Income Diversity
and the Context of Community Development

by

D. Garth Taylor[1]

Introduction. Practitioners emphasize that the most effective strategy for development in a community depends on its context. Defining context, however, is a challenge. There are various contexts that can be considered: economic, political, historical, and demographic. Based on recently produced community development plans in programs such as the LISC/Chicago New Communities Program, it is clear that one of the most important neighborhood contexts is the pattern of income diversity.[2]

This paper presents a new classification of income diversity for measuring the context of neighborhood development. Social science literature often measures income diversity with an index that either: (a) summarizes the entire distribution - such as a Gini coefficient; or (b) calculates the average level of contact or segregation - such as a similarity/dissimilarity index. When applied to the context of community development research, however, the complex design of single-number coefficients and their multiple interpretations makes them difficult to use and explain to practitioners. Therefore, this paper presents a new approach.

To measure diversity, "high-", "moderate-", and "low-income" categories are defined that always have the same interpretation regardless of trends of inflation or changes in the distribution of income in an area – similar to the way the U.S. Census Bureau definition of poverty-level income always refers to the same level of inflation-adjusted buying power; the number of families in each income group in a geographic area is calculated and a coding algorithm summarizes the simultaneous pattern of change of the three income groups. Analyzing the pattern for Chicago between 1970 and 2000, four distinct patterns of income diversity describe the city's 77 neighborhoods: (1) high income; (2) low income; (3) bipolarity; and (4) stable diversity.

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[1] D. Garth Taylor is President of the Metro Chicago Information Center. I am grateful to Krysten Ryba, Melissa Kraus Schwarz, and Kiljoong Kim for hours of laborious research assistance, to the MacArthur Foundation for providing funding for the research, to LISC/Chicago for underlining the importance of income diversity as a context for community development and to colleagues who have read or discussed sections of this report with me including Wesley Skogan, Andrew Reamer, Terry Clark, and Richard Taub.
[2] Recently written development plans for 14 areas in the City of Chicago can be found at http://www.newcommunities.org/.

Defining Income Diversity. The trend in median income is often used as an indicator of the general economic health of the city. And in Chicago, the conclusion drawn from that indicator is not very favorable. The median income in Chicago dropped considerably between 1970 and 1980; and has increased only slightly each decade since (inflation-adjusted, expressed in 2004 dollars).[3] On average, the city got substantially poorer in the 1970s and has only gotten a little wealthier since then.

Chicago Median Income (Census, 2004 dollars)			
1970	**1980**	**1990**	**2000**
$50,146	**$43,064**	**$44,374**	**$46,846**

But in Chicago, the fairly widespread observation that some neighborhoods are getting wealthier and others are getting poorer is one of the most important contexts for setting community development priorities.[4] Measuring change in median income does not shed much light on this topic because the level of diversity is changing while the median, in fact, stays about the same. The following graph illustrates the issue.[5]

The middle-income population declines substantially each decade, mirroring the trend in total population loss for the city. The number of low-income families increases between 1970 and 1980 and declines each decade thereafter. The high-income population shows the opposite trend – declining during the 1970s and increasing each decade thereafter.

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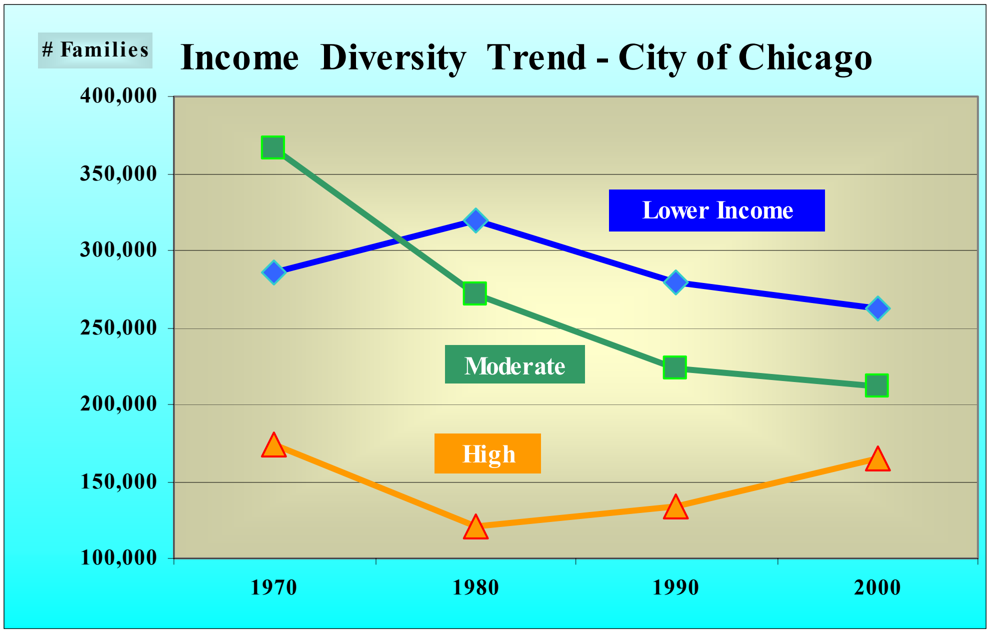
[3] Data analyzed in this report are from the Geolytics Neighborhood Change Tract Database 1970 - 2000.

[4] See Paul Jargowsky **Poverty and Place: Ghettos, Barrios, and the American City** New York: Russell Sage Foundation (1998); his more recent analysis refines his categories considerably and points to the need for a typology of trends in income diversity – see Paul Jargowsky **Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s** Brookings Institution (May, 2003).

[5] The income groups in the graph are based on constant, inflation-adjusted definitions of each income level -- similar to the way poverty level income is defined to mean the same thing each year. The method is explained in a later section of this report.



The data also illustrate the importance of working with raw numbers, rather than percents. Those analyzing percents would most likely focus on the fact that the *percent low-income families is higher* in the year 2000 than in 1970. An analysis based on raw numbers more accurately reflects the fact that the *number of low-income families is actually lower* in 2000 than in 1970. The percentage increase is due to the even more rapid decline of the middle-income population.

Our analysis shows that the decline in moderate-income families occurs in almost every neighborhood in Chicago and is one of the central features of the context for community planning. This trend is often attributed to the decline of the city's manufacturing base.[6] It is tempting to conclude that moderate-income workers are leaving the city. However, the data show no comparable rise of moderate-income families in the suburban counties that comprise the Chicago SMSA. Therefore we should consider other social forces that can change the mix of low- and moderate-income families even though the working population stays more or less in the same place, such as: (a) *Impoverishment of workforce* - declining earnings of families who lost jobs that produce moderate income levels and took jobs that produce low income levels; (b) *Retirement* -- declining

[6] Douglas Massey and Deborah Hirst. *From Escalator to Hourglass: Changes in the U.S. Occupational Structure 1949-1989*. **Social Science Research** 27:51-57 (1998); Arthur Jones Jr. and Daniel H. Weinberg **The Changing Shape of the Nation's Income Distribution, 1947-1998** U.S. Census Bureau. By the definition used in this report, a high level manufacturing position would place a worker's family squarely in the middle-income category; and there are fewer of these jobs in the city now than in 1970. See, for instance, the occupation and earnings trend data published by the Illinois Department of Employment Security http://lmi.ides.state.il.us/download/hisannave.xls

earnings of retirees, particularly apparent in neighborhoods where families age out of the work force or areas that become destinations for newly-retired families.

Social science literature often measures income diversity with an index that either: (a) summarizes the entire distribution - such as a Gini coefficient; or (b) calculates the average level of dispersion, clustering, concentration, segregation, or contact among income categories in a population - such as the similarity/dissimilarity indexes used in income segregation research.[7] With a pattern like the one shown in the graph, diversity measures designed to reflect the increasing bipolarity of low- and high-income families would show *declining* diversity. On the other hand, diversity measures designed to reflect integration/segregation would show *increasing* diversity since each group is getting closer to one-third of the total population. The definition of diversity, and the apparent trend, depends on the assumptions built into the method for calculating the index. These complex design features, and the tendency to lose track of the distinct income groups, makes it difficult to use single-value measures of diversity to communicate the context of neighborhood development.[8] Therefore, this paper presents a new approach.

