DOCUMENT RESUME

ED 481 702 HE 036 257

TITLE Follow-Up Report on 2001 Placements of 2000 North Dakota

University System Graduates.

INSTITUTION North Dakota Univ. System, Bismarck.

PUB DATE 2003-06-00

NOTE 61p.

AVAILABLE FROM North Dakota University System, 600 East Boulevard Avenue,

Department 215, Bismarck, ND 58505-0230. Tel: 701-328-2960; Fax: 701-328-2961; Web site: http://www.ndus.nodak.edu.

PUB TYPE Numerical/Quantitative Data (110) -- Reports - Descriptive

(141)

EDRS PRICE EDRS Price MF01/PC03 Plus Postage.

DESCRIPTORS Age Differences; *College Graduates; Educational Attainment;

*Employment Level; Graduation; Higher Education; *Outcomes of

Education; Racial Differences; Sex Differences

IDENTIFIERS *North Dakota University System

ABSTRACT

This report, based on data from Follow-up Information on North Dakota Education and Training (FINDET), describes the employment status of North Dakota University System (NDUS) graduates for the year 2000 who were employed in the state 1 year after graduation. Approximately half of these graduates were either employed in North Dakota or re-enrolled in North Dakota institutions l year after graduation. Approximately half remained in the state 1 year following graduation. More North Dakota residents remained in the state after graduation than did residents of other states. A significant portion of graduates from surrounding states also remained in North Dakota following graduation from an NDUS institution. A high proportion of programs, even those producing large numbers of graduates, retained significant percentages of their graduates in the state. More than half of all graduates retained in the state were employed in the services sector, and 60 percent of those were employed in health or educational services. Graduates of NDUS institutions made significant contributions to the private sector workforce, local government, and state government. Graduates at all levels earned a median monthly full-time wage of \$2,147 l year after graduation, slightly higher than the state median. There was a direct relationship between level of education and earnings. (SM)



North Dakota University System

Creating a University System for the 21st Century

Follow-up Report on 2001 Placements of 2000 North Dakota University System Graduates

June 2003

OUS. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

 Points of view or opinions stated in this document do not necessarily represent official OERI position or policy. PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

L. IsaaK

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)



The Vital Link to a Brighter Future

Acknowledgements

FINDET (Follow-up Information on North Dakota Education and Training) and the valuable information it provides to the North Dakota University System and to other cooperating agencies, would not have been possible without the dedication and cooperation of a number of individuals. Those individuals, with appreciation extended to each, are:

FINDET Task Force Members (and the positions they held at the time they served):

Alan Austad, Executive Director, North Dakota Council on Vocational Education Anita Decker, Tech Prep Director, North Dakota Tech Prep

Verlyn Fick, Director Outreach and Customized Training, ND State College of Science Marlyn Fredericksen, Placement Officer, North Dakota State College of Science

Ray Gudajtes, Chief, Job Training Programs, Job Service North Dakota

Dan Maggio, Research Analyst, Department of Economic Development and Finance

Dan Marrs, Program Administrator, State Occupational Information Coordinating Committee

Dean Monteith, Administrator, North Dakota School-to-Work

Ron Ness, Deputy Commissioner, Department of Labor

John Opp, Director, AFDC Division, Department of Human Services

Tom Pederson, Director, Research and Statistics, Job Service North Dakota

Leonard Pokladnik, Supervisor, Marketing Education, State Board for Voc. Tech. Educ.

Nancy Rittel, Research Associate, North Dakota University System

Randy Schwartz, Research Assistant, Department of Economic Development and Finance

Linda Steve, Chair, Governors Employment and Training Forum

Chuck Stroup, Director, Department of Economic Development and Finance

Mark Thompson, Director Career Services, University of North Dakota

Ron Torgeson, Director of Management and Research, Department of Public Instruction

Fraine Zeitler, Director, North Dakota Workforce Development Council

FINDET Research Analysts:

Warren Tobin, Research Analyst, 1994 - 1996 Mark Bachmeier, Research Analyst, 1996 - 1998 Tom Morth, Research Analyst, 1998 - present

Consultant:

Jay Pfieffer, Director, Florida Education and Training Placement Information Program

Data Analysis and Report Generation:

Mike Hillman, Vice Chancellor for Academic and Student Affairs, NDUS

Julie Schepp, Associate Academic Affairs and Director of Research, NDUS

Eddie Dunn, Executive Director, College Technical Education Council and Vice Chancellor of
Strategic Planning, NDUS

Gina Padilla, Administrative Secretary/Academic Affairs Assistant, NDUS

With appreciation,

Eddie Dunn, FINDET Task Force Chairman Executive Director, College Technical Education Council and Vice Chancellor of Strategic Planning, NDUS



Executive Summary

Some of the questions most often asked of the North Dakota University System relate to the status of graduates and program completers of our education institutions. Follow-up Information on North Dakota Education and Training (FINDET) is a consortium of several state agencies formed to provide answers to those questions. This report, based on FINDET data, describes the employment status of the North Dakota University System graduates, for the academic year 2000, who were employed in the state one year after graduation.

Approximately 53% of all the 2000 graduates were either employed in North Dakota or reenrolled in North Dakota institutions one year after graduation. Nearly half (48.1%) of the graduates were directly accounted for in North Dakota in the databases available to FINDET for generating follow-up information. However, according to the North Dakota Department of Labor, between 6% and 15% of the state workforce at any time is employed in jobs not reported in the state's employment databases. This group includes individuals who are railroad employees or in various self-employed occupations, including farming. Job Service North Dakota also estimates that approximately 10 percent of the workforce is not reported currently. Assuming the 48.1% of graduates located by FINDET represents only 90% of the graduates remaining in the state (with the remaining 10% employed in jobs not reported in the state's employment database), the total number of graduates remaining in the state one year following graduation is approximately 53%.

As expected, a higher portion of North Dakota residents were found to remain in North Dakota after graduation than residents of other states. Assuming the 58.3% of the North Dakota graduates located and accounted for by FINDET represents only 90% of North Dakota residents remaining in the state one year after graduation (with the remaining 10% employed in jobs not reported in the state's employment database), the total North Dakota resident retention rate rises to 64.1%. These statistics dispel a common myth that a majority of the North Dakota University System graduates leave the state after graduation.

In addition to the North Dakota residents who graduated from a NDUS institution, a significant portion of the 2000 graduates from surrounding states also remained in North Dakota following graduation from one of the NDUS institutions. FINDET located 29.4% of Montana residents, 24% of Minnesota residents, and 36.1% of South Dakota residents in the state one year after graduation. When adjusted for jobs not in the states employment database, North Dakota retains 32.3% of students from Montana, 26.4% of students from Minnesota and 39.7% of students from South Dakota.

A high proportion of the programs, even those that produce a large number of graduates, retained significant percentages of their graduates in the state. Examples (unadjusted for the estimated 10 percent of the workforce not reported) include allied health (65.5%) teacher education and related areas (52%) and business and management related areas (55%).

More than half (unadjusted) of all graduates (52.8%) retained in the state were employed in the services sector of the economy and approximately 60% of those in the services sector were employed in health services (26.5%) or educational services (33.2%). An analysis of the employment data reveals that graduates from the various program areas of study were able to obtain employment in a wide range of industries.

Graduates of NDUS institutions make significant contributions not only to the private sector workforce (2,236 graduates), but also to local government, including school districts (449



graduates) and state government (276 graduates). A relatively large number of 2000 graduates produced from both baccalaureate programs (1,601) and from one and two-year programs (1,335) were retained in the state.

North Dakota University System graduates at all levels earned a median monthly full-time wage of \$2,147 one year after graduation. This is more than the state median of \$2,142 for all wage earners even though it represents only the beginning of the income-earning phase for most of the graduates. As such, the increased median wage of graduates, as they become established and progress in their profession, make a significant contribution to increased income and to the higher standard of living goal set forth by the North Dakota 2000 Committee in the Vision 2000 Report.

As might be expected, there is a direct relationship between level of education and earnings. Graduate degree program graduates earned more than four-year degree program graduates who, in turn, earned more than one and two-year program graduates, on average. Professional program (law, medicine, and pharmacy) graduates' median monthly wages are within the range of graduate programs. The income of graduates varied significantly not only by degree level, but also by area of study.



iv

Table of Contents

Acknowledgements	
Executive Summary	ii
Table of Contents	
Introduction	1-2
Profile of Graduates	3-9
Graduates by Gender	
Graduates by Race/Ethnicity	4
Graduates by Age Group	5
Graduates by State of Residency	e
Graduates by Degree Level	
Graduates by Area of Study	8-9
Status of Graduates One Year After Graduation	11-19
Status of Graduates by Gender	11-12
Status of Graduates by Race/Ethnicity	13
Percent of Graduates Retained in ND by Age Group	14
State of Residency	15-16
Degree Level	17
Area of Study	18-19
Employment Statistics for Graduates	
Employed in North Dakota One Year After Graduation by	21-42
Industries and Service Industries of Employment	21-22
Sector of Employment	23
Industry and Sector of Employment	24
Service Industry and Sector of Employment	25
Degree Level and Industry of Employment	26
Degree Level and Service Industry of Employment	27
Area of Study and Industry of Employment	28
Area of Study and Service Industry of Employment	29
Median Monthly Wages by Gender	3(
Median Monthly Wages by Race/Ethnicity	31
Median Monthly Wages by Age Group	32
Median Monthly Wages by Degree Level	33-34
Median Monthly Wages by Area of Study	35-36
Median Monthly Wages by Industry of Employment	37
Median Monthly Wages by Service Industry of Employment	38
Median Monthly Wages by Sector of Employment	39
Median Monthly Wages by Area of Study and Degree Level	4(
Median Monthly Wages by Industry of Employment and Degree Level	41
Median Monthly Wages by Service Industry of Employment and Degree Lo	evel42



Appendix A: CIP Tables	43-49
Graduates by Two-Digit CIP Code	
Status of Graduates One Year after Graduation by Two-Digit CIP Code	
Employment by Two-Digit CIP Code and Industry	
Employment by Two-Digit CIP Code and Service Industry	
Median Monthly Wages by Two-Digit CIP Code	
Appendix B: Methodological Notes	51-59
Follow-up Cohort	
NDUS Enrollment Status	
North Dakota Employment Status	



Introduction

This report is based on information prepared by the Follow-up Information on North Dakota Education and Training (FINDET) Office at the request of the North Dakota University System. FINDET is an interagency cooperative arrangement established to assess some of the outcomes of education and training programs in North Dakota. The central purpose of FINDET is to improve instructional and program planning decisions and to avoid unnecessary duplication of effort among state agencies.

The cooperative entities that established the FINDET system include: the College Technical Education Council of the NDUS, Job Service North Dakota, North Dakota Association of Placement Personnel, North Dakota Department of Commerce (formerly Economic Development and Finance); North Dakota Department of Human Services, North Dakota Department of Labor, North Dakota Department of Public Instruction, North Dakota School-to-Work Opportunities System, North Dakota State College of Science (Special Initiatives Project), North Dakota Tech Prep, North Dakota University System, North Dakota Workers Compensation Bureau, North Dakota Workforce Development Council, State Board for Vocational and Technical Education, and the North Dakota Career Resources Network (formerly State Occupational Information Coordinating Committee).

The information presented in this report is intended to provide the members of the State Board of Higher Education and campus administrators with information useful in policy formulation, program planning decisions, and in student advising. In particular, the report provides answers to some of the most commonly asked questions of the University System, such as:

- What is happening to the graduates and program completers of our educational institutions?
- Where and in what industries are the graduates being employed?
- How many graduates are remaining in the state?
- What are the income levels being earned by graduates of different programs and degree levels?

The agencies and organizations that collaborated in establishing the FINDET system realize the importance of cooperation in providing useful and cost-effective information regarding program planning, advising, and accountability. Equally as important, the agencies and organizations supporting the FINDET system understand the importance of confidentiality. Consequently, safeguards have been established including specific legislation during the 1997 North Dakota Legislative Session to protect the privacy and confidentiality of personal information received or reported by the FINDET office. Further, as evidenced by the statistics in this report, the data provided by FINDET is focused on programs and not on individuals.

It should be noted that there is approximately a two-year time span from the month when the majority of graduates complete their degree (spring of the year) to the availability of job placement information for a specific year of graduates. Regular follow-up reports by FINDET for the NDUS are timed to provide follow-up information on graduates "one year after graduation." An additional four months are required to allow for the completion of the consolidation of the unemployment insurance wage and employer files (UI files) by Job Service North Dakota. After the matching of the UI files has been completed, the list of graduates "still



not located" is submitted to other sources (all by way of confidentiality agreements) in a series of data matching processes to locate as many of the graduates as possible using existing data bases. Those sources include the Department of Defense, the US Postal Service, and Federal Office of Personnel Management. The sequence of matching processes in addition to the analysis of results and the writing of the report add an additional several months to the report time schedule.

It should be noted that the interagency cooperation and processes used to produce the information in this report account for virtually the entire population of graduates from the North Dakota University System in 2000. The number of cases where the relevant information is "unknown" is very small in comparison to the size of the database--even in some of the worst case examples. For example, where state of residency is unknown in Table 4, only 153 cases were missing the necessary detail. This represents slightly more than 2 percent of the total database. The research methodology used in this report shows tremendous potential for further applications, such as following the movement of students between institutions within the North Dakota University System as proposed in the Student Progress and Achievement Reporting Cooperative.

For clarification and understanding, tables in this report should not be distributed without the methodological notes presented in Appendix B.



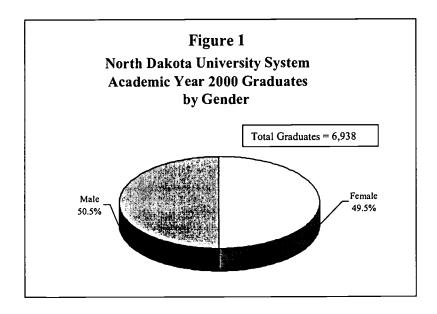
2

Profile of Graduates

This report provides information on the North Dakota University System graduates, for the academic year 2000, one year following their graduation. In order to generate the information in this report, the NDUS institutions provided the FINDET office with information on all graduates including information on the degree earned and the academic program completed. By using graduates' social security numbers, the FINDET office was able to match North Dakota University System records information with employment information provided by the ND Job Service. Job Service receives employment and compensation information on all individuals employed in the state except for individuals who are self-employed (e.g., farmers) or who are not covered by unemployment insurance (e.g., federal and railroad employees). The FINDET office links education and employment information to provide the important education outcome information found in this report.

