

# The Economic Impact of the University of Alaska 2007 Update

Prepared for: University of Alaska

Prepared by:



Juneau • Anchorage • Kodiak

February 2008

# **Table of Contents**

List of Tables	iv
List of Figures	vi
Executive Summary	1
Introduction	6
Overview of the University	6
Purpose of Study	7
The University as an Investment	7
Methodology	9
Chapter 1: UA Revenues	11
Sources of Revenue	11
Description of Revenue Sources	12
Chapter 2: UA-Related Expenditures	14
Spending Overview	14
Goods and Services	14
Payroll	17
Students' Expenditures in the Economy	19
Visitor Expenditures	21
Chapter 3: Employment	23
Chapter 4: Indirect/Induced Economic Impacts	26
Summary of Impacts	27
Chapter 5: University Profile and Programs	28
University of Alaska Profile	29
Description of Programs	29
Faculty and Staff	31
Student Enrollment	31
Academic and Administrative Facilities	32
The University of Alaska Foundation	32
Endowment Funds	5Z
Chapter & Educational Attainment and Increased Earnings of University of Alaska Craduates	
Tatel 2006 University of Alaska Graduate Famings of Oniversity of Alaska Graduates	39
Total 2006 University of Alaska Graduate Earnings	39 11
Chapter 7: University of Alaska Craduate Employment Analysis	
Chapter 7: Oniversity of Alaska Graduate Employment Analysis	44
Profile of 1989-2006 University of Alaska Craduates	44 16
Alaska Retention of LIA Graduates	<del>4</del> 0 50
Farnings of UA Graduates	65
Links between UA Degrees and Alaska Employment	71
Appendix Data	74

# **List of Tables**

Table 1. University of Alaska Revenue Sources 1	11
Table 2. University of Alaska Spending by Community in FY071	15
Table 3. University of Alaska Purchases of Goods and Services, by Alaska Region, FY07	16
Table 4. University of Alaska Purchases of Goods and Services, by Campus within Region, FY071	16
Table 5. University of Alaska Payroll, by Campus, FY071	17
Table 6. Summary of University of Alaska Spending, by Region and Category	18
Table 7. Student Spending	21
Table 8. Out-of-state Visitor Spending	22
Table 9. Average Annual Employment and Unemployment Insurance Coverage, CY06	23
Table 10. Average Annual Employment by Community, 2006	25
Table 11. Total Economic Impacts of the University of Alaska    Control	27
Table 12. Degrees and Certificates Offered by the University of Alaska, 2007	30
Table 13. University of Alaska Receipts from Statewide Land Management Activities FY97, FY02, FY07	34
Table 14. Total Earnings of University of Alaska Graduates Working in Alaska, Classes of 1989-2006 in 2006 (in millions of dollars)*	39
Table 15. Number of University of Alaska Graduates (1983-2006)  Living and Earning Income in Alaska, 2006	6 40
Table 16. Total Earnings of University of Alaska Graduates, Classes of 1983-2006 in 2006 (in millions of dollars)	41
Table 17. Annual Median Earnings for High School Graduates, 2006 Ages 25 and Over, Nationwide	42
Table 18. Annual Median Earnings by Level of Educational Attainment, 2006 University of Alaska Graduates    from the classes of 1989 - 2006	42
Table 19. Increased Earning power of University of Alaska Graduates, Classes of 1983-2006 (in millions of dollars)	43
Table 20. Number of UA Graduates (1989-2006) by Type of Degree	46
Table 21. Number of UA Graduates (1989 - 2006) by Ethnicity	47
Table 22. Number of UA Graduates (1989 - 2006) by Place of Origin	48
Table 23. Number of UA Graduates (1989-2006) by MAU and Campus	49
Table 24. Alaska Outmigration Rates, 1989-2004	51
Table 25. Percentage of 1994 Alaska Residents Remaining in Alaska, 1994-2002	51
Table 26. Percent of UA Scholar Graduates Living in Alaska in 2006	52
Table 27. UA Graduates with Training Related Employment by Year of Graduation	71
Table 28. UA Graduates With Training Related Employment by Type of Degree	71
Table 29. UA Graduates with Training Related Employment by Main Campus	72
Table 30. UA Graduates with Training Related Employment by Place of Origin and Place of Occupation, 200	)6 73
Table 31. Count of Graduates by Year of Graduation and Degree	75
Table 32. Count of Graduates by Gender	76
Table 33. Count of Graduates by Campus (MAU)	77
Table 34. Count of Graduates by Origin	78
Table 35. Count of Graduates by Year of Graduation and Ethnicity	79

Table 36. Count of Graduates by Year of Graduation, Degree and Ethnicity=White	80
Table 37. Count of Graduates by Year of Graduation, Degree and Ethnicity=Alaska Native	
Table 38. Count of Graduates by Year of Graduation, Degree and Ethnicity=Other Minority	82
Table 39.Count of UA Graduates from Alaska by Borough of Origin	

# **List of Figures**

Figure 1. University of Alaska Statewide System	. 6
Figure 2. The University of Alaska – an Economic Engine for Alaska	. 8
Figure 3. University of Alaska Revenue Sources in FY07	12
Figure 4. Summary of University of Alaska Expenditures	18
Figure 5. Total Average Annual Employment of the University of Alaska, by Region, 2006	24
Figure 6. Resident and Employment Status for UA Graduates Classes of 1989-2006	45
Figure 7. Number of UA Graduates (1989 - 2006) by Graduation Year and Gender	47
Figure 8. Share of UA Graduates by MAU, 1989-2006	49
Figure 9. Percent of UA Graduates (Classes 1989-2006) Living and Working in Alaska in 2006 by Year of Graduation	50
Figure 10. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Origin, Race, Degree Type, Gender, Campus, and Total	י 53
Figure 11. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Year of Graduation and Ethnicity	54
Figure 12. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Year of Graduation and Type of Degree	55
Figure 13. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Year of Graduation and Gender	56
Figure 14. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Year of Graduation and Major Campus	57
Figure 15. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Year of Graduation, and Pre-University Origin	58
Figure 16. Percent of UA Graduates from Alaska Living in Alaska by Borough of Origin	59
Figure 17. Percent of UA Graduates (Classes of 1989-2006) From Alaska and Working in Borough of Origin 2006	in 60
Figure 18. Percent of UA Graduates Living in Alaska in 2006 by Age at Graduation	61
Figure 19. Percent of UA Graduates Living in Alaska in 2006 by High Demand Degree Classes of 1995, 2005 and 2005	; 63
Figure 20. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Year of Graduation and High Demand Degree	64
Figure 21. Average FY06 Earnings of UA Graduates Living in Alaska by Graduation Year	65
Figure 22. Average FY06 Earnings of UA Graduates from the Classes of 1989, 1994, 1999, and 2004 Living Alaska, by Degree	in 66
Figure 23. Average FY06 Earnings of UA Graduates Living in Alaska by Gender and by Graduation Year	67
Figure 24. Average FY06 Earnings of Female UA Graduates with Bachelor's Degrees Living in Alaska by Year of Graduation and Gender	68
Figure 25. Average FY06 Earnings of Male UA Graduates with Bachelor's Degrees Living in Alaska by Year of Graduation and Gender	f 69
Figure 26. Average FY06 Earnings of Female UA Graduates with Master's Degrees Living in Alaska by Year o Graduation	f 70

The University of Alaska contracted with the McDowell Group, an Alaska research and consulting firm, to quantify the economic impact of the University System on the Alaska economy. This study updates previous economic impact studies conducted by the McDowell Group in 1998 and 2004. In particular, this analysis measures the State's "return on investment" from its appropriations to the University and focuses on the direct and indirect impacts of the University's spending in the economy. Besides employment, payroll, and expenditures on goods and services, the study analyzes students' personal spending and university-related visitor spending in the economy, and sheds light on some of the qualitative impacts of the University on Alaska's workforce development.

This study also provides analysis of joint research conducted through a partnership between the University of Alaska (UA) and the Alaska Department of Labor Workforce Development (ADOL) to track graduates after they leave the University and assess their contribution to the Alaska workforce.

### Total Economic Impact

The University of Alaska has grown to become an enterprise with an annual economic footprint of over one billion dollars. The University's annual budget in FY 2007 of \$652 million, plus another \$150 million in student and UA visitor spending, and an additional \$290 million in indirect spending in the support sector totaled \$1.1 billion. The total economic impact in Alaska (including just spending in Alaska) of the UA System in FY 2007 was slightly under \$900 million, including direct and indirect spending within Alaska.

#### Leveraging the State's Investment

- In FY07, the State of Alaska allocated \$282.5 million in General Fund money to UA. The University was able to generate an additional \$369 million through tuition, federal grants, land and resource development, donations, and other revenues such as self-supported activities and interest income.
- For every dollar the State of Alaska invested in the university, UA generated an additional \$1.32 in operational revenue from other sources.
- Over time, the University's ability to raise non-state funds has improved. In 1997, for every dollar the State invested, UA raised \$0.98; in FY03, its leverage was \$1.27.

#### **Return on Investment**

- In FY07, from the State's investment in the University of \$282.5 million in operating funds, \$862 million in direct and indirect economic activity was generated in Alaska.
- For every dollar of State investment, the University created just over three dollars in total economic activity in the state, a total return on investment of 200 percent.

## **Employment and Earnings**

- The University of Alaska directly employed a peak of 8,000 workers in Alaska in 2006. They earned \$260 million in total annual payroll.
- After Federal government and non-university-related State government employment, the University of Alaska is the single largest employer in Alaska.
- The Fairbanks campus paid the highest payroll among campuses, totaling \$119.2 million, followed by Anchorage (\$80.1 million), and Juneau (\$13.6 million). These three campuses combined accounted for 82 percent of total UA payroll in FY07.
- In addition to its direct employment, UA indirectly supports approximately 7,100 jobs in the support sector of the Alaska economy. In total, more than 15,100 jobs are directly and indirectly linked to the University of Alaska.
- An estimated \$483 million in personal income in Alaska was directly and indirectly associated with UA in FY07.

## Spending on Goods and Services

• In FY07, the University of Alaska purchased more than \$118 million in goods and services from 1,200 Alaska businesses and organizations. Hundreds of other businesses in the support sector benefit from multiplier effects of this spending, as well as student spending. Nearly every sector of the Alaska economy either directly or indirectly benefits from UA activities.

### Local and Regional Impacts

- Businesses and organizations in more than 70 Alaska communities received some form of payment from UA for supplying goods and services in FY07.
- The Interior region received the largest amount (44 percent or \$184.9 million in total spending) of University combined spending on payroll, goods and services, and health benefits. University spending in the Anchorage/Mat-Su region totaled \$151.8 million, while Southeast received \$27.5 million.
- In FY07, the top ten communities in terms of UA spending on goods and services were Anchorage (\$49.5 million), Fairbanks (\$29.8 million), North Pole (\$4.7 million), Juneau (\$4.1 million), Wasilla (\$3.9 million), Sitka (\$2.1 million), Palmer (\$1.3 million), Homer (\$1.0 million), Soldotna (\$0.9 million), and Kodiak (\$0.7 million). (This does not include UA payroll in these communities.)

### **Other Economic Benefits**

- The University's students also have an economic impact on the State's economy. They spent an estimated \$147 million in the Alaska economy in FY07.
- University-related visitors who travel to Alaska to visit UA students, attend conferences, or participate in sporting events spent an estimated \$5 million in Alaska in FY07.

A 2007 study by the Institute of Social and Economic Research on the economic impact of UA research found that the combined direct and indirect payroll for university research-generated jobs was \$92 million in 2006; direct and indirect university research generated \$125 million in sales throughout Alaska in 2006 (including procurement, business sales, and employee spending); and for each \$1 million in appropriations from the general fund in 2006, 121 jobs and \$4.7 million in payroll within the state were generated.

## The Earnings of University of Alaska Graduates

The University of Alaska has been coordinating with the Alaska Department of Labor Workforce Development (ADOL) to track graduates after they leave the University and assess their contribution to the Alaska workforce. The resulting UA/ADOL database contains information regarding more than 47,000 graduates from classes of 1989 through 2006. Information on an additional 11,000 graduates from the classes of 1983 through not part of the database, was also available.

- University of Alaska graduates living in Alaska from the graduating classes of 1983 through 2006 earned a combined \$1.41 billion in payroll in 2006. Though data is not available for graduates prior to 1983, including the earnings of pre-1983 graduates still in the Alaska labor force would push the total annual UA graduate payroll to near \$2 billion.
- In 2006, there were an estimated 33,680 UA graduates from the classes of 1983 through 2006 in the Alaska workforce, 11 percent of the statewide total. However, UA graduates likely make up a more significant portion of employees in jobs with bachelor or advanced degree requirements. Nationally and in Alaska, 25 percent of all jobs require a 4-year degree or higher.
- Data indicate that Alaska Native women with University of Alaska bachelor's and master's degrees out-earned whites and other minorities with similar degree in 2006.

## University of Alaska Graduates Who Stay in Alaska

- As of 2006, 32,000 (two-thirds) of the UA graduates from the classes of 1989 to 2006 were living in Alaska, including 26,000 who had jobs tracked by ADOL. Jobs not tracked by ADOL include federal government positions and self-employed workers.
- As would be expected, recent graduates are more likely to still be living in Alaska than those from early in the study period. For example, 88 percent of 2005 graduates were still in Alaska in 2006, 75 percent of which were identified as employed in the state. In comparison, 58 percent of the 1990 graduates resided in Alaska in 2006, of which 42 percent were identified as employed in the state.

#### Percent of UA Graduates (Classes 1989-2006) Living and Working in Alaska in 2006 by Year of Graduation



UA graduates who remain in Alaska to work, live, and contribute to the Alaska economy in the highest proportions include:

- Alaska Natives (89 percent—compared to 67 percent of all graduates in this time period).
- Certificate holders (80 percent).
- Older students are also more likely to stay in Alaska after graduation, including 77 percent of those who were over the age of 40 when they began their UA education (versus 64 percent of those who began UA in their twenties).
- Women tend to stay in Alaska at a slightly higher rate then men (71 percent versus 63 percent) although this may be due to factors other than gender, such as degree choice.



#### Percent of UA Graduates (Classes of 1989 to 2006) Living in Alaska in 2006 by Origin, Race, Degree Type, Gender, and Total

The University of Alaska (UA) strengthens the Alaska economy of today and tomorrow through education and workforce development. Besides enriching the lives of students and Alaska communities, UA has important impacts on Alaska's economy. It attracts funding from outside the state, employs faculty and staff, spends money on a variety of goods and services throughout Alaska, and provides many intangible benefits ranging from facilities open to the public to educational and cultural programs that enrich the lives of all Alaskans.

## **Overview of the University**

The State of Alaska invests in higher education in order to develop the human capital of the state. These investments result in long-term economic and social benefits such as gains in productivity, increased earnings of an educated workforce, creation of new knowledge, a supply of skilled professionals to meet labor market demands, and an improvement in the quality of life for Alaskans, among other benefits.

The University of Alaska (UA) is the only public university in Alaska. The university serves more than 33,000 students annually throughout the state. Three major regional campuses – Anchorage, Fairbanks and Juneau – and numerous smaller satellite campuses make higher education accessible to all Alaskans (Figure 1). Advances in distance education delivery are enabling rural Alaskans to remain in their communities while they earn associate's and bachelor's degrees.





Source: University of Alaska, UA in Review 2007. 2007, Fairbanks, Alaska.

The University of Alaska offers approximately 285 degrees, from associate's through doctoral levels, along with more than 180 certificates and licenses. Though several small private colleges and universities in Alaska offer a limited selection of degree programs, Alaskan students would have to travel thousands of miles to find another university that offers the breadth and depth of educational choices that the University of Alaska offers.

Within each region served by the University of Alaska System, local businesses and communities benefit economically from the University's spending in these communities and from cultural and educational

programs and facilities, which are often available to the general public. These provide benefits to the host region and improve local residents' quality of life, but are difficult to quantify. The variety of impacts caused by the University affect the economy of the state as a whole, and communities in rural Alaska in particular.

