



APPLICATIONS MATCH STUDY

A Perspective on Unmet Demand

Fall 2002

Office of Financial Management
NOVEMBER 2003

THE DEMAND FOR HIGHER EDUCATION may be separated into two components: (1) the actual enrollment, and (2) unmet demand. The **enrollment** projections are based upon population forecasts by age and sex under the assumption that participation rates will remain at the current levels. If budget constraints did not limit enrollment, this projection alone would represent expected demand for higher education. However, participation rates have been limited by budget constraints since the early 1980s and by enrollment lids until fiscal year 1994.¹ Potential **unmet demand** is assessed through the applications match process, which matches applicants to Washington public four-year institutions with registered students in Washington public and independent higher education institutions. This study focuses on **undergraduate applicants** only.

The Applications Match Study

The goal of the **Applications Match Study** is to obtain an unduplicated count of qualified individuals applying to Washington public four-year higher education institutions at the undergraduate level who were not served by the higher education system of the state. The study is designed to provide a more accurate account of unserved applicants than can be obtained by adding the numbers of qualified applicants who are denied admission by the individual institutions. The single institutional perspective does not adjust for multiple applications by individual students; nor does it account for students denied admission by one institution, but admitted and served by another; nor does it distinguish between Washington residents and out-of-state applicants.

An applications match study has been conducted annually since Fall 1987. The data requested from institutions as well as the assumptions made in the matching process varied slightly over the first three years of the study. Data for Fall 1990 through Fall 2002 are not entirely comparable with those of preceding years.

Between 1990-91 and 2000-01, data were collected for fall, winter, and spring terms. This allowed for a follow-up portion of the study, which examined applicants for an entire academic year and assessed their application and enrollment status through the following academic year. The most recent analysis of full-year data is available for applicants for 1999-2000, following them through the 2000-01 academic year. This study is available at the Office of Financial Management website.² **Beginning with this Fall 2002 study, fall applications only will be analyzed.**

Limitations

Non-applicants or incomplete applications. Applications to higher education institutions are only one measure of demand for higher education, although they are still the most concrete and objective indicator available. Other forms of demand are not fully captured by applications data, such as individuals who fail to submit applications to four-year institutions because they lack the financial resources or other support services needed to attend. Examination of applicant and enrollment data

provides a measure of unmet need among Washington residents who have taken the step of applying to a four-year institution. Persons who do not submit an application because they lack the resources to participate in higher education, or who believe they will not be admitted due to enrollment limits, are not counted by this measure of unmet need. Persons who do not submit a complete application are also not counted by this measure of unmet need.

Applicants not admitted to institution of first choice. In this study, any applicant who is admitted to a four-year higher education institution is considered to be served by the higher education system of the state, whether the person actually enrolls or not. Some would suggest that unless an applicant is enrolled by his/her first-choice institution, the applicant is not completely served by the system. Applicants' priorities are not recorded in any administrative databases; they have not been a factor in determining whether an applicant has been served by the state's higher education system.

Applicants attending out-of-state institutions. Just as Washington higher education institutions serve many out-of-state residents, many Washington residents leave the state for their post-secondary education. Undoubtedly, many of the applicants who apply to in-state institutions, but never enroll, are attending institutions outside of Washington.

Data Elements

As in the past, application and registration data were requested and received from all public four-year institutions. Registration data from independent colleges and universities³ and from community colleges were also used in the study. This study focuses on undergraduate applicants, i.e., applicants from high school, transfer applicants from two- and four-year institutions, returning undergraduate students, and other applicants not applying for graduate or professional study. A database reflecting the individual applicants was created. For each applicant to public four-year institutions, information related to all applications and to enrollment status was developed. Social security number, name, and birth date were the basis of the matching procedure. Extreme care was taken to avoid any inappropriate matches.

An applicant's ***county of permanent residence*** is the county of permanent residence captured at the time of application and stored in the enrollment file, if the applicant was enrolled in a four-year institution. If the applicant did not subsequently enroll, a county code based upon city, state, and ZIP code of permanent residence at the time of application was used.

Applicants were classified as "***accepted***" if they were admitted to at least one public four-year institution. They were classified as "***denied***" if they were denied admission to at least one public four-year institution and were not admitted by any other. If an applicant was neither admitted nor denied, but instead withdrew an application, submitted an incomplete application, or if the admission status was not provided by the institution, the applicant's admission status was classified as "***other.***"

Status of Applicants for Fall 2002 – Undergraduate Applicants

There were 51,936 undergraduate applicants, who submitted 64,529 applications to public four-year higher education institutions in Washington State for Fall 2002. The subsequent status of these applicants is outlined in Table 1 along with a time series of equivalent data.

