RESIDENTIAL SEGREGATION AND ITS IMPLICATIONS FOR SCHOOL INTEGRATION*

Reynolds Farley†

INTRODUCTION

If parents desire that their children attend neighborhood schools and if the nation’s Constitution requires racially integrated schools, then neighborhoods must be integrated. Residential areas, however, are highly segregated by race; thus public schools are also segregated except in those school districts operating under court orders or under a voluntarily adopted desegregation plan. Because of the segregated character of most neighborhoods, such desegregation plans rely heavily on busing substantial numbers of students to schools outside their neighborhoods.

This article examines the relationship between school segregation and residential segregation. The first section describes the extent of racial residential segregation. The second section examines racial segregation in public schools and its linkage with residential segregation. The impact of school desegregation litigation upon school integration in large school districts is assessed. Finally, the implications of demographic trends for the future are summarized in the concluding pages.

I

RACIAL RESIDENTIAL SEGREGATION

In this article the “index of dissimilarity” will be used as a measure of the extent of residential segregation.¹ The numerical value of the index represents the proportion of either whites or blacks who would have to shift from one area to another to effect complete integration of the residential areas of a city. If a city were completely integrated so that all neighborhoods or sub-areas had an identical racial composition, the value of the index would be zero. If, on the other hand, residential segregation were so pervasive that all blacks lived in exclusively black areas and all whites in exclusively white neighbor-

---

* The research for this article was supported by a grant from the Center for Population Research of the National Institutes of Child Health and Human Development, NIH-71-2210, “The Distribution and Differentiation of Population within Metropolitan Areas.” The author thanks Karl Taeuber for making available data on public school segregation in 1972.

† Associate Director, Population Studies Center, University of Michigan.

¹ The definitive work was written by Karl and Alma Taeuber based on data from the Census of 1960. K. Taeuber & A. Taeuber, Negroes in Cities (1965). After reviewing a variety of proposed measures, the Taeubers selected an index which they identified as \( \delta \) or the index of
Residential Segregation

hoods, the index would assume its maximum value, 100. Thus low values indicate that there is little residential segregation while high values indicate extensive residential segregation. An analysis of the racial composition of residential areas of the nation's largest cities in 1970, shown in Figure 1, indicates that levels of racial residential segregation were quite high. For example, in Dallas, 97 per cent of either the white or the black population would have had to shift their places of residence to produce a completely integrated city; that is, a city in which every block had the same racial composition. Of the fifteen largest cities, San Francisco has the lowest racial residential segregation—75 per cent of either the white or the black population would have to shift their places of residence to bring about complete integration.

When a larger sample of cities, classified by region, was examined, residential segregation was found to be greatest in the South—where the average value of the "index of dissimilarity" was 91.4, somewhat less in the border states (87.3), and lowest in the North (81.4) and West (81.1). None of the 109 cities in the sample had a segregation score under 60 in 1970. Indeed, only 3 cities had scores of less than 70. The racial residential segregation indices used in Figure 1 are based on data from central cities. There is evidence, however, that if the indices were calculated for the entire metropolitan area there would be no significant difference in their values. Blacks appear to be as residentially segregated from whites in the suburbs as in the central cities.

The pervasiveness and magnitude of racial residential segregation is made apparent by comparing it to the extent of residential segregation by income, occupation, or ethnicity. One might expect that families would be segregated by income. In the Chicago urbanized area in 1970, the index of dissimilarity comparing the residential distribution of white families with incomes over $25,000 to that of white families with incomes of $3,000 to $4,000 was 55. Yet the index comparing the residential distribution of all white families with that dissimilarity. It takes as its standard the racial composition of a city or metropolitan area, and then compares the racial composition of subareas—usually city blocks or census tracts—to the racial composition of the entire city or metropolitan area.

In each subarea, i, suppose there are \( w_i \) whites and \( n_i \) blacks. The entire city or metropolitan area contains \( W \) whites and \( N \) blacks. The index of dissimilarity is calculated as follows:

\[
\frac{1}{2} \sum_i \left| \frac{n_i}{N} - \frac{w_i}{W} \right|
\]

See id. at 236, app. A.

2. The indexes in Figure 1 were computed from 1970 Census data.

3. The small values of the standard deviations of the indices given in Figure 1 indicate that the residential segregation scores are clustered around the high values.

4. The three cities were Cambridge, Massachusetts, and Camden and East Orange, New Jersey.


6. These indexes of dissimilarity were calculated from census tract data.
FIGURE 1
INDEXES OF RACIAL RESIDENTIAL SEGREGATION FOR THE NATION'S LARGEST CITIES, 1970

Summary of Racial Residential Segregation Indexes for Cities Classified by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Northern States</th>
<th>Western States</th>
<th>Border States</th>
<th>Southern States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cities</td>
<td>53</td>
<td>10</td>
<td>12</td>
<td>34</td>
</tr>
<tr>
<td>Average racial segregation scores</td>
<td>81.4</td>
<td>81.1</td>
<td>87.3</td>
<td>91.4</td>
</tr>
<tr>
<td>Standard deviation of segregation scores</td>
<td>6.9</td>
<td>7.1</td>
<td>7.4</td>
<td>2.7</td>
</tr>
</tbody>
</table>

of all black families was 93. A comparison of the residential distribution of white families with incomes exceeding $25,000 with that of black families in the same income group in the Chicago urbanized area provides an index of 94.\footnote{These indexes were computed using census data for 1970 from the Indiana and Illinois portions of the Chicago urbanized area. This area includes 3.4 million residents of Chicago and 2.8 million who lived in the suburban ring. \cite{1}} Thus well-to-do whites are much more segregated from affluent black families than they are from poor white families.

