

Chicago Fed Letter

Understanding isolation and change in urban neighborhoods: A research symposium

by Richard Mattoon, senior economist

Policymakers have been concerned about a spatial mismatch between job location and residence for years, particularly as manufacturing jobs have left urban centers for suburban and exurban locations. A recent Chicago Fed conference highlighted a number of public policy options—breaking down housing discrimination and segregation, improving public transit, and providing development subsidies to blighted neighborhoods.

On April 13, 2003, over 90 academics, public policymakers, and community leaders came to the Federal Reserve Bank of Chicago to discuss key trends affecting the nation’s metropolitan areas. This conference, the sixth in the Bank’s Midwest Infrastructure Project, focused on access to employment for urban residents who may have limited housing options, or spatial mismatch.

Curt Hunter, senior vice president and director of research at the Chicago Fed, opened the conference by noting that public policymakers have been concerned about a spatial mismatch between job location and residence for years, particularly as manufacturing jobs have left urban centers for suburban and exurban locations.

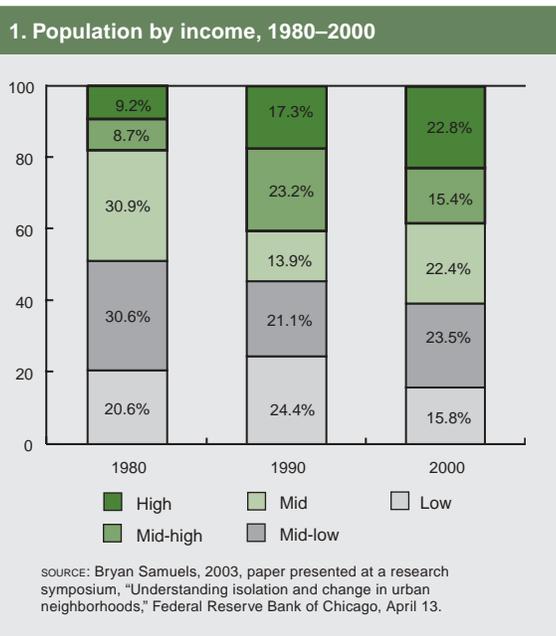
He noted that in Chicago over the past 25 years, manufacturing jobs in the central city have declined at an average rate of 10,000 a year, while remaining essentially stable in the suburbs. The concern is that manufacturing has

traditionally been an important vehicle by which households climb from low income to the middle class. Barriers to job access in the suburbs may worsen the employment prospects of some inner-city residents.

Spatial mismatch and suburbanization

Bryan Samuels of Chicago Metropolis 2020 discussed the organization’s 2003 report on the six-county Chicago metro region, which has a population of eight million.¹ By 2000, the top three quintiles of the income distribution included 60.6% of the population versus 48.8% in 1980 (see figure 1). The minority population had expanded from 30.4% in 1980 to 42.2% in 2000. Hispanics now rival African Americans as the largest minority group in the region. There has also been movement of minorities out of the central city. The Asian population has begun to move north, and the Hispanic population has moved west. The African American population is still concentrated on Chicago’s south side but has spread somewhat farther south.

Samuels noted that Chicago’s Hispanic population is somewhat unusual—78% of the Hispanic population in Chicago has ethnic roots in Mexico versus 58%



of the national Hispanic population. He added that by 2030 Hispanics are anticipated to comprise 33% of the region's population. Finally, he cited a troubling recent trend—the growth in property values exceeding the growth in household income.

Joe Persky of the University of Illinois Chicago presented joint work with Dan McMillen on the possibility that a skills mismatch is developing in metro Chicago. Persky presented evidence from the 2000 Census on the residence of different ethnic groups based on education. In general, for all races without a high school degree, the population has moved somewhat more to the south and out to the northwest around O'Hare airport. The black population without a high school degree has continued to concentrate on the south side. For college graduates, the movement has clearly been to the suburbs. Persky noted that the suburbs are also the source of job growth, with particular concentrations developing in the west and northwest.

Persky presented results from a series of gravity indexes designed to measure job accessibility, as well as an index that adjusts for the competing labor supply. Across all gravity measures, Hispanics appear to have better access to jobs than blacks. This holds for both unskilled and professional positions, as well as if the gravity index is adjusted for the competing labor supply. Persky's findings provide evidence of geographic and spatial mismatch.

