

Applications Match Study

Fall 2010

The Office of Financial Management was asked by the state's baccalaureate institutions to perform this analysis annually beginning in the late 1980s.¹ The data provided by the institutions, as well as the assumptions made in the analysis, have varied somewhat over the years. The analysis for Fall 2010 presented here is the first to incorporate multi-sector longitudinal education data from the Education Research & Data Center (ERDC).

The original goal of the Applications Match Study was to obtain a measure of the number of qualified individuals applying to Washington public four-year higher education institutions and to assess the enrollment outcomes for these applicants. The analysis takes into account:

- the level of the applicants (undergraduate applicants only)
- the geographic origin of the applicants (Washington or out-of-state)
- submission of applications to more than one institution by an individual
- the fact that an applicant can be denied admission by one institution, but admitted by another

At the time the Applications Match Study was designed, the focus was to develop an objective measure of demand for higher education in the state. Today, with availability of longitudinally linked cross-sector education data, a much more comprehensive study of applicant behavior is possible.

Selected Findings

Addition of longitudinal, multi-sector data allows for a more accurate identification of subgroups of applicants and for a more thorough analysis of outcomes. Here are some key findings:

- Overall, over 88 percent of Washington resident applicants to public four-year institutions for Fall 2010 were enrolled in some postsecondary institution that term. This included over 91 percent of 2010 public high school graduates and over 86 percent of applicants with a

The Washington State Education Research & Data Center (ERDC) in the Washington Office of Financial Management is charged with conducting analyses of early learning, K-12, higher education programs and career and education issues and development of a P-20/Workforce data system to support these studies. ERDC focuses on longitudinal education studies, particularly those that involve transitions across education sectors and those that involve workforce-education connections.

Direct Transfer Agreement (DTA) associate's degree from a Washington community or technical college. (See Table 3)

- Among prior year high school graduate applicants, those who were FRPL-eligible in high school enrolled at lower rates (88 percent) than those who were not FRPL-eligible (over 92 percent). As expected, enrollment rates were highest for those with the highest high school GPAs – 94.4 percent for those with GPA in the 3.50 – 4.00 range and 87.4 percent for those with GPAs between 2.50 and 2.99. (Table 8)
- For applicants with enrollment in a community or technical college prior to Fall 2010, 88.2 percent of those who had taken pre-college mathematics enrolled compared with 88.9 percent of applicants with no prior pre-college mathematics course-taking. (Table 13)

Data Elements

Data for prospective students applying for Fall 2010 admission was received from all six public four-year higher education institutions in Washington. Data elements include identifying information used for linking with other education records; the institution to which the individual is applying; the last school or institution attended; the grade point average (GPA) for schools or institutions previously attended; address city, state, and ZIP code at the time of application; and the admission outcome (admitted or denied admission).

Classification of Applicants

The study focuses on undergraduate applicants, who are further categorized as (1) those entering directly from high school, with no intervening postsecondary enrollment; (2) those transferring from another postsecondary institution; and (3) those returning to an institution where they had been enrolled previously. Based on these categories, applicants were characterized into five mutually exclusive subcategories:

- Prior year public high school graduates (e.g., 2009-10 high school graduates for the Fall 2010 study)
- Transfer applicants who have received a direct transfer agreement (DTA) associate degree from a Washington community or technical college
- Transfer applicants who have not been awarded a DTA associate degree previously enrolled in a Washington community or technical college (and did not previously enroll in a Washington public four-year institution)
- Transfer applicants with prior Washington public four-year institution enrollment, even if there is also prior enrollment in a Washington community or technical college, and students applying to the four-year institutions as returning students
- Other new and transfer applicants

The 805 applicants who were awarded a DTA associate degree based on community or technical college coursework taken while enrolled in high school are included in the 2009-10 public high school graduate category for this first phase of the analysis.

