Trends in Public School Segregation in the South, 1987-2000

John T. Yun
Harvard University

Sean F. Reardon
Pennsylvania State University

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Address all correspondence to John T. Yun, The Civil Rights Project,
124 Mt. Auburn St., Suite 400 South, Cambridge, MA 02138 (*yunjo@gse.harvard.edu*)
All errors remain the responsibility of the authors.

Introduction

Since 1954 and the U.S. Supreme Court's *Brown v. Board of Education* decision essentially outlawing state supported racial segregation in America's public schools, the South has held a central place in the school desegregation pantheon. From the lack of implementation of desegregation plans in the 1950s, to the more aggressive plans mandated and implemented in the 1960s and early 1970s, the South has been the at the core of the school desegregation controversy (Orfield, 1983). In addition to the symbolic importance of the South as the original battlefield for desegregation, it has led the nation in implementation of desegregation plans. This is evidenced by the levels of desegregation achieved in the region, with the South becoming the most desegregated region in the nation by the 1970s, a trend that continued up through the 1980s (Orfield, 2001; Orfield & Yun, 1999). However, since then, there have been signs that the gains from the era of desegregation are coming to an end. Desegregation orders are being vacated, and many Southern districts are being declared "unitary" which means that they have, theoretically, removed all vestiges of segregation from their school systems and, more specifically, met the conditions for unitary status outlined in several important U.S. Supreme Court rulings.[1] In addition, there have been several reports issued by The Civil Rights Project at Harvard University that have claimed that a resegregation of the South is occurring, such that the South is giving back many of the gains achieved during the 1960s and 1970s (Orfield, 1999; Orfield, 2001; Frankenberg & Lee, 2002).

In one sense this paper will tread familiar ground since we examine the segregation trends in the South. But in addition to the trends and levels of segregation, we explore different methods for measuring segregation, different levels of aggregation, and the importance of using

[1] Unitary status and the cases that led to that designation can be explored further in *Dismantling Desegregation: The Quiet Reversal of Brown v. Board of Education* (Orfield & Eaton, 1996)

multiple methods to ensure an accurate picture of the dynamics driving these measures. More specifically, we intend this paper to describe broad trends in segregation in the South through multiple lenses, showing how the different levels of aggregation (region, state, and district) can influence the conclusions one makes about the school situation in the South. We also show how employing several different methods of measuring segregation over time (exposure, distribution, and the information theory index) expose trends that may otherwise have remained hidden, or below the threshold for exploration.

This paper is intended to be purely descriptive, which means that attribution of the trends we see to policies or other factors that affect school segregation cannot confidently be made. However, the importance of descriptive data lies in its ability to suggest where to look, and what to look for in order to find answers appropriate to the questions you may ask. Therefore, we do suggest possible interpretations of the data, and further analysis to pursue these trends.

First we examine the question of measuring segregation. What issues are important to consider and how choices of those issues may affect what you find in your analysis. Second, we look at the segregation of the South as a region, using multiple measures for black versus white students, and Latino versus white students. We then repeat these views for selected states and the 50 largest districts in the South. However, in order to avoid repeat analysis, for the state and district analyses we do not use each segregation measure for each racial group. Instead we focus on the pieces of analysis that substantively inform us about the important trends in the region. For instance, we may use exposure for Maryland, and the information theory index for Jefferson County, if these measures show the most important story.

From these analyses we see that segregation has remained at very high levels in most Southern states and districts, and has even increased by large amounts in many others. There

does appear to be an important trend toward resegregation, but that trend is not uniform across the South. We also find that some trends are masked from one measure of segregation, but revealed by others, stressing the importance of the use of multiple measures, and the examination of local situations.

Measuring Segregation

On the face of it, determining how racial segregation in the South has changed from 1987 through 2000 does not seem to be a difficult proposition. Given the data, one simply needs to find an appropriate measure of segregation, calculate a value for each year, and present those findings. However, as with most social science problems, the answer is not so easily obtained.

To correctly specify the underlying dynamics of change there must be attention paid to the type of analysis used and the level at which that analysis is given. Definitions may need to be changed as the situation warrants and multiple ways to display the data need to be taken into consideration. Presentation is not simply aesthetics but also analysis. In this paper we use three measures of segregation, each providing something unique to the analysis.

The Measures

For this paper we use three measures of segregation, the exposure index, the distribution of the exposure index, and the information theory index (H). The exposure index can most simply be described as the percentage of a particular race in the school of the average person of another (or the same) race (Massey & Denton, 1988; Orfield, Bachmeier, James, & Eitle, 1997; Orfield, Glass, Reardon, & Schley, 1993). For example, a black-white exposure index of 33 means that the average black student attends a school that is 33% white[2] (this is the actual

[2] The black-white exposure index would be calculated as the percentage of white students in each school, multiplied by the number of black students in that school, summed by school, then divided by the total number of black

Southern black-white exposure, see Figure 1). Likewise, a white-white exposure index of 74 means that the average white student, attends a school that is 74% white (Figure 1). If there were no public school segregation in the South, we would expect the average black and white students to attend schools which were 56% white, the actual white percentage of white students attending public school in the South. Thus, a black-white exposure index of 33, and a white-white exposure of 74 indicates substantial segregation in public schools in the South—with black students concentrated in schools that have low concentrations of white students, and white students concentrated in schools with relatively high proportion of white students. In Figure 1, this can be viewed as the "gap" between the two measures of exposure and the proportion of white students in the public school population. If the gap increases over time, this can be viewed as an increase in segregation, if it shrinks, this can be viewed as a decrease in segregation. This "gap" measure is not the only importance of the exposure index. Even without the other measures for comparison, changes in the exposure index are critical, since they signal changes in the actual lived experiences of students. Therefore, changes in that index should be taken as an important signal of deepening or lessening segregation in regions, states, or districts, and as important changes in the context of schools for the students affected.

Another important aspect of the exposure index is that it is a summary measure. That is, it describes the average exposure of one group to another. So in addition to reporting exposure we also look at the distribution of schools attended by members of different racial or ethnic groups. These distributions allow us to examine the underlying segregation in more detail than a summary measure would allow. For example, a black-white exposure index of 33 can result from a variety of possible distributions – all black students attending schools that are 33% white

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students in the state. Mathematically this can be represented by the equation, exposure=$1/T[\Sigma_i\ t_i(p_i)]$, where T is the number of black students in the state, t_i is the number of black students in school i, and p_i is the percentage of white

or half the black students attending schools with no white students and the other half attending schools with 66% white students, etc. While it is clear that these situations are very different, the exposure index cannot distinguish between the two. In addition, over time, large changes in the middle of the distribution could result in very small changes in the exposure index, even though large shifts in the distribution are occurring. In fact, we find that examining this distribution gives us a great deal more detail and can allow us to see these important changes that might be missed by simply examining the aggregate exposure index alone.

Finally, we choose to use a segregation measure called the information theory index or H. Essentially H can be thought of as a measure of how diverse individual schools are, on average, compared with the diversity of their surroundings.[3] This measure has several distinct advantages over the exposure index and school distribution measures. First, it can easily be decomposed into between- and within-district components so that we can measure the share of segregation that is due to each of these components. Second, it can be used to simultaneously measure segregation between multiple racial groups (Reardon & Yun, 2001). While we do not use the multigroup capabilities of H in this paper, we do use the decomposibility of H since each of the components of H can be readily interpreted. The between-district segregation can be thought of

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students in school i.

[3] The information theory index is computed as a measure of the ratio of the average diversity of individual schools to the diversity of the total population in all schools combined. Specifically, the diversity is defined as

$$E = \sum_{m=1}^{M} \pi_m \ln\left(\frac{1}{\pi_m}\right),$$

where π_m is the proportion of group m in the population. From this, H is defined as

$$H = 1 - \sum_{j=1}^{J} \frac{t_j}{T} \frac{E_j}{E},$$

where t_j and E_j are the total size and diversity, respectively, in school or tract j and where T and E are the size and diversity, respectively of the whole population. If all schools or tracts have the same race/ethnic composition as the population, the diversity will be the same in all schools, and H will be 0. If many schools or tracts have substantial overrepresentations of a race/ethnic group, then the average diversity within schools or tracts will be low, and H will be large (Theil, 1972). For a further discussion of the information theory index and its decomposition see Reardon, Yun, & Eitle (2000) and Reardon & Firebaugh (2002).

as largely due to residential segregation, and the within-district segregation component, which is most policy relevant, can be thought of as most affected by district desegregation plans. This is an important consideration since court-ordered desegregation plans cannot cross district lines.[4] Thus, regions or states that show increases in the within-district segregation component may not be enforcing desegregation orders or may be showing patterns of resegregation that could be reduced through district policies. It is important to note that the within-district segregation component is NOT the level of racial segregation within districts; it is the amount that the total segregation would be reduced if all within district segregation were eliminated. This component depends on three things: the level of segregation within the district, the size of the district, and the level of diversity present in the district. Thus, while the component of within-district segregation may be low, the actual level of segregation within some districts may be very high (Reardon & Yun, 2001). This fact becomes important as we compare the changes of the within-district component in the state and changes in within-district segregation at the district level.

The Data

For the purposes of this report we use the United States Census Bureau definition of Southern states presented in Table 1, and kept only those states in our dataset. The data are drawn from the Common Core of Data (CCD) produced by the National Center for Educational Statistics (NCES). Each year from 1987 to 2000 NCES gathered data from all of the schools in the U.S., including race counts for each school. These race counts were used to calculate all of the segregation indices reported in this paper. It should be noted that not all states began reporting data to the CCD beginning in 1987. In fact, some states, didn't begin reporting data until 1993.

[4] This is due to the U.S. Supreme Court decisions in *Millikin v. Bradley* (1974), which banned inter-district, city-suburban desegregation plans unless it could be shown that the state, suburbs (or other district) took actions that

[Table 1]

This makes calculating regional changes difficult since the number of states in the regional dataset is not consistent over the time period being studied. To deal with this issue, we chose to impute the nearest year's data backwards to fill out the dataset. Thus, for Alabama, 1988's data was imputed backwards to 1987, such that the 1987 data contained 1988 Alabama data. While this is not an ideal solution, it does allow for a look at regional changes with less of an effect of non-reported state data.

In addition, we also focus largely on black-white segregation, since in all but three states those two races comprise at least 90% of the public school population (see Table 2). Where we do examine Latino-white segregation, we focus on Florida and Texas that contain the majority of Latino students in the region.

