



\$CHOOLS IN CRISIS: MAKING ENDS MEET

Are Residents Losing Their Edge in Public University Admissions? The Case at the University of Washington

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A longstanding implicit bargain that comes with state-supported higher education is now in jeopardy. An obvious part of the bargain is price: state support brings subsidized prices for in-state students. But it has also been understood that state dollars produce a second value—namely, preference in the admissions process. After all, lower prices are not any good if you are not allowed to pay them. Originally the public university was there to serve state residents first. For nonresidents, not only was tuition higher, but admissions standards were more rigorous, meaning that nonresidents needed higher qualifications to gain access. The two-tiered admission standards were thought to benefit in-state students via peer effects, in that the enhanced academic ability from tougher out-of-state admissions standards worked to raise the academic caliber of the student body (and the university) as a whole.

News reports now suggest that public universities across the country, including the Universities of Michigan, Oregon, South Carolina, and Colorado, are shifting more spots to nonresidents (who pay higher tuitions) in order to plug budget gaps, prompting critics to worry that residents are losing their advantage in the admissions process. In fact, the California State University system announced this summer that its schools should reject all in-state graduate students for spring 2013, admitting only out-of-state students.¹ In this instance, it is clear the residents have lost their advantage for graduate school, but otherwise, the effect on admissions standards for residents versus nonresidents is rarely quantified.² Do residents still have an advantage, or are admissions standards leveling for the two groups? Or, are admissions actually now favoring out-of-state applicants? This study explores those questions by examining admissions data at one public university, then sets the findings in a discussion about how best to close public higher education budget gaps in the context of that implicit bargain with state residents.

This case study examines the University of Washington (hereafter UW) where news reports reflect a worry that Washingtonians are losing out to nonresidents when it comes to undergraduate admissions.³ The UW, like many other state flagship universities, has suffered from constrained state revenues during the recent recessionary years. Amidst budget cuts, past presidents Mark

1. Scott Jaschik, "Rejected for Being In-State," *Inside Higher Ed*, 2012.

2. Eric Hoover and Josh Keller, "More students migrate away from home." *Chronicle of Higher Education*, 2011. <http://chronicle.com/article/The-Cross-Country-Recruitment/129577/>.

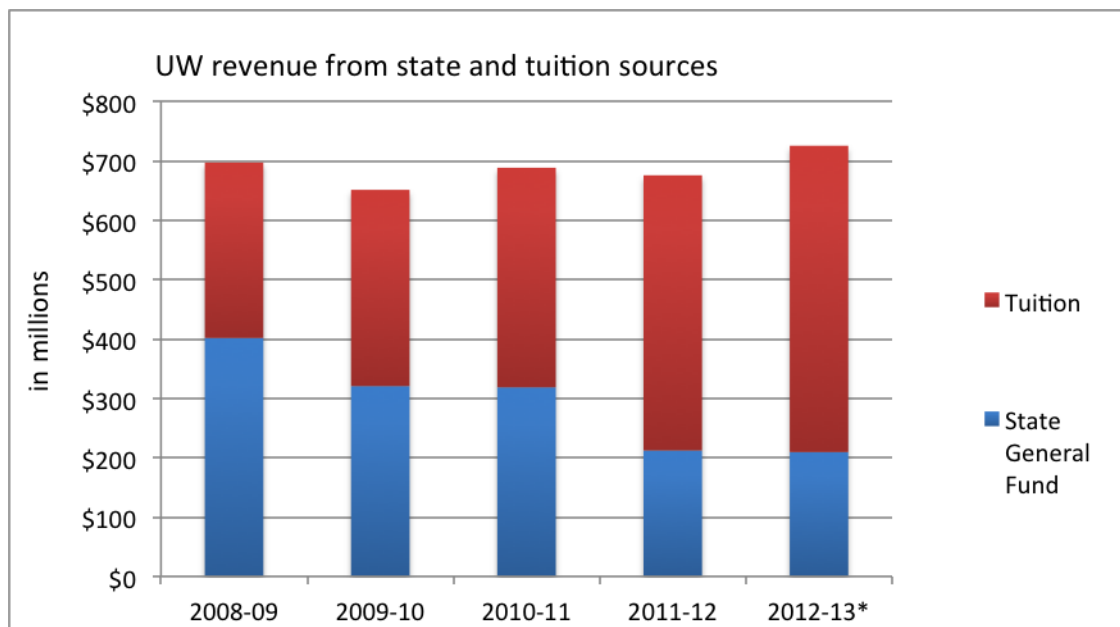
3. The *Seattle Times* published stories in 2011 with titles such as "Why straight-A's may not get you into UW this year" (4/2), "Budget cuts means fewer Washington students get into UW" (4/3), and "Foreign enrollment skyrockets for UW" (11/14).