Janice Madden of the University of Pennsylvania presented her work on income dynamics and the possible causes of suburbanization. She considered four possible causes: land preferences (people want larger yards and homes); house filtering (as the housing stock ages, more affluent residents leave for the suburbs and less affluent residents move into the available housing); "white flight" (white residents abandon neighborhoods as the ethnic composition changes); and finally, local public finance choices.

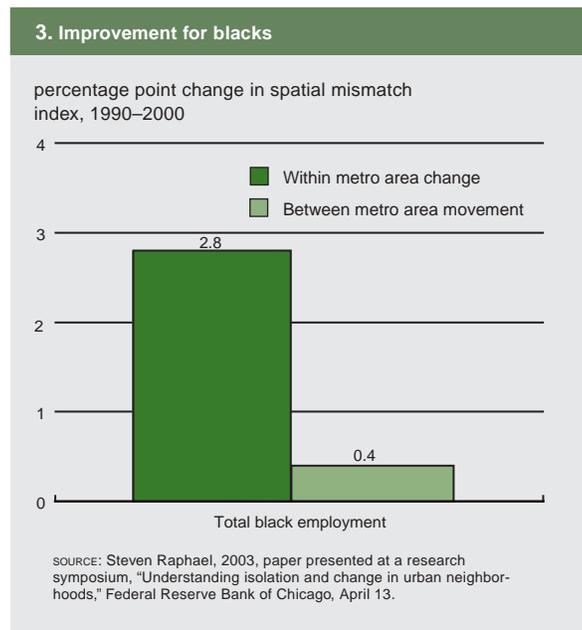
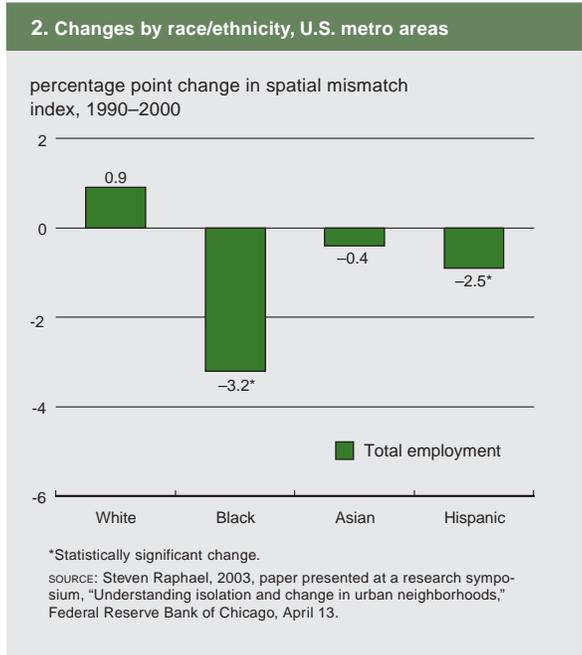
Examining these theories in 31 large central cities for the 1970s, 1980s, and 1990s, Madden found that the poor

(regardless of geographic location) are not generally suburbanizing. Income differences based on geography appear to be driven by the non-poor moving out. Exceptions are Detroit and Milwaukee, where white flight appeared to drive income segmentation. Madden found similar dynamics driving income segmentation in the midwestern and northeastern portions of the country. Race tended to trump income, with poor blacks moving to similar locations as non-poor blacks. A similar pattern holds for whites. Madden found little evidence to support the house filtering or land preference theories. More of the evidence pointed to white flight, along with limited evidence of public finance preferences.

Steven Raphael of the University of California at Berkeley presented joint research with Michael Stoll (UCLA) on the location of people and jobs in U.S. metro areas in the 1990s. Raphael reported that blacks had made modest progress during the decade, reducing the gap in spatial mismatch between blacks and whites by 13% (see figure 2). Nonetheless, no group was more physically isolated from jobs than blacks by 2000. Improvements for blacks were the smallest in metro areas in the Northeast and where blacks represent a relatively large share of the population.

