

Chapter One

Mission and Core Themes

Core Themes

Educate

Undergraduate and Graduate Students

Discover

Through Research, Scholarship, and Creative Activity including an Emphasis on the North and its Peoples

Prepare

Alaska's Career, Technical, and Professional Workforce

Connect

Alaska Native, Rural, and Urban Communities through Contemporary and Traditional Knowledge

Engage

Alaskans via Lifelong Learning, Outreach, and Community and Economic Development

Chapter One: Mission, Core Themes, and Expectations

Eligibility Requirements

The University of Alaska is established by the constitution of the state of Alaska, Article VII, Section 2. The Board of Regents and its authority over the University of Alaska are established by the constitution of the state of Alaska, Article VII, Section 3. Statutory provisions related to the authority of the Board of Regents over the University of Alaska are contained in AS 14.40. The statements of these articles and law are in the [Board of Regents bylaws](#). (ER 2)

UAF's mission and core themes are defined in the following sections. The Board of Regents approved the mission statement in 2006 and the core themes were presented to the board in December 2010. The Statewide Academic Council, with the concurrence of President Gamble, decided that Regents' Policy and University Regulation did not require formal approval of the core themes. UAF's purpose is to serve the educational interests of students, to ensure that our principal programs lead to recognized degrees, and to devote our resources to support our educational mission and core themes. (ER 3)

Standard 1.A: Mission

Mission Statement

The following UAF mission statement was approved by the UA Board of Regents on June 8, 2006, and is contained in its policy (10.01.03):

The University of Alaska Fairbanks, the nation's northernmost Land, Sea and Space Grant university and international research center, advances and disseminates knowledge through teaching, research and public service with an emphasis on Alaska, the circumpolar North and their diverse peoples. UAF – America's arctic university – promotes academic excellence, student success and lifelong learning.

The mission statement is printed in the annual UAF catalog and on the [UAF web page](#). The mission is guided by and consistent with the following UA System mission statement (established on Oct. 6, 2000, and contained in Regents' Policy [10.01.01](#)):

The University of Alaska inspires learning, and advances and disseminates knowledge through teaching, research, and public service, emphasizing the North and its diverse peoples.

The [UAF Strategic Plan 2010](#) states the following:

As the nation's arctic university, UAF is defined by its location in the circumpolar North, Alaska's diverse cultures, rich history, unique geography, and environment. The students, faculty, staff and alumni, in honoring the public trust, commit themselves to the pursuit of excellence and work of the highest possible quality. We hold the following values to be the cornerstone of our identity as an academic community:

*Student success
Vitality and creativity of new discoveries and scholarship
Access to comprehensive higher education and lifelong learning
Sharing assets and resources with Alaska communities through active engagement
Independence of thought and action in the pursuit of knowledge
Diversity of our students and employees
Accountable for and efficient use of university resources
Promoting sustainable living in the North*

Our vision is that UAF will:

Be the university of choice for Alaska scholars

Offer distinctive opportunities in undergraduate and graduate education that take advantage of our location in the Far North

Provide excellent educational services at the point of need for Alaska Native and rural populations

Spearhead integrated research, emphasizing our complex high-latitude physical, biological and social systems

Link research discoveries with teaching, service, and community engagement

Create innovative collaborations with communities, businesses, and governments that meet state, national, and global needs

Demonstrate ways in which gender, racial, and cultural diversity strengthen the university and society

(1.A.1)

Mission Core Themes

UAF is distinctive in the UA System for its research-intensive mission; PhD programs; Land, Sea, and Space Grant status; statewide outreach through the Cooperative Extension Service and Marine Advisory Program; and service to rural and Alaska Native peoples of Interior, northern, and western Alaska.