In Alaska, University research is a positive investment for the state. For every dollar allocated by the Legislature for research, the University produced \$7.60 in total research funding in 2006.<sup>1</sup> This research multiplier compares to \$5.50 nationally in 2004, which means that UA is more successful than most universities in attracting out-of-state research money.<sup>2</sup>

# **Purpose of Study**

The purpose of this study is to quantify the economic impact of the University of Alaska System on Alaska's economy and analyze some of the qualitative benefits of the University. This report also examines the role the University plays in providing skilled workers to the Alaska labor market, and describes direct impacts on different regions of the State. This study updates an earlier analysis of the economic impacts of the University of Alaska System conducted in 2004 by the McDowell Group.<sup>3</sup>

## The University as an Investment

When the Legislature allocates funding to the University, it is investing state revenues – primarily from petroleum production – with the expectation that this investment will prove beneficial. The benefits of higher education have largely been characterized in qualitative and often intangible terms: improved quality of life, greater knowledge, increased involvement in community life and government. However, funding decisions are driven increasingly by program costs as well as program benefits – and benefits are increasingly expected in economic rather than qualitative terms.

The University system has impacts similar to that of any other economic venture. The economic benefit of the University is determined by how much money it directs into the state economy through direct expenditures and the expenditures of employees and others associated with the University. Its economic strength and return on investment of State funds are also determined by how much money the University brings in from sources other than State appropriations, especially out-of-state sources. It is important to note that State appropriations are the keystone for the university's ability to attract funding from non-State sources such as student tuition, self-support activities, federal grants, donations, and earned interest on savings.<sup>4</sup>

The University is an economic engine for the State. It attracts and redistributes revenue across the Alaska economy in the form of purchases of goods and services from Alaska businesses, payroll and benefits paid to University employees, and spending by students and visitors to the University (Figure 2).

<sup>&</sup>lt;sup>1</sup>Goldsmith, S., *University of Alaska Research: An Economic Enterprise* in *Understanding Alaska Update*. 2007, Institute of Social and Economic Research: Anchorage, Alaska.

<sup>&</sup>lt;sup>2</sup> University of Alaska, UA in Review 2007. 2007, Institutional Research and Planning: Fairbanks, Alaska.

<sup>&</sup>lt;sup>3</sup> McDowell Group, The Economic Impact of The University of Alaska, 2003 Update. 2004: Juneau.

<sup>&</sup>lt;sup>4</sup> The bookstore, sports facilities, and student housing are examples of self-support activities.



Figure 2. The University of Alaska – an Economic Engine for Alaska

The University of Alaska System purchases goods and services from Alaska businesses, which in turn employ local residents and purchase goods and services from other in-state and out-of-state businesses. The amount of money the University spends locally and the number of workers it brings to the region from outside determines the economic impact of the University on the region. Local expenditures on goods and supplies for research and teaching, wages paid to faculty, staff, and students, and the spending by employees in the local economy determine the University's "multiplier effect." The term *multiplier* illustrates that each initial dollar spent or job created by the University will lead to additional spending and employment by Alaska businesses selling goods and services to the University and its employees. These businesses further spend a portion of each dollar received to pay for their goods and services. Multiple rounds of this spending and the portion of each dollar spent locally create the *multiplier effect* in the Alaska economy. The larger the multiplier, the more goods and services are produced and sold locally and the higher the economic impact of the University on the state's economy.

Multiplier effects include direct, indirect and induced effects. Direct impacts of the University of Alaska System include purchases and payroll spending by the University itself. Indirect impacts relate to business activity that results from UA's spending in the local economy, such as additional employment needed to supply local

Source: McDowell Group.

goods and services to the University. Induced impacts occur when UA employees spend their payroll dollars in the local economy.

Chapter 1 outlines the University's sources of revenue. Chapter 2 describes University-related expenses and Chapter 3 describes University employment. Chapter 4 presents the economic model used to analyze the multiplier effects of the University. Chapter 5 describes university programs. Chapter 6 calculates the combined earning power of UA graduates living in Alaska from the classes of 1983 through 2006. Chapter 7 illustrates the impacts of UA programs on Alaska's labor force through analysis of a database containing the records of all UA graduates from the classes of 1989 through 2006.

# Methodology

An economic impact analysis investigates spending through an economy and measures the cumulative effects of that spending generated by economic activity such as operating a University. The economic impacts investigated in this study include payroll, employment, university-related expenses, student spending, visitor spending, and the impacts occurring through economic activity related to the University's resource endowments.<sup>5</sup> Data on purchases, employment, and payroll are disaggregated into localized impacts according to the regions outlined by UA.<sup>6</sup>

This study is similar to the economic model developed by Caffrey and Isaacs in 1971 for the American Council on Education. It was the first attempt to assess the regional impact of an educational institution on its host region.<sup>7</sup> The model, widely known as the ACE method, uses direct purchasing data to local vendors. It determines the local spending of its students, employees, and visitors, making sure not to include student payments to the institution for tuition, room and board. A regional economic multiplier is then applied to the total expenditures to determine the overall economic impact. The ACE method also uses a separate multiplier to estimate the impact of total expenditures on job creation in sectors of the economy supporting the institution (induced impacts).

The University of Alaska provided expenditure data on revenue, goods and services, and data on employee payroll and health care costs. Additional data sources include the Alaska Department of Labor and Workforce Development (ADOL) for employment data. Economic impacts are calculated on the current state of the economy by applying the nationally recognized IMPLAN Input/Output model. This software and data tool is widely used by economists to measure income and employment multipliers for determining employment and payroll effects.<sup>8</sup> The study team chose the most current IMPLAN 2006 data file for Alaska to calculate the multipliers used.

<sup>&</sup>lt;sup>5</sup> Timber sales and oil and gas leases create jobs and income in Alaska.

<sup>&</sup>lt;sup>6</sup> The regions are: Anchorage / Mat-Su, Interior, Southeast, Southwest, Gulf Coast, and Northern. For a detailed breakdown of regions contact the McDowell Group at info@mcdowellgroup.net.

<sup>&</sup>lt;sup>7</sup> Caffrey, J. and H.I. Herbert, *Estimating the Impact of a College or University on the Local Economy*. 1971, Washington, D.C.: American Council on Education.

<sup>&</sup>lt;sup>8</sup> Minnesota IMPLAN Group, Inc., IMPLAN System (data and software), www.implan.com.

### Limitations

Our analysis provides only a snapshot of the impacts the University of Alaska System has on the Alaska economy. The study does not forecast any long-term changes to the economy resulting from possible growth or decline in the University's operations, or from localized research and development. Nor does it consider the economic impact of university retirees on the Alaska economy.

Our projections of the economic activity of the University are subject to uncertainties. Some of these uncertainties are associated with the multipliers used to determine local economic impacts. IMPLAN calculates multipliers based on national average production functions for each sector of the economy and is unable to account for location-specific and institution-specific attributes.

### **Database Analysis**

Chapters 6 and 7 illustrate the impacts of University of Alaska graduates on Alaska's workforce. These impacts were analyzed using a database developed by the Alaska Department of Labor and Workforce Development (ADOL) and the University of Alaska to track employment information, along with the Alaska residency status of UA graduates. The database includes data on UA graduates from the classes of 1989 through 2006 and tracks whether or not graduates stay and work in Alaska; how much graduates earn and what factors influence that earning power; and how the passing of time influences graduates choices and earning potential. The data allows for some subgroup analysis by age, gender, location, race, degree type and program, and other information.

The presentation and analysis of the data is not statistically rigorous, but does provide some insight into University of Alaska graduate trends. A rigorous statistical analysis of the graduate residency and employment database would require access to individual records which are confidential. In the absence of statistical analysis, it is not possible to determine with certainty if one particular segment of graduates is more likely to stay in Alaska after graduation than another segment, or if one particular segment of graduates earns more than another. A broad range of factors likely determine the patterns of UA graduates following graduation, including the number of years since graduation, degree type, race, and place of residency before attending college. Nevertheless, sorting data by various subgroups (gender, race, etc) provides indicators of those factors that may be important in graduation retention and earnings, and points toward areas where a more sophisticated statistical analysis may be warranted.

There are two main questions that help frame the discussion of the value of the University as an economic engine – "Where does the money come from?" and "Where does it go?" This chapter addresses the question, "Where does the money come from?" by looking at the University's revenue sources. The next chapter, Chapter 2, addresses the question, "Where does the money go?" concerning the University's expenditures.

## **Sources of Revenue**

In fiscal year 2007 (FY07), the University of Alaska System received and generated a total of \$651.5 million in revenue.<sup>9</sup> More than 43 percent (\$282.5 million) of the total revenue is appropriated funds received through the State of Alaska; 18 percent (\$119.1 million) originates in grants received through the federal government; and 13 percent (\$84.5 million) is generated through student tuition.

Revenue Source	\$ In Millions	% of Total
State Appropriations	\$282.5	43.4%
Federal Receipts	119.1	18.3
Student Tuition and Fees	84.5	13.0
UA Receipts	72.2	11.1
Auxiliary Receipts	41.8	6.4
Indirect Cost Recovery	30.9	4.7
State Inter-Agency Receipts	11.4	1.8
Interest Income	9.1	1.4
Total	\$651.5	100%

#### Table 1. University of Alaska Revenue Sources

Source: University of Alaska Planning and Budget, 2007, Fairbanks, Alaska.

State appropriations increased from \$201.4 million in FY02 (the date of the last UA impact study) to \$282.5 million in FY07. Since FY02, state appropriations stayed constant at approximately 43 percent of total revenue. This measure compares to 50 percent in FY97 (the date of the first UA impact study). The University's total revenue sources grew 41 percent between FY97 and FY02, and recently grew 24 percent between FY02 and FY07. While State appropriations are the basis of the State's investment in the University, money that flows to the University from sources other than the State are an important economic indicator. Table 1 and Figure 3 illustrate that the largest shares in non-state revenues are federal grants (18 percent) and student tuition (13 percent).

<sup>&</sup>lt;sup>9</sup> State Appropriations include General Fund, General Fund Match, General Fund Mental Health, Workforce Development funds, Alaska Commission on Postsecondary Education (ACPE) funds, and ASTF funds. Source: University of Alaska, UA in Review 2007. 2007, Institutional Research and Planning: Fairbanks, Alaska.

Another way to look at the State's investment is in terms of "bang for the buck" terms.<sup>10</sup> "Bang for the buck" is a measure of how much money the University can leverage on top of state appropriations. This analysis measures this leverage by dividing the sum of non-state money by the sum of state related funds. For each dollar in state money, the University raised an additional \$1.32 in FY07. (This compares to \$1.27 in FY03.)<sup>11</sup>





## **Description of Revenue Sources**

**State Appropriations** include receipts from the State of Alaska's general operating fund. State appropriations amounted to \$282.5 million in FY07.

**Federal Receipts** include all revenues received from the federal government. These include restricted federal grants from agencies such as the National Science Foundation, U.S. Small Business Administration, U.S. Department of Defense and other federal agencies, as well as federal funding for student financial aid and work-study programs. They do not include federal financial assistance received directly by students. Federal government funding earned to carry out specific programs and services via grants and contracts is a significant University funding source, accounting for \$119.1 million in FY07.

**Student Tuition and Fees** are generated by tuition charged to students for instructional programs, as well as fees charged in support of specific activities such as materials, labs, and health center fees. These revenues totaled \$84.5 million in FY07.

**UA Receipts** include restricted revenues from corporate sources, private donations, and local governments, as well as revenues from publication sales, non-credit self-support programs, recreational facility user fees and other miscellaneous sources. These sources brought \$72.2 million to the University in FY07.

<sup>&</sup>lt;sup>10</sup> For calculations of "bang for the buck," state money is assumed to be equal to the sum of state appropriations and funds paid to the University through the State's Mental Health Trust. The remaining revenue is considered non-state money.

<sup>&</sup>lt;sup>11</sup> McDowell Group, *The Economic Impact of The University of Alaska, 2003 Update.* 2004: Juneau.

**Auxiliary Receipts** are associated with all self-supported activities of the University. For example, they include all revenues from bookstore, food services, and housing operations. These activities generated \$41.8 million in FY07.

**Indirect Cost Recovery** revenues are generated from federal and other restricted grants, and are used to help offset administrative and support costs that cannot be efficiently tracked directly to grant programs. When the university receives a grant, it records the revenue for the actual project in federal receipts and all the revenue for indirect costs in Indirect Cost Recovery. These revenues totaled \$30.9 million in FY07.

**State Inter-Agency Receipts** originate in contractual obligations with other state agencies. These sources generated \$11.4 million in FY07.

**Interest Income** includes income generated from short-term investments associated with grant receipts and auxiliary enterprises. Interest earnings amounted to \$9.1 million in FY07.

Money spent by the University, its students and visitors directly and indirectly affects the economy.<sup>12</sup> Direct impacts include the expenditures made by the University in its normal business transactions and spending related to university activity. Direct impacts also include university expenditures on capital projects such as the construction of new buildings or the purchase of educational and research equipment. Expenses on goods and services used to operate the University, as well as payroll for faculty, staff, and students, are also considered direct impacts.<sup>13</sup>

Indirect spending is sometimes referred to as a "ripple effect" or a "multiplier effect." As the University, its employees, students and visitors spend money with Alaska businesses, those businesses employ others and purchase goods and services, which in turn generates additional jobs and expenditures. The repeated rounds of spending produce a multiplier effect that increases the overall economic impact of the University, as described in Chapter 4.

# **Spending Overview**

University of Alaska-related expenditures in Alaska included spending on construction, goods and services, faculty and staff payroll, and the spending of UA students in the local economy.<sup>14</sup> The University of Alaska's Statewide Institutional Research and Planning Department provided data on these expenses.<sup>15</sup>

In FY07, the University of Alaska spent \$260.0 million on its employees' gross wages and paid \$40.7 million to Alaska medical providers for the care of University employees and their families. Expenditures in Alaska on goods and services amounted to \$118.4 million, including construction spending of \$56.8 million.<sup>16</sup> Student spending in the local economy is estimated at \$147.1 million. The following sections discuss each of these expenditure categories in detail. The reader can find a summary of these expenditures in Table 7.

# **Goods and Services**

During FY07, the University purchased goods and services valued at \$118.4 million from Alaska vendors in order to provide educational and research services. This spending is widely dispersed in the Alaska economy. In FY07, the University did business with more than 1,200 Alaska businesses and organizations in 70

<sup>&</sup>lt;sup>12</sup> Caffrey, J. and H.I. Herbert, *Estimating the Impact of a College or University on the Local Economy*. 1971, Washington, D.C.: American Council on Education.

<sup>&</sup>lt;sup>13</sup> Health benefits paid to Alaska Medical providers are considered direct benefits.

<sup>&</sup>lt;sup>14</sup> Caffrey, J. and H.I. Herbert, *Estimating the Impact of a College or University on the Local Economy*. 1971, Washington, D.C.: American Council on Education.

<sup>&</sup>lt;sup>15</sup> The University provided vendor data by place of vendor-business and place of campus where the expenditure occurred. In addition, UA provided data on credit card purchases for the UAA, UAF, and UAS campuses solely, not disaggregating by location of purchase. Therefore, our calculations assume that these expenditures occur in Alaska, but are not attributable to any particular community or region. These are identified as "statewide" expenditures (see Tables 2, 3, and 4). Source: University of Alaska Planning and Budget. 2007: Fairbanks, Alaska.

<sup>&</sup>lt;sup>16</sup> Ibid.

communities.<sup>17</sup> Table 2 lists the top 20 communities that are impacted by University spending. More than three-quarters of Alaska-based University spending occurred in Anchorage (48 percent) and Fairbanks (29 percent).

Table 2. University of Alaska Spending
by Community in FY07

Community	Purchases (\$ millions)	Percent
Anchorage	\$49.5	41.8%
Fairbanks	29.8	25.2
North Pole	4.7	3.9
Juneau	4.1	3.9
Wasilla	3.9	3.3
Sitka	2.1	2.0
Palmer	1.3	1.1
Homer	1.0	0.8
Soldotna	0.9	0.8
Kodiak	0.7	0.6
Ketchikan	0.5	0.5
Eagle River	0.5	0.5
Valdez	0.5	0.4
Bethel	0.5	0.4
Seward	0.4	0.4
Delta Junction	0.4	0.3
Dillingham	0.2	0.2
Nome	0.2	0.2
Kenai	0.2	0.2
Ward Cove	0.2	0.1
Statewide	16.5	13.9
Total	\$118.4	100.0%

Source: University of Alaska Planning and Budget, 2007, Fairbanks, Alaska.

Note: Columns may not sum to totals due to rounding.

<sup>&</sup>lt;sup>17</sup> University of Alaska Planning and Budget. 2007: Fairbanks, Alaska.

