Title

Texas Top Ten Percent Plan: How It Works, What Are Its Limits, and Recommendations to Consider

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Texas Top Ten Percent Plan: How It Works, What Are Its Limits, and Recommendations to Consider

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Proyecto Derechos Civiles

Abstract

In this paper, we endeavor to contribute to efforts to implement college admissions strategies appropriate within the nation's developing law by examining percent plans, an alternative race-neutral path to college admissions in Texas, California, and Florida. We seek to do four things: (a) summarize the broad contributions to students' opportunities to access college; (b) describe the three state percent plans currently in place and the important role demography plays in their implementation; (c) synthesize what is known empirically about percent plans, their value, strengths, and limitations; and (d) provide empirically based considerations related for institutions considering the implementation of alternative admissions plans. As the higher education community contemplates percent plans as possible mediators of the equity crisis, this report finds that there is much to be learned from the rigorous research available on these plans to date, and much work left to be done to cultivate their success.

Keywords: percent plans, race and college admissions, affirmative action, minorities

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In June 2013, the United States Supreme Court ruled on the most recent in a series of cases challenging the legality of race-conscious college admissions processes. Specifically, this case argued that the automatic admissions policy in Texas, the Top Ten Percent Plan (TTPP), had been so effective as to render any race-conscious admissions plan unnecessary and therefore unlawful. In *Fisher v. University of Texas at Austin* (2013), the Court recognized the right of universities to pursue diversity as a compelling educational interest and affirmed prior decisions supporting the legality of the consideration of race in admissions. It also highlighted the critical nature of rigorous social science in making and defending sound decisions about admissions policies. Specifically, Justice Kennedy's majority decision in the *Fisher* case noted that institutions have an obligation to document "whether a university could achieve sufficient diversity without using racial classifications." Said differently, the decision clarified that judges cannot simply defer to colleges but must reach their own conclusions on this key issue.

Applying the judicial standard of review articulated in *Gratz v. Bollinger* (2003), *Grutter v. Bollinger* (2003), and *Regents of the University of California v. Bakke* (1978), the Supreme Court in *Fisher v. University of Texas at Austin* (2013) held that the lower courts did not view the Texas TTPP in the light of strict scrutiny, requiring the University of Texas to prove that its admissions plan "is narrowly-tailored to achieve the benefits of diversity," and remanded the case to the Fifth Circuit for findings consistent with the judicial standard. In 2014, the Fifth Circuit Court again found the Texas admissions policy to be narrowly tailored. In particular, this court found that

> …race-conscious holistic review is necessary to make the Top Ten Percent Plan workable by patching holes that a mechanical admissions program leaves in its ability to achieve the rich diversity that contributes to its academic mission—as described by *Bakke* and *Grutter*. (*Fisher v. Texas,* 2014, p. 35)

A key rationale of this court's decision identifies that the successful admission of additional minority students under the percent plan was a result of the changing demography of Texas as well as the continuing trends toward resegregation in the state's secondary education system. In June 2015, the Supreme Court agreed to rehear *Fisher*. At issue again is whether models such as the percent plan have been indeed sufficiently successful to act as a reliable workable race-neutral alternative.

A critical role of this report then is an assessment of the now more than 15-year study of the Texas TTPP. Automatic admissions policies—commonly referred to as percent plan policies—are located as a form of state or gubernatorial policy in Texas, California, and Florida and guarantee admission to a certain percentage of their high school graduates. Initially a state-level response to the end of race-conscious admissions as a result of the 1996 Fifth Circuit Court of Appeals decision in *Hopwood v. University of Texas*, prohibiting affirmative action in university admissions in Texas and evolving into, for certain

universities, an important mechanism within an "affirmative action plus" plan following *Grutter v. Bollinger*, percent plans remain an important ostensibly race-neutral mechanism to carefully understand (*Grutter v. Bollinger,* 2003).

To that end, our charge with this paper is to review briefly the particulars of the three percent plans and their outcomes to date in a scaled way. In particular, in this paper we seek to do four things: (a) summarize the broad contributions to students' opportunities to access college; (b) describe the three state percent plans currently in place and the important role demography plays in their implementation; (c) synthesize what is known empirically about percent plans, their value, strengths, and limitations; and (d) provide empirically based considerations related for implementing a percent plan or race-neutral method. While the U.S. Department of Education and the U.S. Department of Justice have provided guidance to universities on the use of race in higher education settings in the United States (U.S. Department of Justice & U.S. Department of Education, n.d.), in this paper we seek to contribute to efforts to implement admissions strategies appropriate within the nation's developing law through the presentation of research-based recommendations. That is, we synthesize what we know from rigorous and related legal, theoretical, and empirical analyses to guide institutions and their leaders on race-conscious issues to date in the form of research-based recommendations, in particular recommendations related to responsibly designed research and evaluation.

Accessing College

In order to understand percent plans and their relative effectiveness as admissions strategies, it is important first to place that discussion in the broader frame of what factors we know affect college access, particularly for traditionally underserved students. This paper is influenced, conceptually, by several related sets of frameworks for understanding the college access to success trajectory. First, Perna, Rowan-Kenyon, Bell, Thomas, and Li's (2008) theoretical model of student college enrollment (Figure 1) suggests that multiple layers of influence are brought to bear in the decision-making process: students and their families; K-12 schools; higher education institutions; and the broader societal, economic, and policy context. Specifically, this model, building from St. John (2003), emphasizes that the quality and quantity of available resources and the information provided with respect to those resources influence how each layer in this model mediates or moderates the choice process. For example, financial aid available through institution, state, and federal sources bound the overall choices applicants have to consider when they are making decisions about college application and enrollment decisions (e.g., Heller, 1999; Kane, 2003; van der Klauuw, 2002). Additionally, aid influences application and enrollment decisions to the extent that students have access to and understanding of clear and useful information about what the relative impacts are of related choices (e.g., availability of types of merit and/or need-based aid; selection of loans versus grants; the broader implications of community college versus 4-year attendance; Dynarski, 2000; Heller, 1999; Kane, 2003). Said

differently, the model reflects that "state and federal policies may directly impact access to information through programs aimed at reducing college knowledge barriers" (Bell, Rowan-Kenyon, & Perna, 2009, p. 668), further substantiating previous work examining the role of state policies on college enrollment decisions (Perna & Titus, 2004). As such, this framework clarifies important complexities that inherently underlie the understanding of percent plans (most prominently in Texas but also with implications in other states where these admissions plans currently exist).

