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Residence and Mobility of Graduate and Professional

Students in the West.

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Western Interstate Commission for Higher Education,

Boulder, Colo.

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IDENTIFIERS

In State Students; Out of State Students; \*Western

States

A summary is presented of data available on graduate ABSTRACT tuition and fees, numbers of graduate programs and degrees conferred, and residence and mobility of graduate and first-professional students in the 13 states that comprise the Western Interstate Commission for Higher Education. Graduate tuition levels in the 13 western states vary widely for both resident and nonresident students. The median resident tuition was \$545 compared to a median nonresident tuition of \$1,632. Despite these tuition barriers, large numbers of students do migrate to attend graduate and first-professional school. Only three states experienced a net out-migration of graduate students in Fall 1975. Only four states attracted more first-professional students than the number of their state residents attending first-professional schools in other states. The migration of graduate and first-professional students has not been the subject of policy research and evaluation from a regional perspective, nor has the impact of tuition rates been viewed from a regional planning perspective. Appendices provide 1977-78 graduate tuition and fees at public institutions in the west: Ph.D. programs available in six western states, number of doctoral degrees awarded, and average number of degrees awarded per program in 1975-76; and graduate enrollment at state universities and land grant colleges during the Pall of 1976 and 1977. (SW)

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# Project on Expanding Regional Cooperation in Graduate & Professional Education



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### WICHE

The Western Interstate Commission for Higher Education is a nonprofit agency created in the 1950s by the governors and legislatures of the 13 western states. Through interstate sharing and research, WICHE helps states provide high-quality, cost-effective higher education to meet the human resource needs of the states and the education needs of the citizens. WICHE serves Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.



### **Project Intent**

WiCHE's project on Expanding Regional Cooperation in Graduate and Professional Education encourages resource sharing in graduate and professional education in the West by providing information about these programs throughout the region. The project is establishing an information system that will enable higher education decision makers to plan for the future of graduate and professional education from a regional perspective. The graduate education project is supported by a two-year grant from the Carnegie Corporation of New York and by WICHE state dues through its Student Exchange Program.

The project seeks to improve the effectiveness and efficiency of graduate education in the West so that both students and taxpayers are better served.

### Statt

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# RESIDENCE AND MOBILITY OF GRADUATE AND PROFESSIONAL STUDENTS IN THE WEST

Report 78-2

Prepared by Norman Kaufman

September, 1978

Western Interstate Commission for Higher Education An Affirmative Action/Equal Opportunity Employer P.O. Drawer P

Boulder, Cclorado 80302



### **HIGHLIGHTS**

- for both resident and nonresident students. Resident graduate tuition ranged from a low of 170 dollars to a high of 1166 dollars, a spread of 996 dollars. Nonresident tuition varied from 1028 dollars to 2736 dollars, a range of 1708 dollars.
- The median resident tuition was 545 dollars compared to a median nonresident tuition of 1632 dollars. These dollar differences between resident and nonresident graduate tuition represent considerable price barriers to many graduate students.
- Despite these tuition barriers, large numbers of students do migrate to attend graduate and first professional school. These numbers are greater, proportionally, from the smaller western states where graduate offerings may be limited.
- Only three states experienced a net out-migration of graduate students in Fall 1975, while only four states attracted more first professional students to institutions within their borders than the number of their state residents attending first professional schools in other states.
- The migration of graduate and first professional students has not been the subject of policy research and evaluation from a regional perspective, nor has the impact of tuition rates been viewed from a regional planning perspective.



# RESIDENCE AND MOBILITY OF GRADUATE AND PROFESSIONAL STUDENTS IN THE WEST

This brief report contains a summary of data available on graduate tuition and fees, numbers of graduate programs and degrees conferred, and residence and mobility, that is, the in- and out-migration of graduate and first professional students in the thirteen states that comprise the WICHE region.

### Context

In developing their systems of higher education, western states have attempted to achieve several goals: Access to postsecondary education for all students seeking it; diversity of programmatic and institutional choices; the efficient use of tax money; academic excellence appropriate to individual programs and institutions; and, responsiveness both to society's need for trained manpower and the need of the individual student for self development. In pursuing these goals, the states have understandably concentrated their efforts and resources on their own citizens. One result of this concentration has been to create price barriers to students from other states.

It is the goal of the WICHF Project on Expanding Regional Cooperation in Graduate and Professional Education to demonstrate that the reciprocal lowering of tuition in these states would facilitate both a freer interchange of students among states and an environment for cooperative interstate and interinstitutional planning with respect to graduate and professional education. The presentation and discussion of the data that follow should be viewed in this context. Regardless of the interpretations given, the data should prove informative and useful to the reader.



### Price Barriers

prospective graduate student from entering an institution in another state, even when that institution could serve the student's need more effectively than one in his or her state of residence. Table 1 summarizes the graduate level tuition and fees charged resident and nonresident students at public institutions in the thirteen WICHE states; Appendix A lists the 1977-78 resident and nonresident graduate tuition for sixty-nine state universities in the western United States.