Emmert and interim president Phyllis Wise suggested that declining state support would prompt the UW to enroll more nonresident students, who pay higher tuitions, at the expense of residents.⁴ All told, it is not surprising that current 12th graders are wondering if they would have better chances of getting in to the UW if only they lived in Idaho.

Is it easier for a nonresident, compared to a resident, to gain admission to the UW? The question is undoubtedly of interest to families and educators throughout the state, but also a prompt for the UW and state leaders to ask how to preserve the mission of the state's flagship public university during a period of fiscal scarcity.

Certainly, the financial challenges are real. As Figure 1 illustrates, the UW has seen a radical decline in state funding over the last five years; its state funds have dropped by nearly \$200 million (50% of what the state had been providing), amounting to roughly 20% of the University's operating budget.

Figure 1. UW's declining state revenues have been offset in part by increases in tuition revenues



Data from UW operating budgets, available at <http://opb.washington.edu/content/fiscal-year-budgets>.
* 2012-13 budget figures were proposed, while all others years were enacted.

The rhetoric pitting residents' access to the UW against the admission of nonresidents peaked in 2012, prompting state policymakers to mandate that future incoming freshmen classes at the UW Seattle campus must contain at least 4,000 residents.⁵

4. Bruce Ramsey of the *Seattle Times* captures Emmert's sentiment regarding the enrollment of nonresidents in a column published Dec. 22, 2009, available at http://seattletimes.com/html/opinion/2010571250_bruce23.html. Interim President Phyllis Wise's letter, sent to legislators on Feb. 23, 2011, is available at <http://seattletimes.nwsourc.com/ABPub/2011/02/24/2014324431.pdf>.

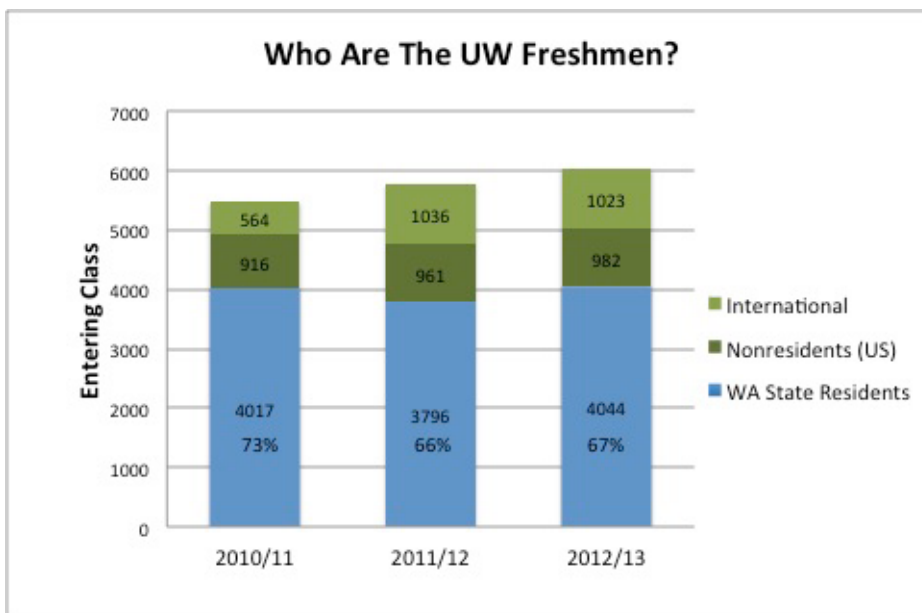
5. Rep. Tina Orwall (D-Des Moines) introduced an amendment on April 22, 2011 to the Higher Education Opportunity Act (HB 1795). The Orwall amendment was not considered on the floor of the House when it was introduced but its language was eventually incorporated in the bill (Sec. 6). HB 1795 was signed into law by Governor Gregoire on June 6, 2011 and became effective August 24, 2011.

