
The End of Affirmative Action in Washington State and Its Impact on the Transition from High School to College

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Changes in affirmative action policies in some states create possibilities for “natural experiments” to observe the effect of public policy on racial and ethnic inequality in American society. This study measured the impact of Initiative 200, a ballot measure that eliminated affirmative action in Washington State, on the transition from high school to college. As of 1999, the year after I-200 passed, the proportion of minority high school seniors who went to college in Washington State decreased temporarily. The impact of I-200 was registered almost entirely at the University of Washington, the flagship public institution in the state. This decrease, however, stemmed less from changes in minority admission rates than from declines in application rates. Affirmative action programs may provide a signal of an institutional “welcoming environment” that serves as a counterweight to the normal reluctance of prospective students to apply to institutions that may be perceived as intimidating. Although the impact of I-200 was short-lived, significant racial and ethnic differences remain in the transition from high school to college.

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Following the civil rights movement of the 1950s and 1960s, the United States began to dismantle the apartheid structure of racial segregation and inequality that had haunted American society since the end of slavery. During the second half of the 19th century and the first half of the 20th century, African Americans and other minority groups experienced separate and unequal opportunities in employment, voting, housing, and education. Discrimination was woven into the fabric of American society and openly practiced by individuals; firms; social groups; schools and colleges; and governmental

agencies at the federal, state, and local levels. The end of official discrimination in the 1960s did not create a fully equal opportunity society, however. Overt forms of discrimination have decreased, but have sometimes been replaced by more subtle actions, which have discriminatory consequences, if not intentions.

Moreover, the historical legacy of discrimination can continue to affect racial and ethnic inequality, even in the absence of contemporary discrimination, because minorities generally begin life in poorer circumstances and have fewer resources for social mobility. The

dilemma was expressed in 1965 by President Lyndon Johnson: "You do not take a man who, for years, has been hobbled by chains and liberate him, bring him up to the starting line in a race and then say, 'You are free to compete with all the others,' and still believe that you have been completely fair" (quoted in Bowen and Bok 1998:6).

A bold response to this dilemma was the introduction of affirmative action policies, which sought to increase educational and employment opportunities for minority groups who had historically experienced discrimination. The origins, effectiveness, and unintended consequences of affirmative action policies have been among the most contested issues in American politics and social science research (Skrentny 2001). Without evidence from the counterfactual of minority socioeconomic progress in the absence of affirmative action policies, the debates over the presumed effects and merits of affirmative action have often generated more heat than light.

In this article, we take the opportunity provided by a change in public policy, namely, the end of affirmative action in Washington State, as a "natural experiment" to assess the impact of affirmative action on minority students' transition from high school to college. On November 3, 1998, voters in Washington State ended affirmative action by passing a statewide measure, Initiative 200 (I-200), by a margin of 58 percent to 42 percent. The initiative was worded: "Shall government be prohibited from discriminating or granting preferential treatment based on race, sex, color, ethnicity or national origin in public employment, education, and contracting?"

The presumption of the sponsors and supporters of I-200 was that affirmative action policies allowed less qualified minority students to enter universities at the expense of majority students. The opponents of I-200 feared that without affirmative action, the educational progress of minority students would be slowed (for more background on the politics and aftermath of I-200, see Fryer 2002). The assumption that I-200 would have an automatic impact was reinforced with widespread press reports of a decrease in African American, Latino, and American

Indian freshmen at the University of Washington (UW) in 1999, following the passage of I-200 (Davila and Mayo 2002).

The decrease in minority enrollments in Washington State is not an isolated case. In California, minority applications and enrollments dropped dramatically at many campuses of the University of California system following rulings by the university's Board of Regents and a proposition passed by state voters to eliminate race-conscious admissions decisions (Lomibao, Barreto, and Pachon 2004; University of California 2003). The declines were the steepest at the flagship campuses of Berkeley and Los Angeles, which have also been among the slowest to recover. Following the 1996 *Hopwood v. Texas* case and the decision of the state of Texas to ban affirmative action in college admissions, enrollments of African American and Hispanic freshman declined at the University of Texas at Austin (Tienda and Niu 2004). There has been a partial recovery in minority enrollments in Texas with the implementation of a plan guaranteeing admission to the top 10 percent of graduating high school classes (Horn and Flores 2003). Similar declines in minority enrollments have been reported in Florida (Marin and Lee 2003), Georgia (Gose and Schmidt 2001), and Michigan (Dobbs 2004; Winter 2004) as affirmative action programs have come under challenge and have been modified or eliminated.

The number and composition of college freshmen from year to year are shaped, however, by demographic and economic forces as well as by public policy. The number of new students who enter colleges and universities depends on the supply of students (the number and composition of potential applicants), as well as institutional decisions about whom to admit and students' acceptances of offers of admission. The appropriate index to evaluate the impact of I-200 (or other policies) on college attendance is the "transition rate," or the percentage of in-state high school seniors who enroll in Washington State colleges and universities. The first objective of our analysis is to estimate transition rates by race and ethnicity and to compare the 1999 rates after the passage of I-200 with rates for earlier and later years. We also examine transition rates

for different types of four-year colleges in the state.

The transition from high school to college is a sequential process of decision making, in which admission to a university is a critical step, but only one stage in the process. Students (with advice and encouragement from others) take the first step by applying to colleges and then make the final decision by deciding whether and where to enroll, assuming that they have been admitted to one or more colleges. Through a detailed analysis of administrative records from UW, we discovered that the decline in minority students in 1999 was partially affected by changes in ethnic-specific admission rates, but primarily the result of declines in college applications from prospective minority students.

The decline in applications from minority students included many students who were almost certain to have been admitted on universalistic standards of grades and test scores. We interpret these findings as suggestive of an unexpected impact of affirmative action policies, namely, as a symbolic beacon of a welcoming environment. Minority students from modest backgrounds may be reluctant to apply to the most competitive and demanding colleges and universities, as may many majority students. Universities' affirmative action policies are often accompanied by outreach efforts that provide information, personal contacts, and encouragement for minority students to apply. Even without a formal policy of affirmative action, these outreach effects may have spurred the rebound in minority application rates to UW in recent years.

AFFIRMATIVE ACTION AS A POLICY RESPONSE

For the past three decades, affirmative action programs have been a bulwark of governmental efforts to redress racial, ethnic, and gender inequality in the United States (Bowen and Bok 1998; Holzer and Neumark 2000; Reskin 1998). Nonetheless, the effects of affirmative action efforts remain uncertain

and controversial. The problem of assessing the effects of affirmative action arises not only because programs are so varied, but because it is difficult to measure discrimination—the phenomenon that affirmative action is designed to prevent or remedy. A few decades ago, racial and gender discrimination was openly practiced (even in newspapers' want ads) and often reinforced by state laws. In such circumstances, it was reasonable to assume that almost all intergroup inequality was caused by discrimination, either directly or indirectly. Thus, the impact of efforts to combat discrimination would be evident in any observable changes in segregation and inequality.

At present, overt or formal discrimination has diminished, although informal practices and everyday expressions of prejudice have proved remarkably resistant to change (Lelyveld 2001). Discrimination that is subtle and hidden (and perhaps even unconscious by the actor) is much more difficult to detect, and its consequences are much more uncertain. Over the past 40 years, social science researchers have expended considerable effort and ingenuity trying to measure the changes in the relative role of discrimination as a cause of racial and ethnic gaps in education, occupations, income, and access to suburban residence. The standard method of estimation is to assume that discrimination is reflected in the net racial or ethnic difference that remains after multivariate statistical models are used to adjust for all measurable social background characteristics that are unrelated to discrimination (Duncan 1969, Featherman and Hauser 1978).

This approach is limited, however, because racial and ethnic inequality is affected not only by contemporary discrimination, but by the legacy of historical patterns of discrimination that have produced unequal resources (e.g., family background characteristics) between groups. The complex and often elusive relationships between historical patterns of discrimination and contemporary intergroup inequality have influenced the origins of affirmative-action programs and have led to the political vulnerability of these programs.