To measure diversity: (a) “high-”, “moderate-“, and “low-income” categories are defined that always have the same interpretation regardless of inflation or changes in the distribution of income – similar to the way the U.S. Census Bureau definition of poverty-level income always refers to the same level of inflation-adjusted buying power;[9] (b) the number of families in each income group in a geographic area is calculated; and, (c) a coding algorithm summarizes the simultaneous pattern of change between 1970 and 2000 for the three income groups.

As mentioned earlier, one of the defining elements of the neighborhood context for almost every area in Chicago is a substantial decrease in the number of moderate-income families. Taking this into account, the pattern of income diversity in Chicago neighborhoods can be largely explained by reference to two additional factors: (1) whether the number of *high-income* families in a neighborhood is increasing; and, (2) whether the number of *low-income* families in a neighborhood is increasing. The result is four patterns of income diversity:

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[7] Douglas S. Massey, and Mary J. Fischer, “The Geography of Inequality in the United States, 1950–2000” in William G. Gale and Janet Rothenberg Pack, eds., **Brookings-Wharton Papers on Urban Affairs** Brookings (2003); Alan, Abramson, Mitchell Tobin, and Matthew VanderGoot “The Changing Geography of Metropolitan Opportunity: The Segregation of The Poor in U.S. Metropolitan Areas, 1970-1990,” **Housing Policy Debate** 6(1):45-72 (1995); Douglas Massey "The Age of Extremes: Concentrated Affluence and Poverty in the Twenty-first century" **Demography** 33:4 Nov 1996; Stanley Lieberson, “Measuring Population Diversity” **American Sociological Review** 34:850-862 (1969); U.S. Bureau of the Census **"Racial and Ethnic Residential Segregation in the United States: 1980-2000, Appendix B: Measures of Residential Segregation”** at http://www.census.gov/hhes/www/housing/housing_patterns/papertoc.html

[8] Philip Coulter **Measuring Inequality: A Methodological Handbook** (Perseus, 1989).

[9] The method for coding income categories is explained in the appendix to this paper.

(1) Emerging High Income; (2) Emerging Low Income; (3) Emerging Bipolarity; and, (4) Stable Diversity.

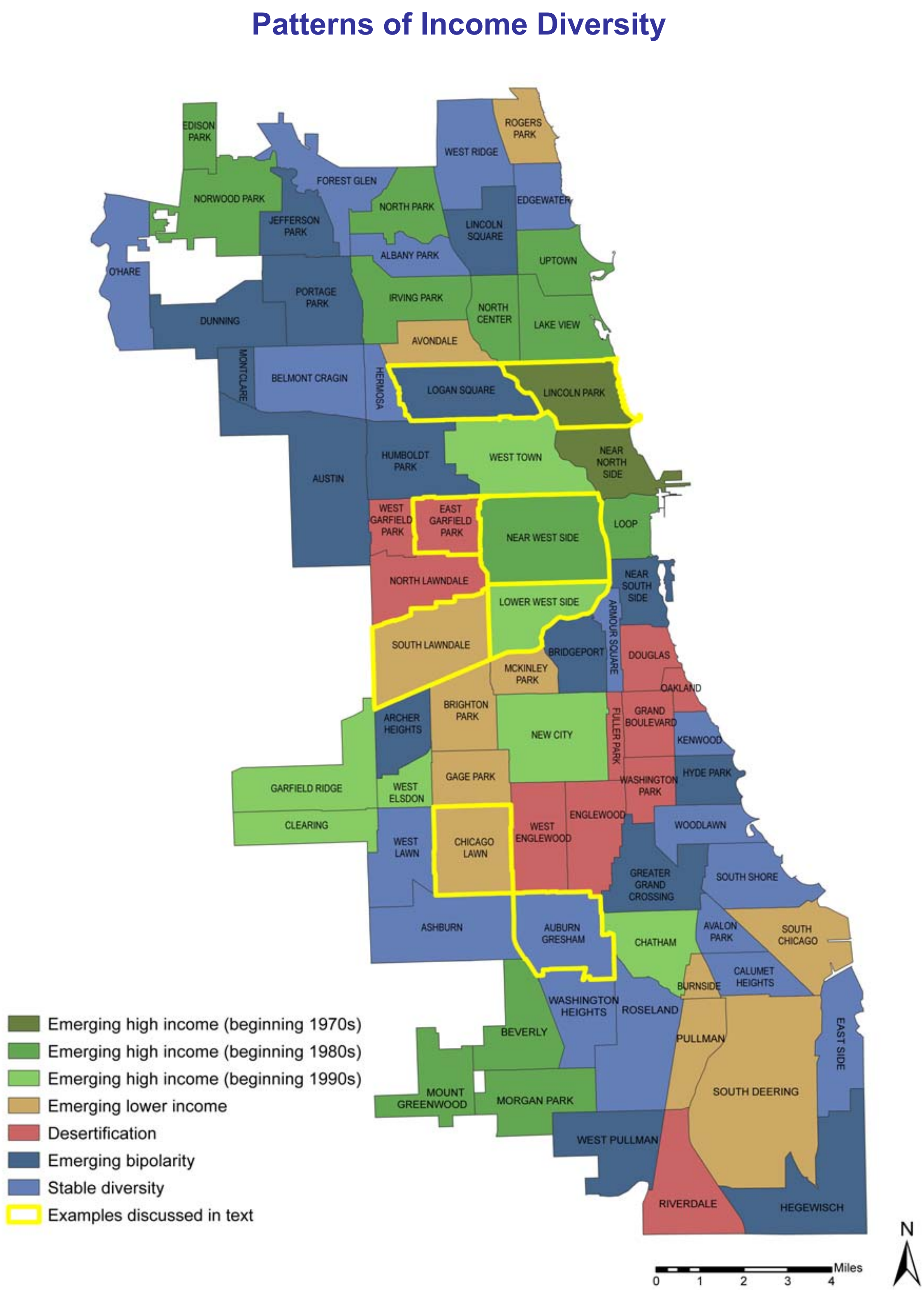
Four Patterns of Income Diversity			
		Increasing Number of Low-Income Families?	
		Yes	No
Increasing Number of High-Income Families?	Yes	**Emerging Bipolarity**	**Emerging High Income**
	No	**Emerging Low Income**	**Stable Diversity**

Empirically, each pattern encompasses almost an equal number of the city's traditionally defined 77 neighborhoods and an equal proportion of the city's population.[10]

Classification of Neighborhoods			
CONTEXT	**Number of Neighborhoods**	**Total population, 2000**	
1. Emerging High Income	**21**	**877,043**	**30%**
a. Beginning 1970s	(2)	(137,226)	(5%)
b. Beginning 1980s	(12)	(444,919)	(15%)
c. Beginning 1990s	(7)	(294,898)	(10%)
2. Emerging Low Income	**22**	**686,018**	**24%**
a. Emerging Low Income	(11)	(426,885)	(15%)
b. Desertification	(11)	(259,133)	(9%)
3. Emerging Bipolarity	**15**	**627,581**	**22%**
4. Stable Diversity	**19**	**705,026**	**24%**

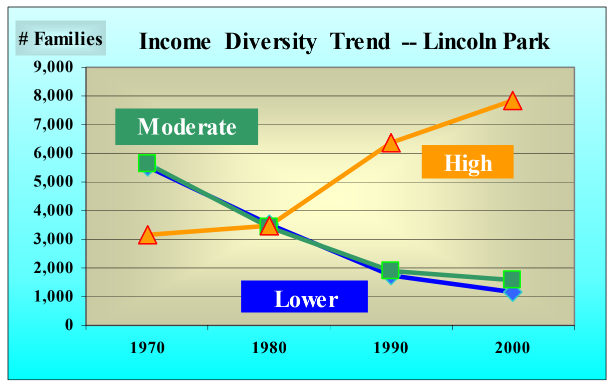
[10] For the definition and use of the 77 Chicago community areas, see Chicago Fact Book Consortium, **Local Community Fact Book, Chicago Metropolitan Area, 1990** Academy Chicago Publishers (1990).

The following map shows the spatial pattern of income diversity in Chicago since 1970.