Region	Purchases (\$ millions)	Percent
Anchorage	\$55.6	46.9%
Interior	35.1	29.7
Southeast	7.2	6.0
Southwest	1.0	0.9
Gulf Coast	4.0	3.4
Northern	0.5	0.5
Statewide	15.0	12.6
Total	118.4	100.0%

# Table 3. University of Alaska Purchases of Goodsand Services, by Alaska Region, FY07

\* Spending was not attributable to a specific region (e.g. payments to the State of Alaska).

Purchasing data in Table 4 illustrates where each of the largest nine campuses buy their goods and services in Alaska. The three major campuses (UAA, UAF, and UAS) combined account for 91 percent of University spending on goods and services within Alaska. Just over half (54 percent) of total UA spending occurs at UAF, 31 percent at the UAA campus, and 6 percent at the UAS campus. It is interesting to note that each campus shows a spending pattern that stretches across all regions. The last row in Table 4 calculates the proportion of spending per campus in its host region. The UAA and Ketchikan campuses buy more than 85 percent of their Alaska goods and services in their region, whereas Sitka and Kenai's local purchases only amount to 23 and 46 percent, respectively. In FY07, the UAF campus bought less from the Interior region (52 percent) compared to FY03 (64 percent).<sup>18</sup>

Region	UAA	UAF	UAS	Kenai	Ketchikan	Kodiak	Mat-Su	PWS	Sitka
Anchorage/Mat- Su	\$29.5	\$22.1	\$1.3	\$0.4	<\$0.1	\$0.1	\$0.6	\$0.3	\$1.2
Interior	2.5	30.0	0.3	0.1	<0.1	<0.1	0.2	0.1	1.7
Southeast	0.2	0.9	4.5		0.5			<0.1	1.1
Southwest	0.4	0.6	<0.1						
Gulf Coast	0.8	2.0		0.3		0.4		0.6	<0.1
Northern	<0.1	0.5	<0.1						
Statewide*	2.7	10.4	0.9	<0.1	<0.1		<0.1	<0.1	0.8
Total in \$ millions	\$36.1	\$66.4	\$7.1	\$1.0	\$0.6	\$0.5	\$0.8	\$1.1	\$4.8
% of Total UA Spending	30%	56%	6%	1%	1%	0%	1%	1%	4%
% of Total Regional Spending	82	45	64	46	85	75	77	53	23

Table 4. University of Alaska Purchases of Goods and Services, by Campus within Region, FY07

Source: University of Alaska Planning and Budget, 2007, Fairbanks, Alaska

"Statewide" spending was not attributable to a specific region (such as payments to the State of Alaska). Note: PWS refers to the Prince William Sound Community College.

#### <sup>18</sup> Ibid.

# Payroll

In FY07, the University spent \$260.0 million *in gross (pre-tax) wages*. UA also spent \$40.7 million in health benefits for its employees and their dependents paid to Alaska medical providers.

Table 5 shows payroll expenditures by campus. Wages not associated with any particular campus are classified as *UA Statewide*. The largest share of wages (46 percent) goes to faculty and staff associated with the Fairbanks campus. Employees on the Anchorage campus receive roughly 31 percent of total payroll.

Campus	Payroll (\$ millions)	Percent
Fairbanks	\$119.2	45.8%
Anchorage	80.1	30.8
Juneau	13.6	5.2
UA Statewide	13.2	5.1
Tanana Valley	5.5	2.1
Rural College	4.6	1.8
Kenai	4.2	1.6
Matanuska-Susitna	3.3	1.3
Kuskokwim	2.8	1.1
Sitka	2.4	0.9
Prince William Sound	2.0	0.8
Interior-Aleutians	1.7	0.7
Ketchikan	1.6	0.6
Kodiak	1.4	0.5
Bristol Bay	1.3	0.5
Northwest	1.0	0.4
Kachemak Bay	0.9	0.4
Chukchi	0.7	0.3
Rural College	0.5	0.2
Total	\$260.0	100.0%

#### Table 5. University of Alaska Payroll, by Campus, FY07

Source: University of Alaska Planning and Budget, 2007, Fairbanks, Alaska.

Table 6 summarizes impacts of University spending for goods and services, payroll, and health care in Alaska. Expenditures outside Alaska have no direct impact on the Alaska economy, and therefore do not contribute to multiplier effects discussed in Chapter 4.

The cost of employee health care paid to Alaska medical providers totaled \$40.7 million for FY07.

Region	Goods & Services	% of Total	Payroll	% of Total	Health Care to AK Providers	% of Total	Total Spending	% of Total Spending
Anchorage/Mat-Su	\$55.6	47%	\$83.4	32%	\$12.8	32%	\$151.8	36%
Interior	35.1	30	129.7	50	20.0	49	184.9	44
Southeast	7.2	6	17.6	7	2.8	7	27.5	7
Southwest	1.0	1	5.8	2	1.0	2	7.7	2
Gulf Coast	4.0	3	8.6	3	1.3	3	13.9	3
Northern	0.5	0	1.8	1	0.3	1	2.6	1
Statewide	15.0	13	13.2	5	2.6	6	30.7	7
Total in \$ millions	\$118.4	100%	\$260.0	100%	\$40.7	100%	\$419.1	100%

#### Table 6. Summary of University of Alaska Spending, by Region and Category

Source: University of Alaska Planning and Budget, 2007, Fairbanks, Alaska

Notes: Goods and Services are operational expenses. "Statewide" indicates that spending was not attributable to a specific region. Payments to the State of Alaska are classified as "Statewide." Goods and services include construction spending.

Figure 4 presents the distribution of expenditures by region calculated in Table 6.



#### Figure 4. Summary of University of Alaska Expenditures

UA spending totaled \$419.1 million in FY07. The Interior region received 44 percent of UA total spending (\$184.9 million), the Anchorage/Mat-Su region benefited from 36 percent of Alaska-based spending (\$151.8 million), and the Southeast region's share was 7 percent (\$27.5 million). Approximately 3 percent (\$13.9 million) went to the Gulf Coast region. The Southwest region's share was 2 percent of expenditures (\$7.7 million) and the Northern region's share was slightly under 1 percent (\$2.6 million).

# Students' Expenditures in the Economy

## Overview

Estimating student spending involves a two step process. First, the study team determined the number of students who a) bring new money to the state's economy or b) are associated with money that would otherwise be lost if the university did not exist. Second, the project team estimated how much each student spends in Alaska over the year. The two following sections describe in more detail the analysis of student expenditures.

## **UA Student Population Profile**

Several studies reviewed in the course of research for this project essentially count the entire student body's total expenditures as university-related economic impact.<sup>19,20,21</sup> In some cases, this methodology produces results showing the impact of student expenditures to be larger than the impact of the University's direct expenditures. Other studies classify students according to their origin (within and outside of the host region).<sup>22,23</sup> The UA system currently has approximately 33,000 students, of which 90 percent are from Alaska and the remaining 10 percent are out-of-state and international students. UA's student body is characterized by a large portion of part-time students and a significantly older student population than is typical for other universities. UA's part-time students account for 62 percent of total enrollment and students above 30 years of age make up 39 percent of the entire UA student population. The latter compares to a national average of 26 percent.<sup>24</sup> These statistics suggest that most students would be in Alaska even if the University did not exist. In quantifying the economic impact of the University on Alaska's economy, it is important to avoid counting expenditures that would have occurred in the absence of the University, as would most likely be the case for most part-time students.

In the case of the University of Alaska, the number of full-time students more closely represents the segment of the student population that a) brings new money to the State's economy or b) is associated with money that would otherwise be lost did the University not exist.<sup>25</sup> While it is clear that non-resident students are here primarily to attend the University, many resident students would attend out-of-state colleges if the University did not exist. The expenditures of these Alaskans would be lost in the absence of the University. Therefore, spending by full-time Alaska resident students should be included in the economic impact analysis. Also, it is reasonable to assume that international and out-of-state students are primarily in Alaska to attend the

<sup>&</sup>lt;sup>19</sup> Appleseed, Engines of Economic Growth: The Economic Impact of Boston's Eight Research Universities on the Metropolitan Boston Area. 2003, Appleseed: New York.

<sup>&</sup>lt;sup>20</sup> Humphreys, J.M., *The Economic Impact of the University of Georgia System on Their Regional Economies in FY 2004*. 2005, The University of Georgia.

<sup>&</sup>lt;sup>21</sup> McDowell Group, *The Economic Impact of the University of Alaska*. 1998.

<sup>&</sup>lt;sup>22</sup> These studies calculate student expenditures by multiplying the number of out-of-region students by the average annual expenditures per student.

<sup>&</sup>lt;sup>23</sup> Institute for Economic Development, A Study of the Economic Impact of The University of Texas System. 2005, University of Texas: San Antonio, TX. p. 42.

<sup>&</sup>lt;sup>24</sup> University of Alaska Planning and Budget. 2007: Fairbanks, Alaska.

<sup>&</sup>lt;sup>25</sup> Full-time students are defined as an undergraduate student enrolled in 12 or more credit hours, or a graduate student taking more than 9 credit hours. Source: University of Alaska. 2007. UA in Review, page 13.

University and therefore likely to be full-time students on one of the three main campuses. The study team ignores expenditures by part-time students because this group's main motive of living in Alaska might not be to attend university. Therefore, living expenses of part-time students are assumed to not be solely university-related and as such are not included in this economic impact analysis.<sup>26</sup> Calculating students' economic impact based on the number of full-time students can provide a reasonable and conservative measure.

## **Estimating Student Expenditures**

The financial aid office of each university is required by the US Department of Education to estimate student costs based upon a nine-month school year.<sup>27</sup> These statistics give reasonable estimates of student costs, but there is inconsistency in how each university derives these costs. The University of Alaska Budget and Planning Department estimates current per-student-expenditures based on calculations conducted in 2000 for the Anchorage area. The project team adjusts the 2000 estimates to reflect location-specific differences in prices for UAA, UAF, and UAS.<sup>28</sup>

Spending levels vary according to students' living arrangements. The study team categorizes full-time students into *on-campus* versus *off-campus*. The latter category of students is based on the residence bed-count, provided by the University of Alaska.<sup>29</sup> In order to avoid double-counting, we exclude payments made to the University. University-related expenditures such as tuition, fees, books, and room & board are already included in the tally of direct university expenditures. For the two categories of students we multiply average per-student-spending by the number of full-time students per category. We do so for each main campus and derive total student spending in Alaska (Table 7).<sup>30</sup> This represents new money coming into the State and money that would otherwise leave the state and therefore contributes to the economic impact of the University.

<sup>&</sup>lt;sup>26</sup> This methodology is not intended to predict the behavior of individual students. It is a conservative means of identifying a portion of the student body's expenditures that are directly associated with the University.

<sup>&</sup>lt;sup>27</sup> This approach excludes spending of non-resident students that stay in Alaska during the summer when they are not primarily enrolled as full-time students.

<sup>&</sup>lt;sup>28</sup> The study team utilizes the ACCRA Cost of Living Index to adjust Anchorage based expenditure data to reflect price differences for each of the main campuses, ignoring other areas of the State. The University of Alaska estimates student spending for board (groceries), books, university-related fees, student loan fees, personal, room (rent), transportation, and university tuition. The ACCRA Cost of Living Index provides price indexes for groceries, housing, utilities, transportation, healthcare and miscellaneous. We then match the UA and ACCRA data as close as possible to reflect location specific price differentials. The Index reflects cost differentials for households in the top income quintile and weighs more heavily on home ownership, than would be if the index would reflect lower income households such as student households. While this approach is not ideal it provides a reasonable estimate. Source: ACCRA, *ACCRA Cost of Living Index*. 2007: Arlington, VA 22210.

<sup>&</sup>lt;sup>29</sup> Note, for UAF, we exclude the bed count for faculty living arrangements, but include the bed-count for family housing to account for graduate students living with families on campus. Including beds for dependents of UAF graduate students might slightly overstate on-campus living for UAF.

<sup>&</sup>lt;sup>30</sup> Note a main campus includes smaller satellite campuses. For example, full-time enrollment at UAA includes students in Anchorage, the Mat-Su, Eagle River, and other satellite campuses.

		-	
	UAA	UAF	UAS
Full-time students			
Number living off-campus	6,540	2,732	786
Number living on-campus	988	1,450	270
Per student spending by category			
Housing	\$7,199	\$6,542	\$7,103
Groceries	3,695	3,619	4,228
Transportation	1,752	1,747	1,734
Personal	1,318	1,286	1,299
Average per student spending			
Living off-campus	\$13,964	\$13,195	\$14,364
Living on-campus	3,070	3,034	3,034
Total spent in the economy in \$ millions	\$94.4	\$40.4	\$12.1

#### Table 7. Student Spending

Note: "Spending" means the money students spent in economy rather than pay to the University. Consequently, the calculations exclude spending on room and board. Also, the study team assumes the number of full-time students living on-campus to be equal to the bed count in UA student residences. Source: University of Alaska Planning and Budget, 2007, Fairbanks, Alaska.

In FY07 student spending is estimated at \$94.4 million for UAA, \$40.4 million for UAF, and \$12.1 million for an estimated total of \$146.9 million (Table 7). These direct expenditures were then allocated to IMPLAN sectors for estimating the indirect and induced impacts of student expenditure.

## **Visitor Expenditures**

Visitors to university campuses are also a component of the economic impact of the University. Commencements, reunions, conferences, festivals, athletic events and family visits are some of the University-related reasons people visit. University visitors spend money for hotels, food, transportation, sightseeing and other purposes that inject money into the economy. If the University did not exist, these events would not occur and no additional money would be brought to Alaska. Unfortunately, no organization tracks out-of-state visitors whose primary purpose for visiting Alaska is University-related. Developing a definitive estimate of visitor impacts would be a substantial research project requiring surveys similar to those conducted for the Great Alaska Shootout, a major basketball event hosted by the University of Alaska Anchorage.<sup>31</sup> Additional student surveys would be required to determine the number of family visits, and the amount spent by those visitors.

In 1997 the Institute of Social and Economic Research (ISER) estimated that the direct impact of non-Alaska visitors to the Great Alaska Shootout was \$1.8 million in 1995.<sup>32</sup> The structure of this tournament has not changed substantially since 1995, therefore adjusting the 1995 economic impact for inflation is reasonable. The estimated FY07 impact is \$2.5 million in 2007 dollars (Table 8).

<sup>&</sup>lt;sup>31</sup> Hill, P.J., *Economic Impact of the 1995 Carrs Alaska Shootout*. 1996, University of Alaska Anchorage, Institute of Social and Economic Research: Anchorage. p. 35. <sup>32</sup> Ibid.

Event	Impact				
Great Alaska Shootout	\$2,500,000				
Top of the World Classic	820,000				
Other sporting events	820,000				
Conferences	680,000				
Family, friends and relatives of students	140,000				
Total	\$4,940,000				

Table 8 Out-of-state Visitor Spending

Source: McDowell Group calculations and Hill.1995. Economic Impact of the 1995 Carrs Alaska Shootout. Also, University of Alaska Statewide Budget and Institutional Research.

Note: Columns may not sum to the total due to rounding.

The Top of the World Classic, a basketball event held in Fairbanks, draws about one-third as many out-ofstate visitors as the Great Alaska Shootout, and is assumed to have one-third the economic impact of the Shootout. Other athletic events are inferred to have impact similar in size to the Top of the World Classic (Table 8).

Visitor spending at UA conferences is estimated at approximately \$0.68 million based on attendance recorded by the University and economic impact formulas provided by the Fairbanks and Anchorage Convention and Visitors Bureaus.

Estimating spending by out-of-state visitors who are visiting students is complicated by the lack of information on visitation rates. For purposes of this analysis it was assumed that ten percent of all out-of-state students receive one visitor a year. The Alaska Visitor Statistics Program found that in fall and winter of 2006, the average length of stay for visitors whose primary purpose is to visit friends and relatives was 10.4 days with an average per person spending of \$52 a day.<sup>33</sup> This assumption results in \$140,000 in spending by visitors from out-of-state who are traveling to visit University students. Total visitor spending for all out-of-state visitors, traveling to Alaska for any reason linked to the University, is estimated at almost \$5 million.

<sup>&</sup>lt;sup>33</sup> McDowell Group, Alaska Visitor Statistics Program: Fall/Winter 2006/07. 2007, State of Alaska: Juneau.