Raphael also reported that metro areas with high levels of black-white residential segregation exhibited a higher degree of spatial mismatch. Conversely, more integrated metros,

such as Minneapolis-St. Paul and Pittsburgh, showed a decline in spatial mismatch between residence and job locations for blacks. The largest factor contributing to the modest decline in spatial mismatch during the decade was the movement of black households within metro areas, with black households showing some tendency to move closer to places of employment within a metro area (see figure 3). While this is somewhat promising, the study does not consider the socioeconomic status



of the blacks choosing to move. If residential mobility is concentrated among middle- and upper-income blacks, it is possible that spatial mismatch conditions have failed to improve for the low-income black population.

While the study suggests that residential mobility may be most effective in reducing spatial mismatch, the authors suggest that improving transportation access can also be beneficial. In some cases, car ownership has helped inner-city blacks find jobs in employment rich suburbs. Also inner-city job development efforts might help.

Crime and urban housing issues

Keith Ihlanfeldt presented his work relating male youth employment to neighborhood crime in Atlanta. It is clear that some central city neighborhoods have crime rates that are vastly higher than those found in most suburban areas. The question is: Does job access influence this? There are several theories to explain crime patterns. First, the decision to engage in crime appears to be affected by an individual's peer group. Second, crime tends to occur in the local neighborhood of the criminal. In the case of burglaries, 52% occur within one mile of the burglar's residence. Third, young males between 16 and 24 commit most crime. The employment opportunities of this group have a direct effect on their tendency to commit crime.

Finding employment for this age group often requires job openings being close by. In high crime areas, employment opportunities are often on the decline. The lack of access to jobs appears to explain a significant portion of the spatial variation in crime. Ihlanfeldt suggests that peer effects also play a significant role (see figure 4).

Ihlanfeldt concluded that the variation in net job growth across a metro area matters. In particular, when poor inner-city neighborhoods increase job availability, an improvement in job access for young males will reduce neighborhood crime.

4. Importance of job access in explaining crime difference

	Property crime rate	Violent crime rate	Drug crime rate
Mean high poverty	0.120	0.077	0.025
Mean low poverty	0.073	0.019	0.002
Difference	0.047	0.058	0.023
Percent of difference due to job access	28.3	10.3	30.9

source: Keith Ihlanfeldt, 2003, paper presented at a research symposium, "Understanding isolation and change in urban neighborhoods," Federal Reserve Bank of Chicago, April 13.

Stuart Rosenthal of Syracuse University presented his work describing the relationship between older homes and poor neighborhoods and the process of urban decay and urban renewal. Is the process of urban decay and renewal inevitable? Also, can policy forestall decay and accelerate renewal and, if so, how and for how long?

Rosenthal found that change in economic status is the norm for urban neighborhoods (see figure 5). Based on samples from 29 major U.S. cities, the income profiles of neighborhoods changed significantly over the 40-year period from 1950 to 1990. Rosenthal offered three explanations: filtering, neighborhood externalities, and impediments to in- and out-migration. Filtering occurs when wealthier residents move out of older homes that are subsequently occupied by families of lower income status. Rosenthal emphasized

that much of the housing stock, for example, is not built to last forever and is of insufficient quality and historical interest to justify rehabilitation.

Neighborhood externalities include Tiebout-type sorting processes, whereby people vote with their feet by moving to neighborhoods that provide their preferred public services. More generally, externalities arise when people care about the characteristics of their neighbors, as with race. This can lead to "tipping," in which a small change can lead to cascading effects that dramatically change the neighborhood's economic status. Homeownership can also impart positive spillover effects on a neighborhood to the extent that homeowners invest in their local communities and have a vested interest in pursuing activities that enhance the neighborhood's economic status.

5. Transition probabilities of census tract relative income, 1950–90

	Low income in 1950	Lower-middle income in 1950	Upper-middle income in 1950	High income in 1950
Low income in 1990	47.07	25.94	16.27	10.59
Lower-middle income in 1990	16.40	27.01	32.24	24.48
Upper-middle income in 1990	17.72	25.34	28.83	28.61
High income in 1990	18.81	21.71	22.67	36.33
Total percent	100	100	100	100

NOTES: Column probabilities sum to 1. Estimates are based on 6,758 census tracts from a balanced panel for 29 metropolitan statistical areas. Tracts with median income less than the city-wide 25th percentile in the given year are defined as low income. Tracts with median income between the 25th and 50th percentiles are defined as lower-middle income. Tracts with median income between the 50th and 75th percentiles are defined as upper-middle income. Tracts with median income above the 75th percentile are defined as upper income. Columns may not total due to rounding.

source: Stuart Rosenthal, 2003, paper presented at a research symposium, "Understanding isolation and change in urban neighborhoods," Federal Reserve Bank of Chicago, April 13.