In addition to the removal of discriminato-

ry barriers that are sanctioned by law or custom, affirmative action programs can be arrayed along a continuum from “opportunity enhancement” to mandating outcomes, such as proportional representation (Bobo and Kluegel 1993). The most basic type of affirmative action consists simply of efforts to ensure that minorities and women are included in the pool of eligible candidates through outreach programs and a reliance on formal means of recruitment, rather than on informal networks. The second type of affirmative action program is one that gives qualified minority candidates extra (but not exclusive) consideration. For example, if several qualified candidates were being considered for a position (or admission), affirmative action would give priority to a minority or woman candidate, much as geographic diversity or an alumnus parent may give an advantage to others in a college admission decision. The third type of affirmative action program, and the one that creates the most political controversy, is a program that admits or recruits minorities or women for targeted slots or positions without consideration of other candidates.

In the famous *Bakke* case (*Regents of the University of California v. Bakke*), the Supreme Court justices split over the question of whether racial quotas could be used to make up for past racism. The deciding vote was cast by Justice Lewis Powell, who argued against racial quotas, but suggested that admissions officers in universities could “take race into account” as one of several factors in evaluating minority candidates (Bowen and Bok 1998:8). This significant distinction has allowed colleges to maintain affirmative action programs as long as they disavowed the use of quotas. This rather inchoate policy was continued with the mixed Supreme Court decisions in 2003 involving the University of Michigan. In one case, the court rejected, 6–3, the use of a system that provided extra points to minorities in undergraduate admissions decisions. But in *Grutter v. Bollinger*, the court voted 5–4 to allow race/ethnicity to continue to be considered as one of several criteria for admissions to law schools. Justice Sandra Day O’Connor, writing for the majority, said that affirmative action was still needed (Ogletree 2004:243).

At the national level, it is probably impossible to disentangle the impact of affirmative action programs from broader patterns that have expanded opportunities for minority students to enroll in colleges and universities. From the 1950s through the 1970s, the proportion of African Americans, native-born Hispanics, and American Indians with at least some college education doubled, but the racial and ethnic differences remained wide because white students were also making impressive educational gains (Mare 1995:173). Although most minority students were still handicapped by their disadvantaged social backgrounds, there was a brief window in the 1970s when African American high school graduates were slightly more likely to enter college than were whites with the same socioeconomic and geographic characteristics (Jaynes and Williams 1989:339). Although affirmative action programs may have played an important role in attracting minority students to highly selective institutions, many other factors, including improvements in minority household incomes, reduced discrimination, and rising ambitions were also important. The tenor of the times, during the 1960s and 1970s, was one of greater opportunities for able high school students, including those from disadvantaged backgrounds, to aspire to a college education.

For the next two decades, college-enrollment rates resembled a roller coaster. By the 1980s, the rates of college attendance and graduation were declining among all groups, especially disadvantaged minorities (Mare 1995). The most plausible reason seems to have been the decrease in financial aid grants and the reluctance of students from poor households to borrow money for college (Jaynes and Williams 1989:340–345). In the 1990s, college enrollments began to rise for all groups, including minority groups, although wide differences by race and ethnicity persisted. By the fall of 1998, 45 percent and 52 percent of 20–21-year-old white non-Hispanic men and women, respectively, were enrolled in college (Martinez and Curry 1999). The comparable figures were 33 percent and 37 percent for African American (non-Hispanic) men and women and 22 per-

cent and 25 percent for Hispanic men and women. Not all minorities are disadvantaged in terms of educational enrollment, however. The comparable percentages of Asian and Pacific Islander 20 and 21 year olds who were enrolled in college were 65 percent and 73 percent for men and women, respectively. In fact, native-born Asian Americans have had higher educational attainments than whites for many decades, even before World War II (Folger and Nam 1967; Hirschman and Wong 1986; Mare 1995).

Affirmative action programs have the potential to affect both the number of minority students who go on to college and these students' choice of college. These two issues have typically been conflated in research on affirmative action because the focus has generally been limited to one college or, at most, a few similar colleges. Changes in enrollment at other colleges have rarely been compared. In the study presented here, which investigated the impact of I-200, we examined changes in enrollment for the universe of four-year colleges and universities in Washington State.

If the impact of affirmative action is solely a result of colleges' admission decisions, only a small proportion of (potential) students are affected by these decisions. About 70 percent to 80 percent of colleges and universities in the United States are nonselective, that is, they admit almost all applicants who meet basic entrance requirements (Bowen and Bok 1998:15). Most of the attention and research on affirmative action has focused on the relatively few colleges and universities that have competitive admissions and are assumed to offer a superior education.

Graduates of selective colleges with higher tuition and average SAT scores have reported above-average earnings (Kane 1998; Solmon and Wachtel 1973) and high levels of job satisfaction and civic involvement (Bowen and Bok 1998) and are more likely to obtain advanced degrees than are graduates of other types of schools (Wegner and Sewell 1970). These associations, however, do not prove that attendance at selective colleges actually causes these outcomes. Recent research has suggested that the characteristics of students prior to their entry into selective colleges, such as socioeco-

nomnic background and motivations, may account for many of the positive effects that are usually attributed to attendance at selective colleges (Dale and Krueger 1999; Pascarella and Terrenzini 1991). Since the labor market probably values many of the same traits as do college admissions officers, the correlation between entry into competitive colleges and labor market success may be inflated.

Affirmative action programs may influence the college choice of minority students for several reasons beyond giving an edge in admissions decisions. Perhaps most important is financial aid because students from disadvantaged backgrounds may be reluctant or unable to assume debt. Also, these students may have different perceptions of academic programs and campus social life (Chapman 1984; Hanson and Litten 1982; Hossler, Schmit, and Vesper 1999; Manski and Wise 1983; McDonough 1997).

Assuming that students, especially minority students, are looking at potential colleges with the question of whether "students like themselves" are present, public policies that eliminate or modify affirmative action programs may be presumed to affect perceptions of the relative attractiveness of different colleges and universities. The prospect of fewer "in-group" classmates or a general sense that minorities are no longer welcome may change the perceived climate of campuses that have ended affirmative action policies (Gorov 1997). More broadly, changes in affirmative action policy could influence how high school counselors advise students and how universities organize recruitment efforts (Traub 1999). In the immediate aftermath of the ban on affirmative action, some minority students, especially those with multiple choices, may enroll in out-of-state colleges, especially historically black ones. In fact, such a spike in out-of-state enrollments occurred among Washington residents, according to our analysis of data from the U.S. Department of Education's National Center for Education Statistics (<http://nces.ed.gov/ipeds/data.asp>). In the fall of 1998, just before Washington State banned affirmative action, 76 students from Washington enrolled as freshmen in historically black colleges. In 2000, that enroll-

ment rose to 86 and then dropped to 62 in 2001 and 72 in 2002.

THE TRANSITION FROM HIGH SCHOOL TO COLLEGE

In our study, the transition from high school to college was indexed by the ratio of college freshmen in four-year Washington State colleges and universities to the number of Washington State high school seniors in the preceding year. Although this measure is subject to some leakage from high school dropouts (the measure of high school enrollment is taken in October of the senior year) and interstate mobility for higher education, the index provides a consistent and reliable measure of the trend in the transition to college over time. Data on high school enrollments are collected and published by the Washington State Office of the Superintendent of Public Instruction (OSPI), and the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS) provides comparable enrollment data for students in all colleges and universities. We extracted the relevant data from the OSPI (<http://www.k12.wa.us/dataadmin>) and IPEDS (<http://nces.ed.gov/ipeds>) web sites.

Both the high school and college data series are based on administrative reports from schools or colleges on the number of students who are enrolled by year in school and by race/ethnicity and gender. Although there are slight inconsistencies in measurement in the race and ethnic categories, the major limitation is the lack of annual information on interstate mobility for college students. The IPEDS form collects data on state of origin and state of college enrollment in even-numbered years (1996, 1998, and so on), but only on a separate reporting form that does not include race and ethnicity. The percentages of Washington State natives who attended out-of-state colleges and the reverse flow—out-of-state students who attended Washington State colleges—were roughly comparable in the 1990s, but there has been a modest increase in the outflow in recent

years.¹ We assume that these year-to-year fluctuations in interstate mobility have not biased our estimates of the transition to college by race and ethnicity.

The second limitation of the IPEDS data is the increasing proportion of students who do not report their race/ethnicity (or write in something different from the standard categories) on their college application forms. About 5 percent of all first-year students who enrolled at four-year Washington colleges and universities in 1999 were classified as having an “unknown or nonreported” race; there were virtually no missing data on race and ethnicity for high school seniors. In the following analysis, we estimate the transition from high school to college for (reported) white students alone and for the sum of “whites” and “unknown race” together. Even if nonresponse to the race question were random, the composition of the population would ensure that most of those with an unknown race were white. Our expectation is, however, that whites are more likely not to report their race because of their fear of reverse discrimination.

