

**Capitalizing on Segregation, Pretending Neutrality:
College Admissions and the Texas Top 10% Law**

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Abstract

In response to the judicial ban on the use of race-sensitive admissions, the 75th Texas legislature passed H.B. 588, which guarantees admission to any Texas public college or university for all seniors graduating in the top decile of their class. We show that high levels of residential and school segregation facilitates minority enrollment at selective public institutions under the uniform admission law because black and Hispanic students who rank at the top of their class disproportionately hail from minority-dominant schools. However, qualifying minority students' lower likelihood of college enrollment at the flagships reflects concentrated disadvantage rather than segregation *per se*.

Capitalizing on Segregation, Pretending Neutrality: College Admissions and the Texas Top 10% Law

I. Introduction

Before the historic *Brown* decision,¹ the legal and policy debate about race and ethnic educational inequality revolved around the *desirability and necessity* of integration, but since has shifted to the *socially acceptable methods* for achieving integration and setting institutional goals. Following the Civil Rights movement, affirmative action was proposed as a strategy that goes beyond the simple prohibition of disparate treatment until Allan Bakke challenged the use of race preferences as a violation of the equal protection clause of the 14th Amendment.² Although the Supreme Court ruled in Bakke's favor, the 1978 opinion includes language that permits institutions of higher education to consider race and ethnicity in order to garner the educational benefits that derive from a diverse student body.

This second landmark opinion set the stage for the contemporary debate about the legality and desirability of race-sensitive criteria in college admissions. Until another spate of legal challenges beginning in the mid-1990s, selective colleges and universities across the nation interpreted *Bakke* as legal license to consider race and ethnicity, among a myriad of other factors, in their admissions decisions. Two major victories were registered in 1996 against affirmative action in college admissions: California voters

¹ *Brown v. Board of Education*, 347 U.S. 483 (1954). *Méndez v. Westminster School District*, 161 F.2d 774 9th Cir. (1947) decision actually predated the *Brown* decision and served as a testing ground for many of the arguments and actors involved in the widely celebrated, historic *Brown* decision (Ferg-Cadima, 2004.) “The precedent-setting Méndez case, which included work by Los Angeles attorney David Marcus, moved Earl Warren, as California’s governor in 1947, to push a broader repeal of segregation laws through the legislature after the ruling” (Jennings, 2004: 26). Several years later, Mr. Warren would write the *Brown* decision.

² *University of California Regents v. Bakke*, 438 U.S. 265 (1978)

passed Proposition 209, which outlawed use of race-sensitive college admissions and the *Hopwood* decision achieved the same end in Texas.³ The following year, enrollment of first-time minority freshmen plummeted at the University of Texas at Austin (UT) and Texas A&M University at College Station (A&M). Specifically, Hispanic freshman enrollment at UT fell from 14.7 percent in 1995 to 12.6 percent in 1997, and black enrollment fell from 4.9 to 2.7 percent of the freshman class. At the College Station A&M campus, Hispanic freshman enrollment dropped from 14.7 to 9.7 percent and black representation fell to under 3 percent, from 4.7 percent before the *Hopwood* decision.⁴ These declines were attributed to the *Hopwood* decision, but uncertainty and confusion about the implications of the ruling may have also contributed to the declines in minority enrollment by deterring students from applying.⁵

In response to the judicial ban on affirmative action, the 75th Texas legislature passed H.B. 588, popularly known as the “top ten percent law,” which guarantees college admission to seniors who graduate in the top 10 percent of their class. Signed into law on May 20, 1997, H.B. 588 has become as controversial as the practice of race-sensitive admissions it replaced. The judicial ban on affirmative action applied to both public and private post-secondary institutions, but the admission guarantee for top 10% graduates only applied to public institutions. Touted as a race-neutral alternative to affirmative action, the uniform admission system put in place by H.B.588 guarantees admission to all

³ *Hopwood v. University of Texas*, 78 F.3d 932 (1996).

⁴ UT at Austin, Office of Institutional Research, *Statistical Handbook, 2003-2004*.

Texas A&M University, Office of Institutional Studies & Planning, *Enrollment Profile, 2003*.

⁵ Although the *Hopwood* decision has been interpreted to apply to undergraduate and post-graduate admissions, financial aid awards, and targeted retention programs, H.B. 588 only applies to undergraduate admissions. The actual opinion never mentions financial aid, but then Attorney General Dan Morales broadened the interpretation of the opinion to include economic aid.

students who graduate in the top ten percent of their class a spot at *any* public institution of their choice. Qualifying students must complete the university's application (including essays) and a college entrance exam (either SAT or ACT), although test scores are not considered in the admission decision or course placement.⁶ In Texas class rank is reported by the students' high schools, not by the University Systems, as in California. Eligible rank can be attained either at the end of the junior year, in the fall of the senior year, or at the end of the senior year; moreover, the admission guarantee is good for two years following graduation provided students do not register at another college (Leicht and Sullivan, 2000).

President Faulkner credited UT's initial success in restoring institutional diversity to H.B.588. Ironically, the success of the top 10% law in restoring ethno-racial diversity at the Texas public flagships requires segregation, namely the pernicious arrangements that the historic *Brown v. Board of Education* ruling sought to dismantle in order to equalize educational opportunities (Frankenberg, Lee, & Orfield, 2003; Ferg-Cadima, 2004). Although other studies (U.S. Commission on Civil Rights, 2002; Guinier, 2001; Tienda, 2001) have acknowledged that percent plans require segregation to proxy for affirmative action, and although there is mounting evidence that Hispanic school segregation is rising (Orfield and Lee, 2004; Reardon and Yun, 2003, 2001; Reardon, et al., 2000), no study has directly examined how much H.B.588 capitalized on segregation to restore ethno-racial diversity in college admissions and enrollment.

As an alternative to affirmative action, H.B.588 raises practical questions that bear on the potential of this allegedly race-neutral solution to diversify Texas public

⁶ SAT I and ACT tests are not used in course placement decisions, but SAT II and other tests may be so used. E-mail, Gary Lavergne, 16 January 2003.

college campuses. First, how much does the uniform admission system require segregation in order to succeed in diversifying the applicant and enrollee pool? In other words, what is the likelihood that minorities who attend integrated schools—the ideal sought by the *Brown* decision—graduate in the top decile of their class? Second, does eligibility for automatic admission equalize the odds students from minority-dominant high schools actually enroll at the public institutions with competitive admissions? Answers to both questions are crucial for answering whether and under what conditions a seemingly race-neutral uniform admission system can diversify campuses of selective colleges and universities.

In what follows, we address both questions using a unique survey designed to gauge how the uniform admission system influenced college-going behavior of underrepresented groups. Section II describes changes in the ethno-racial composition of high school graduates and characterizes the level of residential and high school segregation in the state. To motivate the empirical analyses of race and ethnic differences in college enrollment behavior, Section III considers how minority representation among top 10% graduates would differ if Texas high schools were less segregated. In Section IV we estimate the likelihood of post-secondary enrollment for a cohort of Texas high school seniors who attended predominantly minority versus integrated high schools.

Although touted as a race-neutral admissions plan, empirical results indicate that the success of H.B.588 in restoring diversity to the public flagships resulted because of pervasive race and ethnic segregation in Texas public high schools. We find that (1) black and Hispanic students who qualify for the automatic admission guarantee disproportionately attend schools where minority students comprise the majority of the

student body; (2) that students who attend predominantly white schools are significantly more likely, and those who attend predominantly minority schools are significantly less likely to enroll at selective postsecondary institutions; and (3) that the lower likelihood of Hispanic college enrollment among those who attend segregated schools derives from their concentrated disadvantage rather than segregation *per se*.