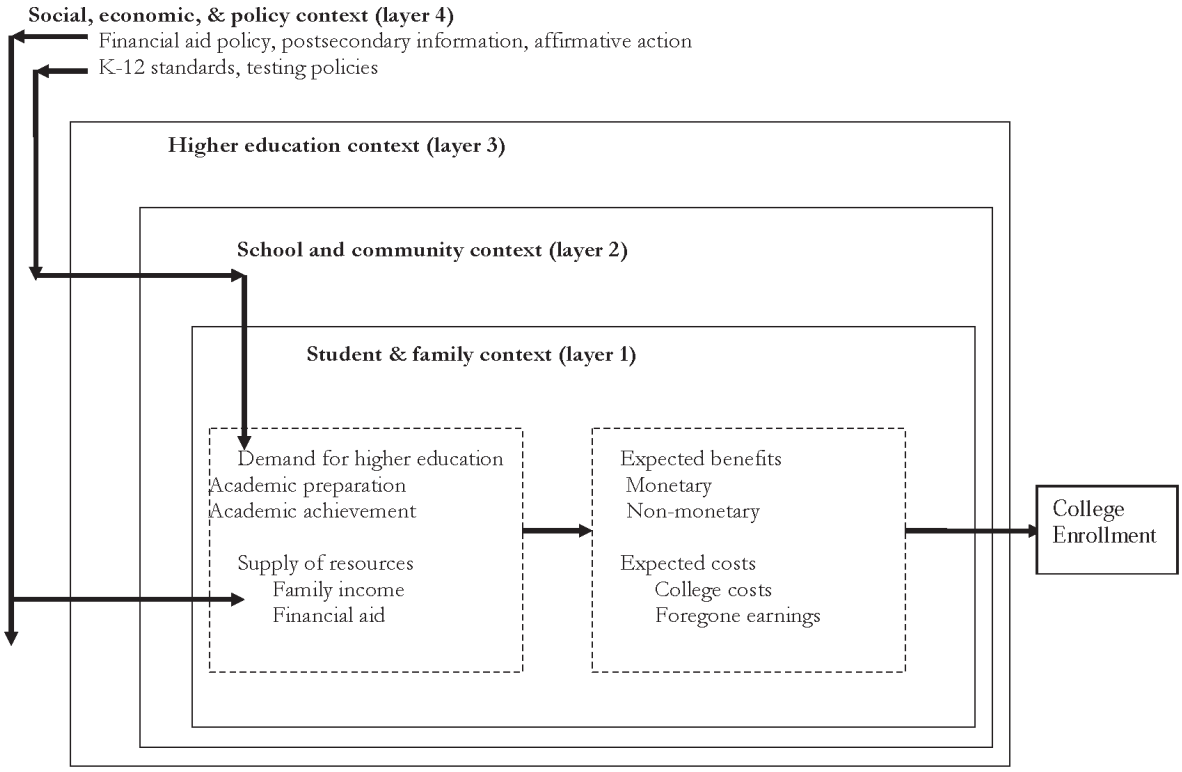

Figure 1 Conceptual model of the influences on student access and enrollment. From "Typology of Federal, State, and Local Public Policies Designed to Promote College Access" by L. W. Perna, H. T. Rowan-Kenyon, A. Bell, S. L. Thomas, and C. Li, 2008, Journal of Higher Education, 79, p. 248. Copyright 2008 by The Ohio State University. Reprinted with permission.

Additionally, work on college access outcomes from economics has contributed to a conceptual frame for understanding college access. Using a variety of datasets both within and outside of traditional education data systems, such work has provided additional detail on family characteristics, wealth in addition to income, as well as operationalization of access to information networks. Research leading to the turn of the century began to emphasize the role of family characteristics and academic achievement in addition to the role of aid on the college enrollment (Figure 2; e.g., Ellwood & Kane, 2000; Heller, 1997; McPherson & Schapiro, 1991, 1998). After 2000, however, the notion of information networks in the college access equation became more prominent, and the use of novel data sources to quantify this phenomenon aided in further understanding this process. Of particular relevance was the acknowledgment of information forces about college opportunity in regard to applications, state policies, outreach, and so on (Avery & Kane, 2004; Dynarski, 2004; B. T. Long & Riley, 2007; M. C. Long & Tienda, 2008; Pallais & Turner, 2006, 2007). Figure 3 attends to these factors in a more comprehensive way.

Initiated in Texas and varied in their guarantees, such policies, colloquially referred to as *percent plans*, offer an alternative race-neutral path to college admissions in Texas, California, and Florida (Horn, 2012; Horn & Flores, 2003). The percent plans currently being implemented in Texas, California, and Florida share some overlap, but are largely divergent in guarantees and processes (see Table 1). Each state's plan and guarantees are discussed briefly, in turn below.

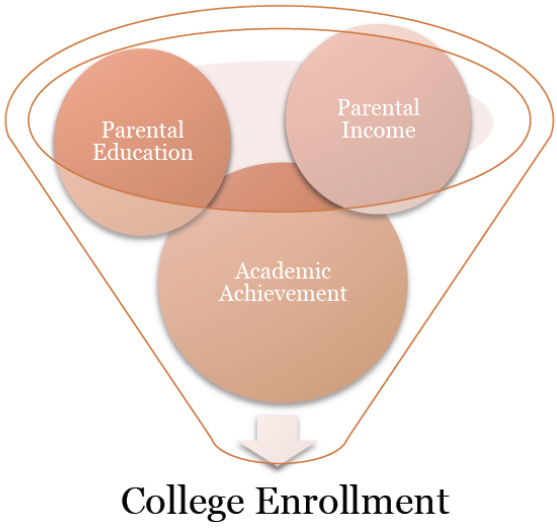

Figure 2 Model of college enrollment: Influence of family characteristics and academic achievement.