These exhibits illustrate the wide range of graduate tuition in the West. For 1977-78, resident tuition charges ranged from a low of 170 dollars at several California state colleges to a high of 1166 dollars at the University of Oregon, a spread of 996 dollars. Nonresident tuition charges varied from 1028 dollars at New Mexico Highlands University to 2736 dollars at the University of Washington and Washington State University, a range of 1708 dollars. Because of this range of tuitions, a graduate student might spend as little as 170 dollars per year to attend a program in his or her home state or as much as 2736 dollars to attend an out-of-state public institution--a difference of over twenty-five hundred dollars.

While these figures are not reflective of programmatic or institutional differences (and do not consider the additional element of private university offerings), they do reflect some of the economic considerations inherent in the student's choice of graduate programs. The median resident tuition among the sixty-nine institutions listed was 545 dollars and the mean was 546 dollars. In contrast, the median nonresident tuition was

Table 1

## AVERAGE GRADUATE TUITION AND FEES

- BY STATE, 1977-78

	Resident Tuition	Non- Resident Tuition	Difference (R - NR)
Alaska	\$ 692	\$1292	\$ 600
Arizona	. 433 '	1560	1127
California State Universities & Colleges University of California	193 _ 754	1633 2659	1440 1905
Colorado University of Colorado/ Colorado State University Others	764 600,	2509 1753	1745 1153
Hawaii	550	1375	825
Idaho	410	1357	947
Montana Universities Colleges	580 ، 514	1948 1522	1368 1008
Nevada	642	1689	1047
New Mexico University of New Mexico/ New Mexico State University Others	518 346	1529 1040	1011 694
Oregon	· 1155	1302	147 <sup>(1)</sup>
Цtah	550	1418	868
Washington University of Washington/ Washington State University Others	740 651	2736 2256	1996 1605
Wyoming	434	1400	966
Average for the Region			Salar Sa
Mean Median	546 545	1776 1632	1147* 1047**

## <u>Highest Tuition</u>

Resident--OREGON Nonresident--VASHINGTON

# Lowest Tuition

Resident--CALIFORNIA--State Universities and Colleges Nonresident--OREGON



<sup>\*</sup>i.e., the arithmetical mean of the differences among average resident and nonresident is \$1147.

\*\*One-half the states have differentials of \$1047 or less.

1632 dollars and the mean 1776 dollars. Twelve institutions charged more than twenty-six hundred dollars for nonresident tuition and fees.

### Consequences of Price Barriers

The desire of states to give priority to the educational needs of their own citizens is proper and fair. In addition, states face specific pressures motivating them to create price barriers. Among these are:

- The diminution of federal and other nonstate sources of financial assistance to and support for graduate students and institutions.
- Student demands for access and equity, which have led to the expansion of graduate and professional programs.
- Professional licensing and certification requirements which require graduate-level continuing education, thus creating a demand for services.
- A stable, rather than expanding, resource base from which to accommodate
  these pressures leading, in many cases, to the implementation of policies
  restricting the enrollment of nonresidents.

Pressures giving rise to tuition surcharges for nonresidents may have the unintended consequence of contributing to unnecessary program development. As states simultaneously raise tuition barriers to nonresident students, out-of-state opportunities for their own students are similarly constrained. This means that access to <u>certain programs</u> may be severely limited for students unless those programs are offered in the student's home state. Thus,

each state is led to develop a comprehensive array of academic programs, including programs which are highly specialized and could be developed more efficiently on a regional basis. This situation may contribute to the development of more programs than are needed to meet regional needs.

This condition of possible program redundancy and duplication is suggested by the data in Appendix B, which aggregates the number of doctoral programs offered in six western states (Alaska, Idaho, Montana, New Mexico, Oregon, and Washington) by broad subject areas. Reference to this table provides the reader with an indication of the number of doctoral programs which did not award any degrees in 1975-76 and the relatively low average number of degrees conferred per program. If these data are indicative of the situation throughout the region, then one might infer that a good deal of duplication does, in fact, exist. Table 2 shows the number of graduate degree programs in the thirteen western states and the number of master's degrees and doctorates conferred in 1975-76.

# Residence and Mobility

Despite tuition barriers and the development of comprehensive postsecondary education systems in many states, large numbers of students do migrate from their home state to attend graduate or professional school. In smaller states, typically, opportunities for graduate and professional training are limited. In addition, many students choose to attend out-of-state private institutions because of their national or regional appeal and reputations. Table 3 depicts the basic data on residence and mobility of graduate and first professional students for fall, 1975, the most recent year for which

Table 2

GRADUATE DEGREE PROGRAMS AVAILABLE IN THE WEST, AND NUMBER OF DEGREES CONFERRED, BY BROAD ARFA, 1975-76

•		<u> </u>	
		Number of:	
8road Subject Area	Graduate Oegree Programs in the Western United States	Master's Degrees Conferred 1975-76	Doctoral Degrees Conferred 1975-76
		, , ,	
Agriculture and Matural Resources	191 " ` ^	777	190 🛝
Architecture and Environmental Design	66	515	16
Area Studies	105	188	32
. Biological Sciences	325	929	728
Business and Management	248 7	6,021	156
Communications	90	310	45
Computer and Information Sciences	. 43	323	. 48
Education	480	9,453	1,322
Enginéering	318	3,321 -	698
Fine and Applied Arts	254	ا 1,311 س	115
Foreign Languages	256 -	529	155
Health Professions .	218	1,987	91 - '
- Home Economics	97	284	12
Law	] 11	. 55	6
Letters	252	1,425	387
Library Science	18	- 1,030	11
Mathematics	77	475	187
Physical Sciences	266	969	758
Psychology	99	1,129	614
Public Affairs and Services	101	2,404	71
Social Sciences	381 -	2,289	902
Theology	34 .	195	123
Interdisciplinary Studies	137	210 -	65 .
TOTAL	4,067	36,129	6,732