# **Chapter 3: Employment**

The University of Alaska System is one of the largest employers in the State of Alaska. In October of 2006, the University employed 7,875 people, according to its own records.<sup>34</sup> This included 4,224 full-time employees, 1,276 of which were faculty. Of the 3,651 part-time employees, 1,134 (or 31 percent of part-time) were part-time faculty and 1,264 (or 34 percent of part-time) were students.<sup>35</sup>

UA employment statistics provided by the University differ from employment statistics reported by the Alaska Department of Labor and Workforce Development (ADOL). While the University takes an employment snapshot on October 1<sup>st</sup> of every year, ADOL provides monthly employment. ADOL reported peak UA employment of 8,013 (in April 2006), a low of 5,404 employees (in August 2006), and average annual employment of 7,030 in 2006.<sup>36</sup>

If the University were a private institution, it would top the list of the largest employers in Alaska by a substantial margin. ADOL reports only four private sector employers with more than 2,000 employees and only 18 with more than 1,000 employees. In a list that includes all public and private sector employers and separates the University from State agencies, the University ranks fourth behind uniformed military, Federal civilians, and the State of Alaska.<sup>37</sup>

Table 9 shows a regional breakdown of average annual employment by the University as measured by ADOL. Approximately 78 percent of university employees are covered by unemployment insurance. The remainder, such as student assistants and students who work as facility personnel, are not covered. The Interior region accounts for 49 percent of University total employment. Ninety-three percent of the employment is associated with the regions hosting the three main campuses.

Region	Covered	% of Covered	Non- Covered	% of Non- Covered	Total	% of Total
Anchorage / Mat-Su	1,987	36%	456	29%	2,442	35%
Interior	2,537	46%	891	57%	3,428	49%
Southeast	472	9%	131	8%	603	9%
Southwest	108	2%	3	0%	111	2%
Gulf Coast	318	6%	6	0%	324	5%
Northern	44	1%	0	0%	44	1%
Statewide	1	0%	77	5%	78	1%
Total	5,466	100%	1,564	100%	7,030	100%

Table 9. Average Annual Employment and Unemployment Insurance Coverage, CY06

Source: Alaska Department of Labor and Workforce Development.

Note: Table shows average annual employment in calendar year 2006. Covered means covered under unemployment insurance.

<sup>&</sup>lt;sup>34</sup> University of Alaska Planning and Budget. 2007: Fairbanks, Alaska.

<sup>&</sup>lt;sup>35</sup> UA categorizes full-time labor as 40 hours per week or more, and part time labor is a minimum of 20 hours per week. Source: UA in Review, 2008, page 64.

<sup>&</sup>lt;sup>36</sup> Alaska Department of Labor and Workforce Development, *Statewide Firm List for 2006*. 2006.

<sup>&</sup>lt;sup>37</sup> "The Trends 100," <u>Alaska Economic Trends</u>, August 2007, p. 11.



Source: Alaska Department of Labor and Workforce Development

Table 10 provides a list of communities in which University employees reside. Most employees, or 88 percent, are living in Fairbanks, Anchorage and Juneau, though there are University employees in all six Alaska regions.<sup>38</sup>

	-	-				
Community			Total	(	% of Total	
Fairbanks			3,417		49%	
Anchorage			2,266 3		32	
Juneau			471		7	
Palmer			132		2	
Soldotna			95		1	
Kodiak			86		1	
Sitka			73		1	
Bethel			68		1	
Ketchikan			53		1	
Valdez			52		1	
Eagle River			41		1	
Homer			37		1	
Dillingham			31		<1	
Nome			28		<1	
Seward			21		<1	
Kenai			15		<1	
Kotzebue			15		<1	
Glennallen			10		<1	
Bristol Bay			8		<1	
Cordova			8		<1	
Other			103 1		1	
Total			7,030 1000		100%	
Source: Alaska	Department	of	Labor	and	Workforce	

#### Table 10. Average Annual Employment by Community, 2006

Source: Alaska Department of Labor and Workforce Development.

Note: Table columns may not sum to total due to rounding.

<sup>&</sup>lt;sup>38</sup> Anchorage Convention and Visitors Bureau, *e-mail communication on December 3, 2007*, S. Bell. 2007.

The University purchases goods and services from Alaska businesses, which in turn employ Alaska residents and purchase goods and services from other regional and non-regional businesses. The amount of money the University spends locally and the number of employees it supports determine the overall economic impact of the University on the region. Local expenditures on supplies for university operations, salaries paid to employees, and local spending by employees, students, and visitors determine the University's *multiplier effect*. The term *multiplier* illustrates that each initial dollar spent or job created by the University supports additional spending and employment by businesses selling goods and services to the University and its employees. These businesses further spend a portion of each dollar received to pay for their goods and services. Multiple rounds of this spending pattern and the portion of each dollar spent locally create the *multiplier effect*.<sup>39</sup> The larger the multiplier, the more goods and services are produced and sold locally and the higher the economic impact of the University on the local economy.

Economic impact analysis distinguishes between three different types of impact: direct, indirect, and induced economic impact.

*Direct economic impact* refers to the initial expenditures by the University of Alaska. This initial spending includes the amount directly spent by the University to purchase goods and services such as materials, utilities, construction services, transportation, and the wages paid to University employees. The study team described these impacts in Chapters 2 and 3. *Indirect economic impact* occurs as a result of University spending circulating through the economy. *Induced economic impact* is associated with the spending of University employees' payroll dollars, as well as spending by students and visitors, to the university.

Indirect and induced impacts are estimated using econometric model multipliers developed specifically for Alaska.<sup>40</sup> For example, if the multiplier is 1.5, the total (direct, indirect, and induced) employment impact of a business that employs 100 workers is equal to 150 jobs. In other words, for every direct job, one-half additional job is created in the support sector. Payroll impacts are estimated in the same way.

The magnitude of the output (a measure of all spending directly or indirectly related to the University), employment, and earnings multipliers depends on the proportion of local spending and the types of goods and services purchased locally, the average salary of employees (which reflects the purchasing power of employees), and the residency of those employees. Calculating multipliers that specifically apply to the University of Alaska would require complex econometric modeling of the State and regional economies that is beyond the scope of this study. However, using IMPLAN, a predictive model of local and state economies, it is possible to derive reasonable estimates of multiplier impacts.<sup>41</sup> IMPLAN calculates multipliers for all sectors of the economy, though only a handful are directly applicable to University spending. Following are the

<sup>&</sup>lt;sup>39</sup> *Ripple effect* is another term often used to describe how initial spending creates or supports additional economic activity in the economy.

<sup>&</sup>lt;sup>40</sup> Minnesota IMPLAN Group, IMPLAN Professional Version 2. 2006: Stillwater, MN.

<sup>&</sup>lt;sup>41</sup> Ibid.

results of an IMPLAN-based analysis of total output, employment and payroll in Alaska that is directly or indirectly linked to the University of Alaska (Table 11).

Impact	Direct	Indirect & Induced	Total
Employment Impact*	8,013	7,120	15,135
Payroll Impact in \$ million	\$260.0	\$223.0	\$483.0
Alaska Spending Impact in \$ million	\$571.1	\$290.7	\$861.8

Table 11. Total Economic Impacts of the University of Alaska

Source: University of Alaska and McDowell Group estimates.

\* Direct employment is as of April 2006, and is peak employment for the year.

UA's direct, in-state expenditures of \$571 million generate another \$291 million in secondary spending for a total of almost \$862 million in total economic activity. This amount of economic activity is equal to \$3.05 for each dollar the State of Alaska invests in the University.

In addition to direct employment of 8,000 Alaskans, more than 7,100 additional full and part-time jobs in Alaska are associated with the University's economic activity. The total amount of full and part-time jobs that are associated with the University is estimated at 15,100, approximately 5 percent of Alaska's non-farm wage and salary employment.<sup>42</sup> Similarly, in addition to UA's direct annual payroll of \$260 million, another \$223 million in payroll is generated elsewhere in the economy, for a total payroll impact of \$483 million.

# **Summary of Impacts**

The State of Alaska invested \$282.5 million in the University in FY07. For that investment the Alaska economy experienced a total economic impact of \$862 million. This is \$3.05 for every \$1.00 of investment by the State.

Other economic impacts of the University include economic activity associated with the University of Alaska Foundation and management of University lands. Impacts of the University of Alaska Foundation and other financial assets are discussed in the following chapter.

<sup>&</sup>lt;sup>42</sup> Non-farm wage and salary employment in 2006 was equal to 314,139. This number excludes self-employed workers, such as fishermen. It also includes uniformed military personnel. Source: Alaska Department of Labor and Workforce Development, *Annual Employment and Wages, 2006.* 2007.

# **Chapter 5: University Profile and Programs**

This study has demonstrated that the University of Alaska plays an important role in Alaska's economy. However, in addition to the impacts that can be quantified, the University of Alaska offers many other benefits that are less tangible and more difficult to quantify.

The chapter provides a brief description of the University and illustrates the scope of student enrollment, employment, real estate holdings, funding, and research programs. This information illustrates how the University of Alaska serves to provide a more educated workforce suited to today's economy; to strengthen Alaska's economy through research and development endeavors; to provide employment throughout the state; and sustain its efforts through investments, endowments, and other funding sources.<sup>43</sup> Many of the University of Alaska's goals and performance measures for FY08 relate directly to strengthening Alaska's preparedness to meet these economic challenges.<sup>44</sup> These goals and measures include:

- Workforce Development Strengthening programs aimed at producing an educated and trained workforce for Alaska; expanding partnerships with business and industry in high-demand fields such as nursing, engineering, construction and the oil, gas and mining industries; and increasing the number of graduates in high-demand job programs.
- **Revenue Generation** Increasing revenue generation from sources other than the State of Alaska, such as federal revenue, tuition and fees, and university receipts.
- **University Research** Increasing the level of competitive research activity.
- **Student Achievement** Increasing student retention and graduation rates; and improving collegereadiness programs and partnerships with K-12 districts across the state.

The following achievements were reported in the University President's 2006-2007 Report:

- **Graduates in high-demand programs** Up 23 percent since 1999, with half the gain in the last two years.
- **Student credit hour enrollment** Up 15 percent since 1999.
- **Student retention** Up 20 percent since 1999.
- Grant-funded research Up 100 percent since 1999.
- University-generated revenue Up 82 percent since 1999, including a 50 percent tuition revenue increase and a 170 percent private donation increase.

<sup>&</sup>lt;sup>43</sup> University of Alaska, UA in Review 2007. 2007. University of Alaska Statewide Budget Planning.

<sup>&</sup>lt;sup>44</sup> These include Alaska's Performance Measures for FY08 and goals laid out in the 2007 University of Alaska President's Report.

# **University of Alaska Profile**

In 1915, the United States Congress set aside federal lands near Fairbanks for a land-grant college. In 1917, the Alaska Agricultural College and School of Mines was established. The institution opened in 1922 and was renamed the University of Alaska in 1935. It was established as the State University in the Alaska State Constitution in 1959. The University of Alaska is the only public institution of higher learning in the State of Alaska.

There are three regional university centers in



the system: University of Alaska Anchorage (UAA), University of Alaska Fairbanks (UAF), and the University of Alaska Southeast (UAS). A chancellor who reports to the President (located in Fairbanks) heads each regional center. The University has extended satellite colleges and sites throughout Alaska, with lower division college centers in Bethel, Dillingham, Eagle River, Homer, Ketchikan, Kodiak, Kotzebue, Nome, Palmer, Sitka and Soldotna; a community college in Valdez; and vocational, military and rural education and extension sites throughout Alaska.

## **Description of Programs**

The University of Alaska offers a full range of traditional degrees commonly found at major universities. The university enrolls nearly 33,000 students and offers approximately 470 study programs.

Among the University of Alaska campuses, UAF offers the greatest variety of post-secondary degrees (fouryear degree and above) and is the only campus to offer doctoral degrees. In contrast, UAA offers the greatest variety in associate degrees and certificates, in addition to offering degrees through the master's level. As the smallest campus, UAS grants certificates and degrees similar to UAA, though fewer in number.

Campus	Doctoral Degrees	Master's Degrees	Baccalaureate Degrees	Associate Degrees	Certificates	Licenses	Faculty
UAF	18	59	70	48	48	10	631 full-time, 335 part-time
UAA	0	35	61	60	85	19	539 full-time, 660 part-time
UAS	0	7	15	18	51	1	106 full-time, 119 part-time

#### Table 12. Degrees and Certificates Offered by the University of Alaska, 2007

Source: University of Alaska.

Rather than list all the degrees and certificates offered, it is more instructive to provide examples of how the University's degree programs respond to the economic needs of Alaska. Alaska's basic industries—mining, oil development, fisheries, forestry, aviation and tourism—are strongly reflected in the certificates and degrees offered by the University of Alaska, as shown below:

#### **UA-FAIRBANKS**

- <u>Certificates</u>: Airframe, Community Health, Ground Vehicle Maintenance, Powerplant, Rural Human Services, Tribal Management
- <u>Associate Degrees</u>: Community Health, Professional Piloting, Renewable Resources, Tribal Management
- <u>Baccalaureate Degrees</u>: Environmental Politics, Fisheries, Geological Engineering, Mining Engineering, Northern Studies, Petroleum Engineering, Rural Development
- <u>Master's Degrees</u>: Arctic Engineering, Atmospheric Sciences, Engineer of Mines, Environmental Engineering, Fisheries, Geological Engineering, Mineral Preparation Engineering, Mining Engineering, Northern Studies, Oceanography, Petroleum Engineering, Rural Development
- <u>Doctoral Degrees</u>: Atmospheric Sciences, Fisheries, Oceanography; shared UAA/UAF degree in Clinical Psychology

#### UA-ANCHORAGE

- <u>Certificates:</u> Aviation Maintenance Technology, Industrial Welding, Nondestructive Testing
- <u>Associate Degrees</u>: Air Traffic Control, Aviation Administration, Aviation Maintenance Technology, Dental Hygiene, Heavy Duty Transportation, Logistics Operations, Geomatics, Radiology Technician
- <u>Baccalaureate Degrees</u>: Aviation Technology, Construction Management, Geometrics, Global Logistics Management, Health Science, Nursing, Psychology
- <u>Master's Degrees</u>: Environmental Quality Engineering, Environmental Quality Science, Global Supply Chain Management, Project Management
- <u>Doctoral Degree</u>: Shared UAA/UAF degree in Clinical Psychology
- <u>Baccalaureate Degrees</u>: Education
- Master's Degrees: Education
- In addition to education degrees, UAS offers more traditional degrees that are less specific to Alaska's basic industries; however it does offer a certificate in Outdoor Skills and Leadership for Alaska tour guides. Located in the state capital, it is also one of two campuses—along with Anchorage—that offer a Masters in Public Administration. UAS is also a delivery site for many of UAA's allied health and nursing programs.

## **Faculty and Staff**

In FY07, the University employed 7,875 employees, including 4,385 regular employees and 3,490 temporary employees.

- Members of the faculty totaled 2,410, including 1,270 full-time permanent faculty members.
- There were 322 professors, 329 associate professors, 566 assistant professors and 1,193 instructors.
- Just over two-thirds (68 percent) of the full-time permanent faculty members hold tenure or tenure-track faculty appointments.
- Total system-wide payroll for FY07 was \$260 million. With an additional \$151 million in benefits, total salary and benefits in FY07 was \$411 million.

### **Student Enrollment**

In FY07, the University had a student population of just under 33,000, 38 percent of whom are attending the University full-time. The University has a significantly older student population than the average for higher education in the US. The average age of students at the University of Alaska is 31 years old. Nationally, 61 percent of students are under the age of 25; in Alaska, less than half of the student population (47 percent) are under 25.

Full-time students account for 38 percent of the University's population. Ninety percent of the University students are Alaska residents. Twenty-five percent of the students report their ethnic background as minority. Women comprise a higher percent of students at UA than the national average. In 2006, women accounted for 66 percent of the students at UA Southeast, 60 percent at UA Anchorage, and 59 percent at UA Fairbanks. On some community campuses, women comprise 80 percent of the student population. Nationally, 57 percent of all university students are women.

The University of Alaska is also enrolling four times as many top Alaska high school graduates as was the case prior to the creation of the University of Alaska Scholars program, in 1999. The University of Alaska Scholars program offers a four-year \$11,000 scholarship to students in the top 10 percent of their graduating classes

who choose to enroll in the University of Alaska. It has been demonstrated that these top scholars attending the University of Alaska will be more likely to stay in the state and contribute to the Alaska economy.