Guided by and consistent with our mission, values, and vision, the following are UAF's core themes:

- Educate: Undergraduate and Graduate Students
- Discover: Through Research, Scholarship, and Creative Activity including an Emphasis on the North and its Peoples
- Prepare: Alaska's Career, Technical, and Professional Workforce
- Connect: Alaska Native, Rural, and Urban Communities through Contemporary and Traditional Knowledge
- Engage: Alaskans via Lifelong Learning, Outreach, and Community and Economic Development

As a state research university and Land, Sea, and Space Grant institution, UAF advances (Discover) and disseminates (Educate, Prepare, Engage, Connect) knowledge through teaching, research, and public service. Because of UAF's location in interior Alaska, we have a strong commitment to maintain and further develop partnerships with Alaska Native and rural communities (Connect). The mission emphasis on Alaska, the circumpolar North and their diverse peoples is represented in all our core themes with the exception of Educate. The Educate theme addresses our broad national and international instructional responsibility within which we strive for academic excellence and student success. Lifelong learning is addressed specifically in the Engage theme but is evident in Educate and Connect as well. Thus, our core themes manifest the essential elements of UAF's mission and collectively encompass our mission.

UAF aligns its research, educational, and public service activities to fulfill these essential elements of its mission through cooperation and collaboration among all of its units. For example, UAF conducts extensive climate research because climate change will have important impacts on the forests, tundra, wildlife, and fisheries of Alaska, and those will in turn impact northern peoples who rely on these environmental resources. Extension units engage the public around the state by sharing the useful information provided by research and provide a feedback mechanism for public priorities for research. In addition, the drier climate affecting interior Alaska in recent years has resulted in an increase in the number and severity of wildfires. The emergency services associate of applied science program prepares graduates for wildland fire control.

Excellent research opportunities improve the educational outcomes of undergraduate and graduate students and their degree completion rates. The interconnections among UAF's themes are too numerous to fully describe, but these examples show that all parts of the university contribute to fulfilling our mission.

Interpretation and Articulation of Mission Fulfillment

UAF is dedicated to maintaining high standards and continuously assessing mission fulfillment. The core themes are connected to our mission, vision, values, and strategic planning, as illustrated in the previous section. These connections provide the context for defining mission fulfillment using indicators of achievement for the objectives for each theme.

The rubric on the following pages identifies for each core theme a subset of indicators of achievement and thresholds indicating when mission fulfillment is surpassed (Likert scale index 5), met (index 3), or below expectation (index 1). We define mission fulfillment as achieving an average index value of 3.0 or better for each subset of indicators and having no more than one indicator in each theme below expectation. In addition, to illustrate that UAF is more than the sum of its parts, a few examples demonstrating the integration of the themes will be used to assess mission fulfillment holistically.

A subset of indicators is used to define mission fulfillment because many of the indicators are new and their utility for assessing mission fulfillment is uncertain. Ratios, e.g., publications per faculty FTE, were used whenever possible so external factors, such as major budget reductions, will not compromise our definition of mission fulfillment. This subset of indicators and the target ratios will be revised as we collect and summarize information over future accreditation cycles.

Our assessment of both qualitative and quantitative indicators will address natural variation and external factors, such as the economy, which may impact results. A few indicators (e.g., first-time full-time student retention rate and graduation rates) have natural boundaries and continuous improvement is naturally limited.

Some indicators of achievement are based on productivity; these are mandated by the UA System in our Performance-Based Budgeting process. While such indicators do not necessarily reflect quality, they are important within our state. This inclusion is consistent with our stated value to be accountable for and to make efficient use of state resources. In addition, UAA, a pilot institution in the new accreditation process, included these indicators in its indicators of achievement and definition of mission fulfillment. UA System [performance metrics](#) are as follows:

- High-demand job area degrees awarded
- First-time, full-time undergraduate retention
- Student credit hours
- Grant-funded research expenditures
- University generated revenue
- Non-credit instructional productivity