1. Emerging High Income. When the high-income population is *increasing* and the low-income population is *decreasing*, the neighborhood context is Emerging High Income -- often called "gentrification."[11] In Chicago, 21 neighborhoods that include 30 percent of the city's 2000 population fit this pattern, with three subtypes, according to when the trend begins:

- **1970s** – the increase in high income begins in the 1970s (2 neighborhoods)
- **1980s** – the increase in high income begins in the 1980s (12 neighborhoods)
- **1990s** – the increase in high income begins in the 1990s (7 neighborhoods)



An example of **Emerging High Income** beginning in the 1970s is the Lincoln Park neighborhood. During the 1970s the low- and moderate-income population declined considerably and the high-income segment rose slightly. After 1980 the low- and moderate-income population continued to fall and the high-income population grew rapidly, making the neighborhood a prototype "island of renewal in a sea of decay"[12] particularly in the historical parts of the neighborhood with larger, older houses and in corridors where lower-density, upscale housing could be built by clearing and/or retrofitting former industrial areas.[13]

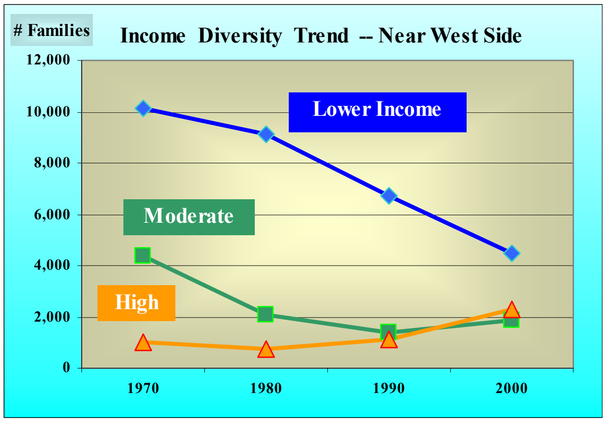
An example of **Emerging High Income** beginning in the 1980s is the Near West Side.[14] In the 1970s, all three income groups declined but after 1980 the number of high-income families began to increase. Proximity to downtown and the nexus of key transportation corridors has always made the Near West Side a priority area for use, redevelopment, urban pioneering and speculation. In 1987, the Chicago Bears football team released a proposal that would develop a 100-block

[11] Sean Zielenbach **The Art of Revitalization: Improving Conditions in Distressed Inner-City Neighborhoods** Garland (2000). We agree with Zielenbach's classification of Uptown, West Town, and Near West Side as gentrifying areas. We disagree on Near South Side (emerging bipolarity) and Douglas (desertification).

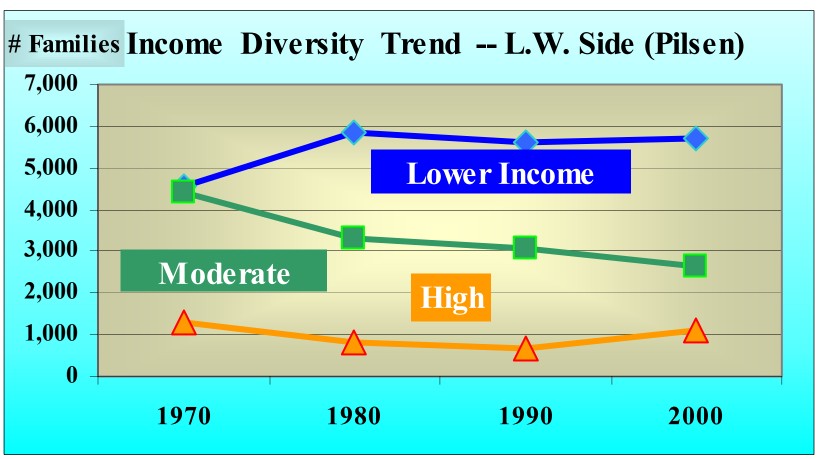
[12] Brian J.L. Berry, "Islands of Renewal in Seas of Decay" in Paul Peterson ed. **The New Urban Reality** Washington: Brookings (1985). The pattern of emerging high income has become so extensive in Chicago and similar cities that scholars have reversed Brian Berry's forecast. See E. K. Wyly and D. J. Hammel "Islands of Decay in Seas of Renewal: Housing Policy and the Resurgence of Gentrification," **Housing Policy Debate** 10:4 (1999) pp 711-771.

[13] Joel Rast **Remaking Chicago: The Political Origins of Urban Industrial Change** DeKalb, Northern Illinois University Press (1999).

[14] The Chicago Fire of 1871 started in the Near West Side, spreading north and east. The neighborhood soon achieved its highest level of population, over 200,000 residents, when it took in displaced people from surrounding communities.



tract of the Near West Side with a new football stadium, a refurbished basketball and hockey facility, a sports medicine center, an industrial park and an economic development zone. The backers of the plan were not able to reach agreement with the city government and neighborhood organizations, but in 1989 the owners of the basketball and hockey facility announced their own plan to build a new stadium. After months of negotiation, a successful agreement was reached that included substantial public funds for street and service improvements and city-donated empty lots for replacement housing costing over $200,000 per unit. The Democratic Party convention of 1996 was held on this site to commemorate and showcase the transformation of Chicago neighborhoods. At present, the challenge of the Near West Side is to manage the upscaling trend that could transform the neighborhood more drastically than present residents and community organizations wish.[15]



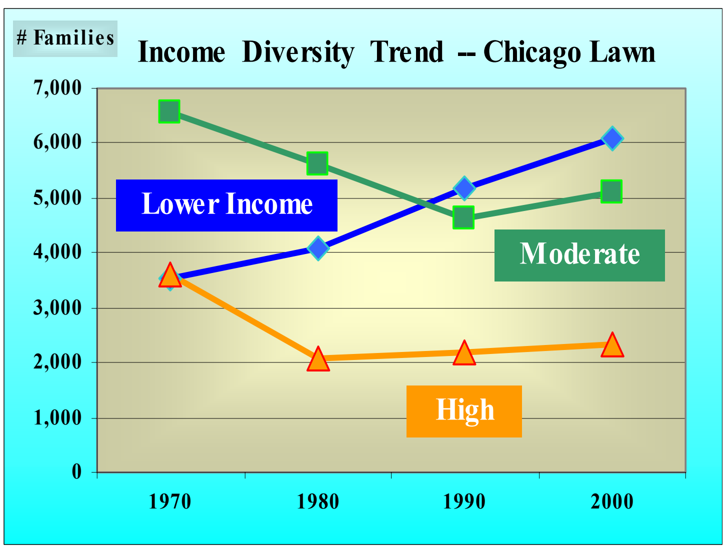
An example of a pattern of **Emerging High Income** beginning in the 1990s is the Lower West Side (Pilsen). This is the only Chicago neighborhood (other than the Loop downtown area) to *gain* population every decade from the 1970s forward, largely because of its role as a port of entry for the Latino population.[16] In the 1970s and the 1980s, the main community development efforts involved rehabilitation and construction of low-income housing to relieve overcrowding and substandard conditions. Most of the tracts in the Lower West Side are areas of Emerging Low Income (which is typical of new immigrant communities), however the neighborhood's proximity to the Loop downtown area, the southward growth of the city's central medical district, and the expansion of

[15] Alexander von Hoffman **House by House, Block by Block: The Rebirth of America's Urban Neighborhoods** Oxford (2003) pp 147-153.
[16] The city suffered population loss in nearly every neighborhood (63 out of 77) in the 1970s, and has bounced back to gain population in about half of the neighborhoods (31 out of 77) since then.

upscale housing around the University of Illinois campus located in the West Loop and the Near West Side neighborhood are bringing Pilsen into the orbit of the broader real estate market. Areas closest to the University and the Loop attracted enough new high-income families in the 1990s to establish the neighborhood as an area of emerging high-income families.