Application Status

Applicants were classified as “accepted” if they were offered admission 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. In some cases, applications were received and withdrawn before an admission decision was made, or they were incomplete or submitted too early or too late. Application records such as these – for which an admission decision was not made – were excluded from this analysis.

Enrollment

Enrollment status of an applicant was determined through matching with one of three enrollment sources, all part of the ERDC P-20W data stores:

- The Public Centralized Higher Education Enrollment System (PCHEES), which is maintained by the Office of Financial Management
- Enrollment records from the State Board for Community and Technical Colleges (SBCTC)
- Enrollment information provided by the National Student Clearinghouse¹

Cross-Sector Data

In addition to the postsecondary education data sources previously mentioned, additional applicant characteristics and information about their prior enrollment was obtained from Office of Superintendent of Public Instruction.

Identification of Direct Transfer Agreement (DTA) Associate Degree Holders

The Direct Transfer Agreement (DTA) Associate Degree is the community college degree designed to transfer to most bachelor’s degree programs in Washington’s four-year institutions.² Generally, if an individual has been awarded a DTA Associate Degree and is accepted at a four-year institution, he/she will have met lower division general education requirements at that institution and will enter with junior standing. Identification of applicants with a DTA associate degree, received either prior to Fall 2010, or during the 2010-11 academic year is based on completions data provided by SBCTC.

¹ Funding for NSC data acquisition was provided by U.S. Department of Education, American Recovery and Reinvestment Act (ARRA) Statewide Longitudinal Data Systems (SLDS) Grant Program.

² Details about the DTA Associate Degree are available on the SBCTC website at www.sbctc.ctc.edu/college/e_transfer.aspx

Determining Washington Residents

Recent graduates from a public high school in Washington and DTA Associate Degree holders with no prior enrollment in a 4-year institution are classified as Washington residents. For other applicants, those who enroll in one of the public four-year institutions are classified as a Washington resident if the institution considers them to be, based on enrollment records. For applicants who do not enroll, the residence at the time of application – based on city, state, and ZIP code – is used to determine whether an applicant is a Washington resident.

Status of Applicants for Fall 2010

There were a total of 73,654 undergraduate applications submitted by 57,522 applicants for Fall 2010 admission. About 70 percent of these applications were submitted by Washington residents. Table 1 shows the distribution of the applications by institution for Washington residents.

Table 1: Applications by institution, Fall 2010

Institution	Applications (Washington and Out-of-state Residents)	Submitted by Washington Residents	
		Count	Percent
University of Washington, Seattle (UWS)	26,721	13,893	52%
University of Washington, Bothell (UWB)	2,529	2,254	89%
University of Washington, Tacoma (UWT)	1,897	1,771	93%
Washington State University, Pullman (WSP)	13,830	10,787	78%
Washington State University, Vancouver (WSV)	1,288	1,168	91%
Washington State University, Tri-Cities (WST)	638	589	92%
Central Washington University (CWU)	7,426	6,829	92%
Eastern Washington University (EWU)	4,952	4,532	92%
The Evergreen State College (TESC)	3,216	1,652	51%
Western Washington University (WWU)	11,157	9,726	87%
Total	73,654	53,201	72%

Approximately 79 percent of all applicants and 70 percent of Washington resident applicants submitted applications to only one institution, as shown in Table 2.

Table 2: Number of applications submitted by applicants, Fall 2010

	All Applicants		Washington Resident Applicants	
	Count	Percent	Count	Percent
1 application	45,254	79%	26,869	70%
2 applications	9,142	16%	8,226	22%
3 applications	2,506	4%	2,442	6%
4 or more applications	620	1%	609	2%
Total	57,522	100%	38,146	100%

There were 38,146 Washington resident undergraduate applicants who submitted 53,201 applications to public four-year higher education institutions in Washington State for Fall 2010. The

subsequent status of these applicants is outlined in Table 3. Similar analysis is presented for five applicant categories.