The final section considers the implications of these findings in light of the changing demography of Texas's school-age population, evidence that school segregation is on the rise in Texas and other key immigrant receiving states (e.g., California and New York) where non-Hispanic white youth are becoming a numerical minority, and the growing controversy about the viability of percent plans in general, and the viability of percent plans, and H.B.588 in particular, as "race-neutral" alternatives to affirmative action in college admissions.

II. Demographic Diversity, School Segregation and College Access

Following the landmark 2003 *Grutter* decision,⁷ which permits narrowly tailored consideration of race and ethnicity in college admissions decisions in the context of full file review, the controversy over college admissions has escalated in Texas (see Arnone, 2004; Watson & Levin, 2004; Glater, 2004; Martinez & Martinez, 2004).⁸ In part this is because the public flagships, especially UT, have been saturated with students admitted under the admissions guarantee, and partly because demand for access to the most competitive institutions has been rising (Cortes, et al., 2004). Even though institutions

⁷ *Grutter v. Bollinger*, 539 U.S. 306, 328 (2003).

⁸ That President Faulkner announced that UT would resume consideration of race and Hispanic origin, as permitted by law, in their admission decisions (University of Texas Office of Public Affairs, 2003), but President Gates indicated that A&M would not do so (Gates, 2003) dramatizes this controversy.

can consider minority status in the context of full file review, H.B.588 remains in force until rescinded.⁹

The college admissions debate gains added significance against the population diversification of the state. Census 2000 showed that only 52 percent of the State's population was Anglo (i.e., nonHispanic white), but among the college-age population Anglos comprise only 44 percent of the total. Murdock and his associates (2003) project that if current trends continue, in this decade college-age Hispanics will outnumber their Anglo counterparts. College admissibility presupposes completion of secondary school, which remains problematic for minority youth, and Hispanics in particular (Schneider, et al., 2004). Texas' rapid demographic growth and associated changes in age structure translated to a 42 percent increase in the number of high school graduates during the 1990's (Cortes, et al., 2004).

Paralleling the diversification of the State, the composition of high school graduates changed. In 1992, one in four Texas high school graduates was Hispanic, but this share rose to one in three a decade later (TEA, 1992; 2002). Concomitantly, the white share of high school graduates fell from 57 to 50 percent of the total, while the black and Asian shares of high school graduates also inched up. That post-secondary enrollment expanded only 16 percent during this period signifies heightened competition for access to higher education in Texas, particularly at the main campus of the UT and A&M systems.

⁹ The legislation explicitly notes that a full year notice is required before any changes in admissions guidelines go into effect. Therefore, if H.B.588 is rescinded or modified, the original law will remain in force for a full year. As of this writing, and despite calls to rescind or modify the legislation, it remains in force. In the interim, UT announced that it would resume consideration of race and ethnicity in admission decisions but A&M has explicitly refused to do so, instead focusing on intensified outreach and increased scholarship support.

Such profound demographic changes certainly can facilitate the diversification of college campuses, but the success of H.B.588 as an alternative to use of race-sensitive admissions criteria depends on the likelihood that minority students graduate in the top decile of their class. That class rank in Texas is determined by high schools rather than post-secondary institutions makes the issue of school segregation particularly salient for assessing the viability of the top 10% law to promote college campus diversity.¹⁰

Although black and Hispanic students are more likely to graduate in the top decile of their class in minority-dominated high schools than in high schools where whites comprise the majority or plurality, but there is no direct correspondence between a groups' proportionate representation in schools and their likelihood of graduating in the top decile of their high school class. To illustrate, we first describe the contours of residential and high school segregation in Texas and subsequently demonstrate the relationship between school ethno-racial composition and minority representation among top decile graduates.

Texas Public High School Segregation

To examine the level of public high school segregation in Texas, we used data from the Texas Education Agency for 1,256 regular instructional campuses that served either 10th and/or 12th grade students during the 2000-01 academic year. Calculation of district-level segregation levels can be highly misleading because Texas school districts include with many single-school districts within localities (e.g., San Antonio) alongside large, multi-school districts (e.g. Austin Independent School District). Therefore, we

¹⁰ In California, students' rank is determined on a system-wide basis using a multiple criteria index that includes test scores as well as high school grades, the difficulty of courses completed and the attributes of the high school (Lightfoot, 1999).

calculated the level of high school segregation using the State's 254 counties.¹¹ Although most studies use the index of dissimilarity to measure school segregation, this metric is less desirable for assessing segregation in multi-ethnic contexts such as Texas. As a multi-group segregation measure of evenness, the entropy indicates the overall degree to which blacks, whites, Hispanics and Asians are separated from each other (see Reardon, et al., 2000; Iceland, et al., 2002; Fischer and Tienda, 2004).¹² Another desirable property of the entropy index is its amenability to decomposition into components reflecting, in this instance, the contribution of between-county and within-county (across schools) separation of groups to the overall entropy index.

A statewide entropy index of .33 qualifies Texas as a state with high levels of school segregation (Reardon and Yun, 2001; Orfield and Lee, 2004).¹³ A decomposition of the index revealed that the *within-county* component of the school segregation index is .15 and the *between-county* component is .18. Substantively this implies that the unequal distribution of minority populations across high schools *within* counties accounts for 45 percent of the overall level of school segregation, with 55 percent due to unequal distribution of minority students *across counties*. The latter is closely linked to the uneven distribution of minority populations across the state. However, and consistent with findings by Reardon and Yun (2003), there is evidence that residential and school segregation are becoming uncoupled because minority concentration in schools is rising

¹¹ Our calculations are based on 251 counties because we restricted our analysis to the subset of high schools that offer both 10th and 12th grade and whose senior class contains at least 10 seniors. This restriction excluded three rural counties whose high schools did not meet these criteria.

¹² See Iceland, Weinberg, and Steinmetz, 2002, Appendix B, "Measures of Residential Segregation." Our calculations are based on a maximum of four groups—Hispanics, blacks, whites and Asians.

¹³ Reardon and Yun (2001) discuss the relationship between the scales on which the dissimilarity (D) and entropy (H) indices are based. Although the correlation between D and H is .9, absolute values of entropy indices are about half the size of those based on the dissimilarity index. Following the convention that .10 is a substantively meaningful change in segregation, a comparable change in segregation based on the entropy index is .05, which is roughly equivalent to a .10 change in the dissimilarity index.

even as the State's minority populations become more geographically dispersed. In 2000, the between-county entropy index of residential segregation was .13 for Texas, which is 40 percent lower than the comparable index of school segregation.¹⁴ Reardon and Yun (2003) also document a drop in *between-county* residential segregation during the 1990s in the South. Substantively, the uncoupling of residential and school segregation imply unequal school enrollment rates among population segments, which most likely reflect the lower enrollment rates among Hispanics and to a lesser extent group differences in age structure.

Table 1 shows how the intense diversification of the state is mirrored in the ethno-racial composition of schools within counties. Approximately half of Texas counties qualify as having low levels of school segregation, but nearly one in five exhibit high or extreme levels of secondary school segregation and slightly fewer than one in three counties qualified as moderately segregated. What these segregation levels portend for minority students' access to selective public colleges and universities under the provisions of H.B.588 partly depends both on the number of and size distribution of schools within a county and the ethno-racial make up of their student body.

(Table 1 About Here)

To illustrate this point, Table 2 displays the size and ethno-racial composition of the 11 high schools located in the most segregated county in Texas. This county is unique because blacks rather than Hispanics, comprise the largest minority group: over 40 percent of the county high school students are black compared with 14 percent statewide; comparable shares of Hispanics are, respectively, 9 and 37 percent for the county and

¹⁴ For these calculations, we used the GeoLytics CensusCD Neighborhood Change Database 1970-2000 Tract Data.

state as a whole (TEA, 2003). Asian and white population shares are similar in the county and the state. Extreme segregation in the county where blacks outnumber Hispanics is consistent with national and regional evidence showing that in general, Hispanic youth are more integrated with whites in schools than their black counterparts, even though both groups witnessed increases in school segregation during the 1990s nationally (Lewis Mumford Center, 2002; Fischer and Tienda, 2004; Reardon and Yun, 2003), and Texas in particular (Frankenberg, et al., 2003).

