The neighborhoods we live in: Comparisons by race and income in Southern California

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School of Social Ecology
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The Metropolitan Futures Initiative (MFI) in the School of Social Ecology at the University of California, Irvine aims to develop an improved understanding of communities and their potential for integrative and collaborative planning and action to ensure a bright future for the region. It approaches these goals by bringing together an interdisciplinary research team along with the insights and techniques of “big data” research.

By combining various large longitudinal and spatial data sources, and then employing cutting edge statistical analyses, the goal is to come to a better understanding of how the various dimensions of the social ecology of a region move together to produce the outcomes observed within our neighborhoods.

With initial focus on Orange County and its location within the larger Southern California area, The Metropolitan Futures Initiative is a commitment to build communities that are economically vibrant, environmentally sustainable, and socially just by partnering the School of Social Ecology’s world class, boundary-crossing scholarship with expertise throughout Southern California.

The MFI Quarterly Report series presents cutting edge research focusing on different dimensions of the Southern California region, and the consequences for neighborhoods in the region. Reports released each quarter focus on issues of interest to the public as well as policymakers in the region. In addition, the MFI webpage (mfi.soceco.uci.edu) provides interactive mapping applications that allow policymakers and the public to explore more deeply the data from each Quarterly Report.

The MFI gratefully acknowledges the Heritage Fields El Toro, LLC for their funding support.
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**Jae Hong Kim** is a member of the MFI Executive Committee and a faculty member in the Department of Planning, Policy, and Design at the University of California, Irvine. His research focuses on urban economic development, land use change, and the nexus between these two critical processes. His academic interests also lie in institutional environments — how institutional environments shape urban development processes — and urban system modeling. His scholarship attempts to advance our knowledge about the complex mechanisms of contemporary urban development and to develop innovative urban planning strategies/tools for both academics and practitioners.

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**Young-An Kim** is a Ph.D. student in the department of Criminology, Law and Society, at the University of California, Irvine. His research interests focus on crime patterns at micro places, effects of structural characteristics of street segments on crime, and immigration and crime. Besides criminology, he is interested in sociology of health, urban sociology, and quantitative research methods.
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Results in Brief

» While racial/ethnic segregation has declined in Southern California neighborhoods over the last three decades, the distribution of households significantly differ by income in each racial/ethnic group.

» Higher income whites live in neighborhoods that typically have fewer Latinos and Blacks compared to lower income whites.

» As income rises, Asian residents live in neighborhoods with a higher percentage white, and fewer Latinos and Blacks compared to lower income Asian residents.

» Higher income Latino residents live in neighborhoods with a higher percentage white and Asian, but fewer Latinos compared to lower income Latino residents.

» The percent Asian in the typical Latino neighborhood has risen from 3-4% in 1980, to about 10% in more recent years.

» As income rises, black residents live in neighborhoods with a higher percentage white and Asian.

» The neighborhoods of black residents have more Latinos in each decade: rising from about 20% in 1980 to about 45% in 2013.

» The percent black in the neighborhoods of black residents has steadily fallen over these decades, from just under 50% in 1980 to just over 20% in 2013.

» The racial/ethnic mixing in the typical neighborhood of white residents has increased in each decade.

» The highest income white residents live in neighborhoods with less racial mixing than other white residents, whereas higher income Latino residents live in neighborhoods with more racial mixing compared to lower income Latino residents.
Results in Brief

» Higher income Asian, Latino, and black residents tend to live in neighborhoods with more new housing stock compared to their counterparts with lower income.

» For all groups, higher income residents live in neighborhoods with more highly educated residents compared to lower income residents.

» However, the percent highly educated is lower in the neighborhoods of black and Latino residents. In fact, high income Latinos or blacks live in neighborhoods with similarly educated residents as do low income white residents.

» For all four racial/ethnic groups, higher income residents tend to live in neighborhoods with a higher percentage of owners, more single family housing, lower population density, and lower unemployment rates.

» White residents live in lower population density neighborhoods compared to the other groups at the same income levels.

» In 2000, higher income residents of all four racial/ethnic groups tend to live in neighborhoods with fewer nearby jobs. This relationship is flatter in 2013.

» In 2013, lower income Asians live near more jobs than any other group, but Latinos live near the fewest jobs.

» The level of violent crime decreases as the income level of residents increases (for all four racial/ethnic groups).

» Even so, at each level of income, black residents live in neighborhoods with higher average violent crime compared to residents of the other three racial/ethnic groups.