Finally, impediments to migration, both into and out of the neighborhood, might affect the rate and manner in which neighborhood economic status evolves. To this end, place-based public housing programs that target low-income families tend to deter upward movement of low-income neighborhoods, while accelerating downward movement of higher-income neighborhoods. In addition, higher homeownership rates appear to entrench the status quo for middle-income neighborhoods—reducing the tendency for the neighborhood either to rise or fall. This may reflect the tendency of homeownership to be associated with local zoning ordinances or the fact that homeowners tend to be less mobile than renters.

Homeownership appears to elevate the future economic status of low-income neighborhoods, possibly because homeowners invest in their neighborhoods and have incentives to pursue activities that enhance property values. Rosenthal also noted that homeownership is being considered as a development tool in some cities.

Keynote

John Kain of the University of Texas at Dallas provided a keynote paper entitled “A pioneer’s perspective on the spatial mismatch literature.” In it, he reviewed his role in founding this area of research with his Ph.D. dissertation in 1961, which examined a single worker household’s journey to work as a determinant of residential location. Kain was interested in seeing if workers would trade off savings in housing costs against increased commuting time. Based on data from Detroit, Kain found that his model did a good job of predicting the location decision of white households, but had virtually no predictive power for blacks. Only after discriminatory constraints on blacks were taken into consideration did black households behave similarly to whites with similar socioeconomic characteristics. Later, Kain extended his analysis to consider different industry and occupational groups. In the case of blacks, it appeared that their residency choice

was so constrained that it was important to examine how this fixed residency affected black behavior in the labor market. He found a willingness among blacks to trade off increased transportation costs against the probability of employment or higher wages. Importantly, Kain’s work showed that in Detroit and Chicago, racial discrimination in the housing market reduced employment among blacks, as well as altering its spatial distribution.

In work with Joe Persky, Kain showed that improving conditions among the rural poor could help metro areas where rural migration was hurting urban economies. He argued that investments in rural economic development might be more effective than job creation programs aimed at segregated urban neighborhoods, because these jobs programs failed to recognize that racial separation and isolation was in fact the problem. The goal, Kain suggests, should be to help black workers seek jobs and housing elsewhere.

In work with John Quigley, Kain examined house values and rents associated with discrimination mark-ups. These early hedonic estimates found that rents in black neighborhoods were 12% to 19% higher than rents of comparable units in white neighborhoods. Furthermore, purchase prices were between 5% and 6% higher than in white neighborhoods. Kain argued that much of the housing price discrimination literature assumes that housing is a homogeneous good. Instead, he suggested, housing is a bundle of heterogeneous attributes, and housing bundles available in black neighborhoods are quite different from those available in the rest of the metro housing market. For black households seeking more desirable housing bundles, the search is often limited to predominantly white neighborhoods where they may encounter harassment. As a result, Kain found that most black households limited their search to low-income neighborhoods, where they consume less in terms of neighborhood and housing unit quality than would be expected

given their income and other characteristics.

Kain discussed his involvement in the development of the National Bureau of Economic Research and HUDS (Harvard Urban Development Simulations) model. This is a computer simulation model of urban housing markets that can be used to evaluate a variety of housing and urban development policies. The model differs from others in identifying specific workplaces of primary workers with an unusually detailed representation of housing bundles and permitting an explicit treatment of the ways in which housing market discrimination affects housing and residential choice. Results from the model indicate that programs that provide grants to upgrade relatively large numbers of dwelling units in target neighborhoods could induce significant neighborhood improvements relative to a baseline where subsidies weren’t provided. However, the impact of these subsidies depended on many factors, including neighborhood location, racial composition and fraction of units assisted.

Finally, Kain discussed spatial mismatch as it is manifested in America’s public schools. He argued that this could be the most serious type of spatial mismatch in metro areas with intense concentrations of black children in low-achieving, inner-city schools.