Segregation scores for white ethnic groups have also been computed.\footnote{N. Kantrowitz, \textit{supra} note 5.} The index of dissimilarity based on the residential distribution of native whites and of people of Polish stock in the New York area for 1960 was 43.\footnote{Id.} By contrast, the index of dissimilarity based on the distribution of native whites and blacks was 80.\footnote{Id.} Thus racial residential segregation is significantly greater than the residential segregation of socioeconomic or ethnic group.

An analysis of changes in the extent of residential segregation during the period since 1970 cannot be undertaken because of the unavailability of data. Nevertheless, the presumption is that levels of residential segregation have changed little since the 1970 Census. Between 1950 and 1960, only modest declines in racial residential segregation were recorded.\footnote{K. Taeuber \& A. Taeuber, \textit{supra} note 1, at 44, Table 5.} Preliminary data for 1970 indicate that this trend toward only slightly lower levels of segregation has continued.\footnote{A. Sorensen, K. Taeuber, \& J. Hollingsworth, \textit{Indexes of Racial Residential Segregation for 109 Cities in the United States, 1940-1970}, at 7 (Studies in Racial Segregation No. 1, 1974). Changing values of indexes of dissimilarity must be interpreted with caution. With the rapid growth of the black population in central cities, many neighborhoods experience a relatively slow transition from all white to all black. Thus these will be reported as "integrated neighborhoods" for a few years during the transition, and an increase in the number of such transitional neighborhoods will produce a lower index value during these years despite the fact that at the end of the transition residential segregation may be as great as before.} Thus, the nation's neighborhoods are almost as segregated now as they were thirty years ago. If present trends persist, schools organized on a neighborhood basis will remain racially segregated indefinitely.

\section*{II}

\textbf{THE CHANGING RACIAL COMPOSITION OF URBANIZED AREAS}

\textbf{A. Trends in Residential Patterns}

As recently as 1940, four-fifths of the black population lived in the South, and almost two-thirds of those resided in rural areas.\footnote{D. Price, \textit{Changing Characteristics of the Negro Population} 9, 11, Tables I-1 \& I-3 (1969).} However, World War II
and the prosperous postwar years saw the movement of blacks away from the rural South and into cities. By 1970, the percentage of all blacks who lived in urbanized areas, 81 per cent, exceeded that for whites, the comparable figure being 72 per cent.14 At present, the black population outside the South is approximately as large as the black population within the South.15

Within urbanized areas, there has been a differential rate of growth of black and white populations. Overall, the share of the nation's white population living within central cities has declined while the proportion of blacks in central cities has risen. The trends for the nation's fifteen largest urbanized areas are shown in Figure 2.16 In each of the central cities of the fifteen urbanized areas, the black population grew faster than the white. The percentage of blacks in Detroit, for example, increased from 29 to 44 per cent between 1960 and 1970. In Washington, the increase in the percentage of blacks in the same period was from 54 per cent to 71 per cent. In the suburbs, on the other hand, the changes in the percentage of the population that was black were generally small. In eleven of the suburban areas shown in Figure 2, the growth rate of the black population exceeds that of whites, but in four areas—Baltimore, Dallas, Detroit, and Houston—the percentage of blacks in the suburbs actually declined because the growth rate of the white suburban population exceeded that of the black.

It is extraordinarily difficult to generalize about demographic trends in urbanized areas, since there is substantial variety in urban growth patterns.17 Thus there are significant exceptions to the generalization that white out-migration and black in-migration characterize the nation's large cities and that suburban rings contain few blacks. Nevertheless, the white population of the largest cities reached a peak around 1960 and since then, the increase in the white population has been concentrated in the suburbs. The black population
has grown both within cities and the suburban rings, although the numerical growth in the black population is much greater in cities.\textsuperscript{18}

During the 1960's two new trends in the distribution of the black population in the urbanized areas became evident. First, the black population in suburban areas increased more rapidly. Indeed, during that decade, the rate of growth of the black population in the suburbs was generally greater than that of the white population, although the numerical increase for whites was much greater than for blacks.\textsuperscript{19} The suburban rings surrounding New York, Los Angeles, Philadelphia, and Washington now contain large and rapidly expanding black populations. This growth does not necessarily portend residential integration in the suburbs. Many of the suburban areas with substantial black populations are extensions of central city ghettos, while others are black suburban enclaves.\textsuperscript{20} Second, the growth rate of the black population in central cities declined during the 1960's. Several large cities which had attracted many blacks in the period of the 1950's experienced a net outmigration of both blacks and whites between 1960 and 1970.\textsuperscript{21}

In summary, the patterns of population change in many urbanized areas suggest that opportunities for school integration are minimal. In many cities there has been a substantial out-migration of whites with a concomitant growth of the black population. Even those cities which are experiencing a net out-migration of blacks appear to be losing whites at a higher rate, thus increasing the percentage of the total population that is black. Although the suburban populations of both blacks and whites are now growing, this does not seem likely to result in racially integrated suburbs; rather the patterns of residential segregation typical in central cities appear to be duplicated in the suburban rings.

B. Black Enrollment in Public Schools

Total population figures underrepresent the black pupil population in public schools. The number of black students as a percentage of the total public
Figure 2
Blacks as a Proportion of the Total Population of the Nation's Largest Central Cities and Their Suburban Rings, 1960 and 1970

Central Cities

<table>
<thead>
<tr>
<th>City</th>
<th>1970 Proportion Black</th>
<th>1960 Proportion Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>23%</td>
<td>15%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>Chicago</td>
<td>31%</td>
<td>23%</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>34%</td>
<td>26%</td>
</tr>
<tr>
<td>Detroit</td>
<td>44%</td>
<td>29%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>21%</td>
<td>14%</td>
</tr>
<tr>
<td>Boston</td>
<td>16%</td>
<td>9%</td>
</tr>
<tr>
<td>Washington</td>
<td>71%</td>
<td>54%</td>
</tr>
<tr>
<td>Cleveland</td>
<td>38%</td>
<td>29%</td>
</tr>
<tr>
<td>St. Louis</td>
<td>41%</td>
<td>29%</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>20%</td>
<td>17%</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Houston</td>
<td>26%</td>
<td>23%</td>
</tr>
<tr>
<td>Baltimore</td>
<td>46%</td>
<td>35%</td>
</tr>
<tr>
<td>Dallas</td>
<td>25%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Proportion Black
FIGURE 2 (cont.)