Despite the financial strain, the accusations of declining access for Washington residents, and the resulting legislative mandate of resident enrollment targets, no one has yet examined the extent to which access to the UW for Washington residents has actually been changing.

A look at freshmen admissions at the University of Washington⁶

For admissions purposes, applicant students are characterized as Washington state residents, domestic nonresidents (from elsewhere in the US) or international students. The mix of the freshman class over the last three years has indeed been shifting, as depicted in Figure 2. The 2010 freshman class included 4,017 Washington state residents, amounting to 73% of the class. In 2011, that number dipped to 3,796 residents (or 66%). For 2012, the number of in-state freshmen rose to 4,044 residents—presumably in response to the state’s mandate—but with the addition of more nonresidents and large growth in the number of international students, the resident share of the total was only 67%.

Figure 2. Incoming classes now rely on a smaller share of in-state students



Acceptance rates for each group have also varied over the last three years. As Table 1 illustrates, Washington state resident acceptance rates (i.e., the portion of resident applicants who were accepted, whether or not they ultimately enrolled) did indeed dip for the entering class of 2011-12, the year media reported that residents were losing their edge.⁷ During that same year, acceptance rates for both types of nonresidents increased. Then for the freshmen entering in fall of 2012, the acceptance rates of residents climbed to 67%, a level higher than in the previous two years.

6. All admissions analysis here pertains only to the UW Seattle campus.

7. See, for example, *Seattle Times*, Budget cuts means fewer Washington students get into UW, April 3, 2011.

Table 1. UW acceptance rates vary by student type

	For school year:		
	2010/11	2011/12	2012/13
Residents			
Applied	10,350	10,447	9,941
Accepted	6,393	6,183	6,619
<i>Acceptance Rate</i>	62%	59%	67%
<i># Enrolled</i>	4017	3796	4044
Nonresidents			
Applied	8,325	9,160	9,595
Accepted	4,965	5,659	5,985
<i>Acceptance Rate</i>	60%	61%	62%
<i># Enrolled</i>	916	961	982
International			
Applied	4,168	4,933	6,602
Accepted	1,607	2,498	2,856
<i>Acceptance Rate</i>	39%	51%	43%
<i># Enrolled</i>	564	1036	1023

Also noteworthy is that the size of the applicant pools varies each year, such that fewer in-state students applied for Fall 2012 than had applied the previous year, and yet there was growth in nonresident applicants of both types.

Characteristics of accepted residents versus accepted nonresidents

Both the changing size of the applicant pool and the possibility of a different level of quality of applicants make it difficult to use the above numbers to draw definitive conclusions about whether or not a resident's odds of getting in to the UW might be better or worse than a nonresident's. Making that judgment requires further exploration of the qualifications of each applicant group. That said, the UW's admissions process is multi-dimensional and includes some qualitative elements, which makes it a challenge to quantify any particular applicant's competitiveness. The UW uses a "holistic admission" process to evaluate each student who applies for undergraduate admission.⁸ Holistic admission accounts for a student's academic background alongside his or her personal characteristics and attributes. Some factors of a student's academic background, such as high school GPA and standardized test scores, are easily quantifiable. In addition, the UW undergraduate admissions committee is highly trained to evaluate qualitative characteristics of an applicant's academic background, such as the rigor of the student's high school courses and grade trends that may suggest how the student's academic achievement improved or declined over the course of high school.

8. The UW's admission policy, as outlined by the Board of Regents: <http://www.washington.edu/admin/rules/policies/SGP/ScholRegCH101.html>.