The data in Table/Figure 1 shows that 6,938 students graduated from the North Dakota University System campuses during academic year 2000 (July 1, 1999 to June 30, 2000). Of those, 3,507 were males and 3,431 were females.

Table 1						
North Dakota University System Academic Year 2000 Graduates by Gender						
		Percent				
Gender	Graduates	of Total				
Female	3,431	49.5%				
Male 3,507 50.5%						
Total	6.938	100.0%				

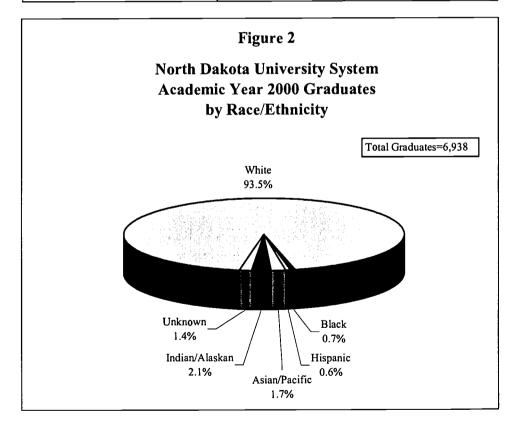




3 10

Table/Figure 2 describes the race/ethnicity of graduates and shows that 93.5% (6,486) of the North Dakota University System graduates were classified as white. Only 2.1% were American Indian/Alaskan, and 1.7% Asian/Pacific Islanders.

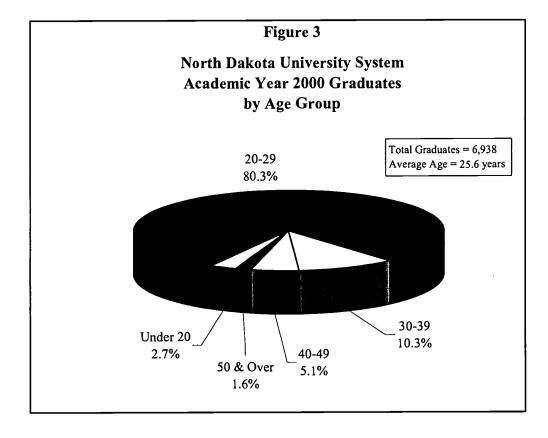
Table 2 North Dakota University System Academic Year 2000 Graduates by Race/Ethnicity							
Race Graduates Percen							
Amer. Indian/Alaskan	148	2.1%					
Asian/Pacific Islander	119	1.7%					
Black	47	0.7%					
Hispanic	39	0.6%					
White	6,486	93.5%					
Other	0	0.0%					
Subtotal	6,839	98.6%					
Race Unknown	99	1.4%					
Total	6,938	100.0%					





The overwhelming majority of graduates (80.3%) were in the 20-29 age group (Table/Figure 3). Only 5.1% of the graduates were in the 40-49 age group while 1.6% of the graduates were 50 years and over. The average age is 25.6 years.

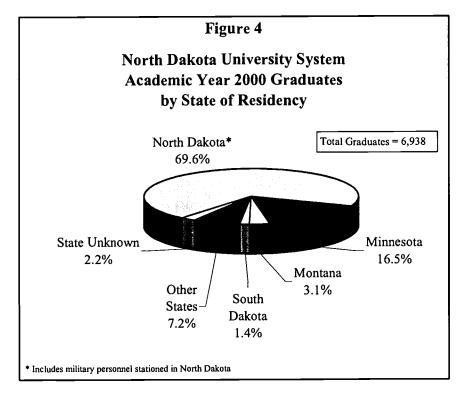
Table 3 North Dakota University System Academic Year 2000 Graduates by Age Group								
Age Group Graduates Percent of Total								
Under 20	186	2.7%						
20-29	5,568	80.3%						
30-39	715	10.3%						
40-49	351	5.1%						
50 & Over	113	1.6%						
Subtotal	6,933	99.9%						
Age Unknown	5	0.1%						
Total	6,938	100.0%						
		Average Age = 25.6 Yea						





A total of 69.6% of the graduates were North Dakota residents (Table/Figure 4), 16.5% were from Minnesota, 3.1% from Montana, and only 1.4% from South Dakota. Several factors seem to play a role in student migration into North Dakota, including population demographics, the proximity of North Dakota institutions to state borders, and the specific requirements of actual exchange agreements.

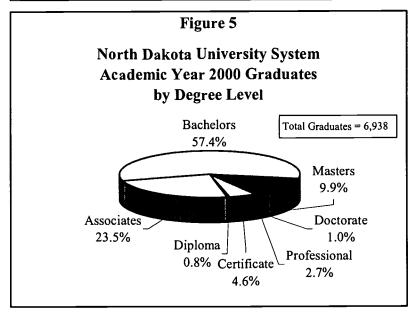
Table 4 North Dakota University System Academic Year 2000 Graduates by State of Residency							
C	Constitution	Percent					
State of Residency	Graduates	of Total					
North Dakota *	4,828	69.6%					
Minnesota	1,142	16.5%					
Montana	218	3.1%					
South Dakota	97	1.4%					
Other States	500	7.2%					
Subtotal	6,785	97.8%					
State Unknown	153	2.2%					
Total	6,938	100.0%					





As shown in Table/Figure 5, more than half (3,982 or 57.4%) of North Dakota University System graduates in academic year 2000 completed baccalaureate degree programs. Over 2,000 (2,007 or 28.9%) of all graduates completed certificate, diploma, or associate degree programs. A total of 759 (10.9%) completed graduate degree programs. The 190 professional program graduates comprised 2.7% of the total graduates in 2000. As defined by Board policy, certificate programs require at least 16 credit hours at the undergraduate level or 8 credit hours at the graduate level. In comparison, diploma programs were vocational/technical programs that require some general education coursework and were completed in two years or less. Associate degree programs include associate of arts and associate of science degree programs which primarily prepare students for transfer to baccalaureate level instruction as well as associate of applied science programs which prepare students to enter the workforce directly. Professional programs include medicine (M.D.), pharmacy (Pharm.D.), and law (Juris Doctor J.D.).

Table 5								
North Dakota University System Academic Year 2000 Graduates by Degree Level								
Degree Level Percent Graduates of Total								
One and Two-Year Programs								
Certificate	321	4.6%						
Diploma	57	0.8%						
Associates	1,629	23.5%						
Four-Year Programs		·						
Bachelors	3,982	57.4%						
Graduate Programs		·						
Masters	688	9.9%						
Doctorate	71	1.0%						
Professional Programs								
Professional	190	2.7%						
Total	6,938	100.0%						





The North Dakota University System uses the U.S. Department of Education's National Center for Education Statistics (NCES) six digit Classification of Instructional Programs (CIP) to classify or catalog academic programs. The CIP system provides a mechanism for grouping similar academic programs with somewhat different titles into one category and for identifying academically related categories. The CIP classification system is useful because it is not entirely based on sometimes unique program titles. The 2000 edition of the Classification of Instructional Programs was used for this report.

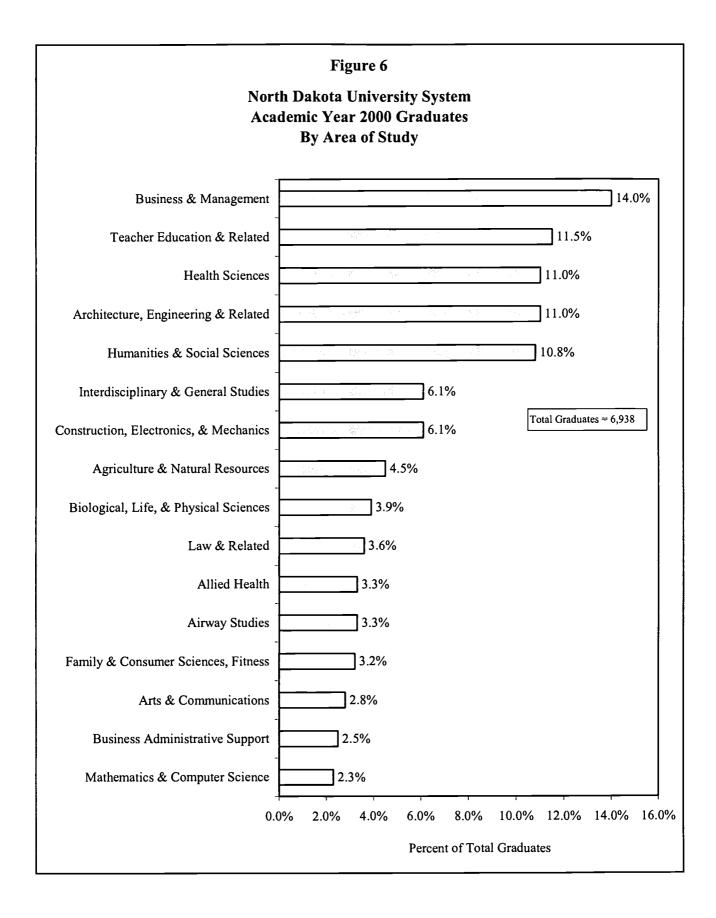
As shown in Table/Figure 6, a relatively large portion of students graduated in five academic areas:

- 1) architecture, engineering, and related
- 2) business and management
- 3) health sciences
- 4) humanities and social sciences
- 5) teacher education and related.

These five areas accounted for over 58 percent of system graduates in 2000. The program area with the smallest percentage of graduates at every level of education was mathematics and computer science with 2.3% (158 students).

Table 6								
North Dakota University System Academic Year 2000 Graduates by Area of Study								
Area of Study	Graduates	Percent of Total						
Agriculture & Natural Resources	312	4.5%						
Airway Sciences	227	3.3%						
Allied Health	229	3.3%						
Architecture, Engineering & Related	764	11.0%						
Arts and Communications	197	2.8%						
Biological, Life, & Physical Sciences	272	3.9%						
Business Administrative Support	174	2.5%						
Business & Management	974	14.0%						
Construction, Electronics, & Mechanics	424	6.1%						
Family & Consumer Sciences, Fitness Related	222	3.2%						
Health Sciences	766	11.0%						
Humanities & Social Sciences	747	10.8%						
Interdisciplinary & General Studies	426	6.1%						
Law & Related	250	3.6%						
Mathematics & Computer Science	158	2.3%						
Teacher Education & Related	796	11.5%						
Subtotal	6,938	100.0%						
Area of Study Unknown	0	0.0%						
Total	6,938	100.0%						







Status of Graduates One Year After Graduation

As shown in Table/Figure 7 and Figure 7-A, FINDET was able to locate 48.1% of NDUS System institution graduates in North Dakota one year after graduation. Females were retained at a higher rate (51.6%) than males (44.7%). This total includes the 37.2% of graduates who were only employed in North Dakota, 5.0% who were only re-enrolled in North Dakota institutions, and 5.9% who were both employed in North Dakota and re-enrolled in NDUS institutions. According to the North Dakota Department of Labor, between 6% and 15% of the state workforce at any time is employed in jobs not reported in the employment database available to FINDET for generating follow-up information. Although the percentages can vary somewhat from year to year, Job Service currently estimates that approximately 10% of the workforce is not reported. In addition, many graduates may be unemployed and re-enrolled in a non-NDUS institution, or living in North Dakota but delaying both further education and a career for a variety of reasons such as raising a family. If graduates are employed proportionately in reported and unreported occupations, and/or attending System and non-System institutions, then the actual percentage of graduates retained in North Dakota would be approximately 10% higher (i.e. 53%) than the 48.1% reported in Table 7.

Table 7

North Dakota University System Status of Academic Year 2000 Graduates One Year After Graduation by Gender

		Total R	etained	Employed in		Re-enrolled in		Both Employed in ND		
		in North Dakota 1/		North Dakota Only 2/		NDUS Only 3/		and Re-enrolled in NDUS		
Gender	Graduates	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Female	3,398	1,753	51.6%	1,370	40.3%	175	5.2%	208	6.1%	
Male	3,477	1,553	44.7%	1,189	34.2%	169	4.9%	195	5.6%	
Total	6.875	3.306	48.1%	2.559	37.2%	344	5.0%	403	5.9%	

^{1/} Does not account for graduates who were in North Dakota but unemployed, employed in jobs not covered by unemployment insurance, or attending private colleges.

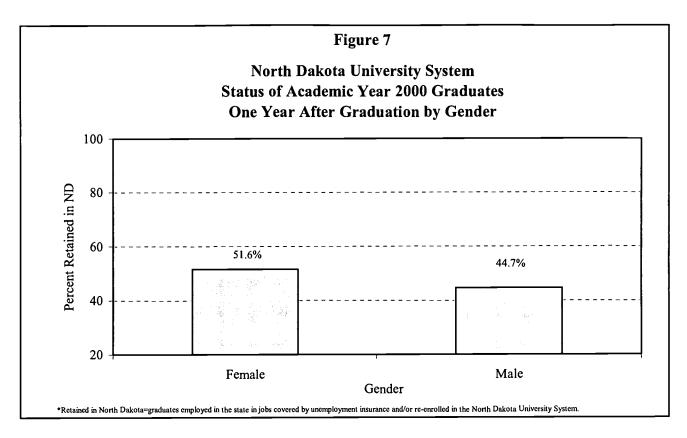
BEST COPY AVAILABLE

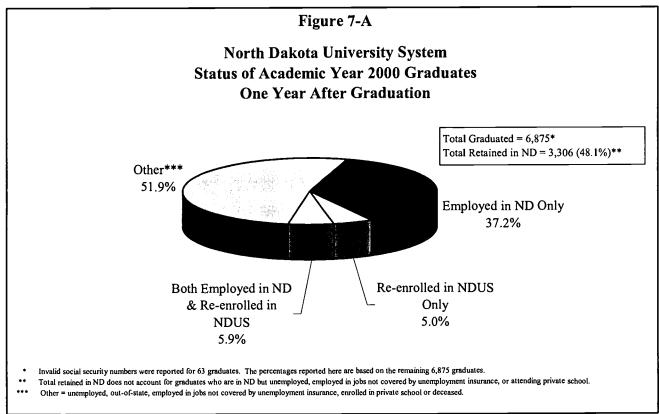


^{2/} Total graduates employed in ND = "Employed in ND Only" + "Both Employed in ND and Re-enrolled in the NDUS."

