STUDENT MIGRATION TO TRADITIONALLY
BLACK INSTITUTIONS
OF HIGHER EDUCATION

IHELG Monograph
89-11

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$5.00
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STUDENT MIGRATION TO TRADITIONALLY BLACK INSTITUTIONS
OF HIGHER EDUCATION

INTRODUCTION AND BACKGROUND

Traditionally black institutions (TBI's) of higher education initially were established in the late 1800's for the education of black youth in the southern states. Their creation was necessitated by segregationists' policies in the South, barring blacks from attending white institutions of higher education. Until the 1954, Brown v. the Board of Education decision, TBI's were the sole means of higher education for black Americans in the South. Desegregation opened the doors of white institutions of higher education to black youth, and gave them a choice of attending either a TBI or a predominantly white institution (PWI). Consequently, a potential threat was posed to the historic mission of TBI's and their ability to maintain enrollment.

An additional challenge to TBI enrollment has been the continual redistribution of the black population. In 1900, slightly over 90 percent of all black Americans resided in the traditional South. By 1980, roughly 50 percent of the black population were still located in the South, the remainder having moved primarily to urban areas in the north or to urban areas on the west coast. Indeed, the population of potential black youth that would attend TBI's are now often located at greater distances than the population for which the institutions were established to serve.
Black enrollment in TBI's, and in higher education in general, sharply increased in the 1970s because of the availability of financial loans and student aid programs. During the early 1980s, however, the enrollment pattern stabilized and subsequently declined slightly. Some researchers have speculated that the decline resulted from an image that a college education is not as valuable to black youths as are the more immediate job opportunities following high school (Lang 1986). Others have speculated that the decline of enrollment is tied to the withering financial programs that have been cut under the recent federal administration (Allen 1987; Hauser 1988). Regardless of cause, if the trend continues, the results could be a potential decline in enrollment for black youth in TBI's and the possible closure of some TBI's. Most certainly declining enrollments of TBI's will require these institutions to seek students from greater distances than their immediate state.

The purpose of this research is twofold; first, to describe the migration patterns (i.e. major in-migration flows, percent non-resident, percent non-resident from adjacent states, percent of interstate migration from non-southern states) of students to TBI's in an effort to determine to what degree TBI's are reliant on interstate migration to sustain enrollment, and second, to determine to what extent these TBI migration patterns are significantly different from those of predominantly white institutions (PWI's) also located in the South. Research questions comparing migration patterns of TBI's and PWI's will be stated as hypothesized relationships and then evaluated statistically or through cartographic comparison.

Several assumptions underlie the research questions tested in this study. First, the black population distribution is different from that of the white population in that it is primarily concentrated in the traditional
south, urban north and west coast. This is a result of the early
centrifugation of black Americans in the southeast and their eventual shift to
northern urban areas (Hart 1960). Second the distribution of the black
population is different from that of the four year TBI's which are primarily
located in the traditional South (Henderson and Hart 1971). Third, that there
is a preference among many black families to have their children educated in
an institution that have black administrators and professors and reflects
black culture (Brown 1986; Lang 1986). Fourth, that many black families
living in the north have relatives still living in proximity to TBI's that may
function as a support group for the student. Fifth, many blacks now living in
the north are alumni of traditionally black institutions and thus may send
their children to TBI's. Lastly, many of the TBI's are located in relatively
rural environments, a situation that possibly might be thought to be safer and
more desirable than institutions of higher education located in northern urban
areas (Lang 1986). These stated assumptions underlie the following research
questions: Are the levels of non-resident student enrollment in TBI's
significantly greater than non-resident enrollment in PWI's? Are the source
areas of interstate migrants to TBI's at significantly greater distances than
for PWI's? Are the patterns of largest in-migration flows to TBI's
substantially different from those of PWI's?