<table>
<thead>
<tr>
<th>City</th>
<th>1970</th>
<th>1960</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>61</td>
<td>5</td>
</tr>
<tr>
<td>Los Angeles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicago</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Detroit</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>San Francisco</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Boston</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Washington</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Cleveland</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>St. Louis</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Houston</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Baltimore</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Dallas</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

FIGURE 3
BLACKS AS A PROPORTION OF TOTAL PUBLIC ELEMENTARY SCHOOL ENROLLMENT IN CENTRAL CITIES AND THEIR SUBURBAN RINGS, 1960 AND 1970

Central Cities

<table>
<thead>
<tr>
<th>City</th>
<th>1970</th>
<th>1960</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>Chicago</td>
<td>43</td>
<td>55</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>50</td>
<td>61</td>
</tr>
<tr>
<td>Detroit</td>
<td>46</td>
<td>64</td>
</tr>
<tr>
<td>San Francisco</td>
<td>39</td>
<td>40</td>
</tr>
<tr>
<td>Boston</td>
<td>32</td>
<td>19</td>
</tr>
<tr>
<td>Washington</td>
<td>80</td>
<td>93</td>
</tr>
<tr>
<td>Cleveland</td>
<td>48</td>
<td>57</td>
</tr>
<tr>
<td>St. Louis</td>
<td>51</td>
<td>65</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Houston</td>
<td>32</td>
<td>27</td>
</tr>
<tr>
<td>Baltimore</td>
<td>34</td>
<td>53</td>
</tr>
<tr>
<td>Dallas</td>
<td>22</td>
<td>34</td>
</tr>
</tbody>
</table>

Proportion Black

0 10 20 30 40 50 60 70 80 90 100%
Blacks as a Proportion of Total Public Elementary School Enrollment in Central Cities and Their Suburban Rings, 1960 and 1970

elementary school enrollment in the fifteen largest cities for the census years 1960 and 1970, as shown in Figure 3, is considerably higher than the black population as a percentage of the total city population. For example, blacks comprised 33 per cent of the total population of Chicago in 1970;\(^\text{22}\) in the same year, black pupils comprised 55 per cent of the total public elementary school population.\(^\text{23}\)

There are several reasons for this difference. First, black birth rates have traditionally exceeded those of whites. While blacks comprise 11 per cent of this nation's population, 14 per cent of the elementary school age population is black.\(^\text{24}\) Second, the high rate of out-migration of white families of childbearing age results in a considerably lower proportion of white school age children remaining in the central cities. In the city of Detroit, for example, the median age of blacks is 23, while for whites, the median age is 36. Whites account for 77 per cent of that city's population aged 65 and over, but only 46 per cent of the school age population.\(^\text{25}\) Third, private and parochial schools enroll about 10 per cent of the nation's elementary school students. In many central cities, non-public schools constitute an even higher percentage of the total elementary school enrollment. Black students are significantly underrepresented in these non-public schools compared to the proportion they comprise of the public elementary school population.\(^\text{26}\) In northern cities, where private and parochial school enrollments are quite high, this has the consequence of increasing the proportion of black students in the public schools. In Philadelphia, for example, private elementary schools in 1970 enrolled almost three-fifths as many pupils as the public schools, yet only 11 per cent of the non-public elementary school students were black, while 61 per cent of the public elementary school students were black.\(^\text{27}\)

C. Economic Factors and Residential Segregation

It is often argued that the high degree of racial residential segregation found in cities\(^\text{28}\) and the near-absence of blacks from the suburban ring\(^\text{29}\) are attributable to income differences between the races. Such contentions are not valid. Most neighborhoods in the United States are economically heterogeneous. If people were residually distributed according to the value of the

---

\(^{22}\) Figure 2, at pp. 170-71 supra.

\(^{23}\) Figure 3, at pp. 172-73 supra.

\(^{24}\) U.S. DEP'T OF COMMERCE, CURRENT POPULATION REPORTS: POPULATION ESTIMATES AND PROJECTIONS 2, Table 1 (Bureau of the Census Series P-25, No. 511, 1974).


\(^{26}\) U.S. DEP'T OF COMMERCE, CURRENT POPULATION REPORTS: POPULATION CHARACTERISTICS 3, Table 1 (Bureau of the Census Series P-20, No. 261, 1974).


\(^{28}\) See Figure 1, at p. 166 supra.

\(^{29}\) See Figures 2 & 3, at pp. 170-73 supra.
housing they can afford, instead of according to skin color, levels of residential segregation would be low. Figure 4 indicates the percentage of black families and of white families in an urbanized area that actually lived in the suburban ring in 1970, and the percentage of black families that would live in the suburbs if the only factor affecting their residential location were their income. We assume, for instance, that if 40 per cent of white families in the urbanized area with incomes of $8,000 to $10,000 lived in the suburbs, then the same proportion of blacks at that income level would be living in the suburbs. We are assuming that blacks retain their actual incomes but are as well represented in the suburbs as whites at each income level.

Figure 4
Actual Proportion of Black and White Families Living in Suburban Ring and Proportion of Black Families Expected in Suburban Ring on the Basis of Their Income, 1970

(continued on next page)
Actual proportion of black and white families living in suburban ring and proportion of black families expected in suburban ring on the basis of their income, 1970

In most urbanized areas, the racial composition of the suburbs would be greatly altered if blacks occupied housing according to their ability to pay. In 1970, 73 per cent of the Detroit area's white families, but only 12 per cent of the area's black families, actually lived in the suburban ring. If blacks were as well represented in the suburbs at each income level as whites, 67 per cent of the black families—rather than 12 per cent—would be suburban residents.