Averaging just over 1,100 students, the 11 public high schools in Texas' most segregated county served about 12 thousand students during the 2001-02 academic year. However, the school size distribution ranged from a meager 40 to 50 students to over double the county average. The sources of school segregation are immediately apparent, as 68 percent of white students attend four schools that are virtually all white (# 1, 5 10, and 11), while 72 percent of the county's black students attend three schools that are exclusively or predominantly black (# 4, 6 and 7). School segregation is less dramatic for Hispanic and Asian students, whose representation (with the notable exception of school #3) seldom exceeds their countywide population share. Although it is not difficult to imagine that some minority seniors will graduate in the top decile of their class in this highly segregated county, whether and to what extent this claim applies to integrated schools and to the statewide population of high school graduates is an empirical question that has not been considered.

III. High School Minority Composition and Class Rank

Publicly available administrative files do not provide information about schools' class rank distribution by minority group status. Therefore, we use survey data to address

whether and how the ethno-racial composition of schools is related to their class rank distribution and college enrollment behavior. The remaining analyses are based on the senior cohort of the Texas Higher Education Opportunity Project (THEOP) data, a longitudinal study of Texas public high school students who were first surveyed during spring of 2002 using a paper and pencil in-class survey instrument (N=13,803).¹⁵ For cost reasons, the longitudinal sample is based on a random subsample of the baseline respondents (N=5,836) who were re-interviewed by phone one year following high school graduation. To guarantee the maximum possible precision for blacks and Asians, all baseline respondents from these groups were included in the longitudinal sample; proportionate samples of Hispanics and non-Hispanic whites were randomly drawn for the sample balance. The response rate for the wave 2 interviews was 70 percent, and sample weights for the follow-up interviews were recalibrated to the original population.

In addition to basic demographic, socioeconomic and standard tracking information, the baseline survey included a battery of questions about college plans, including up to five rank ordered college preferences, whether applications were submitted, and the respondent-reported institutional admission decisions. Class rank, measured in deciles, is self-reported when known to students and estimated by students when unknown. Rank can be based either during spring semester of the junior year or fall or spring of the senior year for purposes of eligibility for automatic admission, which is based on the semester of application. This partly explains why almost 20 percent of the college choice sample, that is students who indicated they planned to attend college

¹⁵ The THEOP survey also includes a large, baseline sample of sophomores, who are not included in these analyses because their college application process did not begin until fall, 2004.

the fall following their graduation, self-report themselves as top decile graduates, but there is also a known upward bias in self-reported class rank.¹⁶

An important strength of the longitudinal design is that it avoids selection biases inherent in other studies by asking students' college choices *prospectively* rather than retrospectively. Because actual college enrollment status was ascertained in the wave 2 interviews, we restrict our analyses to the longitudinal sample. However, extensive diagnostic tests reveal that the distributions of key covariates do not differ between the baseline and the first follow-up sample.¹⁷ The race-ethnic composition of the THEOP senior sample corresponds to the 2002 population of high school seniors based on administrative data, within the margin of sampling error.¹⁸

To portray how school segregation influences the likelihood that students will qualify for automatic admission and their enrollment propensity, for two reasons we use a school-level measure of minority composition. First, despite their desirable properties, multi-group measures of how evenly whites, blacks, Hispanics and Asians are distributed among schools within counties shifts the focus of our analysis from “segregated schools” to “schools in segregated counties.” This is the case with all six multi-group segregation measures discussed by Reardon and Firebaugh (2000). Second, because the top 10% law stipulates that schools determine their class rankings, schools are the appropriate units for

¹⁶ Higher ranked students are more likely to know their class rank, to state an institutional preference, and to actually enroll in college, which also contributes to the disproportionate share classified as top decile graduates among college-bound students, but so too does upward bias in response error. We are currently expanding data collection to obtain the actual high school transcripts for respondents to evaluate the response error and also to increase the measurement precision of the class rank criterion.

¹⁷ Diagnostic results are available from authors on request.

¹⁸ TEA data for 2002 report the composition of graduating seniors as follows: 13 percent African American; 33 percent Hispanic; 50 percent white and 4 percent Asian and others. The main difference is in the shares of white and black students—with a 2 percentage point disparity indicating that we may have under-represented black students or may have classified respondents who reported more than one race differently.

assessing how segregation influences which students will qualify for the admission guarantee.

The minority composition of high schools in the THEOP survey was derived from administrative data posted by the Texas Education Agency and appended to individual records. Students were sorted into five strata based on the ethno-racial composition of their high schools, using the percent white as a baseline referent. These are

- predominantly white (more than 80% white);
- majority white (60-80% white);
- integrated (40-60% white);
- majority minority (20-40% white);
- predominantly minority (less than 20% white).

School Segregation and Class Rank

Table 3 shows distribution of Texas seniors by high school segregation strata for all seniors and for top decile graduates based on THEOP follow-up sample. Despite the rapid diversification of Texas' school-age population, over 40 percent of high school seniors were exposed to extreme segregation—attending either predominantly minority or predominantly white schools. Less than one in four Texas seniors attended integrated schools. Of the 78 percent who attended segregated schools, 24 percent graduated from predominantly minority high schools, 30 percent from majority white schools and 17 percent from high schools where white students predominated. Schools where blacks and Hispanics comprise a majority but where whites are a significant plurality are typically rare compared with predominantly minority schools.

(Table 3 About Here)

The cross-classification of demographic groups according to the ethno-racial composition of their high school conforms to the segregation profile reported in Table 2 inasmuch as black students are relatively scarce in predominantly white schools while white students are quite scarce in predominantly minority schools. Although this is partly a matter of definition, the story is more complex because Hispanics are less segregated from whites than are black students and because integrated schools combine sizeable shares of all groups (compared with their relative size). Hispanic's disproportionate concentration in majority and predominantly minority schools reflects two circumstances: (1) that Hispanic high school seniors outnumber black seniors by a factor of three to one; and (2) that within the state, Hispanic seniors are more regionally concentrated than blacks, largely in south and west Texas.

To operate as an alternative to affirmative action, the top 10% law has to insure that black and Hispanic students are represented in the top decile of their class so that they qualify for the admission guarantee, which partly depends on whether they attend segregated or integrated schools. Two sets of probabilities reported in Table 3 are pertinent for understanding how class rank is related to school segregation levels for black, white, Hispanic and Asian seniors, namely the overall probability of qualifying for the admissions guarantee and the group-specific differences according to the school's racial mix. If group membership and the ethnic composition of high schools were unrelated to students' class rank and segregation level of their high school, then the (bolded) marginal distributions of panels A and B would be virtually identical. The difference between them, reported in panel C, shows the extent to which segregation

either increases or decreases a group's chances of graduating in the top decile of their class relative to the assumption of uniform probabilities based on their population shares.

For example, white and Asian students represented 52 and 4 percent, respectively, of the 2002 senior high class, but their probability of qualifying for the admission guarantee was 6 percentage points higher each, or 58 and 10 percent, respectively. A comparison of the top and middle panels reveals that if all Texas high schools had been integrated in 2002, the share of whites and Asians qualifying for the admissions guarantee would have been higher than the average achieved under the extant regime of school segregation—71 versus 58 percent for Anglos and 13 versus 7 percent for Asians.