» At each income level, white and Asian residents live in neighborhoods with lower average violent crime rates compared to black or Latino residents.

» The average violent crime rate in the neighborhoods of the lowest income white and Asian residents is only somewhat higher than the average violent crime rate for the highest income Latino residents, and about the same as the neighborhoods of the highest income black residents.

» Property crime shows no systematic pattern by racial/ethnic group, or by income level.
The neighborhoods we live in are important, as they are the locations of our daily activities. Nonetheless, there are differences in the characteristics of neighborhoods across any city or region. Our goal in this Report is to better understand the differences between neighborhoods. In particular, we are interested in understanding the differences in neighborhoods based on the socio-economic status of the household, as well as the racial/ethnic composition of the household. This better understanding can shed light on any possible inequalities that may exist and require policy attention. Furthermore, by taking a long-term view to this question—by studying the region from 1980 to present—we are able to provide insight on what types of changes have occurred in these neighborhoods over this period of time.

In this Report, we are particularly interested in how economic resources and racial/ethnic status might interact to affect access to various types of neighborhoods. Thus, whereas a particular racial/ethnic group may tend to live in a neighborhood with less favorable conditions compared to another group, the question we ask is whether economic resources can diminish this gap? Specifically, do greater economic resources for racial/ethnic groups that are typically more disadvantaged (e.g., Blacks, Latinos) similarly provide them access to similar neighborhoods as they might for more advantaged groups such as White residents?

This Report therefore focuses on the characteristics of neighborhoods occupied by members of racial/ethnic groups based on different levels of income. For example, we compare the characteristics of the neighborhoods of high income white residents to those of high income black residents to high income Asian residents to high income Latino residents. Likewise, we compare the neighborhoods of different racial groups based on other income levels (very low income, low income, medium income, etc.). We also compare within racial/ethnic groups: for example, do high income Blacks live in different neighborhoods compare to low income Blacks? In short, to what extent do race and economic resources—either separately or in tandem—affect the type of neighborhoods that residents are able to access?

We study various dimensions of these neighborhoods (including racial composition, racial mixing, education levels, home ownership, new housing stock, vacancy rates, unemployment, the presence of jobs, and crime rates) to get a sense of how they differ by different racial/ethnic groups with different income levels. Consideration is also given to whether access to neighborhoods for various groups has changed over a 30 year period, specifically from 1980 to 2010. We use Census data from four decades to study this question: 1980, 1990, 2000, and 2013 (the most recent data, which is in fact a 5-year average from 2011-15).
Considering the neighborhoods for racial/ethnic group members based on income level for 1980-2013

Throughout this Report, we compare the neighborhoods of members of various racial/ethnic groups by income level. We used the income bins provided by the U.S. Census in each of the decadal years. These bins change over decades, due to inflation, Census decisions, etc. The actual bins used in each decade are shown in Table 1. There were fewer bins in the two earlier decades (just 9 bins in each decade), whereas there were more bins in the two more recent decades (16). In the Figures in this Report, we do not try to adjust these income bins for inflation over time (see the Technical Appendix for a more complete discussion of this issue). However, we do “stretch” the number of categories in the two earlier decades so that they match the number of categories in the two later decades. This is done to prevent the visual mis-representation that would otherwise occur if we just plotted the specific bins. We describe how this was done in the Technical Appendix. The number in the left-hand column represents the bin number shown on the x-axis in all figures in this Report.

<table>
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Racial composition of neighborhoods from 1980-2013

In this section, we look at the racial/ethnic composition experienced by the average member of a racial/ethnic group who is in a specific income bin. For example, for the lowest income level of white residents (bin 1), we obtained information on the percent white in the neighborhood for each low income white resident in the region, and although they might live in very different environments from one another, we then computed the average over them all.

In the first plot, we show the percent white in the neighborhood experienced by white residents in the different income bins (in each of the four decades). We see that for whites in the lowest income bin in 1980 and 1990 (the blue and red lines), they lived in a neighborhood that had, on average, about 60% white residents (the left side of the Figure). By 2000, white residents in the lowest income bin lived in a neighborhood with, on average, about 53% white residents (the green line). And by 2013, the lowest income white residents lived in a neighborhood that is about 50% white (the purple line).

We can also see in this plot that as the income level of white residents rises, they tend to live in neighborhoods with a higher percentage white. In 1980 (the blue line), whereas white residents in the lowest income bin lived in neighborhoods with about 60% whites, those in the highest income bin lived in neighborhoods over 80% white. In 1990 (the red line), white residents in the highest income bin were 77% white. In 2000, the highest income white residents lived in neighborhoods that were 74% white, and by 2013 the highest income white residents lived in neighborhoods that were just 63% white.