So, while a student's academic background drives the admissions committee's review, the consideration of other quantitative and qualitative academic factors means that one cannot perfectly predict admission to the UW with GPA and test scores alone.⁹ The consideration of both quantitative and qualitative factors in the admissions process, for example, could mean that a high school valedictorian in Washington State may be denied admission to the UW due to having taken a weak or insufficient academic course load as required for admission.

This study reports the average GPA and test scores (specifically SAT scores) of applicants because these data provide the best available summary measure of students' academic characteristics. While this provides some broad comparisons of some groups for the two years of available data, it should be noted that these data aren't available for international applicants, as international student applications don't reflect comparable GPAs and SATs.¹⁰ International students do represent a key group in admissions trends, with the number of international students nearly doubling from 2010-11 to 2011-12. However, trend analysis on acceptance rates for this group creates challenges, as changes in recruiting across different countries can dramatically affect the caliber of applicants from one year to another. Thus for this analysis we set aside international applicants and focus hereafter on Washington State residents versus US nonresidents.

Gauging the academic quality of applicants to the UW based on the available data, in 2011 residents had higher GPAs on average, while nonresidents had higher SATs (Table 2A). Average GPAs and SATs for accepted residents and nonresidents vary little between 2011 and 2012 (Table 2B).

Table 2A. Higher GPAs, lower SATs for accepted residents in 2011

	Accepted Residents, 2011		Accepted US Nonresidents, 2011	
	GPA	SAT	GPA	SAT
Mean	3.79	1240	3.74	1300
(s.d.)	(0.21)	(164)	(0.20)	(127)
Median	3.85	1250	3.76	1300

Table 2B. Little change in GPAs, SATs for accepted applicants in 2012

	Accepted Residents, 2012		Accepted US Nonresidents, 2012	
	GPA	SAT	GPA	SAT
Mean	3.79	1240	3.74	1300
(s.d.)	(0.20)	(162)	(0.20)	(127)
Median	3.84	1260	3.76	1300

9. For the three years of data used in this analysis, GPA is moderately correlated with the admissions committee's review (0.79) but the correlation between test scores and the admissions committee's review is comparatively weak (0.46). As such, the SAT scores reported in this brief ought to be interpreted with particular caution.

10. International Students often don't report the SAT and their GPAs are incomparable.

Given the higher GPAs among accepted residents, one might conclude that the cutoff for residents is higher than for nonresidents. Then again, an indication of how the applicant pools might vary, the SATs suggest the opposite—that nonresidents have higher scores by an average of 60 points. While the two indicators suggest opposite trends, the relative magnitude of the SAT difference within the entire applicant pool is more substantial, reflecting a 14 percentile difference, versus an 8 percentile difference in the GPAs.¹¹ But either way, looking only at the qualifications of the average accepted student cannot answer the question about a student’s admission chances for an applicant who is indeed at the margin. The next section explores the qualifications of those students at the margins.

Applicants at the margin suggest resident students have had little to no edge in admissions

One way to explore whether residents have an edge in UW admissions is to look at a student on the margin of being accepted. There are two sides to the margin: those just above the cut off for acceptance and those just below. In order to identify those students on the margin, we obtained the admissions committee’s evaluation of each freshman application submitted to the UW. We captured the admissions committee’s summary evaluation with a numeric figure along with the student’s acceptance or rejection, scaled the admissions committee reviews for the applicants that were rejected, then further examined the 300 top applicants as a subsample for our analyses of applicants on the margins.

Examining the lowest-scoring students who were accepted, it is clear that this group is uncharacteristic of typical students, in that some have extreme factors (such as athleticism) that enhanced their applications. A better comparison, we concluded, is to compare those students just below the academic cut-off for each group. In other words, are the academic characteristics of just-barely-denied residents higher or lower than those of just-barely-denied nonresidents?