Table 3

Graduate Students

(3)

# TOTAL GRADUATE AND FIRST-PROFESSIONAL STUDENT

# RESIDENTS, THOSE ENROLLED IN-STATE AND OUT-MIGRANTS

BY STATE IN THE WICHE REGION, FALL 1975

·(4)·

1,438

3,334

39,663

360

784

1,803

27,485

119

654

241

15537

12,178

First Professional Students

a 'States		Student' Residents*	Students Remaining**	Number of Out Nigrants	Ratio of Students Remaining (2) to Student Residents (1)	Student Residents*	Students Remaining**	Number of Out Migrants	Ratio Stude Remaini to Stu Residen
Alaska	٠.	1,622	1,152	470	0.71	167	0	167	0.0
Arizona		14,176	12,501	1,675	0.88	1,595	797	798	, 0.5
California,	4	164,339	150,909	13,430	0.92	24,057	19,416	4,641	0.8
Colorado		10,781	7,249	∖ 3,532	0.67	2,478	1,381	1,097	0.5
Hawaii	ا، ر	2,729	7,755	974	0.64	782	333-	449	0.4
Idaho	•	3,535	2,543	992	0.72	é20 J	.186	434	0:3
Mon tana	• "	2,832	1,870	<del>9</del> 62 (	0.66	575	147	428	0.2
Nevada		1,708	1,188	520	·0:70	∙ 287- •.	ί ο	287	* 0.0
New Mexico		5 792	4,310	7,482	0,74	1,177	535	642	0:4
Oregon		9,840	7,574	,2,266	· 0.77	2,793	1,984	809	0.7

6,095

10,851

235,059

759

4,708

7,297

203,361

305

Utah

Washington

TOTAL, WICHE States

Wyoming

National Center for Education Statistics

19387

3,554

31,698

454

€ Ö.77

0.67

0.40

0:87

<sup>\*</sup>f.e., students whose residence by NCES definitions is the state listed. . \*\*i.e., those students who remain in their home state.

data is available. The figures on the left hand side of Table 3 refer to graduate students and illustrate that, typically, one-quarter to one-third of each western state's residents who attend graduate school go out of state. California and Arizona are notable exceptions to this generalization in that only 8 and 12 percent of graduate students residing in these states attend school in other states. On the other hand, sixty percent of Wyoming residents who attend graduate school do so in other states. Thus, although the overall percentage of students in the West who attend graduate school in their home state is higher than the national average (87 percent versus 80 percent), graduate students residing in eleven of the thirteen states tend to be more mobile than their counterparts nationwide. This figure is weighted heavily by California's nearly 151,000 students remaining, a figure comprising three-fourths of the total for all thirteen western states.

Two planning-issues need to be addressed; (1) whether present levels of mobility represent adequate access for western state graduate students, and (2) whether the lowering of tuition barriers would be justified by the resulting facilitation of interstate cooperation and resource sharing.

First professional students residing in the West tend to be even more mobile than their graduate student counterparts. The figures on the right-hand side of Table 3 indicate the number of first professional students (e.g., law, medicine, dentistry, veterinary medicine, optometry, osteopathy, podiatry, chiropractic, theology, etc.) who reside in each state, the number who remain (i.e., attend school in their home state), and the number of out-migrants. These figures indicate that in seven of the thirteen states a

majority of professional students leave the state for training. These data attest, in part, to a limited number of openings in each state and the consequent high level of competition for places. Also, two states, Alaska and Nevada, offer no first professional training and several others offer training in very few fields. Only California and Oregon provide many more than half of the first professional places—occupied by their residents.

These data, taken by themselves, do not necessarily indicate a dearth of opportunities and may, in fact, represent the reasoned policy of these states in providing funds for a mix of educational opportunities and other social priorities, while at the same time ensuring an adequate supply of trained practitioners. Many states have sought other mechanisms to provide places for professional students such as use of WICHE's Professional Student Exchange Program and specific bilateral agreements between states.

Table 4 offers another perspective on graduate and professional student migration by contrasting the number of student out-migrants with the number of students coming into the state and giving the net inflow or outflow for each state and the region. In most cases, WICHE states attracted more graduate students into their institutions than the number leaving, resulting in a positive net figure. The opposite was true for first professional students. In nine of the thirteen states, greater numbers of students left their homestate, resulting in a negative net figure. These net figures for professional students may be indicative of two factors: First, the desire of professional schools, especially independents, to recruit a heterogeneous student body and, second, the dominant position of California's statistics (weighted, in part, by a significant number of students coming in through