Public transit and job access

Next, Harry Holzer of Georgetown University presented joint work with John Quigley and Steven Raphael (University of California, Berkeley) on the effects of public transit on labor market access. This was based on a natural experiment analyzing the effect of the extension of the San Francisco/Oakland area public transit rail system to suburban employment centers. Does the availability of transit improve the employment outcomes of inner-city minorities?

The study used phone surveys to examine entry-level hiring decisions by firms both prior to and after the opening of the transit facility. The study

6. Community quality for Settlement Grant recipients who become owners

	All		White		Black	
	Renter	Owner	Renter	Owner	Renter	Owner
Average for all households						
Math scores ^a	8.1	10.5	13.6	14.2	6.4	9.3
Class size ^b	19.3	19.8	18.1	18.1	19.9	20.5
Murder rate per 1,000 persons	0.42	0.28	0.16	0.11	0.44	0.33
Education level ^c	0.09	0.08	0.09	0.08	0.11	0.10
Commercial space ^d	0.10	0.09	0.10	0.08	0.11	0.10
Distance from City Hall (miles) ^e	4.4	5.0	5.0	5.3	4.4	5.2

^aPercent of eighth grade students scoring above state median in math tests.

^bTotal number of students per teacher.

^cPercent of adults 24 and older who have BAs.

^dPercent of total building area used for commercial space.

^eMiles from center of tract of City Hall.

NOTES: Based on 4,425 households, for whom both previous and current Census tracts are known; 819 white, 2,196 black, 1,171 Hispanic, and 239 other.

SOURCES: Pennsylvania Department of Education; Philadelphia Police Department Homicide Division; 1990 Census; the Philadelphia Board of Revision and Taxation; Settlement Grant recipient data, The Office of Housing and Community Development of the City of Philadelphia; and authors' calculations.

used a “difference-in-difference” methodology, comparing employment growth at establishments located near the new subway with those farther away.

An interesting finding is that the new public transportation had a different effect on the employment outcomes for Latinos than for blacks. Employment effects for Latinos were large in magnitude and statistically significant, but not for blacks.

Holzer offered several explanations. First, Latinos tended to live closer to the new subway line. In general, it seems as though employment effects are greatest for those residing nearest to the origin of the new transit route. If the line had been built closer to black populations, the results may have been different. Second, the hiring of Latinos in suburban locations was already occurring at a faster pace prior to the station being built. This suggests that Latinos may have already had better attachments to suburban employers. It is also possible, Holzer said, that Latinos face less discrimination than blacks in finding suburban employment.

Place-based subsidies

Matt Kahn of Tufts University presented his joint work with Jean Cummings

and Denise Di Pasquale (City Research) on the effects of promoting inner-city homeownership as an urban development strategy. The work is based on the Nehemiah program in Philadelphia, which provides large (\$50,000) subsidies to first-time minority buyers willing to purchase new homes in a blighted neighborhood. Proponents of this approach argued that homeownership would yield social benefits, such as attracting role models to the community, building neighborhood social capital, and creating neighborhood stakeholders. This in turn would help anchor the center city tax base as these homeowners chose urban rather than suburban locations.

The study conducted interviews of the 500 new homebuyers to assess their impressions of their housing choice and neighborhood. The survey indicates that most buyers were very satisfied with the quality of their new housing. The houses were bigger, had garages, and had fewer maintenance problems than their previous residences. There was also some evidence of improvement in community quality, with reductions in the poverty rate from 26% to 21% and improvement in student performance, based on scores from standardized state

math tests (see figure 6). However, Kahn cautioned that the study did not observe significant neighborhood interaction between the new homeowners and the existing residents. He termed this a possible “oasis effect” in which the new homeowners spent little time trying to integrate into the neighborhood. In that case, the social benefits to the neighborhood might not be fully realized.

Kahn noted that a study of a Nehemiah project in New York has found that social benefits are accruing. He said that in assessing future Nehemiah projects, it will be important to establish whether the neighborhood was truly blighted or was already gentrifying prior to the project.