Other studies which have analyzed the role that economic variables play in the residential segregation of blacks from whites within central cities or in suburban areas also demonstrate that economic factors explain only a small proportion of the residential segregation found in American metropolises.

III

Racial Segregation in Public Elementary Schools

Southern schools were completely segregated by race in 1954. Many northern city schools were also highly segregated because of school board practices and because neighborhoods were segregated by race. For approximately a decade after the Supreme Court's ruling in Brown v. Board of Education, private lawsuits on behalf of students in southern districts brought about limited advances in racial integration, particularly in schools in border states.

The Civil Rights Act of 1964 gave the Justice Department power to bring school desegregation suits and provided that the Department of Health, Education, and Welfare (HEW) could terminate funds in districts which maintained segregated facilities. The latter provision gained further importance with the passage of the Elementary and Secondary Education Act of 1965, which channeled large amounts of federal funds to southern districts.

Governmental pressures for school desegregation increased after 1965 as HEW issued guidelines and negotiated with many southern districts about

30. K. Taeuber and A. Taeuber, supra note 1, at 78-95.
31. Hermsen & Farley, supra note 5, at 605-08.
32. For evidence concerning school segregation prior to 1967, see 2 U.S. Commission on Civil Rights, Racial Isolation in the Public Schools 12-19, Table A-3 (1967).
36. Id. § 2000c-6.
37. Id. § 2000d-1.
39. See G. Orfield, supra note 34, at 94.
discriminatory practices.\textsuperscript{41} Federal courts enunciated new and encompassing integration principles. For example, the 1968 Supreme Court decision in \textit{Green v. County School Board of New Kent County}\textsuperscript{42} held that freedom-of-choice integration plans were acceptable only if they actually desegregated schools. In \textit{Alexander v. Holmes County Board of Education}\textsuperscript{43} the Supreme Court demanded that school districts terminate dual systems at once and begin immediately to operate unitary systems. The Denver decision, \textit{Keyes v. School District No. 1},\textsuperscript{44} called for school integration in a northern city which did not have the history of state-prescribed de jure segregation common to the southern school districts. The Supreme Court's unanimous decision in the Charlotte, North Carolina case, \textit{Swann v. Charlotte-Mecklenburg Board of Education},\textsuperscript{45} legitimized large-scale busing as an integration device and permitted the use of a "mathematical racial balance reflecting the pupil constituency of the system" as "a starting point in the process of shaping a remedy."\textsuperscript{46}

The Civil Rights Act of 1964 also provided for the collection of data concerning the racial composition of students and staff in public schools.\textsuperscript{47} These data permit the measurement of trends over time in school segregation. An analysis of large city school districts, 85 in the North and 58 in the South,\textsuperscript{48} enrolling 20 per cent of the nation's white public elementary school students in the fall of 1972 and 65 per cent of the black students, was undertaken to determine the extent of intradistrict school segregation.\textsuperscript{49}

The index of dissimilarity,\textsuperscript{50} used in the first part of this article as a measure of residential segregation, can also be used to measure school segregation.

\textsuperscript{42} 391 U.S. 430 (1968).
\textsuperscript{43} 396 U.S. 19 (1969).
\textsuperscript{44} 413 U.S. 189 (1973).
\textsuperscript{45} 402 U.S. 1 (1971).
\textsuperscript{46} \textit{Id.} at 25, 29.
\textsuperscript{48} The 85 northern districts and the 58 southern districts selected for this analysis met the following criteria: (1) The city associated with the school district had a total population of 100,000 or more in 1970. Seventeen cities under 100,000 for which residential segregation scores were available were also included. In most states, city school district boundaries are coterminous with the boundaries of the municipality. In some southern states, however, the city school district is coterminous with the entire county. The Charlotte-Mecklenburg school district, for example, includes both the city of Charlotte and Mecklenburg County, North Carolina. (2) Data concerning school segregation were available for the years 1966, 1967, and 1968. The district of Detroit provided 1966 data rather than 1967 and eight other districts provided 1968 data rather than 1967. (3) At least 3 per cent of the district's public school enrollment was black.
\textsuperscript{50} This index, used for measuring racial residential segregation, is discussed in note 1 \textit{supra}. When used to measure school segregation, the index of dissimilarity compares the racial composition of individual schools to the racial composition of the entire school district. The numerical
Large values indicate a substantial degree of segregation while low values indicate that the school district is effectively integrated. In 1967, segregation indices for Montgomery, Alabama and Shreveport, Louisiana exceeded 97, indicating the existence of a dual school system in each of those cities.

Several federal judges, having found that a school system is unconstitutionally segregated, have ordered as part of the judicial relief that the individual schools in an unconstitutionally dual system should have approximately the same racial composition as the entire district. In Swann v. Charlotte-Mecklenburg Board of Education, the district court mandated that school authorities assign pupils such that each school would approximate the 71 per cent white, 29 per cent black ratio of the district. The integration plan designed for the Louisville area, where about 20 per cent of the student population is black, specified that for the fall of 1974, the proportion of blacks in every school must be between 12 and 30 per cent. If these remedial orders are implemented, the indices of dissimilarity will be low for these school districts.