Regarding the patterns for white residents based on the remaining measures of the racial/ethnic composition, we see:

» The percent Asian in their typical neighborhood has risen from just under 4% in 1980, to 8% in 1990, to about 9% in 2000, and about 12% in 2013.

» There is modest evidence that higher income white residents have a higher percentage Asian in their neighborhood compared to lower income white residents.

» There is much stronger evidence that higher income whites live in neighborhoods that typically have fewer Latinos and Blacks compared to lower income whites.

» The lowest income white residents live in neighborhoods that typically have about 30% Latinos, whereas the highest income white residents live in neighborhoods that typically have closer to 15% Latinos.

» The percent Black in the neighborhood ranges from about 4-5% for low income white residents to close to 2% for high income white residents.
Figure 1.1

White residents: Percent white in neighborhood by income level

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</tbody>
</table>
Figure 1.2

White residents: Percent Asian in neighborhood by income level

- 1980
- 1990
- 2000
- 2013
Figure 1.3

White residents: Percent Latino in neighborhood by income level

- 1980
- 1990
- 2000
- 2013
White residents: Percent black in neighborhood by income level

Figure 1.4
Regarding the patterns for Asian residents based on the racial/ethnic composition, we see:

» The percent white in their typical neighborhood has fallen from about 50% in 1980, to about 45% in 1990, to about 40% in 2000, and just over 30% in 2013.

» As income rises, Asian residents live in neighborhoods with a higher percentage white. In 1980 and 1990, the lowest income Asian residents lived in neighborhoods that were about 45% white whereas the highest income Asian residents lived in neighborhoods over 60% white. In 2000 and 2013, the lowest income Asian residents live in neighborhoods about 30% white whereas the highest income Asian residents lived in neighborhoods that were 54% white (in 2000) and 45% white (in 2013).

» The percent Asian in Asian residents’ typical neighborhood has risen from 10% in 1980, to 20% in 1990, to 24% in 2000, and 28% in 2013.

» It does not appear that higher income Asian residents live in neighborhoods with a higher percentage Asian compared to lower income Asian residents.

» We see that higher income Asian residents live in neighborhoods that typically have fewer Latinos and Blacks compared to lower income Asian residents.

» The lowest income Asian residents live in neighborhoods that typically have 30–35% Latinos, whereas the highest income Asian residents live in neighborhoods that typically have about 20% Latinos.

» The percent Black in the neighborhood ranges from 5–7% for low income Asian residents to close 4% for high income Asian residents.
Figure 2.1

Asian residents: Percent white in neighborhood by income level

- 1980
- 1990
- 2000
- 2013
Asian residents: Percent Asian in neighborhood by income level

Figure 2.2
Figure 2.3

Asian residents: Percent Latino in neighborhood by income level
Asian residents: Percent black in neighborhood by income level

Figure 2.4
Turning to the patterns for Latino residents based on the racial/ethnic composition, we see:

» There is strong evidence that as income rises, Latino residents live in neighborhoods with a higher percentage white. In 1980 and 1990, the lowest income Latino residents lived in neighborhoods that were 30% white whereas the highest income Latino residents lived in neighborhoods 55% white. In 2000 and 2013, the lowest income Latino residents live in neighborhoods 20% white compared to high income Latino residents who lived in neighborhoods that were 40% white.

» The percent Asian in the typical neighborhood of a Latino has risen from 3-4% in 1980, to about 10% in more recent years.

» It appears that higher income Latino residents live in neighborhoods with a higher percentage Asian compared to lower income Latinos, especially in 2000 and 2013. In 2013, whereas the lowest income Latino residents live in neighborhoods with 8% Asian this value is 14% for the highest income Latinos.

» It is interesting to note that higher income Latino residents live in neighborhoods that typically have fewer Latinos compared to lower income Latino residents. In 2013, the lowest income Latino residents live in neighborhoods that are about 60% Latino, whereas this value is 40% for the highest income Latino residents.