Table 4

NET PATTERNS OF MIGRATION FOR GRADUATE

AND FIRST PROFESSIONAL STUDENTS IN THE

THIRTEEN WICHE STATES, FALL 1975

	Gr	aduate Stude	nts,	First I	Profestional	Students	Net
State	Out of	Into	Net	Out of	Into	Net	Graduate and Professional
Alaska	- 470	40	-430	167	0	<b>-167</b>	-597
Arizona	1,675	5,692	4,017	798	155	-643	3,374
California	13,430	25,510	12,080	4,641	5,665	1,024	13,104 °
Colorado	3,532	6,183	2,651	1,097	1,240	143	2,794
Hawa i i	974 ·	1,932	958	449	90 .	-359	599
Idaho	992	701	-291	434	94	-340	-631
Montana	962	817	-145	428	66	-362	-507
flevada	520	800	230	287	0	-287	-7.
New Mexico	1,482	1,717	235	642	68	-574	-339
Oregon	2,266	4,585	2,319	809	1,560-	751	3,070
Utah	1.,387	2,850	1,463	654	472	-182	1,281
- Washington	3,554.	5,670	2,116	1,531	1,741	210	2,326
Wyoming	454	714 -	260	24)	. 94	-147	113
TOTAL, WICHE States	31,698	57,211,	25,513	12,178	11,245	-933	24,580

SOURCE: National Center for Education Statistics

WICHE's Professional Student Exchange Program) and their influence on the totals for the region. Because of this latter fact, the reader is urged to review the data on a state by state basis.

These data indicate that, on the whole, graduate and first professional students in the West are more mobile than the class of graduate or first professional students taken as a nationwide group. Variations in state policy, and thus, opportunity for these students, exist within the region and among states. Yet, very few efforts are under way to address these issues and to recommend alternative policies and practices. The Project on Expanding Regional Cooperation in Graduate and Professional Education seeks to contribute to the effectiveness and efficiency of graduate-level education in the West by encouraging and facilitating resource sharing. Project activities include: (1) the development of a data base on graduate education and the capacity for analytic efforts to support planning, and (2) planning activities in six demonstration states to develop new patterns of cooperation and resource sharing at the graduate level.

This report and others forthcoming are intended to provide information on graduate education and to stimulate efforts at cooperation among states and institutions. The reader's comments, critiques, and suggestions are most welcome.

### Appendix a

## RESIDENT AND NONRESIDENT GRADUATE TUITION

# AND FEES AT PUBLIC INSTITUTIONS. IN THE WEST,

# BY STATE, 1977-1978\*

	•		• '
State and Institution	Resident Tuition	Non- Resident Tuition	Oifference
Other and superior	(\$)	(\$)	· (2)
Color and the second			<b>**</b>
		•	
***************************************	-	<u> </u>	<u>-'</u> , <u>.</u>
ALASKA		<del>-</del>	
University of AlaskaFairbanks	\$ 692	\$1292	4 500
University of AlaskaJuneau Senior College	692	1292	\$ 500 600
University of AlaskaAnchorage Senior College	692	1292	600
		1777	
ARIZONA	•		المطاسمين فالمسترافية
Section Control (Ind., una Pari	***		
Arizona State University Northern Arizona University	450 400	1640	1190
University of Arizona	450	1400≈ 1640∖	1000
Olliferated of Mirrolla		1040,	, 190 ·
CALIFORNIA			
*	•		
California Polytechnic State University	. 4	-1.	.,
San Luis Obispo California State Universities:	200	1640	1440
California State Universities:	104	. 760 <b>₽</b> *// .	1440
Dominguez Hills	194 170	163 <b>47</b> (5)	1440 1440
San Bernardino	194	1634	1440
Stanislaus	190	1630	1440
Pomona	192	1632	1440
Chico	- ′ 201	1640	1439
Fresno	198	1638	1440
Fullerton	230	1670	1440
Logg Beach Los Angoles	190 · ´ 190 ·	1630	1440
Northridge	190	1638 1630	1448 1440
Sacramento	190	1630	1440
- Humboldt State University	190 2	- 1630	1440 · `
San Diego State University = -	188	1628	1440
San Francisco State University	184	1631	1447
Sonoma State College	170	1620 <u>·</u> .	1450~ ~
University of California: Santa Cruz	803	19700	1005
San Francisco	791	, 2708 2696	1905 1905
Berkeley	770 .	2675	1905
San Diggo	750.	2655	1905
Los Angeles	750 ·	2655	1905 .
🤋 - Santa Berbara - L	743	2648	1905
Irvine	735	2640	1905
Riverside Oavis	729 719	2634	1905
UGY13	1113	2624	1905
COLORÁDO		•	•
			<i>:</i>
Adams: State, University	604	1434	830
University of Northern Colorado	572	1859	1287
University of Southern Colurado ,	· 618	1930 1700	1312
Western State College Colorado State University	604 727	1790 2375	1186 1648
University of Colorado	800	2642	<ul> <li>1046</li> <li>1842</li> </ul>
		PA-1#	. 1042
HANAII AS		•	-
_	, , , , , , , , , , , , , , , , , , ,		
. University of HawajiManoa	-550	1375	825

<sup>\*</sup>Source: American Association of State Colleges and Universities, Office of Government Relations; and National intion of State Universities and Land Grant Colleges, Office of Research and Information.