That black and Hispanic students are less likely than whites to qualify for the admission guarantee in integrated and even (for Hispanics) majority minority high schools suggests the existence of within-school segregation along economic lines. Hispanics top decile representation in integrated schools is 12 percent points below their population share and that of black students is 9 points lower. Given their large and growing share of the school-age population in Texas and empirical evidence that Hispanics are less segregated from whites than blacks (Fischer and Tienda, 2004), it is troubling that their probability of qualifying for the college admission guarantee under a hypothetical regime of integrated schools could fall by half—from 26 to 12 percentage points (other things equal). Philosophically, this conflicts with the school desegregation aspirations sanctioned by the *Brown* decision.

Furthermore, Anglos and Asians who attend predominantly minority schools (e.g., less than 20 percent white) also have a higher chance of graduating in the top decile of their class than one would expect if group membership were independent of this

academic outcome. Whereas only six percent of all students at predominantly minority schools were Anglo and only two percent were Asian, they represented 10 and 5 percent of top decile graduates, respectively. Even more striking, the chances that black and Hispanic seniors graduate in the top decile of their class are highest if they attend high schools where whites comprised less than 20 percent of the student body, but the probability that Hispanics qualified for the admission guarantee was disturbingly low for those enrolled in “majority minority” high schools (where 20 to 40 percent of all students were white). Hispanics comprised over three-quarters of these students and only 46 percent of top decile graduates.

In sum, these tabulations yield two clear messages about the promise and performance of the top 10% law as an alternative to affirmative action. First, the share of top decile students who are black or Hispanic rises as the as minority share of the student population rises. Second, H.B.588 potentially could diversify campuses of selective public institutions in Texas even more than it has to date. For example, in 2002, Hispanics and blacks combined represented 43 percent of high school graduates (TEA, 2002), but at UT they comprised 19 percent of first-time freshmen and at A&M only 12 percent that year. Of course, the admission guarantee can not guarantee enrollment, hence it is instructive to also consider who actually matriculates, as reported in Table 4. Panel A shows that over two-thirds of top ranked Hispanic students and nearly half of black students hail from highly segregated schools, where whites represent less than one in five students, compared with only 4 and 13 percent of white and Asian students, respectively. The majority top decile white and Asian students hail from white and integrated schools.

(Table 4 About Here)

Because the admissions guarantee conferred on top decile graduates applies only to public institutions in Texas, and because the law was motivated by a desire to maintain (or augment) diversity at the UT and A&M in the wake of the Hopwood decision, it is instructive to consider whether and to what extent school segregation facilitates access to the public flagships. Over half of Asian and just over one third of white top 10% graduates who attended college enrolled at either UT or A&M, but only one-in four black and Hispanic students did so. However, of those enrolled at the flagships, the distribution from school segregation strata roughly mirrors the distribution of all enrolled top decile, with the notable exception of Hispanic top decile graduates from integrated schools.

To summarize, minority students comprise 56 percent of the college-age population in Texas, but only 43 percent of high school graduates, 32 percent of top decile high school graduates, and 19 and 12 percent of first-time freshman enrollment at UT and A&M, respectively. Hispanic students and to a lesser extent black students who attend schools where they comprise the majority are more likely to qualify for automatic admission than their counterparts who attend integrated schools. Furthermore, and contrary to the integration ideal sought by *Brown*, black and Hispanic students who attend integrated schools less likely than white and Asian students at these schools to qualify for the admissions guarantee. And, Black and Hispanic top decile students who enrolled at flagships mainly come from high schools where minorities predominate.

The top decile admissions guarantee is just that: a pass to enroll in any Texas public institution of choice, provided that the required application materials were

submitted on time.¹⁹ Not all Texas students who qualify for the guarantee actually use it. In part this is because of differences in college going behavior across high schools and demographic groups, as well as individual preferences for public versus private or in-state versus out-of-state institutions (Niu, et al., 2004; Tienda and Niu, 2004).

IV. Multivariate Analyses

The descriptive tabulations, while instructive, leave several questions unanswered. For example, the tabular results can not disclose what circumstances undergird the unequal enrollment propensities among students who attend segregated versus integrated schools. Of course, by definition, students who attend minority-dominated schools are mostly black and Hispanic, but they are usually poorer, on average, their parents are less likely to have college degrees, and their college dispositions are generally lower than their counterparts who attend integrated or predominantly white schools. Whether social background differences among students who attend segregated versus integrated high schools explains the unequal enrollment outcomes from Table 3 is in empirical question to which we turn next.

Modeling Strategies

To assess overall influence of high school minority composition on college enrollment, we estimate a logistic regression with the following covariates: gender, region, race/ethnicity and class rank, in addition to high school minority composition. Sample means, reported in Appendix 1, show that Hispanics are distinctive in several ways. As the only group with sizable a share residing in the southwestern region, they also are most likely to attend predominantly minority schools, to reside with parents who

¹⁹ All applicants, including top decile graduates, were required to take a College Board exam—either the SAT or the ACT—but this was not a factor in the admissions decision of those who qualified for the admission guarantee.

lack a high school education; and to delay thinking about college until secondary school. Combined with their large and growing numbers, their fate in Texas' higher education system is of particular interest. To evaluate whether H.B.588 capitalized on segregation in order to increase minority enrollment at the public flagships, we estimate the baseline model for all students (controlling for class rank), separately for top decile graduates, and also for Hispanics.

Differential effects of high school minority composition on college enrollments are likely to operate through individual SES and/or school SES. Not only do students differ in family resources devoted for education, but those who attend minority-dominant schools often are exposed to concentrated economic disadvantage, which is the hallmark of persistent segregation (Massey and Denton, 1993; Charles, 2003). We test these two possibilities separately because the former can operate regardless of segregation, and the latter operates as a direct consequence of segregation.

Specifically, the "*family SES model*" adds parental education, home ownership and college disposition (grade level when respondent first considered college) to the base model to determine whether differential effects of high school minority composition on college enrollments are due to differences in family background. If so, the significance of school minority composition coefficients should be eliminated when family SES is added to the base model.

The "*school SES model*" adds a measure of socioeconomic differences among schools. Specifically we appended from the TEA school enrollment database the percent of students who are economically disadvantaged to student records to test whether differential effects of high school minority composition on college enrollments reflect

concentration of poverty or segregation *per se*. If differential effects of high school minority composition on college enrollments are due to concentration of poverty but not family SES, the significance of school minority composition coefficients should be eliminated by adding school SES to the base model, but not family background. This would provide evidence that the detrimental effect of segregation on college enrollment derive from the concentrated disadvantage associated with school segregation rather than family SES.

The judicial prohibition of race-sensitive admissions in effect through 2003 extended to both public and private institutions in the jurisdiction of the 5th circuit, but the legislated admission guarantee applied only to public institutions in Texas. Therefore, we specify college enrollment decisions using seven mutually exclusive options that capture these legal constraints. From least to most selective, these alternatives include:

- selective Texas private and non-Texas institutions;
- Texas public flagships—UT or A&M;
- selective Texas public institutions, excluding flagships;
- *less selective Texas public institutions*;
- less selective Texas private and non-Texas institutions;
- 2-year institutions; and
- nonenrollment.

Although two-year institutions have open admissions, we include them as a separate category because of their growing importance as a post-secondary option in Texas and the nation (Cortes, et al., 2003).

Tables 5a, 5b and 5c reports relative risk ratios for the total sample, Hispanic students and top 10% graduates, respectively. Less selective Texas public institutions serve as the reference group for all models. In the interest of parsimony, we only report coefficients of substantive interest, namely minority group status, class rank and school segregation strata for the baseline specification, and the segregation strata for models that include, sequentially, family background and school SES.