## Academic and Administrative Facilities

The University of Alaska owns, operates and maintains 393 facilities dispersed throughout the state, providing 6.3 million square feet of space for higher education, research and public services. The adjusted value of the university's facilities, including infrastructure, is \$1.7 billion, including \$561 million for UAA, \$935 million for UAF, and \$136 million for UAS (the balance is for other portions of the UA System).

New construction includes UAA's Integrated Science Building, an \$87 million, 120,000 square-foot building currently in progress; and UAF's \$26.5 million Lena Point Fisheries Facility, a 30,900 square-foot facility located in Juneau.

## The University of Alaska Foundation

The University of Alaska Foundation is a public nonprofit corporation (501(c)(3)) established in 1974 to solicit, manage, and invest donations for the exclusive benefit of the University. The Foundation is legally separate from the University and is governed by its own board of trustees. As of June 30, 2007, the Foundation had endowments and other assets totaling approximately \$169 million, up from \$144 million in 2006.

Just under three-quarters (71 percent) of the University of Alaska Foundation assets are in a Consolidated Endowment Fund managed with the university for investment purposes (see discussion below). In 2007, more than 5,900 individuals, businesses and foundations made charitable gifts totaling more than \$23 million in support of University of Alaska programs and students. This compares to just over 4,700 donors who contributed \$18.3 million in 2006. Individual giving represented 31 percent of the total contributions, compared to 10 percent the previous year. Approximately one-third of the donations were contributed toward endowments.

## **Endowment Funds**

By Acts of Congress in 1915 and 1929, the University was granted approximately 110,000 acres of land which the territory, and later the State of Alaska, managed on behalf of the University. It holds approximately 81,000 acres of the lands at no basis because fair value at the date of transfer was not determinable. In 1982 and 1988 it entered into settlement agreements with the State that allowed it to select additional State-owned lands including limited timber, agricultural, surface and subsurface rights with a combined market value of \$45.5 million. The settlements were in exchange for University lands that were disposed of or adversely affected during the period of administration by the territory and the State of Alaska. In 2005, the Alaska Legislature passed House Bill 130, granting the University of Alaska approximately 250,000 acres of State land. HB 130 requires that the lands be conveyed to the University by July 1, 2008. However, because of restrictions in the legislation related to municipal entitlement and the University research forest, only 52 parcels totaling 189,000 acres are eligible for conveyance by the statutory deadline.

The total Consolidated Endowment Fund increased by \$42.4 million in 2006. The FY07 annual return on the fund was 18 percent, the highest since its inception, translating to an investment earnings of \$20.9 million for the UA Foundation. The average annual total return on that pooled investment since 1997 is 10 percent. As of June 30<sup>th</sup>, 2007, the fund totaled more than \$266 million.

The endowment includes approximately 170,000 acres of land designated as investment property, and 13,000 acres as educational property. The Statewide Office of Land Management (SOLM) generated receipts of more than \$5.8 million in FY97, \$5.0 million in FY02, and \$6.6 million in FY07 from real estate and resource development projects involving the University of Alaska and University of Alaska Foundation property.

Table 13 provides details of the University's receipts from its land management activities during FY97, FY02, and FY07. Funds derived from sales, leases, exchanges, and transfer of University trust lands must be deposited to the land-grant endowment fund. Regents' policy and University regulations that govern the expenditure of investment income specify that a portion of annual earnings be utilized for each of the following:

- Expenditures to manage University of Alaska's lands.
- Reinvestment in order to "inflation-proof" the endowment.
- Transferal to a Natural Resources Fund primarily for the purpose of funding programs in support of agriculture, fisheries, natural resource management and marketing, and natural resource management education. This is the primary funding source of the UA Scholars program.

Receipt Type	FY97	FY02	FY07
University Trust Land			
Land Sales	\$1,470,954	\$2,027,368	\$3,719,136
Commercial/Residential Sales	13,004	102,200	100,583
Land Leases	61,901	119,878	96,263
Mineral Lease/Royalty Payments	75,300		18,200
Permits & Fees	3,790	6,760	13,870
Easements/Rights of Way	10,875	850	2,500
Timber Sales	2,276,529	246,807	
Oil and Gas Leases	10,575	56,220	1,984
Material Sales	29,352	1,900	1,911
Misc.	4,306	1,996	58,250
Total University Trust Land	\$3,956,626	\$2,563,979	\$4,012,698
Other University Property			
Commercial/Residential Leases	\$835,280	\$1,184,564	\$1,537,787
Land Sales	542,428	41,967	357,856
Permits & Fees	2,900	3,100	48,000
Material Sales	11,612	33,174	45,885
Land Leases	5,576	9,627	32,254
Investment Revenue	439,740		
Easements/Right of Way			
Miscellaneous		300	2,900
Total Other University Property	\$1,837,536	\$1,272,732	\$2,024,682
Other Receipts			
Land Contract Interest			\$558,651
Foundation Property Land Sales	44,084	585,201	16,440
Total Other Receipts	\$44,084	\$585,201	\$575,091
TOTAL RECEIPTS	\$5,838,246	\$4,995,548	\$6,612,471

#### Table 13. University of Alaska Receipts from Statewide Land Management Activities FY97, FY02, FY07

Source: UA, Statewide Office of Land Management

Note: Columns may not sum to total due to rounding.

## **Research Programs**

University of Alaska research programs play an important role in determining which services the university is able to offer, and the overall value of the University to the state of Alaska. The research programs provide a significant return on state investment for research. A 2007 study by the Institute of Social and Economic Research into the economic impact of University of Alaska research generated the following findings: <sup>45</sup>

- For every general fund dollar spent on research in FY07, the University generated \$7.60 in total research funding for the university.
- In 2006, 2,392 jobs were supported by university research spending, including 1,292 direct jobs and 1,100 indirect jobs.
- The combined direct and indirect payroll for university research generated jobs was \$92 million in 2006.
- Direct and indirect university research generated \$125 million in sales throughout Alaska in 2006 (including procurement, business sales, and employee spending).
- Each \$1 million in appropriations from the general fund in 2006 created 121 jobs and \$4.7 million in payroll within the state.
- Non-general fund research revenue comes mostly from outside Alaska, so the University's research programs, like mainstream industries, bring new dollars into the state.

University of Alaska programs account for 44 percent of all research and development efforts in Alaska, compared to 14 percent on average for universities in other states.<sup>46</sup> At the same time, Alaska spends considerably less than other states on research and development (1.0 percent of its gross state product, compared to the average of 2.5 percent for other states).

During FY07 the University received \$22.8 million in State general fund appropriations for research, and over \$145 million from other sources. Of the other sources:

- UAA received \$9.2 million.
- UAF received \$109.4 million.
- UAS received \$990,000
- Other areas received \$25.8 million in indirect cost recovery.

The \$145 million in research revenue is nearly double that of FY00, when the university generated \$75.3 million in revenue.

<sup>&</sup>lt;sup>45</sup> Goldsmith, S., *University of Alaska research: an economic enterprise*. 2007, Institute of Social and Economic Research: Anchorage, Alaska.

<sup>&</sup>lt;sup>46</sup> University of Alaska, *UA in Review 2007*. 2007, University of Alaska Planning and Budget, Fairbanks, Alaska.

Detailing the activities and contributions of more than 70 institutes is beyond the scope of this study; this section highlights only a few institutes that attract research funding from sources other than the State of Alaska.

#### **UAF INSTITUTES**

Most of the University of Alaska's research activities take place on the UAF campus.

The **Geophysical Institute** conducts scientific research in space physics, atmospheric sciences, seismology, volcanology, tectonics and sedimentation, and remote sensing. Its facilities include the Alaska Synthetic Aperture Radar Facility, which provide all-weather data; and the Alaska Volcano Observatory, which monitors hazardous volcanoes around Cook Inlet.

- General Fund (GF) Revenues: \$5,060,900
- Non-General Fund (NGF) Revenues (FY 06): \$28,231,800
- NGF for every dollar of GF: 5.6

The **International Arctic Research Center (IARC)** conducts research vital to the understanding of climate change, global warming and issues of the Arctic. Its activities include developing CO2 protocols and collaborating with nearly 100 international researchers.

- General Fund (GF) Revenues: \$936,600
- Non-General Fund (NGF) Revenues (FY 06): \$8,647,000
- NGF for every dollar of GF: 9.2

The **School of Fisheries and Ocean Sciences (SFOS)** conducts research in oceanography, fisheries, and seafood science and technology. The School has seven units and five research programs. Faculty research at the School of Fisheries and Ocean Sciences extends from the rivers of Alaska to the fisheries of the Bering Sea and from Arctic Ocean oceanography to marine mammals in the Antarctic.

- General Fund (GF) Revenues: \$1,655,000
- Non-General Fund (NGF) Revenues (FY 06): \$15,131,900
- NGF for every dollar of GF: 9.1

The **School of Natural Resources and Agricultural Sciences** is engaged in the long-term management of Alaska's natural resources and works with farmers, ranchers, community planners, the oil and gas industry, recreation managers, and foresters. The School focuses its research on problems related to sustainable agriculture and forestry in relation to economic, social and cultural needs. The experiment station operates two farms and several research sites.

- General Fund (GF) Revenues: \$3,875,800
- Non-General Fund (NGF) Revenues (FY 06): \$6,280,600

• NGF for every dollar of GF: 1.6

The Arctic Region Supercomputing Center (ARSC) serves the computational needs of the University of Alaska and the Department of Defense (DOD) as a shared resource within the DOD's High Performance Computing Modernization Program. The Center supports researchers tackling computational problems, including global climate change, bioinformatics, permafrost, ocean circulation and sea ice. ARSC computational systems and resources include a wide range of high performance computing, storage and visualization technology.

- General Fund (GF) Revenues: none
- Non-General Fund (NGF) Revenues (FY 06): \$12,689,500
- NGF for every dollar of GF: na

The **Institute of Arctic Biology (IAB)** studies plant, animal, and human adaptation to arctic and sub-arctic environments. Research areas include ecology; conservation and resource ecology; physiology and biomedicine; and genetics and evolutionary biology. IAB provides platforms for research in programs from ecology and ecosystems to molecular biology and genetics, including field stations, small and large animal facilities, and core laboratories for geographic information systems (GIS) and DNA sequencing. Major programs include the Center for Alaska Native Health Research, Alaska Specialized Neuroscience Research Program, and the Center for Molecular Genetic Studies of Hibernation.

- General Fund (GF) Revenues: \$3,902,200
- Non-General Fund (NGF) Revenues (FY 06): \$16,221,100
- NGF for every dollar of GF: 4.2

The **Institute of Northern Engineering (INE)** provides research and engineering solutions for the world's cold regions. INE focuses on basic and applied research and development, as well as research outreach. INE conducts research in all areas of engineering, including, but not limited to: civil and environmental, petroleum, mining, geological, electrical, computer, and mechanical engineering.

- General Fund (GF) Revenues: \$2,116,800
- Non-General Fund (NGF) Revenues (FY 06): \$11,643,200
- NGF for every dollar of GF: 5.5

### UAA INSTITUTES

The **Institute of Social and Economic Research (ISER)** was established by the Legislature in 1961. ISER's mission is to research and analyze important public policy issues and share that information and analysis with the public in order to contribute to the understanding of trends and decisions. ISER's research includes the impact of oil and other resource development, the effects of change on Alaska's Native peoples, and the benefits of education and research to Alaska's economy. ISER maintains the state's largest economic database and forecasts population and employment growth.

- General Fund (GF) Revenues: \$1,135,500
- Non-General Fund (NGF) Revenues (FY 06): \$2,411,800
- NGF for every dollar of GF: 2.1

The **Environment and Natural Resources Institute (ENRI)** provides access to environmental and natural resources information. The Institute maintains cooperative links with natural resources libraries and researchers in Alaska, elsewhere in the U.S. and in other circumpolar nations. ENRI states that its chief goal is "to provide sound scientific data and analyses without advocacy for use in natural resource and environmental decision making." ENRI's two facets of services and applied research function through the Arctic Environmental Information and Data Center (AEIDC), Alaska Natural Heritage Program (AKNHP), Alaska State Climate Center (ASCC), Aquatic Ecology, Arctic Stable Isotope Lab, Cultural Heritage Studies and the Seismic Data Analysis and Information Center.

- General Fund (GF) Revenues: \$437,400
- Non-General Fund (NGF) Revenues (FY 06): \$922,800
- NGF for every dollar of GF: 2.1

## Chapter 6: Educational Attainment and Increased Earnings of University of Alaska Graduates

The purpose of this chapter is to measure aspects of the University of Alaska's economic impact related to the earnings of its graduates who remain in Alaska and the added earning power of their University of Alaska degrees.

The University of Alaska (UA) partnered with the Alaska Department of Labor Workforce Development (ADOL) to track UA graduates and their earnings. The resulting database contains information regarding more than 47,000 graduates from the classes of 1989 through 2006. Of these, 32,000 are currently living in Alaska, including 26,000 whose employment information was tracked by ADOL. Earnings are only tracked for graduates working in Alaska in the private sector, with state government, or with local governments. Graduates who are self-employed, working for the federal government, in the military or living out of state are not tracked.

In addition to the data from ADOL, some data for 11,000 graduates from the classes of 1983 through 1988 is available from UA.

## **Total 2006 University of Alaska Graduate Earnings**

Graduates from the UA classes of 1989 through 2006 with tracked employment information earned a total \$1.05 billion in 2006. Earnings by degree type are shown in Table 14.

Type of Degree	Earnings
License	\$2.5
Certificate	82.1
Associate	281.9
Bachelor's	485.6
Masters	192.3
Doctoral Degree	5.2
Total Earnings	\$1,049.5

#### Table 14. Total Earnings of University of Alaska Graduates Working in Alaska, Classes of 1989-2006 in 2006 (in millions of dollars)\*

Source: University of Alaska and the Alaska Department of Labor Workforce and Development.

\*Does not include self-employed graduates or graduates employed by the federal government.

Note: Graduates who received multiple degrees from the University of Alaska during the study period of 1989 through 2006 are double counted.

As stated, these figures do not include self-employed graduates or those holding federal government jobs. ADOL data indicated that there were 6,000 UA graduates (classes of 1989-2006) living in Alaska, but not identified as employed. To determine how many of these graduates would likely be working, the study team used Current Population Survey data—a joint publication of the Bureau of Labor Statistics and the Census Bureau—for 25- to 34-year-olds, recognizing that some graduates are older or younger than this cohort. The Current Population Survey shows that 90 percent of graduates aged 25 to 34, with at least an associate degree, were earning income in 2006.

In addition to the graduates in the database, the number of graduates by degree type from 1983 through 1988 is also available, but without residency or income data. The study team estimated that about half of this group was likely to still be living in Alaska, and used the same 90 percent employment calculation to determine how many of these UA graduates from the classes of 1983 through 1988 were likely employed.

Using these parameters, the study team estimated that there were 37,400 graduates living in Alaska in 2006, including 33,700 who were likely to have been employed and earning an income. Table 15 breaks this estimate out by year of graduation.

Graduation Class	Graduates with Degrees	Graduates Living in Alaska in 2006	Graduates Earning an ADOL Tracked Income in Alaska in 2006	Additional Non- Tracked Graduates Likely Earning an Income in Alaska in 2006
1983	1,633	817	0	735
1984	1,577	789	0	710
1985	1,846	923	0	831
1986	1,845	923	0	830
1987	2,069	1,035	0	931
1988	1,934	967	0	870
1989	1,723	947	729	123
1990	1,871	1,084	811	165
1991	1,992	1,140	866	160
1992	2,255	1,331	1,020	178
1993	2,400	1,430	1,085	202
1994	2,800	1,668	1,304	197
1995	2,912	1,705	1,361	174
1996	2,957	1,748	1,395	178
1997	2,947	1,782	1,441	163
1998	2,940	1,871	1,539	145
1999	2,753	1,790	1,451	160
2000	2,674	1,797	1,484	133
2001	2,591	1,753	1,433	145
2002	2,696	1,982	1,667	117
2003	2,744	2,035	1,689	143
2004	2,958	2,389	1,993	157
2005	2,948	2,599	2,197	142
2006	3,223	2,918	2,573	53
Total	58,288	37,423	26,038	7,642

# Table 15. Number of University of Alaska Graduates (1983-2006)Living and Earning Income in Alaska, 2006

Source: Data provided by University of Alaska and the Alaska Department of Labor Workforce and Development, and McDowell Group estimates.