Findings

We found that segregation in the South was generally increasing on all measures, most significantly on the exposure index. But we also found that those changes varied greatly, with some states and districts increasing much faster than others, and others showing decreasing levels of school segregation. In addition, we found that some changes in segregation were clearly revealed only on one of the three measures of segregation. Without using multiple measures, some important changes would have been missed.

The South as a Region

The first step in examining any trends in segregation is to examine the enrollment rates by race in order to look for any changes across the years. Table 2 shows a steady decline in the share of white enrollment in the South, a stable, or slightly increasing black share, and a rapidly

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substantially contributed to the segregation in the district (Orfield & Eaton, 1996).

increasing Latino share. These changes suggest that due to the falling white public school enrollment share, there may be some decreases in the black-white, and Latino-white exposure indices, since there would be fewer white students to distribute in the schools.

[Table 2]

Figure 1 confirms this initial hypothesis. As the percentage of white students in the South decreases so does both the black-white exposure and the white-white exposure. While the levels of black-white exposure are decreasing, however, it is not clear that the gap between the actual percentage white in the South and the exposure indices are closing or increasing. There does seem to be a small increase in the gap between white-white exposure and the percent white, which indicates increasing isolation of white students from everyone, but it is not a large increase. Does this mean that segregation is increasing or decreasing? On one hand, using the exposure index, you could argue that segregation is increasing since the actual lived experience of black students is becoming more separated from white students. But on the other hand, since our crude gap measure between the exposure index and the percentage of white students has not grown, you could say that the decrease in exposure is simply due to demographic changes, over which districts have no control. Whatever the case, at this point, the answer to what has happened to black-white segregation in the South is unclear.

[Figure 1]

Figure 2 gives us another perspective on the issue. This figure represents the distribution of schools attended by black students in the South. The axis labeled "Percentage White in School" is broken up in to intervals of 10 percentage points, with the extreme left representing schools that are 0-10% white, and the extreme right representing schools that are 90-100% white. The vertical axis represents the percentage of black students attending schools with that

percentage of white students. From this figure it is clear that while the black-white exposure index in the year 2000 is 33, a plurality of black students attend schools that are 0-10% white. In fact, as the exposure index decreased 6 points from 1987 to 2000, the percentage of black students attending schools that were 0-10% white increased by 6% as well. Again, we do not have a definitive sense about whether and how much segregation may be increasing in the region, but we do have a better sense of what the context of schooling is for black students in the South. They are not attending schools that are nicely distributed around the 33% average measure, but they attend schools that are very isolated from white students, and the percentage of black students in that situation is increasing.

[Figure 2]

Figure 3 gives the clearest indication of how black-white segregation is changing in the South. There is a clear but modest trend upwards from 1987 to 2000 on the segregation measure of H, which takes into account the demographic changes that are occurring in the region. What we see in terms of changes in total segregation is an increase from .37 to .40. This change is not considered large. Large changes in H can be defined at .05 over 10 years, which corresponds to about a .10 change in the index of dissimilarity, another popularly used measure of segregation (Reardon & Yun, 2001). Not only is the change in segregation important, but the level of segregation is also of interest. As measured by H, levels of .10 are considered moderately segregated, any value greater than .25 is considered highly segregated, and anything above .40 hyper-segregated.[5] So the South as a whole has become more segregated over this time period and continues to show very high levels of segregation despite the modest growth in segregation.

[Figure 3]

[5] H values of .3 and .4 correspond to D values of approximately .4 and .6, respectively, which are generally taken to be thresholds of highly, and hyper-segregated values (Reardon & Yun, 2001).

Black-white segregation growth in the South appears to modestly trend upwards over the period 1987-2000, but what of Latino-white segregation in the region? Since there are few Latino students in the rest of the South we focus on the two states with the lion share of Latino students, Texas and Florida, which, combined, accounted for 96.5% of all Latino students in the South in 1987 and 86.5% in 2000. So while the Latino growth in the rest of the South is increasing, the Southern story is still dominated by these 2 states.

[Figure 4]

Figure 4 represents the exposure picture for the region. As before, we do see a slight separation between white-white exposure and, unlike the black-white story, there does appear to be a slight narrowing of the gap between the Latino-white exposure and percent white enrollment. This seems to indicate that, if anything, segregation between Latino and white students stayed the same or decreased during this period. However, again, this does not express the entire story. During this time of small decreases in the Latino-white exposure (a decrease of 2% from 1987 to 2000), the percentage of Latino students attending schools that were fewer than 10% white increased by 4% (see Figure 5).

[Figure 5]

Even more striking is the finding using the information theory index, H. In Figure 6, we see that the total segregation between Latino and white students has decreased. However, the decrease is entirely due to a reduction in between-district segregation, which is most strongly related to residential segregation between school districts. Just as importantly, the component of H related to within-district Latino-white segregation increased quite a bit during that time. As a percentage of the total segregation, the within component increased from 19% to 37%, indicating that within-district segregation became much more of an issue during this period of time. The

actual explanation of why the within component of segregation increased is not entirely clear. It could simply be that the within-district segregation levels increased during this time and the district composition and total enrollments stayed the same, or that there was a shift in enrollments from less segregated to more segregated districts, or the composition of the districts has changed. However, by any of these measures, what is clear is that, on average, Latino students faced more segregated situations within districts in 2000 than in 1987, even during a time of decreasing total segregation.

[Figure 6]

Given the information found here we can make several general points. First, it is clear that the segregation in the South is increasing or staying the same on all measures except for the total Latino-White segregation levels. In terms of pure exposure of black and Latino students to white students, there has also been a marked decrease. Regardless of whether that change is due to demographic factors, it is important to see how the experiences of these students are changing. Finally, it is clear that each of these measures provides important information about the situation we see forming in the South and that lacking any of these measures, our information would be much less complete.

The Southern States

As important as it is to examine the South as a whole, there is an inherent problem with aggregation. Aggregation tends to wash out variation that you may see in smaller divisions such as states or districts. Therefore, looking at selected states can give more about the structure and variation of segregation in the South than a more general analysis. For instance, Table 3 shows that five of the Southern states show increases in segregation and decreases in exposure for black and white students, nine states show flat levels of segregation and decreasing levels of exposure,

and only two states that have both flat exposure levels and flat segregation. Interestingly enough, none of the states in the region show decreasing levels of segregation on this measure.

[Table 3]

[Figure 7 - Figure 9]

It is important to note that Table 3 only categorizes the states based on the changes in the level of segregation, not the levels of segregation themselves. The levels can best be determined in the next set of figures using H. In addition, Figures 7 through 9, using the states of Arkansas, Maryland, and South Carolina, respectively, show examples of the types of graphs defined by the categories in Table 3. Each of these graphs show how steeply percentages may change and how divergent or parallel the lines may become.

Figure 10 illustrates the point made in the earlier tables as well. It shows the segregation trends for states whose levels of segregation have changed more than .05 points in a decade – a level that is considered to be a substantial change in segregation. It is also interesting to note that none of the states, except for West Virginia, showed decreases in black-white segregation. The other states in the South showed changes that were simply below the .05 threshold. Just as importantly, of all the states in the South in the year 2000, only West Virginia, South Carolina and Delaware showed levels of H below the .25 level of high segregation, and Maryland Tennessee, Arkansas, and Alabama found themselves into the extreme segregation category of H greater than .40.

[Figure 10]

Two of the states in Table 3, North Carolina and Delaware, could bear closer scrutiny. When we examine North Carolina's between- and within-segregation numbers using H, we see an interesting pattern in Figure 11. For instance, the between-district component of segregation

in North Carolina decreased a noticeable amount in the years between 1991-93 and the within-district component of segregation increased during this period. At the same time the total segregation increased.

[Figure 11]

One possible explanation for this change is district consolidation. During this time period there was a small decrease in the number of districts in North Carolina, which might have grouped together highly segregated districts to create this change. Alternatively, these changes may have been due to a policy change in the desegregation plans in Charlotte-Mecklenburg, which moved from a busing-based segregation plan to a magnet-based choice program (Mickelson, 2001). One hypothesis would be that the plan did what it was supposed to by decreasing the between-district segregation but acted to increase the segregation in the rest of the district. It may also have been a combination of effect, including a booming economy, which may have lured many more white families into the district and settled them in predominantly white schools. Whatever the case, this marked increase in the within-district component (from 26% of the total segregation in the state to 41% in 2000) should be further explored.

Delaware is another interesting case. Figure 12 shows Delaware as a state with large increases in H, but with segregation levels below even the moderately segregated threshold of .10. The question is what's the trend, and how bad can it be given the extremely low levels of segregation, particularly in comparison with the other Southern states. One of the problems with H as a measure, and all evenness measures like H, is that while there are thresholds for understanding how segregated a state or district is, the number has very little concrete meaning. However, if you look at the distribution of Delaware's black population, you see the trend quite clearly, and get a real sense of how large it is. Figures 12 shows that in 1987 over 70% of black

students in Delaware attended schools that were 61%-80% white. By the year 2000 that number had plummeted to 32%, a 40% change. In addition, the next lowest category, 41%-60% white, showed a commensurate increase from 20% of black students to 50% of black students in that category. The question still remains, were these students in schools that were just at the edge of the thresholds and are the populations stabilizing at these, still very desegregated levels? When we disaggregate the school levels more we find that at around 1997 the 51%-60% category tops out and begins to decrease and the 41%-50% category shows a rapid increase in membership, indicating that the distribution is continuing to shift downwards through the mid-range, and perhaps proceeding into the lower ranges of white percentages. This trend can be seen by the increasing numbers of students in hyper-segregated schools—those schools with between 0%-10% white students. From 1987 to 1993, no black students attended these schools. From 1993 to 2000, that number grew to 5.5% of the black population. Clearly this resegregating trend is continuing, and may soon be of concern to residents of Delaware. These changes are not free of context. In fact, during these years, the Delaware desegregation orders were under litigation, which ultimately ended in 1996 with a declaration of unitary status for the Christiana, Brandywine, Colonial, and Red Clay School Districts (The Civil Rights Project, 2002). Concurrent to the declaration of unitary status, the percentage of black students attending hyper-segregated schools jumped to 3% from less than 1%. The numbers receded from that high in the next two years, but between 1999 and 2000 that number jumped from 2.5% to its high of 5.5%. Clearly, given the data we have, we cannot determine whether unitary status in these cases led to this increase in hyper-segregated schools. However, it is important to note that of the four districts declared unitary, the Red Clay School District, the second largest school district in

Delaware, showed an increase in segregation as measured by H beginning in 1995 from .046 to .162 in 2000, a 300% increase in black-white segregation.