White Schools' Advantages and Minority Schools' Disadvantages

The top panel of Table 5a reports the baseline relative risk ratios (RRR) for all seniors. As a policy instrument, the top 10 percent law sought to broaden minority student access to the selective public institutions in Texas. Because the admissions guarantee does not apply to private colleges and universities, top decile graduates' enrollment odds is highest at the selective *public* institutions. Compared with seniors who graduated at or below the 30th percentile of their class, top decile graduates are 20 times as likely to enroll at UT or A&M relative to a less selective state university. Top 10% graduates also are 4 times as likely to enroll at a private Texas or a selective out-of-state institution. Black and Hispanic students are significantly *less likely* than Anglos of comparable class rank to enroll in the most selective institutions (three right columns) relative to a less selective public institution in Texas. Although Asians are as likely as whites to enroll in one of the public flagships, they are less likely to enroll in other selective public institutions or private institutions in or out of state. At the lower end of the college selectivity spectrum, Hispanics' are as likely as whites of comparable rank to enroll in a two-year institution or opt for nonenrollment. These results underscore the

importance of minority students qualifying for the admissions guarantee in order for H.B.588 to function as a proxy for affirmative action.

(Table 5a About Here)

Of particular substantive interest are the enrollment odds according to the high school racial mix, which determines how many blacks and Hispanics graduate in the top decile of their class. With the exception of less selective out-of-state institutions or private Texas colleges, graduates from minority dominated high schools are significantly *less likely* than graduates from integrated schools to enroll in a selective post-secondary institution—whether public or private, in or out-of-state—relative to a less selective public institution. Conversely, graduates from majority white or predominantly white high schools are two to three times as likely as seniors who attended integrated schools to enroll in selective institutions relative to less selective Texas public colleges.

Table 5b reports comparable college enrollment RRR's from a separate estimation for Hispanics, who as a group are most likely to attend predominantly minority high schools (Appendix 1). The results generally parallel those observed for all students in that Hispanics who attend majority or predominantly minority high schools are significantly less likely to enroll in selective compared with less selective public institutions. Among the 16 Texas public institutions classified as less selective by Barron's, the Hispanic Association of Colleges and Universities (2004) classifies 10 as "Hispanic-serving," meaning that 25 percent of enrolled students are Hispanic, but only two of the 22 selective public institutions in the state are so classified. This means that for many Hispanic students, segregated high school experiences eventuate into segregated college experiences.

(Table 5b About Here)

However, Hispanics who *do* graduate in the top decile of their class and who *do* enroll in college are over 50 times as likely as Hispanic students who graduate at or below the third decile of their class to attend one of the public flagships as compared with a less selective public institution. Top performing Hispanic students are also 6 times as likely as their lower ranked counterparts to attend a selective private college in Texas or a selective college out-of-state relative to a one of the State's less selective public institutions.

Table 5c, which restricts the analysis sample to top decile graduates, provides a more stringent test of the effectiveness of H.B.588 in broadening college access to graduates from minority-dominated high schools. The base model shows that top ranked graduates from predominantly white high schools are 6 to 7 times as likely as top ranked seniors from integrated schools to attend the most selective institutions in the state and the country compared with a nonselective Texas public institution. This includes the public flagships. However, graduates from high schools where minority students predominate or constitute the majority of the student body are only about 30 to 50 percent *as likely* as their statistical counterparts who graduated from integrated schools to enroll in a selective public institution, including UT or A&M.

(Table 5c About Here)

Because similar relative risk ratios obtained for all seniors, it appears that H.B.588 had little effect equalizing access to Texas selective public institutions for top 10% students who attended predominately minority schools. To consider why the enrollment odds are so low for top decile graduates from minority segregated high

schools, we consider how socioeconomic resources, measured the family and the school level, help explain these large disparities.

Segregation and Concentrated Economical Disadvantage

The lower panels of Tables 5a, 5b and 5c report enrollment odds according to the high school ethnic mix after taking into account the differences in family or school SES. Estimates in Table 5c clarify whether the enrollment behavior of students who qualify for the admission guarantee merely reflect group differences in socioeconomic resources. In the main, these results show that the lower propensity of students who graduate from minority-dominant high schools to enroll at selective institutions, particularly the public flagships, is a pernicious effect of concentrated poverty produced by residential segregation (Massey and Denton, 1993).

For all seniors, the lower enrollment odds at the most selective institutions of graduates from majority minority and predominantly minority high schools are unaltered when students' family background is added to the baseline model. When high school economic status is, instead, modeled, odds of enrollment at the public flagships for students from predominantly white and predominantly minority high schools are equalized. Substantively this indicates that the lower probability of public flagship versus non selective college enrollment for graduates from predominantly minority high schools results from the concentration of economic disadvantage at these schools, not the racial mix of the schools *per se*.

Similar results obtained for Hispanic sample reported in Table 5b. Variation in parent education, home ownership and college disposition does not alter differential enrollment odds at selective institutions, as indicated by identical RRRs from the baseline

model and the individual SES model. However, Hispanic graduates from minority high schools' lower enrollment odds at selective public institutions (the public flagships and Texas private and out-of-state selective institutions) relative to less selective colleges are neutralized once the economic status of the high schools is equalized statistically. This result further testifies that for Hispanics, the concentration of economic disadvantage in high schools rather than their ethnic homogeneity *per se* is largely responsible for the lower enrollment odds at flagships. This reflects the regional concentration of Hispanics in the poor, southwestern section of the state, and in large, inner-city barrios in other parts of the State.

For top 10% graduates (Table 5c), differences in family socioeconomic circumstances were partly responsible for unequal college enrollment odds among graduates of minority dominated high schools. Differences in family background of high ranking students from minority dominated high schools undergird their lower enrollment odds at the public flagships and Texas private and out-of-state selective institutions relative to less selective public institutions. However, similar results obtain when the school economic status is used in lieu of students' family background. These results drive home a salient point about the limits of preferential admissions policies, whether based on race-sensitive criteria or uniform rank, namely that broadening access is a necessary but insufficient condition to diversify college campuses. We return to this point in the conclusion.

Institutional Attributes and College Choice

Although public institutions of higher education in Texas would be totally saturated with students granted automatic admission if every rank-eligible graduate

enrolled in college, the obvious question is why every rank-eligible student does not seek to enroll at the public flagships. For this, it is instructive to examine what attributes students consider in choosing colleges. Using a scale of 0 to 10, respondents were asked to rate by importance various factors, such as cost, the availability of financial aid, academic reputation, location, and school size, in deciding where to matriculate. Table 6, which compares the item response means between students enrolled at less selective public institutions in Texas and those enrolled at one of flagships, provides some insight.

(Table 6 About Here)

Students enrolled in the less selective public institutions value different college attributes compared with those who attend the public flagships. Students enrolled at the less selective public institutions, including those who graduate at the top of their class, consider cost, financial aid, academic support, institutional recruitment efforts and distance to home in making their college choices, while those who attend one of the flagships place greater importance on academic reputation, institutional prestige and social life. Top decile graduates from predominantly minority schools place higher importance on just about every issue than all seniors or the top 10% graduates in general, two exceptions. First, top decile students who graduate from minority-dominant high schools and enroll are equally concerned about academic support and recruitment efforts as their counterparts who enroll at less selective public institutions. Despite concerns about their academic preparation, top decile graduates outperform students with standardized test scores 200 to 300 points higher who did not graduate in the top 10 percent of their class (Glater, 2004). Second, that top 10% graduates from predominantly minority schools rank cost and financial aid of higher importance than either all seniors

or top decile graduates in general attests that economic factors are a major consideration in their college decision-making. In general, top decile graduates who do not enroll at a public flagship rank cost factors higher than their rank counterparts who matriculate at either UT or A&M.