Table 3: Outcomes for Washington resident applicants, for total and for subgroups, Fall 2010

	All Applicants	2010 Public High School Graduates	AA-DTA Applicants	Other CTC Transfers	Public 4-Year Transfers & Returning	Other Applicants
Applications	53,201	31,202	8,357	4,907	2,724	6,011
Applicants (Individuals)	38,146	19,554	7,019	4,235	2,565	4,773
Enrolled Washington Public 4-Year	23,768	11,721	5,290	2,406	1,944	2,407
Enrolled Washington CTC	3,926	2,291	321	865	183	266
Enrolled other institution	6,084	3,961	438	333	103	1,249
<i>Percent enrolled, any institution</i>	<i>88.5%</i>	<i>91.9%</i>	<i>86.2%</i>	<i>85.1%</i>	<i>86.9%</i>	<i>82.2%</i>
Not enrolled	4,368	1,581	970	631	335	851
Offered admission	2,843	985	706	346	245	561
Denied admission	1,525	596	264	285	90	290
<i>Percent denied admission</i>	<i>4.0%</i>	<i>3.0%</i>	<i>3.8%</i>	<i>6.7%</i>	<i>3.5%</i>	<i>6.1%</i>

Of the 38,146 Washington resident applicants for Fall 2010, 23,768 were enrolled at a Washington public four-year institution in Fall 2010.

An additional 3,926 were enrolled in a community or technical college and 6,084 were enrolled in a private or out-of-state institution.

A total of 4,368 Washington resident applicants for Fall 2010 were not enrolled in any higher education institution during Fall 2010.

Of those 4,368 Washington resident applicants for Fall 2010 not enrolled during Fall 2010, 2,843 were offered admission to a public four-year institution but did not enroll.

Finally, 1,525 applicants were denied admission for Fall 2010 and not enrolled in any higher education institution in Fall 2010.

Similar breakdowns for selected subgroups are also shown in Table 3.

Applicants Not Enrolled or Admitted by Institution, Fall 2010

Table 4 shows the breakout of the applicants who did not enroll and were denied admission by all institutions to which they applied. “Multiple” indicates that the applicants were denied admission by more than one institution.

Table 4: Fall 2010 Applicants not enrolled or admitted by institution and by applicant type

Applicant Type	Institution											Total
	UWS	UWB	UWT	WWU	WSP	WSV	WST	EWU	TESC	CWU	Multi	
2010 Public High School Graduates	155	12	11	108	102	2	3	25	1	68	109	596
AA-DTA Applicants	122	40	17	54	2	2	0	2	6	8	11	264
Other CTC Transfers	81	27	20	56	38	8	3	18	2	12	20	285
Public 4-Year Transfers & Returning	38	12	4	15	4	0	1	2	0	14	0	90
Other Applicants	96	20	23	41	27	8	5	13	0	32	25	290
All Applicants	492	111	75	274	173	20	12	60	9	134	165	1,525

UWS = UW, Seattle; **UWB** = UW, Bothell; **UWT** = UW-Tacoma;
WSP = WSU, Pullman; **WSV** = WSU, Vancouver; **WST** = WSU, Tri-Cities

As in past years, applicants to the University of Washington (all campuses) account for the greatest share (44%) of applicants not admitted or enrolled. The University of Washington campuses, Washington State University campuses, and Western Washington University account for 76 percent of the total.

Three types of applicants serve as the focus in the sections that follow:

- Washington public high school graduates, 2009-10
- DTA Associate Degree applicants
- Community & Technical College transfer applicants

Washington Public High School Graduates, 2009-10

A total of 19,557 applicants for Fall 2010 admission were Washington public high school graduates during the 2009-10 school year. Characteristics of these applicants are available by linking related information from K-12, including income status, race and ethnicity, grade point average, school income level, and school locale. From postsecondary enrollment records, students who enrolled in dual credit courses³ during high school can be determined. These elements are profiled in Table 5.