2. Emerging Low Income. When the high-income population is *decreasing* and the low-income population is *increasing*, the pattern is Emerging Low Income. Twenty-two neighborhoods that include 24 percent of the city's population fit this pattern, with two subtypes:[17]

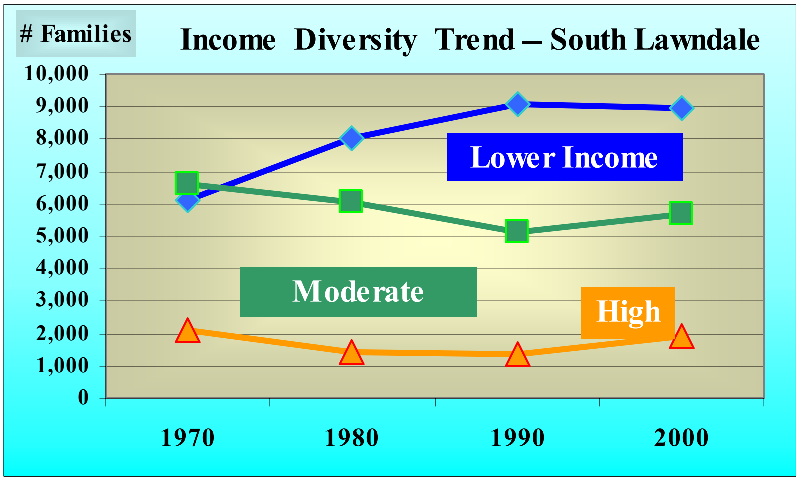
- **Emerging Low Income –** The non-extreme case: low income is *increasing,* high income is *decreasing,* but there are still a significant number of moderate- and high-income families (11 neighborhoods).
- **Desertification** –The extreme case: low income is *increasing*, high income is *decreasing*, very few moderate- or high-income families are left, with a high remaining concentration of low income (11 neighborhoods).



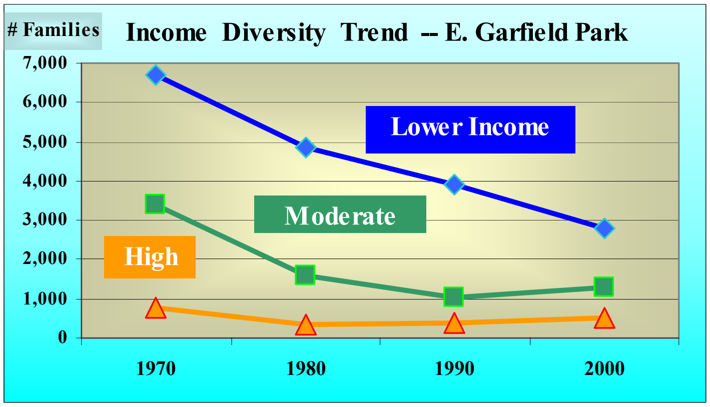
An example of **Emerging Low Income** is Chicago Lawn. The rise in low-income population begins in the 1970s and continues every decade after, so that by the year 2000, the predominant family type is low income. The neighborhood consists primarily of small, well-constructed 1920s-era bungalow homes that have stood the test of the Chicago elements. At the time of the 1970 Census, this neighborhood was known as the all-white community where Rev. Martin Luther King, Jr. had been recently hit by a rock and where the American Nazi Party had its headquarters. Since then, it has become a home for an ethnic mélange of African Americans and first- and second-generation Mexicans. Its commercial corridors are also a key port of entry for Middle Eastern and Arab migration. It is the home of the Inner-City Muslim Action Network and the focal point for intensive efforts at cross-cultural understanding, as well as homeowner counseling and campaigns against predatory lending, property abandonment and foreclosure.

[17] The predominant empirical patterns for lower income have to do with the completeness of the transition to a concentrated low-income community (emerging vs. desert), and less to do with the classification of when the pattern began -- e.g., 1970s, 1980s, and 1990s.

Another example of **Emerging Low Income** is South Lawndale. Since 1970, it has become a major center of Latino concentration in Chicago and in the U.S. With the exception of Lower West Side (Pilsen), every neighborhood in Chicago that has become a center for Latino immigration is an area of emerging low-income population.

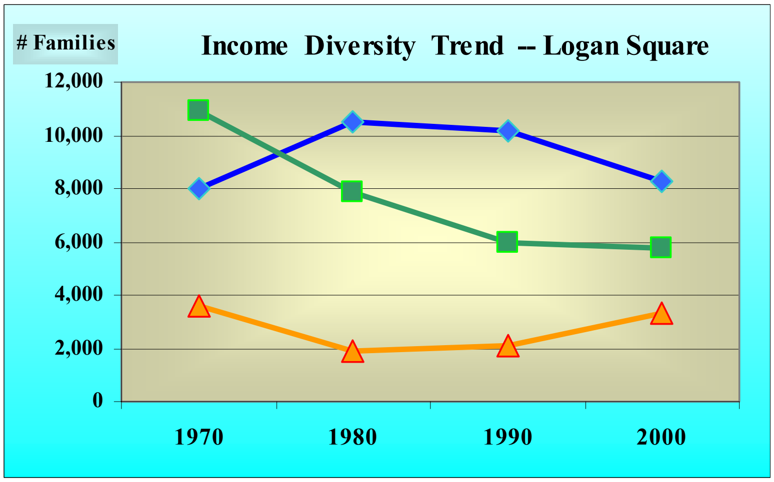


The extreme case of Emerging Low Income is **Desertification** – where the total population is in steep decline and there are few remaining inhabitants remaining who are not low income.



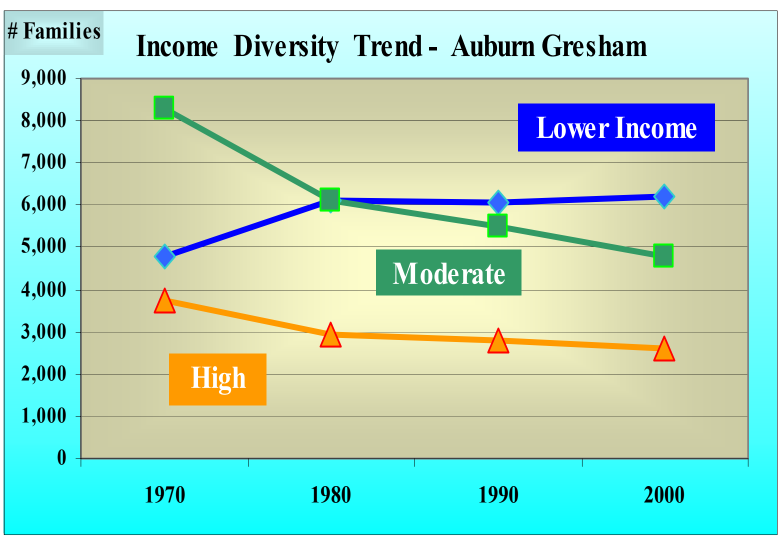
An example of **Desertification** is East Garfield Park. The neighborhood was constructed on trolley corridors that transported wholesale trade and manufacturing workers to and from the downtown. These trolley lines eventually became part of the city's "elevated train" network (the Blue Line and the Green Line). In the early post-World War II years, East Garfield Park was an area of extreme density and overcrowding, but by 1970 a pattern of disinvestment and population loss was apparent. Public disturbances that followed the assassination of Martin Luther King, Jr. cut deeply into the remaining commercial and residential core of this community (the assassination was in April 1968, two years before the 1970 Census -- the starting point for our trend analysis).

3. Emerging Bipolarity. When *both* the high-income population *and* the low-income population are *increasing* the context is **Emerging Bipolarity**. Fifteen neighborhoods that include 22 percent of the city's population fit this pattern.



An example of a pattern of **Emerging Bipolarity** is Logan Square. The area is extremely well served by public transportation rail lines and expressways, and has other excellent public amenities such as parkways and boulevards. During the 1970s the number of low-income families increased greatly as the neighborhood became a port of entry for immigrants; especially Latino populations. It is a well-organized neighborhood, opposing redlining and slumlording, and never went through serious deterioration or abandonment. The amenable location, the quality of the housing stock, and the effectiveness of community organizations have made it a place where the low income population work to "defend" their ability to stay in the neighborhood against the market entry of new generations of high income buyers and renters who find the neighborhood attractive for the same reasons.[18]

4. Stable Diversity. When a neighborhood maintains a significant proportion of low-, moderate-, *and* high-income families, the neighborhood context is **Stable Diversity**. In Chicago, 19 neighborhoods that include 24 percent of the city's 2000 population fit this pattern.