Our primary focus in this study is on students who begin their postsecondary studies as freshmen in four-year colleges and universities, although about half the students who go on to higher education in Washington State enroll in community colleges or other two-year institutions. Many of these community college students are academically oriented and eventually transfer to four-year institutions. It is difficult, however, to sort out the “college-bound” community-college students from the larger number who are simply taking a class or two to upgrade their vocational skills or for self-fulfillment. For example, less than a quarter of first-time community-college students were enrolled in high school during the previous year.

We simplified the process by examining just the transition from high school senior to being a freshman in a four-year college or university—which yields a consistent, though incomplete, picture of the overall process. There are three primary divisions of four-year colleges and universities in Washington State. The state has two major research universities (UW and Washington State University, WSU),

four additional four-year public universities and colleges (Western Washington, Central Washington, Eastern Washington, and Evergreen), and a number of private colleges (including Seattle University, University of Puget Sound, Pacific Lutheran, Gonzaga, and Whitman).

CHANGES IN THE TRANSITION RATE

The number of seniors who were enrolled in public and private high schools in Washington State rose from about 68,000 in the late 1990s to about 76,000 in 2003. About 4 out of 5 high school seniors in Washington State were non-Hispanic whites, but the overall proportion of minority students increased by a couple of percentage points in recent years. At the end of the 1990s, about 8 percent of seniors in the state were Asian and Pacific Islanders, a little less than 7 percent were Hispanic, 4 percent were African American, and 2 percent were American Indian.

In the late 1990s, about 16,000 freshmen were enrolled in Washington State colleges and universities, which is about one fourth the number of high school seniors in the previous year (assuming that approximately the same number of students leave and enter the state for higher education). This figure is an underestimate of the proportion of high school seniors who will eventually attend four-year colleges because it ignores the sizable number of community college students who transfer to four-year colleges. Figure 1 shows the trend in the transition from high school senior to college freshman by race and ethnicity from 1994 to 2002.

Figure 1 shows three distinct racial and ethnic patterns in the transition from high school to college. A little more than 1 in 5 white Washington high school seniors go on to college the following year (with attendance rising by a couple of percentage points if the "race unknown and other" students are considered white). Attendance is the highest for Asian American students—about 1 in 3 high school seniors enroll in college the fol-

lowing year. The third racial/ethnic pattern is the below-average transition rate from high school senior to college freshman for the traditionally underrepresented minorities: African Americans, American Indians, and Hispanics. Only about 1 in 7 of these minority high school seniors attend four-year colleges in Washington the following year.

An observable, though relatively small and temporary, decline in the "transition rate" from high school to college appeared as of 1999—the year following the passage of I-200—for all groups except whites (and whites and others/unknown). A more detailed examination is presented in Table 1, which shows the number of college freshmen and transition rates from high school to college by race and ethnicity and type of higher education.

The number of freshmen in four-year colleges and universities in Washington State (based on IPEDS data) is presented by race/ethnicity and by year in the left-hand panels of Table 1 for the average of the mid-1990s (1994–97), for the individual years immediately before and after the passage of I-200, and for the average of 2001–02. In the right-hand panels are the transition rates—the proportions of high school students who attended college the following year. Below each panel are measures of relative change, indexed as the percentage change for each interval. The appropriate index for assessing the impact of I-200 is not the change in the absolute number of college freshmen, but the change in the rate of transition from high school to college. These are the results shown in the right-hand columns of Table 1, with the transition rates indexed by the ratio of college freshmen to high school seniors in the preceding year for each racial/ethnic group.

The absolute number of college freshmen and the transition rates are shown for all four-year colleges and for the three major subdivisions of higher education: the research universities (UW and WSU), other public four-year colleges, and private four-year colleges. All high school students are administratively classified by race/ethnicity (probably on forms completed by parents, teachers, or school administrators); however, students who apply to college may write in any race or

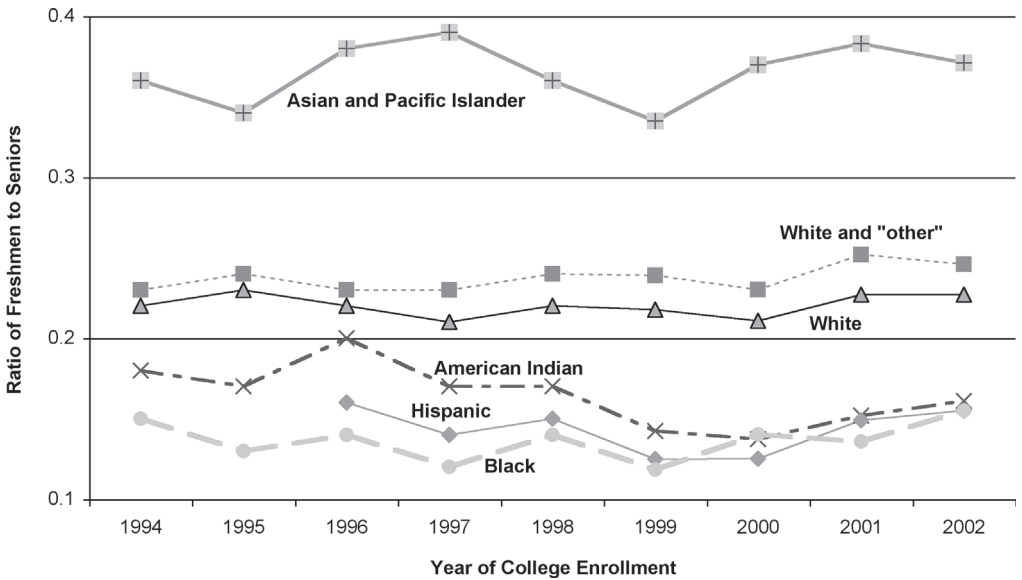


Figure 1 The Transition from High School to College: The Ratio of College Freshmen to High School Seniors in the Previous Year, by Race/Ethnicity, Washington State: 1994–2002

Source: OSPI and IPEDS; see the text.

Note: The values for Hispanics in 1994 and 1995 are not available.

ethnicity or leave the item blank. As we noted earlier, we assumed that most college students with an “other or unknown” race/ethnicity are probably white, and the last panel in Table 1 shows the combined white (non-Hispanic) plus “others” student population.

Examining the change (the absolute number of freshmen and the rate of transition from high school to college) from 1998 to 1999 in the context of a longer span of years may suggest whether I-200 had an effect above and beyond what may be expected from typical year-to-year variation. The pattern for white non-Hispanic students (or the “white plus other” students) establishes the benchmark by which the other groups will be measured. The freshmen college enrollment figures include all students (in state and out of state), while the denominators include only in-state high school seniors. Fluctuations in the relative number of students who go out of state for college, compared to those from other states who come to colleges and universities in Washington, may account for

some “normal” year-to-year variation in the transition rates.

The trend in freshman college enrollments among white students has been remarkably steady. The absolute number of white college freshmen grew from about 11,000 in the mid-1990s to almost 13,000 in 2003, and the transition rate hovered at about 21 percent to 22 percent, with a slight overall decrease in 2000 and in research universities in 1999. If we assume that the combined white and “other and unknown” race/ethnicity group better reflects the actual experience of white students, then their transition rate from high school senior to college freshman is about 23 percent to 25 percent.