			<i>A</i>	
		Non-		
	Resident	Resident		
Cara and Tambianadan	Tuition	Tuition	Difference	
State and Institution	(\$)*	(\$)		-2
A. The state of th	<b>\41</b>		· · (\$) - · · ·	
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<u>IDANO</u>			- j	
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Boise State University	_\$ 366	\$1406	\$1040/	
	410		850	
University of Idaho	534	1734	1200	
Lewis-Clark State College	328	1028	700	Ξ.
		.*		
MONTANA				
			****	
Eastern Montana College	519	1527	1008	
Montana College of Mineral Science and			— <u> </u>	•
Technology	516	· 1524	1008	
Northern Montana College	185	1493	1008	•
Western Montana College	- 534	1542	1008	
Montana State University	546	1914	1368	
University of Montana	613	. 1981	<b>1368</b>	
The second of th	• •			
<u>NEVADA</u>		- , ,		. •
		A		
University of NevadaLas Vegas	756	: 1878 (	1122	
University of NevadaReno	- 528	1500 J	972	
	Tarak in sa		\	
NEW MEXICO		10 m 10 m 10 m 10 m 10 m	1	_
New Mexico Highlands University	349	1028	679`	-
Western New Mexico University	343 . ,	<u> </u>	708	
University of New Mexico	514	1510	996	
New Mexico State University	522	1548	1026	٠.
				ľ
OREGON			·	-
		45.	· // //	_
Eastern Oregon State College	1161	1308	» \ 147	
Portland State University.	1152	1299	147	
South Oregon State College	1158	1305	147	-
Oregon College of Education	1127	1274	147	
"- University of Oregon"	1166	1313	147	•
Oregon State University	1164	<u></u>	147 (-	
		<sub>'</sub> +,		•
<u>UTAH</u>	6		er a training	
	7 . C45	1 400	Age b	
University of Utah	545 555 »	1420	0/5	
Utah State University	555 .	1416	861	
		"		
MASHINGTON	-	* *7	ニー・フィーブ	
San	· ces	gore	7605	
Gentra's Washington University	651·	2256	1605	•
Eastern Hashington University	65 <u>1</u>	2256	1605	
Western Washington University	. 651	2256	1605	-
University of Washington	741	2736	1995	
Washington State University	740	2736	1996	
***************************************	٠		A	:
WYONING A STATE OF THE STATE OF		*		
Confirmation of Manager	3 828 '	1 400	ose	
University of Wyoming	434	1400	966	
No. 15			*	
Meuan .	å oce	<b>¢</b> 1700	<b>\$184</b> 9′′,	
RÄNGE	, 1\$ 996 (170 +6 1166)	\$1708		
	(170 to 1166)	(1028 to 2736)	(147 to 1996)	
· · · · · · · · · · · · · · · · · · ·	* ***	\$37¢¢	#1200	
MEAN .	\$ 546	\$1766	\$1220	
Anna sar	# EAF	. ¢1622 `	\$1087	•
MEDIAN	. \$ 545	\$1632-	<b>≱1007</b>	
A STATE OF THE STA	•		2	

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\*Full East Provided by ERIC

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### Appendix B

# PH.D. PROGRAMS AVAILABLE IN SIX WESTERN STATES, \* HUMBER OF DOCTORAL DEGREES

AWARDED AND AVERAGE NUMBER OF DEGREES AWARDED PER PROGRAM, 1975-76

	Number of Major Fields of Study at Institutions Within Six States	Number of Doctoral Degrees Awarded	Number of Programs Which Did Not Award Any Doctorates in 1975-76	Average Number of Degrees Conferred Per Program
	'* ,			
Agriculture and Natural Resources	58	73	37	1.3
Architecture and Enviornmental Design	17	2	16	0.1
Area Studies	15	12	12 .	0.8
Biological Sciences	66	133	14	2.0
Business and Management	44	25	35	0.6
Communications	; 16	7	13	
Computer and Information Sciences	12	5	10	0.4
Education	106	303	53	2.9
Engineering	80	70	48	0.9
Fine and Applied Arts	47	25	30	0.5
foreign Languages	24	<b>2</b> 9	16	1.2
Health Professions	9	jý) ····	2	2.1
Home Economics	8	1-1	7	0.1
Letters	4.3	86	37	
Library Science	2 4	3	1	≟″ ຊ <b>.5</b>
Mathematics	, 15.	37	2	2.5
Physical Sciences 4	74	157	25	2.1
.Psychology	34	. 74	3	5.3
Public Affairs and Services -	8	1 * *	7	0.1
Social Sciences	77 .	149	. 18	1.9 48
Interdisciplinary Studies	7 .	ü	0 .	1.2
TOTAL	740	1222	366 (49.4%)	1,65

National Center for Education Statistics, Earned Degrees Conferred, 1975-76.

ERIC (x states are: Alaska, Idaho, Montana, New Mexico, Oregon, and Washington.