Indices of dissimilarity measuring racial segregation in the public elementary schools in the fifteen largest cities in the South and Border States and the fifteen largest cities in the North and West are given in Figure 5. In 1967, the southern and border districts had high segregation indices ranging from a low of 76 in Louisville to a high of 97 in Oklahoma City. Schools were somewhat less segregated by race in the North and West, but not significantly so. New York was the only northern district with an index below 60, while San Fran-

---

51. The Shreveport index is derived from data for Caddo Parish rather than being limited to the city itself.
53. 311 F. Supp. at 267-68. On appeal, the United States Supreme Court approved the use of such racial quotas as "a starting point in the process of shaping a remedy, rather than an inflexible requirement." 402 U.S. at 25. However, the Court went on to say:
   If we were to read the holding of the District Court to require, as a matter of substantive constitutional right, any particular degree of racial balance or mixing, that approach would be disapproved and we would be obliged to reverse. The constitutional command to desegregate schools does not mean that every school in every community must always reflect the racial composition of the school system as a whole.
402 U.S. at 24.
54. 12 Integrated Education 13 (September-October, 1974).

Northern & Western Districts

- New York
  - 1972: 54
  - 1970: 53
  - 1967: 52

- Los Angeles
  - 1972: 87
  - 1970: 88
  - 1967: 89

- Chicago
  - 1972: 93
  - 1970: 92
  - 1967: 92

- Philadelphia
  - 1972: 81
  - 1970: 79
  - 1967: 76

- Detroit
  - 1972: 78
  - 1970: 80
  - 1966: 79

- San Francisco
  - 1972: 20
  - 1970: 63
  - 1967: 67

- Boston
  - 1972: 74
  - 1970: 74
  - 1967: 74

- Cleveland
  - 1972: 92
  - 1970: 91
  - 1967: 90

- St. Louis
  - 1972: 92
  - 1970: 88
  - 1967: 91

- Pittsburgh
  - 1972: 74
  - 1970: 85
  - 1967: 88

<table>
<thead>
<tr>
<th>City</th>
<th>1967</th>
<th>1970</th>
<th>1972</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minneapolis</td>
<td>22</td>
<td>22</td>
<td>71</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>22</td>
<td>22</td>
<td>74</td>
</tr>
<tr>
<td>Seattle</td>
<td>62</td>
<td>62</td>
<td>65</td>
</tr>
<tr>
<td>San Diego</td>
<td>69</td>
<td>72</td>
<td>78</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>74</td>
<td>74</td>
<td>74</td>
</tr>
</tbody>
</table>

Student Racial Segregation Indexes

<table>
<thead>
<tr>
<th></th>
<th>Northern Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=85</td>
</tr>
<tr>
<td>Mean</td>
<td>1967 1970 1972</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>15   18   20</td>
</tr>
</tbody>
</table>


(continued on next page)

Southern & Border Districts

<table>
<thead>
<tr>
<th>City</th>
<th>1972</th>
<th>1970</th>
<th>1967</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>77</td>
<td>80</td>
<td>81</td>
</tr>
<tr>
<td>Houston</td>
<td>80</td>
<td>86</td>
<td>92</td>
</tr>
<tr>
<td>Baltimore</td>
<td>87</td>
<td>87</td>
<td>89</td>
</tr>
<tr>
<td>Dallas</td>
<td>89</td>
<td>93</td>
<td>n.a.</td>
</tr>
<tr>
<td>Miami</td>
<td>92</td>
<td>74</td>
<td>67</td>
</tr>
<tr>
<td>Atlanta</td>
<td>95</td>
<td>84</td>
<td>81</td>
</tr>
<tr>
<td>New Orleans</td>
<td>86</td>
<td>82</td>
<td>80</td>
</tr>
<tr>
<td>San Antonio</td>
<td>88</td>
<td>81</td>
<td>78</td>
</tr>
<tr>
<td>Louisville</td>
<td>86</td>
<td>87</td>
<td>76</td>
</tr>
<tr>
<td>Fort Worth</td>
<td>93</td>
<td>91</td>
<td>72</td>
</tr>
</tbody>
</table>

1 Data for the school districts refer to an entire county.
FIGURE 5 (cont.)

Norfolk
1972 16
1970 67
1967 90
1972 1970 1967

Memphis
1972 86
1970 90
1967 95

Ft. Lauderdale
1972 43
1970 80
1967 93

Oklahoma City
1972 25
1970 88
1967 92

Birmingham
1972 81
1970 80
1967 94

<table>
<thead>
<tr>
<th>Southern Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N=58</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Racial Segregation Indexes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
</tr>
<tr>
<td>1967 86 75 53</td>
</tr>
<tr>
<td>1970 11 16 26</td>
</tr>
<tr>
<td>1972 11 16 26</td>
</tr>
</tbody>
</table>

cisco and Seattle had indices under 70. The average student segregation indices for the two major regions are shown in Figure 5.

Changes over time in school segregation can be readily summarized. Prior to a major desegregation effort, schools in all these districts were extensively segregated by race. Before 1967 a few districts voluntarily adopted integration plans and consequently segregation levels were low that year in Evanston, Illinois, Providence, Rhode Island, and Riverside, California.

After 1967, school segregation decreased dramatically in many districts, in large part because of federal court orders. Charlotte had a segregation index of 77 in 1967. In the fall of 1970 students were reassigned, pursuant to a federal desegregation decree which included busing of about 46,000 of the district's 80,000 students. Thus in 1970, the segregation index fell to 18. The San Francisco Unified School District effected an extensive integration plan pursuant to a 1971 federal district court order to devise a workable integration plan to normalize the ratio of blacks to whites within all the San Francisco school district's schools. Thereafter, as shown in Figure 5, the segregation index for San Francisco dropped from 67 in 1967 to 20 in 1972. Plans requiring massive integration went also into operation in Oklahoma City, Oklahoma, Jacksonville, Florida, and Nashville, Tennessee, between 1970 and 1972, resulting in a substantial decline in school segregation—from 97 in 1967 to 25 in Oklahoma City, from 92 to 22 in Jacksonville, and from 85 to 37 in Nashville. By contrast, there were no such orders affecting schools in St. Louis, Chicago, Cleveland, or Los Angeles, and, as indicated in Figure 5, the level of school segregation actually increased slightly between 1967 and 1972 in three out of four of these cities. The decrease in the fourth city, Los Angeles, was small—from 89 in 1967 to 87 in 1972.