As was reported in the news media at the time, there were measurable declines in the number of minority freshman in 1999, relative to 1998 (as well as earlier and later years). These declines were most evident at public colleges, especially the research universities. For example, the number of African American freshman at the two research universities fell

Table 1. Trends in Freshman Enrollment and Transition Rates, by Race and Ethnicity and Type of College in Washington State, 1994–2002

Race and Ethnicity	Number of Freshmen				Transition Rate: Ratio of College Freshmen to Washington High School Seniors			
	All 4-Year Colleges	Research Universities	Other Public Colleges	Private Colleges	All 4-Year Colleges	Research Universities	Other Public Colleges	Private Colleges
<i>Non-Hispanic White</i>								
1994–97 Average	11,070	4,483	3,137	3,451	0.22	0.09	0.06	0.07
1998	11,723	4,667	3,435	3,621	0.22	0.09	0.06	0.07
1999	11,944	4,397	3,820	3,727	0.22	0.08	0.07	0.07
2000	12,656	4,686	4,164	3,806	0.22	0.08	0.07	0.07
2001–02 Average	12,961	4,742	4,199	4,020	0.23	0.08	0.07	0.07
Percentage Change								
From 1994–97 to 1998	5.9	4.1	9.5	4.9	-2.9	-4.5	0.5	-3.7
From 1998 to 1999	1.9	-5.8	11.2	2.9	1.0	-6.6	10.3	2.1
From 1999 to 2000	6.0	6.6	9.0	2.1	2.1	2.6	5.0	-1.6
From 2000 to 2001–02	2.4	1.2	0.8	5.6	2.1	0.9	0.5	5.3
<i>Black</i>								
1994–97 Average	336	171	88	77	0.13	0.07	0.03	0.03
1998	386	208	100	78	0.14	0.07	0.04	0.03
1999	336	154	92	90	0.12	0.05	0.03	0.03
2000	406	208	101	97	0.13	0.07	0.03	0.03
2001–02 Average	446	225	117	105	0.15	0.07	0.04	0.03
Percentage Change								
From 1994–97 to 1998	15.1	21.8	14.3	1.0	3.5	9.6	2.8	-9.2
From 1998 to 1999	-13.0	-26.0	-8.0	15.4	-14.5	-27.3	-9.6	13.4
From 1999 to 2000	20.8	35.1	9.8	7.8	10.3	23.3	0.2	-1.6
From 2000 to 2001–02	9.9	8.2	15.3	7.7	11.6	9.9	17.2	9.5
<i>Hispanic</i>								
1996–97 Average	545	257	143	146	0.15	0.07	0.04	0.04
1998	611	301	156	154	0.14	0.07	0.04	0.04
1999	551	187	181	183	0.12	0.04	0.04	0.04
2000	549	201	167	181	0.12	0.05	0.04	0.04
2001–02 Average	754	285	225	244	0.15	0.06	0.05	0.05
Percentage Change								
From 1996–97 to 1998	12.1	17.3	9.5	5.5	-3.0	1.5	-5.3	-8.8
From 1998 to 1999	-9.8	-37.9	16.0	18.8	-13.6	-40.5	11.2	13.9
From 1999 to 2000	-0.4	7.5	-7.7	-1.1	-0.9	7.0	-8.2	-1.6
From 2000 to 2001–02	37.3	41.8	34.7	34.8	22.7	26.7	20.4	20.5
<i>American Indian</i>								
1994–97 Average	248	92	86	70	0.18	0.07	0.06	0.05
1998	265	108	106	51	0.17	0.07	0.07	0.03
1999	215	70	102	43	0.14	0.05	0.07	0.03
2000	222	79	86	57	0.14	0.05	0.05	0.04
2001–02 Average	253	88	109	57	0.16	0.05	0.07	0.04
Percentage Change								
From 1994–97 to 1998	6.7	17.4	22.9	-27.1	-4.8	4.7	9.6	-35.0
From 1998 to 1999	-18.9	-35.2	-3.8	-15.7	-16.2	-33.0	-0.6	-12.9
From 1999 to 2000	3.3	12.9	-15.7	32.6	-3.9	5.0	-21.6	23.3
From 2000 to 2001–02	13.7	10.8	26.2	-0.9	14.7	11.7	27.3	0.0

continued

Table 1. Continued

Race and Ethnicity	Number of Freshmen				Transition Rate: Ratio of College Freshmen to Washington High School Seniors			
	All 4-Year Colleges	Research Universities	Other Public Colleges	Private Colleges	All 4-Year Colleges	Research Universities	Other Public Colleges	Private Colleges
<i>Asian and Pacific Islander</i>								
1994–97 Average	1,704	1,100	235	370	0.37	0.24	0.05	0.08
1998	1,854	1,209	220	425	0.36	0.23	0.04	0.08
1999	1,887	1,212	294	381	0.33	0.22	0.05	0.07
2000	2,148	1,413	298	437	0.36	0.24	0.05	0.07
2001–02 Average	2,267	1,518	321	429	0.38	0.25	0.05	0.07
Percentage Change								
From 1994–97 to 1998	8.8	9.9	-6.2	14.9	-2.1	-1.1	-15.6	3.4
From 1998 to 1999	1.8	0.2	33.6	-10.4	-6.9	-8.3	22.3	-18.0
From 1999 to 2000	13.8	16.6	1.4	14.7	9.0	11.6	-3.0	9.8
From 2000 to 2001–02	5.5	7.4	7.6	-1.9	3.4	5.2	5.3	-4.0
<i>Non-Hispanic White and Other</i>								
1994–97 Average	11,709	4,685	3,358	3,667	0.23	0.09	0.07	0.07
1998	12,944	5,261	3,792	3,891	0.24	0.10	0.07	0.07
1999	13,120	5,133	4,006	3,981	0.24	0.09	0.07	0.07
2000	13,723	5,260	4,378	4,085	0.24	0.09	0.08	0.07
2001–02 Average	14,239	5,397	4,478	4,364	0.25	0.09	0.08	0.08
Percentage Change								
From 1994–97 to 1998	10.5	12.3	12.9	6.1	1.4	3.0	3.6	-2.7
From 1998 to 1999	1.4	-2.4	5.6	2.3	0.5	-3.3	4.7	1.4
From 1999 to 2000	4.6	3.0	9.1	2.6	0.7	-1.3	5.3	-1.2
From 2000 to 2001–02	3.8	2.6	2.3	6.8	3.4	2.3	1.9	6.5

Source: Office of the Superintendent for Public Instruction, Washington State, and the U.S. Department of Education's Integrated Postsecondary Educational Data System.

Note: The number of freshman students includes both in-state and out-of-state students. The figures for the year after I-200 are in bold face.

from 208 in 1998 to 154 in 1999, a decline of more than 25 percent. The transition rates, which “adjust” for changes in the “supply” of students (high school seniors the year before), also show significant declines in the proportions of minority students (including Asian and Pacific Islanders) who went on to college in 1999.

In absolute terms, minority transition rates declined by 2 to 3 percentage points from 1998 to 1999. In relative terms, the changes in transition rates represent double-digit percentage declines of 14 percent to 16 percent in one year (less for Asian Americans). Changes of this magnitude stand out from the normal year-to-year variation. Yet for most minorities, the transition rates bounced back to their “normal” levels in 2000 or shortly thereafter. The depressed transition rates appear to have been only temporary.

In addition to the unmistakable decline in

the likelihood of minority high school seniors going on to college in Washington State, there are important variations by type of college in 1999. The significant decline in the transition rates from 1998 to 1999 for the underrepresented minorities appears to have been limited to the research universities. More detailed data (not shown here) indicate that the largest declines in minority student enrollments occurred at UW. There were also declines in minority enrollments at WSU, but this was part of an overall decline in enrollments of all racial and ethnic groups at WSU in 1999—perhaps because of the upswing in enrollments in 1998 following WSU's appearance in the Rose Bowl.

Although the ratio of IPEDS college freshman to OSPI high school seniors is not an ideal measure of the transition from high school to college, the potential biases in the index are not specific to one ethnic group,

nor are they likely to have changed significantly over the span of years represented here. Therefore, we interpret the decline in minority students in 1999, following the passage of I-200, as the impact of the ending of affirmative action. The declines in 1999 were much larger than the “normal” year-to-year variation, were limited to minority students, and were found only at the research universities. Fortunately, we have access to data on applications and admission of students to UW from 1998 to 2003, which allows for a more detailed examination of the impact of I-200 on enrollment in the major research university in the state.

A CLOSER LOOK AT UW

UW is the dominant educational institution in the state, both quantitatively and qualitatively. With almost 5,000 freshmen in 2000, it enrolled almost one third of the first-year students in four-year colleges in the state. In addition to its reputation as the flagship institution of the public educational system, UW is also considered to be the most prestigious institution for undergraduate education in the state. Because of UW’s unique position in the higher educational system of the state, as well as the finding that the impact of I-200 on minority enrollments is primarily limited to research universities, we examine the trend in minority enrollments at UW before and after the implementation of I-200.