^{3/} Total graduates re-enrolled in NDUS="Re-enrolled in NDUS Only" + "Both Employed in ND and Re-enrolled in the NDUS."

^{4/} Excludes 63 graduates for whom invalid social security numbers were reported.







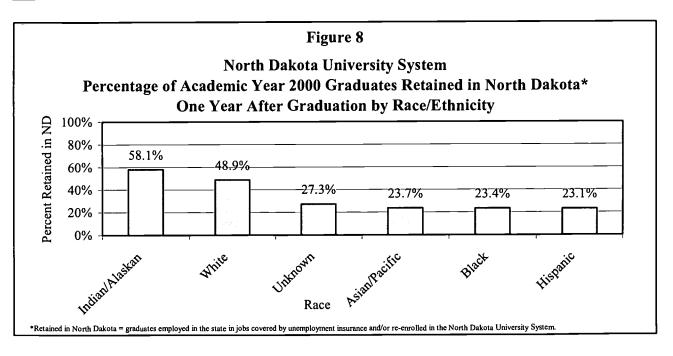
Table/Figure 8 illustrates that continued residence in North Dakota after graduation is highly correlated with race/ethnicity. Since more than 93% of graduates were white, the white graduation retention percentage of 48.9% largely determined the total retention percentage of 48.1%. American Indian/Alaskan graduates were retained at a much higher rate in North Dakota (58.1%) than Black graduates (23.4%). American Indian/Alaskan graduates were much more likely to be employed in North Dakota (43.2%) than Asian/Pacific Islanders (11.9%).

Table 8 North Dakota University System Status of Academic Year 2000 Graduates One Year After Graduation by Race/Ethnicity

		Total Retained in North Dakota 1/		Employed in North Dakota Only 2/		Re-enrolled in NDUS Only 3/		Both Employed in ND & Re-enrolled in NDUS	
Race	Graduates	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Amer. Indian/Alaskan	148	86	58.1%	64	43.2%	12	8.1%	10	6.8%
Asian/Pacific Islander	118	28	23.7%	14	11.9%	9	7.6%	5	4.2%
Black	47	11	23.4%	7	14.9%	4	8.5%	0	0.0%
Hispanic	39	9	23.1%	4	10.3%	2	5.1%	3	7.7%
White	6,435	3,148	48.9%	2,452	38.1%	315	4.9%	381	5.9%
Other	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Race Unknown	88	24	27.3%	18	20.5%	2	2.3%	4	4.5%
Total	6,875	3,306	48.1%	2,559	37.2%	344	5.0%	403	5.9%

^{1/} Does not account for graduates who were in North Dakota but unemployed, employed in jobs not covered by unemployment insurance, or attending private colleges.

^{4/} Excludes 63 graduates for whom invalid social security numbers were reported





^{2/} Total graduates employed in ND = "Employed in ND Only" + "Both Employed in ND and Re-enrolled in the NDUS."

^{3/} Total graduates re-enrolled in NDUS = "Re-enrolled in NDUS Only" + "Both Employed in ND and Re-enrolled in the NDUS."

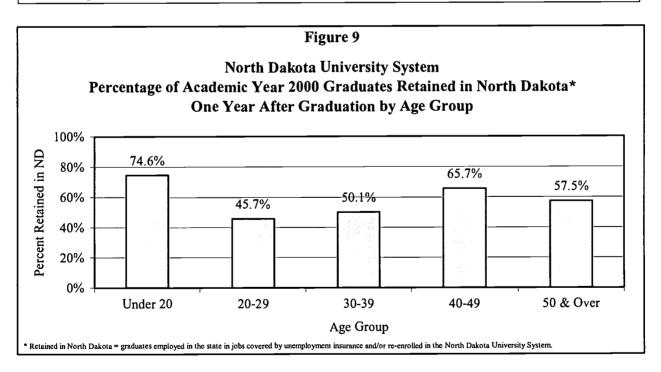
As shown in Table/Figure 9, the youngest and oldest graduates were most likely to be retained in North Dakota. Only the 20-29 age group, the group with the largest number of graduates, had less than 50% retention in North Dakota (45.7%).

Table 9 North Dakota University System Status of Academic Year 2000 Graduates One Year After Graduation by Age Group

		Total F	Retained	Employed in		in Re-enrolled in		Both Employed in ND		
		in North	Dakota 1/	North Dak	tota Only 2/	NDUS	Only 3/	& Re-enrolled in NDUS		
Age Group	Graduates	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Under 20	185	138	74.6%	98	53.0%	17	9.2%	23	12.4%	
20-29	5,515	2,518	45.7%	1,893	34.3%	294	5.3%	331	6.0%	
30-39	7 07	354	50.1%	302	42.7%	22	3.1%	30	4.2%	
40-49	350	230	65.7%	203	58.0%	8	2.3%	19	5.4%	
50 & Over	113	65	57.5%	62	54.9%	3	2.7%	0	0.0%	
Age Unknown	5	1	20.0%	1	20.0%	0	0.0%	0	0.0%	
Total	6,875	3,306	48.1%	2,559	37.2%	344	5.0%	403	5.9%	

^{1/} Does not account for graduates who were in North Dakota but unemployed, employed in jobs not covered by unemployment insurance, or attending private colleges.

^{4/} Excludes 63 graduates for whom invalid social security numbers were reported.





^{2/} Total graduates employed in ND = "Employed in ND Only" + "Both Employed in ND and Re-enrolled in the NDUS."

^{3/} Total graduates re-enrolled in NDUS = "Re-enrolled in NDUS Only" + "Both Employed in ND and Re-enrolled in the NDUS."

As shown in Table/Figure 10, North Dakota residents were more likely to remain in North Dakota after graduation than residents of other states. A total of 58.3% of the graduates who were residents of North Dakota were accounted for in the databases available to FINDET. Assuming the 58.3% of North Dakota graduates located and accounted for by FINDET represents only 90% of North Dakota residents remaining in the state one year after graduation (with the remaining 10.0% employed in jobs not reported in the state's employment database), the total North Dakota retention rate rises to 64%. These statistics dispel a common myth that a majority of the North Dakota University System graduates, who were residents of North Dakota, leave the state after graduation.

FINDET located 29.4% of Montana residents, 24% of Minnesota residents, and 36.1% of South Dakota residents in the state one year after graduation. North Dakota residents were also the most likely to be either employed in North Dakota, re-enrolled in a System institution, or both following graduation. FINDET located 492 of the 2,051 residents of other states (24% of the non-resident graduates) in North Dakota one year after graduation from a North Dakota University System institution in 2000. These numbers and percentages are conservative because, as explained earlier, they probably represent only 90% of the total graduates actually retained.

Table 10 North Dakota University System Status of Academic Year 2000 Graduates One Year After Graduation by State of Residency

		Total Retained		Total Retained Employed in		Re-enre	olled in	Both Employed in ND		
State of		in North	Dakota 1/	North Dak	North Dakota Only 2/		NDUS Only 3/		& Re-enrolled in NDUS	
Residency	Graduates	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
North Dakota 4/	4,824	2,814	58.3%	2,221	46.0%	242	5.0%	351	7.3%	
Minnesota	1,142	274	24.0%	195	17.1%	50	4.4%	29	2.5%	
Montana	218	64	29.4%	44	20.2%	10	4.6%	10	4.6%	
South Dakota	97	35	36.1%	23	23.7%	9	9.3%	3	3.1%	
Other States	451	72	16.0%	31	6.9%	32	7.1%	9	2.0%	
State Unknown	143	47	32.9%	45	31.5%	1	0.7%	1	0.7%	
Total	6,875	3,306	48.1%	2,559	37.2%	344	5.0%	403	5.9%	

^{1/} Does not account for graduates who were in North Dakota but unemployed, employed in jobs not covered by unemployment insurance, or attending private colleges.

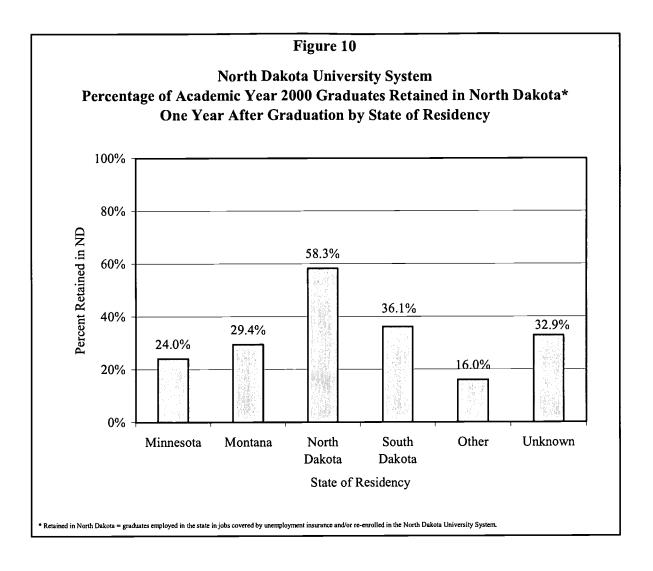


^{2/} Total graduates employed in ND = "Employed in ND Only" + "Both Employed in ND and Re-enrolled in the NDUS."

^{3/} Total graduates re-enrolled in NDUS = "Re-enrolled in NDUS Only" + "Both Employed in ND and Re-enrolled the NDUS."

^{4/} Includes military personnel stationed in North Dakota.

^{5/} Excludes 63 graduates for whom invalid social security numbers were reported.



BEST COPY AVAILABLE



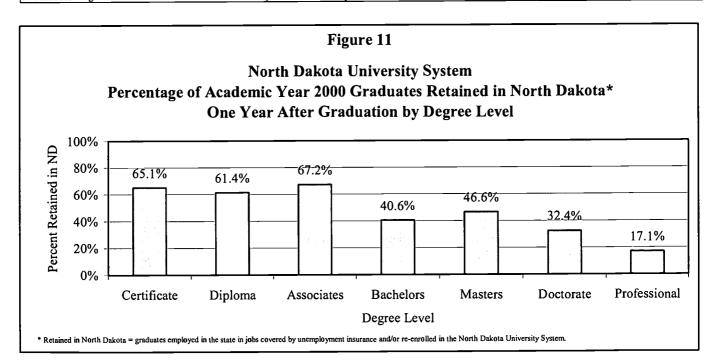
Table/Figure 11 shows the relationship between degree level and retention in the state. The retention rate for one and two-year programs is high compared to the more advanced degrees and specialized program areas. However, because of the substantially larger numbers of graduates with bachelor degrees, more bachelor degree graduates remain in the state than one and two-year program graduates.

Table 11 North Dakota University System Status of Academic Year 2000 Graduates One Year After Graduation by Degree Level

		Total Re	tained	Emple	oyed in	Re-enre	olled in	Both Employed in ND		
		in North I	in North Dakota 1/		kota Only 2/	NDUS	Only 3/	& Re-enrol	& Re-enrolled in NDUS	
Degree Level	Graduates	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
One & Two-Year Programs										
Certificate	321	209	65.1%	184	57.3%	7	2.2%	18	5.6%	
Diploma	57	35	61.4%	32	56.1%	2	3.5%	1	1.8%	
Associates	1,623	1,091	67.2%	776	47.8%	125	7.7%	190	11.7%	
Four-Year Programs										
Bachelors	3,940	1,601	40.6%	1,245	31.6%	186	4.7%	170	4.3%	
Graduate Programs										
Masters	676	315	46.6%	269	39.8%	24	3.6%	22	3.3%	
Doctorate	71	23	32.4%	22	31.0%	0	0.0%	1	1.4%	
Professional Programs										
Professional	187	32	17.1%	31	16.6%	0	0.0%	1	0.5%	
Total	6,875 4/	3,306	48.1%	2,559	37.2%	344	5.0%	403	5.9%	

^{1/} Does not account for graduates who were in North Dakota but unemployed, employed in jobs not covered by unemployment insurance, or attending private colleges.

^{4/} Excludes 63 graduates for whom invalid social security numbers were reported.





^{2/} Total graduates employed in ND = "Employed in ND Only" + "Both Employed in ND and Re-enrolled in the NDUS."

^{3/} Total graduates re-enrolled in NDUS = "Re-enrolled in NDUS Only" + "Both Employed in ND and Re-enrolled in the NDUS."

Table/Figure 12 indicates that the likelihood of being retained in North Dakota is directly related to an individual's area of study. For example, graduates with a degree in Business Administrative Support were most likely to remain in North Dakota (71.8%). A total of 52.0% of teacher education and related graduates remained in the state, and a significant proportion (33.5%) of architecture, engineering, and related graduates remained in the state. Areas of study which contribute the largest number of graduates included architecture, engineering, and related with 761 graduates, and business and management with 965 graduates. Because of the large numbers, but also the relatively high retention rates, business and management produced the largest number of graduates retained in the state with 531. Interdisciplinary and general study students were most likely to be both employed and re-enrolled in North Dakota University System institutions (16.4%), and most likely to be only re-enrolled and not employed (16.4%). Business administrative support graduates were not only one of the most likely to be retained in North Dakota but also one of the most likely to be employed only and not re-enrolled in a System institution (66.7%). Since employment information available to FINDET, as explained earlier, does not include individuals who are railroad employees or in various self-employed occupations, including farming, the number of graduates retained in North Dakota is estimated to be higher (6% to 15% higher) than the numbers reported here.