METHODOLOGY

Statistical Sources

This research examined statistical migration data for first-time
undergraduates attending traditionally black institutions and comparable
predominantly white institutions of higher education on a full time basis
during the Fall semester of 1984. These data, available in computer tape format from the "Higher Educational General Information Survey" conducted by the National Center for Educational Statistics (NCES), provided the number of entering students by level, full- or part-time status and in- and out-of state residence for all categories of academic institutions (private, public university, two and four year) (NCES 1986). Most importantly, the survey reported the state of origin for each student. A more recent survey was released for Fall 1986 student migration, however, a significant number of institutions failed to respond to the survey. In addition the NCES did not attempt to input migration statistics from the previous surveys. For these reasons the 1986 survey was unsuitable for this study.

Data Preparation

A traditionally black institution of higher education is defined as a college established primarily to provide an education to black Americans during a period when the nation's higher education system was legally segregated along racial lines. These institutions were established primarily in the late 1800s and were mainly located in the South. In the Fall of 1984, there were 86 TBI's in the United States offering a bachelor of arts or graduate degree. Of these, 81 were located in the South. For the present study, eleven institutions were eliminated because they offered only graduate degrees or professional programs (Atlanta University, Meharry Medical College and Interdenominational Theological Center), or were no longer predominantly black (Kentucky State University, Bluefield College and West Virginia State), or they were located outside of the South (Central State University, Ohio; Wilberforce University, Ohio; Cheyney State College, Pennsylvania; Lincoln
University, Pennsylvania; and Lincoln University, Missouri).

For comparison purposes predominantly white institutions were matched with traditionally black institutions. Matching was conducted on the basis of enrollment numbers at the state level separately for public and private institutions. Actual one-to-one matching of TBI's with PWI's was impossible because enrollment at TBI's was generally larger, thus matching was done by state totals for public and private institutions. In addition, an attempt was made to match level of offerings (BA, MA, PhD) and approximate location within a state. Table 1 gives the relevant characteristics for both TBI's and PWI's.

TABLE 1 about here

Migration statistics for both TBI's and PWI's were extracted from computer tapes and put into matrix form. Statistics were restricted to students enrolling in college for the first time as full-time freshmen in a four-year institution of higher education. Foreign students, as well as those from outlying areas (Guam, Virgin Islands), were not included. The generated matrixes had 51 rows, each row indicating the origin state of each migrant and each column represented a different school. Four matrixes were created, one each for black and white public institutions and one each for black and white private institutions. This was done because migration patterns for public and private schools are known to be quite different, with private institutions generally having more non-resident students enrolled in public institutions of higher education (Gossman, et al. 1968). Statistics for percent non-resident enrolled in each institution, percent of non-residents from adjacent states and percent of interstate migrants from non-southern states were calculated.
using these matrixes. Calculation of actual distance of migration was accomplished by determining the distance between each institution of higher education in the study and the population centroid of each state. The population centroid being the geographic location of the center of population of each state as defined by the U.S. Bureau of Census. Average distance was determined by multiplying the number of students by distance between the institution and the origin state and dividing that total by the number of students.

Testing differences between black and white patterns was accomplished using two methods. First, differences in percent of enrolled students classed as non-resident, percent from non-southern states, percent of migrants from adjacent states and distance traveled were tested using analysis of variance (ANOVA) procedures with TBI and PWI's as between subject factors. Separate analyses were conducted for private and public institutions. Second, patterns of largest in-migration flow to each institution were used to determine migration fields of the public and private TBI's and PWI's. The mapped results were then compared cartographically to determine the number of flows originating in non-southern states, number of flows originating in adjacent states, direction of flows and the general configuration of flows. Largest flows have been used by many to reduce the overall flow pattern to its most basic elements. Most of the studies have employed graph theory techniques (Nystren and Dacey 1973).