School segregation and housing markets

Steve Ross of the University of Connecticut presented his joint work with John Clapp on evidence of school segregation and housing performance in Connecticut. The work examines the relationship between house price levels, school performance, and the racial and ethnic composition of Connecticut school districts between 1995 and 2000. Research evidence has suggested that school quality as reflected in test scores is heavily influenced by the socioeconomic characteristics of the school and has a significant influence on property values in the district. This suggests that the price of housing and the characteristics of schools are determined simultaneously by a process in which households sort over the housing stock and across communities; and communities may intervene in the process by regulating land use.

This study creates a panel dataset to assess how the property values, performance, and demographic characteristics of the schools evolve over time. The major finding is that where Hispanics and blacks tend to move to is influenced by the racial and ethnic composition of the town. Ross noted that this is particularly true for new migrants, which suggests that migrants may follow a

7. Black–white differences in successfully completing job search

	Black	White
Predicted weekly hazard (gap = .032) (evaluated at beginning of search spell)	0.038	0.070
Contribution to the gap from racial differences in the following variables:		
1 Job accessibility	23.1%	
2 Car ownership	8.0%	
3 Search in job-rich areas	5.1%	
4 Social network quality	5.6%	
5 Reservation commute time	2.8%	
6 Search intensity	9.5%	
7 Human capital variables	10.0%	
8 Demographic variables	5.1%	
Total explained (all variables)	69.3%	

NOTE: Columns may not total due to rounding.

SOURCE: Rucker Johnson, 2003, paper presented at a research symposium, "Understanding isolation and change in urban neighborhoods," Federal Reserve Bank of Chicago, April 13.

“beaten path” approach to locating in towns that mirror their ethnic identity. This minority sorting process affects the low-priced housing segment only.

Job access in metropolitan areas

Finally, Rucker Johnson of the University of Michigan discussed access to employment in the suburbs and central city. He noted that a shift in geographic labor demand to the suburbs has occurred over the past three decades. This shift has not been uniform, with suburban job growth concentrated in specific locations. In light of this trend, Johnson said that he wanted to investigate whether individuals were expanding the geographic pattern of their job search in response to decentralized employment and whether the costs and benefits of the search make longer commutes and expanded job search an inefficient response to this trend.

In particular, how true is this for black non-college graduates?

Johnson suggested that black non-college graduates face certain barriers in conducting larger geographic job searches. To begin with, blacks often face more residential location constraints because of discrimination in the suburban housing market. Second, blacks often have greater job search and commute costs due to lower car ownership rates. Finally, blacks often have inferior social networks and information about jobs (see figure 7).

In research on the metro areas of Boston, Atlanta, and Los Angeles, Johnson found that job availability for less-educated workers was greatest in predominantly white suburbs and that these “job rich” areas tended not to be served by public transportation. In addition, less-educated blacks appeared

to be far more constrained in accessing suburban jobs than less-educated whites. Johnson found that race differences in the distribution of job access accounted for one-quarter of the black–white gap in successful job searches.

Conclusion

The symposium found that many barriers continue to constrain urban labor market access, particularly for inner-city minorities. Public policy options are many. They include focusing on breaking down housing discrimination and segregation, improving public transit, and possibly providing significant development subsidies to blighted neighborhoods, as well as subsidizing job search and access for isolated workers.

¹ For this purpose, the Chicago region consists of the following six counties: Cook, Lake, DuPage, McHenry, Will, and Kane.

Michael H. Moskow, *President*; William C. Hunter, *Senior Vice President and Director of Research*; Douglas Evanoff, *Vice President, financial studies*; David Marshall, *Vice President, macroeconomic policy research*; Daniel Sullivan, *Vice President, microeconomic policy research*; William Testa, *Vice President, regional programs and Economics Editor*; Helen O'D. Koshy, *Editor*; Kathryn Moran, *Associate Editor*.

Chicago Fed Letter is published monthly by the Research Department of the Federal Reserve Bank of Chicago. The views expressed are the authors' and are not necessarily those of the Federal Reserve Bank of Chicago or the Federal Reserve System. Articles may be reprinted if the source is credited and the Research Department is provided with copies of the reprints.

Chicago Fed Letter is available without charge from the Public Information Center, Federal Reserve Bank of Chicago, P.O. Box 834, Chicago, Illinois 60690-0834, tel. 312-322-5111 or fax 312-322-5515. *Chicago Fed Letter* and other Bank publications are available on the World Wide Web at <http://www.chicagofed.org>.

ISSN 0895-0164