A typical case of **Stable Diversity** is the Auburn Gresham neighborhood on the southwest side of Chicago. Originally a resort-like community built around former fishing lagoons, Auburn Gresham has a high concentration of historic bungalows, and other high-quality homes that have remained moderately

[18] In the context of income diversity and gentrification, the term "defended neighborhood" increasingly refers to one where local organizations work to preserve the capacity of low- to moderate-income families to remain in the area and reap the benefits of their past investment in school improvement, neighborhood upkeep, citizen policing, etc.

priced, allowing for a high homeownership rate compared to other Chicago neighborhoods. In a pattern that is typical of Stable Diverse communities, Auburn Gresham has a somewhat older population. There is a long-term decline in the moderate-income population, characteristic of nearly all neighborhoods, but one of the defining characteristics of Stable Diverse areas is that there is still a significant proportion of moderate-income families as well as high- and low-income families.

Income Diversity and Neighborhood Context. The classification of neighborhoods, according to the trend in income diversity, produces – as might be expected - a highly differentiated economic segmentation. The following tables summarize 2000 U.S. Census data for neighborhoods categorized according to neighborhood typology. The longest-gentrifying areas (1970s and 1980s) show the highest incomes, home values, and rents. The low-income areas, and especially the desertifying areas, are lowest on all economic measures. The bipolar neighborhoods and the stably diverse neighborhoods are quite similar to each other and quite similar to recent-gentrifying areas (1990s).

Economic Segmentation of Neighborhood Contexts				
CONTEXT	Examples from Text	2000 Census Data		
		Median Family Income	Median Home Value	Median Rent
Emerging High Net Worth				
Beginning 1970s	Lincoln Park	$115,389	$540,445	$924
Beginning 1980s	Near West Side	$63,401	$227,509	$733
Beginning 1990s	Pilsen	$41,498	$177,322	$587
Emerging Low Income				
Emerging Low Income	Chicago Lawn South Lawndale	$36,839	$110,192	$558
Desertification	East Garfield Park	$24,554	$97,139	$457
Emerging Bipolarity	Logan Square	$44,787	$163,306	$610
Stable Diversity	Auburn Gresham	$45,125	$150,467	$602

Stories of Chicago neighborhood change usually involve a component of immigration and "ethno-racial" succession.[19] As the following table shows, the

[19] The term "ethno-racial" is used to describe the basis of identities reputedly based on "race" or "ethnicity." Although race is a social fact of American life, scientists as well as the general public are increasingly dubious biological and historical theories of "race" reflected, for instance, in the rules for U.S. Census classification. See for instance, Eric Klinenberg **Heat Wave: A Social Autopsy of Disaster in Chicago** University of Chicago (2003) p 245. In the 2000 U.S. Census 16 percent in Chicago gave racially ambiguous responses, saying they have "no race," belong to "two or more races," or belong to "some other race." The level of ambiguity in public acceptance of the definition and measurement of "race" now affects the accuracy of our picture of "race"/ethnic relations in the city. For instance, whether the level of segregation is going up,

classification based on trends in income diversity produces highly differentiated ethno-racial segmentation as well. Areas of gentrification in Chicago have generally been areas of increasing white population and decreasing Latino population.[20] The longest-gentrifying areas (1970s and 1980s) show very high proportions of white population and very low proportions of Latino population. The most recent gentrifying areas show an elevated percent white, but also a high proportion Latino. This is because certain areas of the city were ports of entry for Latinos but have a housing stock, transportation and/or locational amenities that make them attractive to higher-income families and the areas are transitioning from Latino to white – e.g., Lower West Side (Pilsen), and New City (Back of the Yards).

The ethno-racial segmentation shows a distinctive Latino and immigrant concentration in emerging low-income neighborhoods. Immigration of low-wage workers is one of the hallmark trends of Chicago and selected other American cities since the 1970s. With this immigration comes the complexity of ensuring public safety and providing public services to a low-income population, complicated by the additional needs of a non-English speaking, and sometimes undocumented, labor force.

Ethno-racial Segmentation of Neighborhood Contexts

CONTEXT	Examples from Text	2000 Census Data				
		White (non-H)	Black (non-H)	Asian	Latino	Foreign Born
Emerging High Net Worth						
Beginning 1970s	**Lincoln Park**	77%	13%	5%	4%	11%
Beginning 1980s	**Near West Side**	60%	17%	8%	15%	19%
Beginning 1990s	**Pilsen**	33%	24%	1%	42%	25%
Emerging Low Income						
Emerging Low Income	**Chicago Lawn South Lawndale**	16%	27%	2%	55%	35%
Desertification	**East Garfield Park**	1%	96%	1%	2%	2%
Emerging Bipolarity	**Logan Square**	33%	37%	5%	24%	21%
Stable Diversity	**Auburn Gresham**	25%	43%	7%	24%	24%

There is also a remarkably high percent African American population in desertifying areas. Over the decades, the strongest - and sometimes only - correlate of disinvestment and lack of economic development in Chicago has

down, or staying the same, or whether the city is "highly" segregated as opposed to "moderately" segregated now depends on how racially ambiguous responses are classified.

[20] D. Garth Taylor, Sylvia Puente "Immigration, Gentrification and Chicago Race/Ethnic Relations in the New Global Era," Chicago: MCIC (2004).

been the concentration of the African American population.[21] These are areas where the cycle of disinvestment and abandonment has reached its pinnacle, and the remaining population is abandoned in an area of few jobs and services. The desertifying areas include many of the historical "Black Belt" communities studied in recent work by William Julius Wilson.[22]

The bipolar neighborhoods and the stably diverse neighborhoods are once again similar to each other, and show a substantial diversity of white, African American, Asian and Latino population.

Income Diversity and Community Development. The pattern of income diversity in a neighborhood is a result of the balance of market forces and social changes affecting a neighborhood, and how that balance is changing. The more that is known about the market forces and social changes affecting the neighborhood context, the more we can know about the kind of development strategies likely to be most needed and most effective. Early post-World War II models for urban renewal are viewed by many community development practitioners as having been blunt strategies for wholesale "urban removal" of low-income populations from targeted areas of the city. Community development usually involves a contest over the resulting income diversity of the affected neighborhood,[23] but development strategies are now more participatory, more funds are available, there is a higher priority on community preservation and there is more knowledge about how to do it.[24]

Some of the most salient market forces were alluded to in explaining how particular neighborhoods came to be classified in particular categories. In general, the most important kinds of changes to be considered are: demand-side market forces (who is entering/leaving the neighborhood), supply-side market forces (what is available for consumption), demographic forces (which tend to alter the demand side – such as immigration, retirement, labor force change), and local public policy forces (which tend to affect the supply side – such as anti-redlining policies; planning and zoning strategies, direct public subsidies such as paying for streets and sewers; and indirect public subsidies such as tax preferences).

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[21] Joel Rast **Remaking Chicago: The Political Origins of Urban Industrial Change** DeKalb, Northern Illinois University Press (1999), citing studies by the City of Chicago Department of Planning and Development.

[22] William Julius Wilson **When Work Disappears: The World of the New Urban Poor** Knopf (1996). Wilson's work is based on historical "Black Belt" neighborhoods generally, with detailed surveys in Oakland (classified here as Desertification) and Woodlawn (Stable Diversity).

[23] John H. Mollenkopf **The Contested City** Princeton University (1983)

[24] Richard D. Bingham and Robert Mier (Eds) **Theories of Local Economic Development: Perspectives from Across the Disciplines** SAGE (1993)

Social and Market Forces Affecting Neighborhood Change	
Demand Side (characteristics of residents)	Demographic Change Immigration Labor Force Change Retirement
Supply Side (what is provided)	Private Sector Incentives Capital Availability Existing Built Environment Public Policies Public Subsidy (streets, sewers, tax benefits)

The income diversity classification defines the neighborhood in the context of market forces and social changes affecting the city and the region. This definition of neighborhood context suggests the priority for different strategies for community development.