Districts of the South

In the same way that looking at states provides a more nuanced approach to examining the segregation trends in the South, looking at districts does the same. However, while you gain subtlety and relevance to a local audience, you lose simplicity and breadth of analysis. In order to accommodate that trade-off, we chose to provide two simple tables of the 50 largest districts in the South and examine the exposure measure, and the information theory index, H, for both black-white, and Latino-white segregation.

[Table 4]

Table 4 shows the myriad patterns of segregation and exposure that can occur when you look at units as small as school districts. For instance, Austin Independent School District in Austin, Texas was one of the first school districts in the South to be declared unitary in the early 1990s and, as is noted in Table 4, they have seen a marked drop in their black-white exposure numbers and a large increase in their black-white segregation since 1987. In 1987, the average black student went to a school that was 34% white. By 2000 that number had dwindled to only 19% white. Likewise, the level of segregation increased by .12, from just barely in the highly segregated range (.26) to an extremely segregated .39. Again both measures tell you something useful about the situation in Austin. Combined they tell you that not only has the opportunity for exposure and interaction between white and black students been significantly reduced, these opportunities are being reduced faster than can be accounted for by changes in the demographics of the district. Can these changes be attributed to the granting of unitary status to Austin?

Again, give our data and the descriptive nature of our analysis we cannot say, but this is another important question that needs to be investigated.

The Baltimore County Public Schools presents another interesting case. Unlike their sister, Baltimore City Public Schools, the County Schools had relatively high values of black-white exposure in 1987. However, by 2000 those numbers had decreased by 20%, leaving the average black student in the Baltimore County Schools in a school that is 33% white. In addition, the actual level of segregation in the County schools increased by .08, moving from the highly segregated category into the extremely segregated category. So, even schools with relatively high black-white exposure numbers (compared to the city schools which are at 6%) can have extremely segregated schools since they are distributing their students so poorly through their district.

The Charlotte-Mecklenburg School system was declared unitary in 2001. Since this status was granted after the dataset's final date, it is unclear how this could affect the segregation in the district. However, it is interesting to note the level and the trends toward resegregation prior to the granting of unitary status. In Charlotte-Mecklenburg, since 1987, the average black student found their schools to have 16% fewer white students, for a 2000 exposure index of 38. During that same time the black white segregation measured by H increased by .10. This is a large increase in segregation over the 14 years of data. While the level of segregation in the district is still low (.16 in 2000), the change represents a 150% increase in the black-white segregation prior to the granting of unitary status. What will happen in this district in the years following the unitary status decree must be followed.

Finally, the Dekalb County Schools in the Atlanta metropolitan area were also declared unitary in 1996. From 1993 to 2000 black students in Dekalb have seen their low exposure to

white students (.16) fall even further to single digits (.07), which means that the average black student in the Dekalb County School System attends a schools that is 93% non-white. At the same time, even with these extremely low exposure levels the segregation managed to increase by .13 points from 1993 to 2000. In fact, .10 of that .13 change in H occurred since the unitary status decision in 1996. So the change in H of .10 in 5 years is twice the level of what would be considered a large change in H which is .10 in 10 years.

Again, even given these examples we cannot say that unitary status is leading to resegregation in these districts. However, we need to be sure not to ignore these signs, and follow the progress of these districts as more and more are declared unitary.

This district analysis can also be carried out for Latino-white segregation in the same 50 districts (Table 5). Results from several should be examined more closely. Arlington Independent School District in Texas is an interesting case. In 1987 the Latino-white exposure index was .72. By 2000 it had fallen .39 to .33. This is indicative of the huge demographic changes that the Arlington schools system was undergoing. In 1987 the district was almost 80% white. By 2000 the white enrollment share had dropped to just over 50%. However, if students were being distributed evenly as the migration occurred, H should not have changed so radically. However, during that same time span, H in the district moved from a modest .10 to a highly segregated .24, a .14 increase in 14 years, again nearly double the rate that would be considered a large increase in segregation.

[Table 5]

Austin and Charlotte-Mecklenburg show similar trends to one another for Latino-white segregation as well, with both districts showing large decreases in exposure, .15 and .21, respectively. In addition, both of these districts show large increases in segregation, .13 for

Austin and .16 for Charlotte-Mecklenburg, moving both districts from the low segregation category immediately into the high segregation category in a short 14-year period.

Finally, we examine the changes occurring in Broward County. This is a particularly interesting case because it is a district that is undergoing rapid demographic changes as evidenced by the change in the Latino-white exposure index. From 1987 to 2000 the exposure index in Broward County decreased from .64 to .44, a very large decrease. However, unlike other districts that have experienced similar decreases, the Latino-white segregation levels has not increased, remaining at .08 from 1987 to 2000. Looking back at Table 4 and Broward County, note that a similar pattern emerges for black-white segregation and exposure with large changes in exposure not translating into changes in segregation. The only difference between the Latino-white and the black-white experiences is that black students experience much higher levels of segregation, even though the levels have not changed since 1987. This is a very important finding and requires closer scrutiny. For instance, why has Broward County managed to keep their segregation level flat? What are they doing differently from other districts? Are there factors such as community poverty and the relative affluence of the Latino and black populations migrating into the county that affect this phenomenon? Clearly further exploration must be done to investigate this finding.

Conclusion

The intent of this paper was to provide general information about the condition of racial the ethnic segregation in the schools of the South. Using the Common Core of Data from 1987 to 2000 and several different measures of segregation we were able to explore multiple facets of school segregation and provide alternative interpretations of the meaning of segregated

schooling. We also argued that multiple measures and different levels of aggregation provide important insights into the nuances of school segregation. For instance, the general statement that racial segregation is increasing in Southern schools is not necessarily clear at the regional level, particularly if you are using measures of segregation that take into account changes in the racial proportions. Instead, by using multiple measures, and exploring segregation at the state and district level, we were able to establish in multiple ways that segregation, on average, is still increasing in the South, despite the current high levels of segregation already reached in some areas by 1987.

In addition to the examination of Southern school segregation, we were interested in demonstrating how combining different indices of segregation provided greater depth to these descriptive analyses and could provide a number, or a description, that was readily understood by anyone. For instance, when we explored the changes in Delaware's level of segregation, we identified the state using changes in H, but then examined the meaning of these changes using the distribution of schools, finding that the percentage of black students attending 60%-80% white schools had dropped almost 30% in 14 years, and this trend was continuing, possibly leading to further resegregation at a very rapid pace.

The regional and state analyses demonstrated that even using summary measures there is a way to gain policy insights, particularly when using the information theory index H and its decompositions. We decomposed H into its between-district and within-district components and found that North Carolina had very large increases in the share of segregation attributable to within-district segregation. We also found that the within-district component for Latino students in Texas and Florida was increasing a great deal. These insights provide policy relevant reasons

for exploring these general findings more closely, since within-district segregation is most readily addressed with district desegregation plans, the very plans that are currently under attack.

From the district analyses we found that several districts which have been declared unitary seem to have greatly increased in their levels of segregation around the time of unitary status being granted or, strangely enough, before unitary status was granted. These are districts that have, theoretically, dismantled segregated systems "root and branch." Clearly there needs to be more research into the effects of unitary status and why unitary status is given in situations where not only high levels of segregation persist but the levels of segregation are growing at very high rates.

It is also clear that there are places such as Broward County where large demographic shifts have not resulted in wholesale increases in segregation levels. There needs to be further investigation into why these districts have been successful in maintaining some sort of racial balance in their districts.

There is still much to learn about the patterns and causes of segregation between black, white, and Latino students in the South. In fact, these analyses suggest that in many districts and states, a combination of biracial and multigroup indices may be needed to go beyond the dichotomy of black-white, and Latino-white analysis. This step beyond dichotomy may help us examine how segregation levels are changing in the South, and to more fully characterize how these increases in segregation are affecting the context and the learning experiences of all students receiving their schooling in the South.

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Table 1. List of United States Census Defined Southern States, and the Year Entered CCD

State	Year Entered CCD
Alabama	1988
Arkansas	1987
Delaware	1987
Florida	1987
Georgia	1993
Kentucky	1987
Louisiana	1989
Maryland	1988
Mississippi	1988
North Carolina	1987
Oklahoma	1987
South Carolina	1987
Tennessee	1987, Left 1999
Texas	1987
Virginia	1992
West Virginia	1989

Table 2. Percent and Change of White, Black, Latino, Asian, and Native American Students in 1989 and 2000

	White			Black			Latino			Asian			Native		
	1989	2000	Change	1989	2000	Change	1989	2000	Change	1989	2000	Change	1989	2000	Change
Alabama	62.9	60.8	-2.2	35.7	36.5	0.8	0.2	1.3	1.1	0.5	0.7	0.3	0.7	0.7	0.1
Arkansas	74.8	71.7	-3.1	24.0	23.3	-0.7	0.4	3.6	3.2	0.6	0.9	0.3	0.2	0.5	0.3
Delaware	68.7	60.7	-8.1	26.9	30.8	3.9	2.6	6.0	3.3	1.5	2.3	0.8	0.1	0.3	0.1
Florida	62.8	53.5	-9.3	23.8	25.1	1.3	11.9	19.3	7.4	1.4	1.9	0.4	0.2	0.3	0.1
Georgia*	59.9	54.7	-5.2	37.0	38.2	1.1	1.5	4.8	3.2	1.4	2.2	0.8	0.2	0.2	0.0
Kentucky	90.0	87.7	-2.3	9.4	10.5	1.1	0.2	0.9	0.8	0.4	0.6	0.2	0.0	0.2	0.2
Louisiana	53.4	48.9	-4.5	44.1	47.8	3.6	1.0	1.4	0.4	1.1	1.3	0.2	0.4	0.6	0.2
Maryland	61.7	53.3	-8.3	32.7	37.1	4.4	2.1	4.8	2.8	3.3	4.4	1.0	0.2	0.4	0.1
Mississippi	48.7	47.3	-1.4	50.6	51.1	0.5	0.1	0.8	0.6	0.4	0.7	0.2	0.1	0.1	0.0
North Carolina	66.5	61.0	-5.6	30.4	31.3	0.9	0.7	4.4	3.8	0.8	1.9	1.0	1.6	1.5	-0.1
Oklahoma	75.0	64.9	-10.1	9.9	10.8	0.8	2.6	6.0	3.4	1.1	1.4	0.3	11.4	16.9	5.5
South Carolina	57.9	54.9	-3.0	41.1	42.1	1.0	0.3	1.9	1.5	0.6	1.0	0.3	0.1	0.2	0.1
Tennessee**	76.6	73.4	-3.2	22.4	24.0	1.6	0.3	1.3	1.1	0.7	1.1	0.4	0.1	0.1	0.1
Texas	50.3	42.1	-8.2	14.6	14.4	-0.1	33.1	40.5	7.4	1.9	2.7	0.7	0.2	0.3	0.1
Virginia***	68.5	63.6	-4.9	25.5	27.1	1.5	2.5	4.9	2.3	3.3	4.1	0.9	0.2	0.3	0.1
West Virginia	95.5	94.7	-0.9	3.9	4.3	0.4	0.2	0.4	0.2	0.4	0.5	0.1	0.0	0.1	0.1
South Total	62.4	55.8	-6.6	25.9	26.6	0.7	9.6	14.5	4.9	1.4	2.1	0.7	0.7	1.0	0.3

Source: Common Core of Data 1987-2000, National Center for Educational Statistics

* Georgia's difference calculation is the difference between 1993 and 2000.