» Whereas the lowest income Latino residents lived in neighborhoods with almost 10% Black in 1990, this fell to 8% in 2000 and 7% in 2013. In contrast, the percent black is lower in the neighborhoods of high income Latino residents (about 5%).
Figure 3.1

Latino residents: Percent white in neighborhood by income level

Latino residents: Percent Asian in neighborhood by income level

Figure 3.2
Figure 3.3

Latino residents: Percent Latino in neighborhood by income level

- 1980
- 1990
- 2000
- 2013
Figure 3.4

Latino residents: Percent black in neighborhood by income level

- 1980
- 1990
- 2000
- 2013
Next we look at the patterns for black residents based on the racial/ethnic composition, and see:

» As income rises, black residents live in neighborhoods with a higher percentage white. The lowest income black residents live in neighborhoods that are typically 15-19% white, whereas the highest income black residents live in neighborhoods that are typically 35-40% white. However, these percentages have not really changed over decades.

» Black residents tend to live in neighborhoods with a slightly higher percent Asian in each subsequent decade.

» The neighborhoods of higher income black residents have more Asians (12% in 2013) compared to those of lower income black residents (7% in 2013).

» The neighborhoods of black residents have more Latinos in each decade: whereas they had about 20% Latino in 1980, this rose to 30% in 1990, to just under 40% in 2000, and to about 45% in 2013.

» Higher income black residents live in neighborhoods that typically have fewer Latinos compared to lower income black residents. In 2013, the lowest income black residents tend to live in neighborhoods that are 50% Latino, whereas this figure is 30% for the highest income black residents.

» The percent black in the neighborhoods of black residents has steadily fallen over these decades. Whereas the neighborhood of the typical black resident was just under 50% black in 1980, this fell to 35% in 1990, to 28% in 2000, and to just over 20% in 2013.

» There is only very slight evidence that higher income black residents live in neighborhoods with a lower percentage black.
Black residents: Percent white in neighborhood by income level

Figure 4.1
Black residents: Percent Asian in neighborhood by income level

Figure 4.2
Black residents: Percent Latino in neighborhood by income level

Figure 4.3
Black residents: Percent black in neighborhood by income level

Figure 4.4
In this section, we look at the racial/ethnic mixing of the typical neighborhood of residents of various race/ethnicities by income bins. We measured racial/ethnic mixing (heterogeneity) based on a Herfindahl index. For this measure, the most mixed neighborhood would have equal numbers of all four racial/ethnic groups, whereas the least mixed neighborhood would have all members of one group. Higher values on this measure indicate neighborhoods with more racial mixing.

**Regarding the pattern of racial/ethnic mixing for different racial/ethnic groups, we see:**

- The racial/ethnic mixing in the typical neighborhood of white residents has increased in each decade.

- Whereas the level of racial/ethnic mixing is similar for white residents based on most income bins, the level of mixing is lower in the neighborhoods of the higher income white residents.

- The racial/ethnic mixing in the typical neighborhood of Asian residents has increased modestly in each decade.

- There is modest evidence that the level of mixing is lower in the neighborhoods of very high income Asian residents compared to lower income Asian residents.

- Latino residents lived in neighborhoods with very low mixing in 1980, but consistently higher levels since then.

- There is some evidence in 2000 and 2013 that higher income Latino residents live in neighborhoods with more mixing compared to lower income Latino residents.

- Black residents lived in neighborhoods with low mixing in 1980, but consistently higher levels since then.

- In 1990 and 2000, the highest income black residents lived in neighborhoods with less mixing compared to lower income black residents. However, in 2013 high income Black residents live in neighborhoods with slightly higher racial mixing than do lower income Black residents.

- Comparing across racial groups for low income residents, we see that in 2013 that Asians live in the most mixed neighborhoods (57), followed by Blacks (54), Whites (52), and Latinos (44).

- Comparing across racial groups for high income residents, we see that in 2013 that Asians live in the most mixed neighborhoods (56), followed by Blacks (55), Latinos (52), and Whites (48).

- In 1980, high income black residents lived in more racially mixed neighborhoods than high income members of any of the other groups.

We point out that given that Asians and Blacks are the two smallest groups in the region, we would expect them to be more likely to live in mixed neighborhoods compared to the other two groups. This is simply a mathematical relationship based on opportunities, and is well-known in the segregation literature.
White residents: Racial/ethnic heterogeneity in neighborhood by income level

Figure 5.1
Figure 5.2

Asian residents: Racial/ethnic heterogeneity in neighborhood by income level
Figure 5.3

Latino residents: Racial/ethnic heterogeneity in neighborhood by income level

[Graph showing trends from 1980 to 2013 for different income levels]
The neighborhoods we live in: Comparisons by race and income in Southern California

Figure 5.4

Black residents: Racial/ethnic heterogeneity in neighborhood by income level
In this section, we look at the tendency of residents in various racial/ethnic categories by income bins to live in neighborhoods with new housing. We measure this as the percent of housing built in the last decade in the neighborhood.