Although federal courts and—in a few districts—state courts played the dominant role in reducing school segregation, an analysis of data for these 143 districts indicates a general trend toward decreasing segregation in schools, even without court orders. After eliminating those districts involved in large-

61. See Mims v. Duval County School Bd., 447 F.2d 1330 (5th Cir. 1971).
63. See U.S. Commission on Civil Rights, supra note 56, at 23-28 (Harrisburg, Pa.): Fort. Decision Making in the Sacramento De Facto Segregation Crisis, in School Desegregation in the North, supra note 58, at 77-115 (Sacramento, Cal.).
scale desegregation programs, a pattern of modest declines in segregation levels is evident, the declines being greater in the South than in the North. One study suggests that the pattern in many cities during the 1960's was as follows: demands by black parents for improved or integrated schools, initial rejection of these demands by school boards, followed by stronger demands from blacks and actions by courts no longer willing to tolerate delays in disestablishing dual school systems, and finally school boards and administrators responding by improving some black schools, closing older and inadequate facilities, reorganizing school attendance zones, busing students, or devising open-enrollment plans. These actions help to account for the decrease in student segregation.

The summary data provided in Figure 5 for all 143 school districts indicate that in 1967 southern districts were considerably more segregated, with an index value of 86, than those outside the South, where the index value in 1967 was 68. By 1972, however, the average segregation index was smaller in the South, 53, than in the North and West, where it was 58. In 1967 the standard deviation for segregation scores was low in the South since southern districts all had similar levels of segregation. By contrast, the standard deviation for the South in 1972 was high, 26, indicating wide variations among southern districts in their levels of segregation. Those southern districts operating under court orders had low segregation indices—frequently under 25—while those not under such court orders in 1972—including Dallas, Houston, and Louisville—had indices exceeding 80.

IV

SCHOOL AND RESIDENTIAL SEGREGATION WITHIN DISTRICTS

Outside the South, we would expect a correspondence between a city's racial residential segregation index and its school segregation index since school attendance zones are often drawn on a neighborhood basis. It is more difficult to anticipate the relationship in the South. In 1954, southern schools were segregated regardless of whether or not racial residential segregation was present. By the late 1960's, some of the South's larger, urban school districts

64. See Rossell, supra note 55.
65. For an excellent analysis of the reaction of the Fifth Circuit Court of Appeals to footdragging by school districts and lower federal courts, see Read, Judicial Evolution of the Law of School Integration Since Brown v. Board of Education, supra note 40, at 18-20.
67. Green v. County School Bd. of New Kent County, 391 U.S. 430, 432 (1968), represents a situation where there is no residential segregation (New Kent County being a rural county in Eastern Virginia), but where there was total school segregation through 1965.
adopted the neighborhood schools concept prevalent in the urban districts in the North. Others, however, retained dual systems with a slight sprinkling of blacks in the white schools resulting from the use of pupil placement plans or freedom-of-choice plans.

To determine the linkage between school segregation and residential segregation, school segregation indices of 94 cities (the 61 northern and 33 southern cities for which residential information was available) for 1972 were compared to the residential segregation indices for 1970 of the same cities. This analysis, shown in Figure 6, indicates that there is no relationship between the extent of school segregation and residential segregation in the South—cities with high residential segregation scores were no more likely to have large school segregation scores than cities whose neighborhoods were relatively integrated. The slight relationship between school and residential segregation in the South that existed in 1967 has disappeared, undoubtedly because of the activity of federal courts, which have ordered school integration in many cities where blacks and whites are highly segregated by residence. These districts include Asheville, North Carolina, Norfolk and Richmond, Virginia, and Oklahoma City, Oklahoma. At the other extreme, public schools in Baltimore, Dallas, and St. Louis were highly segregated, reflecting their high degree of residential segregation.


69. Pupil placement plans allowed school authorities initially to assign students to the schools maintained for their race. Each application for reassignment to schools of the opposite race was considered in light of various nonracial factors, e.g., availability of staff or transportation, curricula suitable for the individual pupil's abilities and academic preparation, the psychological effect the assignment would have on the pupil, and his morals, conduct, home environment and health. Such plans were declared constitutionally permissible in Shuttlesworth v. Birmingham Bd. of Educ., 358 U.S. 101 (1958), aff'g 162 F. Supp. 372 (N.D. Ala. 1958). However, even Circuit Judge Rives, the author of the lower court opinion in Shuttlesworth (heard by a three-judge district court), recognized that the law easily could be applied unconstitutionally and that in that event it would be struck down. 162 F. Supp. at 381-82. Later, when it finally became clear that the sole purpose of such plans was to frustrate desegregation, they were enjoined. See Read, supra note 40, at 19.

70. Freedom-of-choice plans were designed, theoretically, to desegregate by allowing each student to attend the school he personally chose, limited only by the dimensions of the school district, the nature of the school, and the physical capacity of the school. See Read, supra note 40, at 19. Generally, however, they achieved no sizeable integration, as illustrated by the New Kent County, Virginia school system where a freedom-of-choice plan in effect between 1965 and 1968 resulted in no whites attending the formerly black high school and only 13 percent of the county's black students enrolling in the formerly all-white high school. This result caused the Supreme Court to strike down freedom-of-choice plans which failed to achieve integration in Green v. County School Bd. of New Kent County, 391 U.S. 430 (1968). See Read, supra note 40, at 28-29.