** Tennessee's difference calculation is the difference between 1989 and 1998.

***Virginia's difference calculation is the difference between 1992 and 2000.

Figure 1. Southern Black-White Exposure, White-White Exposure, and Percent White from 1987 to 2000

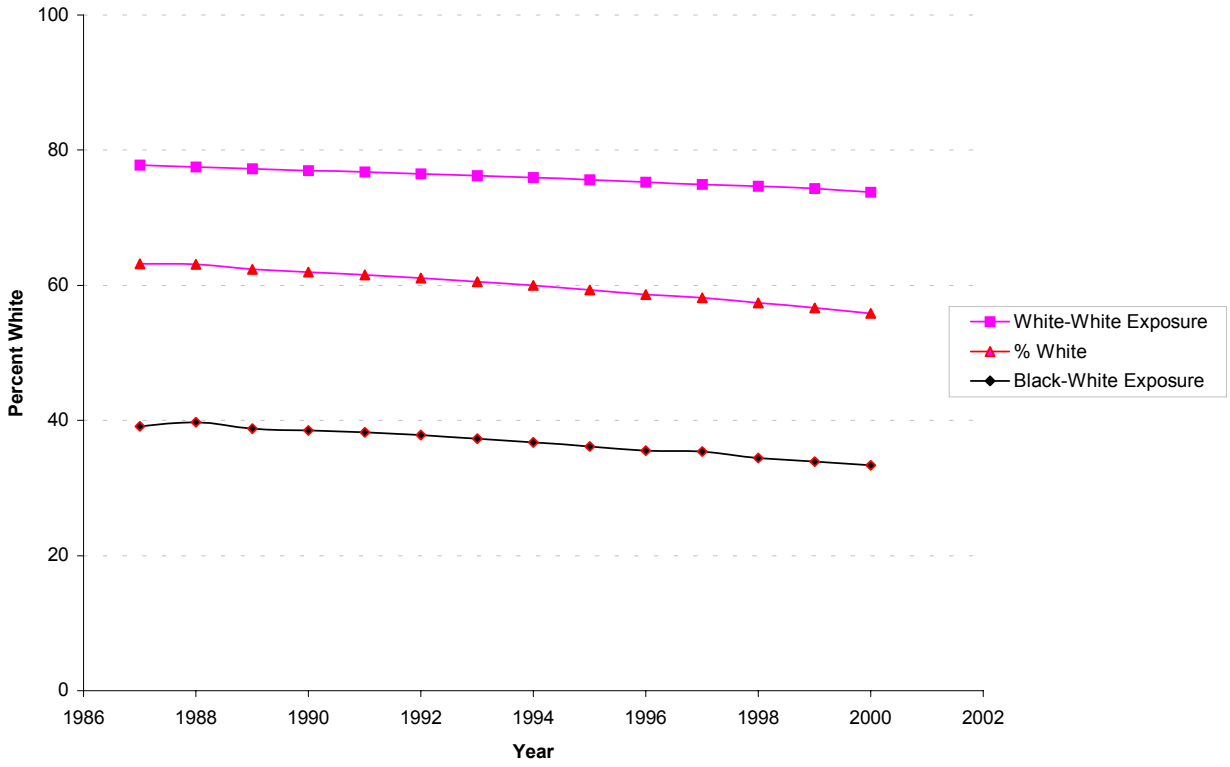

Figure 2. Distribution of Black Students by Percentage White Students in Southern Schools from 1987 to 2000

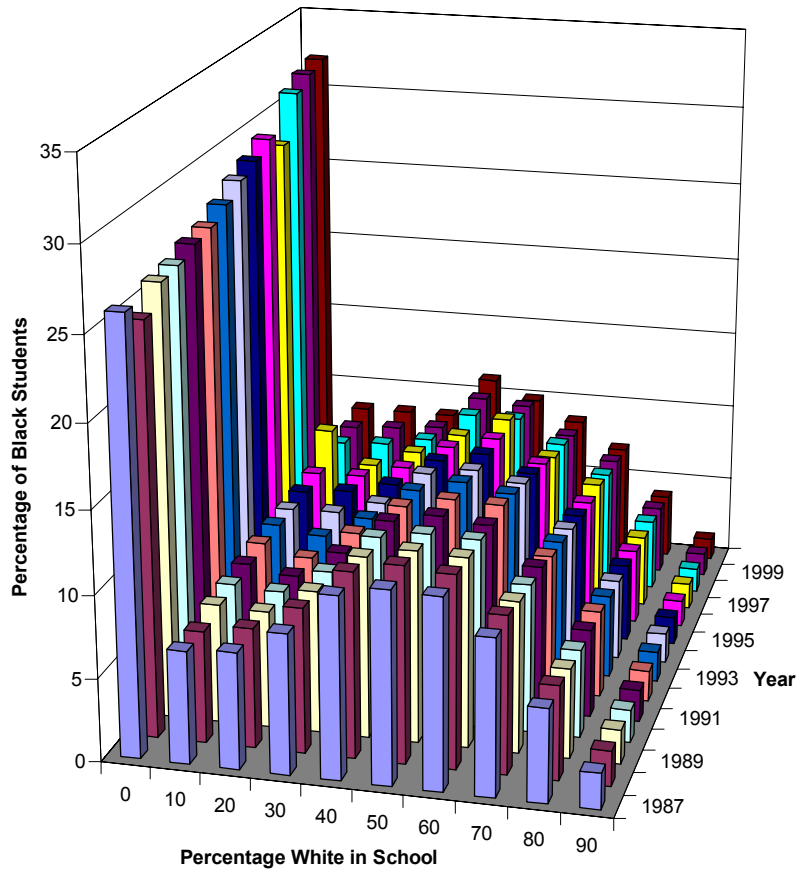

Figure 3. Total H Disaggregated Into Between- and Within-District Components for Black-White Segregation in the South from 1987 to 2000

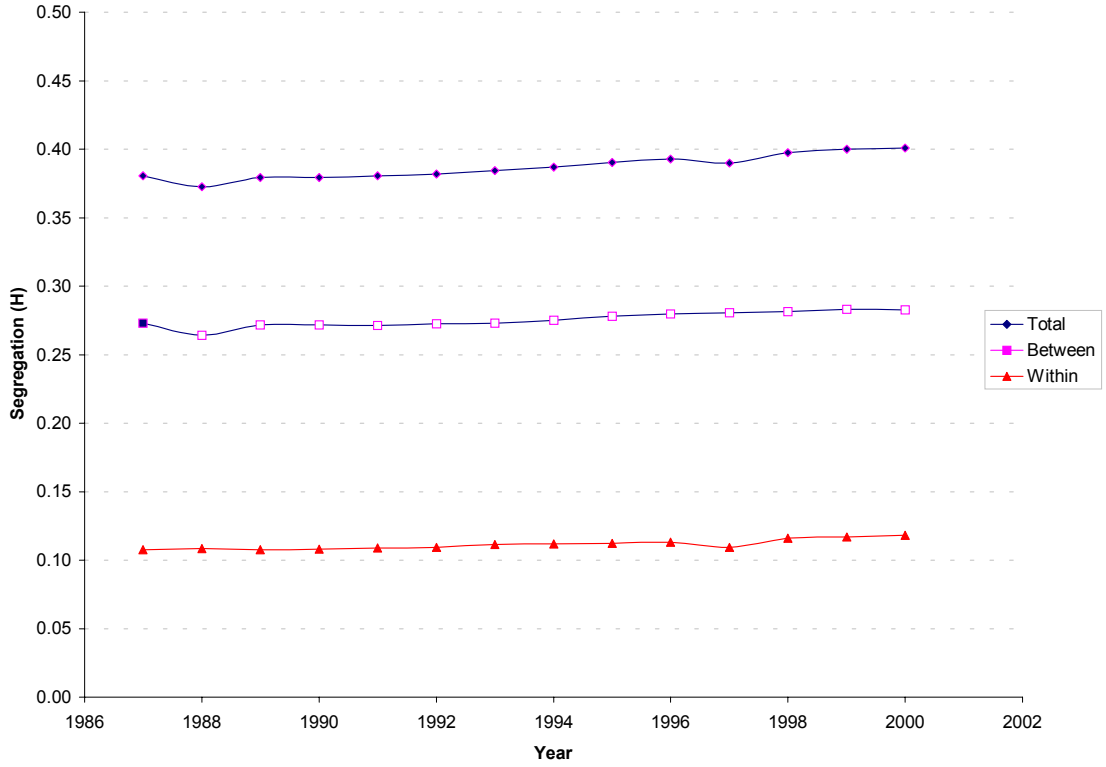

Figure 4. Southern Latino-White Exposure, White-White Exposure, and Percent White Enrollment from 1987 to 2001