The academic characteristics of applicants at the margins—students who were scored highly by the admissions committee but just missed the threshold required for acceptance—shows the top 300 residents who were denied admission in 2011 had substantially higher GPAs than the top 300 nonresidents who were denied admission (Table 3A).¹² The SATs for those nonresidents reflect the opposite trend, albeit only by a difference of 10 points. Examining the percentile rankings of each average score within the total applicant pool suggests that the magnitude of GPA difference is indeed more substantial (30 percentiles) than the magnitude of difference in SAT (just 2 percentiles).

11. Using national percentiles, the SAT difference reflects 16 percentiles. Equivalent national percentiles on GPAs were not available.

12. Notes in the technical appendix explain how applicants at the margins were identified and why the cutoff of 300 applicants was used for this analysis.

Table 3A. For Fall 2011, residents with higher GPAs denied admission

	Top 300 Denied Residents		Top 300 Denied Nonresidents	
	GPA	SAT	GPA	SAT
Mean	3.80	1130	3.54	1140
(s.d.)	(0.14)	(141)	(0.29)	(155)
Median	3.81	1110	3.58	1130
	n = 300		n = 300	

By the next year, the top 300 denied residents still had higher GPAs, although the gap was smaller (equating to a 6 percentile difference) (see Table 3B). Similarly to 2011, in 2012 nonresidents denied at the margin had slightly higher SATs (equating to a 4 percentile difference in the applicant pool).

Table 3B. For Fall 2012, GPA gap narrowed between residents and nonresidents

	Top 300 Denied Residents		Top 300 Denied Nonresidents	
	GPA	SAT	GPA	SAT
Mean	3.63	1130	3.57	1150
(s.d.)	(0.16)	(171)	(0.26)	(158)
Median	3.61	1110	3.66	1150
	n = 300		n = 300	

These findings illustrate that the question of residents' access to the UW in recent years is as much a matter of who was accepted as who was not accepted. The characteristics of accepted residents and nonresidents in 2011 and 2012 show that residents had higher GPAs while nonresidents had higher SATs. But resident and nonresident applicants on the cusp of admission to the UW in 2011 did not follow this same trend. In 2011, the average GPA of the top resident applicants not accepted was substantially higher on average (3.80) compared to the GPA of top nonresident applicants that were not accepted (3.54) while the difference in SATs was much less pronounced.

In short, for an applicant at the margin in 2011, say with a GPA of 3.6, it may indeed have been easier to gain acceptance if the application came from out-of-state. The GPA threshold appeared substantially higher for residents than nonresidents, suggesting that by 2011 residents had not only lost their edge in admissions, but may even have had a harder time gaining admission than their nonresident peers. The SAT trends, however, suggest the opposite, although at a smaller magnitude of effect—namely, that resident status remained an advantage in admissions, as nonresidents at the margin were rejected with higher SATs than was typical for marginally rejected residents.

By 2012, however, the difference between the GPAs of the two groups was smaller, while SATs for marginally rejected nonresidents jumped up even a bit more. All told, evidence from the 2012 admissions cycle shows a more level playing field between resident and nonresident applicants on the cusp of gaining admission to the UW. Residents do not appear to have much advantage in

gaining admission to the UW, as many in the state believe they should have, but are not at a disadvantage either.

**Beyond the resident-nonresident paradigm:
Looking toward innovative solutions to financing states' public higher education**

As this study suggests, Washington residents have indeed lost their edge in UW admissions, and in fact may have been at a disadvantage in 2011. The significant increase in the acceptance rate for residents from 2011 to 2012 (from 59.2% to 66.6%, an increase of 7.4 percentage points) is likely attributable in part to the legislature's mandate that the UW enroll a minimum of 4,000 residents in the 2012 freshman class.¹³ While the policy appears to have increased access for Washington residents in 2012 from the previous year, the mandate continues to pit the admission and enrollment of residents against the admission and enrollment of nonresidents. Not surprisingly, the perception that resident admissions are hostage to university budgets has created frustration among residents, who believe that their public university should exist first to serve Washingtonians.