Table 12 North Dakota University System Status of Academic Year 2000 Graduates One Year After Graduation by Area of Study

		Total Retained in Nortb Dakota ^{1/}		Emple North Dal	oyed in kota Only ^{2/}		olled in Only 3/	Both Employed in ND & Re-enrolled in NDUS	
Area of Study	Graduates	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Agriculture & Natural Resources	311	153	49.2%	109	35.0%	19	6.1%	25	8.0%
Airway Sciences	224	23	10.3%	16	7.1%	4	1.8%	3	1.3%
Allied Health	229	150	65.5%	113	49.3%	11	4.8%	26	11.4%
Architecture, Engineering, & Related	761	255	33.5%	223	29.3%	13	1.7%	19	2.5%
Arts & Communications	195	87	44.6%	65	33.3%	9	4.6%	13	6.7%
Biological, Life, & Physical Sciences	271	90	33.2%	49	18.1%	25	9.2%	16	5.9%
Business Administrative Support	174	125	71.8%	116	66.7%	3	1.7%	6	3.4%
Business & Management	965	531	55.0%	462	47.9%	20	2.1%	49	5.1%
Construction, Electronics, & Mechanics	424	273	64.4%	241	56.8%	15	3.5%	17	4.0%
Family & Consumer Sciences, Fitness	219	94	42.9%	80	36.5%	5	2.3%	9	4.1%
Health Sciences	754	306	40.6%	197	26.1%	68	9.0%	41	5.4%
Humanities & Social Sciences	743	344	46.3%	233	31.4%	58	7.8%	53	7.1%
Interdisciplinary & General Studies	422	286	67.8%	148	35.1%	69	16.4%	69	16.4%
Law & Related	242	126	52.1%	103	42.6%	4	1.7%	19	7.9%
Mathematics & Computer Science	157	55	35.0%	44	28.0%	6	3.8%	5	3.2%
Teacher Education & Related	784	408	52.0%	360	45.9%	15	1.9%	33	4.2%
Area of Study Unknown	0	0	0.0%	0	0.0%	o	0.0%	0	0.0%
Total	6,875 4/	3,306	48.1%	2,559	37.2%	344	5.0%	403	5.9%

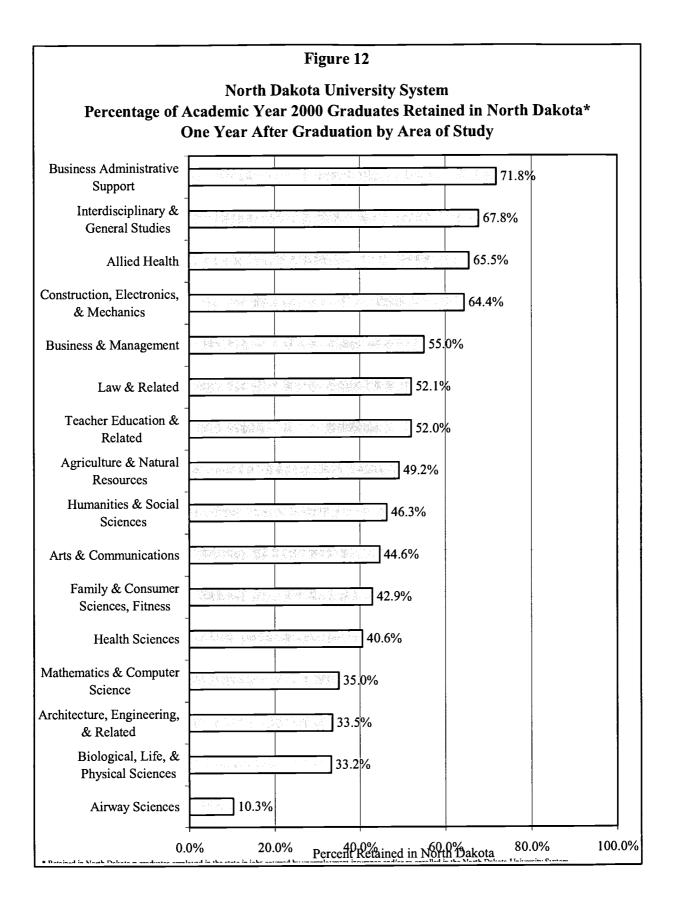
^{1/} Does not account for graduates who were in North Dakota but unemployed, employed in jobs not covered by unemployment insurance, or attending private colleges.



^{2/} Total graduates employed in ND = "Employed in ND Only" + "Both Employed in ND and Re-enrolled in the NDUS."

^{3/} Total graduates re-enrolled in NDUS = "Re-enrolled in NDUS Only" + "Both Employed in ND and Re-enrolled in the NDUS."

^{4/} Excludes 63 graduates for whom invalid social security numbers were reported.





Employment Statistics for Graduates Employed in North Dakota One Year After Graduation

Information provided by the North Dakota Job Service was used to categorize employed graduates by industrial classification area (example: mining, construction, manufacturing, retail trade, services) and by the type of service industry within the service classification area (example: business services or educational services). Although these classifications were extremely useful, they do not provide the level of detail needed for comprehensive planning purposes. For example, the current data could determine if an M.D. who graduated in 2000 was working in the health service area. It could not be determined, however, if the M.D. was working as a physician, a janitor, or an administrator. The FINDET program is currently exploring ways employers could provide this level of information without burdening the employers with detailed reporting requirements. As shown in Table 13-A, the majority of System graduates (52.8%) were employed in the services area. A much smaller percentage but still significant number of graduates were employed in retail trade (13.5%), finance, insurance and real estate (6.8%) construction (5.4%), manufacturing (6.1%) and wholesale trade (5.0%). Only 27 (0.9%) graduates were employed in agriculture, forestry, and fishing. The reader is reminded that information on self-employed farmers is not included in the databases available to FINDET.

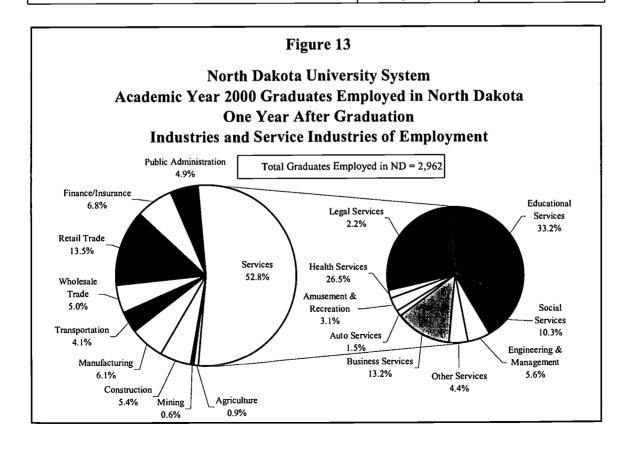
Table 13-A
North Dakota University System
Academic Year 2000 Graduates Employed in North Dakota
One Year After Graduation by Industry of Employment

		Employed	Percent
Standa	ard Industrial Classification (SIC) Area	Graduates	of Total
A.	Agriculture, Forestry, & Fishing	27	0.9%
B.	Mining	17	0.6%
C.	Construction	159	5.4%
D.	Manufacturing	181	6.1%
E.	Transportation & Public Utilities	120	4.1%
F.	Wholesale Trade	149	5.0%
G.	Retail Trade	399	13.5%
H.	Finance, Insurance, & Real Estate	200	6.8%
I.	Services	1,565	52.8%
J.	Public Administration	144	4.9%
K.	Nonclassifiable Entities	0	0.0%
Subto	tal	2,961	100.0%
Ind	astry Unknown	1	0.0%
Total		2,962	100.0%



Table 13-B & Figure 13 provide a more detailed breakdown of graduates employed in the services area. The majority of graduates retained in the service area in North Dakota were in one of two areas: educational services (33.2%) or health services (26.5%). Smaller, but significant, numbers of graduates were employed in business services (13.2%) and social services (10.3%).

Table 13-B North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation in Service Industries Only by Service Industry **Employed** Percent Graduates of Total Service Industry 13.2% **Business Services** 207 73 75 Auto Repair, Services, and Parking 24 1.5% Amusement & Recreation Services 79 49 3.1% Health Services 26.5% 80 414 2.2% 81 Legal Services 34 **Educational Services** 33.2% 520 83 Social Services 161 10.3% Engineering & Management Services 87 5.6% Other Service Industries 69 4.4% 100.0% Total 1,565





Table/Figure 14 provides information on public and private sector employment of graduates one year after graduation. The majority of graduates (2,236 or 75.5%) were employed in the private sector, 15.2 percent were employed in local government, and 9.3 percent in state government.

	Table 14									
North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation by Sector of Employment										
Employed Percent Graduates of Total										
State Government	276	9.3%								
Local Government	449	15.2%								
Private	2,236	75.5%								
Subtotal	2.961	100.0%								
Sector Unknown 1 0.0%										
Total	2,962	100.0%								

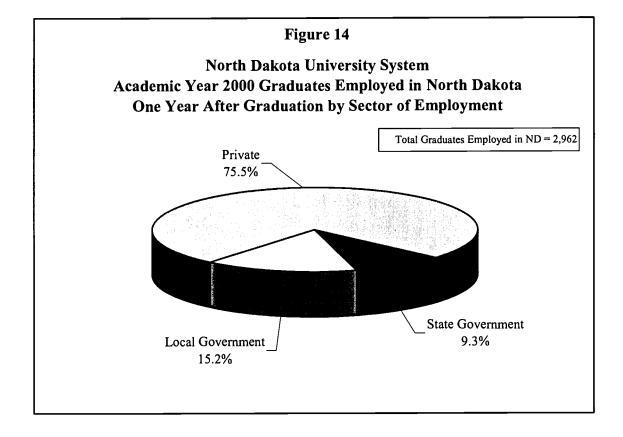




Table 15-A provides information on graduates employed in North Dakota one year after graduation by industry and sector of employment. As might be expected, the services area employs the largest number of graduates in the private sector (996), local government (366), and state government (203) categories. Only public administration programs provide a significant number of graduates to state and local government in addition to the services area programs.

Table 15-A North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation by Industry and Sector of Employment

		Employ	ment Secto	or	·
	State	Local		Sector	
Standard Industrial Classification (SIC)	Government	Government	Private	Unknown	Total
A. Agriculture, Forestry, & Fishing	0	0	27	0	27
B. Mining	0	0	17	0	17
C. Construction	12	0	147	0	159
D. Manufacturing	0	1	180	0	181
E. Transportation & Public Utilities	0	0	120	0	120
F. Wholesale Trade	0	0	149	0	149
G. Retail Trade	0	0	399	0	399
H. Finance, Insurance, & Real Estate	1	2	197	0	200
I. Services	203	366	996	0	1,565
J. Public Administration	60	80	4	0	144
K. Nonclassifiable Entities	0	0	0	0	0
Industry Unknown	0	0	0	1	0
Total	276	449	2,236	1	2,962



Within the service industries, educational services provided the largest number of graduates for state government (171) and local government (342), while health services provided the largest number of graduates in the private sector (410) as shown in Table 15-B. School district employment appears as local government employment in this table.

Table 15-B

North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation in Service Industries Only by Service Industry and Sector of Employment

		Employn	nent Sector	r	
Service Industry	State	Local Government	Private	Sector Unknown	Total
73 Business Services	4	2	201	0	207
75 Auto Repair, Services, & Parking	0	0	24	0	24
79 Amusement & Recreation Services	4	19	26	0	49
80 Health Services	2	2	410	0	414
81 Legal Services	0	0	34	0	34
82 Educational Services	171	342	7	0	520
83 Social Services	22	0	139	0	161
87 Engineering & Management Services	0	0	87	0	87
Other Service Industries	0	1	68	0	69
Total	203	366	996	0	1,565



Table 16-A summarizes graduates employed in North Dakota one year after graduation by degree level and industry of employment. One and two-year programs, four-year programs, and graduate programs all contribute significant numbers of graduates to the services area, which employed more than half (1,565 or 52.8%) of all graduates retained in the state. Within the services industry, (see Table 16-B) the largest number of one and two-year program graduates were employed in health services (181) and the largest number of four-year program graduates were employed in educational services (282) and health services (189). One hundred seventy-seven or 68.9% of masters program graduates were employed in the educational services area and 18 doctoral program graduates (81.8%) were employed in this area. The total of 520 graduates employed in the educational services area and the 414 graduates employed in health services area account for 59.7% of the 1,565 graduates employed in the services industry.

Table 16-A North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation by Degree Level and Industry of Employment Standard Industrial Classification (SIC) Area Services (see 16-B for details)) Forestry, & Fishing Finance, Insurance, Industry Unknown Fransportation & Wholesale Trade Non-classifiable Manufacturing Public Utilities & Real Estate Public Admin. Retail Trade Construction Agriculture, Mining Entities **Fotal Degree Level** One & Two-Year Programs Certificate Diploma

1,415 Bachelors **Graduate Programs** Masters Doctorate **Professional Programs Professional** 120 149 2,962 Total 1,565

Associates

Four-Year Programs



Table 16-B

North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation in Service Industries Only by Degree Level and Service Industry

				Sei	rvice l	ndustr	y			
Degree Level	Business Services	Auto Repair, Services, & Parking	Amusement & Recreation Services	Health Services	Legal Services	Educational Services	Social Services	Engineering & Management Services	Other Service Industries	Total
One & Two-Year Programs	_									
Certificate	11	7	1	16	0	3	4	1	4	47
Diploma	0	7	0	2	0	1	0	0	0	10
Associates	67	8	15	163	16	38	40	24	22	393
Four-Year Programs										
Bachelors	123	2	31	189	11	282	91	52	41	822
Graduate Programs										
Masters	6	0	2	38	0	177	24	8	2	257
Doctorate	0	0	0	1	0_	18	2	1_	0	22
Professional Programs										
Professional	0	0	0	5	7	1	0	11	0	14
Total	207	24	49	414	34	520	161	87	69	1,565



Table 17-A shows the relationship between area of study and industry of employment for graduates employed in North Dakota one year after graduation. The table shows, for example, that only 11 of the 134 graduates in agriculture and natural resources were actually employed in the agriculture, forestry, or fishing industries. The majority of graduates in this area (44) were employed in services, and 26 were employed in the wholesale trade area. The reader is reminded that information on self-employed farmers is not included in the databases available to FINDET. What this data strongly illustrates is graduates from the various areas of study find employment in a wide range of industries.