Regarding the pattern of new housing in neighborhoods for different racial/ethnic groups, we see:

» For white residents, those in higher income groups tend to live in neighborhoods with more new housing stock, although this gap has narrowed over time. In 1980, high income white residents lived in neighborhoods with an average of 31% new housing units whereas the lowest income residents had about 24%. In 1990, the gap was very narrow. In 2000, higher income white residents had about 16% new housing compared to 10% for the lowest income white residents. In 2013 this gap was not really evident.

» Higher income Asian residents tend to live in neighborhoods with more new housing stock compared to low income Asian residents.

» Higher income Latinos live in neighborhoods with more new housing stock (15%) compared to low income Latinos (10%).

» High income Black residents tend to live in neighborhoods with more new housing stock compared to low income Black residents.
White residents: Percent new housing units in neighborhood by income level

Figure 6.1
Asian residents: Percent new housing units in neighborhood by income level

Figure 6.2
Latino residents: Percent new housing units in neighborhood by income level

Figure 6.3
Black residents: Percent new housing units in neighborhood by income level

Figure 6.4
In this section, we look at the educational level of residents in the typical neighborhood of residents in various racial/ethnic categories by income bins. We measure this as the percent of residents in the neighborhood with a bachelor’s degree, or more.

Regarding the pattern of educational attainment in neighborhoods for different racial/ethnic groups, we see:

» For white residents, high income residents tend to live in neighborhoods with more highly educated residents compared to lower income white residents. In 2013, a high income white resident lived in an average neighborhood with over 50% with a bachelor’s degree, compared to about 35% for low income white residents.

» In 2013, the highest income Asian residents live in neighborhoods with 50% with a bachelor’s degree, whereas the percentage is about 30% for lower income Asian residents.

» There is an interesting pattern where the lowest income bin for each group tends to live in neighborhoods with somewhat more educated residents compared to the income bins just above it.

» There is a strong pattern for Black and Latino residents in which those with higher income live in neighborhoods with more highly educated residents (although at lower levels compared to Whites and Asians). In 2013, the highest income Latino residents lived in neighborhoods with an average of 39% residents with at least a bachelor’s degree compared to just 17% for low income Latino residents. The values were essentially the same for high and low income Black residents.

» There is little difference in the neighborhoods of high income Latinos or blacks compared to low income whites, as they have about 35-59% of residents with bachelor’s degrees.
White residents: Percent with a bachelor's degree or more in neighborhood by income level

Figure 7.1
Figure 7.2

Asian residents: Percent with a bachelor's degree or more in neighborhood by income level
Figure 7.3

Latino residents: Percent with a bachelor's degree or more in neighborhood by income level

[Graph showing the percentage of Latino residents with a bachelor's degree or more in different years (1980, 1990, 2000, 2013) by income level.]
Figure 7.4

Black residents: Percent with a bachelor's degree or more in neighborhood by income level
Percent vacant units in neighborhood from 1980-2013

In this section, we look at the presence of vacant units in the typical neighborhood of residents in various racial/ethnic categories by income bins. We measure this as the percent occupied units in the neighborhood.

Regarding the pattern of vacant units in neighborhoods (which we plot in the opposite direction as the percent occupied units) for different racial/ethnic groups, we see:

» The vacancy rate is lower for high income white residents compared to low income white residents. In 2013, the vacancy rate was about 9% for low income white residents compared to under 7% for high income white residents.

» For white residents, in every decade we see that the vacancy rate blips up for the highest income group.

» For Asian residents, the difference in vacancy rate across income levels does not vary much (about a 1 percentage point difference between the highest and lowest income groups).

» For Latino residents, there is modest evidence that higher income residents live in neighborhoods with lower vacancy rates compared to lower income residents.

» For Black residents, there is a pronounced difference in vacancy rates between high and low income residents. In 2013, the vacancy rate for low income black residents average about 7.5% whereas it was 5.5% for the highest income black residents.
White residents: Percent occupied units in neighborhood by income level

Figure 8.1
Asian residents: Percent occupied units in neighborhood by income level

Figure 8.2
Figure 8.3

Latino residents: Percent occupied units in neighborhood by income level
Black residents: Percent occupied units in neighborhood by income level

Figure 8.4
Percent owners in neighborhood from 1980-2013

In this section, we look at the presence of owners (as opposed to renters) in the typical neighborhood of residents in various racial/ethnic categories by income bins. We measure this as the percent owners in the neighborhood.