Overall, American Indians, Hispanics, and African Americans constituted 12.6 percent of high school seniors in Washington during the 1997–98 academic year, but only 8.2 percent of the entering in-state UW freshmen in the fall of 1998. In 1999, following the passage of I-200, there was no change in the ethnic composition of high school seniors, but the share of underrepresented minorities fell to 5.7 percent of the UW freshmen class. It appears that I-200 had an impact, but skeptics may reasonably ask for an analysis that considers alternative explanations, as well as a detailed account of how I-200 affected freshmen enrollments. Our analysis—based on the UW admissions and records database—contains information on applications, admissions,

and the enrollment of freshmen and provides a window on the sequence of steps from high school senior to college freshman.

APPLICATION, ADMISSION, AND MATRICULATION

The transition from high school senior to college freshman begins with a student’s decision to apply to college. The second step is the institutional decision by the college to admit or reject the student’s application. The third step is the student’s enrollment (matriculation) as a college freshman. These steps are diagrammed for in-state students at UW in Figure 2. The first and most consequential step is the application rate—fewer than 12 percent of seniors in Washington State high schools apply for admission to UW. Because of the vastness of the potential pool of out-of-state applicants, this model (and the analysis) is limited to in-state students.

Of the applicant pool of 8,614 high school seniors in 2000, UW admitted 85.5 percent. This UW admissions policy may be described as mildly selective for in-state students; a much smaller proportion of out-of-state students is admitted. The final step in Figure 2 is the sum of the individual decisions among the successful applicants who decide which (if any) college to attend. About 55 percent of the admitted pool of 7,365 students accepted the UW admission offer to the freshman class in 2000. The entering class of 4,090 in-state UW freshmen in the fall of 2000 represented about 5.7 percent of Washington high school seniors in the previous year.

This simple model illustrates that decisions by students (and their families) can be much more consequential than those of institutions. The standard model of affirmative action and the debate over the policy focus almost exclusively on the institutional decisions of colleges. This image is probably shaped by the examples drawn from the most selective colleges and universities in the nation. Most state universities in the United States are probably similar to UW in that they have mildly selective admission practices, with the majority of qualified in-state students being

accepted. In such circumstances, changes in public policy hold considerable potential to influence the transition to college by affecting the decisions of *students*, as well as the decisions of institutions. With this framework in mind, we consider the potential reasons for the decline in the transition from high school senior to UW freshman in 1999 after the passage of I-200.

Table 2 elaborates the model in Figure 2 for four years or periods (1998, 1999, 2000, and the average of 2001–03) by racial/ethnic groups. The first panel shows the transition rates from high school senior to UW applicant, the middle panel shows the UW admission rates, and the final panel shows the enrollment rates (the actual number of high school seniors, applicants, admitted freshman, and enrolled freshman are shown in Appendix Table A). There are slight differences in the racial and ethnic classification of high school seniors (from OSPI) and the UW racial and ethnic classification. Asians and Pacific Islanders are combined in the OSPI

data but are separate categories in the UW database. Two additional categories appear in the UW database: other/unknown (race not reported) and international (the number of in-state international students are too few to be reported here).

Students are not required to report their race/ethnicity on their college applications, and a growing number of students feel that it is not in their interest to do so. Those who did not report race/ethnicity rose from 11.7 percent of the applicants in 1998 to 15.3 percent in 1999, but then declined after UW specifically asked these students to supply a race or ethnicity. In some of the analyses reported later, we combined whites and others/unknowns.

About 12 percent of Washington State high school seniors apply to UW, but this overall average is a composite of varied racial and ethnic patterns. A high proportion of the state’s Asian and Pacific Islander high school seniors (almost all are Asian Americans)—about 27 percent to 30 percent—apply for admission to UW. A little more than 9 percent

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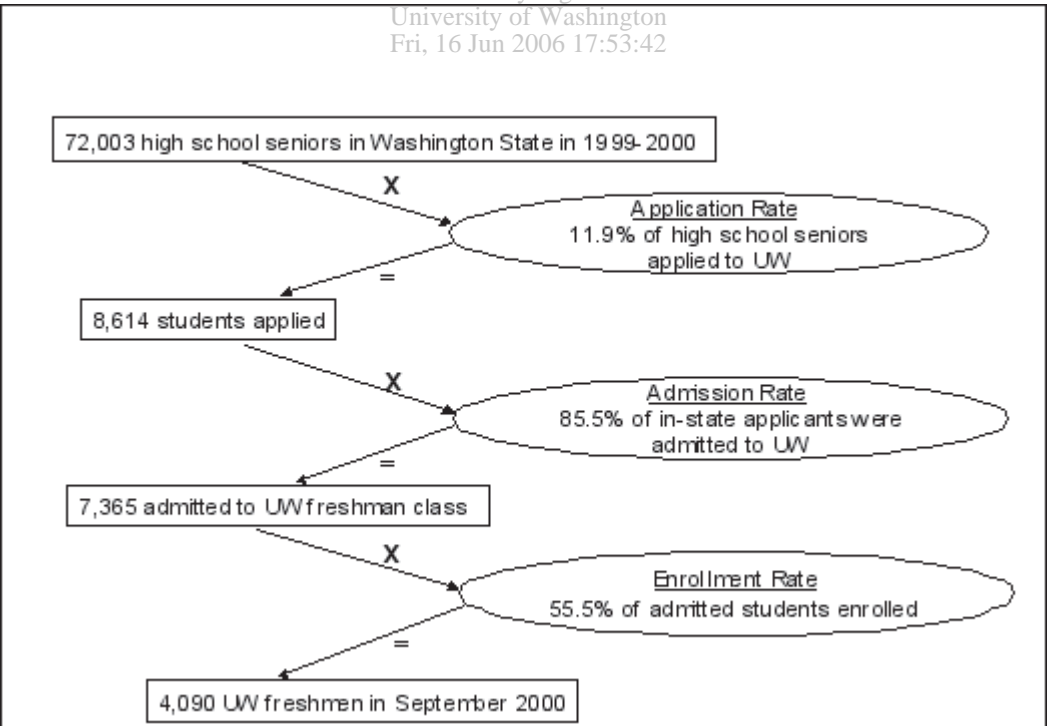


Figure 2 The Transition from High School to College Freshmen: The Wining of 72,003 Washington State High School Seniors to 4,090 In-State Freshmen at the University of Washington

Table 2. The Transition from Washington High School Senior to College Applicant, from Applicant to Admitted Freshman, and from Admitted to Enrolled Freshman, University of Washington, 1998 to 2003 (percentage)

<i>Race/Ethnicity</i>	From High School Senior to UW Applicant: Percentage of Seniors Who Apply			
	1998	1999	2000	2001–03
White	9.5	9.2	9.1	9.1
White and Other/Unknown ^a	11.3	11.5	11.2	10.9
Black	8.4	6.7	7.3	8.3
Hispanic	7.0	6.0	5.3	6.2
American Indian	6.4	5.6	5.1	5.3
Asian American/Pacific Islander ^b	30.3	27.0	28.4	30.4
Total	12.2	12.1	12.0	11.9

<i>Race/Ethnicity</i>	From Applicant to Admitted Freshman: UW Admission Rate			
	1998	1999	2000	2001–03
White	79.3	82.1	85.6	80.1
Black	83.7	70.4	83.3	77.2
Hispanic	86.7	80.1	82.8	80.9
American Indian	82.0	76.5	90.4	88.5
Asian American ^b	82.3	85.5	87.8	83.8
Pacific Islander ^b	97.3	83.3	85.7	78.5
Other/Unknown ^a	78.9	84.2	83.3	78.1
Total	80.2	82.6	85.5	80.7

<i>Race/Ethnicity</i>	From Admitted to Enrolled Freshman: Percentage Who Enroll			
	1998	1999	2000	2001–03
White	50.4	50.3	52.2	52.5
Black	48.2	51.1	57.7	54.1
Hispanic	65.1	52.6	53.4	59.6
American Indian	53.7	53.8	57.3	55.7
Asian American ^b	72.9	72.5	72.4	71.0
Pacific Islander ^b	50.0	50.0	75.0	64.3
Other/Unknown ^a	52.1	54.1	45.2	43.6
Total	55.4	55.1	55.5	55.8

Sources: Office of the Superintendent for Public Instruction, Washington State, and UW admissions and records database.