Table 17-A North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation by Area of Study and Industry of Employment

	_		Stan	dard I	ndustr	ial Cla	assific	ation (S	IC) Are	a		
Area of Study	Agriculture, Forestry & Fishing	Mining	Construction	Manufacturing	Transportation & Public Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, eal Estate	Services	Public Admin.	Industry Unknown	Total
Agriculture & Natural	11	1	5	8	6	26	15	11	44	7	0	134
Resources		_		_						Í	_	
Airway Sciences	1	0	1	1	0	0	0	1	15	0	0	19
Allied Health	0	0	2	0	1	0	10	1	123	2	0	139
Architecture, Engineering, & Related	2	0	69	55	29	10	14	1	56	6	0	242
Arts & Communications	0	0	0	10	7	5	14	3	39	0	0	78
Biological, Life, &	^	0	1	0	2	5	10	5	41	1	0	65
Physical Sciences	0	U	1	"	2	ر	10	ا ا	41	1	"	65
Business Administrative Support	0	1	3	2	3	6	7	16	77	6	1	122
Business & Management	1	5	18	35	17	32	79	106	194	24	0	511
Construction, Electronics, & Mechanics	4	9	46	43	14	44	56	0	41	1	0	258
Family & Consumer Sciences, Fitness	1	0	1	1	2	6	14	5	53	6	0	89
Health Sciences	3	0	2	0	2	2	38	1	188	2	0	238
Humanities & Social Sciences	2	0	1	9	10	6	38	22	176	22	0	286
Interdisciplinary & General Studies	2	1	6	8	11	5	66	12	97	9	0	217
Law & Related	0	0	2	1	7	1	16	5	40	50	0	122
Mathematics & Computer Science	0	0	0	3	6	0	5	4	31	0	0	49
Teacher Education & Related	0	0	2	5	3	1	17	7	350	8	0	393
Area of Study Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Total	27	17	159	181	120	149	399	200	1,565	144	1	2,962



Table 17-B provides details of employment of graduates by area of study within the service industry of employment. Areas of study providing significant numbers of graduates to particular service industries include: teacher education and related area graduates to the educational services industry (313); health sciences area graduates to the health services industry (159); and allied health graduates to the health services industry (102). Service industries appear to attract graduates from a wide range of academic areas of study.

North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation in Service Industries Only by Area of Study and Service Industry of Employment

Table 17-B

				Se	rvice I	ndustry				
Area of Study	Business Services	Auto Repair, Services, & Parking	Amusement & Recreation Services	Health Services	Legal Services	Educational Services	Social Services	Engineering & Management Services	Other Service Industries	Total
Agriculture & Natural	9	1	4	2	0	20	2	4	2	44
Resources		•								
Airway Sciences	1	0	0	0	0	14	0	0	0	15
Allied Health	3	0	2	102	0	1	15	0	0	123
Architecture, Engineering, & Related	8	0	2	2	0	12	1	26	5	56
Arts & Communications	9	1	3	1	0	14	7	2	2	39
Biological, Life, & Physical Sciences	1	0	4	8	0	20	0	5	3	41
Business Administrative Support	19	0	3	31	10	6	6	2	0	77
Business & Management	70	0	10	24	9	26	6	33	16	194
Construction, Electronics, & Mechanics	7	20	2	2	0	6	0	1	3	41
Family & Consumer Sciences, Fitness	7	0	3	14	0	8	15	1	5	53
Health Sciences	3	1	3	159	0	14	5	1	2	188
Humanities & Social Sciences	22	1	6	27	3	42	60	4	11	176
Interdisciplinary & General Studies	17	0	3	29	1	15	14	4	14	97
Law & Related	9	0	1	6	10	4	10	0	0	40
Mathematics & Computer Science	18	0	1	4	0	5	0	2	1	31
Teacher Education & Related	4	0	2	3	1	313	20	2	5	350
Area of Study Unknown	0	0	0	0	0	0	0	0	0	0
Total	207	24	49	414	34	520	161	87	69	1,565



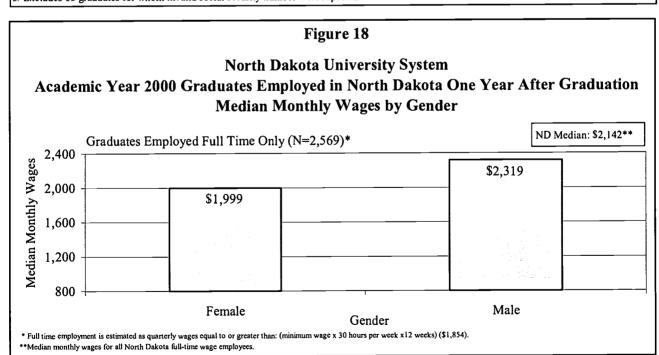
Table 18 provides median monthly wage information on 2000 graduates employed in North Dakota one year after graduation. System graduates' median wage of \$2,147 per month compares favorably to the North Dakota median wage of \$2,142 per month. Graduates' median wage surpasses the state median wage even though it represents the beginning of the income earning phase for most graduates compared to all earning phases for all employees in the state. At \$2,319 per month, the median wages of male graduates is higher than the median wages of female graduates at \$1,999 per month, although a slightly larger percentage of males (87.2%) were employed full time compared to females (86.3%). A greater percentage of females (46.4%) were employed in North Dakota one year after graduation compared to males (39.8%).

Table 18 North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation Median Monthly Wages by Gender

		Employed in	Percent Employed in	Employed Full Time	Percent Full Time	Median Monthly Wages
Gender	Graduates	North Dakota 1/	North Dakota	(estimated) 2/	(of employed)	(of full time)
Female	3,398	1,578	46.4%	1,362	86.3%	\$1,999
Male	3,477	1,384	39.8%	1,207	87.2%	\$2,319
Total	6,875	2,962	43.1%	2,569	86.7%	\$2,147
		_	All ND Waga	Employees	70.50/	\$2.142

All ND Wage Employees 78.5% \$2,142

^{3/} Excludes 63 graduates for whom invalid social security number were reported.





^{1/} Does not account for graduates who were in North Dakota but employed in jobs not covered by unemployment insurance.

^{2/} Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).

Table 19 describes the graduates' monthly wages by race/ethnicity for graduates employed in North Dakota one year after graduation. The median monthly wages of Asian/Pacific Islanders is the highest (\$2,725) followed by those of American Indian/Alaskans (\$2,250). The median monthly wages of white graduates (\$2,138) is approximately the same as the overall median of all graduates (\$2,142). Graduates classified as American Indian/Alaskan were more likely to be employed in North Dakota than the typical graduate.

Table 19

North Dakota University System

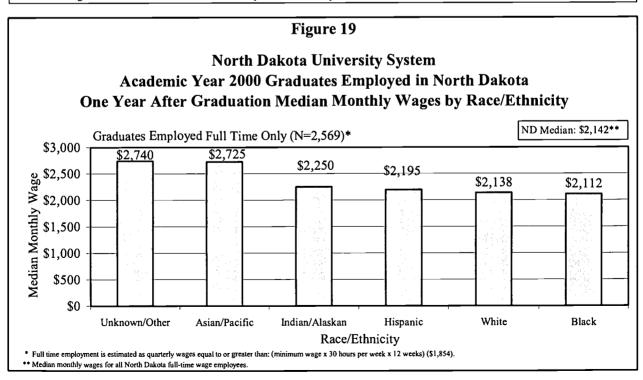
Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation

Median Monthly Wages by Race/Ethnicity

			Percent	Employed	Percent	Median
		Employed in	Employed in	Full Time	Full Time	Monthly Wages
Race	Graduates	North Dakota 1/	North Dakota	(estimated) ^{2/}	(of employed)	(of full time)
Amer. Indian/Alaskan	148	74	50.0%	64	86.5%	\$2,250
Asian/Pacific Islander	118	19	16.1%	16	84.2%	\$2,725
Black	47	7	14.9%	5	71.4%	\$2,112
Hispanic	39	7	17.9%	6	85.7%	\$2,195
White	6,435	2,833	44.0%	2,462	86.9%	\$2,138
Other	0	0	0.0%	0	0.0%	
Race Unknown	88	22	25.0%	16	72.7%	\$2,740
Total	6,875 ^{3/}	2,962	43.1%	2,569	86.7%	\$2,147
	78.5%	\$2,142				

^{1/} Does not account for graduates who were in North Dakota but employed in jobs not covered by unemployment insurance.

^{3/} Excludes 63 graduates for whom invalid social security number were reported.





^{2/} Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).

Table 20 describes the median monthly wages of the North Dakota University System graduates, for the academic year 2000, who were employed in North Dakota one year after graduation by age group. The median monthly wage continued to rise for each consecutive age range and was highest for the 50 & Over age range group where it peaked at \$2,886 per month. Median monthly wages were probably related to both education level and years of job experience.

Table 20

North Dakota University System

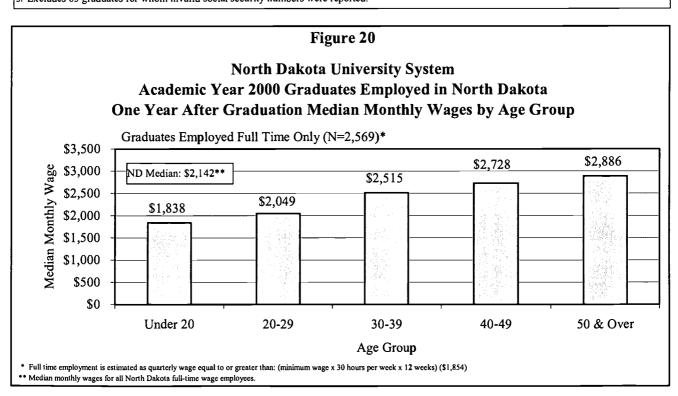
Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation

Median Monthly Wages by Age Group

			Percent	Employed	Percent	Median
		Employed in	Employed in	Full Time	Full Time	Monthly Wages
Age Group	Graduates	North Dakota ^{1/}	North Dakota	(estimated) 2/	(of employed)	(of full time)
Under 20	185	121	65.4%	96	79.3%	\$1,838
20-29	5,515	2,224	40.3%	1,905	85.7%	\$2,049
30-39	707	332	47.0%	303	91.3%	\$2,515
40-49	350	222	63.4%	208	93.7%	\$2,728
50 & Over	113	62	54.9%	56	90.3%	\$2,886
Age Unknown	5	1	20.0%	1	100.0%	\$4,456
Total	6,875 3/	2,962	43.1%	2,569	86.7%	\$2,147
			All ND Wage Em	ployees	78.5%	\$2,142

^{1/} Does not account for graduates who were in North Dakota but employed in jobs not covered by unemployment insurance.

^{3/} Excludes 63 graduates for whom invalid social security numbers were reported.





^{2/} Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).

Table 21 indicates there is a direct relationship between degree level and median monthly wages; wages increase as degree level increases. The median monthly wage of associate degree graduates is \$1,775 compared to \$2,236 for baccalaureate graduates, \$3,137 for masters degree graduates, and \$4,508 for doctoral degree graduates. The median monthly wage of professional program graduates is \$4,544. Within the one and two-year degree programs, diploma graduates, in comparison to associate degree graduates, were more likely to be employed full time (97.0% versus 83.2%) and earn a higher median monthly income (\$1,905 versus \$1,775). Baccalaureate degree program graduates' average monthly salary of \$2,236 is above the North Dakota median monthly wage for all employees of \$2,142. Table 21 appears to reinforce the assumption that education pays and more education pays even better.

Table 21

North Dakota University System

Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation

Median Monthly Wages by Degree Level

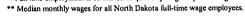
Degree Level	Graduates	Employed in North Dakota ^{1/}	Percent Employed in North Dakota	Employed Full Time (estimated) 2/	Percent Full Time (of employed)	Median Monthly Wages (of full time)		
One & Two-Year								
Programs								
Certificate	321	202	62.9%	177	87.6%	\$1,853		
Diploma	57	33	57.9%	32	97.0%	\$1,905		
Associates	1,623	966	59.5%	804	83.2%	\$1,775		
Four-Year Programs								
Bachelors	3,940	1,415	35.9%	1,224	86.5%	\$2,236		
Graduate Programs								
Masters	676	291	43.0%	278	95.5%	\$3,137		
Doctorate	71	23	32.4%	23	100.0%	\$4,508		
Professional			_					
Programs			•					
Professional	187	32 _	17.1%	31	96.9%	\$4,544		
Total	6,875	2,962	43.1%	2,569	86.7%	\$2,147		
All ND Wage Employees 78.5% \$2,142								

^{1/} Does not account for graduates who were in North Dakota but employed in jobs not covered by unemployment insurance.
2/ Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).
3/ Excludes 63 graduates for whom invalid social security numbers were reported.



Figure 21 North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation Median Monthly Wages by Degree Level Graduates Employed Full Time Only (N=2,569)* \$5,000 \$4,544 \$4,508 ND Median: \$2,142** \$4,000 Median Monthly Wage \$3,137 \$3,000 \$2,236 \$1,905 \$1,775 \$1,853 \$2,000 \$1,000 \$0 Doctorate Professional Certificate Diploma Associates **Bachelors** Masters Degree Level







Information on the median monthly wages by area of study for System graduates, for the academic year 2000 and employed one year after graduation, is presented in Table 22. Graduates in mathematics & computer sciences earn the highest median monthly wages (\$3,211) followed by graduates in architecture, engineering and related (\$3,000 per month) and health science (\$2,743 per month). Mathematics and computer science is the academic area with the fewest number of graduates (Table/Figure 6) and the highest median monthly wages.