Given that distance to home appears to be an important factor in college choice, and given that Texas is a very large state, students enrolled at either UT or A&M must be willing to travel further to attend college. And they are. Table 7 reports mean distances to enrollment institution for all seniors, top 10% graduates, and top decile graduates from predominantly minority schools. For all three samples, students who matriculate at one of the public flagships live further, on average, than their counterparts who attend a less selective or nonselective public institution. Except for students who live within a 100-mile radius of the Houston area or a 100-radius of the Austin area, the public flagships may be less accessible for practical reasons.

(Table 7 About Here)

For all three sample comparisons, students who enrolled at less selective public institutions live much further from the public flagships than students who enrolled at one of the flagships, and top 10% students from predominately minority schools live the furthest from flagships. In fact, top 10% students who graduate from predominately minority high schools travel 6 times further than their rank and school counterparts who enroll at a local public institution, compared with all top decile graduates, for whom the distance differential is only 4 times greater. This finding further underscores the importance of aggressive recruitment in order for the uniform admission policy to increase institutional diversity by capitalizing on segregation. Especially for students

from resource-poor high schools with low college-going traditions or students from families where parents lack post-secondary education, without aggressive outreach activities to promote application and commensurate financial support defray financial burdens, students who qualify for the admissions guarantee are significantly less likely to enroll at the public flagships.

V. Conclusions

Even with a 50-year hindsight showing deleterious consequences of residential and school segregation, consensus about acceptable policy levers for broadening opportunity in higher education remains illusive. As a compromise between the principles of democratic inclusion and the requirements of a meritocracy, the legitimacy of affirmative action has been challenged in public referenda to outlaw race preferences in California and Washington State, and in judicial decisions from *Bakke* to *Hopwood* and to *Gratz* and *Grutter*. Although the *Grutter* decision recognized diversity as a compelling state interest and sanctioned narrowly tailored use of race-sensitive admissions, “affirmative action” in higher education remains highly controversial—perhaps even more so than after the *Bakke* decision because the stakes keep rising as the demand for seats at the selective institutions grows and the population becomes more diverse.

As a strategy to diversify selective college campuses, the Texas top 10 percent plan receives mixed reviews. Touted as a race-neutral alternative to affirmative action, H.B. 588 received broad political support when the outcome of the Michigan cases was uncertain, but its unintended consequences, including saturation of UT with automatically admitted students, have led to calls for its appeal both on grounds that it is not, in fact

race neutral (Levey, 2004) and that use of a uniform merit criterion advantages high performing students from low performing schools (Glater, 2000).

What constitutes “race neutral” seems to depend on the eyes of the beholder. For example, the amicus curiae brief (Jones, et al., 2003a: 13-14) filed by the U.S. Department of Education on behalf of the plaintiffs in *Gratz and Hamacher v. Bollinger* states that

...proven race-neutral alternatives to achieving the laudable goals of educational openness and diversity remain available...Not only has Texas’s race-neutral policy maintained or increased the number of minority students enrolled at the University of Texas, but the students enrolled through its percentage plan, including minority students, consistently outperform other students at the University of Texas with comparable standardized test scores.

The administration’s brief filed in support of *Grutter v. Bollinger* makes similarly lofty claims (Jones, et al., 2003b:8):

By attacking the problems of openness and educational diversity directly and focusing on attracting the top graduating students from throughout the State, the Texas program has enhanced opportunity and promoted educational diversity by any measure. Florida and California have adopted similar race-neutral policies with similar results.

In testimony before the Texas Senate Subcommittee on Higher Education, Curt Levey, Director of Legal and Public Affairs at the Center for Individual Rights, praised the plan for achieving diversity without considering race, yet recognized that (2004:5)²⁰

...the Ten Percent Plan was adopted with the best of intentions, the fact is that in some respects, the Ten Percent Plan retains aspects of a double standard. As a consequence, it suffers from some of the same problems as the use of overt racial preferences.

²⁰ The Center for Individual Rights is a public interest law firm that litigated many cases challenging affirmative action, including *Hopwood*, *Gratz* and *Grutter*.

Even though the percent plan did not violate *Hopwood's* judicial ban on the use of race in college admissions, its limited success in restoring diversity to the two public flagship campuses was possible because, when applied to both segregated and integrated high schools, the uniform merit criterion ensured that a sizable number of minority students would at least qualify for automatic admission. If this premise was understood by the architects of H.B.588, the underlying probability structure was not because the contours of segregation were not formally analyzed with respect to college-going behavior. Our empirical analyses evaluate the likelihood that minority and nonminority students graduated in the top decile of their class and actually enrolled in colleges with selective admissions.

We find that (1) Texas public high schools are highly segregated both in terms of county-level entropy index and school level minority composition; (2) that white and Asian students who attend integrated high schools are more likely than black and Hispanic students to graduate in the top decile of their class, and this advantage persists even if they attend predominantly or majority minority schools; (3) black and Hispanic students who qualify for the automatic admission guarantee disproportionately attend schools where minority students comprise a significant or dominant majority of the student body; (4) that students who attend predominantly or majority white schools are significantly more likely, and those who attend predominantly minority schools are significantly less likely to enroll at selective postsecondary institutions; (5) that the lower likelihood of Hispanic enrollment at the public flagships among those who attend segregated schools derives from their concentrated disadvantage rather than segregation *per se*. Our examination of criteria students use in making college choices reveals that (6)

benefit-eligible students who enroll in less selective Texas public institutions are more concerned about cost, financial aid and distance from home than those who enrolled at UT or A&M. These students rate academic reputation, institutional prestige and social life of higher importance in criteria for selecting a college.

Our conclusion that concentrated disadvantage rather than segregation *per se* is what dampens enrollment odds for minority students who attend schools with few white students is consistent with Massey and Denton's (1993) conclusion that spatial segregation is a powerful force perpetuating the concentration of economic disadvantage, with its myriad deleterious consequences for educational outcomes, inter-group relations, and social mobility (Charles, 2003). That school racial mix and social class composition often are tightly coupled both underscores the importance of identifying the mechanisms responsible for low college going traditions at minority dominated high schools (Bellessa Frost, 2004), and calls into question the wisdom of considering segregation as a protective factor, even for political expediency.

The pernicious underside of school segregation is that it accentuates class differences, which easily trump any advantages afforded to blacks and Hispanics clustered in predominantly minority schools. That black and Hispanic students who attended integrated schools were less likely to qualify for the admission guarantee than whites and Asians, while white and Asian students who attended minority-dominant high schools were more likely to qualify for the admission guarantee dramatizes the class dilemma in the context of segregation.

Finally, because an admission guarantee does not ensure enrollment, particularly for students from families with limited resources, but especially for students who attend

resource-poor schools, by itself H.B.588 appears to be insufficient to broaden educational opportunity for minorities even in the face of pervasive segregation. In fact, without aggressive recruitment at inner city high schools with low college-going traditions and high minority student populations, and without generous scholarship support to enable high performing students from low performing schools to attend UT or A&M, the “success” of H.B.588 in restoring diversity to selective public campuses remains questionable.

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Table 1: Segregation of Texas Public High Schools in 2001

	Entropy Index				N
	Extreme (0.40--1.00)	High (0.25--0.40)	Moderate (0.10--0.25)	Low (0.00--0.10)	
School N	11	209	394	642	1,256
County N	1	4	46	200	251

Source: Texas Education Agency, 2002

Note: The entropy index for Texas is 0.33

**Table 2: Race/Ethnic Composition of Public High Schools: Most Segregated Texas County, 2001-02
(Row Percent)**

High School	White	Black	Hispanic	Asian	Total Enrollment^a
1	92	1	3	4	1,690
2	53	44	3	0	340
3	15	40	31	14	1,533
4	0	97	1	2	1,018
5	92	0	6	2	1,633
6	6	81	11	2	1,834
7	5	91	3	1	1,394
8	60	29	7	5	2,218
9	36	59	5	0	39
10	92	2	4	2	53
11	90	5	4	1	612
County Group Share	45	42	9	4	12,364
State Group Share	46	14	37	3	1,143,198

Source: Texas Education Agency, 2002

Note: The county entropy index is 0.40.

a. Total enrollments exclude other races.