Development Strategies: Emerging High Income. In neighborhoods where the high-income population is increasing, the goals for community development organizations are likely to involve ways to maintain a presence of low- to moderate-income families in a neighborhood that is experiencing rapidly rising rents and home prices because of the influx of high-income families. Strategies often include zoning variances or favorable tax treatments to develop property designed for a range of income levels;[25] financial support to landlords to rent to lower-income tenants in areas where higher-level rents could be achieved or rental buildings could be converted to condominiums at a higher price point; set-aside housing to dampen the extent of economic change to protect residents from radical forms of displacement and social programs to minimize class antagonism and encourage residents to benefit from the upgrading in public and commercial services that often accompanies gentrification.[26]

[25] Sometimes zoning variances or favorable tax treatments for an upscale development are granted by government in exchange for a promise to develop lower-income housing elsewhere in the city, or for a payment to a low-income housing trust fund that will finance lower-income housing elsewhere in the city. This strategy helps guarantee that lower-income housing is built somewhere in the city, but it does not contribute to income diversity within any neighborhood.
[26] See, for instance, Philip Nyden; Emily Edlynn; Julie Davis **The Differential Impact of Gentrification on Communities in Chicago** Chicago: Loyola University Chicago Center for Urban Research and Learning (2006) p 38.

Social Segmentation of Neighborhood Contexts								
		2000 Census Data						
CONTEXT	Examples from Text	65 years old or older	Residing in same house 5 yrs ago	Under 18 years old	< High School grad	Unem-ployed	Public Assistance Income
Emerging High Net Worth							
Beginning 1970s	Lincoln Park	10%	35%	10%	5%	5%	5%
Beginning 1980s	Near West Side	11%	49%	18%	9%	6%	8%
Beginning 1990s	Pilsen	10%	56%	28%	19%	9%	12%
Emerging Low Income							
Emerging Low Income	Chicago Lawn South Lawndale	7%	54%	31%	23%	12%	14%
Desertification	East Garfield Park	10%	61%	35%	17%	26%	34%
Emerging Bipolarity	Logan Square	10%	57%	27%	15%	10%	14%
Stable Diversity	Auburn Gresham	12%	57%	27%	13%	10%	14%

Development Strategies: Emerging Low Income. As the table showing the social segmentation of neighborhood contexts illustrates, Emerging Low Income neighborhoods have a high proportion of families who have lived in the neighborhood a long time, a high proportion who have not completed high school, and a high proportion unemployed or on public assistance. In these neighborhoods, the strategy for community development organizations is likely to involve community organizing, enforcement of housing quality standards, increased protection from crime, and commitments of financial resources and infrastructure improvement in order to stem the tide of disinvestment and withdrawal.[27]

In some cases the question being struggled with is how to provide incentives for moderate- to high-income families to remain in the community as the number of lower-income families increases, so a neighborhood can become Stable Diverse or Bipolar.

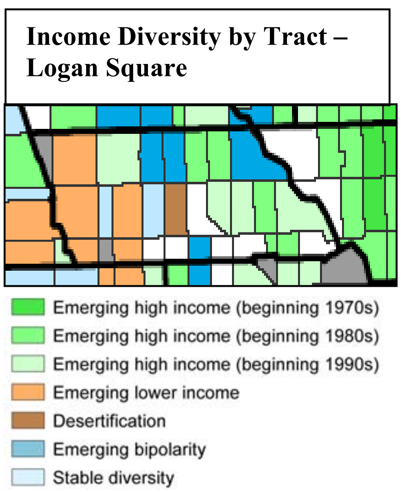
Development Strategies: Bipolarity. Sometimes the community development goal is a “bipolar” type of neighborhood, with new market-rate housing for

[27] See, for instance, Jill Jonnes **South Bronx Rising: The Rise, Fall, and Resurrection of an American City**, New York: Fordham University (2002); Charles Orlebeke **New Life at Ground Zero: New York, Home Ownership, and the Future of American Cities** Rockefeller Institute: New York (1997). These strategies are further shaped by the dominant reason for the emergence of lower income population – i.e., immigration, entry of lower income families; reduced income among previously middle income families; or retirement.

moderate- and high-income families, and at the same time, construction of below-market and subsidized housing to provide residences for low-income families. The *Plan for Transformation* of the Chicago Housing Authority is an example of the conscious pursuit of a bipolar income mix. The Plan states that it will create "new mixed-income communities with contemporary town homes and low-rise buildings, where public housing residents will live in the same neighborhood as people who purchase market rate and affordable homes."[28]

Bipolarity is a challenging pattern for community development practitioners because the neighborhood is, technically speaking, diverse, but integration, if it is to occur, will involve shared activities, shared space, and shared urban meanings between a very low-income population and a very high-income population. Bipolar communities, in general, are places with a great deal of contested ground (i.e., some of the census tracts in the neighborhood are usually Emerging Low Income, while others are Emerging High Income).

A tract map of income diversity in Logan Square (shown on the left) for instance, shows an east-to-west pattern of gentrification. Even though it is based on 40 years of trend data, the "bipolar status" in Logan Square is still clearly a snapshot. The issue for community planners is whether income diversity can be maintained in the face of economic and ethnic change.



To the extent that a "bipolar" community becomes a policy goal, development strategies will include subsidized construction of rental and purchase units at a range of price points and social/cultural programming strategies for integrating high- and low-income populations into a shared use of public, commercial, and cultural space.[29]

Development Strategies: Stable Diversity. There are a large number of stable diverse neighborhoods in the city, (19 neighborhoods, 24 percent of the city's population). Their relative economic health and ethno-racial diversity offer a wide latitude for economic development interventions and strategies designed to sustain resilient mixed income communities. Most of the vibrant success stories

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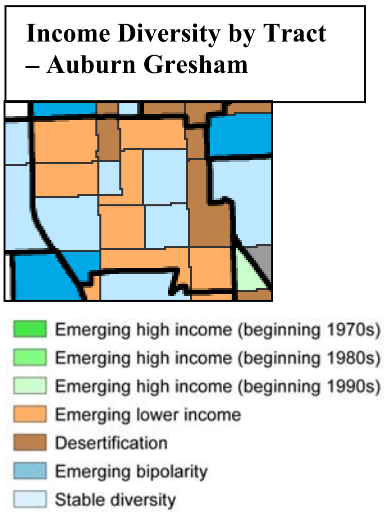
[28] Quoted from the CHA Web site http://www.thecha.org/transformplan/plan_summary.html The CHA is itself a case study of the impact of income diversity trends. The buildings were constructed for a mixture of moderate- and low-income families. Over time the population became less diverse as middle-income families moved out and low-income families moved in. See Sudhir Venkatesh, **American Project: The Rise and Fall of a Modern Ghetto** Cambridge, MA: Harvard University (2000) p 276.

[29] For a summary of progress toward the income diversity goal in the new CHA communities see Sudhir Venkatesh, Isil Celimli, Douglas Miller, and Alexandra Murphy, *Chicago Public Housing Transformation: A Research Report*. New York: Columbia University Center for Urban Research and Policy (2004); also http://www.chicagohousingauthority.net/

from the past 30 years of community development come from neighborhoods where there is a large number of low- and moderate-income families and a small number of high-income families. In these areas, community development strategies focus on securing funding to build and maintain low-cost homes and mobilizing public services to maintain the neighborhood as a pleasant place for low- and moderate-income residents.[30]



The tract map for Auburn Gresham, shown on the left, shows a pattern that is typical for stable diverse communities – a good deal of the population is concentrated in tracts also code as Stable Diversity (i.e., the neighborhood coding is not an "average" of disparate trends). Also, the Stable Diversity tracts tend to be near Emerging Lower Income tracts, indicating challenges to the resilience of neighborhoods in the Stable Diversity category. These neighborhoods also have a somewhat higher proportion of elderly population (12 percent), raising the importance of community planning for turnover of housing stock or providing support to older residents who wish to remain in their homes.