Using an earnings formula that considers graduation year, degree earned, and the gender of graduates, the earnings of the untracked graduates (classes of 1983-2006) are estimated at \$362 million in 2006. In total, it is estimated that University of Alaska graduates from the classes of 1983 through 2006 earned approximately \$1.41 billion in 2006.

Type of Degree	Tracked Earning Classes 1989-2006	Untracked Earnings Classes 1989-2006	Untracked Earnings Classes 1983-1988	Total Earnings
License	\$2.5	\$0.0	\$0.0	\$2.5
Certificate	82.1	9.0	21.6	112.7
Associate Degree	281.9	42.0	71.8	395.7
Bachelor's Degree	485.6	48.0	113.6	647.2
Master's Degree	192.3	11.0	42.8	246.1
Doctoral Degree	5.2	0.5	1.3	7.0
Total Earning	\$1,049.5	\$110.5	\$251.1	\$1,411.1

#### Table 16. Total Earnings of University of Alaska Graduates, Classes of 1983-2006 in 2006 (in millions of dollars)

Source: Estimates by McDowell Group, Inc. Data provided by University of Alaska and the Alaska Department of Labor and Workforce Development. Untracked graduate earnings were estimated by the McDowell Group. Note: Graduates who received multiple degrees from the University of Alaska during the study period of 1983 through 2006 are double-counted, which will slightly inflate the total earnings estimates.

According to ADOL, there were 314,139 Alaskans in the workforce in 2006, earning a combined total of \$13 billion. According to McDowell Group estimates, there were 33,680 UA graduates from the classes of 1983 through 2006 in the Alaska workforce in 2006, and they earned a combined total of \$1.4 billion. Therefore, these UA graduates earned 10.9 percent of all wages in Alaska in 2006, and represented 10.7 percent of the entire Alaska workforce in that year. (This calculation may be slightly inflated, because graduates from these classes who earned more than one degree from the University of Alaska are double counted).

## The Added Value of Degrees from the University of Alaska

In addition to determining the total size of the University of Alaska workforce and total earnings (classes 1983-2006), it is also instructive to consider the "added value" of a UA degree. In 2006 the "average" UA degree holder (classes 1989-2006) earned \$42,315. Men with master's degrees earned the most, with an average 2006 wage of \$60,233, and women with AA degrees earned the least, with an average wage of \$30,407.

The added value of a UA degree is the difference in annual average earnings between a UA graduate, and his or her earnings might otherwise have been if he or she had not earned a college degree. The following national statistics guide this analysis:

• In 2006, men over the age of 24 with a bachelor's degree earned 68 percent more than male high school graduates, while men with a master's degree earned 106 percent more. For women, the

contrast was even more dramatic; they earned 77 percent more with a bachelor's than their high school-educated counterparts, and 120 percent more with a master's degree.<sup>47</sup>

- A bachelor's degree is worth nearly a million dollars more than a high school degree over a lifetime. Over the course of a hypothetical 40-year working life, workers with bachelor's degrees are estimated to earn \$2.1 million, while workers with high school degrees will earn an average of \$1.2 million. Workers holding professional degrees will earn \$4.4 million.<sup>48</sup>
- Those with a post-secondary education are more likely to be employed. In 2006, 4.3 percent of high school graduates age 25 and over were unemployed compared to 2.3 percent of workers with bachelor's degrees and 1.7 percent of workers with master's degrees.<sup>49</sup>

National data also indicates that a female University of Alaska graduate earns nearly \$16,000 more per year than a female high school graduate, while a male UA graduate earns almost \$18,000 more than their high school-educated cohort.

# Table 17. Annual Median Earnings for High School Graduates, 2006Ages 25 and Over, Nationwide

Educational Attainment	Annual Median	Annual Median	Annual Median
	Earnings	Male Earnings	Female Earnings
High School Graduate	\$27,384	\$33,074	\$21,609

Source: Current Population Survey, US Census Bureau, 2007.

# Table 18. Annual Median Earnings by Level of Educational Attainment, 2006University of Alaska Graduates from the classes of 1989 - 2006

Educational Attainment	Average Earnings	Average Male Earnings	Average Female Earnings
Certificate	\$36,999	\$45,723	\$31,057
Associate of Arts	\$33,349	\$40,330	\$30,407
Associate of Applied Science	\$41,838	\$53,196	\$35,214
Bachelor's	\$42,399	\$49,353	\$38,216
Master's	\$52,728	\$60,233	\$47,711
PhD	\$45,918	\$47,816	\$43,440
Total Average	\$42,315	\$50,541	\$37,446

Source: Calculations by McDowell Group, Inc. Data provided by University of Alaska and the Alaska Department of Labor and Workforce Development.

Note: PhD wages were estimated using a relatively small sample size, which may not be statistically representative of the overall PhD earning power.

University of Alaska graduates from 1983 through 2006 residing in Alaska cumulatively earned approximately \$1.41 billion in 2006. If these graduates had not earned these degrees, they may have earned only \$940

<sup>&</sup>lt;sup>47</sup> Current Population Survey, a Joint Project Between the Bureau of Labor Statistics and the Bureau of the Census, 2007.

<sup>&</sup>lt;sup>48</sup> "More Education Means Higher Earnings—For Life", Occupational Outlook Quarterly, Fall 2002, p. 48.

<sup>&</sup>lt;sup>49</sup> "Education Pays...", U.S. Department of Labor, Bureau of Labor Statistics, http://www.bls.gov/emp/emptab7.htm.

million. This analysis suggests that attending the University of Alaska increased the earning power of its graduates by approximately \$470 million in 2006 alone.

Type of Degree	Total 2006 Earnings with UA Degree	Likely Female Earning with Lesser Degree	Likely Male Earnings with Lesser Degree	Total Likely Earnings with Lesser Degree	Total Increased Earning Power
License	\$2.5	\$1.0	\$0.9	\$1.9	\$0.5
Certificate	112.6	38.4	39.1	77.5	35.2
Associate Degree	395.7	148.5	121.3	269.8	125.9
Bachelor's Degree	647.2	205.4	192.0	397.4	249.8
Master's Degree	246.1	103.1	83.6	186.7	59.4
Doctoral Degree	7.0	2.6	3.8	6.5	0.5
Total Earning	\$1,411.1	\$498.9	\$440.8	\$939.8	\$471.3

#### Table 19. Increased Earning power of University of Alaska Graduates, Classes of 1983-2006 (in millions of dollars)

Source: Calculations and analysis by McDowell Group, Inc. Data provided by University of Alaska and the Alaska Department of Labor and Workforce Development. To calculate increased earning power, licenses, certificates, associates, and bachelor degree earnings were compared with national high school degree earnings from Table 18. Master's and doctoral degree earnings were compared with UA bachelor degree earnings in Table 19.

It must be emphasized that this figure of \$471 million in increased earning power only reflects 2006 earnings for the cohort of recent graduates—those in the classes of 1983 to 2006. Graduates as far back as 1960 are likely still in the workforce—and earning substantially higher incomes near the end of their working years.

### Introduction

This special section presents an analysis of the impacts of University of Alaska programs on Alaska's labor force. The Alaska Department of Labor and Workforce Development (ADOL) has been coordinating with the University of Alaska to track residency and employment status of UA graduates. The result is an extensive database linking UA graduate data with ADOL employment data. The database includes data on UA graduates from the classes of 1989 through 2006. The data tracks whether or not graduates stay in Alaska, which graduates are more likely to stay; how much graduates earn and what factors influence that earning power; and how the passing of time influences graduate retention in Alaska and earning potential. The data allows for subgroup analysis by age, gender, location, race, degree type and program, and other information.

Information contained in the database includes:

- **Graduate demographics** Graduate information includes **race** and **gender** of each graduate, the **age** of each graduate when they began their education, and total number of graduates for various subgroups (see below).
- **Graduation year** University of Alaska graduates from the classes of 1989 through 2006 are included in the database.
- Alaska residency in 2006 UA graduates were considered to be 2006 Alaska state residents if they applied for the Permanent Fund Dividend in 2005 or 2006. In addition to Alaska residency, the database also contains information regarding borough or census area residency.
- **Origin information** The database includes information regarding where graduates lived prior to enrolling in the university, including whether graduates were living in Alaska (including origin city and borough/census area), a US state other than Alaska, or in a foreign country.
- Employment information Employment information includes total number of employed graduates by gender, and total earnings by gender. Employment information is available only for private sector, state and local government employees living in Alaska. It was not available for graduates who were self-employed, working for the federal government (military or civilian), or living outside of Alaska. In addition to Alaska employment, the borough or census area of the graduate's work location was also available. Employment information also categorized which graduates were in training related employment (determined by a match of the Classification of Instructional Programs (CIP) codes connected to UA degrees, and the Standard Occupational Classification (SOC) codes); and which graduates are working in fields with similar education requirements (determined by connecting SOC code to Bureau of Labor Statistics educational requirements codes).

- Major Administrative Unit (MAU)<sup>50</sup> and Campus attended Graduates could be sorted by which MAU they attended, including UAA, UAF and UAS. They could also be sorted by which campus they attended, including Anchorage, Kenai, Kodiak, Mat-Su, PWSCC, Fairbanks, Bristol Bay, Chukchi, Interior/Aleutians, Kuskokwim, Northwest, Rural College, Tanana Valley, Juneau, Ketchikan, and Sitka.
- Type of degree Type of degree information included whether the graduate had obtained a certificate (one-year and two-year), master's, bachelor's, associates (AAS and AA), PhD, or license. Information was also available regarding precisely what type of degree was obtained. (For example, if it was a bachelor's, was it a BA, BAS, BBA, BFA, BLS, BS, BM, BT, BSW, BLA, BED, BHS?) Graduate major was also available. (For example, for a graduate who received a master's of arts degree was it in anthropology, administration of justice, applied linguistics, cross-cultural studies, community psychology, English, music, Northern studies, human services, professional communication, rural development, or something else?) There were also career cluster descriptions, high demand area descriptions (high and low areas), CIP codes and descriptions for each area of study.



#### Figure 6. Resident and Employment Status for UA Graduates Classes of 1989-2006

As previously mentioned, employment information is only available for private sector, state and local government employees. Self-employed graduates and those working for the federal government are excluded. From the base of 47,384 graduates from the classes of 1989 through 2006, 31,969 graduates (67 percent) are currently living in Alaska, including 26,036 (54 percent) who are private sector, state or local government employees. The employment status for the remaining 5,933 graduates (13 percent) living in Alaska is unknown.

<sup>&</sup>lt;sup>50</sup> The structure of the University of Alaska system is organized around four MAUs: UA Statewide, UA Anchorage, UA Fairbanks, and UA Southeast. (UA Statewide is an administrative unit with no associated graduate data.)

## Profile of 1989-2006 University of Alaska Graduates

The following tables provide an overview of UA graduates from 1989 through 2006, and contain these overall statistics:

- Nearly half (47 percent) of these graduates obtained bachelor's degrees.
- Sixty percent of UA graduates during this time period were women.
- Alaska Natives accounted for 9 percent of all graduates during this time period, while whites made up 81 percent.
- Eighty-six percent of the graduates came from Alaska, including 10 percent from rural Alaska.
- Fifty-eight percent of the degrees obtained during this time period were from the University of Alaska Anchorage, with another third from the University of Alaska Fairbanks.

# Table 20. Number of UA Graduates (1989-2006)by Type of Degree

Type of Degrees	Number of Graduates
One-year certificate	1,151
Two-year certificate	2,378
Associate of Applied Science	7,975
Associate of Arts	6,401
Baccalaureate	22,077
Licensure	80
Masters	6,954
Doctorate	368
Total	47,384



#### Figure 7. Number of UA Graduates (1989 - 2006) by Graduation Year and Gender

#### Table 21. Number of UA Graduates (1989 - 2006) by Ethnicity

Ethnic Group	Number of Graduates
White	36,909
Alaska Native	4,007
Other Minority	4,775
Unknown	1,713
Total	47,384

Place of Origin	Number of Graduates
Alaska	40,889
Rural Alaska	4,671
Non-Rural Alaska	35,219
Alaska Unknown	999
Elsewhere in the United States	4,508
Foreign	1,661
Unknown	326
Total	47,384

### Table 22. Number of UA Graduates (1989 - 2006) by Place of Origin

MAU	# of Graduates
UAA	
Anchorage	24,535
Kenai	1,327
Kodiak	312
Mat-Su	1,368
PWSCC	381
UAA Total	27,923
UAF	
Fairbanks	11,202
Bristol Bay	201
Chukchi	92
Interior/Aleutians	358
Kuskokwim	508
Northwest	104
Rural College	1
Tanana Valley	3,224
UAF Total	15,690
UAS	
Juneau	3,027
Ketchikan	290
Sitka	454
UAS Total	3,771
University of Alaska Total	47,384

#### Table 23. Number of UA Graduates (1989-2006) by MAU and Campus

Note: The structure of the University of Alaska system is organized around four MAUs: UA Statewide, UA Anchorage, UA Fairbanks, and UA Southeast. (UA Statewide is an administrative unit with no associated graduate data.)



#### Figure 8. Share of UA Graduates by MAU, 1989-2006

## **Alaska Retention of UA Graduates**

Producing suitably skilled workers to join the Alaska labor force is a crucial contribution UA makes to the Alaska economy. The following analysis provides information on the residency, employment and earnings status of UA graduates. The following chart illustrates the effect of time on Alaska residency and employment for the UA graduate population. For example, just over half (55 percent) of the graduates from the class of 1989 were living in Alaska as of 2006, and 42 percent of those graduates were employed in ADOL tracked jobs. Three-quarters (74 percent) of the class of 2002 was living in Alaska as of 2006, with 62 percent of the members of that class employed. Among the class of 2006, 91 percent were still residing in Alaska, and 80 percent were employed.



#### Figure 9. Percent of UA Graduates (Classes 1989-2006) Living and Working in Alaska in 2006 by Year of Graduation

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section. .

### Outmigration Patterns from the State of Alaska

In considering the outmigration of UA graduates from the state of Alaska, it is useful to also look at the outmigration patterns of Alaska residents as a whole, and of young adults nationally.

Alaska is a state of migrants. According to ADOL, only 38 percent of Alaska residents were actually born in Alaska. This number varies significantly based on place of residency. About 75 percent of the population in rural Alaska was born in Alaska, compared to 32 percent for Anchorage and 30 percent for Fairbanks. From 1989 to 2002, an average of 43,000 people per year left Alaska (7 percent of the population), while a similar

The Economic Impact of University of Alaska, 2007 Update

average number of people moved to Alaska.<sup>51</sup> In addition to population change due to migration, there are approximately 10,300 births and 3,000 deaths in Alaska each year, for an annual natural increase of 7,300.<sup>52</sup>

Year (July 1 <sup>st</sup> – June 30 <sup>th</sup> )	Alaska Residents Who Left Alaska	Outmigration Rate
1989-1990	38,140	7.1%
1994-1995	45,979	7.7
1999-2000	40,076	6.4
2003-2004	40,633	6.3
Average	41,691	6.9%

Table 24. Alaska	<b>Outmigration Rates</b> ,	1989-2004
------------------	-----------------------------	-----------

Source: Alaska Population Overview: 2003-2004 Estimates. State of Alaska, Department of Labor and Workforce Development, Research and Analysis Section, October 2006

A 2004 ADOL study showed that in 2002, 71 percent of people who were residents in Alaska in 1994 were still living in Alaska. In other words, in a span of 8 years, approximately 29 percent of Alaskans had left Alaska. Although not exactly comparable, the numbers from this study can be matched up with UA alumni outmigration rates using an eight-year time span for comparison. <sup>53</sup> For example, 64 percent of the class of 1998 was still living in Alaska eight years later, in 2006; and in the ADOL study, 71 percent of 1994 Alaska residents were still living in Alaska eight years later, in 2002.

Year	Percent of 1994 Alaska Residents Living in Alaska
1994	100%
1995	91
1996	86
1997	83
2002	71

## Table 25. Percentage of 1994 Alaska ResidentsRemaining in Alaska, 1994-2002

Jeff Hadland, "Alaska's 'Brain Drain': Myth or Reality?" Monthly Labor Review, May 2004. U.S. Bureau of Labor Statistics.