71. Farley, supra note 55, at Table 4.
73. See Brewer v. School Bd., 397 F.2d 37 (4th Cir. 1968).
of residential segregation, since these districts were not operating in 1972 under federal court orders requiring massive integration.76

The northern city districts, however, do show a moderate relationship between residential and school segregation. Where neighborhoods are highly segregated, schools tend also to be highly segregated; and the variance in residential segregation accounts for one-sixth of the variance in school segregation. Those school districts where the degree of school segregation is much less than was predicted on the basis of their level of residential segregation are districts which put massive integration plans into operation, curtailing the extent to which the neighborhood school concept of pupil assignment was used. These districts include Berkeley,77 Evanston,78 Evansville,79 Harrisburg,80 Pasadena,81 Providence,82 and San Francisco.83 Northern districts whose levels of school segregation greatly exceeded what would be predicted from their residential segregation scores include Chicago—a city in which both federal courts and HEW have failed to integrate schools84—and Cleveland.

V

CAUSES OF RESIDENTIAL SEGREGATION

At the beginning of this article, it was noted that if parents desired neighborhood schools and if the Constitution requires integrated schools, then neighborhoods must be integrated. It is therefore appropriate to examine the causes of residential segregation and possibilities for change. In his concurring opinion in Milliken v. Bradley, Justice Stewart noted that there was a "'growing core of Negro schools surrounded by a receding ring of white schools in Detroit'" and that this "predominantly Negro school population in Detroit" was

---

76. The residential and school segregation scores for these cities, given in Figures 1 and 5, at p. 166 & pp. 180-83 supra, are as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td>Dallas</td>
<td>96</td>
<td>89</td>
</tr>
<tr>
<td>St. Louis</td>
<td>90</td>
<td>92</td>
</tr>
</tbody>
</table>


82. See H. Pfautz, supra note 57.


84. See CENTER FOR NATIONAL POLICY REVIEW, supra note 79, at 7-10; G. ORFIELD, supra note 34, at ch. 4.
FIGURE 6
SCHOOL SEGREGATION SCORES IN 1972 AND RESIDENTIAL SEGREGATION SCORES IN 1970, SELECTED NORTHERN AND SOUTHERN SCHOOL DISTRICTS

A. Data for the North (N = 61)

1972 School Segregation Scores (y)

1970 Residential Segregation Scores (x)

Chicago
Cleveland
Evansville
Providence
San Francisco
Evanston
Pasadena
Berkeley
Wichita

r = .40
r² = .16
bₓᵧ = 1.22
ᵧ = .59
δᵧ = 21
ₓ̄ = 81
δₓ = 7

B. Data for the South (N = 33)

1972 School Segregation Scores (y)

1970 Residential Segregation Scores (x)

\[ r = -0.01 \]
\[ r^2 = 0.00 \]
\[ b_{yx} = -0.04 \]
\[ y = 63 \]
\[ \sigma_y = 25 \]
\[ \bar{x} = 90 \]
\[ \sigma_x = 5 \]

St. Louis
Baltimore
Dallas
Asheville
Richmond
Oklahoma City
Jacksonville
Norfolk
Greensboro

1The Bureau of the Census classifies Missouri as a northern state. However, since schools in that state were once segregated by law, it is here treated as a southern state.

Source: Data in Figures 1 and 5.
"caused by unknown and perhaps unknowable factors such as in-migration, birth rates, economic changes, or cumulative acts of private racial fears . . . ."\textsuperscript{85}

Many aspects of the trend toward residential segregation are known, however. For example, it is known that blacks made sizable economic gains during the 1960's and that by 1970 racial differences in occupation, income, and educational attainment were generally smaller than they were in previous decades.\textsuperscript{86} It is also known that, despite these economic gains, levels of residential segregation did not decline significantly.\textsuperscript{87} Moreover, urban blacks report considerable dissatisfaction with their housing,\textsuperscript{88} and few blacks report a preference for all black residential areas.\textsuperscript{89} At the same time, a growing proportion of whites report a willingness to accept a black in their neighborhood;\textsuperscript{90} in 1972, four-fifths of a national sample of whites said that it would make no difference if a Negro of similar education and income moved onto their block.\textsuperscript{91}

A committee appointed by the National Academy of Sciences to investigate residential patterns in the United States, observed that there were few stable interracial areas.\textsuperscript{92} The committee concluded:\textsuperscript{93}

\begin{itemize}
  \item \textsuperscript{85} Milliken v. Bradley, 418 U.S. 717, 756 n.2 (1974). Judge Craven, speaking for the majority in the Richmond metropolitan area case, had earlier used almost these identical words. Bradley v. School Bd. of City of Richmond, 462 F.2d 1058, 1064 (4th Cir. 1972), aff'd by an equally divided Court, 412 U.S. 92 (1973). See also Craven, The Impact of Social Science Evidence on the Judge: A Personal Comment, 39 LAW & CONTEMP. PROB. no. 1, at 150, 155 (1975).
  \item Interestingly, however, the Supreme Court, in two major school desegregation cases preceding Milliken v. Bradley, has implied that various school board policies which have the effect of maintaining racially segregated schools may have an impact on residential patterns. The "earmarking" of schools as black or white may have a "reciprocal effect":
  \begin{itemize}
    \item People gravitate toward school facilities, just as schools are located in response to the needs of people. The location of schools may thus influence the patterns of residential development of a metropolitan area and have important impact on composition of inner-city neighborhoods.
  \end{itemize}
  \item Farley & Hermalin, The 1960s: A Decade of Progress for Blacks?, 9 DEMOGRAPHY 353, 354-65 (1972). See U.S. BUREAU OF LABOR STATISTICS, DEPT. OF LABOR, BULL. No. 1699, BLACK AMERICANS: A CHARTBOOK 39 (1971). As Figure 4, at pp. 75-76 supra, indicates, the economic status of blacks does not account for their residential segregation from whites.
  \item A. Sørensen, K. Tauber & J. Hollingsworth, supra note 12.
  \item See Campbell & Schuman, Racial Attitudes in Fifteen American Cities, in The National Advisory Commission on Civil Disorders, Supplemental Studies for the National Advisory Commission on Civil Disorders 23, Table II-m (1968); 3 G. Gallup, The Gallup Poll 2037, 2195 (1972).
  \item Pettigrew, Attitudes on Race and Housing: A Social-Psychological View, in Segregation in Residential Areas 21, 44-45, Table (A. Hawley & V. Rock eds. 1973). See also Campbell & Schuman, supra note 88, at 16, Table II-6.
  \item O. Duncan, H. Schuman, & B. Duncan, Social Change in a Metropolitan Community 108, Table 48 (1973); O. Duncan, supra, at 159, Table 11-1.
  \item O. Duncan, H. Schuman, & B. Duncan, supra note 89, at 99, Table 41.
  \item National Opinion Research Center, National Data Program for the Social Sciences 36 (1972).
  \item Social Science Panel, National Academy of Sciences, Freedom of Choice in Housing (1972).
  \item Id. at 20.
\end{itemize}
Today, in many metropolitan areas there are in fact two housing markets, not one. A web of institutional discrimination exists that reduces the "effective" supply, especially for nonwhite minorities. The institutional web, comprised of many interrelated components, ranges from the services of realtors, mortgage lenders, appraisers, and developers; to the laws, government regulations, and administrative and political behavior of government officials; to patterns and practices related to employment, schools, transportation, and community services.