Table 1.1

Mission Fulfillment Definition Rubric by Theme					
Likert Scale	5	4	3	2	1
Theme	Surpasses Mission Expectation		Meets Mission Expectation		Below Mission Expectation
Educate: Undergraduate and Graduate Students	More than 95% of programs have direct evidence that students are achieving intended learning outcomes.		75 to 85% of programs have direct evidence that students are achieving intended learning outcomes.		Less than 50% of programs have direct evidence that students are achieving intended learning outcomes.
	Average student performance on all programmatic national examinations with at least 5 students assessed is above the 75th percentile.		Average student performance on all programmatic national examinations with at least 5 students assessed is between the 40th and 60th percentile.		Average student performance on some programmatic national examinations with at least 5 students assessed is below the 25th percentile.
	First-time full-time undergraduate retention rate is at least 70%.		First-time full-time undergraduate retention rate is 60 to 65%.		First-time full-time undergraduate retention rate is less than 55%.
	Average senior ETS proficiency profile score is more than the 70th percentile for doctoral I and II institutions.		Average senior ETS proficiency profile score is between the 40th and 60th percentile for doctoral I and II institutions.		Average senior ETS proficiency profile score is less than the 30th percentile for doctoral I and II institutions.
	Employment placement of master's and PhD graduates in degree-appropriate positions within one year of graduation is more than 85%.		Employment placement of master's and PhD graduates in degree-appropriate positions within one year of graduation is 65 to 75%.		Employment placement of master's and PhD graduates in degree-appropriate positions within one year of graduation is less than 50%.
	Average number of independently reviewed publications is more than 1.5 per PhD graduate two years after graduating.		Average number of independently reviewed publications is 0.75 to 1.25 per PhD graduate two years after graduating.		Average number of independently reviewed publications is less than 0.5 per PhD graduate two years after graduating.
Discover: Through Research, Scholarship, and Creative Activity including an Emphasis on the North and its Peoples	Number of peer-reviewed publications per year per faculty member with research workload is more than 1.5.		Number of peer-reviewed publications per year per faculty member with a research workload is 0.75 to 1.25.		Number of peer-reviewed publications per year per faculty member with a research workload is less than 0.50.
	Grant or contract research expenditures per faculty member are more than \$200,000 per year.		Grant or contract research expenditures per faculty member are \$75,000 to \$125,000 per year.		Grant or contract research expenditures per faculty member are less than \$50,000 per year.
	Annual direct expenditures in areas of significant importance to Alaska and the North exceed 80% of research expenditures.		Annual direct research expenditures in areas of significant importance to Alaska and the North are 65 to 70% of research expenditures.		Annual direct expenditures in areas of significant importance to Alaska and the North are less than 55% of research expenditures.
	Number of creative exhibitions and performances per faculty FTE in fine and performing arts is more than 1.25.		Number of creative exhibitions and performances per faculty FTE in fine and performing arts is 0.75 to 1.0.		Number of creative exhibitions and performances per faculty FTE in fine and performing arts is less than 0.50.
	Percentage of faculty with research workloads reporting at least one paper with 12 or more citations exceeds 25%.		Percentage of faculty with research workloads reporting at least one paper with 12 or more citations is 15 to 20%.		Percentage of faculty with research workloads reporting at least one paper with 12 or more citations is less than 10%.

Mission Fulfillment Definition Rubric by Theme					
Likert Scale	5	4	3	2	1
Theme	Surpasses Mission Expectation		Meets Mission Expectation		Below Mission Expectation
Prepare: Alaska’s Career, Technical, and Professional Workforce	Number of high-demand job area program graduates is more than 775.		Number of high-demand job area program graduates is 580 to 650.		Number of high-demand job area program graduates is less than 460.
	More than 75% of programs with state or national exams for certification have pass rates of 80% or higher.		40 to 60% percent of programs with state or national exams for certification have pass rates of 80% or higher.		Less than 25% percent of programs with state or national exams for certification have pass rates of 80% or higher.
Connect: Alaska Native, Rural, and Urban Communities through Contemporary and Traditional Knowledge	Partnerships have significant and lasting impacts, are two-sided in terms of shared resources and responsibility, and represent every area of the state where UAF is active.		Partnerships have impact, share resources and responsibility, are lasting, and well distributed geographically.		Partnerships lack impact and are one-sided in terms of shared resources and responsibility, short lived, and poorly distributed geographically.
	Alaska Native and rural students are graduating in a proportion to enrollment at 95 to 100 % of the rate of other students.		Alaska Native and rural students are graduating in a proportion to enrollment at 70 to 85 % of the rate of other students.		Alaska Native and rural students are graduating in a proportion to enrollment at less than 60% of the rate of other students.
Engage: Alaskans via Lifelong Learning, Outreach, and Community and Economic Development	Non-credit instructional productivity units earned are more than 5,500.		Non-credit instructional productivity units earned are 4,100 to 4,700.		Non-credit instructional productivity units earned are less than 3,300.
	Non-credit workshops organized by CES, MAP, and AFES have more than 16,000 participants annually, and are well distributed topically and geographically across Alaska.		Non-credit workshops organized by CES, MAP, and AFES have 12,000 to 14,000 participants annually, and are distributed topically and geographically across Alaska.		Non-credit and non-CEU workshops organized by CES, MAP, and AFES have less than 10,000 participants annually or are not well distributed topically or geographically across Alaska.
	Intellectual property procedures and practices result in 4 or more non-disclosure agreements between UAF and private business.		Intellectual property procedures and practices result in 2 non-disclosure agreements between UAF and private business.		Intellectual property procedures and practices do not produce any non-disclosure agreements between UAF and private business.
	Partnerships exist with 4 or more business or community based economic development groups.		Partnerships exist with at least 2 businesses or community based economic development groups.		No partnership agreements exist with business or community based economic development groups.