RESULTS

The first hypothesized major difference between black and white student migration characteristics was that TBI's would have a significantly larger
percentage of enrolled students classified as non-residents for both public and private institutions. Examination of average percent non-resident for black and white institutions supports this contention. Public TBI's have 8.5 percent more students classed as non-residents than PWI's, with private TBI's having 9.2 percent more non-residents than PWI's (Table 2). An ANOVA test revealed significant differences in percent non-resident $F(1, 59) = 55.54, P < .05$ only between public TBI's and PWI's. Although private institutions had a greater mean percent non-resident compared to public institutions, the variability of the private data was much greater for public institutions.

Other migration characteristics examined between TBI's and PWI's involved primarily distance measures. These measures include the percentage of interstate migrants from non-southern states, the percentage of interstate migrants moving only from an adjacent state to attend school and the average interstate distance traveled by migrating college students.

TABLE 2 about here

The measure of percentage of interstate migration from non-southern states revealed a strong difference between TBI's and PWI's for both the public and private sector. Differences between the average percent of migrants from non-southern states for public TBI's and PWI's was 15.3 percent. Difference between private TBI's and PWI's was slightly less with an 11.7 percent average. Significant differences were revealed for both public and private institutions when differences between institutions were tested using ANOVA; Public $F(1, 59) = 7.28, P < .01$, and Private $F(1, 85) = 4.71, P < .05$.

Averages for percent of migrants from adjacent states were slightly
higher for public PWI's (8.8 percent) than for public TBI's (7.7 percent) (Table 2). When these figures were tested using ANOVA, no significant differences were revealed. Similar results were found for private institutions, with TBI's having a 28.0 percent average and PWI's a 35.7 percent average, and no significant difference recorded with ANOVA testing.

Absolute differences in distance traveled by students enrolling in public TBI's was 160 miles greater on average than for students traveling to public PWI's. These results were significant F(1,59) = 10.40, P < .01. Students migrating to private TBI's, when tested, did not travel a significantly greater distance than those traveling to PWI's, even though the average distance was greater by 64 miles.

The second part of the examination of migration characteristics to TBI's and PWI's involved the largest in-migration flow to each institution. These largest in-migration flows provide a good indication of each institutions migration field by outlining the dominant direction of flow and distance traveled by migrating college students. The results of mapping largest flows are shown for public institutions in Figure 1 and for private institutions in Figure 2. The average percent of all interstate migrants to each institution represented by largest flows is relatively large for each data set: 28.3 percent for public and 19.5 percent for private TBI's. Overall the percent of interstate migrants represented by largest flows was greater to PWI's; 41.4 percent to public and 26.9 percent to private PWI's.

Figures 1 and 2 about here
Comparison of maps of largest in-migration flows to public institutions revealed major differences in the state of origin of flows to TBI's and PWI's (Figure 1). Origins of in-migration flows to TBI's were primarily from states outside of the South. Indeed, 69 percent of the largest in-migration flows to TBI's were from non-southern states, whereas, only 18 percent of largest in-migration flows to PWI's originated from outside of the South. In addition, it should be noted that over one-half of all in-migration flows to TBI's were from Illinois, New York and Michigan, three states which comprise 20 percent of the total United States black population. In terms of adjacency of major in-migration flows, it was expected that PWI's would have far more flows from adjacent states than TBI's. Indeed, only 37 percent of the in-migration flows to TBI's were from adjacent states, while 82 percent of flows to PWI's began in adjacent states.

Another noticeable difference in largest flow patterns involves their length (distance) and orientation (direction). As can be seen in Figure 1, major flows to public TBI's are noticeably longer and depict a definite north to south orientation compared to major flows to public PWI's. In addition, there is a division of southern states into an eastern and western region. The western half, with one exception, has its TBI's linked with northern states. The eastern region, on the other hand, has relatively shorter flows, with many to adjacent states. In particular Florida, Georgia and South Carolina, interact more with each other than with northern states. While the reason for the weaker interaction of TBI's in the southeastern region with northern states remains unclear, the predominant direction of flows seems to follow that of past and present overall migration patterns of the black population (McHugh 1987). In contrast to TBI patterns, those of PWI's are
shorter in general, from adjacent states and with a random orientation. This rapid distance decay effect is consistent with past research findings (Fryman 1988).