**Table 3: Distribution of Texas Public High School Seniors by School Segregation Strata and Class Rank: 2002
(Row Percent)**

Segregation Strata	White	Black	Hispanic	Asian	N	Column %
A. All Seniors						
Predominately White	85	2	10	3	556	17
Majority White	72	9	15	4	1321	30
Integrated	56	14	24	7	1197	23
Majority Minority	22	6	70	2	334	5
Predominately Minority	6	15	77	2	1818	24
Total	52	10	34	4	5226	100
B. Top 10%						
Predominately White	82	0	1	17	99	16
Majority White	75	6	11	8	224	31
Integrated	71	5	12	13	202	24
Majority Minority	44	6	46	4	51	5
Predominately Minority	10	13	71	5	293	24
Total	58	6	26	10	869	100
C. Difference: B-A						
Predominately White	-3	-2	-9	14		
Majority White	3	-3	-4	4		
Integrated	15	-9	-12	6		
Majority Minority	22	0	-24	2		
Predominately Minority	4	-2	-6	3		
Total	6	-4	-8	6		

Source: Texas Higher Education Opportunity Project, Senior Wave 2 Data.

Note: Weighted Percents; Unweighted N's.

Predominately White: %White \geq 80 %, Majority White: $60\% \leq$ %White $<$ 80%, Integrated: $40\% \leq$ %White $<$ 60%,
Majority Minority: $20\% \leq$ %White $<$ 40%, Predominately Minority: %White $<$ 20%

**Table 4: College Enrollment by School Segregation Strata:
Top Decile Texas Public High School Seniors in 2002
(Column Percent)**

	White	Black	Hispanic	Asian	<i>Total</i>
A. Top 10%					
Predominately White	23	0	1	28	<i>16</i>
Majority White	40	29	13	27	<i>31</i>
Integrated	29	19	11	31	<i>24</i>
Majority Minority	4	5	9	2	<i>5</i>
Predominately Minority	4	47	66	13	<i>24</i>
	<hr/> 100	<hr/> 100	<hr/> 100	<hr/> 100	<hr/> <i>100</i>
N	414	99	215	141	869
B. Top 10% Enrolled					
Predominately White	23	0	1	28	<i>17</i>
Majority White	40	32	14	26	<i>32</i>
Integrated	30	14	10	31	<i>24</i>
Majority Minority	4	4	9	2	<i>5</i>
Predominately Minority	3	50	66	13	<i>22</i>
	<hr/> 100	<hr/> 100	<hr/> 100	<hr/> 100	<hr/> <i>100</i>
N	399	87	191	138	815
C. Top 10% Enrolled in Texas Flagships					
Predominately White	23	0	2	44	<i>22</i>
Majority White	42	35	9	14	<i>31</i>
Integrated	28	13	23	31	<i>27</i>
Majority Minority	3	0	3	0	<i>2</i>
Predominately Minority	4	52	64	11	<i>18</i>
	<hr/> 100	<hr/> 100	<hr/> 100	<hr/> 100	<hr/> <i>100</i>
N	145	21	46	78	290

Source: Texas Higher Education Opportunity Project, Senior Wave 2 Data.

Note: Weighted Percents; Unweighted N's.

Predominately White: %White \geq 80 %

Majority White: $60\% \leq$ %White < 80%

Integrated: $40\% \leq$ %White < 60%

Majority Minority: $20\% \leq$ %White < 40%

Predominately Minority: %White < 20%

Table 5a: Relative Risk Ratios: College Enrollment of Texas Public High School Seniors in 2002
(Base Category=Less Selective Texas Public Institutions)

	College Enrollment (n=5576)					
	Not Enrolled	2-Year	Other Less-Selective ^a	Other TX Selective Public	Flagships ^c	Other Sel. ^d
Base Model						
Top 10%	0.2 ***	0.3 ***	1.2	1.5 *	20.9 ***	3.7 ***
Black	0.6 ***	0.6 ***	2.3 ***	0.3 ***	0.3 ***	0.6 **
Hispanic	1.1	0.9	0.2 ***	0.6 **	0.3 ***	0.5 ***
Asian	0.4 ***	0.5 ***	0.3 **	0.2 ***	0.7	0.4 ***
Predominately White	1.4	2.2 ***	1.5	2.0 **	3.0 ***	3.1 ***
Majority White	1.3	1.9 ***	2.2 **	1.8 ***	2.8 ***	3.2 ***
Integrated	1.0	1.0	1.0	1.0	1.0	1.0
Majority Minority	1.1	1.0	0.6	0.3 ***	0.3 **	0.8
Predominately Minority	0.8	0.7 *	1.2	0.5 ***	0.5 ***	0.4 ***
Base Model+Family SES						
Predominately White	1.3	2.3 ***	1.6	2.0 **	3.2 ***	3.3 ***
Majority White	1.4	2.0 ***	2.2 **	1.8 ***	2.9 ***	3.2 ***
Integrated	1.0	1.0	1.0	1.0	1.0	1.0
Majority Minority	1.0	0.9	0.5	0.2 ***	0.4 *	0.9
Predominately Minority	0.7 **	0.7 **	1.2	0.4 ***	0.6 *	0.4 ***
Base Model+%Economically Disadvantaged						
Predominately White	1.8 **	2.7 ***	1.8	2.5 ***	2.4 ***	2.7 ***
Majority White	1.6 **	2.2 ***	2.5 ***	2.1 ***	2.2 ***	2.8 ***
Integrated	1.0	1.0	1.0	1.0	1.0	1.0
Majority Minority	0.5 **	0.6 *	0.3	0.1 ***	0.6	1.2
Predominately Minority	0.3 ***	0.5 ***	0.7	0.2 ***	1.0	0.6 *

Source: Texas Higher Education Opportunity Project, Senior Wave 2 Data.

***: p<0.001, **: p<0.01, *: p<0.05

Note: All models include sex, region and flags for other races.

^aOther Less-Selective: Texas private and non-Texas less-selective

^bOther TX Selective Public: Texas selective public, excluding flagships

^cFlagships: UT or A&M

^dOther Selective: Texas private and non-Texas selective

Table 5b: Relative Risk Ratios: College Enrollment of *Hispanic* Texas Public High School Seniors in 2002
 (Base Category=Less Selective Texas Public Institutions)

	College Enrollment (n=1619) ^a				
	Not Enrolled	2-Year	Selective ^b	Flagships ^c	Other Sel. ^d
Base Model					
Top 10%	0.2 ***	0.3 ***	2.3 **	50.9 ***	5.9 ***
Majority White	1.0	1.5	1.4	1.9	2.4
Integrated	1.0	1.0	1.0	1.0	1.0
Majority Minority	0.7	0.6	0.1 ***	0.1 **	0.5
Predominately Minority	0.5 **	0.4 **	0.2 ***	0.2 **	0.3 *
Base Model+Family SES					
Majority White	1.0	1.6	1.4	2.3	2.3
Integrated	1.0	1.0	1.0	1.0	1.0
Majority Minority	0.6	0.5 *	0.1 ***	0.1 **	0.5
Predominately Minority	0.4 **	0.3 ***	0.2 ***	0.2 **	0.3 *
Base Model+%Economically Disadvantaged					
Majority White	1.1	1.6	1.8	1.8	2.4
Integrated	1.0	1.0	1.0	1.0	1.0
Majority Minority	0.3 **	0.4 **	0.02 ***	0.2	0.5
Predominately Minority	0.2 ***	0.3 ***	0.03 ***	0.4	0.3

Source: Texas Higher Education Opportunity Project, Senior Wave 1 & 2 Data.

