

## **Diversity and Dissolution of the American Color Line: Patterns of Residential Segregation across American Places, 1990-2010**

### **Extended Abstract**

This paper addresses a straightforward question: Are higher levels of place diversity associated with lower levels of residential segregation? Immigration, intermarriage, high minority fertility, youthful age structure, and recent shifts in racial-ethnic identity have all contributed to an increase in diversity in the United States. This has been one of the most significant demographic trends in recent decades ushering in a new era of racial/ethnic relations beyond the traditional black-white divide. However, the implications of this increase in diversity on residential patterns of black and whites remain unclear.

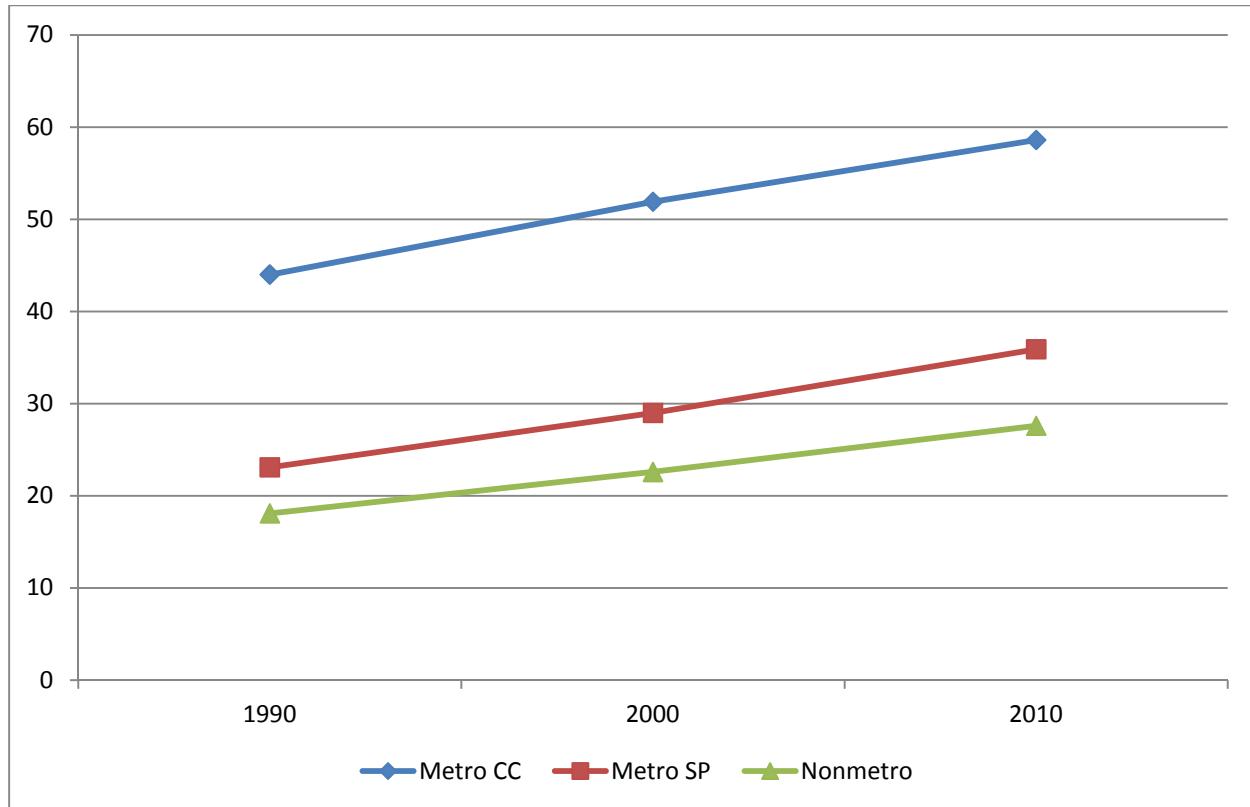
In this study we use decennial census data for 1990, 2000, and 2010 to address the question of how higher diversity relates to patterns of residential segregation, especially between blacks and whites. We use census blocks as the geographic base to examine patterns of residential segregation within census defined places. We use constant places, and place boundaries are normalized based on the 2010 geographies. The term diversity is used to refer to the number and size of racial-ethnic groups that the population of a place comprises. We use the entropy index ( $E$ ) to measure diversity, and calculate the index using the four main groups: black, white, Hispanic, and Asian. An  $E$  value of 0 implies that all members of the population in a place belong to one single racial-ethnic group, and therefore signifies complete homogeneity. In contrast, a value of 100 indicates complete heterogeneity, meaning each group comprises 25 percent of the place population. We use the index of Dissimilarity ( $D$ ) to measure patterns of residential segregation within places.

Preliminary results show that the black-white segregation has declined over the three decades by over 10 points, but remains highest in central cities followed by nonmetropolitan places. Despite this decline, separation between blacks and whites still remains high when compared to the separation of Whites and Hispanics and Whites and Asians. At the same time, diversity overall has increased. Central cities remain the most diverse places followed by suburban and rural places, respectively. As expected, our results clearly show that, net of other factors, the higher the level of diversity of a place, the lower the levels of residential segregation. Our results also show that the increase of diversity in a place leads to lower levels of residential segregation.