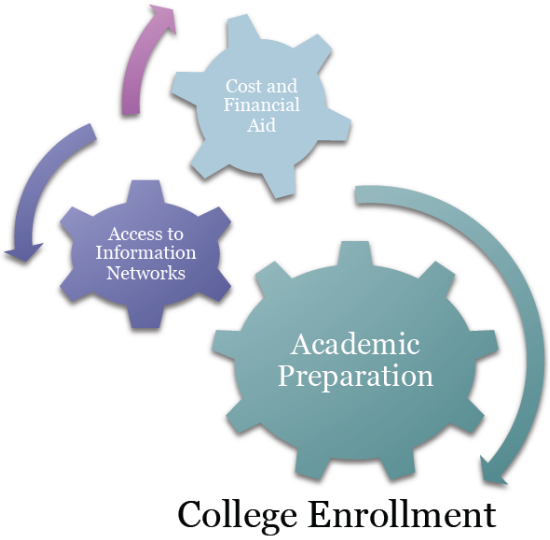

Figure 3 Model of college enrollment: Influence of information networks in addition to aid and academic preparation.

What Are the Percent Plans and How Does Demography Play a Role in Understanding Their Effectiveness?

In Texas, eligible students must graduate in the top 10% of their high school class,[1] a classification made at the end of the junior year or beginning of senior year in high school (College for All Texans, 2012; Horn, 2012). Over time, revisions to the law resulted in the requirement that students graduate with a recommended or advanced high school program of study (or the portion of program available to them; Texas Education Code [TEC], 2009, 51.803–51.809). The Texas percent plan policy does not explicitly discuss the use of race-conscious scholarships and outreach, but multiple universities as well as the Higher Education Coordinating Board maintain either individual or community-based grant opportunities for percent plan students with demonstrated financial need.

The University of California's (UC) Eligibility in Local Context (ELC) plan provides guaranteed admission to a UC system institution for students graduating in the top 9% of their respective high school classes (Horn, 2012; Horn & Flores, 2003). While students identify campus preferences, ELC does not provide guarantee that the student will be granted that preference, unlike Texas. Eligible students must have completed 11 UC-approved *a-g* courses[2] prior to the senior year and a UC-calculated GPA that meets or exceeds the threshold set by the university system for that high school (Horn & Flores, 2003). Similar to Texas, UC's policy does not discuss financial aid or outreach requirements, and to date, no scholarships have been directly associated with ELC.

Table 1 Percent Plan Guarantees in Texas, California, and Florida

Question	Texas	California (original)	California (revised)[b]	Florida
Who gains admission?	Top 10%: public and private	Top 4%: comprehensive public and private	Top 9%: comprehensive public and private	Top 20%: public
To what does the policy grant admission?	Texas public university of student's choice [a]	A UC system university, but not necessarily of student's choice	A UC system university, but not necessarily of student's choice	A state university system campus, but not necessarily of student's choice
What are the coursework and other requirements?	Since 2004, recommended or advanced high school program or portion of program available to students	a-g system eligible coursework requirements	a-g system eligible coursework requirements	State-mandated coursework
Does the policy allow for or address race-conscious scholarships and outreach?	No; high–school-based scholarships and outreach	No; high–school-based scholarships and outreach	No; high–school-based scholarships and outreach	Yes, both allowed at time of implementation

Note. Sources: Horn & Flores (2003); Marin & Lee (2003); University of California Office of Strategic Communications (2009).

[a] In 2009, the Texas legislature modified the law to cap the guaranteed admissions to University of Texas at Austin to 75% of the entering class (i.e., TEC, 2009, §51.803). [b] In 2009, the UC Board of Regents modified the original Eligibility in Local Context (ELC) parameters (University of California Office of Strategic Communications, 2009).

Florida's Talented 20 program provides guaranteed admission to one of the state university system campuses for students graduating in the top 20% of their high school classes after the 7th semester of high school (Horn, 2012; Horn & Flores, 2003). Students must complete a designated set of 18 courses (Florida Department of Education, 2005). While aid is not directly attached to the Talented 20 program, priority for financial aid is given to those students in awarding the Florida Student Assistance Grant (Florida Department of Education, 2005). Unique to the Talented 20 program, the original design maintained opportunities to undertake race-conscious outreach efforts (despite the plan's connection

to the state's One Florida initiative which prohibits such efforts in the admissions process; Marin & Lee, 2003).

In summary, then, while packaged in similar rhetoric of transparent eligibility, the three plans offer substantially different opportunities to access public higher education in their respective states. On one extreme, Texas offers the least restrictive set of guidelines, whereas California, on the other, offers much more reserved benefits for eligible students. Additionally, the percent plans also operate within a complex landscape of other state policies related to higher education often tied to legislative priorities and available funding for public higher education. Among the percent-plan states in this analysis, Florida, for example, has invested heavily in merit aid scholarship approaches prioritizing grades and test scores for award receipt (Heller & Marin, 2004). Texas invested heavily in need-based financial aid in the early 2000s then instituted tuition deregulation that negatively affected some racial groups over others (Flores & Shepherd, 2014).

Demography and State Policy

In understanding the implementation and outcomes of percent plan policies, it is essential to acknowledge the connection between a state's demography and its policy. In this paper, we use Texas to illustrate this point. Between 2000 and 2010, the Hispanic population accounted for more than 50% of the total increase in the U.S. population (15.2 million out of 27.3 million). The Black population also grew faster than the total U.S. population (12% versus 9%; Ennis, Rios-Vargas, & Albert, 2011; Rastogi, Johnson, Hoeffel, & Drewery, 2011). And these demographics are reflected in the nation's changing postsecondary education population. By 2011, for example, Hispanics constituted the largest minority group at the nation's 4-year colleges and universities (Fry, 2011; Fry & Lopez, 2012).