Comparison of largest in-migration flows to private TBI's and PWI's were similar to those of public institutions but not as pronounced (Figure 2). Slightly over half (52 percent) of the largest in-migration flows to TBI's were from non-southern states as compared to 23 percent for PWI's. Largest in-migration flows from adjacent states were less frequent for TBI's (45 percent) than PWI's (56 percent), which is consistent with the public institution data. Largest flows to private TBI's were longer and in general more oriented north to south than those for PWI's. Many of the largest flows to private PWI's were oriented from south to north. This is especially evident in the pattern of largest in-migration flows originating in Florida. Indeed, Florida appears to be a source area of students to southeastern private schools in that 16 of the overall 43 largest flows originate in Florida. Several of the private PWI's had largest flows from northern areas. In some cases such as Concordia Lutheran (Texas), the largest flow reflects ties with a particular population. In this case the large Lutheran population in Minnesota. This occurrence is similar to the migration of blacks to TBI's in that it is ethnic specific. The pattern of private black flows does not, however, reveal a division of the South into regions, as was the case for public black flows.

DISCUSSION

Migration differences clearly exist between TBI's and PWI's, however, those differences vary as to degree. In all cases there appeared to be a
greater difference between public TBI's and PWI's than those privately controlled. Perhaps the fact that students traveling to private schools are more mobile in general than those migrating to public schools may account for some of the lessening of differences between private institutions. In addition, the recent popularity of southern private schools, may tend to produce similar migration characteristics between private PWI's and TBI's (Christal 1982).

Perhaps many of the differences between TBI's and PWI's can best be explained in terms of established migration concepts (Roseman 1977). First, all schools have a source area or hinterland from which they draw students. This hinterland or potential migration field for TBI's is more expanded from that of PWI's because of the large number of blacks living in the northern states and California. In addition, because there are only a few TBI's located in the north there is only a minimal intervening opportunity or closer alternative for placing children in a TBI. Given a desire by black families to send their children to a TBI, they are forced to send them long distances to southern destinations. It should be noted that five TBI's are located outside of the traditional South (Missouri, Ohio and Pennsylvania) and appear to function as an intervening opportunity to blacks desiring enrollment in a TBI. Overall, approximately 70 percent of all in-migrants to these five schools are from states bordering the Great Lakes. In addition, Illinois, Michigan and New York are the origin states for largest in-migration flows to these TBI's. Most likely the channelization of in-migration flows occurring from north to south is caused by black families with ties to states within the south or alumni status of family members with southern based TBI's (Roseman 1971). In addition, past research on return migration to the south identifies
similar direction patterns (direct north to south) to this study (McHugh 1987).

SUMMARY AND CONCLUSIONS

Migration patterns to traditionally black institutions of higher education were examined and compared with patterns of similar white institutions in the same region. Comparisons were made using two data sets, one for public and one for privately controlled colleges and universities. Migration characteristics were compared and statistically tested. Largest immigration flows to each institution of higher education were mapped. Origin states were identified and TBI-PWI patterns compared. Although not all comparisons between TBI and PWI migration characteristics were significantly different, the overwhelming evidence is that migration patterns to TBI and PWI are distinct and these differences are most notable for public institutions.

In general, migrants to TBI's, when compared to migrants to PWI's, came from longer distances, generally from states outside of the South and were less likely to be from adjacent states. These general differences between TBI's and PWI's were stronger for public institutions than for privately controlled institutions.

TBI's had a greater percentage of students classed as non-residents than PWI's for both public and private institutions, however, only public, non-residency was significant. Significant difference in average distance traveled by migrants and in the percentage of interstate migrants coming from non-southern states of origin were also found between black and white public institutions. Percentage of migrants from adjacent states did not test significantly in terms of differences for either public or private
institutions. The only measure for private institutions that was significantly different was the percentage of migrants from non-southern states.