Table 22

North Dakota University System

Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation

Median Monthly Wages by Area of Study

			Percent	Employed	Percent	Median
		Employed in	Employed in	Full Time	Full Time	Monthly Wages
Area of Study	Graduates	North Dakota 1/	North Dakota	(estimated) 2/	(of employed)	(of full time)
Agriculture & Natural Resources	311	134	43.1%	101	75.4%	\$2,017
Airway Sciences	224	19	8.5%	16	84.2%	\$2,033
Allied Health	229	139	60.7%	117	84.2%	\$1,762
Architecture, Engineering, & Related	761	242	31.8%	220	90.9%	\$3,000
Arts & Communications	195	78	40.0%	69	88.5%	\$1,788
Biological, Life, & Physical Sciences	271	65	24.0%	48	73.8%	\$2,285
Business Administrative Support	174	122	70.1%	108	88.5%	\$1,593
Business & Management	965	511	53.0%	468	91.6%	\$2,200
Construction, Electronics, & Mechanics	424	258	60.8%	235	91.1%	\$2,070
Family & Consumer Sciences, Fitness	219	89	40.6%	79	88.8%	\$1,713
Health Sciences	754	238	31.6%	201	84.5%	\$2,743
Humanities & Social Sciences	743	286	38.5%	237	82.9%	\$2,035
Interdisciplinary & General Studies	422	217	51.4%	155	71.4%	\$1,385
Law & Related	242	122	50.4%	111	91.0%	\$1,962
Mathematics & Computer Science	157	49	31.2%	44	89.8%	\$3,211
Teacher Education & Related	784	393	50.1%	360	91.6%	\$2,416
Area of Study Unknown	0	0	0.0%	0	0.0%	\$0
Total	6,875 3/	2,962	43.1%	2,569	86.7%	\$2,147
		All N	ID Wage Empl	oyees	78.5%	\$2,142

1/ Does not account for graduates who were in North Dakota but employed in jobs not covered by unemployment insurance.

3/ Excludes 63 graduates for whom invalid social security numbers were reported.



^{2/} Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).

Figure 22 North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation Median Monthly Wages by Field of Study Graduates Employed Full Time Only (N=2,569)* 1\$3,211 Mathematics & Computer Science \$3,000 Architecture, Engineering & Related \$2,743 Health Sciences Teacher Education & Related \$2,416 \$2,285 Biological, Life & Physical Sciences Business & Management \$2,200 North Dakota Median** \$2,142 Construction, Electronics & Mechanics \$2,070 Humanities & Social Sciences \$2,035 \$2,033 Airway Sciences \$2,017 Agriculture & Natural Resources Law & Related \$1,962 31,788 Arts & Communications \$1,762 Allied Health **3**\$1,713 Family & Consumer Sciences, Fitness \$1,593 **Business Administrative Support** Interdisciplinary & General Studies \$1,385 \$0 \$500 \$1,000 \$1,500 \$2,000 \$2,500 \$3,000 \$3,500 Median Monthly Wages * Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks)(\$1,854). ** Median monthly wages for all North Dakota full-time wage employees.



Table/Figure 23-A provides information on the median monthly wages by industry of employment for system graduates, for the academic year 2000, employed in North Dakota one year after graduation. The highest median monthly wages by industry were earned for graduates employed in the manufacturing (\$2,392) and public administration (\$2,339) industries.

Table 23-A North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation Median Monthly Wages by Industry of Employment

Stand (SIC)	ard Industrial Classification Area	Employed Graduates	Employed Full Time (estimated) 1/	Percent Full Time (of employed)	Median Monthly Wages (of full time)
A.	Agriculture, Forestry, & Fishing	27	23	85.2%	\$1,596
B.	Mining	17	16	94.1%	\$2,034
C.	Construction	159	148	93.1%	\$2,208
D.	Manufacturing	181	172	95.0%	\$2,392
E.	Transportation & Public Utilities	120	107	89.2%	\$2,329
F.	Wholesale Trade	149	137	91.9%	\$2,275
G.	Retail Trade	399	281	70.4%	\$1,593
H.	Finance, Insurance, & Real Estate	200	191	95.5%	\$1,931
I.	Services	1,565	1,361	87.0%	\$2,201
J.	Public Administration	144	132	91.7%	\$2,339
K.	Nonclassifiable Entities	0			\$0
	Industry Unknown	1	1	100.0%	\$1,837
Total		2,962	2,569	86.7%	\$2,147
		All ND Wage B	Employees	78.5%	\$2,142

1/ Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).

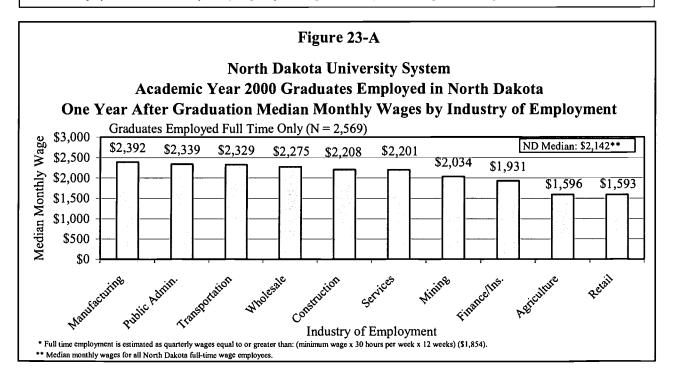
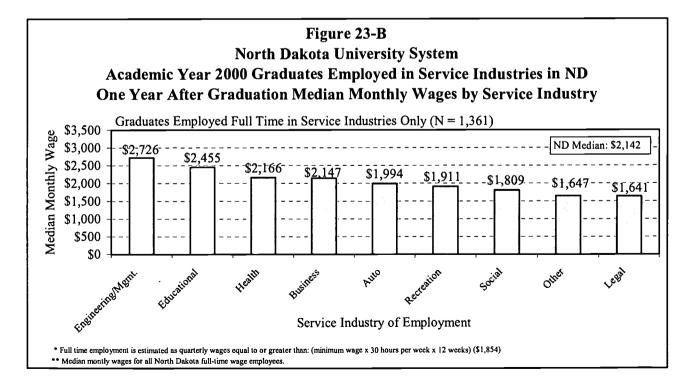




Table 23-B shows that within the service industry, graduates in engineering and management services earn the highest median monthly wage with \$2,726 per month followed by educational services employees at \$2,455 per month.

Table 23-B North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation In Service Industries Only Median Monthly Wages by Service Industry of Employment

Service Industry	Employed Graduates	Employed Full Time (estimated) 1/	Percent Full Time (of employed)	Median Monthly Wages (of full time)
73 Business Services	207	175	84.5%	\$2,147
75 Auto Repair, Services, and Parking	24	23	95.8%	\$1,994
79 Amusement and Recreation Services	49	26	53.1%	\$1,911
80 Health Services	414	365	88.2%	\$2,166
81 Legal Services	34	26	76.5%	\$1,641
82 Educational Services	520	480	92.3%	\$2,455
83 Social Services	161	134	83.2%	\$1,809
87 Engineering and Management Services	87	79	90.8%	\$2,726
Other Service Industries	69	53	76.8%	\$1,647
Total	1,565	1,361	87.0%	\$2,201
	All ND Wage	Employees	78.5%	\$2,142
1/ Full time employment is estimated as quarterly wages equal to	•	• •		





As shown in Table/Figure 24, the overwhelming majority of graduates are employed in the private sector, where they earn slightly less (\$2,043 per month) than the state average wage of \$2,147 per month. Graduates employed in local government earned a median monthly wage of \$2,430 and were most likely to be employed full time (92.2%).

Table 24

North Dakota University System

Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation

Median Monthly Wages by Sector of Employment

Employment Sector	Employed Graduates	Employed Full Time (estimated) 1/	Percent Full Time (of employed)	Median Monthly Wages (of full time)
State Government	276	248	89.9%	\$2,382
Local Government	449	414	92.2%	\$2,430
Private	2,236	1,906	85.2%	\$2,043
Sector Unknown	1	1	100.0%	\$1,837
Total	2,962	2,569	86.7%	\$2,147
	All ND Wag	ge Employees	78.5%	\$2,142

1/ Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).

Figure 24 North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation Median Monthly Wages by Sector of Employment Graduates Employed Full Time Only (N = 2,569)* \$2,500 \$2,430 \$2.382 % \$2,400 \$2,300 \$2,200 \$2,100 \$2,000 \$1,900 ND Median: \$2,142* \$2,043 \$1,800 State Government Local Government Private Sector of Employment * Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854) ** Median monthly wages for all North Dakota full-time wage employees.



Table 25 provides information regarding the median monthly wages of graduates employed full time in North Dakota one year after graduation by area of study and degree level. For purposes of confidentiality, the table does not display information on area of study and degree level combinations that include fewer than five graduates. Overall this table shows a relatively clear relationship among area of study, degree level, and income.

Table 25 North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation Median Monthly Wages of Graduates Employed Full Time ^{1/} by Area of Study and Degree Level

	One & T	Two-Year I	Programs		Graduate	Programs		
Area of Study	Certificate	Diploma	Associates	Bachelors	Masters	Doctorate	Professional	Total
Agriculture & Natural Resources			\$1,467	\$2,500	\$2,673	*		\$2,017
Airway Sciences				\$2,033				\$2,033
Allied Health	\$1,558	*	\$1,782					\$1,762
Architecture, Engineering, & Related	\$2,234		\$2,371	\$3,741	\$3,435			\$3,000
Arts & Communications	*		\$1,661	\$1,816	\$2,782			\$1,788
Biological, Life, & Physical Sciences				\$2,250	*	*		\$2,285
Business Administrative Support	*	*	\$1,496	\$2,708				\$1,593
Business & Management	\$1,395	*	\$1,867	\$2,263	\$3,472			\$2,200
Construction, Electronics, & Mechanics	\$1,945	\$1,923	\$2,168					\$2,070
Family & Consumer Sciences, Fitness	*		\$1,250	\$1,772	*			\$1,713
Health Sciences	*		\$1,050	\$2,667	\$3,433		\$4,995	\$2,743
Humanities & Social Sciences			\$1,420	\$1,929	\$2,834	\$3,433		\$2,035
Interdisciplinary & General Studies			\$1,258	\$2,124				\$1,385
Law & Related	\$2,027		\$1,533	\$2,049			\$3,128	\$1,962
Mathematics & Computer Science			*	\$3,276	\$3,680			\$3,211
Teacher Education & Related			*	\$2,031	\$3,221	\$4,377		\$2,416
Area of Study Unknown								
Total	\$1,853	\$1,905	\$1,775	\$2,236	\$3,137	\$4,508	\$4,544	\$2,147

I/ Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).
 Median wages calculated on fewer than five cases.



Information on median monthly wages of graduates employed full time in North Dakota one year after graduation by industry of employment and degree level is presented in Table 26-A.

Table 26-A

North Dakota University System

Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation Median Monthly Wages of Graduates Employed Full Time ^{1/} by Industry of Employment and Degree Level

Standard Industrial Classification	One &	Гwo-Year Р	rograms		Graduate Programs			
(SIC) Area	Certificate	Diploma	Associates	Bachelors	Masters	Doctorate	Professional	Total
A. Agriculture, Forestry & Fishing	*		\$1,579	\$1,636				\$1,596
B. Mining	*		\$2,233	\$1,696				\$2,034
C. Construction	\$1,983	*	\$2,071	\$3,049				\$2,208
D. Manufacturing	\$2,212	*	\$1,977	\$3,177	*			\$2,392
E. Transportation & Public Utilities	\$2,022		\$2,573	\$2,301	*			\$2,329
F. Wholesale Trade	\$1,770	*	\$2,174	\$2,590	\$3,355			\$2,275
G. Retail Trade	\$1,836	\$1,912	\$1,214	\$1,811	*		\$5,113	\$1,593
H. Finance, Insurance & Real Estate	*	*	\$1,717	\$2,076	*			\$1,931
I. Services	\$1,528	\$1,909	\$1,681	\$2,212	\$3,122	\$4,542	\$3,846	\$2,201
J. Public Administration	\$2,027		\$2,092	\$2,385	\$3,236	*	*	\$2,339
K. Nonclassifiable Entities								
Industry Unknown			*					\$1,837
Total	\$1,853	\$1,905	\$1,775	\$2,236	\$3,137	\$4,508	\$4,544	\$2,147

^{1/} Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).



^{*} Median wages calculated on fewer than five cases.

More detailed information on graduates within service industries is provided in Table 26-B.

Table 26-B

North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation In Service Industries Only Median Monthly Wages of Graduates Employed Full Time 1/ by Industry of Employment and Degree Level

		One & T	wo-Year Pr	ograms]	Graduate	Programs		
Serv	rice Industry	Certificate	Diploma	Associates	Bachelors	Masters	Doctorate	Professional	Total
73	Business Services	\$1,652		\$1,514	\$2,708	*			\$2,147
75	Auto Repair, Services & Parking	\$2,221	\$2,073	\$1,994	*				\$1,994
79	Amusement & Recreation Services			\$1,922	\$1,883	*			\$1,911
80	Health Services	\$1,469	*	\$1,705	\$2,512	\$3,499	*	\$4,942	\$2,166
81	Legal Services			\$1,426	*			\$3,083	\$1,641
82	Educational Services	*		\$1,916	\$2,093	\$3,160	\$4,303	*	\$2,455
83	Social Services	*		\$1,482	\$1,807	\$2,506	*		\$1,809
87	Engineering & Management Services	*		\$1,922	\$2,940	\$3,092	*	*	\$2,726
	Other Service Industries	*		\$1,105	\$1,975	*			\$1,647
Tot	tal	\$1,528	\$1,909	\$1,681	\$2,212	\$3,122	\$4,524	\$3,846	\$2,201

1/ Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).



^{*} Median wages calculated on fewer than five cases.

Appendix A: CIP Tables



Appendix A

Information in all of the previous tables was compiled by collapsing information across major CIP (classification of instructional program: 2000 edition) categories. For example, the agriculture and natural resources category actually includes CIP's from three different areas: agriculture business and production, agricultural services, and conservation and renewable natural resources. Since this more detailed information may be useful for planning and management purposes, it is included in tables in Appendix A. Table A1 shows the more detailed information on number of graduates by classification of instructional program area.