During this same period, Texas had the greatest numeric population increase of all U.S. states (four million) as well as registering the second largest number of Hispanics (after California) and the third largest number of Blacks (after New York and Florida; Ennis et al., 2011; Mackun & Wilson, 2011; Rastogi et al., 2011). In fact, data from the Integrated Postsecondary Education Data System (IPEDS) in 2010 show that Texas had the nation's largest Black and Hispanic 4-year undergraduate populations (Flores & Park, 2013).

In connecting the potential enrollment success of an implemented percent plan with demography, then, one necessary condition would include a large youth age population both eligible to *and* enrolling in college. Figures 4 and 5 present, geographically, the tremendous growth of the eligible underrepresented student population in Texas over time. That demographic *success*, however, masks substantial gaps in expected rate of growth based on population size and more specifically where students are choosing to enroll in college. For example, despite an increase of more than 237,000 Hispanic college enrollees from 2000 to 2011, Texas remains well below the state higher education board's enrollment

goals, which were set with consideration of the fact that Hispanics are expected to become the largest racial/ethnic group in the state by 2015. Black student college enrollment has fared more positively, although a growing majority of this enrollment has occurred at the community college level (Flores & Park, 2013).

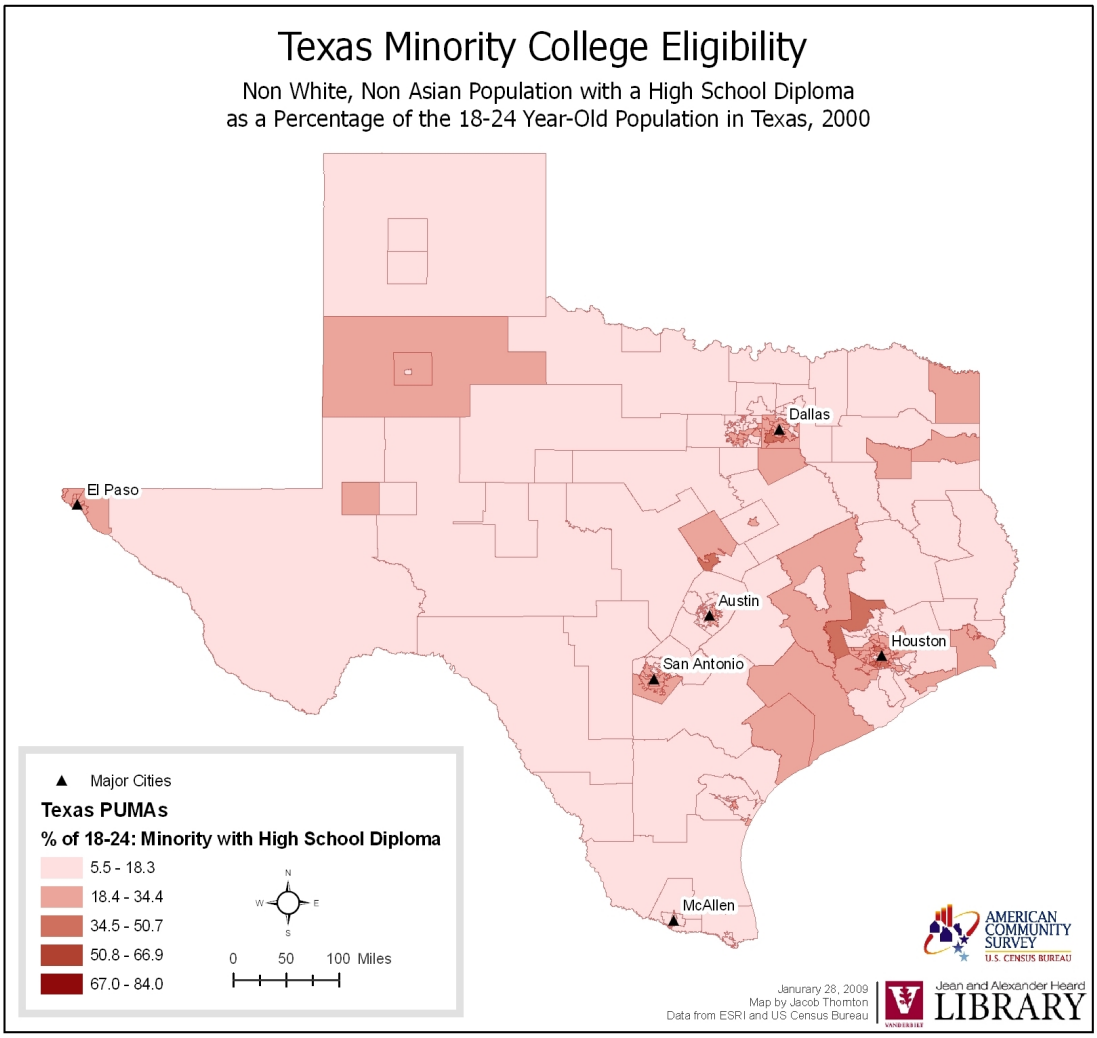

Figure 4. Texas minority college eligibility, 2000. Figure created by Jacob Thornton and Stella M. Flores. PUMA = public micro data area.