# Appendix C'-

# GRADUATE ENROLLMENT AT STATE UNIVERSITIES AND LAND-GRANT COLLEGES

# FALL 1976 AND FALL 1977

-		,•	
•		· ·	
	•	. 102	Percent Change
•	Fal3_1976	Fa13 1977	1976 to 1977
•	F#11_17/V	1417 1911	
		•	
Alaska			
University of Alaska	A/R	•	
Fairtanks	245	277	13,1%
Laiteanks .	543		
Arizona	•		
Arizona State University	8,786*	5,732	not computed .
thiversity of Arizona	6,377	6,664	7.65
THUSANZICA OF WLITCHS	0,577		
		1	
Cailfornia		· ·	•
University of California		•	
	11,772	8,126 ∞₹	not computed
- Berkeley	11,776	2,943	not computed
Qavis -	5.041*	6.7743	net computed
lrvine	1:,397*	1,335	not computed:
tos Angeles	20.972*	8,047	not computed
	1,403	1.327	not computed #
Riverside	1 4 6034	1,473 <i></i>	not computed -
54n Diego	4,633*	720	and computed
San Francisco	1,867*	140	not computed
Santa Barbara	4.395	1,913	not computed
	4;251	349	not computed
~ Santa Cruź ·	41231		
		1 × 1	
Colorado .			
Colonido Essão Holivarias	3,472	3,853	11.0%
Colorado State University	3,476		
University of Colorato			- 1.63
Boulder	3,615	- 3.556	
Colorado Springs	. 394	452%	14.7%
	1,719	1,806	5.1%
Denver	14/19	362	7.7%
Med Center	336	707	• ''' Y
•			
undit.			
Hawali.			
University of Hawali		3,630	. 15,4%
_Manoa	3,146	7.030	. 1447
			4 ,
8110	W N/A	27	
Bilo		27	
Bilo *		27	
Idaho A	. ¥/A · .	27	
Idaho A		1,289	- 9.2%
Bilo *	. ¥/A · .	27	
Idaho University of Idaho	. ¥/A · .	27	
Hilo  Idaho University of Lidaho  Montana	. ¥/A · .	27	
Hilo  Idaho University of Lidaho  Montana	. ¥/A · .	1,289	
Hilo  Idaho University of Idaho  Montana Hontana University System East Montana	. ¥/A · .	1,289 433	
Hilo  Idaho University of Idaho  Montana Hontana University System East Montana	. ¥/A · .	1,289 433 20	- 9,23
Hilo  Idaho University of Idaho  Montana Hontana University System East Hontana Hin/Science and Technology	N/A 1,420	1,289 433	
Hilo  Jeaho University of Leaho  Montana Hontana University System East Hontana Hin/Science and Technology Hontana State	. ¥/A · .	1,289 1,289 433 20 539	- 9,23
Hilo  Idaho University of Idaho  Montana Hontana University System East Montana Hinr Science and Technology Hontana State Horthern Montana	1,420 580	1,289 433 20 539 125	- 9,23
Hilo  Jeaho University of Leaho  Montana Hontana University System East Hontana Hin/Science and Technology Hontana State	N/A 1,420	1,289 433 20 539 125	- 9,23
Hilo  Idaho University of Idaho  Montana Montana University System East Montana Min/Science and Technology Montana State Northern Montana University of Idaho	1,420 580	1,289 1,289 433 20 539	- 9,23
Hilo  Idaho University of Idaho  Montana Hontana University System East Montana Hinr Science and Technology Hontana State Horthern Montana	1,420 580	1,289 433 20 539 125	- 9,23
Hilo  Idaho University of Idaho  Montana Hontana University System East Hontana Hin/Science and Technology Montana State Rorthern Montana University of Hontana Western Montana	1,420 580	1,289 433 20 539 125	- 9,23
Hilo  Idaho University of Idaho  Montana Montana University System East Montana Min/Science and Technology Montana State Northern Montana University of Houtana Mestern Montana Mestern Montana	*/A 1,420 580 N/Ä	27 1,289 433 20 539 125 789 162	- 9.2x - 7.1%
Hilo  Idaho University of Idaho  Montana Montana University System East Montana Min/Science and Technology Montana State Northern Montana University of Houtana Mestern Montana Mestern Montana	1,420 580	1,289 433 20 539 125	- 9,23
Hilo  Idaho University of Idaho  Montana Hontana University System East Hontana Hin/Science and Technology Montana State Rorthern Montana University of Hontana Western Montana	*/A 1,420 580 N/Ä	27 1,289 433 20 539 125 789 162	- 9.2x - 7.1%
Hilo  Jdaho University of Idaho  Montana University System East Montana Min/Science and Technology Montana State Korthern Montana University of Houtana Mestern Montana Mestern Montana Mestern Montana Mestern Montana Mestern Montana	*/A 1,420 580 N/Ä	27 1,289 433 20 539 125 789 162	- 9.2%
Idaho University of Idaho  Montana Hontana University System East Montana Hinr Science and Technology Hontana State Horthern Montana University of Hontana Heyada University of Nevada, Reno New Maxico	*/A 1,420 580 N/Ä 862*	27 1,289 433 20 539 125 789 162	- 9.2%
Hilo  Idaho University of Idaho  Montana Hontana University System East Montana Hinr Science and Technology Hontana State Northern Montana University of Hontana Hevada University of Mevada, Reno New Mexico New Yexico State University	%/A 1,420 580 N/Ä 862*	27 1.289 433 20 539 125 797 162	- 9.2% - 7.1% not computed - 5.1%
Idaho University of Idaho  Montana Hontana University System East Montana Hinr Science and Technology Hontana State Horthern Montana University of Hontana Heyada University of Nevada, Reno New Maxico	*/A 1,420 580 N/Ä 862*	27 1,289 433 20 539 125 789 162	- 9.2%