Table A1 North Dakota University System Academic Year 2000 Graduates by Classification of Instructional Program (CIP) Area

	Classification of Instructional Program		Percent
CIP Area Code	(CIP) Area	Graduates	of Total
01	Agriculture, Agriculture Operations & Related Sciences	270	3.9%
03	Natural Resources & Conservation	42	0.6%
04	Architecture & Related Services	57	0.8%
05	Area, Ethnic, Cultural & Gender Studies	2	0.0%
09	Communication, Journalism & Related Programs	118	1.7%
11	Computer and Information Sciences & Support Services	118	1.7%
12	Personal & Culinary Services	10	0.1%
13	Education	796	11.5%
14	Engineering	411	5.9%
15	Engineering Technologies/Technicians	296	4.3%
16	Foreign Languages, Literatures & Linguistics	30	0.4%
19	Family & Consumer Sciences/Human Sciences	121	1.7%
22	Legal Professions & Studies	78	1.1%
23	English Language & Literature/Letters	96	1.4%
24	Liberal Arts & Sciences, General Studies & Humanities	455	6.6%
25	Library Science	0	0.0%
26	Biological & Biomedical Sciences	177	2.6%
27	Mathematics & Statistics	40	0.6%
30	Multi/Interdisciplinary Studies	48	0.7%
31	Parks, Recreation, Leisure & Fitness Studies	91	1.3%
38	Philosophy & Religious Studies	11	0.2%
40	Physical Sciences	95	1.4%
41	Science Technologies/Technicians	0	0.0%
42	Psychology	187	2.7%
43	Security & Protective Services	172	2.5%
44	Public Administration & Social Service Professions	106	1.5%
45	Social Sciences	238	3.4%
46	Construction Trades	79	1.1%
47	Mechanic & Repair Technologies/Technicians	249	3.6%
48	Precision Production	96	1.4%
49	Transportation & Materials Moving	227	3.3%
50	Visual & Performing Arts	79	1.1%
51	Health Professions & Related Clinical Sciences	995	14.3%
52	Business, Management, Marketing & Related Support Services	1,148	16.5%
	Subtotal	6,938	100.0%
	CIP Area Unknown	0	0.0%
	Total	6,938	100.0%



Table A2 provides the detailed retention information.

Table A2 North Dakota University System Status of Academic Year 2000 Graduates One Year After Graduation by Classification of Instructional Program (CIP) Area

		Total R	Dakota 1/		ota Only 2/	NDUS	olled in Only 3/	Both Emplo	rolled in US
CIP Area	Graduates	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Agriculture, Agriculture Operations, & Related Sciences	270	130	48.1%	93	34.4%	15	5.5	22	8.1%
Natural Resources & Conservation	41	23	56.1%	16	39.0%	4	9.8%	3	7.3%
Architecture & Related Services	57	5	8.8%	5	8.8%	0	0.0%	ő	0.0%
Area, Ethnic, Cultural, & Gender								_	
Studies	2	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Communication, Journalism, & Related Programs	116	47	40.5%	37	31.9%	4	3.4%	6	5.2%
Computer & Information Sciences & Support Services	117	44	37.6%	38	32.5%	2	1.7%	4	3.4%
Personal & Culinary Services	10	5	50.0%	5	50.0%	0	0.0%	0	0.0%
Education	784	408	52.0%	360	45.9%	15	1.9%	33	4.2%
Engineering	408	98	24.0%	80	19.6%	lii	2.7%	7	1.7%
Engineering Technologies/Technicians	296	152	51.4%	138	46.6%	2	0.7%	12	4.1%
Foreign Languages, Literatures, & Linguistics	30	10	33.3%	6	20.0%	0	0.0%	4	13.3%
Family & Consumer Sciences/Human Sciences	121	60	49.6%	53	43.8%	3	2.5%	4	3.3%
Legal Professions & Studies	75	19	25.3%	17	22.7%	0	0.0%	2	2.7%
English Language & Literature/Letters	96	37	38.5%	23	24.0%	0	9.4%	5	5.2%
Liberal Arts & Sciences, General	451	312	69.2%	156	34.6%	79	17.5%	77	17.1%
Studies, & Humanities Library Science	0	0	0.0%	0	0.0%	0	0.0%	o	0.0%
Biological & Biomedical Sciences	176	64	36.4%	38	21.6%	12	6.8%	14	8.0%
Mathematics & Statistics	40	11	27.5%	6	15.0%	4	10.0%	1	2.5%
Multi/Interdisciplinary Studies	48	19	39.6%	17	35.4%	2	4.2%	Ô	0.0%
Parks, Recreation, Leisure & Fitness				1		i		_	
Studies	88	29	33.0%	22	25.0%	2	2.3%	5 0	5.7%
Philosophy & Religious Studies	11	4	36.4%	3	27.3%	1	9.1%		0.0%
Physical Sciences	95	26	27.4%	11	11.6%	13	13.7%	2	2.1%
Science Technologies/Technicians	0	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Psychology	186	84	45.2%	52	28.0	19	10.2%	13	7.0%
Security & Protective Services	167	107	64.1%	86	51.5%	4	2.4%	17	10.2%
Public Administration & Social Service Professions	104	62	59.6%	56	53.8%	1	1.0%	5	4.8%
Social Sciences	237	102	43.0%	68	28.7%	16	6.8%	18	7.6%
Construction Trades	79	44	55.7%	41	51.9%	1	1.3%	2	2.5%
Mechanic & Repair Technologies/Technicians	249	166	66.7%	146	58.6%	10	4.0%	10	4.0%
Precision Production	96	63	65.6%	54	56.3%	4	4.2%	5	5.2%
Transportation & Materials Moving	224	23	10.3%	16	7.1%	4	1.8%	3	1.3%
Visual & Performing Arts	79	40	50.6%	28	35.4%	5	6.3%	7	8.9%
Health Professions & Related Clinical Sciences	983	456	46.4%	310	31.5%	79	8.0%	67	6.8%
Business, Management, Marketing & Related Support Services	1,139	656	57.6%	578	50.7	23	2.0%	55	4.8%
Program Area Unknown	1	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	6,875 4/	3,306	48.1%	2,559	37.2%	344	5.0%	403	5.9%
I Utai	0,0,0	3,500	70.1 /0	4,000	311270		3.0 / 0		

^{1/} Does not account for graduates who were in North Dakota but unemployed, employed in jobs not covered by unemployment insurance, or attending private colleges.

^{4/} Excludes 63 graduates for whom invalid social security numbers were reported.



^{2/} Total graduates employed in ND = "Employed in ND Only" + "Both Employed in ND and Re-enrolled in the NDUS."

3/ Total graduates re-enrolled in NDUS = "Re-enrolled in NDUS Only" + "Both Employed in ND and Re-enrolled in the NDUS."

Table A3 provides more detailed CIP information by industry of employment,

Table A3

North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation by Classification of Instructional Program (CIP) Area and Industry of Employment

				Sta	ndard Ind	ustrial (Classifica	ation (SIC	C) Area			
CIP Area	Agriculture, Forestry, and Fishing	Mining	Construction	Manufacturing	Transportation and Public Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, & Real Estate	Services	Public Admin.	Industry Unknown	Total
Agriculture, Agriculture Operations, &	10	0	3	7	6	25	13	11	38	2	0	69
Related Sciences Natural Resources & Conservation	1 1	1	2	1	0	1	2	0	6	5	0	19
Architecture & Related Services	Ô	Ô	õ	Ô	ŏ	Ô	2	Ö	3	Ŏ	Ŏ.	5
Area, Ethnic, Cultural, & Gender	l o l	0	0	0	0	0	0	0	0	0	0	l ol
Studies Communication, Journalism, & Related Programs	0	0	0	4	7	3	3	1	25	0	0	43
Computer & Information Sciences &	ا م ا	ا م	0	,	ے	0	3	4	26	1	0	42
Support Services	0	0	0	3	6	-	_	-			-	l i
Personal & Culinary Services	0	0	0	1	0	0	2	0	2	0	0	5
Education	0	0	2	5	3	1	17	7	350	8	0	393
Engineering	1	0	16	35	5	1	3	0	25	1	0	87
Engineering Technologies/Technicians	1	0	53	20	24	9	9	1	28	5	0	150
Foreign Languages, Literatures, & Linguistics Family & Consumer Sciences/Human	0	0	0	0	0	0	1	0	9	0	0	10
Sciences	0	0	0	0	1	3	10	4	34	5	0	57
Legal Professions & Studies	0	0	0	0	0	0	2	1	12	4	0	19
English Language & Literature/Letters	0	0	0	3	1	1	3	1	19	0	0	28
Liberal Arts & Sciences, General	3	0	6	7	10	5	72	21	102	7	0	233
Studies, & Humanities)	ا ^ن ا	0	/	10	3	12	21	102	· '	-	
Library Science	0	0	0	0	0	0	0	0	0	0	0	0
Biological & Biomedical Sciences	0	0	1	0	2	4	8	4	32	1	0	52
Mathematics & Statistics	0	0	0	0	0	0	2	0	5	0	0	7
Multi/Interdisciplinary Studies	0	1	0	1	2	0	2	0	7	4	0	17
Parks, Recreation, Leisure & Fitness Studies	1	0	1	0	1	3	2	1	17	1	0	27
Philosophy & Religious Studies	0	0	0	0	0	0	0	0	3	0	0	3
Physical Sciences	0	0	0	0	0	1	2	1	9	0	0	13
Science Technologies/Technicians	0	0	0	0	0	0	0	0	0	0	0	0
Psychology	0	0	0	3	4	3	9	3	40	3 46	0	65
Security & Protective Services	0	0	2	1	7	1	14	•	28		-	103
Public Administration & Social Service Professions	0	0	0	0	1	0	3	0	45	12	0	61
Social Sciences	1	0	1	3	3	2	14	9	48	5	0	86
Construction Trades	1	0	23	1	11	3	2	0	2	0	0	43
Mechanic & Repair	2	,	1 2	7	3	39	50	0	32	0	0	156
Technologies/Technicians	3	4	18						1			
Precision Production	0	5	5	35	0	2	4	0	7	1	0	59
Transportation & Materials Moving	1 1	0	1	1	0	0	0	1	15	0 0	0	19 35
Visual & Performing Arts	0	0	0	6	0	2	11	2	14	'	_	
Health Professions & Related Clinical Sciences	3	0	4	0	3	2	48	2	311	4	0	377
Business, Management, Marketing & Related Support Services	1	6	21	37	20	38	86	122	271	30	0	633
Program Area Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Total	27	17	159	181	120	149	399	200	1,565	144	1	2,962



and Table A4 provides the specific service industry of employment information.

Table A4

North Dakota University System Academic Year 2000 Graduates

Employed in North Dakota One Year After Graduation In Service Industries by Classification of Instructional Program (CIP) Area and Service Industry of Employment

					Comi	an Industr				
				т	Servi	ce Industi	<u>y</u>			
CIP Area	Business Services	Auto Repair, Services, & Parking	Amusement & Recreation Services	Health Services	Legal Services	Educational Services	Social Services	Engineering & Management Services	Other Service Industries	Total
Agriculture, Agriculture Operations, &	7	1	4	1	0	18	2	4	1	38
Related Sciences	·				-	1	_	·	_	
Natural Resources & Conservation	2	0	0	1	0	2	0	0	1	6
Architecture & Related Services	0	0	0	1	0	1	0	1	0	3
Area, Ethnic, Cultural, & Gender Studies	0	0	0	0	0	0	0	0	0	0
Communication, Journalism, &	5	1	3	0	0	8	6	1	1	25
Related Programs Computer & Information Sciences &										•
Support Services	18	0	1	3	0	1	0	2	1	26
Personal & Culinary Services	0	0	0	2	0	0	0	0	0	2
Education	4	0	2	3	1	313	20	2	5	350
Engineering	3	0	0	0	0	4	0	17	1	25
Engineering Technologies/Technicians	5	0	2	1	0	7	1	8	4	28
Foreign Languages, Literatures, & Linguistics	1	o	0	2	0	5	0	0	1	9
Family & Consumer Sciences/Human Sciences	4	0	0	7	0	7	9	1	2	30
Legal Professions & Studies	1	0	0	0	10	1	0	0	0	12
English Language & Literature/Letters	5	1	1	0	0	8	1	0	3	19
Liberal Arts & Sciences, General	17	l 0	3	27	1	17	18	4	15	102
Studies, & Humanities			_		0	0	0	0	0	0
Library Science	0	0	0	0	0	15	0	3	2	32
Biological & Biomedical Sciences	1	0	4	7	0	4	0	0	0	5
Mathematics & Statistics	0	0	0	1 4	0	1	0	0	Ĭ	7
Multi/Interdisciplinary Studies	1	0	0	4	U		-		_	
Parks, Recreation, Leisure & Fitness Studies	3	0	3	5	0	0	3	0	3	17
Philosophy & Religious Studies	0	0	0	1 1	0	1	1	0	0	3
Physical Sciences	Ö	Ιŏ	ő	l il	ŏ	5	0	2	1	9
Science Technologies/Technicians	ŏ	l ŏ	ŏ	Ō	0	0	0	0	0	0
Psychology	2	ا أ	3	ا و	1	9	12	1	3	40
Security & Protective Services	8	0	1	6	0	3	10	0	0	28
Public Administration & Social	1	l 0	1	10	0	5	28	0	0	45
Service Professions	_	1			-	ĺ		-		l
Social Sciences	12	0	1	3	2	11	14	3	2	48
Construction Trades	1	0	0	1	0	0	0	0	0	2
Mechanic & Repair Technologies/Technicians	3	20	0	1	0	5	0	0	3	32
Precision Production	3	0	2	0	0	1	0	1	0	7 15
Transportation & Materials Moving	1	0	0	0	0	14	0	0 1	1	13
Visual & Performing Arts	4	0	0	1	0	6	1	1		
Health Professions & Related Clinical Sciences	6	1	5	261	0	15	20	1	2	311
Business, Management, Marketing & Related Support Services	89	0	13	55	19	32	12	35	16	271
Program Area Unknown	0	0	0	0	0	0	0	0	0	0
Total	207	24	49	414	34	520	161	87	69	1,565



Table A5 provides employment and wage information for each more detailed CIP categories.