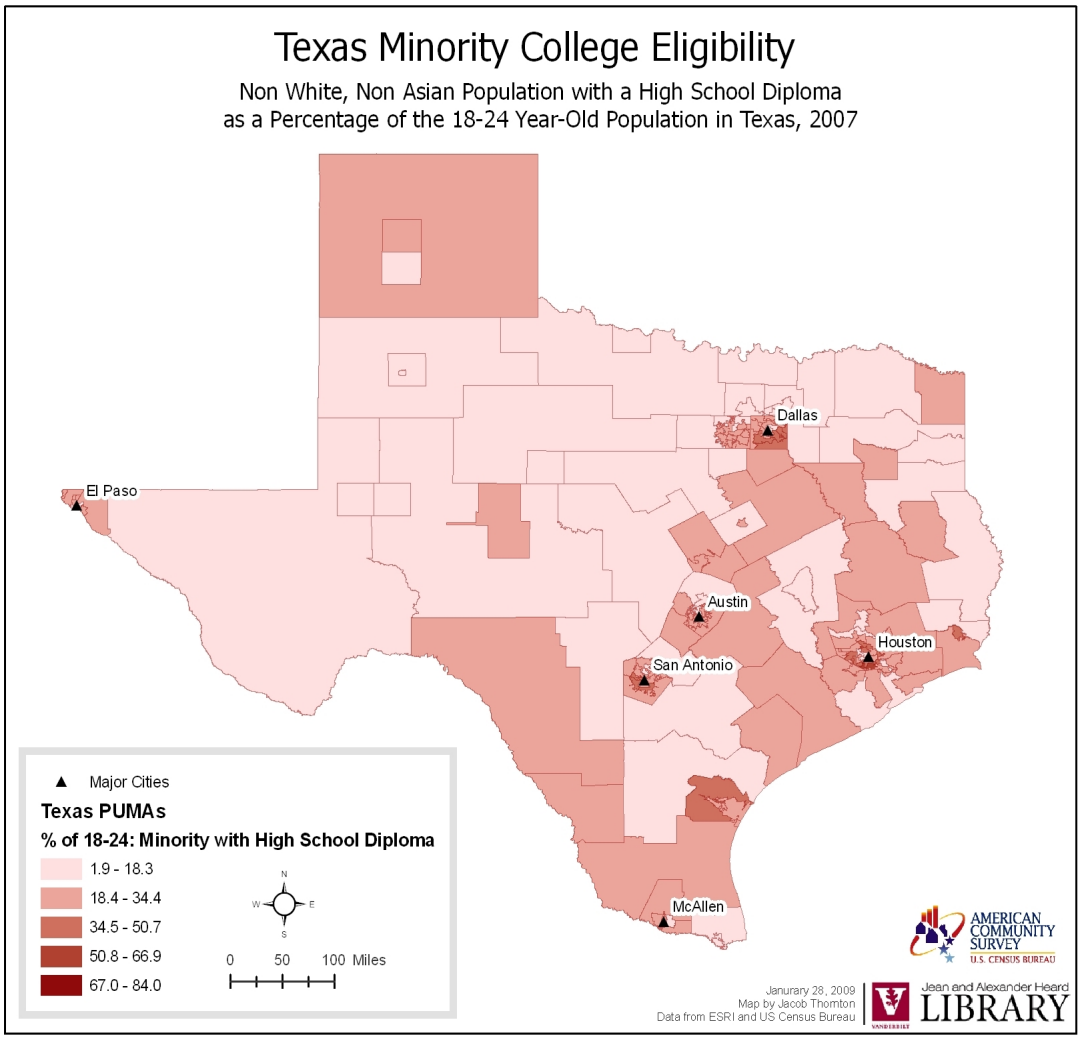

Figure 5 Texas Minority College Eligibility, 2010. Figure created by Jacob Thornton and Stella M. Flores. PUMA = public micro data area.

Further, an evaluation of student *eligibility* specifically for the percent plan in 2010, 12 years after its initial implementation, shows that the total number of TTPP-eligible students admitted to Texas colleges and universities was twice the number admitted in 1998 (26,600 versus 13,092), and the number of these students enrolled showed a similar increase (17,701versus 9,957; Horn & Flores, 2012). Yet, this increase in the percentage of students admitted under the plan was not reflected by similar-level increases in enrollment for different racial/ethnic groups at elite and nonelite public institutions in Texas. In particular, underrepresented students eligible for the Texas TTTP were less likely to be represented at elite institutions despite noteworthy increases in their eligibility for admissions under the percent plan. In 2010, for example, 60% of White TTTP students enrolled in elite public

institutions, compared to 69% of Asian American students, 44% of Hispanic students, and only 34% of Black students. In that same year, 36% of Black TTTP students enrolled in the nonselective 4-year sector of Texas higher education, compared to 29% of Hispanic students, 19% of White students, and only 5% of Asian American students (Horn & Flores, 2012).

In sum, percent plans vary both in their guarantees and in the ways in which demographic context nuances understanding of their effectiveness. Scholars have sought to consider both, and in the paper we now turn to what the literature has identified about percent plans, their strengths, and their limitations.

What Have We Learned From 15 Years of Research on Percent Plans and Other Race-Neutral Admissions Approaches?

In line with Justice Kennedy's request for institutions to document whether universities can achieve sufficient diversity without using racial classifications, in this section of the paper we present peer-reviewed research examining a set of related questions. Indeed, such questions have received some of the most rigorous analysis attention across multiple disciplines and methodologies of educational topics researched to date. While numerous scholars have contributed to the work on a range of diversity policies, we include the studies because of their influence in the literature as examinations of race-neutral alternatives from a policy analysis perspective. That is, the analyses consulted specifically were used to examine the impact of various configurations of affirmative action and its alternatives utilizing methodologies grounded in the theoretical frameworks that account for the various factors that affect these plans and their intended beneficiaries.

Broadly, three strands of research regarding the use of affirmative action in selective colleges and universities have surfaced in the public discourse and academic journals over the last decade and a half (Flores & Oseguera, 2013). The first wave of research examined relates to the effects of alternative admissions plans such as the state-specific race-neutral admissions programs known as the college percent plans. The second wave of research examines the role of these alternative measures as efficient substitutes to affirmative action. The third wave of research evaluates the effects of state bans on affirmative action by way of state legislation or voter referenda in college admissions, and more recently, the effects of such bans in neighboring states.

Are Percent Plans Effective?

The Texas TTPP is perhaps the most evaluated such plan in the literature to date. Much of research on the Texas plan and its effects on the state's most selective and moderately selective institutions has focused on whether the level of diversity achieved before affirmative action was retracted has rebounded; whether college admissions mirrored the

state's evolving demographics, which is a goal of state higher education leaders; and, to a lesser extent although still relevant, whether students admitted under a race-neutral regime were persisting and completing college at reasonable rates (Niu & Tienda, 2010).