<sup>&</sup>lt;sup>51</sup> Williams, G., *Migration*. Alaska Economic Trends. July 2004. Alaska Department of Labor and Workforce Development: Juneau, Alaska, available at: http://www.labor.state.ak.us/trends/jul04.pdf. There are two ways of looking at in- and out-migration over time. The first is by adding up annual figures. Using this method, between 1995 and 2000 more than 212,000 people moved away from Alaska, while nearly 200,000 people moved to Alaska. However, this number counts those who moved to and from Alaska on multiple occasions multiple times. Another way to look at it is to just count the in/out migration change over the same period. From 1995 to 2000—126,000 unique people had left the state, while nearly 100,000 moved to Alaska. However, this number misses those who moved both to and away from Alaska in that five-year span.

<sup>&</sup>lt;sup>52</sup> Williams, G., *A Picture of Alaska's Population*. Alaska Economic Trends. March 2007, Alaska Department of Labor and Workforce Development: Juneau, Alaska, available at: www.labor.state.ak.us/research/trends/mar07pop.pdf <sup>53</sup> Hadland, J., *Alaska's 'Brain Drain:' Myth or Reality?* Monthly Labor Review, May 2004. U.S. Bureau of Labor Statistics.

According to national data, younger adults with a college education move between states at a rate more than twice that of the general population. Nationally, 20 percent of adults aged 25 to 39 with a college education moved to a different state between 1995 and 2000, compared to one in twelve (8.4 percent) of the population as a whole. <sup>54</sup> In Alaska the trends are similar, with young adults leaving Alaska in greater rates than other age groups.<sup>55</sup>

In light of these larger migratory patterns, the UA graduate outmigration is consistent with the population in general. Studies have even shown that, at least in the short-term, an Alaska postsecondary education actually reduces the outmigration rates of Alaska's youth.<sup>56</sup>

### UA Graduates Who Stay: Retention Rate Profiles

The following analysis provides more detail on UA graduate retention in Alaska. The presentation and analysis of the data is not statistically rigorous, but does provide some insight to some of the factors that determine retention. A rigorous statistical analysis of the graduate residency and employment data base would require access to individual records which are confidential. In the absence of statistical analysis, it is not possible to determine with certainty if one particular segment of graduates is more likely to stay in Alaska after graduation than another segment (men compared to women, for example.) A broad range of factors likely determine whether a graduate is more likely or less likely to reside in Alaska following graduation. These include the number of years since graduation, degree type, race, place of residency before attending college, and other factors. Sorting graduate retention data by various subgroups (gender, race, etc.) provides an indicator of what factors may be important in graduation retention, and point toward areas where a more sophisticated statistical analysis may be warranted.

The following analysis examines UA graduate retention into the following categories:

- Place of residence prior to attending UA
- Ethnicity
- Type of degree earned
- Campus attended
- Gender

Figure 10 provides an overview of graduate retention for all graduates in the 1989-2006 period, sorted by these categories. The figure also shows employment status. The analysis suggests Alaska Natives are much more likely than white Alaskans to stay in Alaska after graduation. Students earning certificates appear to be more likely to stay than students earning other degrees. Not surprisingly, Alaska-resident graduates are more likely to stay than non-Alaskans.

<sup>&</sup>lt;sup>54</sup> Franklin, R., *Migration of Young Single and College Educated: 1995 to 2000.* 2003, U.S. Census Bureau. Census 2000 Special Reports available at: http://www.census.gov/prod/2003pubs/censr-12.pdf.

<sup>&</sup>lt;sup>55</sup> Hadland, J., *Alaska's 'Brain Drain: Myth or Reality?* Monthly Labor Review, May 2004. US Buruea of Labor Statistics. <sup>56</sup> Ibid.



#### Figure 10. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Origin, Race, Degree Type, Gender, Campus, and Total

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

Notes: ADOL only has Alaska employment information for graduates working in the private sector and in state and local government. Graduates who are working for federal (military or civilian) or are self-employed are not included. Residency figures for foreign nationals not available.

#### UA GRADUATES WHO STAY IN ALASKA AFTER GRADUATION: ETHNICITY ANALYSIS

The following chart presents retention data by ethnicity. Alaska Native graduates tend to stay in Alaska at a significantly higher rate than white graduates. Minority groups, other than Alaska Natives, stay in Alaska in the lowest percentages. The number of graduates in each group varies widely. In 1990, for example, there were 101 Alaska Native graduates, 136 graduates from other minority groups, and 1,320 white graduates. In 2005, there were 299 Alaska Native graduates, 355 other minority graduates, and 2,184 white graduates. For graduation counts by ethnic group, please see Appendix Data.



#### Figure 11. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Year of Graduation and Ethnicity

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

#### UA GRADUATES WHO STAY IN ALASKA AFTER GRADUATION: DEGREE ANALYSIS

Students who earn certificates and associates of applied science consistently stay in Alaska at a higher rate than those who earned four-year degrees and advanced degrees. In 1990, the following degrees and certificates were awarded: 132 certificates, 324 associates of applied science, 295 associates of arts, 875 bachelors, 240 masters, and 5 PhDs. In 2005, there were 222 certificates, 534 associates of applied science, 276 associates of arts, 1,304 bachelors, 571 masters, and 25 PhDs.

#### Figure 12. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Year of Graduation and Type of Degree



Year of Graduation From the University of Alaska



Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

#### UA GRADUATES WHO STAY IN ALASKA AFTER GRADUATION: GENDER ANALYSIS

Women with UA degrees appear to consistently stay in Alaska at a slightly higher rate than men.

In 1990, there were 821 male graduates and 1,050 female graduates, and in 2005, there were 1,114 male and 1,833 female graduates.





Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section

#### UA GRADUATES WHO STAY IN ALASKA AFTER GRADUATION: MAJOR CAMPUS ANALYSIS

The minimal differences in retention rates among the three major campuses are most likely related to the types of degrees awarded (with UAA awarding a larger proportion of certificates and associates of arts degrees).

In 1990, there were 1,192 graduates from UAA, 552 from UAF, and 127 from UAS; and in 2005, there were 1,687 from UAA, 1,007 from UAF, and 254 from UAS.

#### Figure 14. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Year of Graduation and Major Campus



Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

#### UA GRADUATES WHO STAY IN ALASKA AFTER GRADUATION: ORIGIN ANALYSIS

Nearly three-quarters (73 percent) of Alaska resident graduates from the classes of 1989 through 2006 have stayed in Alaska versus just over a third (38 percent) of those who lived outside of Alaska prior to enrolling at UA.

In this case, urban Alaska includes the Municipality of Anchorage, the Fairbanks North Star Borough, the City and Borough of Juneau, the Matanuska-Susitna Borough, the Kenai Peninsula Borough, the City and Borough of Sitka, and the Ketchikan Gateway Borough. Rural Alaska includes all other areas of the state.<sup>57</sup> Rural Alaskan UA graduates consistently stay in the state at a higher rate (82 percent overall) than urban Alaskan graduates (70 percent overall).

<sup>&</sup>lt;sup>57</sup> These areas include: Bethel Census Area, Kodiak Island Borough, Valdez-Cordova Census Area, Nome Census Area, Wade Hampton Census Area, Northwest Arctic Borough, North Slope Borough, Wrangell-Petersburg Census Area, Southeast Fairbanks Census Area, Yukon Koyukuk Census Area, Prince of Wales-Outer Ketchikan Census Area, Aleutians West Census Area, Dillingham Census Area, Skagway-Hoonah-Angoon Census Area, Aleutians East Borough, Haines Borough, Denali Borough, Lake and Peninsula Borough, Bristol Bay Borough, and Yakutat City and Borough.

In 1990, there were 1,576 graduates who lived in urban Alaska prior to UA enrollment, 154 rural Alaskans, and 13 graduates from outside Alaska. In 2005, graduates included 2,033 urban Alaskans, 358 rural Alaskans, and 261 graduates from outside Alaska.





Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

More than 90 percent of students who came from the following five Alaska boroughs chose to remain in Alaska: Aleutians East, Bethel, Lake & Peninsula, Northwest Arctic, and Wade Hampton. Graduates originally from Fairbanks and Anchorage are the least likely to have remained in Alaska.



Figure 16. Percent of UA Graduates from Alaska Living in Alaska by Borough of Origin

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

More than 50 percent of UA students from Bethel and Northwest Arctic returned there to work after graduation, while less than 20 percent of graduates originally from Denali Borough, Lake and Peninsula Borough, and Southeast Fairbanks Borough returned home to work. (For counts of graduates by graduation year and borough of origin, see Appendix Data.)



Figure 17. Percent of UA Graduates (Classes of 1989-2006) From Alaska and Working in Borough of Origin in 2006

Source: Data from University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

Note: Information is only from graduates working in Alaska in the private sector, state and local government. Graduates working for federal (military or civilian), self-employed, or living out of state are not included.

#### UA GRADUATES WHO STAY IN ALASKA AFTER GRADUATION: AGE ANALYSIS

The older students are when they receive their UA degree, the more likely they are to remain in Alaska long term after graduation. Sixty-eight percent of graduates from the class of 1993 who were 40 or older at the time of graduation were still in Alaska in 2006, compared to 54 percent of those who graduated in their twenties. For the graduating classes of 1989 through 2006, more than three quarters (77 percent) of those who graduated from UA at the age of 40 or older remained in Alaska in 2006.



#### Figure 18. Percent of UA Graduates Living in Alaska in 2006 by Age at Graduation

#### UA GRADUATES WHO STAY IN ALASKA AFTER GRADUATION: UA SCHOLARS

The UA Scholars Program began in 1999 and offers an \$11,000 scholarship to the top 10 percent of the graduates from qualified Alaska high schools. In 2000 a single UA Scholar became the first graduate of this program. By 2006, a total of 691 UA scholars had earned diplomas. Of the 691 UA Scholars who graduated in that period, 654 (95 percent) remain in Alaska. Seventy-nine percent of UA Scholars from the class of 2003 remained in Alaska in 2006, along with 74 percent of those graduates who were not UA Scholars. Nine out of ten UA Scholar graduates from the class of 2004 remained in Alaska in 2006, compared to 80 percent all other graduates.

Year of Graduation	Number of UA Scholar Graduates	Percent of UA Scholar Graduates Living in Alaska
2000	1	100%
2001	8	75
2002	19	95
2003	77	79
2004	152	90
2005	174	98
2006	260	100
Total	691	95%

#### Table 26. Percent of UA Scholar Graduates Living in Alaska in 2006

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

UA GRADUATES WHO STAY IN ALASKA AFTER GRADUATION: HIGH DEMAND DEGREE ANALYSIS

Providing education and training for students to pursue careers in the state's high demand fields is part of the University of Alaska's mission. Several occupations have been identified by UA and the Alaska Department of Labor as high demand. These "best bet" occupations have growing job availability and higher than average wages. The chart below shows the percentage of these graduates who are still in Alaska.



Figure 19. Percent of UA Graduates Living in Alaska in 2006 by High Demand Degree Classes of 1995, 2005 and 2005

Source: Data from University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

The following charts look at selected high demand degree retention rates by graduating class. Allied health, health, and teacher education all have retention rates that are consistently much higher than the average rate. Business, finance, and management graduates stay in Alaska at rates similar to the average. Nursing is interesting because graduates from the classes of 1989 to 1996 are less likely to still be in Alaska than the average UA graduate, while 87 percent of nursing graduates from 1997 onwards have stayed in-state, compared to the average UA rate of 73 percent for those years. For degree counts by year, please see Appendix Data.



#### Figure 20. Percent of UA Graduates (Classes of 1989-2006) Living in Alaska in 2006 by Year of Graduation and High Demand Degree

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

## **Earnings of UA Graduates**

One measure of the economic impact of higher education is the earnings of students. University of Alaska graduates living in Alaska from the graduating classes of 1989 through 2006 earned more than a billion dollars in 2006. The average wage of these graduates was \$42,315 (excluding the class of 2006). Each year, as a UA degree "ages," it gains approximately three and a half percent in earnings value. Those graduating in 1989 earned 72 percent more than 2005 graduates. These numbers include those with certificates, associate degrees, bachelor's, master's, as well as PhD's.





1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

Note: Earnings are only from graduates working in Alaska in the private sector, state and local government. Graduates working for federal (military or civilian), self-employed, or living out of state are not included.

### Earnings by Degree

As expected, UA graduates with master's degrees earn more than those with bachelor's degrees, who in turn earn more than those with associate's degrees. Due to the small number of PhD candidates, and the fact that so many leave the state for work, it is difficult to calculate statistically meaningful PhD earnings. (For the number of degrees earned per year, see Appendix Data.)



# Figure 22. Average FY06 Earnings of UA Graduates from the Classes of 1989, 1994, 1999, and 2004 Living in Alaska, by Degree

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

Note: Earnings are only from graduates working in Alaska in the private sector, state and local government. Graduates working for federal (military or civilian), self-employed, or living out of state are not included.
### Earnings of UA Graduates by Gender

Following national trends, men in Alaska with similar levels of educational attainment significantly out-earn their female cohorts. Women with UA degrees received from 1989 through 2006 earned an average of 75 cents for each dollar to that of their male counterparts in 2006, an average salary of \$37,464 versus \$50,441.

Female UA graduates from the class of 2005 earned 86 cents for each dollar earned by male 2005 graduates. In 2006, female graduates from the class of 1993 earned 66 cents for each dollar earned by male graduates from the same class. Nationally, women one year out of college working full time earn 80 percent as much as men, and 69 percent of men 10 years after graduation.<sup>58</sup> (For gender counts by graduation year, see Figure 7.)



#### Figure 23. Average FY06 Earnings of UA Graduates Living in Alaska by Gender and by Graduation Year

Year of Graduation From the University of Alaska

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

Note: Earnings are only from graduates working in Alaska in the private sector, state and local government. Graduates working for federal (military or civilian), self-employed, or living out of state are not included.

<sup>&</sup>lt;sup>58</sup> Goldberg Dey, Judy. "Behind the Pay Gap." April 2007. AAUW Educational Foundation.

### Earnings of UA Graduates by Ethnicity

While the gender gap in UA graduate earnings follows national trends, the ethnicity gap does not. According to the 2000 US Census, the median earnings of American Indians and Alaska Natives working full time was 77 percent of the median earnings of whites nationally, and 82 percent in Alaska. However, the data indicates that Alaska Natives with University of Alaska bachelor's and master's degrees out-earned whites and other minorities in 2006.

Women make up nearly two thirds (63 percent) of the data set for all of Alaska's working UA graduates from the classes of 1989 through 2006, and Alaska Native women make up a full three-quarters of all Alaska Natives who earned degrees in this period. Because of this, it is useful to break the earnings by degree and ethnicity into gender. (For counts of degrees earned by ethnic group, see Appendix Data.)

EARNINGS OF UA GRADUATES BY ETHNICITY: BACHELOR'S DEGREE ANALYSIS

As illustrated in the following charts Alaska Native women from 15 of the 17 graduation classes out-earned their white counterparts in 2006.

#### Figure 24. Average FY06 Earnings of Female UA Graduates with Bachelor's Degrees Living in Alaska by Year of Graduation and Gender



Year of Graduation	From the	University	v of Alaska

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Alaska Native Grads	28	25	42	59	52	55	65	62	69	60	56	78	72	71	90	69	67
White Grads	371	427	503	529	566	654	691	701	641	684	652	582	595	616	597	608	597
Tracked AK Native	20	18	29	38	32	41	47	41	50	46	48	61	58	56	68	50	62
Tracked White Grads	165	196	221	240	249	317	347	326	294	373	355	338	333	361	377	411	463

Ethnicity earnings show less consistent trends for men with bachelor's degrees. Alaska Native men earned more in eight of the 15 graduation years in that data set. Given the relatively small sample sizes, it is important to note that the presence of a single individual with significantly higher-than-average earnings can impact the average for a class of graduates.





	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
AK Native Grads	21	20	20	26	31	30	30	25	32	32	19	27	26	28	19
White Grads	325	346	381	415	469	455	458	462	392	403	396	390	358	407	406
Tracked AK Native	7	14	15	14	17	22	24	17	18	27	11	23	21	24	17
Tracked White Grads	158	161	175	192	206	211	234	241	218	188	197	229	208	247	306

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

Note: Earnings are only from graduates working in Alaska in the private sector, state and local government. Graduates working for federal (military or civilian), self-employed, or living out of state are not included.