^a Assuming that almost all college applicants with race/ethnicity not reported are white.

^b The OSPI high school data combine Asian American and Pacific Islanders in one category, but the UW data have separate categories; here, the categories are combined for application, but separated for admission and enrollment.

of white high school seniors apply to UW, but this proportion could be about 11 percent if we assume that almost all those who did not report their race and ethnicity (the others/unknown category) are white.

Underrepresented minority high school seniors (African Americans, Hispanics, and American Indians) are less likely to apply to UW than are white high school seniors. The differences are fairly modest in absolute terms, but are consequential in affecting the composition of college freshmen, as we shall show. Most important, there was a drop-off in the percentage of minority high school students who applied to UW in 1999 relative to 1998. The application rate for African American students rose in 2000 and, by 2001–03, had nearly returned to the 1998 rate of a little more than 8 percent. The application rates for Hispanics and American Indians declined in 1999 and again in 2000, but rebounded modestly in 2001–03. Although Asian Americans had the highest level of application to UW, they also experienced a dip in their application rate in 1999. These patterns suggest a “discouragement” effect for all applications by minority students after the passage of I-200.

The second step of the process is the university admissions rate—indexed here as the percentage of applicants who are admitted. The overall UW admission rate of freshman applicants is determined by a host of factors, including the number and qualifications of in-state and out-of-state applicants, the absorptive capacity of the institution, and the expected “yield” (the percentage of admitted students who will matriculate). For the years represented here, the UW admission rate for in-state students was about 80 percent to 86 percent, with only modest variations by race and ethnicity.

In 1998, when race and ethnicity could be taken into account, the admission rates of the underrepresented minorities were slightly higher (82 percent for American Indians, 87 percent for Hispanics, and 84 percent for African Americans) than for whites (79 percent). In 1999 (after I-200), there was a decline of about 14 percentage points in the admission rates of Washington State African American students (from 84 percent to 70 percent) and smaller declines for the other

underrepresented minorities. In the same year, there were modest rises in the admissions rates for whites and Asians. In 2000, there was little variation in admission rates by race and ethnicity. There have been modest decreases in the admission rates for all groups since 2000, but little in the way of clear patterns. The admissions rates of the other/unknown applicants are parallel to those of the white applicants.

The final step in the process is matriculation—the percentage of admitted applicants who actually enroll. Since many students apply to multiple colleges and universities, the “yield” of enrolled freshmen to admissions depends on many factors that cannot be measured here. At UW, a little more than half the in-state students (55 percent to 56 percent) who are admitted become UW freshmen. Since 1999, the rates for the underrepresented groups in Washington State have been fairly close to those of whites—perhaps a few percentage points higher. The one group with a distinctive pattern is Asian Americans students, whose enrollment rate tops 70 percent of those who are admitted.

DECOMPOSITION OF THE CHANGES IN TRANSITION RATE

Measuring the intervening steps in the transition from high school senior to college freshman does not, by itself, show the relative importance of each of these processes. One method of estimating the relative impact of the three processes on the overall change in the transition rate from high school senior to UW freshman is the demographic method of the “decomposition of differences in rates” (Kitagawa 1955; Preston, Heuveline, and Guillot 2001). The standard decomposition formula is as follows:

$$\Delta T = \Delta AP^* \bar{AD} * \bar{EN} + \Delta AD^* \bar{AP} * \bar{EN} + \Delta EN^* \bar{AP} * \bar{AD}$$

The percentage point change in the transition rate from high school senior to college freshman (ΔT) equals the sum of three quantities:

1. the change in the application rate (ΔAP) times the average admission rate (\overline{AD}) times the average enrollment rate (\overline{EN}),
2. the change in the admission rate (ΔAD) times the average application rate (\overline{AP}) times the average enrollment rate (\overline{EN}),
3. the change in the enrollment rate (ΔEN) times the average application rate (\overline{AP}) times the average admission rate (\overline{AD})

where ΔT is the percentage-point change in the transition rate from high school senior to college student from t to $t + 1$; ΔAP is the percentage-point change in the application rate from t to $t + 1$; ΔAD is the percentage-point change in the admission rate from t to $t + 1$; ΔEN is the percentage-point change in the enrollment rate from t to $t + 1$; and \overline{AP} , \overline{AD} , and \overline{EN} are the average (mean) admission, application, and enrollment rates for t and $t + 1$.

In Table 3, we present the decomposition of the 1998 to 1999, 1999 to 2000, and 2000 to 2001–03 changes in rates (percentage-point changes) of Washington State high school seniors who enrolled as freshmen at UW. The transition rates are the ratio of UW freshmen to high school seniors in the preceding year. The first panel shows the rates for each year: 1998, 1999, 2000, and 2001–03 and then the change in the rates from 1998 to 1999, from 1999 to 2000, and from 2000 to 2001–03 (in the top right-hand panel). As with the earlier tables, we computed a “white and other” population, which includes the sum of whites and unknown/other race UW freshmen in the numerator and OSPI white seniors in the denominator.

Overall, about 1 in 20 high school seniors in Washington State enters UW as a freshman the following year. More precisely, the proportion rose slightly from 5.4 percent in 1998 to 5.5 percent in 1999 to 5.7 percent in 2000 and then declined slightly to 5.4 percent in 2001–03. About 17 percent to 18 percent of Asian American high school seniors in the state enter UW as freshmen. Close to the state average are whites (or whites and unknowns), with about 4 percent to 5 percent of seniors enrolling as UW freshmen the following year. Consistently below the white level are African Americans, Hispanics, and American Indians, whose rates of transition from high school

senior to college freshman hover from slightly above 2 percent to slightly below 4 percent. Since underrepresented minorities have higher attrition during high school, these figures are underestimates of the interethnic gaps in attaining a higher education.

From 1998 to 1999, the rates of transition from high school senior to UW first-year student dropped for all groups except whites. Although these declines are only 1.0 percentage point for African Americans, 1.4 percentage points for Hispanics, 1.5 percent for Asians and Pacific Islanders, and 0.5 percentage point for American Indians, these are significant changes from the previous year. For example, the change in the transition rate from high school senior to UW freshman of 3.4 percent to 2.4 percent for African Americans represents a relative decline of 29 percent. For the two-year interval from 1998 to 2000, it appears that the transition rate for African American and Asian American students bounced back to the 1998 level, but there was a slower recovery for American Indians and Hispanics. Only for the most recent period, 2001–03, are the transition rates roughly comparable to the 1998 levels.

In the lower panels of Table 3, we decompose the percentage-point change for each group for the 1998 to 1999 interval (and the 1999 to 2000 and the 2000 to 2001–03 intervals) into three transitions: application rates, admission rates, and enrollment rates (based on the transition rates presented in Table 2). The components of change can be positive or negative.² The .98 percentage-point drop in the African American transition rate from 1998 to 1999 is the sum of three components: -0.65 owing to the lower application rate, -0.50 owing to the lower admission rates by the university, and a counterbalancing change of +0.17 points because admitted African American students were slightly more likely to accept admission in 1999 than in 1998. The decline in enrollment of Hispanics of 1.39 percentage points was due partially to declines in the application rate (-0.45), but also to declines in rates of admission (-0.25), and enrollment (-0.68). Declines in application and admission rates also lowered the American Indian rate of transition from high school senior to UW first-year student.