Regarding the pattern of owners in neighborhoods for different racial/ethnic groups, we see:

- For all four racial/ethnic groups, higher income residents tend to live in neighborhoods with a higher percentage of owners (and therefore fewer renters).

- For white residents, whereas low income residents live in neighborhoods with about 50% owners, high income residents have 65% to 70%.

- For Asian residents, the gap is from about 35% and 40% owners for low income residents to 65% to 70% for high income residents.

- For Latino and Black residents, whereas low income residents live in neighborhoods with between 35% and 40% owners, high income residents have 60% to 65%.
Figure 9.1

White residents: Percent owners in neighborhood by income level
Asian residents: Percent owners in neighborhood by income level

Figure 9.2
Figure 9.3

Latino residents: Percent owners in neighborhood by income level
Figure 9.4

Black residents: Percent owners in neighborhood by income level
In this section, we look at the presence of single family housing units (as opposed to multi-family units) in the typical neighborhood of residents in various racial/ethnic categories by income bins. We measure this as the percent single family units in the neighborhood. Whether living in a neighborhood with more single family units is a “desirable” feature is an issue we sidestep: although some residents may prefer an entirely residential area, others may prefer a more walkable area. For example, see the recent MFI Report on accessibility to various amenities for an empirical exploration of this issue. We therefore simply provide these values here without any comment on desirability of this feature.

Regarding the pattern of single family units in neighborhoods for different racial/ethnic groups, we see:

» There is a strong tendency across all four racial/ethnic groups for higher income residents to live in neighborhoods with more single family housing compared to lower income residents.

» In 1980, white, Black, and Latino residents were particularly likely to live in neighborhoods with a high percentage of single family units. This was the case even for the lowest income residents.

» Since 1990, low income white and Asian residents tend to live in neighborhoods with just above 45% single family units whereas high income white and Asian residents live in neighborhoods with about 65% single family units.

» Since 1990, low income Black residents tend to live in neighborhoods with 40% to 45% single family units whereas high income Black residents live in neighborhoods with about 60% single family units.

» In 2013, high income Latino residents are particularly likely to live in neighborhoods with more single family housing: low income Latinos have about 43% single family units in their neighborhoods whereas high income Latinos have about 66%.
White residents: Percent single family housing units in neighborhood by income level

Figure 10.1
Asian residents: Percent single family housing units in neighborhood by income level

Figure 10.2
Latino residents: Percent single family housing units in neighborhood by income level

**Figure 10.3**
Black residents: Percent single family housing units in neighborhood by income level

Figure 10.4
Population density in neighborhood from 1980-2013

In this section, we look at the population density in the typical neighborhood of residents in various racial/ethnic categories by income bins. We measure this as the population divided by the land area in the neighborhood.

Regarding the pattern of population density in neighborhoods for different racial/ethnic groups, we see:

» In general, higher income residents of all four racial/ethnic groups tend to live in neighborhoods with lower population density.

» The graphs all use the same y-axis, to highlight that white residents live in lower density neighborhoods compared to the other groups at the same income levels.

» Population density for white residents ranges from 9-10k for the lowest income bins to about 5k for the highest income bin.

» Low income Asians lived in much denser neighborhoods in 1980, but lower density since then.

» Since 1990, whereas low income Asian residents live in population density of about 14-16k, high income Asian residents live in population density of about 6-7k.

» Since 1990, low income Latino residents live in population density of about 14-17k compared to high income Latino residents of about 7-8k.

» Since 1990, low income Black residents live in population density of about 14-15k compared to high income Black residents of about 8k.
Figure 11.1

White residents: Population density in neighborhood by income level
Asian residents: Population density in neighborhood by income level

Figure 11.2
Figure 11.3

Latino residents: Population density in neighborhood by income level
The neighborhoods we live in: Comparisons by race and income in Southern California

Figure 11.4
Unemployment rate in neighborhood from 1980-2013

In this section, we look at the unemployment rate in the typical neighborhood of residents in various racial/ethnic categories by income bins.

Regarding the pattern of unemployment in neighborhoods for different racial/ethnic groups, we see

- For all four racial/ethnic groups, higher income residents tend to live in neighborhoods with lower unemployment rates.

- In 2013, low income white residents lived in neighborhoods with about 10% unemployment rates compared to high income white residents with under 8%.