Hilo  Idaho University of Idaho  Montana Hontana University System East Montana Hinr Science and Technology Hontana State Northern Montana University of Hontana Hevada University of Mevada, Reno New Mexico New Yexico State University	%/A 1,420 580 N/Ä 862*	27 1.289 433 20 539 125 797 162	- 9.2% - 7.1% not computed - 5.1%
Jdaho University of Idaho  Montana Hontana University System East Hontana Hin Science and Technology Montana State Horthern Montana University of Idaha Western Montana Hevada University of Hevada, Reno New Mexico New Texico State University University of New Hexico	%/A 1,420 580 N/Ä 862*	27 1.289 433 20 539 125 797 162	- 9.2%  - 7.1%  not computed  - 5.1%  1.25
Hilo  Jeaho University of Leaho  Montana Hontana University System East Montana Him Science and Technology Hontana State Northern Montana University of Houtana Mestern Montana  Meyada  University of Nevada, Reno New Mexico New Texico New Texico New Texico State University University of New Mexico  Oreson	580 N/Ā 862*	27 1,289  433 20 539 125 789 162  925	- 9.2%  - 7.1%  not computed  - 5.1%  1.25
Hilo  Idaho University of Idaho  Montana University System East Montana Min. Science and Technology Montana State Rorthern Montana University of Ilontana Western Montana Meyada University of Nevada, Reno New Mexico New Pexico New Pexico Reid Pexico State University University of New Mexico Oregon Oregon Oregon	580 N/Ä 862* 1,364 3,456	27 1,289  433 20 539 125 797 162  925  1,313 -3,427	- 9.2% - 7.1% not computed - 5.1%
Hilo  Jeaho University of Leaho  Montana Hontana University System East Montana Him Science and Technology Hontana State Northern Montana University of Houtana Mestern Montana  Meyada  University of Nevada, Reno New Mexico New Texico New Texico New Texico State University University of New Mexico  Oreson	580 N/Ā 862*	27 1,289  433 20 539 125 789 162  925	- 9.2%  - 7.1%  not computed  - 5.1%  1.25
Hilo  Idaho University of Idaho  Montana University System East Montana Min. Science and Technology Montana State Rorthern Montana University of Ilontana Western Montana Meyada University of Nevada, Reno New Mexico New Pexico New Pexico Reid Pexico State University University of New Mexico Oregon Oregon Oregon	580 N/Ä 862* 1,364 3,456	27 1,289  433 20 539 125 797 162  925  1,313 -3,427	- 9.2%  - 7.1%  not computed  - 5.1%  1.25
Idaho University of Idaho  Montana Hontana University System East Hontana Him Science and Technology Montana State Rorthern Kontana University of Iloutana Western Montana  Meyada University of Nevada, Reno New Mexico Rew Texico State University University of Row Mexico  Oregon Oregon Oregon University of Oregon	580 N/Ä 862* 1,364 3,456	27 1,289  433 20 539 125 797 162  925  1,313 -3,427	-9.2% -7.1% not computed -5.1% 1.2%
Idaho University of Idaho  Montana Hontana University System East Montana Hinr Science and Technology Hontana State Horthern Montana University of Hontana Mestern Hontana  Mevada University of Nevada, Reno New Mexico Hew Texico State University University of New Hexico  Oregon Oregon Oregon Utah	1,420 580 N/Ā 862* 1,384 3,456 2,036 N/A	27 1,289  433 20 539 125 789 162  925  1,313 -3,427  2,073 3,182	-9.2% -7.1% not computed -5.1% 1.2%
Hilo  Jdaho University of Idaho  Montana Hontana University System East Hontana Hin Science and Technology Montana State Horthern Montana University of Iloutana Western Montana Western Montana  Mevada  University of Nevada, Reno New Mexico New Texico State University University of New Mexico  Oregon Oregon State University University of Oregon  Utah  University of Utah	1,420 580 M/Ā 862* 1,384 3,456 2,036 N/A	27 1.289 433 20 539 125 789 162 925 1,313 -3,427 25073 3,182 4,818	-9.2%  7.1%  not computed  -5.1%  1.2%  1.8%
Hilo  Jdaho University of Idaho  Montana Hontana University System East Hontana Hin Science and Technology Montana State Horthern Montana University of Iloutana Western Montana Western Montana  Mevada  University of Nevada, Reno New Mexico New Texico State University University of New Mexico  Oregon Oregon State University University of Oregon  Utah  University of Utah	1,420 580 N/Ā 862* 1,384 3,456 2,036 N/A	27 1,289  433 20 539 125 789 162  925  1,313 -3,427  2,073 3,182	-9.2% -7.1% not computed -5.1% 1.2%
Idaho University of Idaho  Montana Hontana University System East Montana Hinr Science and Technology Hontana State Horthern Montana University of Hontana Mestern Hontana  Mevada University of Nevada, Reno New Mexico Hew Texico State University University of New Hexico  Oregon Oregon Oregon Utah	1,420 580 M/Ā 862* 1,384 3,456 2,036 N/A	27 1.289 433 20 539 125 789 162 925 1,313 -3,427 25073 3,182 4,818	-9.2%  7.1%  not computed  -5.1%  1.2%  1.8%
Idaho University of Idaho  Montana Hontana University System East Montana HinrScience and Technology Hontana State Horthern Montana University of Houtana Western Hontana Heyada University of Nevada, Reno New Mexico New Mexico New Mexico Temporal State University University of New Mexico Oregon Oregon Utah University of Utah Utah State University	1,420 580 M/Ā 862* 1,384 3,456 2,036 N/A	27 1.289 433 20 539 125 789 162 925 1,313 -3,427 25073 3,182 4,818	-9.2%  7.1%  not computed  -5.1% 1.25  1:8%