***: p<0.001, **: p<0.01, *: p<0.05

Note: All models include sex and region.

^aDue to small cell sizes, segregation strata Predominately White and enrollment category "Other Non/Less Selective" are deleted.

^bOther TX Selective Public: Texas selective public, excluding flagships

^cFlagships: UT or A&M

^dOther Selective: Texas private and non-Texas selective

Table 5c: Relative Risk Ratios: College Enrollment of *Top 10%* Texas Public High School Seniors in 2002
(Base Category=Less Selective Texas Public Institutions)

	College Enrollment (n=922)					
	Other Non/Less		Other TX Public		Flagships ^c	Other Sel. ^d
	Not Enrolled	2-Year	Selective ^a	Selective ^b		
Base Model						
Black	3.3 *	0.6	3.6 *	1.2	0.7	0.6
Hispanic	2.2	0.6	0.2	1.4	0.6	0.8
Asian	0.3	0.4	0.1	0.4 *	1.0	0.4 *
Predominately White	7.8 *	5.4 *	6.3	6.9 *	6.2 *	6.2 *
Majority White	1.7	1.4	1.4	1.7	1.6	2.0
Integrated	1.0	1.0	1.0	1.0	1.0	1.0
Majority Minority	1.2	1.6	0.4	0.4	0.3 *	0.7
Predominately Minority	0.8	1.0	0.8	0.4 **	0.5 *	0.4 **
Base Model+Family SES						
Predominately White	9.8 *	5.6 *	5.4	7.7 **	6.8 **	7.2 **
Majority White	1.6	1.5	1.2	1.7	1.7	2.1
Integrated	1.0	1.0	1.0	1.0	1.0	1.0
Majority Minority	1.4	1.7	0.4	0.4	0.4	1.0
Predominately Minority	0.9	1.0	0.6	0.4 *	0.6	0.5
Base Model+%Economically Disadvantaged						
Predominately White	8.9 *	5.8 *	5.9	8.6 **	4.8 *	5.6 *
Majority White	2.0	1.5	0.3	2.3	1.3	1.8
Integrated	1.0	1.0	1.0	1.0	1.0	1.0
Majority Minority	0.5	1.2	0.5	0.1 **	0.6	1.0
Predominately Minority	0.3 *	0.7	0.9	0.1 ***	0.9	0.5

Source: Texas Higher Education Opportunity Project, Senior Wave 2 Data

***: p<0.001, **: p<0.01, *: p<0.05

Note: All models include sex, region and flags for other races.

^aOther Less-Selective: Texas private and non-Texas less-selective

^bOther TX Selective Public: Texas selective public, excluding flagships

^cFlagships: UT or A&M

^dOther Selective: Texas private and non-Texas selective

Table 6: Correlates of College Choice: Texas Public High School Seniors in 2002

(0: Extremely Unimportant, ..., 10: Extremely Important)

College Attributes	All Seniors			Top 10%			Top 10% from Predominantly Minority High Schools		
	<i>N</i>	Enrolled at a Non/Selective Texas Public Institution	Enrolled at one of the Flagships T-Test	<i>N</i>	Enrolled at a Non/Selective Texas Public Institution	Enrolled at one of the Flagships T-Test	<i>N</i>	Enrolled at a Non/Selective Texas Public Institution	Enrolled at one of the Flagships T-Test
	682	482		112	308		63	88	
Cost	6.61	5.70 ***		7.04	6.00 ***		7.13	6.35 *	
Availability of Financial Aid	6.26	4.49 ***		6.78	4.82 ***		7.49	6.17 **	
Academic Support	5.89	5.52 *		6.13	5.58 *		6.29	6.50	
Recruitment Efforts	4.24	3.49 ***		4.53	3.71 **		4.73	4.95	
Academic Reputation	6.35	8.41 ***		6.39	8.39 ***		6.62	8.47 ***	
Prestige	5.49	7.70 ***		5.57	7.66 ***		5.82	7.78 ***	
Admission Standards	6.32	6.27		5.79	6.22		6.29	6.73	
Job Placement Record	5.02	5.11		5.22	5.26		5.86	5.20	
Social Life	5.57	6.81 ***		5.46	6.84 ***		5.82	6.91 *	
Lots of People Like Me	5.41	5.56		5.24	5.54		5.93	5.31	
Distance to Home	7.17	5.67 ***		7.12	5.75 ***		7.35	5.98 ***	

Source: Texas Higher Education Opportunity Project, Senior Wave 2 Data

***: $p < 0.001$, **: $p < 0.01$, *: $p < 0.05$

Table 7: Means of Distance (in miles) to College: Texas Public High School Seniors in 2002

Distance	All Seniors			Top 10%			Top 10% from Predominantly Minority High Schools		
	Enrolled at a Non/Less Selective Texas Public Institution	Enrolled at one of the Flagships	T-Test	Enrolled at a Non/Less Selective Texas Public Institution	Enrolled at one of the Flagships	T-Test	Enrolled at a Non/Less Selective Texas Public Institution	Enrolled at one of the Flagships	T-Test
	<i>N</i>	682	482	112	308		63	88	
High School to College Enrolled		51.15	148.37 ***	38.56	156.20 ***		30.76	191.62 ***	
High School to the Nearest Flagships		191.13	117.23 ***	201.62	123.15 ***		220.23	158.24 **	

Source: Texas Higher Education Opportunity Project, Senior Wave 2 Data

***: $p < 0.001$, **: $p < 0.01$, *: $p < 0.05$

Note: For those enrolled a Texas college (N=3879), mean distance from high school to the college is 77.43 miles, mean distance to the nearest flagship is 163.67 miles.

Appendix 1: Means and S.E. (in parentheses) of Covariates

Variable	All	White	Black	Hispanic	Asian
N	5576	2036	944	1677	382
Individual Characteristics					
Female	0.49	0.51	0.58	0.53	0.48
Class Rank					
Top Decile	0.17	0.20	0.10	0.13	0.37
Second Decile	0.18	0.21	0.15	0.17	0.20
Third Decile and Below	0.65	0.59	0.74	0.71	0.43
First Thought About Going College					
Always	0.58	0.68	0.61	0.50	0.69
Middle High School	0.12	0.10	0.15	0.14	0.09
High School	0.17	0.13	0.14	0.25	0.16
Don't Know	0.04	0.05	0.03	0.04	0.03
Missing	0.09	0.05	0.06	0.07	0.04
Parental Education					
Don't Know	0.17	0.08	0.11	0.13	0.14
Less Than High School	0.15	0.04	0.07	0.36	0.15
High School	0.20	0.22	0.26	0.22	0.17
Some College	0.22	0.29	0.30	0.17	0.14
College and Higher	0.25	0.37	0.26	0.11	0.40
Home Ownership					
Own	0.72	0.87	0.59	0.78	0.81
Rent	0.14	0.09	0.32	0.16	0.11
Don't Know/Missing	0.13	0.04	0.09	0.06	0.08
Location					
South-East	0.55	0.53	0.55	0.50	0.82
High School Segregation Strata					
Predominately White	0.10	0.22	0.03	0.03	0.07
Majority White	0.25	0.42	0.19	0.10	0.24
Integrated	0.23	0.28	0.27	0.12	0.33
Majority Minority	0.06	0.03	0.03	0.13	0.03
Predominately Minority	0.35	0.06	0.48	0.62	0.33
School Characteristics					
% Students Economically disadvantaged	34.08 (23.52)	20.64 (14.78)	36.11 (19.78)	50.75 (23.35)	19.76 (13.91)

Source: Texas Higher Education Opportunity Project, Senior Wave 2 Data