- In 2013, low income Asian residents lived in neighborhoods with about 9.5% unemployment rates compared to high income Asian residents with about 7%.

- In 2013, low income Latino residents lived in neighborhoods with about 12.5% unemployment rates compared to high income Latino residents with about 8.5%.

- In 2013, low income Black residents lived in neighborhoods with about 14% unemployment rates compared to high income Black residents at 7-8% (but 9.5% in 2013).
White residents: Unemployment rate in neighborhood by income level

Figure 12.1
Asian residents: Unemployment rate in neighborhood by income level

Figure 12.2
Figure 12.3

Latino residents: Unemployment rate in neighborhood by income level


0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Black residents: Unemployment rate in neighborhood by income level

Figure 12.4
Available jobs in neighborhood in 2000 and 2013

In this section, we look at the number of jobs in the typical neighborhood of residents in various racial/ethnic categories by income bins. We measure this by looking at the number of jobs within a ½ mile buffer of each household in the neighborhood.

Regarding the pattern of the number of jobs in neighborhoods for different racial/ethnic groups, we see:

» In general, in 2000 higher income residents of all four racial/ethnic groups tend to live in neighborhoods with fewer jobs. This relationship is flatter in 2013.

» In 2013, lower income Asians live near more jobs than any other group.

» In 2013, Latinos tend to live near fewer jobs than any other group.
White residents: Total employees in neighborhood by income level

Figure 13.1
Asian residents: Total employees in neighborhood by income level

Figure 13.2
Figure 13.3

Latino residents: Total employees in neighborhood by income level

2000
2013

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

100000
150000
200000
250000
300000
Figure 13.4

Black residents: Total employees in neighborhood by income level

- 2000
- 2013
Crime in neighborhoods in 2000 and 2013

In this section, we look at the average level of violent and property crime in the typical neighborhood of residents in various racial/ethnic categories by income bins. We look at just two time points—2000 and 2013—due to data limitations. The crime data come from the Southern California Crime Study (SCCS), and were collected by the Irvine Laboratory for the Study of Space and Crime (ILSSC). The data were collected from cities in the region, and therefore we only have data for a selection of the cities at each time point (and it is a much smaller number of cities at the earlier time point).

Regarding the pattern of average violent and property crime rates in neighborhoods for different racial/ethnic groups, we see in 2000:

- There is a general pattern where the level of violent crime decreases as the income level of residents increases (for all four racial/ethnic groups).

- Even so, at each level of income, black residents live in neighborhoods with higher average violent crime compared to residents of the other three racial/ethnic groups.

- At each income level, white residents live in neighborhoods with lower average violent crime rates compared to members of the other three groups.

- The average violent crime rate in the neighborhoods of the lowest income white residents is similar to the average violent crime rate for the highest income Latino residents, and even lower than the neighborhoods of the highest income black residents.

- Black residents in the highest income bin actually experience higher average violent crime rates compared to black residents in the three next highest bins.

- There is very little pattern for property crime. There appears to be no pattern by racial/ethnic group, or by income bin.
Violent crime rate in neighborhood by income level for 4 racial/ethnic groups: 2000

Figure 14.1
The neighborhoods we live in: Comparisons by race and income in Southern California

Figure 14.2

Property crime rate in neighborhood by income level for 4 racial/ethnic groups: 2000

Figure 14.2
Regarding the pattern of average violent and property crime rates in neighborhoods for different racial/ethnic groups, we see in 2013:

» There is a general pattern where the level of violent crime decreases as the income level of residents increases (for all four racial/ethnic groups).

» Even so, at each level of income, black residents live in neighborhoods with higher average violent crime compared to residents of the other three racial/ethnic groups.

» At each income level, the average level of violent crime in the neighborhoods of white and Asian residents is very similar.

» The average violent crime rate in the neighborhoods of the lowest income white and Asian residents is only somewhat higher than the average violent crime rate for the highest income Latino residents, and about the same as the neighborhoods of the highest income black residents.

» There is very little pattern for property crime. There appears to be no pattern by racial/ethnic group, or by income bin.
Violent crime rate in neighborhood by income level for 4 racial/ethnic groups: 2013

Figure 15.1
Property crime rate in neighborhood by income level for 4 racial/ethnic groups: 2013
Conclusion

In this Report, we have studied how the context of neighborhoods differs based on the economic resources of residents. They also can differ based on the racial/ethnic characteristics of residents. We saw for several characteristics of neighborhoods, it appears that those with higher income are able to attain access in neighborhoods that appear “better” based on certain dimensions. However, this difference based on income does not always operate the same for residents of different racial/ethnic groups, even though racial/ethnic segregation has declined in Southern California neighborhoods over the last three decades.