M. C. Long and Tienda (2008) found that changes in college admissions decision structures from the percent plan prevented the type of rebound in diversity numbers experienced under a traditional affirmative action (i.e., race-conscious) admissions plan. Kain, O'Brien, and Jargowsky (2005) did find some restoration of diversity preban numbers, but they attribute this to the increasing percentage of the minority population over time and not to the effectiveness of the percent plan (Flores & Oseguera, 2013). More recently, Harris and Tienda (2012) confirmed the significance of accounting for the changing demographics in Texas, most notably the increasing percentage of Hispanic students. In particular, accounting for the changes in the size of high school graduation cohorts shows Hispanic students at a significant disadvantage in regard to enrollment outcomes compared to White students at the state's top two institutions. The authors provide additional clarity to the notion of perceived enrollment success by identifying the difference between increased enrollment outcomes on paper versus increased enrollment as it relates to the eligible population of interest that should theoretically be enrolling in college according to their rate of growth by age group. Specifically, Harris and Tienda (2012) found that Hispanic students experienced their lowest application and admissions rates during the years the percent plan was in effect, which resulted in their having a reduced presence at the state's flagship institutions compared to years when affirmative action was in place. These analyses are particularly important because descriptive reviews of admissions rates that do not account for demographic growth of groups such as Hispanic students, instead provides a portrait of increasing higher representation of this group than would otherwise be reported with appropriate statistical procedures. Said differently, ignoring the dramatic changes in the high school graduate population gives the appearance of substantially restoring access for students of color to levels before the percent plan, when, in reality, for a much larger population and share of students of color, it has actually declined.

While statewide analyses of the effects of the percent plan have yielded negative results on the use of this admissions alternative as a replacement for affirmative action, analysis of one district in Texas employing a regression discontinuity design found some limited influence of the percent plan on college enrollment into flagship institutions in Texas for both White and minority (defined in the study as Asian, Black, and Hispanic) students. The results are tempered by the fact, though, that the study only considered one large urban district and found the strongest impacts only for students who attended high college-sending high schools (Daughtery, Martorell, & McFarlin, 2012). That is, any effect of the percent plan on flagship enrollment is concentrated in high schools that already send high percentages of students to college. In contrast, data from this large district show that the percent plan does not have an effect for students who attend the most disadvantaged high schools. In a state where underrepresented minorities are concentrated in low-achieving segregated schools

(M. C. Long & Tienda, 2008; Niu & Tienda, 2010), other state and national studies including similar schools (e.g., Adelman, 2006; M.C. Long, Iatarola, & Conger, 2009) identify a low probability that they will adequately prepare students equally for 4-year institutions.

Interestingly, the analytic attention given to the Texas TTPP has not been seen in other states due primarily to issues of data availability stemming from coordination of statewide data systems and linking of the K-12 sector to that of the postsecondary sector. Much of the work on California, for example, has focused on the effects of state bans on affirmative action, primarily Proposition 209 (Grodsky & Kurlaender, 2010). In Florida, the work remains largely in the form of descriptive statistics, preventing a clearer understanding of the performance of the Talented 20 program.

Are Alternative Admissions Plans Efficient?

Building on work in the areas of taste-based discrimination (Becker, 1971), statistical discrimination (Arrow, 1973; Phelps, 1972), and the effects of affirmative action in the labor market (Coate & Loury, 1993; Lundberg, 1991), Chan and Eyster (2003) examined whether a ban on traditional affirmative action practices at a highly selective public institution in California equalized the applicant pool by failing to give minority students the advantage of admitting them with lower test scores. Using administrative data within a framework of efficiency, the authors determined that adopting an admissions rule that ignores standardized test scores and other measures of academic ability, traditionally identified by admissions officers for all applicants, is inefficient, because doing so does not select the best candidates from any ethnic group (Flores & Oseguera, 2013). Said differently, admissions rules that partially ignore qualifications yield less qualified candidates than an affirmative action rule that yields similar diversity but more qualified candidates.

Using data from the 1989 College and Beyond dataset, Fryer and colleagues (Fryer, Loury, & Yuret, 2008) provided another experiment on what they call the limits of race-neutral approaches (Flores & Oseguera, 2013). Student outcomes were analyzed under three regimes: a color-conscious approach (authors use *color-sighted*) that uses traditional affirmative action practices; a color-blind approach equivalent to a race-neutral approach that incorporates proxies for race and ignores other measures of academic ability; and a laissez-faire approach that essentially does not incorporate affirmative action practices but operates more like a cutoff score, whereby applicants who meet a particular standard are admitted, and those who do not are not admitted. Similar to the work of Chan and Eyster (2003), Fryer et al. (2008) found that employing color-blind rather than color-sighted affirmative action resulted in a loss of efficiency, from less than 1 percentage point to just over 6 percentage points, depending on the college (e.g., differences in the size and location of elite institutions). In sum, the work of Fryer et al. (2008) suggests that firms (or organizations) constrained by a color-blind system (i.e., race neutral), yet still concerned with diversity, will employ rules that ultimately flatten the function that relates to a

worker's (i.e., student's) level of qualification. Some less qualified candidates will have a greater chance of being accepted and some more qualified candidates will face a lower chance of acceptance. The authors caution that such a practice may reduce a worker's (i.e., student) incentive of preparatory effort because of the loss of the benefit of this investment.

Do Purposeful Bans on Affirmative Action Reduce Student Participation of Underrepresented Minorities?

Employing a four-stage college choice strategy utilizing data from the National Longitudinal Study of the High School Class of 1972, Arcidiacono (2005) presented one of the first analyses to estimate structurally an individual's decision on where to submit an application by modeling expectations on admittance, financial aid, and future earnings. The paper specifically evaluated the effect on Black students of eliminating race-conscious advantages in the admissions and financial aid processes, including future earnings. Arcidiacono's four-stage model includes (a) students' choice of where to submit applications; (b) schools' decisions on admissions and financial aid; (c) students' choice of where, or whether, to attend a school, based on the amount of financial aid offered and alternative options, which include opting out of college altogether and entering the labor market instead; and (d) students' decision to enter the labor market. Arcidiacono provided simulations using data from a time well before states banned affirmative action, and therefore these simulations should be understood in this context. For example, the data Arcidiacono used looked at college entry in 1974, just a few years before the landmark Bakke decision, which clarified admissions practices in terms of race (*Regents of the University of California v. Bakke*, 1978). Admittedly, the cohorts of Black students applying to college in that earlier era were considerably smaller than current estimates of numbers of Black high school graduates, which reached a record number in 2009, according to the 2010 U.S. Census (Fry, 2011). Nevertheless, Arcidiacono found that removing affirmative action programs would have the greatest effect on the percentage of Black students attending top-tier schools. In some cases, the percentage of Black males attending colleges with an average SAT score above 1200 fell by over 40%. He found a more modest effect on the general distribution of total Black student enrollment; however, removing financial aid benefits related to race reduced the percentage of Black students who enrolled in any college as well.