**Average Within-Place Segregation in Metro & Nonmetro Places, 1990-2010**

		<b>1990</b>	<b>2000</b>	<b>2010</b>
Black-White				
ALL		<b>72.2</b>	<b>66.7</b>	<b>62.2</b>
METROPOLITAN	Central City	76.3	71.9	68.4
METROPOLITAN	Suburban Place	58.7	53.8	50.2
NON-METROPOLITAN		74.5	67.4	62.2
Hispanic-White				
ALL		<b>52.9</b>	<b>52.3</b>	<b>49.6</b>
METROPOLITAN	Central City	59.0	58.8	56.1
METROPOLITAN	Suburban Place	41.3	41.3	40.0
NON-METROPOLITAN		55.1	53.9	51.4
Asian-White				
ALL		<b>48.4</b>	<b>48.0</b>	<b>47.0</b>
METROPOLITAN	Central City	51.9	51.2	50.2
METROPOLITAN	Suburban Place	41.3	42.1	41.7
NON-METROPOLITAN		59.8	60.9	61.1

**Figure 1: Average Diversity in Metro and Nonmetro Places, 1990–2010**



**Table 2: Place Characteristics Associate with Segregation, 2010**

	Black-White	Hispanic-White	Asian-White
	B	SE	SE
Constant	20.572 ***	0.021	15.343 ***
Diversity	-0.005 ***	0.001	-0.026 ***
Diversity, 2010			0.001
<b>Demographic Characteristics</b>			
2010 Population, ln	3.802 ***	0.002	-0.009 ***
Percent Black	0.131 ***	0.001	3.382 ***
Percent Hispanic	0.030 ***	0.001	0.124 ***
Percent Asian	-0.092 ***	0.001	0.004 ***
Minority Less White Growth Rate	-0.003 ***	0.001	-0.003 ***
Ratio of Median Household Income	-12.364 ***	0.008	0.000 ***
Percent Change in Housing Units, 1990-2000	-0.021 ***	0.000	-4.363 ***
<b>Place Type (ref.=Metro Central City)</b>			
Metro Suburban Place	-3.919 ***	0.006	-0.026 ***
Nonmetro Place	7.433 ***	0.009	-1.329 ***
<b>Spatial Location (ref.=South)</b>			
west	-6.037 ***	0.008	3.454 ***
midwest	1.639 ***	0.005	4.663 ***
northeast	4.368 ***	0.006	-6.734 ***
<b>Annexation</b>			
Annexed Territory	0.317 ***	0.005	6.326 ***
<b>Functional Specialization</b>			
Retirement	8.991 ***	0.017	6.062 ***
Manufacturing	1.417 ***	0.008	0.618 ***
Government	-4.847 ***	0.014	-1.440 ***
School	0.291 ***	0.004	-2.844 ***
Military	-10.958 ***	0.012	-10.296 ***

**Table 3: Place Characteristics Associated with Changes in Segregation, 1990-2010**

	Black-White	Hispanic-White	Asian-White	
Constant	35.389	1.273 ***	28.702	1.310 ***
Segregation in 1990	-0.442	0.008 ***	-0.454	0.008 ***
<b>Diversity</b>				
Change in Diversity, 1990-2010	-0.222	0.011 ***	-0.040	0.010 ***
Diversity Index, 1990	-0.061	0.011 ***	-0.155	0.011 ***
<b>Demographic Characteristics, 1990</b>				
1990 Population, ln	-0.883	0.101 ***	-0.515	0.097 ***
Percent Black	0.008	0.008 ***	0.104	0.013 ***
Percent Hispanic	0.062	0.017 ***	-0.003	0.008 ***
Percent Asian	0.101	0.052 *	0.196	0.042 ***
<b>1990-2010 Demographic/Economic Change</b>				
Black Less White Growth Rate	-0.002	0.001 ***	-0.001	0.001 ***
Rate of Change in Ratio of black to white Mean	-0.001	0.001 ***	0.001	0.001 ***
Household Income				
phouse9010	-0.040	0.004 ***	-0.028	0.004 ***
<b>Functional Specialization, 1990</b>				
Retirement	1.781	0.493 ***	1.386	0.447 ***
Manufacturing	-0.273	0.350	-1.760	0.369 ***
Government	-1.496	0.607 *	-0.817	0.602 ***
School	0.825	0.286 **	-0.910	0.267 ***
Military	-0.791	1.058	-2.185	0.999 **
<b>Place Type (ref.=Metro Central City)</b>				
Metro Suburban Place	-3.574	0.504 ***	-4.797	0.491 ***
Nonmetro Place	-1.844	0.556 **	-0.993	0.547 *
<b>Spatial Location (ref.=South)</b>				
West	1.708	0.546 **	-0.474	0.310 ***
Midwest	1.800	0.375 ***	1.889	0.335 ***
Northeast	0.079	0.382	-0.815	0.359 *
<b>Annexation</b>				
Annexed Territory	-0.071	0.270	-0.275	0.256
R2	41.6	41.1	41.1	49.9