³ Dual credit courses, as defined here, include Running Start and College in the High School courses offered through public postsecondary institutions in Washington. There are other college-level course-taking opportunities available to high school students, including Advanced Placement (AP) and International Baccalaureate (IB) courses. Students receiving AP or IB college credits are not included in the “Dual Credit” category in this study.

Table 5: Characteristics of 2009-10 Washington public high school graduate applicants

Applicant Income Status In High School			High School GPA		
Low income (FRPL-eligible)	3,297	16.9%	3.50 – 4.00	8,958	45.8%
Not low income	16,257	83.1%	3.00 – 3.49	6,048	30.9%
			2.50 – 2.99	2,666	13.6%
			Lower than 2.50	715	3.7%
			Not reported	1,167	6.0%
Race/Ethnicity			Dual Credit		
American Indian, Alaska Native	213	1.1%	Dual credit	5,246	26.9%
Asian, Pacific Islander	2,867	14.7%	No dual credit	14,292	73.1%
Black/African-American	812	4.2%			
Hispanic	1,251	6.4%	School Locale		
White	13,397	68.5%	Large metro	3,182	16.4%
Two or more races	240	1.2%	Metro suburb	8,040	41.4%
Race/ethnicity not reported	774	4.0%	Midsized	3,670	18.9%
			Urban fringe	2,448	12.6%
			Distant	2,103	10.8%
			Not reported	111	0.6%
School Income Category					
Low income	4,359	22.3%			
Medium income	6,198	31.7%			
High income	8,997	46.0%			

Outcomes for various subgroups of the 2009-10 high school graduates are presented in the series of tables that follows.

For K-12 students, income status is determined by the student's eligibility for free or reduced-price lunch (FRPL). School income status can be described by the percentage of students who are FRPL-eligible. Table 6 shows outcomes for applicants based on their individual FRPL-eligibility and it also shows outcomes based on their school's income status.

The school income status categories were determined using the FRPL eligibility rates for all high school graduates. Table 6 shows the details for each of the three categories.

Table 6: School income status (based on FRPL eligibility of 2009-10 public high school graduates)

Income Status	Percent of Graduates FRPL-eligible	Number of Schools	Number of Graduates
Low income (high FRPL eligibility rate)	>33.5%	261	21,687
Medium income	19.25 – 33.49%	133	22,159
High income (low FRPL eligibility rate)	<19.25%	150	22,017

Table 7 shows the applications outcomes for 2009-10 Washington public high school graduates by individual low-income status and by the income status of the school from which they graduated.

Table 7: Outcomes for Washington resident applicants, by student income status and by school income category

	Student Income Status		School Income Category		
	Low Income	Not Low Income	Lower Income	Middle Income	Higher Income
Applications	5,562	25,640	6,991	9,565	14,646
Applicants (Individuals)	3,297	16,257	4,359	6,198	8,997
Enrolled Washington Public 4-Year	2,037	9,684	2,624	3,716	5,381
Enrolled Washington CTC	495	1,796	673	717	901
Enrolled other institution	369	3,592	583	1,294	2,084
<i>Percent enrolled, any institution</i>	<i>88.0%</i>	<i>92.7%</i>	<i>89.0%</i>	<i>92.4%</i>	<i>93.0%</i>
Not enrolled	396	1,185	479	471	631
Offered admission	199	786	274	295	416
Denied admission	197	399	205	176	215
<i>Percent denied admission</i>	<i>6.0%</i>	<i>2.5%</i>	<i>4.7%</i>	<i>2.8%</i>	<i>2.4%</i>

High school grade point average (GPA) was reported for some applicants by the institutions to which they applied. Many records had missing information, however. Table 8 shows applicant outcomes by high school GPA reported in the students' K-12 records.