Similar results can be found in an examination of the effect of the most recent bans of affirmative action on college admissions. The following analyses were used to examine these new political phenomena, which are increasing in number, on a national scale. Using a difference-in-difference strategy with Current Population Survey (CPS) and American Community Survey (ACS) data from 1995 to 2003, Hinrichs (2012) examined how state bans on affirmative action in California, Florida, Texas, and Washington affected college enrollment, educational attainment, and the demographic composition of universities. While there are numerous limitations with these data sources in that it is impossible to account for precollege academic characteristics or the various stages of the choice process

noted in other studies, there remains great value in the level of state representation in the CPS data and in the size of the ACS sample. First, Hinrichs found that while there was no effect from the bans on the typical student or typical college, the bans did reduce the enrollment of underrepresented minorities and increase White enrollment at selective colleges. Furthermore, in California in particular, there was a notable shift in where underrepresented minority students were attending college, from more selective to less selective campuses, confirming Arcidiacono's (2005) findings as well as predictions of a cascading effect found in various higher education news accounts (Selingo, 1999). Second, and of most relevance to this review, is the finding that such bans caused a significant drop in underrepresented student populations at the nation's most selective colleges and universities. Such a finding should not be surprising because affirmative action policies in college admissions are most relevant in highly selective colleges and universities.

To measure the effects of bans via an institutional effect approach, Backes (2012) employed data from the IPEDS. The author contributed to this wave of research on state bans despite having used aggregate level data by attempting to account for state-level policies likely to affect college admissions such as a high-stakes accountability system, a high school exit exam, and the presence of a percent plan. Backes found that fewer Black and Latino students enrolled at the most selective institutions as a result of the state bans. In short, the effects of affirmative action, as noted in previous studies, were limited to the nation's most selective colleges and universities. Also relevant to this review is the author's finding regarding enrollment shifts at private universities as a result of the state bans on affirmative action in college admissions. The study did not find an increase in minority student enrollment at private institutions in states with bans. In sum, a shift in the higher education landscape for traditionally underrepresented student enrollment in states with bans seems to be toward lower tier rather than higher ranked institutions.

Utilizing another national data source although with longitudinal student level data, the National Educational Longitudinal Study of 1992, Howell (2010) provided simulation analyses that indicated that a nationwide ban on affirmative action would decrease minority enrollment nationally by 2% across all levels of selectivity in U.S. colleges and universities. When accounting for selectivity, however, the effect changes substantially. That is, implementing race-neutral admissions across the nation would decrease minority enrollment at selective 4-year colleges by 10.2%. The effect is also not likely to be mitigated even by offers of financial incentives. Howell left some hope open in restoring some level of diversity through heavy recruitment of minority students but did not provide evidence on effective practices as this was not the intent of the study. Blume and Long (2014) provided similar results in a recent similar national analysis using a more updated national dataset (although with implications that go beyond the banned affirmative action states of interest). The authors, unsurprisingly, found substantial declines in levels of affirmative action practiced in highly selective colleges in ban states. However, new to this area of literature is their finding that the decline in use of affirmative action in such states also negatively

affected students who live in adjacent states that lack highly selective colleges (e.g., Nevada, Arizona, and Idaho).

Empirically Guided Recommendations for Considering Percent Plan Implementation

Justice Kennedy's majority decision in the *Fisher* case upheld the compelling benefits of diversity but also emphasized the obligation of universities to meet rigorously the expectations of narrow tailoring, specifically that institutions have an obligation to document "whether a university could achieve sufficient diversity without using racial classifications" (*Fisher v. University of Texas at Austin*, p. 10). Specifically, universities were admonished by the Court in the Court's rigorous expectation of universities having a narrowly tailored policy. Should institutional and state decision makers consider the ways in which alternative admissions plans to affirmative action, such as percent plans, might be incorporated into their higher education systems, we provide a set of empirically guided recommendations comprised from over a decade of rigorous social science research.

Understand and Forecast Your State and Institutional Context

First, it is essential to acknowledge the demographic, economic, political, and broader context in which the discussion of race-conscious admissions is occurring and carefully consider the implications of that context on potential success of an admissions plan. Further, such information may prove useful in creating essential, targeted related outreach, recruitment, and scholarship efforts. Finally, careful attention to context reflects the dynamic rather than static nature of the nation's college-age student population, and reinforces a commitment to regularly review our outreach and recruitment efforts in particular. For example, this dynamic context is occurring across a number of states due to factors such as immigration, a surge in minority births, and the combination of more deaths and fewer births from the White population (Frey, 2013). Five jurisdictions now have majority-minority populations (California, Hawaii, New Mexico, Texas, and Washington, D.C.) and 14 have majority-minority child populations under the age of 5 (Arizona, California, Delaware, Florida, Georgia, Hawaii, Maryland, Mississippi, New Jersey, New Mexico, New York, Nevada, Texas, and Washington, D.C.). In addition, four jurisdictions contain over half of all foreign-born residents and 14 others exceed the national average share of the foreign born in the United States. State and institutional leaders would be wise to consider the forthcoming shifts in the K-16 population, the electorate, and other socio-political dimensions of their governing context. In summary, there are very different racial and ethnic compositions both between and within states that shape the possible kinds of diversity colleges can achieve and with whom they must be prepared to support effectively.