Income Diversity and Impact Research. It was noted earlier that the income diversity classification defines the neighborhood in the context of market forces and social changes affecting the city and the region. *This defines the neighborhood in the context of nearby neighborhoods and similar neighborhoods in the city, which establishes a basis for benchmarks and counterfactuals to be used for assessing the impact of neighborhood development activities.*

Interrupted Time Series Design

	…T -2	T -1		T 1	T 2 . . .
Program Area	O	O	X	O	O
Comparison Area	O	O		O	O

O = data collection observation

T-2, T-1, T1, T2 = timing of data collection observations

X = timing of program activity

To demonstrate the impact of community development activities, the profession has settled on an approach that compares "before" and "after" data for a target program area with "before" and "after"

[30] See Paul Grogan and Tony Proscio **Comeback Cities: A Blueprint for Neighborhood Revival** Westview (2000): "It is still unrealistic to expect inner cities suddenly to become prime destinations for the mass of upwardly mobile families now moving to the suburbs (p 138). Urban neighborhoods are not recovering the way every one expected them to: by getting wealthier. They are becoming healthy and desirable without imitating the suburbs, economically or socially (p 14). Even after the revitalization of poor and blighted neighborhoods, very wide income disparities between city and suburbs will probably persist indefinitely, and substantial racial segregation and isolation will continue (p 55)."

data for a benchmark area. There is general agreement that the "interrupted time series" design or its close cousin, the "difference of differences" design, are among the most robust quasi-experimental models for evaluation research.[31]

The interrupted time series and the difference of differences designs require data that are: frequently collected, high quality, possess high face validity (i.e., bears directly on the goals of the community development program), and are able to be disaggregated finely enough to allow a sensitive delineation of "program" and "comparison" areas. Data sets that are currently accessible to the public rarely meet all of these criteria, so community development researchers are focusing on one or both of the following strategies:

(1) making do with less data – determining when there is a core set of measures that can stand for a wider array, when the wider array is not available;[32] and,

(2) making more data available – for instance, opening up parcel-level files from city and county government that contain information that is directly on point (i.e., high face validity) but requires information processing advances to make it publicly accessible while protecting confidentiality concerns, and also requires validation research to determine the data quality and the alignment with other public sources that provide sometimes differing estimates of what is supposed to be the same underlying information.[33]

The interrupted time series and the difference of differences designs also require a comparison area. Some studies of community development impact compare program areas to citywide and/or countywide results.[34] These should probably be called "benchmarking" studies rather than "impact" studies because, although they use the analytic tools of the interrupted time series and the difference of differences model, there is no suggestion that the comparison area is similar to the program area (i.e., that the average set of conditions in the city or county is what would have happened in the program area if there had been no program). Instead, the role of the citywide or countywide data is to establish a general benchmark for evaluating the direction and magnitude of change in the program area.

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[31] Donald T. Campbell, Julian C. Stanley **Experimental and Quasi-Experimental Designs for Research** (reprinted Houghton Mifflin, 2005). The difference of differences design relies on one pre- and post- data collection operation, rather than a pre- and post-time series. The options for analysis are a little more limited than with the interrupted time series design, on the other hand sparseness of data and non-linear patterns of change often limit the appropriateness of using the interrupted time series model.

[32] For instance, George Galster, Chris Hayes, & Jennifer Johnson "Identifying Robust, Parsimonious Neighborhood Indicators," **Journal of Planning Education and Research** 24:265-280 (2005).

[33] Expanding data availability is, for instance, a core strategy of the National Neighborhood Indicators Partnership http://www2.urban.org/nnip/

[34] For instance Lindley R. Higgins **Measuring the Economic Impact of Community-Based Homeownership Programs on Neighborhood Revitalization** George Mason University School of Public Policy (April 2001) compares program area trends to citywide and countywide change in housing prices; citywide change in retail sales,; and citywide trends in crime rates.

An "impact" study (as opposed to a "benchmarking" study) requires a comparison area that is: (a) geographically delimited; and (b) comparable to the program area. The assumptions that make it possible to calculate a measure of impact are:

(1) "Pre-existing" differences between the program and comparison area that affect the pattern of change and can be measured and adjusted for.

(2) The adjusted pattern in the comparison area is the same as the pattern that would have occurred in the program area if the program had not been in place.

(3) The difference between the adjusted pattern in the program area and the adjusted pattern in the comparison area is the estimate of program impact.[35]

But social conditions are not randomly scattered among neighborhoods and the process is, to paraphrase the U.S. Supreme Court, "not fully known, and perhaps not fully knowable." This means that community development researchers need to pay attention to *the face validity of the choice of comparison area* as well as the *face validity of the indicators* used to measure impact. Community development researchers use four approaches to ensure the validity of the choice of comparison area. The alternatives are to compare a program area to:

(1) an immediately adjacent area;[36]

(2) an immediately adjacent area and to successive rings of further outlying areas;[37]

(3) an area that is not adjacent, but faces similar contextual circumstances;[38] and,

(4) a group of other areas that are not adjacent, but face similar contextual circumstances.[39]

The measure of income diversity is a substantial tool for establishing the validity of the choice of a comparison area for impact research. The measure of income

[35] Donald T. Campbell, Thomas D. Cook **Quasi-Experimentation: Design and Analysis Issues** (Houghton Mifflin, 1979).
[36] Tony Proscio, Measuring Community Development: An Emerging Approach to Quantifying Neighborhood Revitalization, LISC Chicago available at www.mcic.org
[37] Ingrid Gould Ellen, Scott Susin, Amy Ellen Schwartz and Michael Schill **Do Homeownership Programs Increase Property Value in Low-Income Neighborhoods?** Harvard University Joint Center for Housing Studies (Sept 2001); George C. Galster, Peter Tatian, and Robin Smith. "The Impact of Neighbors Who Use Section 8 Certificates on Property Values," **Housing Policy Debate** 10, no. 4 (1999):
879–917.
[38] John Accordino, George Galster, Peter Tatian **The Impacts of Targeted Public and Nonprofit Investment on Neighborhood Development** Federal Reserve Bank of Richmond (July 2005).
[39] Suggested to me by Wesley Skogan.

diversity can tell us whether an adjacent area proposed as a comparison area is similar to the program area being evaluated, or if the neighborhood contexts are different and therefore there is little expectation that the patterns on the outcome measures would be similar (the null hypothesis for estimating program effects).

For instance, if the program being evaluated is in the Auburn Gresham neighborhood (Stable Diversity) then the adjacent Chatham neighborhood would not be a good comparison because it is an area of Emerging High Income (1990s). However, the adjacent Ashburn neighborhood or the adjacent Washington Heights neighborhood would be good comparison areas because they are also areas of Stable Diversity.

The choice of adjacent neighborhoods for comparison might understate the program effect, however, the "good effects" of the program (for instance, increasing mortgage lending) might spill over to the adjacent area, diminishing the measured difference.[40] The income diversity measure is a guide to which non-adjacent areas share a similar context for development but would no be subject to spillover effects. For instance, Avalon Park would be good a comparison area for Auburn Gresham because it is also a stably diverse area, but Garfield Ridge would not because it is an area of Emerging High Income (1990s).

Using the income diversity index to choose one neighborhood as comparison would match the contextual profile, but could also inadvertently capitalize on idiosyncratic features of the comparison area (proximity to other programs, other assets) that bias the result. The income diversity index can help eliminate unknown biases that might intrude from relying on one comparison area by identifying a group of neighborhoods that all share a similar context of neighborhood change, and therefore could be aggregated as a non-place specific comparison. This is similar to the practice of using citywide or countywide results as a benchmark for measuring change, except by aggregating only *similar* neighborhoods, there is a strong argument that average conditions among the comparison group reflect a context that is similar to the context of the program area.

Recap. This paper presents a new classification of income diversity for measuring the context of neighborhood development. It is a measure of context with very high face validity – it describes the neighborhood context using exactly the terms that community planners use and it differentiates among neighborhood contexts the way planners differentiate appropriate strategies for community development. This measure:

[40] Spillover effects can be negative as well – for instance effective crime prevention in one community can drive offenders to an adjacent area, a "negative" pattern (from the point of view of community well-being) that would overstate the impact in the program area (crime was displaced, not deterred). I am thankful to Wes Skogan for discussing this point with me.

- Is built using widely accessible data (U.S. Census), although the methodology will need to be modified to accommodate the new American Community Survey design of the U.S. Census Bureau;
- Provides a summary measure of income diversity that has high face validity and is easy to interpret;
- Uses trend data to measure the context of community change instead of relying on recent cross sectional differences;
- Can be incorporated into other dynamic models of neighborhood change – as a contextual variable or as an outcome variable;
- Can be aggregated to adjacent or non-adjacent customized areas to create comparison groups for impact research;
- Can be disaggregated to the tract level for examining micro-patterns underlying general neighborhood classifications or for incorporation into more fine-grained models of neighborhood change or program impact.[41]

[41] In Chicago there are 865 tracts with sufficient population (50 or more) in each year to be eligible for inclusion in the calculation of the income diversity profile. Of these, 641 tracts (74 percent) code directly into one of the four patterns of change. An additional 110 tracts (13 percent) would code except that there are zero families in one of the income categories (usually high income). When the coding rules are relaxed to assign these areas, then 87 percent of all tracts are codable using the scheme proposed here and 13 percent are not codable because they show a pattern that does not fit any of the profiles.