Table 3. Decomposition of the Change in the Rate of Washington State High School Seniors Enrolling as Freshmen at the University of Washington (UW), by Race and Ethnicity, 1998 to 1999, 1999 to 2000, and 2000 to 2001-03

Race/Ethnicity	Percentage of High School Seniors Enrolling at UW				Percentage Point Change			
	1998	1999	2000	Average of 2001-03	1998 to 1999	1999 to 2000	2000 to 2001-03	Total
White	3.8	3.8	4.1	3.8	0.0	0.3	-0.2	0.1
White and Other/Unknown	4.5	4.9	4.9	4.4	0.3	0.0	-0.4	0.0
Black	3.4	2.4	3.5	3.5	-1.0	1.1	0.0	0.1
Hispanic	3.9	2.5	2.3	3.0	-1.4	-0.2	0.7	0.0
American Indian	2.8	2.3	2.6	2.6	-0.5	0.3	0.0	0.0
Asian/Pacific Islander	18.1	16.7	18.0	18.0	-1.5	1.4	0.0	0.0
Total	5.4	5.5	5.7	5.4	0.1	0.2	-0.3	0.0

Decomposition of the Rate of UW Enrollment of High School Seniors

Race/Ethnicity	1998 to 1999		1999 to 2000		2000 to 2001-03		Total
	Application	Enrollment	Application	Enrollment	Application	Enrollment	
White	-0.12	0.14	0.00	0.02	0.00	-0.26	0.02
White and Other/Unknown	0.11	0.20	0.04	0.34	-0.14	-0.30	0.01
Black	-0.65	-0.50	0.17	-0.98	0.46	-0.26	-0.22
Hispanic	-0.45	-0.25	-0.68	-1.39	0.43	-0.06	0.29
American Indian	-0.33	-0.18	0.01	-0.50	0.11	-0.06	-0.08
Asian/Pacific Islander	-2.01	0.58	-0.03	-1.4 5	1.23	-0.81	-0.42
Total	-0.04	0.16	-0.02	0.09	-0.01	-0.32	0.03

Source: Table 2.

The decomposition of the overall change in the transition rate from 1999 to 2000 and from 2000 to 2001–03 shows an overall pattern of recovery. From 1999 to 2000, the observed declines for the African American and Asian and Pacific Islander populations that were registered in 1999 had largely been erased. The depressed rates for Hispanics and American Indians were slower to recover, although they did so in the most recent period.

The decomposition exercise provides evidence that changes in the rates of application are an important part of the explanation for the relative declines of minority enrollments after the passage of I-200. At first glance, it may seem that the white application rate decreased as well, but if we can assume that most of those who did not report a race (the “unknowns”) are white, there was no overall change in the application rate of the majority population to UW from 1998 to 2000. Increases in minority application rates were also important components of the recovery from 1999 to 2000 and from 2000 to 2001–03.

What are the practical implications of these findings? To present this analysis to university administrators, we computed the implications of these results as the outcomes of three alternative strategies or scenarios that may be considered to increase the number of underrepresented minority students. The first strategy would be to increase the application rate of minority high school seniors to UW to the average of all Washington State seniors—12.0 percent in 2000. The second strategy would be to admit 100 percent of all students who apply. The third strategy would be to persuade 100 percent of all accepted students to matriculate. None of these strategies is realistic, in the sense that it could be achieved. The goal of this “what if” exercise is to discover the potential of these three “levers” to increase the number of underrepresented students (details are available from us on request).

The first scenario, which raises the application rates for these groups to the simple average of all Washington seniors (12.0 percent) and with the other two processes, the admission rates and the enrollment rates, remaining unchanged, would result in a dramatic

increase in the number of minority freshmen. The number of African American freshmen would increase by two thirds, and the number of Hispanic and American Indian students would more than double. The second scenario, to increase the admission rate to 100 percent of all applicants, would have the least impact in raising the number of minority students. With admission rates for in-state minority students about 70 percent to 80 percent, changes in racial differences in admission rates would scarcely affect the composition of the first-year students at UW. The third scenario—having all admitted students matriculate—would have a more substantial impact on minority students’ enrollments, approximately doubling their number, because only half the admitted applicants (minorities and the majority) currently enroll. Although this strategy would be efficacious in increasing minority enrollments, it is also probably the most difficult to accomplish.

Although minority admission rates have recovered to their pre-1999 levels, there are still substantial majority–minority gaps in the overall transition rates from high school seniors to UW freshmen. Since admission and matriculation rates vary only slightly by race and ethnicity, the primary explanation is differences in application rates. For the most recent period (2001–03), minority application rates were 2 to 5 percentage points below the white/unknown level. Even a small growth in the proportions of qualified minorities who apply is likely to translate to a substantially larger number of minorities in the first-year university enrollments.

HAS THE QUALITY OF THE APPLICANT POOL CHANGED?

The decomposition analysis identified declines in minority college applications as the primary mechanism for the lower number of African American, Hispanic, and American Indian freshman at UW after the passage of I-200. This analysis assumes that the processes of application, admission, and enrollment are independent of each other. However, students’ plans for, and applications to, college are probably

affected by expectations about success. High school students who are in doubt about their qualifications for admission to selective colleges may be less likely to apply to the most competitive colleges and universities.

This logic suggests an alternative explanation for the observed change in minority application rates to UW following I-200. If the number and composition of the pool of high school seniors changed during the late 1990s, perhaps applications went down because of an increasing fraction of "less competitive students" among the potential pool of college applicants. If these less qualified students had applied, then the admission rate (admitted/applied) would have declined, with no change in the number of enrolled minorities.

One possible way to address this alternative explanation, albeit indirectly, is to examine the number and qualifications of the pool of applicants. We compared the "quality" of potential applicants by examining the scores of SAT takers in Washington State (presumably high school seniors) by race and ethnicity. There were no significant changes in either the ratio of test takers to high school seniors or average scores by race and ethnicity (detailed data available on request).

A more direct picture of the changing composition of UW applicants comes from the UW admissions and records database. The UW admissions office constructs an "admission index" score, based on high school grade point average and SAT scores, for each applicant. This index, which ranges from 0 to 99, is used to make the first cut of admissions decisions. Students who score above a certain level tend to be admitted if they have all the other prerequisites, and at the other end of the distribution, those with an admission index below a certain line are routinely denied admission. Applicants in the middle of the range undergo more scrutiny before an admission decision is made. Table 4 shows the absolute number and percentage change of all UW applicants from 1998 to 2001-03 and for those who were rated highly in the admissions index (66 and higher).

The overall declines in minority application rates from 1998 to 1999 were paralleled by declines in the number of highly rated applicants for the same years. There were also decreases in the number of less qualified and

average rated applicants; however, the "discouragement" that led to the lower rate of application was not limited to students with little chance of being admitted. As minority applicants increased in subsequent years, the number of top-rated applicants also increased.

Our reading of this evidence is that most of the decline in minority applicants, especially among Washington State students, was among students who stood a good chance of being admitted to UW. Many of these students were competitive at other colleges, perhaps out of state, and may have decided not to apply to UW.

CONCLUSION

The contemporary debate over affirmative action is confusing to the public, partly because of heated rhetoric as both proponents and opponents try to take the high moral ground. The goals of eliminating discrimination, forging a color-blind society, and maintaining the legacy of Martin Luther King, Jr., are invoked by advocates for and against affirmative action. Underlying the debate are real disagreements over how to define discrimination and how to redress the unfairness and injuries caused by discrimination.

Changes in public policies can sometimes create opportunities for "natural experiments" that allow researchers to measure the impact of affirmative action. In the present case, the end of affirmative action after the passage of I-200 eliminated the ability of colleges and universities in Washington State to take race into account in admission and financial-aid decisions. Although we do not know if present or past patterns of discrimination had any influence on college attendance by minorities in Washington State, we can assume that there were no dramatic changes in the conditions that affected the transition from high school to college in Washington from 1998 to 1999, including any patterns of discrimination. This would leave changes in policy as the most likely cause of any significant change in college enrollment rates from 1998 to 1999.

There was a substantial decrease in the number of African American, Hispanic, and American Indian freshmen (and percentage of

Table 4. Percentage Change of In-State Freshman Applicants and of Highly Rated Applicants to the University of Washington by Race and Ethnicity, 1998 to 2003

	Race and Ethnicity							Total
	White	Black	American Indian	Hispanic American	Asian American	Pacific Islander	Other/Unknown	
<i>Number of Applicants</i>								
1998	5,147	233	294	100	1,528	37	975	8,322
1999	5,035	189	266	85	1,500	24	1,285	8,394
2000	5,166	227	233	83	1,642	28	1,212	8,614
2001 to 2003 (average)	5,236	262	323	87	1,829	36	1,042	8,815
<i>Percentage Change (All Applicants)</i>								
1998 to 1999	-2.2	-18.9	-9.5	-15.0	-1.8	-35.1	31.8	0.9
1999 to 2000	2.6	20.1	-12.4	-2.4	9.5	16.7	-5.7	2.6
2000 to 2001-03	1.3	15.3	38.8	4.4	11.4	27.4	-14.0	2.3
<i>Percentage Change (of Highly Rated Applicants)^a</i>								
1998 to 1999	-0.9	-18.8	-0.8	-34.7	-4.2	-38.9	35.8	2.2
1999 to 2000	6.6	33.8	-15.3	59.4	11.4	36.4	-4.7	6.0
2000 to 2001-03	2.7	-8.4	55.9	-11.1	11.4	13.3	-16.3	2.0

Source: University of Washington admissions and records database.