By taking a long-term view from 1980 to the present, we were able to assess to what extent there has been change in neighborhood access over this time period. On the one hand, certain measures showed considerable consistency over time. For example, there was a consistent positive relationship between the income level of residents and the percent owners living in their neighborhoods over all four decades. On the other hand, certain measures exhibited a more noticeable change over this time period. For example, in the most recent time period, we saw evidence that higher income Latinos tend to live in neighborhoods with much more racial mixing compared to lower income Latinos; this pattern was not nearly as pronounced in earlier decades.

We saw notable differences in the level of violent crime in the neighborhoods of residents based on income level. Residents with higher levels of income tend to live in neighborhoods with lower violent crime rates. Interestingly, their neighborhoods, on average, have similar levels of property crime to those of lower income residents. Nonetheless, there were differences across racial/ethnic groups, as even the lowest income white and Asian residents tend to live in neighborhoods with less violent crime than the highest income Black and Latino residents.

Finally, it was interesting to note that there was very little relationship between the number of jobs nearby and the income level of residents. There were instead much larger differences across racial/ethnic groups: white residents, and particularly Asian residents, live in neighborhoods with far more jobs nearby compared to Black and Latino residents.
Most of the data used in this Report come from the U.S. Census. We used data from the 1980, 1990, and 2000 Censuses. For the most recent year, we used data from the 2011-2015 5-year estimates from the American Community Survey (ACS), which we refer to as “2013” given that this is the mid-point of these data. The Census now only releases data for small units of analysis (i.e., census tracts) aggregated to five year totals: this is because single years would contain too few survey respondents to provide reasonably accurate estimates of characteristics of the neighborhood.

In each year, we obtained information for each tract on the number of residents in each of the race X income bins. That is, the Census provides information on the number of residents of a particular race/ethnicity in each of the income bins that they defined (and we showed in Table 1 of this Report). We use these counts to compute population weighted means of the variables of interest. For example, to compute the average population density in the tracts of high income Latino residents, we obtained the summary statistics for the population density measure when using the number of high income Latino residents in a tract as the weighting variable (in Stata, these are used as “frequency weights”, in that they simply weight the particular tract by the number of such residents within it.

A challenge is that we cannot directly compare income bins across decades. This is because inflation changes the meaning of the categories. Although using an inflation adjustor is useful when computing the average income of persons, it is not as useful here given that the Census has already aggregated the counts to pre-determined income values and we cannot change these ranges. Thus, using an inflation adjustor would only approximately allow matching up categories, but they would not match (and would therefore have considerable overlap between classes across years).

Another challenge is that the different number of income categories used in the two earlier years compared to the two later years would cause visual deception. For that reason, we chose to use an approach that “stretches” the fewer categories such that they match the number of categories in the two later years. Given there were 16 categories in the later years, and just 9 in the two earlier years, we “stretched” the earlier years by placing the bins as 1,x,2,x,3,x,4,x,5,x,6,7,x,8,x,9. For each ‘x’ we linearly interpolated the income from the two surrounding bins. This provides a more reasonable comparison across years.

The crime data for this study come from the Southern California Crime Study (SCCS). In that study, the researchers made an effort to contact each police agency in the Southern California region and request address-level incident crime data for the years 2005-2012. Many of the agencies were willing to share their data with us. As a consequence, we have crime data for 2,740 of the 3,852 tracts in the region, which cover 219 of the 341 cities and 83.3 percent of the region’s population. The data come from crime reports officially coded and reported by the police departments. We classified crime events into six Uniform Crime Report (UCR) categories: homicide, aggravated assault, robbery, burglary, motor vehicle theft, and larceny. Crime events were geocoded for each city separately to latitude–longitude point locations using ArcGIS 10.2, and subsequently aggregated to various units such as blocks, block groups, and census tracts. The average geocoding match rate was 97.2% across the cities, with the lowest value at 91.4%.

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1 We define the region as including five counties: San Bernardino, Riverside, Los Angeles, Orange and San Diego. 61.8% of the cities have data for all or seven of the eight years in this range. For remaining cities, coverage varies year to year. The data is described here: http://ilssc.soceco.uci.edu/category/southern-california-crime-study/.
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