Table 8: Outcomes for Washington resident applicants, by high school GPA

Universe for reporting by GPA: Applicants for whom high school GPA is reported

	2010 Public High School Graduates	High School Grade Point Average			
		3.50-4.00	3.00-3.49	2.50-2.99	<2.50
Applications	31,202	13,667	10,163	4,478	1,110
Applicants (Individuals)	19,554	8,958	6,048	2,666	715
Enrolled Washington Public 4-Year	11,721	5,732	3,743	1,347	178
Enrolled Washington CTC	2,291	413	780	639	302
Enrolled other institution	3,961	2,308	1,073	345	66
<i>Percent enrolled, any institution</i>	<i>91.9%</i>	<i>94.4%</i>	<i>92.5%</i>	<i>87.4%</i>	<i>76.4%</i>
Not enrolled	1,581	505	452	335	169
Offered admission	985	459	312	132	22
Denied admission	596	46	140	203	147
<i>Percent denied admission</i>	<i>3.0%</i>	<i>0.5%</i>	<i>2.3%</i>	<i>7.6%</i>	<i>20.6%</i>

Race and ethnicity characteristics of applicants to the public four-year institutions is frequently absent from application records received for this study, and is not available for individuals until they actually enroll in one of the institutions. Access to race/ethnicity information through K-12 records allows an analysis by race/ethnicity of the prior year high school graduates who applied for Fall 2010 admission. The outcomes for recent public high school applicants are shown in Table 9.

Table 9: Outcomes for Washington resident applicants, by race and ethnicity*Universe for reporting by race/ethnicity: Applicants for whom race/ethnicity is reported*

	American Indian & Alaska Native	Asian and Pacific Islander	Black/ African-American	Hispanic/Latino	White	Two or More Races
Applications	320	5,008	1,432	2,130	20,623	379
Applicants (Individuals)	213	2,867	812	1,251	13,397	240
Enrolled Washington Public 4-Year	133	1,799	425	726	8,030	139
Enrolled Washington CTC	19	401	126	225	1,409	34
Enrolled other institution	30	467	175	134	2,926	46
<i>Percent enrolled, any institution</i>	85.4%	93.0%	89.4%	86.7%	92.3%	91.3%
Not enrolled	31	200	86	166	1,032	21
Offered admission	16	103	36	90	699	12
Denied admission	15	97	50	76	333	9
<i>Percent denied admission</i>	7.0%	3.4%	6.2%	6.1%	2.5%	3.8%

Increasing numbers of high school students are participating in dual credit programs such as Running Start and College in the High School. Running Start is a program that allows 11th and 12th graders take college level courses at public 2- and 4-year institutions and earn both high school and college credit. It is possible to complete an associate degree at a community or technical college while in high school. Of the 8,227 Fall 2010 applicants who had participated in dual credit programs (Running Start or College in the High School) while in high school, 805 earned DTA Associate Degrees prior to Fall 2010.

Table 10: Outcomes for Washington resident applicants, by high school dual enrollment (Running Start or College in the High School)

	2010 Public High School Graduates	All Dual Enrollment	DTA Prior to Fall 2010	No Dual Enrollment
Applications	31,202	8,227	1,230	22,975
Applicants (Individuals)	19,554	5,246	805	14,308
Enrolled Washington Public 4-Year	11,721	3,262	577	8,459
Enrolled Washington CTC	2,291	573	26	1,718
Enrolled other institution	3,961	1,032	140	2,929
<i>Percent enrolled, any institution</i>	91.9%	92.8%	92.3%	91.6%
Not enrolled	1,581	379	62	1,202
Offered admission	985	264	49	721
Denied admission	596	115	13	481
<i>Percent denied admission</i>	3.0%	2.2%	1.6%	3.4%

DTA Associate Degree Applicants

In addition to the 2009-10 high school graduates who earned DTA Associate Degrees prior to Fall 2010, an additional 8,357 individuals with DTA Associate Degrees applied for Fall 2010 admission to Washington public four-year institutions. The outcomes of the applicants with DTA Associate Degrees are shown in Table 11.