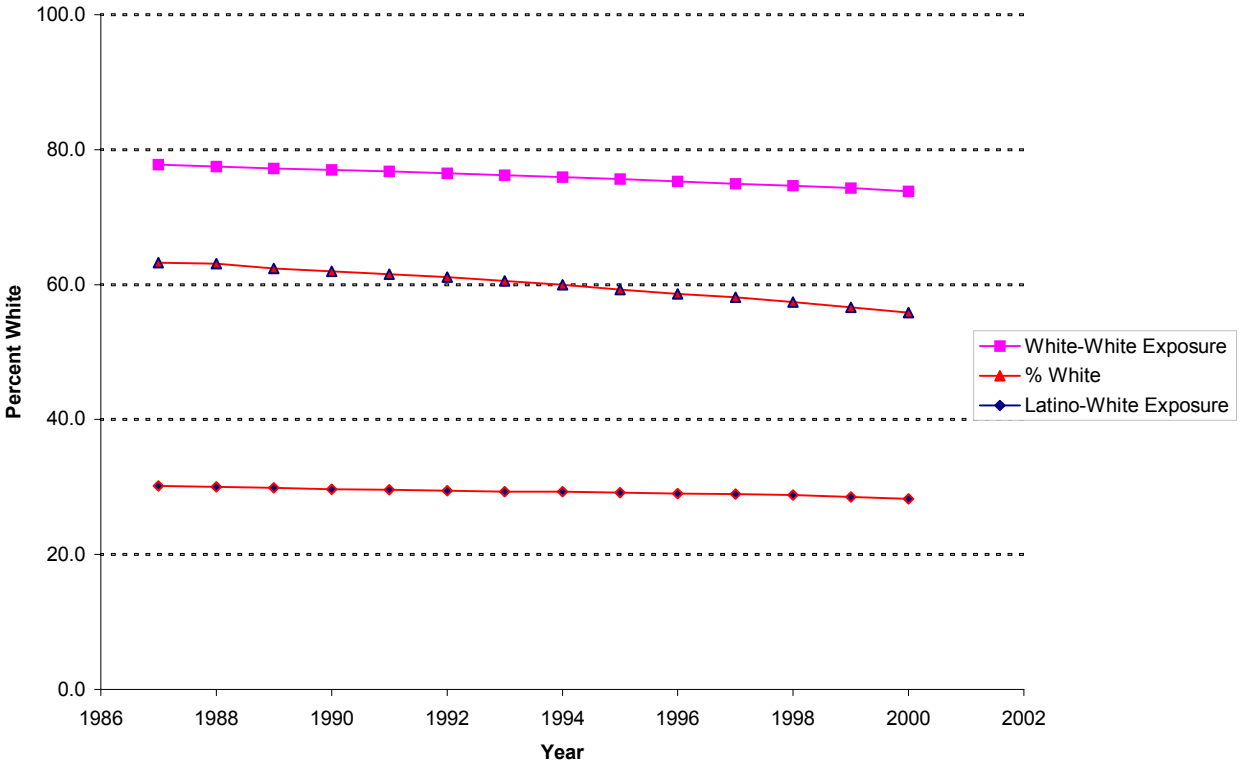

Figure 5. Distribution of Latino Students by Percentage White in School for Texas and Florida from 1987 to 2000

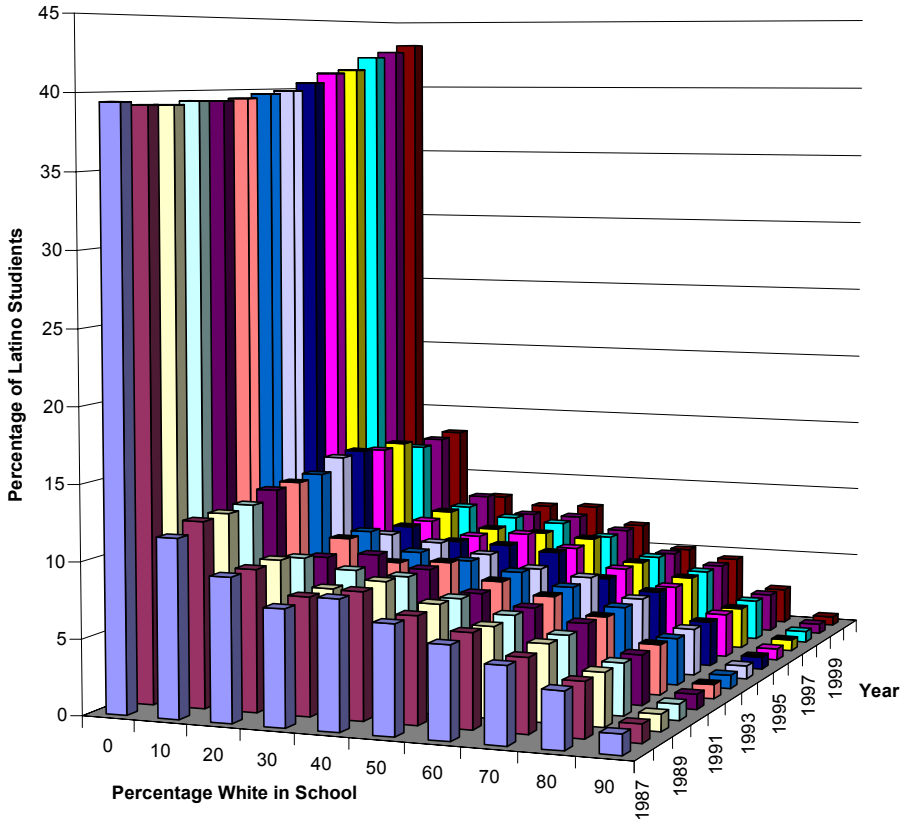

Figure 6. Total H Disaggregated into Between- and Within-District Components for Latino-White Segregation in Texas and Florida from 1987 to 2000

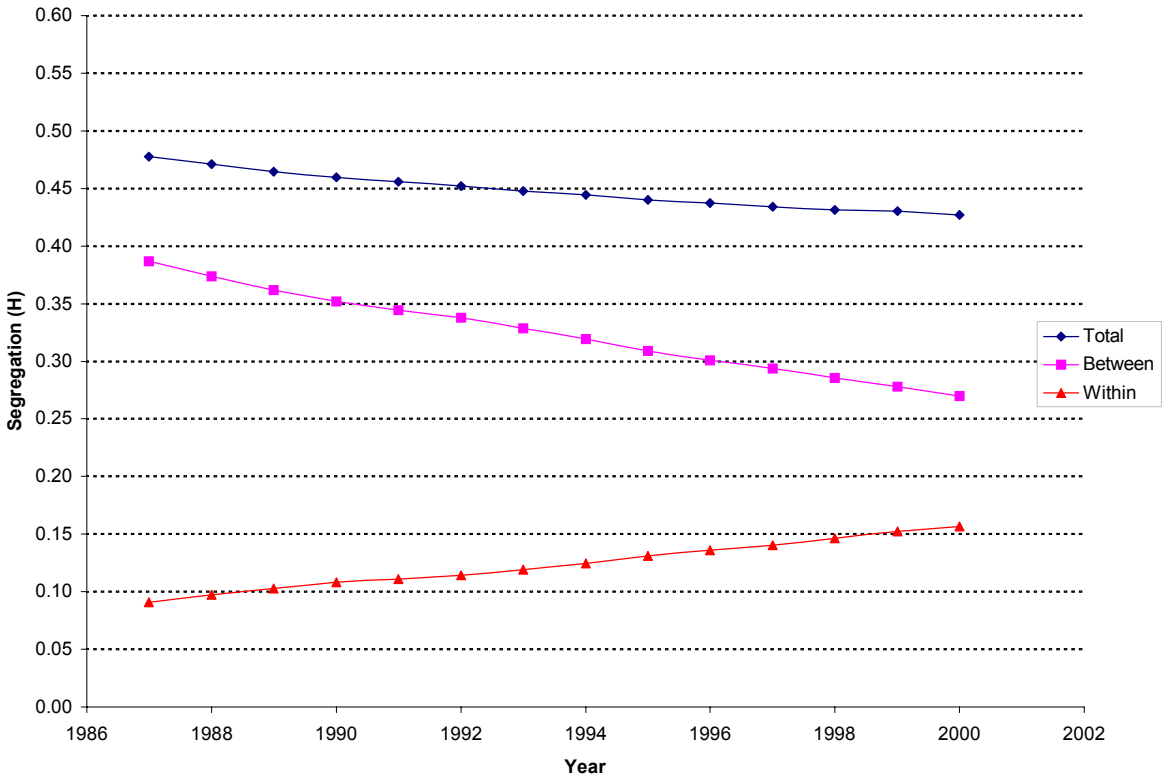

Table 3. Categorization of State Segregation Levels by Black-White Exposure, White-White Exposure, and Percent White Enrollment

Decreasing Exposure Increasing Segregation	Decreasing Exposure Flat Segregation	Flat Exposure Flat Segregation
Alabama	Georgia	South Carolina
Arkansas	Louisiana	West Virginia
Delaware	Florida	
Kentucky	Maryland	
North Carolina	Mississippi	
	Oklahoma	
	Tennessee	
	Texas	
	Virginia	

Figure 7. Arkansas Black-White Exposure, White-White Exposure, and Percent White Enrollment From 1987 to 2000

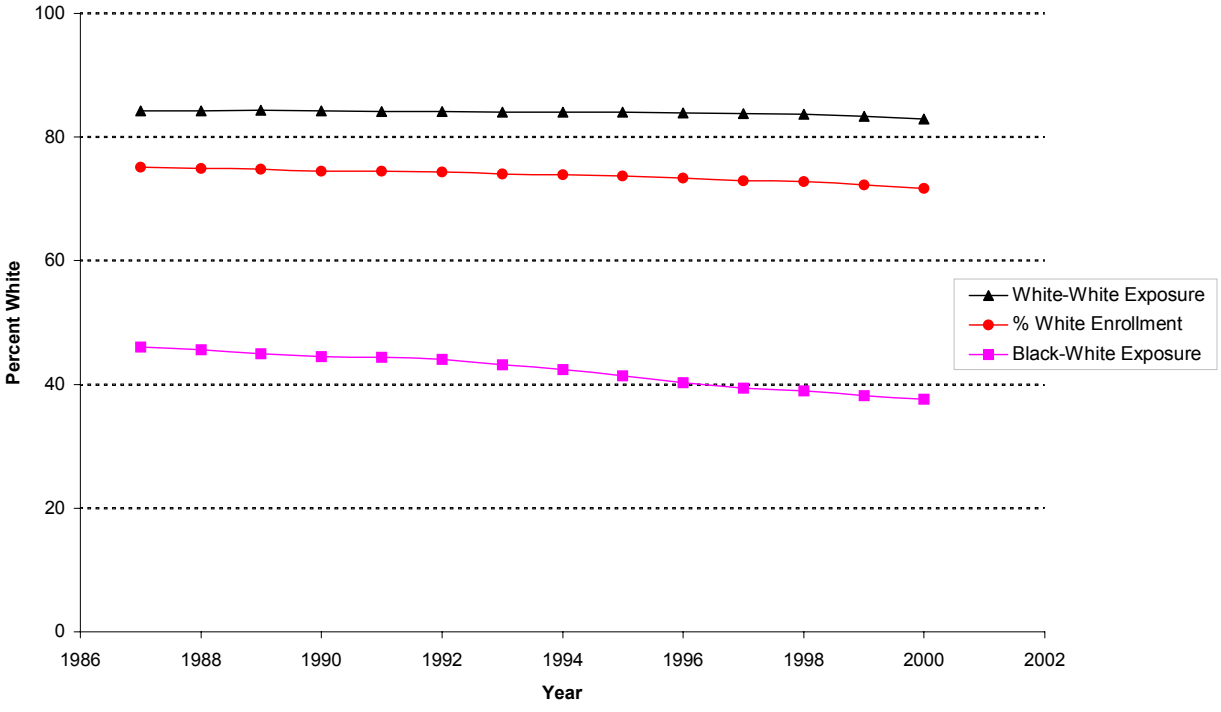

Figure 8. Maryland Black-White Exposure, White-WhiteExposure, and Percent White Enrollment From 1988 to 2000