Jdaho University of Idaho  Montana University System East Montana Mint Science and Technology Montana State Rorthern Montana University of Ilontana Western Montana Western Montana Meyada University of Nevada, Reno New Mexico New Mexico New Mexico State University University of New Mexico Oregon Oregon Utah University of Utah Utah State University Washington	1,420 580 M/Ā 862* 1,384 3,456 2,036 N/A 5,040 1,122	27  1.289  433 20 539 125 789 162  925  1,313 -3,427  2,073 3,182  4,818 1,178	-9.2%  7.1%  not computed  -5.1% 1.25  1:8%
Jdaho University of Idaho  Montana Hontana University System East Hontana Him Science and Technology Montana State Rorthern Montana University of Iloutana Western Montana Western Montana Hevada University of Nevada, Reno New Mexico New Texico State University University of New Mexico Oregon Oregon State University University of Utah Utah Utah Utah State University Washington Washington Washington State University	1,420 580 M/Ä 862* 1,384 3,456 2,036 N/A 5,040 1,122	27 1,289 433 20 539 125 780 162 925 1,313 -3,427 2,073 3,182 4,818 1,178	-9.2%  -7.1%  not computed  -5.1%  1.2%  -4.4%  5.0%
Jdaho University of Idaho  Montana Hontana University System East Hontana Him Science and Technology Montana State Rorthern Montana University of Iloutana Western Montana Western Montana Hevada University of Nevada, Reno New Mexico New Texico State University University of New Mexico Oregon Oregon State University University of Utah Utah Utah Utah State University Washington Washington Washington State University	1,420 580 M/Ā 862* 1,384 3,456 2,036 N/A 5,040 1,122	27  1.289  433 20 539 125 789 162  925  1,313 -3,427  2,073 3,182  4,818 1,178	-9.2%  7.1%  not computed  -5.1% 1.25  1:8%
Jdaho University of Idaho  Montana University System East Montana Mint Science and Technology Montana State Rorthern Montana University of Ilontana Western Montana Western Montana Meyada University of Nevada, Reno New Mexico New Mexico New Mexico State University University of New Mexico Oregon Oregon Utah University of Utah Utah State University Washington	1,420 580 M/Ä 862* 1,384 3,456 2,036 N/A 5,040 1,122	27  1.289  433 20 539 125 797 162  925  1,313 -3,427  2,073 3,182  4,818 1,178	-9.2%  -7.1%  not computed  -5.1%  1.2%  -4.4%  5.0%
Idaho University of Idaho  Montana Montana University System East Montana Min. Science and Technology Montana State Rorthern Montana University of Ilontana Western Montana Western Montana Meyada University of Nevada, Reno New Mexico New Texico State University University of New Mexico Oregon Oregon Utah University of Utah Utah State University Washington Washington Washington Washington University of Washington	1,420 580 M/Ä 862* 1,384 3,456 2,036 N/A 5,040 1,122	27 1,289 433 20 539 125 780 162 925 1,313 -3,427 2,073 3,182 4,818 1,178	-9.2%  -7.1%  not computed  -5.1%  1.2%  -4.4%  5.0%
Jdaho University of Idaho  Montana Hontana University System East Hontana Him Science and Technology Montana State Borthern Montana University of Iloutana Western Montana Western Montana Hevada University of Nevada, Reno New Mexico New Texico State University University of New Mexico Oregon Oregon State University University of Utah Utah Utah Utah State University Washington Washington Washington Washington Woming	1,420 580 M/Ā 862* 1,384 3,456 2,036 N/A 5,040 1,122 1,973 7,230	27 1,289  433 20 539 125 787 162  925  1,313 3,427  2,073 3,182  4,818 1,178  1,993 7,633	-9.2%  7.1%  not computed  -5.1%  1.2%  1.8%  -4.4%  5.0%  1.0%  4.8%
Idaho University of Idaho  Montana Montana University System East Montana Min. Science and Technology Montana State Rorthern Montana University of Ilontana Western Montana Western Montana Meyada University of Nevada, Reno New Mexico New Texico State University University of New Mexico Oregon Oregon Utah University of Utah Utah State University Washington Washington Washington Washington University of Washington	1,420 580 M/Ä 862* 1,384 3,456 2,036 N/A 5,040 1,122	27  1.289  433 20 539 125 797 162  925  1,313 -3,427  2,073 3,182  4,818 1,178	-9.2%  -7.1%  not computed  -5.1%  1.2%  -4.4%  5.0%

<sup>\*</sup>Vaniers of Students, differented on a different basis In 1976 than in 1977.



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Source: forolles at a State Universities and Land-Grant Colleges, Fall 1976 and forollegat at State Universities and Land-Crist p. 1, 1-11, 1-17, united of Parametrian Indormation, University Association of State Universities and Land-Grant Colleges.

# PROJECT ON EXPANDING REGIONAL COOPERATION IN GRADUATE AND PROFESSIONAL EDUCATION

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Washington Stale University

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Demonstration States Coordinating Committee also includes asterished Advisory Countil member from each demonstration state.