Migration to TBI's reflects the distribution of black Americans as well as the distribution of black institutions. While TBI's draw a substantial number of students from areas outside of the South, it is difficult to determine a "dependency" of TBI's on these states to sustain enrollment. However, it is clear that the TBI's do draw from all areas where black Americans are located and thus, gives rise to a distinct migration pattern that is different from patterns to PWI's. It is hoped that the findings of this research will be helpful to administrators of TBI's in determining student migration hinterlands and patterns of migration. These findings should help aid the development of a realistic strategy for student recruitment. In addition, the findings should be valuable to those who study migration in general and the college student population in particular.
LITERATURE CITED


Brown, Darryl. 1986. Do Black Colleges have a Ride in the '80's? Youth-
Policy. 8(2):6-8.

Christal, M.E. 1982. The Sweep to the South; Fact or Fallacy? Paper
presented at Southern Association of Institutional Research, Oct. 28,
1982.

College and University. 63(3):235-247.

1968. Migration of College and University Students in the United

Hauser, R.M. 1988. Declining Black College Entry: How Did It Happen?
Madison, WI: Center for Demography and Ecology.

Association of American Geographers. 50(3):243-266.


Lang, M. 1986. Black Student Retention at Black Colleges and Universities:
10(2):167-175.


TABLE 1

CHARACTERISTICS OF TRADITIONALLY BLACK INSTITUTIONS
AND PREDOMINANTLY WHITE INSTITUTIONS OF HIGHER EDUCATION

<table>
<thead>
<tr>
<th></th>
<th>Public</th>
<th></th>
<th>Private</th>
<th></th>
</tr>
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<tbody>
<tr>
<td></td>
<td>TBI</td>
<td>PWI</td>
<td>TBI</td>
<td>PWI</td>
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<tr>
<td>Number of Institutions</td>
<td>31</td>
<td>28</td>
<td>44</td>
<td>43</td>
</tr>
<tr>
<td>Average Percent Black</td>
<td>82.3</td>
<td>9.4</td>
<td>88.4</td>
<td>8.3</td>
</tr>
<tr>
<td>Enrollment</td>
<td>18,667</td>
<td>19,276</td>
<td>55,947</td>
<td>56,873</td>
</tr>
</tbody>
</table>

TABLE 2

MIGRATION CHARACTERISTICS FOR TRADITIONALLY BLACK INSTITUTIONS
AND PREDOMINANTLY WHITE INSTITUTIONS OF HIGHER EDUCATION

<table>
<thead>
<tr>
<th></th>
<th>Public</th>
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<th>Private</th>
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<td></td>
<td>TBI</td>
<td>PWI</td>
<td>TBI</td>
<td>PWI</td>
</tr>
<tr>
<td>Averages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Non-resident</td>
<td>22.6</td>
<td>14.1</td>
<td>5.54*</td>
<td>43.7</td>
</tr>
<tr>
<td>Percent Non-South</td>
<td>54.4</td>
<td>39.1</td>
<td>7.26**</td>
<td>56.5</td>
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<tr>
<td>Percent Adjacent</td>
<td>35.4</td>
<td>44.2</td>
<td>1.76</td>
<td>28.0</td>
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<tr>
<td>Distance Traveled</td>
<td>425.6</td>
<td>235.7</td>
<td>10.50**</td>
<td>454.0</td>
</tr>
</tbody>
</table>

* P < .05
** P < .01
FIGURE 1. Patterns of largest state in-migration flows to public TBI's (top) and PWI's (bottom) based on first-time full-time freshmen migration patterns Fall 1984.

FIGURE 2. Patterns of largest state in-migration flows to private TBI's (top) and PWI's (bottom) based on first-time full-time freshmen migration patterns Fall 1984.