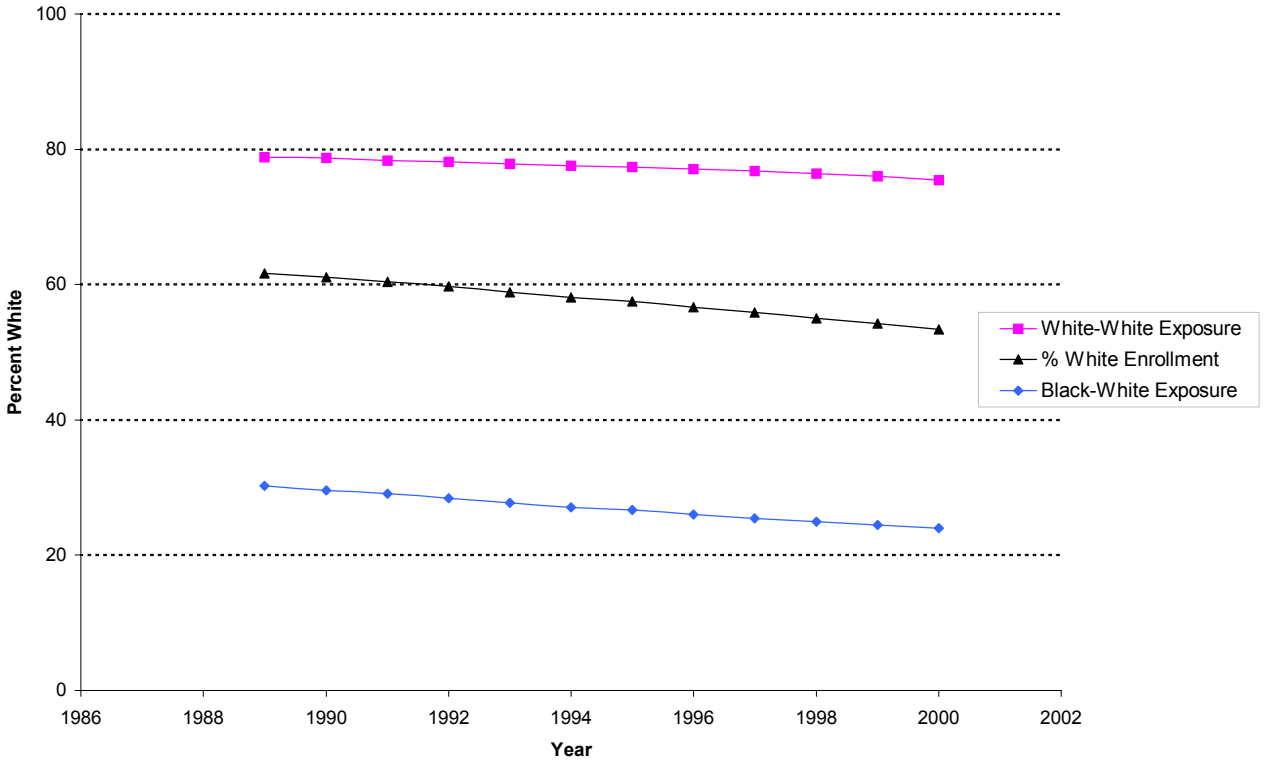

Figure 9. South Carolina Black-White Exposure, White-White Exposure, and Percent White Enrollment From 1987 to 2000

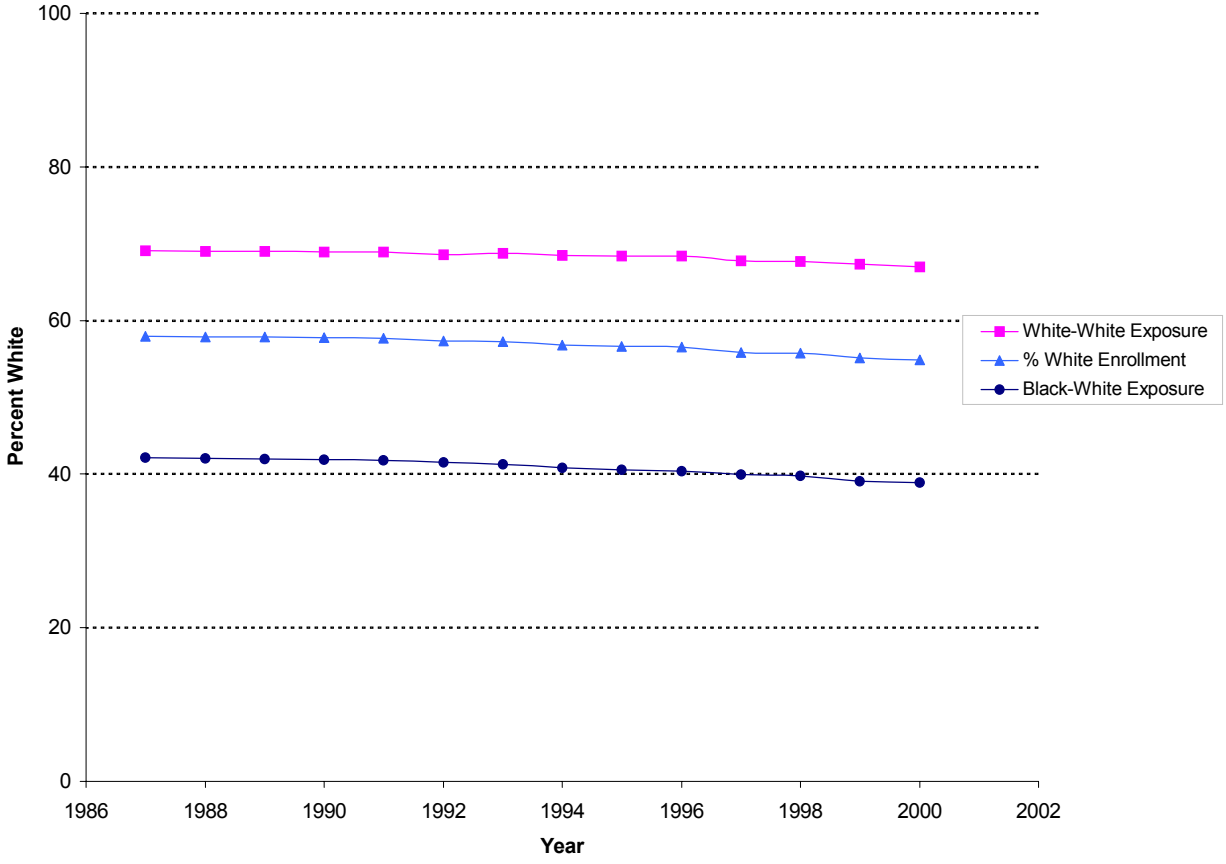

Figure 10. States with Large Black-White Segregation Increases in the South From 1987 to 2000

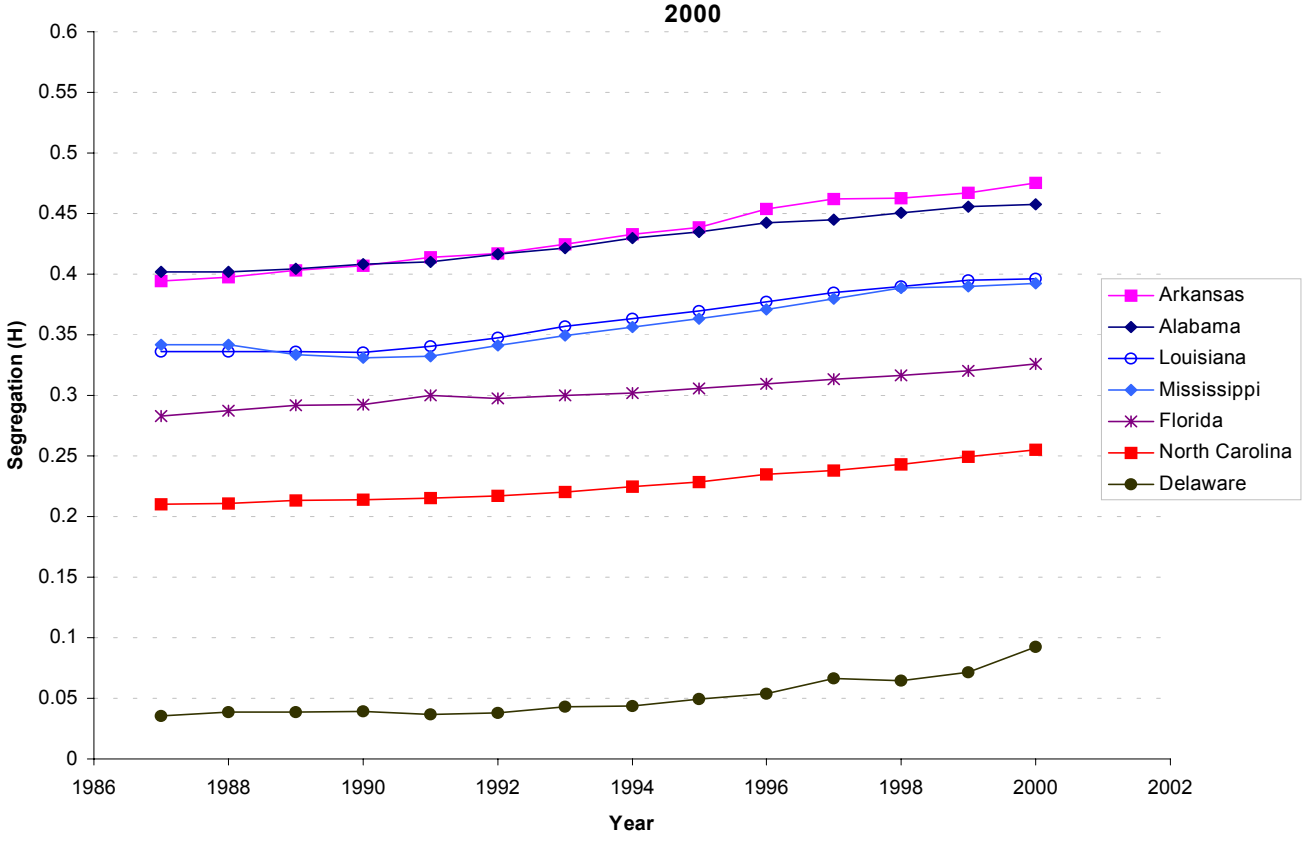

Figure 11. Total H Disaggregated into Between- and Within-District Components for Black-White Segregation in North Carolina from 1987 to 2000