While reflective of one university in one state, these findings raise broader concerns that state-supported universities, if unconstrained by public policy, can act counter to the goals implicit in the longstanding bargain that accompanied state support. Public universities can rationalize changes to the admission process that appear advantageous to the university in the short term, but could serve to erode good faith in the institution in the long term, potentially resulting in a spiral of mutually reinforcing distrust and state disinvestment. Elsewhere in the country, similar public debates are underway, leading some to express concern that solving budget gaps with nonresidents will weaken the case for state support when state revenues begin to climb.

A more productive dialogue might be one where state lawmakers and administrators move beyond the resident-nonresident tradeoff to look for policy solutions that maintain access for state residents and make progress on solving budget gaps. Some options might indeed be new ideas in higher education, but the current climate demands a fresh approach to solving these problems, and certainly one that does not simply restrict resident access to the state's flagship university. For instance, the UW and peer universities might consider any one of the following ideas:

Differentiate Tuition

- *By labor market value of degree:* The UW already charges differential tuition prices for graduate programs in such fields as business, public health, and engineering. One way to increase revenue would be to vary tuition for each major, in light of the likely labor market returns. By raising tuition for those majors where graduates tend to earn more (e.g. business, engineering) the higher tuitions could generate more revenues for the UW.
- *By relevance to Washington State's needs:* A different approach might be to think of in-state tuition as a subsidy, with the subsidy applying more heavily to those degrees that are more important to Washington state's public or economic needs. Where the state needs more

13. The increase in the resident acceptance rate from 2011 to 2012 is also likely a function of the smaller applicant pool of residents compared to those of the prior two years.

science or teaching degrees, these tuitions might be subsidized, while other degrees might be subsidized less.¹⁴

- *By family income:* As accusations emerged that the UW was taking an out-of-state student over a similarly qualified resident, not surprisingly, some residents asked to be allowed to apply with non-resident status even if that meant higher tuition. Conceivably, the UW could progressively tier resident tuition based on family income to bring in additional revenues from those families that are in less need of the state subsidy. To ensure continued access by low-income groups, a university could utilize needs-blind admissions.
- *Up to a particular credit ceiling:* Earning a bachelor's degree at the UW requires 180 credits. The state may indeed feel an obligation to subsidize these credits for residents. However, with state resources scarce, requiring residents to pay the full unsubsidized price of tuition after passing the 180 credit threshold might not only increase revenue at the UW but also improve the efficiency of undergraduate degree production and make room for a larger freshman class.

Expand Enrollment

- *Expanding enrollment* (as UW has already started to do to some extent) is another way to tackle budget gaps. Even in-state students come with some tuition dollars, and if the UW can find ways to serve more students efficiently, these extra dollars might offset some gaps (and provide benefits for the state as a whole). Some might assume the marginal costs of serving one additional student exceed the in-state tuition rates (as former interim President Phyllis Wise suggested in a meeting with the second author in 2010), but the evidence on this point is not conclusive. Perhaps, by shifting some delivery models, the UW might be able to lower marginal costs such that expanding enrollment is a net win. Use of technology for some lectures, for instance, could facilitate higher enrollments at negligible costs, as would restructuring salaries to create incentives for serving more students.¹⁵ Individual departments might think of other ways to expand their enrollments, and the UW could encourage this by giving them back some of the incremental revenue. Some public universities are already expanding enrollment as a way to maintain institutional quality while opening up new sources of revenue.¹⁶

Scale the UW's Expertise Across Non-UW Students

- *At other state universities:* Where the UW maintains a scarce expertise in a subject matter, that expertise might exist in service of other state programs, enabling faculty to teach courses accessible to other universities and spread costs across more students.

14. The UW Faculty Senate Planning and Budgeting Committee in 2011 peripherally reviewed the merits and drawbacks of differential pricing for undergraduate tuition; see http://www.washington.edu/faculty/facsen/scpb/diff_tuition_briefing.pdf.

15. Many faculty already use their expertise to augment their earnings with non-UW work and might instead be incented to find ways to serve more students.

16. Two pertinent examples of this are the "New American University" initiative at Arizona State University (<http://newamericanuniversity.asu.edu/>) and the University of Virginia's increased enrollment as a response to the Virginia Higher Education Opportunity Act of 2011 (<http://www.virginia.edu/finance101/answers.html>).