#### EARNINGS OF UA GRADUATES BY ETHNICITY: MASTER'S DEGREE ANALYSIS

Alaska Natives earned 277 master's degrees between 1989 and 2006. ADOL has earnings information for 209 of these degree holders, including 159 women and 50 men. However, while the combined earnings averages are available, ADOL does not provide earnings information for groups under 4 persons, thus limiting the analysis to 26 Alaska Native men and 149 Alaska Native women. For this reason, the master's degree ethnic analysis was limited to females. Alaska Native women with Master's degrees from eight of the ten graduation classes out-earned their white counterparts.

# Figure 26. Average FY06 Earnings of Female UA Graduates with Master's Degrees Living in Alaska by Year of Graduation



Year of Graduation From the University of Alaska

	1997	1998	1999	2000	2001	2002	2003	2004	2005
AK Native Grads	14	6	15	9	15	15	17	26	22
White Grads	243	207	227	216	178	168	185	243	270
Tracked AK Native	10	5	10	9	12	15	14	25	18
Tracked White Grads	132	111	123	141	113	118	124	179	218

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section.

Note: Earnings are only from graduates working in Alaska in the private sector, state and local government. Graduates working for federal (military or civilian), self-employed, or living out of state are not included.

### Links between UA Degrees and Alaska Employment

Another way to measure the significance of a UA diploma in Alaska is to look at how many graduates actually use the training and expertise they gained while pursuing their degrees in the workplace.

The Alaska Department of Labor and Workforce Development has developed method to measure the relevance of University of Alaska degree work to the subsequent employment of UA graduates in Alaska.

Training-related employment is determined by a match of the Classification of Instructional Programs (CIP) codes connected to UA degrees, and the Standard Occupational Classification (SOC) codes provided by employers on quarterly contribution reports. The Alaska Department of Labor and Workforce Development used an existing "federal crosswalk" that was set up to identify training related matches, and customized it for use in Alaska.

According to available data, slightly more than three-quarters of UA graduates (76 percent) were employed in training related jobs in 2006. This percent does not vary much based on year of graduation.

# Table 27. UA Graduates with Training Related Employmentby Year of Graduation

1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
73%	80%	79%	79%	77%	76%	78%	79%	79%	79%	77%	78%	79%	76%	74%	71%	71%

UA graduates with Master's degrees and Associate of Arts degrees are most likely to use the training they received at the university in their careers, with approximately five out of six employed graduates living in Alaska having training related employment. Master's degrees from UAS were directly used at a slightly higher rate – 88 percent. Looking at the three main campuses, UAS graduates tend to use the training provided by their degrees more than UAF graduates.

Type of Degree	% of Total
License	81%
Certificate	68
Associate of Applied Science	71
Associate of Arts	83
Bachelor's	73
Master's	84
Doctoral	72

# Table 28. UA Graduates With Training Related Employmentby Type of Degree

#### Table 29. UA Graduates with Training Related Employment by Main Campus

Campus	% of Total
UAS	80%
UAA	75
UAF	73

Source: University of Alaska and Alaska Department of Labor and Workforce Development, Research and Analysis Section. Notes: Earnings are only from graduates working in Alaska in the private sector, state and local government with SOC data. Graduates working for federal (military or civilian), selfemployed, or living out of state are not included.

The following table looks at the percent of UA graduates with training related employment by graduate origin and current work location. Again, most results do not vary widely; however, there are some interesting deviations. Eighty-five percent of graduates from the Lake and Peninsula Borough work in fields they trained for at UA, while only 46 percent of UA graduates currently working in the Lake and Peninsula area work in training related occupations. Nine out of ten UA graduates (89 percent) from Aleutians East Borough have training related employment, and nine out of ten UA graduates (90 percent) working in Dillingham are in training related fields. While Yakutat has relatively low percentages (58 percent and 56 percent) for both categories, there were only 17 graduates from which to derive these percentages. Other borough data sets were significantly larger. (For Alaska borough origin counts, see Appendix Data.)

Location	Graduates From Location In Degree- Related Field	Graduates Working in Location in Degree-Related Field
Aleutians East	89%	70%
Aleutians West	85	76
Anchorage	75	75
Bethel	83	84
Bristol Bay	74	63
Denali	74	68
Dillingham	80	90
Fairbanks North Star	72	71
Haines	68	79
Juneau	80	80
Kenai Peninsula	75	77
Ketchikan Gateway	78	75
Kodiak Island	72	76
Lake & Peninsula	85	46
Matanuska-Susitna	75	78
Nome	79	80
North Slope	68	66
Northwest Arctic	75	85
Prince Of Wales	77	85
Sitka	76	78
Skagway-Hoonah- Angoon	84	75
Southeast Fairbanks	77	74
USA Outside Alaska	67	NA
Valdez-Cordova	71	74
Wade Hampton	78	82
Wrangell-Petersburg	78	73
Yakutat	58	56
Yukon-Koyukuk	75%	77%

# Table 30. UA Graduates with Training Related Employment by Placeof Origin and Place of Occupation, 2006

## **Appendix Data**

Table 31 Count of Graduates by Year of Graduation and Degree Table 32 Count of Graduates by Gender Table 33 Count of Graduates by Campus (MAU) Table 34 Count of Graduates by Origin Table 35 Count of Graduates by Year of Graduation and Ethnicity Table 36 Count of Graduates by Year of Graduation, Degree, Gender, and Ethnicity=White Table 37 Count of Graduates by Year of Graduation, Degree, Gender, and Ethnicity=Alaska Native Table 38 Count of Graduates by Year of Graduation, Degree, Gender, and Ethnicity=Other Minority Table 39 Count of UA Graduates From Alaska by Borough of Origin

Class of	Certificate	Associate of Applied Science	Associate of Arts	Bachelor's	Master's	Doctoral Degree	Total
1989	128	347	251	789	198	10	1,723
1990	132	324	295	875	240	5	1,871
1991	161	292	282	993	254	10	1,992
1992	146	362	350	1,053	331	13	2,255
1993	152	405	378	1,150	304	10	2,399
1994	265	468	396	1,292	352	24	2,797
1995	245	432	401	1,428	386	19	2,911
1996	207	451	439	1,411	420	28	2,956
1997	208	437	422	1,393	465	20	2,945
1998	237	441	414	1,385	429	34	2,940
1999	187	434	412	1,271	422	27	2,753
2000	208	431	328	1,244	443	20	2,674
2001	179	433	374	1,232	346	27	2,591
2002	187	511	344	1,281	354	19	2,696
2003	187	487	361	1,245	428	36	2,744
2004	224	555	370	1,288	501	20	2,958
2005	222	534	276	1,304	571	25	2,932
2006	254	631	308	1,443	510	21	3,167
Total	3,529	7,975	6,401	22,077	6,954	368	47,304

Table 31. Count of Graduates by Year of Graduation and Degree

Source: University of Alaska and Alaska Department of Labor and Workforce Development. Note: There were also 80 licenses earned.

UA Class of	Male Graduates	Female Graduates
1989	797	926
1990	821	1,050
1991	886	1,106
1992	935	1,320
1993	1,006	1,394
1994	1,183	1,617
1995	1,193	1,719
1996	1,229	1,728
1997	1,168	1,779
1998	1,198	1,742
1999	1,026	1,726
2000	1,018	1,653
2001	946	1,645
2002	1,061	1,635
2003	1,024	1,720
2004	1,110	1,848
2005	1,114	1,833
2006	1,235	1,988
Total	18,950	28,429

Table 32. Count of Graduates by Gender

Class of	UAA	UAF	UAS
1989	1,074	508	141
1990	1,192	552	127
1991	1,118	716	158
1992	1,382	708	165
1993	1,516	704	180
1994	1,718	917	165
1995	1,792	903	217
1996	1,802	928	227
1997	1,702	1,015	230
1998	1,681	1,055	204
1999	1,625	914	214
2000	1,476	939	259
2001	1,459	920	212
2002	1,546	933	217
2003	1,592	918	234
2004	1,718	971	269
2005	1,687	1,007	254
2006	1,843	1,082	298
Total	27,923	15,690	3,771

### Table 33. Count of Graduates by Campus (MAU)

Class of	Urban Alaska	Rural Alaska	Outside of Alaska
1989	1,395	129	131
1990	1,576	154	150
1991	1,609	203	199
1992	1,860	196	199
1993	1,939	197	235
1994	2,147	301	304
1995	2,241	268	369
1996	2,256	272	414
1997	2,104	290	435
1998	2,166	255	333
1999	2,072	207	294
2000	1,889	253	347
2001	1,844	241	375
2002	1,868	279	406
2003	1,929	284	443
2004	2,042	370	499
2005	2,041	358	503
2006	2,241	414	533
Total	35,219	4,671	6,169

Table 34. Count of Graduates by Origin

Source: University of Alaska and Alaska Department of Labor and Workforce Development. In this case, urban Alaska includes the Municipality of Anchorage, the Fairbanks North Star Borough, the City and Borough of Juneau, the Matanuska-Susitna Borough, the Kenai Peninsula Borough, the City and Borough of Sitka, and the Ketchikan Gateway Borough. Rural Alaska includes all other areas of the state.

Class of	Alaska Native	Other Minority	White	Not Reported
1989	89	111	1,320	203
1990	101	136	1,534	100
1991	142	144	1,634	72
1992	155	183	1,841	76
1993	175	205	1,937	83
1994	215	249	2,224	112
1995	236	301	2,285	90
1996	202	281	2,365	109
1997	248	301	2,266	132
1998	256	293	2,329	62
1999	228	291	2,170	64
2000	261	278	2,066	69
2001	213	292	2,017	69
2002	250	299	2,060	87
2003	260	320	2,081	83
2004	342	337	2,191	88
2005	299	355	2,184	110
2006	335	379	2,405	104
Total	4,007	4,755	36,909	1,713

### Table 35. Count of Graduates by Year of Graduation and Ethnicity

Class of	Certificate	Associate of Applied Science	Associate of Arts	Bachelor's	Master's	Doctoral Degree	Total
1989	88	285	197	610	133	7	1,320
1990	104	265	234	743	185	3	1,534
1991	122	246	221	828	213	4	1,634
1992	118	301	274	875	269	4	1,841
1993	121	337	286	947	237	8	1,936
1994	175	382	299	1,069	286	12	2,223
1995	161	355	288	1,160	309	11	2,284
1996	140	370	335	1,156	343	21	2,365
1997	121	337	301	1,099	394	13	2,265
1998	118	342	320	1,146	376	27	2,329
1999	125	336	295	1,044	349	21	2,170
2000	122	330	239	986	372	17	2,066
2001	122	333	263	991	288	20	2,017
2002	126	399	226	1,006	292	11	2,060
2003	114	376	256	955	351	29	2,081
2004	118	386	256	1,015	398	18	2,191
2005	121	391	192	1,003	447	17	2,171
2006	135	476	208	1,121	409	13	2,362
Total	2,251	6,247	4,690	17,754	5,651	256	36,849

#### Table 36. Count of Graduates by Year of Graduation, Degree and Ethnicity=White

Source: University of Alaska and Alaska Department of Labor and Workforce Development. Note: There were also 60 licenses earned by White students.

Class of	Certificate	Associate of Applied Science	Associate of Arts	Bachelor's Master's		Doctoral Degree	Total
1989	13	10	19	43	4	0	89
1990	14	25	26	31	5	0	101
1991	27	23	26	63	3	0	142
1992	16	20	32	79	79 7		155
1993	16	31	40	72	16	0	175
1994	67	28	33	81	5	0	214
1995	48	31	49	96	12	0	236
1996	42	32	29	92	7	0	202
1997	68	32	31	99	18	0	248
1998	90	45	29	85	7	0	256
1999	52	34	31	88	21	2	228
2000	63	45	29	110	13	0	260
2001	31	38	34	91	19	0	213
2002	51	50	33	98	17	1	250
2003	41	44	38	116	21	0	260
2004	80	79	49	97	37	0	342
2005	64	80	38	86	30	0	298
2006	91	67	45	92	35	0	330
Total	874	714	611	1519	277	4	3,999

Table 37. Count of Graduates by Year of Graduation, Degree and Ethnicity=Alaska Native

Source: University of Alaska and Alaska Department of Labor and Workforce Development. Note: There were also seven licenses earned by Alaska Natives.

Class of	Certificate	Associate of Applied Science	Associate of Arts	Bachelor's	Master's	Doctoral Degree	Total
1989	13	24	17	46	11	0	111
1990	6	24	23	55	26	2	136
1991	8	22	26	63	21	4	144
1992	9	33	36	66	35	4	183
1993	12	27	38	92	35	1	205
1994	14	45	56	90	34	9	248
1995	24	37	54	128	51	7	301
1996	16	41	64	106	49	5	281
1997	12	54	66	125	41	2	300
1998	16	47	60	124	39	7	293
1999	8	49	74	119	37	4	291
2000	16	44	50	121	44	3	278
2001	19	48	61	128	31	5	292
2002	5	44	71	145	28	6	299
2003	24	54	57	140	39	6	320
2004	21	68	49	151	46	2	337
2005	31	44	34	158	80	7	354
2006	12	68	43	190	53	6	372
Total	266	773	879	2,047	700	80	4,745

# Table 38. Count of Graduates by Year of Graduation, Degree and<br/>Ethnicity=Other Minority

Source: University of Alaska and Alaska Department of Labor and Workforce Development. Note: There were also ten licenses earned.

Borough of Origin	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Total
Aleutians East	0	0	3	2	1	4	1	1	2	4	2	5	3	5	3	3	4	9	52
Aleutians West	1	1	3	3	4	6	2	8	10	7	6	5	4	9	10	4	9	8	100
Anchorage	785	872	885	1,01 2	1,02 9	1,12 4	1,19 2	1,20 4	1,10 3	1,16 8	1,06 1	945	932	896	932	1,02 1	1,04 2	1,10 4	18,30 7
Bethel	14	19	23	27	28	40	21	29	33	37	20	26	30	35	33	53	33	49	550
Bristol Bay	1	1	2	2	2	3	3	7	4	4	2	2	9	4	4	4	8	7	69
Denali	2	5	4	6	5	4	0	11	2	4	10	6	8	3	5	7	10	3	95
Dillingham	8	5	15	3	11	19	10	11	10	15	11	8	10	16	20	15	29	12	228
Fairbanks NS	268	301	378	399	418	488	486	506	484	541	492	473	447	463	444	465	420	489	7962
Haines	3	4	5	3	2	7	2	1	2	2	1	2	4	6	14	4	12	12	86
Juneau	105	106	119	114	105	99	116	119	101	94	116	120	100	95	109	99	114	117	1948
Kenai Peninsula	99	101	86	143	134	159	168	144	159	128	153	116	156	161	172	160	142	192	2573
Ketchikan	21	26	26	31	51	26	27	30	27	37	17	30	23	32	37	45	45	45	576
Kodiak Island	17	20	18	32	31	41	45	41	46	32	31	41	33	40	52	48	55	57	680
Lake & Pen	0	3	1	3	1	6	7	5	7	8	5	5	4	4	3	5	5	11	83
Mat-Su	98	157	98	141	176	226	214	222	207	176	207	177	155	196	214	212	246	262	3384
Nome	11	12	13	14	14	22	20	12	15	11	12	12	16	16	11	22	22	28	283
North Slope	2	3	7	1	3	7	7	4	4	15	6	7	8	6	4	14	9	20	127
Northwest Arctic	7	8	10	6	8	8	7	9	26	10	8	14	9	9	5	22	14	20	200
Prince Of Wales	4	4	6	2	4	6	5	8	6	5	1	9	5	5	6	13	6	13	108
Sitka	19	13	17	20	26	25	38	31	23	22	26	28	31	25	21	40	32	32	469
SKG-HNH-ANG	2	0	3	5	4	3	10	8	6	8	4	5	9	5	11	7	11	16	117
SE Fairbanks	17	17	15	25	14	26	26	26	15	19	18	19	18	19	19	21	27	30	371
Valdez-Cordova	24	28	35	35	35	43	47	40	45	32	38	37	31	46	46	46	43	45	696
Wade Hampton	6	6	15	8	5	19	11	16	15	7	7	13	7	11	6	16	15	13	196
WRA-PBS	8	6	7	5	10	11	9	10	19	10	7	9	12	15	7	19	15	23	202
Yakutat	0	0	2	0	2	2	1	0	0	1	1	2	0	1	2	1	1	1	17
Yukon-Koyukuk	2	12	16	14	13	24	34	25	23	24	17	26	21	24	23	46	30	37	411
USA Outside AK	2	13	15	18	37	42	17	23	32	167	74	109	106	167	188	246	260	296	1812

Table 39.Count of UA Graduates from Alaska by Borough of Origin