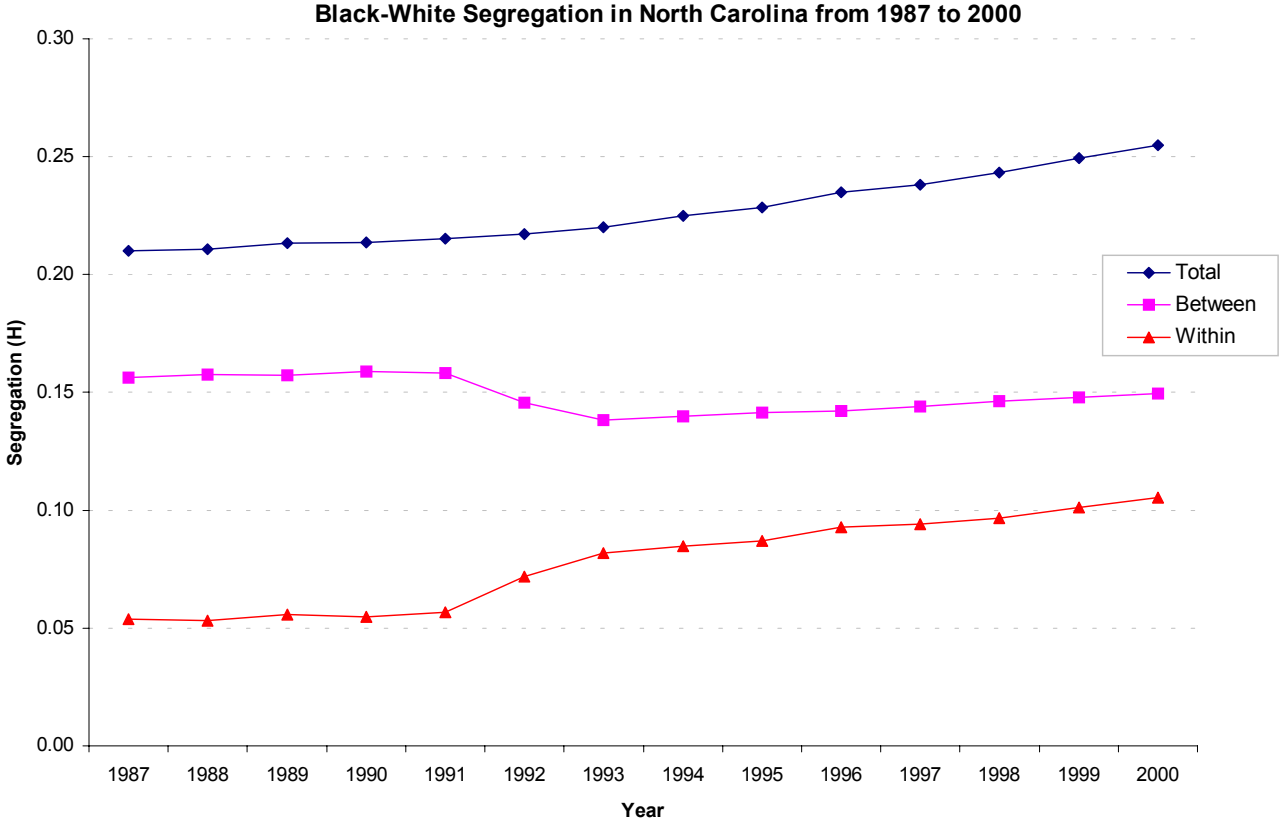

Figure 12. Percent of Black Students Attending Schools of Various White Enrollments In Delaware From 1987 to 2000

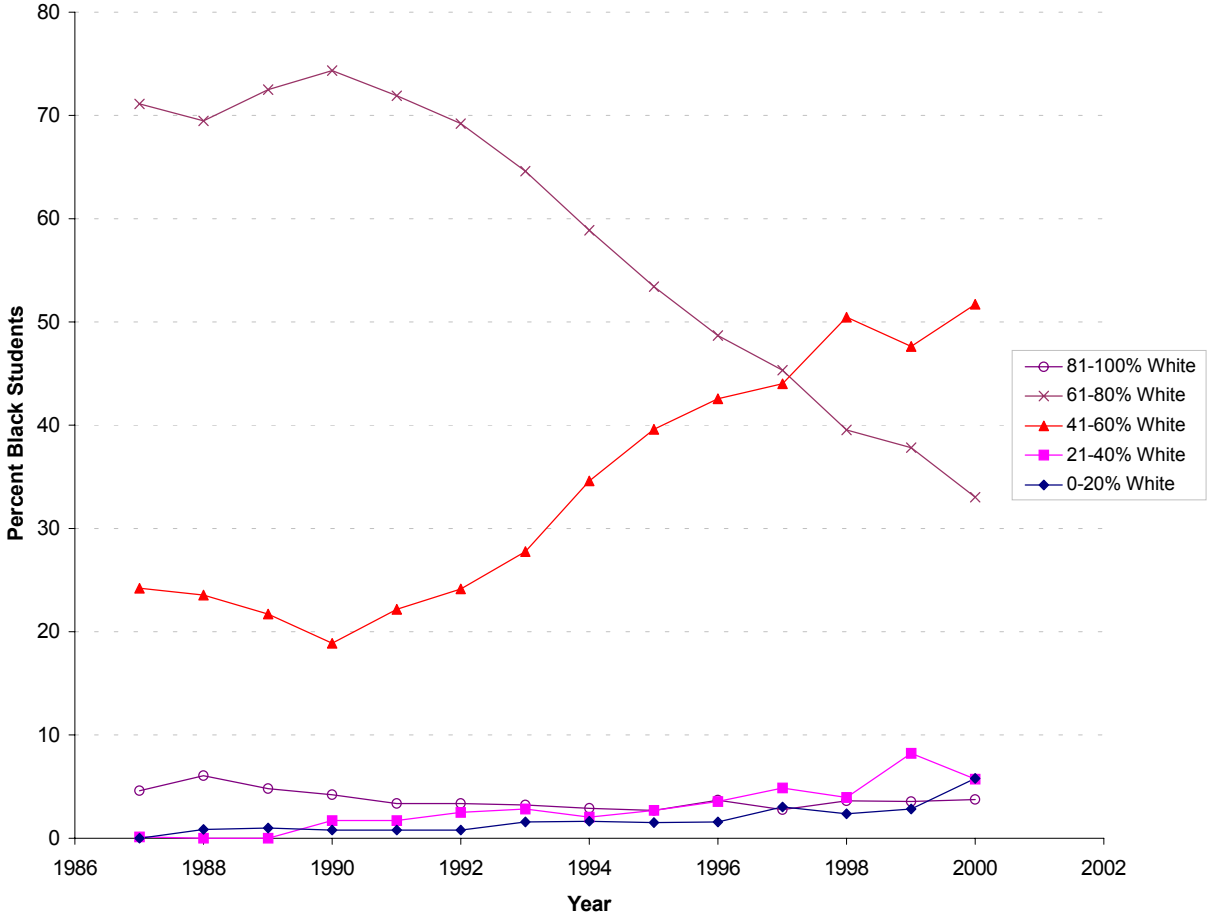

Table 4. 50 Largest Southern Districts Change in Black-White Exposure and Black-White Segregation (H) from 1987 to 2000