Carefully Consider the Effects of Race-Neutral Policies in Admissions

The term *race-neutral* may be reflected in a broad array of admissions practices, which may need to be understood more precisely by institutions in regard to their effects, in assessing their admissions strategies moving forward. Local practices such as holistic review or test-based admissions, motivated by a variety of influences including state bans as described earlier, need to continue to be carefully understood by institutional leaders. Multidisciplinary research across various state contexts, and the nation as a whole, to date has found that these alternative admissions plans do not reach or sufficiently restore the level of race and ethnic diversity present before the retraction of affirmative action. And knowing the outcomes of such decisions is a first step in understanding how to move into the future with other programming and policy decisions.

Broaden and Leverage the Concept of K-16 Partnerships, Especially in Recruitment

Increasingly, states are turning toward legislated policies that seek to create a seamless flow for students from primary to secondary to tertiary education and a connectedness to the curricular experiences across grades and educational levels. Such a policy framework marks an important shift conceptually, from traditional models construing each of these educational levels as separate propositions and thus contributing to the continued stratification of educational opportunities and outcomes, through the perpetuation of multiple and often competing levers of power and knowledge (e.g., Antonio, Venezia, & Kirst, 2004; Kirst & Venezia, 2004). In specifically enhancing admissions efforts, then, such partnerships may enhance outreach as well as longer term academic signaling. That is, the reform toward a seamless transition to higher education may induce students not likely to consider college; this possibility may translate into decisions by students to take more college-ready coursework to prepare them for the transition into the next sector of higher education. Such efforts have been documented already in regard to changes in curriculum choice in Texas (Domina, 2007) although the follow-through into college application behavior has had less success (Horn & Flores, 2012).

Thoughtfully Provide and Allocate Resources Across Multiple Tiers of Support Associated With Admission

Institutions need to allocate resources to recruitment and retention carefully and connect them to the broader literature on what influences college choice. In particular, the empirical research suggests that substantial institution-driven resource allocation needs to be made with regard to enhancing student applications to the most rigorous institutions. Various research studies have documented the benefit of attending a more selective institution as it relates to college completion outcomes. Access-driven policies, however well intentioned, without supports to apply or to persist in college are an incomplete formula for success in

particular in institutions with fewer resources and capacity to support students, as compared to their better-resourced and more selective institutions.

Create Stakeholders for Access Teams Within a State

Finally, it is important to recognize the strain this kind of effort puts on already limited university resources. Universities might seek to leverage current and ongoing efforts, particularly with regard to data collection at the state and national level, as well as to consider the formation of multistakeholder partnerships to take on these tasks. Organizations such as Marta Tienda's Texas Higher Education Opportunity Project at Princeton University and others serve as strong examples of the ways in which scholars, state officials, private foundations, and university leaders can work together to produce rigorous assessment useful in improving institutional decision making. In regard to data collection, the State Higher Education Executive Officers have provided a series of reports detailing the capacity of state data systems across the K-20 sectors including workforce commissions. Understanding how to capitalize on a state's data capacity to create stronger K-13 and higher education policy through such innovative data systems could lead to stronger and more creative policy development within a state and institution environment.

Conclusion

Analyses of data over the last 12 years suggest two stories related to percent plans effectiveness, at least in Texas. First, the soaring numbers of the non-White population, particularly Latinos, among college-eligible students may be leading to inaccurate praise of not only the percent plan but other related state college enrollment policies as well. More accurate assessments of percent plan effectiveness that account for these demographic realities indicate that Latinos are less likely to go to college despite their heavily increasing share of the high school graduate population (Flores & Park, 2013). The second story of the percent plan in Texas is where eligible students choose to go to college. As noted, the data suggest that underrepresented students who are percent–plan-eligible are more likely to enroll in a nonselective flagship institution, a choice likely influenced by concentrated disadvantage both economically and in the high schools attended (Harris & Tienda, 2012; Horn & Flores, 2012). That is, an admissions guarantee does not guarantee enrollment, and various data sources have pointed to this phenomenon to date.

In moving forward, then, what this body of research on the percent plans requires one to consider is the balance in the relationship between the student and that student's personal context, the institution, and the policies that create opportunity. One of the fundamental issues policy makers and university leaders alike have to address is the underlying purpose(s) of admissions and how to assess whether those purposes are being met through the strategies being used. While those in the middle of percent-plan implementation and those watching in the wings consider next steps, the paper ends with four simple questions

to start the process. First, how can or will the implemented policy contribute to better and more meaningful connections between the primary, secondary, and postsecondary sectors? Second, in what ways does or can the policy address the broader factors that influence substantially access to college? Third, to what extent is a university or system willing to trade autonomy for transparency in college admissions and to what end? Finally, how are (or will be) outcomes of such policies defined, measured, and evaluated, and in what disaggregated contexts?

These simple examples, nestled in the broader empirical literature described, underscore the importance, then, of having a clear and shared policy and implementation understanding of disaggregation, where fine-grained income status and geography more complexly understood, also proved important qualifiers to understanding policy success. Part of what will allow for this serious work to be done is to build, maintain, and put to use seamless data systems that connect at the individual-level preschool through college experiences and outcomes and include adequate flags that let policy makers and educators carefully track the progress of all students through the full educational pipeline (Hoffman, Vargas, Venezia, & Miller, 2007). As the higher education community contemplates percent plans as possible mediators of the equity crisis, then, there is much to be learned from the case studies available in the United States, and much work left to be done to cultivate their success.

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Notes

[1] The 2009 revisions to the original Texas HB 588 legislation (i.e., TEC, 2009, §51.803) set a by-campus cap of 75% on the required proportion of entering students composed of percent-plan beneficiaries. The practical result has been a shift in the required rank to gain admission to the University of Texas at Austin. For example, students applying to University of Texas had to be in the top 7% of their high school classes

[2] The a-g courses are UC- and California State University (CSU)-approved courses that students are required to complete in high school in order to be eligible for admission consideration. Each course is assigned a letter from a though g. See http://collegetools.berkeley.edu/resources.php?cat_id=22#resource