Table 11: Outcomes for Washington resident applicants, for total and for subgroups

	All DTA Applicants	DTA Earned in HS	DTA Earned After HS
Applications	9,587	1,230	8,357
Applicants (Individuals)	7,824	805	7,019
Enrolled Washington Public 4-Year	5,867	577	5,290
Enrolled Washington CTC	347	26	321
Enrolled other institution	578	140	438
<i>Percent enrolled, any institution</i>	<i>86.8%</i>	<i>92.3%</i>	<i>86.2%</i>
Not enrolled	1,032	62	970
Offered admission	755	49	706
Denied admission	277	13	264
<i>Percent denied admission</i>	<i>3.5%</i>	<i>1.6%</i>	<i>3.8%</i>

Community & Technical College Transfer Applicants

Table 12 shows enrollment outcomes for all applicants classified as CTC transfer applicants, including those awarded a DTA Associate Degree prior to Fall 2010.

Table 12: Outcomes for Community & Technical College Transfer Applicants (Excluding those with prior public 4-year enrollment)

	College GPA As Reported in Applications File						Not Reported
	3.50-4.00	3.00-3.49	2.75-2.99	2.50-2.74	2.00-2.49	<2.00	
Applications	1,934	2,038	726	446	323	18	4,102
Applicants (Individuals)	1,508	1,584	592	359	255	15	3,511
Enrolled Washington Public 4-Year	1,132	1,215	443	267	187	4	2,619
Enrolled Washington CTC	45	61	37	17	20	2	165
Enrolled other institution	156	105	46	19	12	4	236
<i>Percent enrolled, any institution</i>	<i>88.4%</i>	<i>87.2%</i>	<i>88.9%</i>	<i>84.4%</i>	<i>85.9%</i>	<i>66.7%</i>	<i>86.0%</i>
Not enrolled	175	203	66	56	36	5	491
Offered admission	157	150	44	38	12	0	354
Denied admission	18	53	22	18	24	5	137
<i>Percent denied admission</i>	<i>1.2%</i>	<i>3.3%</i>	<i>3.7%</i>	<i>5.0%</i>	<i>9.4%</i>	<i>33.3%</i>	<i>3.9%</i>

Prior Pre-college Course-Taking

Between 50 and 60 percent of recent high school graduates enrolling in a community or technical college enroll in one or more pre-college (sometimes called “remedial”) courses during their first year of studies⁴. Many of these students go on to apply to the public four-year institutions. Of the Fall 2010 applicants, over 19,000 had some prior community or technical college enrollment,

⁴ See “P20 Reports on Washington Public High School Graduates,” a series of ERDC reports, at www.erdccdata.wa.gov.

including dual enrollment through Running Start and College in the High School). Table 13 shows the enrollment outcomes for all applicants with prior CTC enrollment.

Table 13: Outcomes for applicants with CTC credits in pre-college mathematics or English

	All Applicants with Prior CTC Enrollment	Prior Enrollment in Pre-College Courses			
		No Pre-College	Math Only	English Only	Both Math and English
Applicants (Individuals)	19,503	12,597	5,069	619	1,218
Enrolled Washington Public 4-Year	12,721	7,847	3,639	409	826
Enrolled Washington CTC	2,323	1,540	555	77	151
Enrolled other institution	2,204	1,818	275	45	66
<i>Percent enrolled, any institution</i>	<i>88.4%</i>	<i>88.9%</i>	<i>88.2%</i>	<i>85.8%</i>	<i>85.6%</i>
Not enrolled	2,255	1,392	600	88	175
Offered admission	1,476	907	403	55	111
Denied admission	779	485	197	33	64
<i>Percent denied admission</i>	<i>4.0%</i>	<i>3.9%</i>	<i>3.9%</i>	<i>5.3%</i>	<i>5.3%</i>