		Exposure			H		
District	**State**	**1987**	**2000**	**Change**	**1987**	**2000**	**Change**
ALDINE ISD	TX	0.41	0.10	-0.31	0.04	0.08	0.04
ANNE ARUNDEL COUNTY PUBLIC SCHOOLS	MD	0.69	0.57	-0.12	0.17	0.22	0.05
ARLINGTON ISD	TX	0.73	0.40	-0.33	0.08	0.14	0.06
ATLANTA CITY	GA	0.04	0.03	-0.01	0.53	0.58	0.04
AUSTIN ISD	TX	0.34	0.19	-0.14	0.26	0.39	0.12
BALTIMORE CITY PUBLIC SCHOOLS	MD	0.09	0.06	-0.04	0.49	0.47	-0.02
BALTIMORE COUNTY PUBLIC SCHOOLS	MD	0.53	0.33	-0.20	0.32	0.40	0.08
BREVARD COUNTY SCHOOL DISTRICT	FL	0.72	0.68	-0.04	0.14	0.15	0.01
BROWARD COUNTY SCHOOL DISTRICT	FL	0.38	0.24	-0.14	0.35	0.36	0.01
CADDO PARISH SCHOOL BOARD	LA	0.29	0.22	-0.07	0.30	0.34	0.05
CHARLOTTE-MECKLENBURG SCHOOLS	NC	0.53	0.38	-0.16	0.06	0.16	0.10
COBB COUNTY	GA	0.64	0.45	-0.18	0.21	0.27	0.06
CYPRESS-FAIRBANKS IS	TX	0.72	0.54	-0.18	0.06	0.07	0.01
DADE COUNTY SCHOOL DISTRICT	FL	0.14	0.07	-0.08	0.43	0.45	0.02
DALLAS ISD	TX	0.12	0.05	-0.07	0.41	0.41	0.00
DEKALB COUNTY	GA	0.16	0.07	-0.09	0.27	0.40	0.13
DISTRICT OF COLUMBIA PUB SCHLS	DC	0.02	0.02	0.01	0.60	0.60	-0.01
DUVAL COUNTY SCHOOL DISTRICT	FL	0.44	0.36	-0.08	0.22	0.23	0.01
EAST BATON ROUGE PARISH SCHOOL BOARD	LA	0.32	0.19	-0.14	0.22	0.31	0.09
EL PASO ISD	TX	0.31	0.21	-0.10	0.15	0.18	0.02
FAIRFAX COUNTY PUBLIC SCHOOLS	VA	0.60	0.51	-0.09	0.14	0.16	0.02
FORT BEND ISD	TX	0.24	0.21	-0.03	0.42	0.40	-0.02
FORT WORTH ISD	TX	0.25	0.16	-0.09	0.33	0.35	0.02
FULTON COUNTY	GA	0.18	0.18	-0.01	0.57	0.55	-0.03
GREENVILLE COUNTY SCHOOL DISTRICT	SC	0.67	0.55	-0.11	0.07	0.15	0.07
GUILFORD COUNTY SCHOOLS	NC	0.74	0.35	-0.39	0.10	0.25	0.16
GWINNETT COUNTY	GA	0.69	0.49	-0.20	0.18	0.19	0.01
HILLSBOROUGH COUNTY SCHOOL DISTRICT	FL	0.60	0.39	-0.21	0.10	0.21	0.11
HOUSTON ISD	TX	0.11	0.06	-0.04	0.39	0.46	0.07
JEFFERSON CO	KY	0.65	0.58	-0.07	0.03	0.05	0.02
JEFFERSON PARISH SCHOOL BOARD	LA	0.49	0.31	-0.18	0.09	0.18	0.10
KNOX COUNTY SCHOOL DISTRICT	TN	0.44	0.57	0.13	0.46	0.31	-0.15
LEE COUNTY SCHOOL DISTRICT	FL	0.70	0.59	-0.10	0.11	0.12	0.02
MEMPHIS CITY SCHOOL DISTRICT	TN	0.13	0.08	-0.05	0.42	0.41	-0.01
MOBILE COUNTY	AL	0.30	0.22	-0.08	0.39	0.47	0.08
MONTGOMERY COUNTY PUBLIC SCHOOLS	MD	0.56	0.39	-0.17	0.13	0.18	0.05
NASHVILLE-DAVIDSON COUNTY SD	TN	0.54	0.38	-0.16	0.09	0.15	0.05
NORTHSIDE ISD	TX	0.43	0.35	-0.09	0.11	0.09	-0.02
ORANGE COUNTY SCHOOL DISTRICT	FL	0.47	0.29	-0.19	0.26	0.30	0.04
ORLEANS PARISH SCHOOL BOARD	LA	0.04	0.02	-0.02	0.46	0.47	0.01
PALM BEACH COUNTY SCHOOL DISTRICT	FL	0.36	0.31	-0.05	0.37	0.32	-0.05
PINELLAS COUNTY SCHOOL DISTRICT	FL	0.75	0.65	-0.10	0.07	0.11	0.04
POLK COUNTY SCHOOL DISTRICT	FL	0.62	0.61	-0.01	0.16	0.05	-0.11
PRINCE GEORGE'S COUNTY PUBLIC SCHOOLS	MD	0.24	0.09	-0.14	0.17	0.24	0.06
PRINCE WILLIAM COUNTY PUBLIC SCHOOLS	VA	0.68	0.53	-0.14	0.08	0.10	0.02
SAN ANTONIO ISD	TX	0.07	0.04	-0.02	0.42	0.33	-0.09
SEMINOLE COUNTY SCHOOL DISTRICT	FL	0.67	0.61	-0.06	0.19	0.13	-0.07
VIRGINIA BEACH CITY PUBLIC SCHOOLS	VA	0.67	0.54	-0.13	0.07	0.11	0.04
VOLUSIA COUNTY SCHOOL DISTRICT	FL	0.69	0.61	-0.08	0.14	0.17	0.03
WAKE COUNTY SCHOOLS	NC	0.67	0.57	-0.10	0.04	0.08	0.04

Source: Common Core of Data, National Center For Educational Statistics 1987-2000

Table 5. 50 Largest Southern Districts Change in Latino-White Exposure and Latino-White Segregation (H) from 1987 to 2000

		Exposure			H		
District	**State**	**1987**	**2000**	**Change**	**1987**	**2000**	**Change**
ALDINE ISD	TX	0.36	0.09	-0.27	0.12	0.10	-0.02
ANNE ARUNDEL COUNTY PUBLIC SCHOOLS	MD	0.73	0.60	-0.12	0.16	0.14	-0.02
ARLINGTON ISD	TX	0.72	0.33	-0.39	0.10	0.24	0.14
ATLANTA CITY	GA	0.18	0.14	-0.04	0.35	0.43	0.08
AUSTIN ISD	TX	0.37	0.22	-0.15	0.18	0.31	0.13
BALTIMORE CITY PUBLIC SCHOOLS	MD	0.43	0.31	-0.12	0.19	0.23	0.05
BALTIMORE COUNTY PUBLIC SCHOOLS	MD	0.79	0.61	-0.18	0.06	0.10	0.03
BREVARD COUNTY SCHOOL DISTRICT	FL	0.84	0.76	-0.08	0.03	0.05	0.02
BROWARD COUNTY SCHOOL DISTRICT	FL	0.64	0.44	-0.20	0.08	0.08	0.00
CADDO PARISH SCHOOL BOARD	LA	0.57	0.48	-0.09	0.16	0.11	-0.05
CHARLOTTE-MECKLENBURG SCHOOLS	NC	0.55	0.34	-0.21	0.08	0.23	0.16
COBB COUNTY	GA	0.69	0.44	-0.25	0.11	0.26	0.15
CYPRESS-FAIRBANKS IS	TX	0.70	0.48	-0.22	0.08	0.14	0.06
DADE COUNTY SCHOOL DISTRICT	FL	0.18	0.11	-0.07	0.28	0.19	-0.09
DALLAS ISD	TX	0.18	0.07	-0.11	0.29	0.28	-0.01
DEKALB COUNTY	GA	0.25	0.16	-0.09	0.29	0.37	0.09
DISTRICT OF COLUMBIA PUB SCHLS	DC	0.09	0.06	-0.04	0.51	0.59	0.09
DUVAL COUNTY SCHOOL DISTRICT	FL	0.67	0.56	-0.11	0.06	0.06	0.00
EAST BATON ROUGE PARISH SCHOOL BOARD	LA	0.51	0.32	-0.19	0.38	0.22	-0.16
EL PASO ISD	TX	0.18	0.13	-0.05	0.23	0.19	-0.04
FAIRFAX COUNTY PUBLIC SCHOOLS	VA	0.57	0.47	-0.10	0.15	0.19	0.04
FORT BEND ISD	TX	0.45	0.27	-0.18	0.14	0.29	0.15
FORT WORTH ISD	TX	0.26	0.15	-0.11	0.34	0.33	-0.01
FULTON COUNTY	GA	0.58	0.42	-0.16	0.15	0.28	0.13
GREENVILLE COUNTY SCHOOL DISTRICT	SC	0.65	0.52	-0.13	0.21	0.19	-0.02
GUILFORD COUNTY SCHOOLS	NC	0.80	0.39	-0.41	0.05	0.23	0.18
GWINNETT COUNTY	GA	0.71	0.43	-0.28	0.13	0.25	0.12
HILLSBOROUGH COUNTY SCHOOL DISTRICT	FL	0.61	0.45	-0.16	0.12	0.13	0.01
HOUSTON ISD	TX	0.13	0.07	-0.06	0.32	0.38	0.06
JEFFERSON CO	KY	0.69	0.55	-0.14	0.12	0.13	0.00
JEFFERSON PARISH SCHOOL BOARD	LA	0.54	0.42	-0.12	0.12	0.13	0.01
KNOX COUNTY SCHOOL DISTRICT	TN	0.92	0.47	-0.45	0.13	0.41	0.28
LEE COUNTY SCHOOL DISTRICT	FL	0.72	0.64	-0.08	0.11	0.05	-0.06
MEMPHIS CITY SCHOOL DISTRICT	TN	0.51	0.21	-0.31	0.27	0.34	0.06
MOBILE COUNTY	AL	0.67	0.53	-0.13	0.11	0.15	0.04
MONTGOMERY COUNTY PUBLIC SCHOOLS	MD	0.55	0.37	-0.18	0.14	0.21	0.07
NASHVILLE-DAVIDSON COUNTY SD	TN	0.66	0.45	-0.21	0.12	0.17	0.05
NORTHSIDE ISD	TX	0.37	0.31	-0.07	0.17	0.13	-0.04
ORANGE COUNTY SCHOOL DISTRICT	FL	0.67	0.42	-0.25	0.08	0.12	0.05
ORLEANS PARISH SCHOOL BOARD	LA	0.15	0.10	-0.05	0.31	0.32	0.01
PALM BEACH COUNTY SCHOOL DISTRICT	FL	0.58	0.43	-0.14	0.15	0.17	0.03
PINELLAS COUNTY SCHOOL DISTRICT	FL	0.77	0.70	-0.07	0.05	0.06	0.01
POLK COUNTY SCHOOL DISTRICT	FL	0.71	0.56	-0.15	0.08	0.12	0.04
PRINCE GEORGE'S COUNTY PUBLIC SCHOOLS	MD	0.26	0.08	-0.17	0.24	0.44	0.20
PRINCE WILLIAM COUNTY PUBLIC SCHOOLS	VA	0.68	0.52	-0.16	0.07	0.11	0.04
SAN ANTONIO ISD	TX	0.07	0.04	-0.03	0.16	0.10	-0.06
SEMINOLE COUNTY SCHOOL DISTRICT	FL	0.83	0.68	-0.15	0.03	0.04	0.01
VIRGINIA BEACH CITY PUBLIC SCHOOLS	VA	0.71	0.61	-0.10	0.03	0.04	0.00
VOLUSIA COUNTY SCHOOL DISTRICT	FL	0.77	0.66	-0.11	0.15	0.17	0.03
WAKE COUNTY SCHOOLS	NC	0.69	0.58	-0.11	0.09	0.10	0.01

Source: Common Core of Data, National Center For Educational Statistics 1987-2000