- Of the 36,242 Washington resident applicants for Fall 2002, 23,348 were enrolled at one of the public or independent four-year higher education institutions in Washington during Fall 2002. An additional 3,824 were enrolled in a community college during Fall 2002.
- A total of 9,070 Washington resident applicants for Fall 2002 were not enrolled in any of the higher education institutions involved in this study during Fall 2002.
- Of the 9,070 Washington resident applicants for Fall 2002 not enrolled during Fall 2002, 5,119 were offered admission to a public four-year institution for Fall 2002. These applicants are considered to be served by the higher education system. Undoubtedly, many of these applicants enrolled in out-of-state institutions. The most recent student migration studies conducted by NCES⁴ for Fall 2000 indicate that over 6,000 Washington resident freshmen enrolled in out-of-state institutions.
- Application information provided for 2,079 of the non-enrolled Washington resident applicants for Fall 2002 indicated admission status unknown, a withdrawn application, an incomplete application, or that no admissions decision had been made as of the tenth class day of the fall term. These applications have been excluded from the analysis.
- Finally, 1,872 of the non-enrolled Washington resident undergraduate applicants for Fall 2002 were denied admission by at least one public four-year institution and not admitted by any other for Fall 2002. Of these, 1,090 were known to have a grade point average (GPA) or admission index (AI) acceptable for admission to a Washington four-year institution⁵ and 341 had GPAs or AIs lower than the minimum acceptable level. The GPA and AI for 441 of these applicants are unknown. Some of these 441 applicants may have had acceptable GPAs or AIs. Admission indices and grade point averages for the 1,531 unserved applicants are summarized in Table 3.

Results of the analysis indicate that for Fall 2002 between 1,090 and 1,531 qualified individual undergraduate applicants were denied admission to a public four-year institution and not enrolled in any other public or private Washington higher education institution during that same term.

Table 1: Fall Undergraduate Applications/Applicants to Washington Public Four-Year Institutions

	Fall 1996	Fall 1997	Fall 1998	Fall 1999	Fall 2000	Fall 2001	Fall 2002
Applications	54,859	53,456	53,362	54,870	57,752	59,863	64,529
Individuals:	44,204	44,164	45,147	44,468	47,772	49,515	51,936
Washington residents:	31,794	31,730	32,984	32,827	34,307	34,843	36,242
Registered, public or independent four-year	21,605	21,489	22,197	22,309	22,983	23,320	23,348
Registered, community/technical college	3,269	2,986	3,118	2,719	3,303	3,406	3,824
Did not register	6,920	7,255	7,669	7,799	8,041	8,117	9,070
Accepted	5,015	4,864	5,180	4,919	5,106	5,100	5,119
Other	910	1,294	1,336	1,611	1,689	1,831	2,079
Denied: ⁶	995	1,097	1,153	1,269	1,246	1,186	1,872
Low GPA or AI	182	181	218	274	234	211	341
Unknown GPA and/or AI	110	162	164	143	219	154	441
Acceptable GPA or AI	703	754	771	852	793	821	1,090
Unserved (excludes unknown GPA/AI)	703	754	771	852	793	821	1,090
Unserved (includes unknown GPA/AI)	813	916	935	995	1,012	975	1,531

Table 2 provides additional detail for the Fall 2002 underserved undergraduate applicants, with breakouts for applicants entering from high school, transfers from two-year colleges, and transfers from four-year institutions (including returning students). The transfer categories are based upon information provided by the individual institutions. Transfer applicants from two-year institutions do not necessarily hold an associate's degree.

Table 2: Fall 2002 Applications/Applicants to Washington Public Four-Year Institutions, By Type

	Undergraduate Applicants	Entering from High School	Two-Year Transfers	Four-Year Transfers
Applications	64,529	39,885	13,193	6,792
Individuals:	51,936	29,365	11,662	6,338
Washington residents:	36,242	18,871	9,954	4,255
Registered, public or independent four-year	23,348	12,139	6,878	2,849
Registered, community/technical college	3,824	2,003	1,123	312
Did not register	9,070	4,729	1,953	1,094
Accepted	5,119	3,208	959	495
Other	2,079	626	581	332
Denied: ⁶	1,872	895	413	267
Low GPA or AI	341	232	32	10
Unknown GPA and/or AI	441	80	194	101
Acceptable GPA or AI	1,090	583	187	156
Unserved (excludes unknown GPA/AI)	1,090	583	187	156
Unserved (includes unknown GPA/AI)	1,531	663	381	257

Interpretation of Results for Fall Analysis

Not all of the potentially unserved applicants (the "Waiting Line") are necessarily unserved.

- Some applicants may be attending institutions outside Washington or one of the independent institutions within the state for which no enrollment data are available.
- Many unserved applicants enroll in or are admitted by higher education institutions in subsequent terms. Between Fall 1991 and Fall 1999, approximately 60 percent of qualified undergraduate applicants to public higher education institutions denied admission for a fall term enrolled or were admitted in subsequent terms.²
- Since approximately 40 percent of all individuals admitted to a four-year institution never enroll, it is likely that some of these applicants would not enroll even if accepted.

The "waiting line" as indicated by unserved applicants should not be interpreted as a measure of total unmet need for higher education. Persons who may lack the resources to attend a four-year institution, for example, and who may not submit an application, are not counted among the unserved.