^a Scored 66 or higher on a scale of 0 to 99, based on high school GPA and the SAT.

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high school graduates) who enrolled in the fall of 1999. This decline was almost entirely concentrated at the two research universities, UW and WSU. The drop in first-year enrollments at WSU affected all groups, including non-Hispanic whites, perhaps because of the unusually high 1998 enrollments following WSU's participation in the Rose Bowl the year before. The decrease in the underrepresented minorities at UW, however, stood in contrast to the lack of change in first-year enrollments among non-Hispanic whites.

If a substantial number of the minority students at UW in the 1990s were there solely because of preferential admissions policies, the passage of I-200 would have reduced their number because more qualified majority students took their places. However, changes in the rates of admission of applicants played a secondary role in the decline of minority students from 1998 to 1999. The rates of admission of minority applicants were only marginally lower in 1999 than in 1998.

The decrease in minority enrollments occurred, in large part, because of the drop in applications by minority students. We have interpreted the decline in the application rate to UW in 1999 and 2000 as a discouragement effect following the passage of I-200. This interpretation is consistent with the broader literature on campus climate. Minority students who are more socially integrated are less likely to feel alienated and drop out or transfer (Cabrera et al. 1999; D'Augelli and Hershberger 1993; Hurtado and Carter 1997). Changes in the perceptions of campus climate are important factors as high school seniors make decisions about college applications.

An alternative interpretation is that the decline in minority application rates was primarily among high school seniors who decided not to apply because they thought that they would be unlikely to be admitted in a race-blind admissions process. However, this interpretation is inconsistent with the stability in the number and average scores of Washington State minorities who took SAT examinations in 1998 and 1999. Moreover, the decrease in minority applicants was across the board, including many students whose high school grades and SAT scores would have ensured their admission to UW.

If the publicity over I-200 discouraged some minority high school seniors from applying to UW, why was this response not evident at other state universities and colleges or private colleges in the state? The prestige of UW, its size, and its reputation as a demanding (and perhaps impersonal) educational environment may have discouraged many students from applying. Other colleges in the state were probably seen as providing a less intimidating transition to higher education. Countervailing forces, including the encouragement of family, friends, and teachers, may have led many students to see UW as a positive challenge with greater opportunities and the reward of a prestigious degree.

Although minority high school seniors are not alone in seeing UW as a potentially intimidating environment, they may be more hesitant than majority students to take the leap to apply because they have fewer family members and friends who had been undergraduates at a major research university. It seems reasonable to assume that affirmative action may have served as one of the countervailing forces for minority students who may have been apprehensive about the prospect of attending UW. Affirmative action may have meant a personal contact (by letter or telephone) or encouragement from a high school counselor that served to overcome the students' natural reluctance to apply to the most competitive university in the state.

When affirmative action was eliminated in 1999, the fundamental conditions remained the same. No new barriers were erected that made it more difficult to apply to UW, and the advantages and disadvantages remained as before. What was missing, however, was a policy that provided a welcoming and positive face on the prospect of attending UW, in spite of its size and reputation. With the loss of an important positive image created by affirmative action, a small number of college-bound minority high school seniors probably realigned their set of attractive college destinations and left UW off the list.

The impact of ending affirmative action in Washington State on minority students' applications to UW appears to have been temporary. After one or two years of depressed application rates, the number of freshman

applications of African American, American Indian, and Hispanic students has risen or exceeded their pre-I-200 levels. With an awareness of the problem, UW mounted an outreach program to high schools and community groups to encourage more freshman applications from prospective minority students. These efforts may have eased the impact of I-200.

The findings reported here for the state of Washington may have relevance for many other regions and universities in the United States. In particular, the finding that affirmative action programs can affect minority application rates stands in contrast to the standard interpretation that affirmative action programs are important only because of their presumed effect on admission rates. This is certainly the case for selective private and public colleges and universities. At these institutions, only a small fraction of qualified applicants are admitted, and variations in ethnic-specific admission rates can have a major impact on the racial and ethnic composition of students.

The UW experience may be more repre-

sentative of public higher education in most states, where there is only a moderate degree of selectivity in admissions decisions. In these settings, the majority of qualified applicants from every racial and ethnic group are already admitted, so the use of affirmative action criteria in admissions decisions has only a modest impact on the number of minority students. For these universities, increasing the application rate from minority students may be a more effective strategy. Since application rates tend to be low (and minority application rates are even lower), even a small rise in the minority application rate can lead to a substantial increase in minority college enrollments, with no change in admission rates. Although affirmative action policies may be one means of encouraging minority students' applicants, there may be other strategies, including outreach efforts and an inclusive public image that may accomplish the same end. If the political tides continue to erode traditional affirmative action programs, universities and colleges may have to find more creative strategies for encouraging a diverse student body.

Appendix Table A.

High School Seniors in Washington State and In-State Applicants, Admissions, and Enrolled Freshmen at the University of Washington (UW) by Race and Ethnicity: 1998 to 2003

Washington State High School Seniors						
Race/Ethnicity	1998	1999	2000	2001	2002	2003
White	54,409	54,875	56,974	56,888	57,437	58,994
Black	2,790	2,840	3,112	3,074	3,051	3,302
Hispanic	4,226	4,410	4,432	4,757	5,162	5,755
American Indian	1,561	1,511	1,624	1,590	1,630	1,654
Asian and Pacific Islander ^a	5,157	5,636	5,888	5,922	6,103	6,401
Total	68,143	69,272	72,030	72,231	73,383	76,106

In-State Applicants to UW						
Race/Ethnicity	1998	1999	2000	2001	2002	2003
White	5,147	5,035	5,166	4,930	5,480	5,297
Black	233	189	227	222	309	254
Hispanic	294	266	233	288	308	374
American Indian	100	85	83	91	94	75
Asian American ^a	1,528	1,500	1,642	1,659	1,871	1,958
Pacific Islander ^a	37	24	28	29	33	45
Other/Unknown	975	1,285	1,212	1,592	895	640
International	8	10	23	18	11	16
Total	8,322	8,394	8,614	8,821	9,001	8,647

In-State Students Admitted to UW						
Race/Ethnicity	1998	1999	2000	2001	2002	2003
White	4,079	4,136	4,421	4,092	4,397	4,100
Black	195	133	189	178	243	185
Hispanic	255	213	193	243	259	283
American Indian	82	65	75	83	82	65
Asian American ^a	1,258	1,283	1,441	1,459	1,531	1,609
Pacific Islander ^a	36	20	24	24	25	35
Other/Unknown	769	1,082	1,010	1,239	703	500
International	3	4	15	13	8	7
Total	6,677	6,936	7,368	7,331	7,248	6,784

In-State Freshman Enrolled at UW						
Race/Ethnicity	1998	1999	2000	2001	2002	2003
White	2,056	2,082	2,309	2,196	2,203	2,206
Black	94	68	109	112	116	100
Hispanic	166	112	103	162	138	168
American Indian	44	35	43	43	47	38
Asian American ^a	917	930	1,044	1,034	1,077	1,152
Pacific Islander ^a	18	10	18	18	11	25
Other/Unknown	401	585	457	598	265	201
International	0	0	7	7	4	1
Total	3,696	3,822	4,090	4,170	3,861	3,891

Sources: Office of the Superintendent for Public Instruction, Washington State, and the UW admissions and records database.

^a The OSPI high school data report Asian American and Pacific Islanders in one category, but the UW admissions and record database has separate categories. The categories are combined for application, but separated for admission and enrollment.

NOTES

1. The percentages of students from out of state were 12.4 in 1992, 14.5 in 1994, 14.1 in 1996, 12.8 in 1998, 16.7 in 2000, and 14.0 in 2002. The percentages of Washington State high school students who went to out-of-state colleges were 14.3 in 1992, 14.8 in 1994, 15.6 in 1996, 17.5 in 1998, 22.3 in 2000, and 20.1 in 2002 (Knapp et al. 2005).

2. The decomposition results are presented to two significant digits to the right of the decimal point, while the summary percentage-point changes are rounded to the nearest tenth of a percentage point in the top panels.

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