- *Across other top-tier universities around the country:* As the UW develops some digital courses, these courses might be offered for fees to others around the country. Where the UW might have the top offering in an environmental topic, it could explore charging for access to a digital offering, access to teaching materials, or exposure to its faculty. Similarly, the UW might save on some of its high-cost offerings by encouraging its students to receive some credits via a high-quality, lower-cost option provided by another university.

Certainly, no option is without its downsides, and some of these may indeed not be viable for the UW or its peers. But current leaders owe it to the state to consider what other budget-closing options are possible, other than further limiting resident access to the public universities. Access to a state's flagship university is clearly important to residents who feel that their state resources have, over the years, helped build the great university that exists today. And, for state leaders, providing access to residents has always been a way to invest in the future of the state's workforce.

Going forward, any strategy applied should be studied for its effects on admissions, resident access, and access by different state population groups. That this analysis has not been done before suggests that state leaders are not regularly informed as to how different admissions policies affect access by residents. Given that the next few years will likely continue to produce strained budgets, any solutions to public university budget gaps should regularly be assessed against the mission and desired outcomes of the state's flagship university.

Technical Appendix

Sources of Admissions Data

The findings in this policy brief were made possible with the cooperation of the Office of Admissions' release of data to us based on the University of Washington Human Subjects Division's approval of this research project. The data we received from the UW came from the UW-wide Student Database (SDB) and the Office of Admissions customer relationship management (CRM) software. Both were "scrubbed" of unique identifiers that would allow for the identification of any single student in the data set. We followed federal guidelines for the protection of confidential data and worked closely with the UW to ensure the integrity of the data used for this research.

Modification of Data for Analysis

To carry out the policy analysis the data were recoded and modified in the following ways:

1. The admissions analysis in this brief focuses on Washington resident applicants and nonresident domestic applicants to the UW, thus we eliminated international students from the analysis. The UW places each non-international applicant in one of four categories: resident of Washington, U.S. citizens; residents of Washington, noncitizen; domestic nonresidents, U.S. citizens; and domestic nonresidents, noncitizen. We collapsed the two resident categories and two nonresident categories into single resident and nonresident categories and then created a binary category in which all domestic applicants in our data set were coded either resident or nonresident.
2. About a quarter of domestic freshman applicants to the UW apply with ACT scores instead of SAT scores. The UW Office Admissions accepts either standardized test. To provide a more accurate estimate of the standardized test scores of applicants and accepted students we used data provided by the College Board¹⁷ to write a statistical package that converted all ACT scores to SAT scores. This gave each applicant an SAT score which we could then use to calculate aggregated test score statistics for a given sample or subsample of students.
3. To carry out our analysis examining characteristics of the 2011 and 2012 applicant pools we needed complete records for each applicant. This required us to eliminate from our analysis applicant records that lacked a high school GPA, standardized test scores, or both. The number of records that were dropped was less than 1% of each year's applicant pool.

Analysis of Applicants on the Margins

Our analysis of applicants on the margins is based on a letter Interim President Phyllis Wise sent to the Washington State legislature on February 23, 2011. In her letter, Wise notes that a \$186 million cut in state funding to the UW would lead to "reduced access for 150 resident freshmen" and an "increase of 150 non-resident students" at the UW (page 6). To simulate this proposed reduction of resident enrollment at the expense of enrolling more nonresidents, we assume in our analysis a "tradeoff" of 300 students. That is, if one resident enrolls for every two residents accepted, and the intended outcome is to reduce resident enrollment by 150, we assume the UW would accept 300 fewer residents. This oversimplifies to some degree the complexities involved with enrollment management at the UW, but our study examines access as defined by gaining admission to the UW, not the enrollment decisions of residents and nonresidents. By using samples of 300 applicants at the margins, we illustrate the empirical differences in the academic qualifications of resident and nonresident applicants who face the real prospect of being on the cusp of gaining admission given administrative directives on enrollment goals.

17. <http://research.collegeboard.org/programs/sat/data/concordance>.

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