The implications of this institutional web of discrimination have also been apparent to several judges in school integration cases outside of the South. Courts have not, however, solved the problem of how to cut through this web.

CONCLUSION

The analyses undertaken in this article have indicated first, that neighborhoods in the United States are extensively segregated by race and there is no compelling evidence that residential segregation is significantly decreasing. Second, within many—but not all—metropolitan areas, the out-migration of a substantial proportion of white families of childbearing age is responsible in large part for the existence of central cities with large black populations and surrounding suburban rings with primarily white populations. Third, pressures from the federal government for school integration greatly increased during the last decade, significantly reducing the degree to which central city school districts are segregated. Analysis of 143 school districts has indicated that, on the average, the proportion of either black or white students that a district would have to shift to bring about the same racial composition in each of the

94. In Bradley v. Milliken, Judge Roth pointed out that residential segregation within the city of Detroit and throughout the metropolitan area is "substantial, pervasive and of long standing." 338 F. Supp. 582, 586 (E.D. Mich. 1971), aff'd, 484 F.2d 215 (6th Cir. 1973), rev'd, 418 U.S. 717 (1974). In attempting to explain this phenomenon, Judge Roth continued:

While the racially unrestricted choice of black persons and economic factors may have played some part in the development of this pattern of residential segregation, it is, in the main, the result of past and present practices and customs of racial discrimination, both public and private, which have and do restrict the housing opportunities of black people. . . .

Governmental actions and inaction at all levels, federal, state and local, have combined, with those of private organizations, such as lending institutions and real estate associations and brokerage firms, to establish and to maintain the pattern of residential segregation throughout the Detroit metropolitan area.

338 F. Supp. at 586-87.

Judge Keith, whose order integrated the schools in Pontiac, Michigan, in considering the role of the school board when confronted with the development of a residentially segregated pattern in that city, also touched on these factors:

A Board of Education simply cannot permit a residential segregated situation to come about and then blithely announce that for a Negro student to gain attendance at a given school all he must do is live within the school’s attendance area. To rationalize thusly is to be blinded to the realities of adult life with its prejudices and opposition to integrated housing.

schools in that district fell from 75 per cent in 1967 to 56 per cent in 1972. Those districts operating under court order, or which have voluntarily implemented integration plans, have segregation levels which are now dramatically lower than they were a decade ago. Intradistrict integration has proceeded most rapidly in the South, and today, on average, schools in that region are less racially segregated than schools in the North and West.

This article has attempted to address the relationship between residential segregation and school segregation. As the indices of school segregation given in Figures 5 and 6 have shown, schools can be integrated despite the existence of very high levels of residential segregation. However, residential segregation makes school integration more difficult to accomplish, and as the proportion of black students in large school districts increases, it will become necessary to bus more and more children longer distances to achieve integration of the schools.

Furthermore, the growing concentration of blacks in central cities, and the almost exclusively white school populations in the suburban rings, means that further court orders directed only to the central city will have limited impact. Public school enrollments in many of the largest cities are predominantly black and thus complete intradistrict integration in Chicago, Cleveland, Detroit, and Philadelphia would result in integrated schools which would be about three-fifths black; in Atlanta and New Orleans, such desegregated schools would be four-fifths black. The general trend toward out-migration of both whites and blacks and the decline in birth rates mean that both black and white enrollments in central city public schools will decline. The decline, however, will be greater among whites than blacks, meaning that integrated central city schools will enroll fewer and fewer white students.

When cities and their suburban rings are consolidated into single school districts—as is the case with the Miami-Dade County (Florida) school district, the Nashville-Davidson County (Tennessee) school district, and the Charlotte-Mecklenburg (North Carolina) school district—-intradistrict integration will not lead to predominately black central city schools. The recent Supreme Court decision in the case of Detroit and its suburbs suggests, however, that courts may have no power to compel such consolidations.95 Thus the opportunity for achieving integrated schools by combining central city and suburban areas may only occur in the case of voluntary consolidations.

As the data have indicated, court-ordered or voluntary desegregation plans confined to the central city initially have a substantial impact on the degree of school integration, even though residential segregation remains firmly entrenched. However, as long as present demographic trends continue with the pupil population of the many cities becoming increasingly black, implementa-

tion of such plans will have limited impact on the extent of school segregation. On the other hand, even if courts were willing to order integration on a metropolitan-wide basis, because of the extensive residential segregation both within the central city and between the city and the suburban ring—for what seem to be all too “knowable” factors of “institutional discrimination”—such integration of the schools could be accomplished only by sacrificing the neighborhood school concept.