APPENDIX: Defining Income Levels for Tracking Diversity

Low Income. In community development research, “low income” is usually defined as some multiple of the federal poverty standard. In 2004 the federal poverty standard for a family of four was $19,311. In 1964, when the standard was first defined, the benchmark for a family of four was $3,169. It would first appear that this is a big change, but if the 1964 standard is expressed in 2004 dollars it is exactly the same as the 2004 figure -- $19,311.[42] Except for adjustments based on the Consumer Price Index, the definition of the federal poverty standard does not change.[43]

Commonly-used “low income” classifications include “150 percent of the poverty level” (about $28,967 in 2004 prices), and “200 percent of the poverty level ($38,622).” Most conversations about community development tend toward the “200 percent of poverty” definition for “lower” income since that is the level of resources where home ownership begins to be a reasonably widely available option. Following the HUD guideline that mortgage payments are normally required to total less than 31% of gross income, a family with an annual income of $38,622 and minimal expenses can afford a home costing $123,528. [44] This is below the Chicago median, but there is a substantial housing market at this level -- among the 77 Chicago communities, there are 18 where the median sale price for detached single family homes is below $123,000 and 25 where the median sale price for attached single family homes is below $123,000.[45] We therefore use the benchmark of “200 percent of the federal poverty level” as the threshold for identifying “lower-income” families.

High Income. Almost all of the research on income inequality, diversity, segregation, etc. defines “high income” as the upper tenth, the upper quarter or some other percentage of the upper end of the income distribution. This approach makes trend analysis impossible because it anchors the definition of “high income” to the average income in an area. What is needed is a benchmark

[42] All poverty information is from U.S. Bureau of the Census pages on historical and current poverty statistics http://www.census.gov/hhes/poverty/histpov/hstpov1.html and http://www.census.gov/hhes/poverty/threshld.html

[43] Among social scientists there is debate about the adequacy of the Census Bureau poverty definition (see for instance, Jared Bernstein and Arloc Sherman **Poor measurement: New Census report on measuring poverty raises concerns** Center on Budget and Policy Priorities March, 2006). The use of the poverty measure here is for the purpose of establishing a general division of the population; the income diversity patterns are quite robust with respect to alternative poverty measures.

[44] U.S. Department of Housing and Urban Development website “How Much Housing You Can afford” http://www.hud.gov/buying/index.cfm Home purchase price calculator from GNMA affordable housing web site http://www.ginniemae.gov/2x_prequal/intro_results.asp. Actual practice seems to be to make mortgage loans at a significantly lower ratio of home value to income. This will not affect the findings reported here, but is an important topic for another report.

[45] Home sale price data for 2004 are from Chicago Multiple Listing Service. The Chicago median is $210,000 for detached single family homes in Chicago and $160,750 for attached single-family homes.

for defining “high income” that is independent of the distribution of income in a particular time and place – the same way the definition of “poverty” is independent of time and place.

The benchmark used here is based on an analysis of asset ownership – e.g., a home, a business, or liquid assets. Significant asset ownership implies the ability to make a substantial down payment and secure a sizable mortgage.[46] Higher levels of asset ownership among buyers moving into a neighborhood leads to high end real estate development and the possibility that others will be priced out of a neighborhood’s housing market.[47]

The Census Survey of Income and Program Participation reports that families earning $78,825 have a median net worth of $202,941 (both expressed in 2004 dollars) – about half of which is home equity and half is other financial holdings.[48] This is the top income category reported and corresponds to about the top 20 percent of American families. By HUD and GNMA guidelines, families at this income and asset level can afford to purchase a home costing $252,000, with a payment at closing cost of about $57,000 cash. This would delineate the “high end” of the Chicago housing market. It is above the Chicago median sale price of $210,000 for detached single-family homes and well above the median of $160,750 for attached single-family homes. Therefore, the benchmark of $78,825 (2004 dollars) is the threshold for “high-income” families.

With the appropriate CPI adjustment we can determine the dollar figure that defines high-income threshold in any year – similar to the way the CPI adjustment determines the poverty threshold -- to measure the trend in high-income families in a community.

Moderate Income. The moderate-income category is the group who earn above the $38,622 low-income threshold and below the $78,825 high-income threshold.

Summary of Income Benchmarks. The definitions of income categories are shown in the table below. The low-income threshold is invariant because it is based on the federal poverty threshold. The high-income threshold is based on the level of income that is associated with the ability to purchase and maintain a fixed asset level. The definitions don’t change with inflation or movements up or down in the median income because the thresholds, and the income measures in the data being analyzed, are always expressed in constant dollars.

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[46] Michael Sherraden **Assets and the Poor: A New American Welfare Policy** Sharpe (1991).
[47] Saskia Sassen **Globalization and Its Discontents: Essays on the New Mobility of People and Money** The New Press (1998) p. xxiv, p. 160.
[48] U.S. Bureau of the Census *Net Worth and Asset Ownership of Households* **Current Population Reports** p.70-88 (May 2003).

Definition of Income Groups (2004 dollars)				
	1970	1980	1990	2000
Low Income = up to -->	$38,622	$38,622	$38,622	$38,622
Moderate Income = between	. . .	. . .	. . .	. . .
High Income = above -->	$78,825	$78,825	$78,825	$78,825

Relation to Other Definitions. HUD Section 8 and Section 236 guidelines are based on percentages of the PMSA median family income. The FY 2005 threshold for "very low income" is about $35,000, close to our definition of "lower income." The HUD Section 221(d)(3)BMIR and Section 235 limit for a "low- and moderate-income household" is $66,215, which is in the upper part of our "moderate income" designation.[49] The HMDA criterion for "low-income borrowers" is $55,760 – significantly above our threshold of $38,622. However, the HMDA threshold for middle-income borrowers is $83,640 – which is just a step above our threshold of $78,825.

How to Calculate the Number and Percent in Income Categories. Estimating the number of families in low-, moderate-, and high-income categories requires working with census data tabulations where the groupings do not correspond to the dollar thresholds chosen here, are different from one decade to the next and need to be adjusted for inflation. Demographers, faced with the need to work primarily with published census tables, have solved these problems by developing standard procedures for calculating medians from grouped data. The steps are:

- Prepare the census data
    - Calculate income distributions from the census data. Adjust the boundaries to constant dollars using the CPI index.[50] Calculate the cumulative percent of families up to and including the upper threshold for each income category in the census table.
    - To use the census data to track change, it is necessary to make sure the census data for each decade are conformed to the same tract boundaries – this adjustment affects only a handful of census tracts in the City of Chicago each year, but can be a laborious matter when working with data for exurban or rural areas.[51]
- Decide on low income, moderate income, and high income category boundaries expressed in constant dollars. These are the categories developed above -- $38,622 for the low income threshold; $78,825 for the high income threshold.

[49] HUD income thresholds are explained at http://www.huduser.org/datasets/il/il05/index.html
[50] This paper uses the CPI for all U.S. consumers, all items, U.S. city average see http://data.bls.gov/cgi-bin/surveymost?cu
[51] The Geolytics Neighborhood Change Tract Database 1970 – 2000 used for this report purports to have made these adjustments. We find the Database to be extremely reliable for 1980 and beyond.

- Use the procedures for calculating the median from grouped data, but instead of solving for the dollar amount that corresponds to the 50^{th} percentile; use the method to interpolate the cumulative percentage that corresponds to the target dollar amounts for low income, moderate income, and high income.[52]
- Multiply the estimated percent in each group by the total number of families on which the income distribution is based. This will yield the number of families in each income group.

[52] Estimate the cumulative percent of population who fall below the low-income threshold. This is the percent in the low income group. Estimate the cumulative percent of population who fall exactly below the high-income threshold. Subtract this percent from 100. This is the percent in the high income group. Add together the percent in the low- and high-income groups. Subtract this percent from 100. This is the percent in the moderate income group.