Table A5

North Dakota University System Academic Year 2000 Graduates Employed in North Dakota One Year After Graduation Median Monthly Wages by Classification of Instructional Program (CIP) Area

CIP Area Agriculture, Agriculture Operations, & Related Sciences Natural Resources & Conservation Architecture & Related Services	Graduates 270 41 57	Employed in North Dakota 1/	Percent Employed in North Dakota	Employed Full Time (estimated) 2/	Percent Full Time (of employed)	Median Monthly Wages
Related Sciences Natural Resources & Conservation	41	115			(or employed)	(of full time) 4/
Natural Resources & Conservation			42.6%	88	76.5%	\$2,076
		19	46.3%	13	68.4%	\$1,668
Alchitecture of Related Services) 3/	5	8.8%	3	60.0%	Ψ1,000
Area, Ethnic, Cultural, & Gender	1				j	
Studies	2	0	0.0%	0	0.0%	
Communication, Journalism, & Related Programs	116	43	37.1%	39	90.7%	\$1917
Computer & Information Sciences & Support Services	117	42	35.9%	38	90.5%	\$3,308
Personal & Culinary Services	10	5	50.0%	4	80.0%	
Education	784	393	50.1%	360	91.6%	\$2,416
Engineering	408	87	21.3%	81	93.1%	\$3,795
Engineering Technologies/Technicians		150	50.7%	136	90.7%	\$2,378
Foreign Languages, Literatures, &	30	10	33.3%	7	70.0%	\$2,405
Linguistics Family & Consumer Sciences/Human	121	57	47.1%	52	91.2%	\$1,759
Sciences		10	25.3%	18	94.7%	\$2,810
Legal Professions & Studies	75	19 28	29.2%	23	82.1%	\$2,137
English Language & Literature/Letters	Į.	28	29.2%			
Liberal Arts & Sciences, General Studies, & Humanities	451	233	51.7%	164	70.4%	\$1,357
Library Science	0	0	0.0%	0	0.0%	
Biological & Biomedical Sciences	176	52	29.6%	36	69.2%	\$2,139
Mathematics & Statistics	40	7	17.5%	6	85.7%	\$2,213
Multi/Interdisciplinary Studies	48	17	35.4	17	100.0%	\$2,201
Parks, Recreation, Leisure & Fitness Studies	88	27	30.7%	23	85.2%	\$1,615
Philosophy & Religious Studies	11	3	27.3%	3	100.0%	
Physical Sciences	95	13	13.7%	12	92.3%	\$2,820
Science Technologies/Technicians	0	0	0.0%	0	0.0%	
Psychology	186	65	35.0%	53	81.5%	\$1,874
Security & Protective Services	167	103	61.7%	93	90.3%	\$1,899
Public Administration & Social Service Professions	104	61	58.7%	58	95.1%	\$2,481
Social Sciences	237	86	36.3%	67	77.9%	\$1,900
Construction Trades	79	43	54.4%	37	86.1%	\$1,940
Mechanic & Repair	249	156	62.7%	149	95.5%	\$2,071
Technologies/Technicians Precision Production	96	59	61.5%	49	83.1%	\$2,228
Fransportation & Materials Moving	224	19	8.5%	16	84.2%	\$2,033
Visual & Performing Arts	79	35	44.3%	30	85.7%	\$1,755
Health Professions & Related Clinical Sciences	983	377	38.4%	318	84.4%	\$2,358
Business, Management, Marketing &	1,139	633	55.6%	576	91.0%	\$2,041
Related Support Services Progra m Area Unknown	0	o	0.0%	0	0.0%	
Fotal	6,875 3/		43.1%	2,569	86.7%	\$2,147

1/ Does not account for graduates who were in North Dakota but employed in jobs not covered by unemployment insurance.

^{4/} In the case where the number of graduates employed full-time is less than 5, the median monthly wage is not shown.



78.5%

\$2,142

All ND Wage Employees

^{2/} Full time employment is estimated as quarterly wages equal to or greater than: (minimum wage x 30 hours per week x 12 weeks) (\$1,854).

^{3/} Excludes 63 graduates for whom invalid social security number were reported.

Appendix B: Methodological Notes



Appendix B

Important information for interpretation of the tables in this report is found in Appendix B. Appendix B describes how CIP categories were collapsed into academic areas of study. Also included in Appendix B is a description of how more detailed service industry classifications were collapsed into the more general category of divisions in the SIC classification. The information found in Appendix B is critical to accurately interpret the information found in the tables in this report. Tables in this report should not be distributed without being accompanied by these methodological notes.



Follow-up Cohort

- The academic year 2000 graduate cohort, upon which this report is based, includes 6,938 persons who were awarded degrees (including certificate programs and diplomas) from NDUS campuses between July 1, 1999 and June 30, 2000. Graduate data was obtained from the North Dakota Higher Education Computer Network.
- Fourteen persons were awarded two degrees during the 2000 academic year. For the present analyses, each was counted only once, by the highest degree awarded, or by the most recent degree if both were of the same level.
- Two majors were reported for 238 of the 6,938 graduates. The first major listed in each record was used in all tables describing the fields of study of graduates. In 118 of the 238 cases, both majors were identified by the same two-digit Classification of Instructional Program (CIP) code (2000 edition), indicating that the general areas of study were similar.
- > The age of graduates represents age (last birthday) at the time (month/year) the degree was awarded.
- > The state of residency of graduates represents residency status in NDUS as of the most recent enrollment period prior to the date the degree was awarded.
- > The area of study of graduates represents general categories derived, by NDUS personnel, from reported CIP codes. The reported categories encompass the following CIP code ranges:

Agriculture and Natural Resources

- Agriculture, Agriculture Operations, and Related Sciences (01.0101 01.9999)
- Natural Resources and Conservation (03.0101 03.9999)

Airway Sciences

• Transportation and Materials Moving (49.0101 - 49.9999)

Allied Health

- Dental Services (51.0601 51.0699)
- Health and Medical Administrative Services (51.0701 51.0799)
- Allied Health and Medical Assisting Services (51.0801 51.0806)
- Clinical/Medical Laboratory Technician (51.1004)
- Psychiatric/Mental Health Services Technician (51.1502)
- Nursing (excluding R.N. and Post-R.N. training) (51.1613 51.1699)

Architecture, Engineering, and Related

- Architecture and Related Services (04.0201 04.9999)
- Engineering (14.0101 14.9999)
- Engineering Technologies/Technicians (15.0101 15.9999)



Arts and Communication

- Communication, Journalism and Related Programs (09.0101 09.9999)
- Visual and Performing Arts, General (50.0101 50.9999)

Biological, Life, and Physical Sciences

- Biological Sciences/Life Sciences (26.0101 26.9999)
- Physical Sciences (40.0101 40.9999)

Business Administrative Support

- Office Management and Supervision (52.0204)
- Administrative Assistant and Secretarial Science (52.0401 52.0499)

Business and Management

Business, Management, and Marketing (52.0101 - 52.0203; 52.0205 - 52.0399; 52.0601 - 52.999)

Construction, Electronics, and Mechanics

- Science Technologies/Technicians (41.0101 41.9999)
- Construction Trades (46.0101 46.9999)
- Mechanics and Repairers (47.0101 47.9999)
- Precision Production Trades (48.0101 48.9999)

Family and Consumer Sciences, Fitness Related

- Personal and Culinary Services (12.0101 12.9999)
- Family and Consumer Sciences/Human Services (19.0101 19.9999)
- Parks, Recreation, Leisure, and Fitness Studies (31.0101 31.9999)

Health Sciences

• Health Professions and Related Clinical Sciences (51.0203 - 51.0204; 51.0808 - 51.1002; 51.1005 - 51.1501; 51.1601; 51.2001 - 51.9999)

Humanities and Social Sciences

- Area, Ethnic, Cultural, and Gender Studies (05.0101 05.9999)
- Foreign Languages, Literatures, and Linguistics (16.0101 16.9999)
- English Language and Literature/Letters (23.0101 23.9999)
- Humanities/Humanistic Studies (24.0103)
- Library Science (25.0101 25.9999)
- Philosophy and Religious Studies (38.0101 38.9999)
- Psychology (42.0101 42.9999)
- Public Administration and Social Service Professions (44.0201 44.9999)
- Social Sciences (45.0101 45.9999)

Interdisciplinary and General Studies

- Liberal Arts and Sciences, General Studies and Humanities (24.0101 24.0102)
- Multi/Interdisciplinary Studies (30.0101 30.9999)



Law and Related

- Security and Protective Services (43.0101 43.9999)
- Legal Professions and Studies (22.0101 22.0199)

Mathematics and Computer Science

- Computer and Information Sciences and Support Services (11.0101 11.9999)
- Mathematics and Statistics (27.0101 27.9999)

Teacher Education and Related

• Education (13.0101 - 13.9999)

NDUS Enrollment Status

> The NDUS enrollment status of graduates was determined by linking the social security numbers of graduates to a list of NDUS enrollees for the Fall 2000 term. Enrollment data was obtained from the North Dakota Higher Education Computer Network.

North Dakota Employment Status

- The ND employment status of graduates was determined by linking the social security numbers of graduates to fourth quarter 2001 unemployment insurance (UI) wage records. Quarterly UI wage data contain employer-reported quarterly earnings for all persons employed in jobs covered by unemployment insurance. The data also include Standard Industrial Classification (SIC) and sector codes for each reporting employer.
- > UI wage data do not account for persons who are self employed or employed in jobs not covered by unemployment insurance (i.e., federal, railroad).
- > UI wage data are total wages earned for a quarter. Monthly wages in this report are quarterly wages divided by 3 (months in a quarter). This understates the monthly wages of persons who were employed for less than three full months during the quarter.
- ➤ UI wage data include wages paid to both full and part time employees but do not contain any fields from which they can be distinguished. Full time employment is estimated for this report as quarterly wages equal to or greater than (minimum wage x 30 hours per week x 12 weeks) or (5.15 x 30 x 12 =\$1,854) for fourth quarter 2001 wages.
- Industry of employment categories used in this report are the general "Divisions" of the SIC classification, which encompass the following "Major Group" or two-digit SIC categories. Service industries are reported at this (two-digit) level.

A. Agriculture, Forestry, and Fishing

- Agricultural Production--Crops (01)
- Agricultural Production--Livestock (02)
- Agricultural Services (07)
- Forestry (08)
- Fishing, Hunting, and Trapping (09)



B. Mining

- Metal Mining (10)
- Coal Mining (12)
- Oil and Gas Mining (13)
- Nonmetallic Minerals, Except Fuels (14)

C. Construction

- General Building Contractors (15)
- Heavy Construction other than Building Construction (16)
- Special Trade Contractors (17)

D. Manufacturing

- Food and Kindred Products (20)
- Tobacco Products (21)
- Textile Mill Products (22)
- Apparel and other Textile Products (23)
- Lumber and Wood Products (24)
- Furniture and Fixtures (25)
- Paper and Allied Products (26)
- Printing and Publishing (27)
- Chemical and Allied Products (28)
- Petroleum and Coal Products (29)
- Rubber and Misc. Plastic Products (30)
- Leather and Leather Products (31)
- Stone, Clay, and Glass Products (32)
- Primary Metal Industries (33)
- Fabricated Metal Products (34)
- Industrial Machinery and Equipment (35)
- Electronic and other Electric Equipment (36)
- Transportation Equipment (37)
- Instruments and Related Products (38)
- Miscellaneous Manufacturing Industries (39)

E. Transportation and Public Utilities

- Railroad Transportation (40)
- Local and Interurban Passenger Transit (41)
- Trucking and Warehousing (42)
- U.S. Postal Service (43)
- Water Transportation (44)
- Transportation by Air (45)
- Pipelines, other than Natural Gas (46)
- Transportation Services (47)
- Communications (48)
- Electric, Gas, and Sanitary Services (49)



F. Wholesale Trade

- Wholesale Trade--Durable Goods (50)
- Wholesale Trade--Nondurable Goods (51)

G. Retail Trade

- Building Materials and Garden Supplies (52)
- General Merchandise Stores (53)
- Food Stores (54)
- Automotive Dealers and Service Stations (55)
- Apparel and Accessory Stores (56)
- Furniture and Home Furnishings Stores (57)
- Eating and Drinking Places (58)
- Miscellaneous Retail (59)

H. Finance, Insurance, and Real Estate

- Depository Institutions (60)
- Non-depository Institutions (61)
- Security and Commodity Brokers (62)
- Insurance Carriers (63)
- Insurance Agents, Brokers, and Service (64)
- Real Estate (65)
- Holding and other Investment Offices (67)

I. Services

- Hotels and other Lodging Places (70)
- Personal Services (72)
- Business Services (73)
- Auto Repair, Services, and Parking (75)
- Miscellaneous Repair Services (76)
- Motion Pictures (78)
- Amusement and Recreation Services (79)
- Health Services (80)
- Legal Services (81)
- Educational Services (82)
- Social Services (83)
- Museums, Botanical, Zoological Gardens (84)
- Membership Organizations (86)
- Engineering and Management Services (87)
- Private Households (88)
- Miscellaneous Services (89)

J. Public Administration

- Executive, Legislative, and General (91)
- Justice, Public Order, and Safety (92)
- Finance, Taxation, and Monetary Policy (93)



- Administration of Human Resources (94)
- Environmental Quality and Housing (95)
- Administration of Economic Programs (96)
- National Security and International Affairs (97)

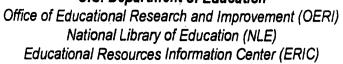
K. Nonclassifiable Establishments

• Nonclassifiable Establishments (99)





U.S. Department of Education





NOTICE

Reproduction Basis

X	This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
	This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