As a group, the Fall 2002 unserved applicants generally had grade point averages and/or admission index scores toward the lower end of the admissible ranges. Table 3 shows admissions index, high school grade point average (GPA), and college GPA for the 1,531 unserved undergraduate applicants.

Table 3: Grade Point Averages (GPA) and Admission Indices (AI), Fall 2002 Unserved Undergraduate Applicants

Table 3A: High School Applicants

Admissions Index	Applicants	High School GPA	Applicants	GPA and AI not reported
76+	5	3.50-4.00	2	80
51-75	230	3.00-3.49	5	
28-50	259	2.50-2.99	7	
13-27	75			

Table 3B: College Transfer Applicants

Two-Year College Transfers			Four-Year Transfers		
College GPA	Applicants	GPA and AI not reported	College GPA	Applicants	GPA and AI not reported
3.50-4.00	33	114	3.50-4.00	33	58
3.00-3.49	72		3.00-3.49	79	
2.50-2.99	107		2.50-2.99	53	
2.00-2.49	55		2.00-2.49	34	

Unserved Applicants by Institution, Fall 2002

Table 4 shows the breakout of the 1,531 unserved applicants for Fall 2002 by institution and by application type. "Multiple" indicates that the applicants were denied admission by more than one institution.

Table 4: Fall 2002 Unserved Undergraduate Applicants by Institution and by Application Type

	UW	WWU	WSU	CWU	EWU	TESC	Multiple ⁷	Total
High School	268	187	63	68	1	0	76	663
Two-year Transfer	242	92	19	19	1	0	8	381
Four-year Transfer	173	45	3	6	1	0	4	232
Returning	17	6	0	2	0	0	0	25
Other	96	21	11	26	72	0	4	230
Total	796	351	96	121	75	0	92	1,531

- Applicants entering from high school, mainly to the University of Washington and to Western Washington University, account for the 43 percent of the total unserved Fall 2002 undergraduate applicants.
- Since Fall 1993, higher education institutions have been allowed to enroll students above the number of budgeted FTEs if, in their judgment, the additional students could be accommodated without harming the quality of education. For institutions enrolling more than the number of budgeted FTEs, the "waiting line" is probably smaller than it would have been otherwise.

Endnotes

- ¹ In 1993 1st Special Session Washington Laws: “Each institution shall enroll to its budgeted biennial average FTEs, plus four percent or minus two percent. ... [A]n amount equal to the student quality standard multiplied by the number of FTE students above or below the variances shall revert to state general fund.” This language was removed effective Fiscal Year 1994.
- ² See “Applications Match Study: A Perspective on Unmet Demand,” State of Washington, Office of Financial Management, March 2002. Available at <http://www.ofm.wa.gov/hied/index.htm>.
- ³ Independent institutions providing enrollment data for Fall 2002 included Gonzaga University, Heritage College, Pacific Lutheran University, St. Martin’s College, Seattle University, University of Puget Sound, Walla Walla College, Whitman College, and Whitworth College.
- ⁴ U.S. Department of Education. National Center for Education Statistics. Digest of Education Statistics 2002, NCES 2003060, by Thomas Snyder and Charlene Hoffman. Washington DC: 2001, Table 204. <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003060>
- ⁵ The admission index (AI) is a number calculated as a function of high school grade point average and standardized test (SAT or ACT) scores. Regional institutions (CWU, EWU, WWU, and TESC) are authorized to admit an applicant with admission index of 13; the two research universities (UW and WSU) are authorized to admit applicants with an admission index of 28 or above. These values are used in this study to designate whether an applicant is academically qualified for admission. If the admission index is not provided for an applicant, then a minimum high school grade point average of 2.50 is used as a minimum. Application information used in this study does not include information as to whether high school subject matter requirements were met by the applicant. In several cases, the actual admission index required for admission to the institution is considerably higher than these minimums. For college transfer applicants, a college grade point average of 2.00 is used as the minimum acceptable qualification.
- ⁶ For each year of this study, Washington State University applicants coded as ‘DP’ (Decision Pending) have been classified as applicants denied admission to WSU.
- ⁷ The 76 unserved high school applicants submitting applications to more than one institution submitted applications in the following combinations: 26 applicants to UW-WWU; 17 applicants to WWU-WSU; 9 applicants to EWU-WSU; 6 applicants to UW-WWU-WSU; 4 applicants to UW-WSU; 4 applicants to EWU-WWU; 3 applicants to CWU-EWU; 3 applicants to CWU-WSU; 2 applicants to CWU-WWU-WSU; 1 applicant to CWU-WWU; 1 applicant to CWU-EWU-WSU.

The 8 unserved two-year transfer applicants submitting applications to more than one institution submitted applications in the following combinations: 5 applicants to UW-WWU; 2 applicants to UW-WSU; 1 applicant to EWU-WSU.

The 4 unserved four-year transfer applicants submitting applications to more than one institution submitted applications in the following combinations: 2 applicants to UW-WWU; 1 applicant to EWU-WSU; 1 applicant to WWU-WSU.