Note: The rubric utilizes a 1 to 5 Likert scale index that assigns a value of 5 when the mission is surpassed, a 3 when the mission is met, and a 1 when a component of our mission is not being fulfilled. When an indicator is assessed as falling between the rubric statements for surpassing and meeting mission fulfillment, a 4 is assigned. Similarly, when an indicator is assessed as falling between the rubric statements for meeting mission fulfillment and non-fulfillment, a 2 is assigned.

(1.A.2)

Standard 1.B: Core Themes

Core Theme 1 Educate: Undergraduate and Graduate Students

Brief Description

In alignment with our mission to disseminate knowledge and promote academic excellence, student success, and lifelong learning, UAF offers educational programs for occupational endorsements, certificates, and associate, bachelor's, master's, and PhD degrees. Programs include vocational-technical, arts, sciences, and professions. Pre-college preparation is also offered to help prepare students for postsecondary education. UAF has 18 PhD programs in areas of particular strength including the sciences, engineering, psychology, indigenous studies, and anthropology, and an active interdisciplinary PhD program. The diverse collection of programs includes 167 degrees and 33 certificates in 127 disciplines. This collection of programs is a result of student, local, and state demand, our history as Alaska's first university, our strength in research, and our geographic isolation. As a Land, Sea, and Space Grant institution, baccalaureate, master's, and doctoral programs are infused with a research focus and our commitment to the state of Alaska and the northern regions.

UAF acts continuously to assess and improve the educational experience for its students. Each certificate and degree program is evaluated every five years in a program review process, which includes a review of each program's assessment of student learning outcomes. Faculty members evaluate courses in the undergraduate Core Curriculum every year. Students in every course evaluate their teachers at the end of each semester. UA Statewide conducts the Noel Levitz survey and a graduate survey, and UAF conducts the National Survey of Student Engagement (NSSE) and Community College Survey of Student Engagement (CCSSE) to gather broad student input on our programs and services. Results are used to change and improve education and related services through a continuous improvement process.

While all our themes integrate and overlap, the Prepare and Connect themes, in particular, overlap with the Educate theme. Historically, miners, fishermen, welders, and engineers from outside the state were brought in to meet local employment demands. In cooperation with the state of Alaska, UAF is working to make more employment opportunities available to Alaskans by preparing graduates for regional and state high-demand job areas. Given the large geographic size of the state and the lack of a fully developed road system, providing educational access to rural and Alaska Native communities is vital. These special responsibilities have led us to identify two distinct themes, Prepare and Connect, to recognize and assess these special components of our mission.

The objectives and indicators for the Educate theme are given below with indicators of achievement and the rationale for each:

Objective: Meet standards for learning outcomes of academic programs

Indicator: Students achieve intended learning outcomes within their programs.

Evidence that students are achieving intended learning outcomes within their program is based on the outcomes from UAF's five-year internal program review process. The findings of the most recent review for programs with specialized accreditation are also addressed.

Regents' Policy and University Regulation (10.06) require academic program review every five years, and specific quality, productivity, and efficiency measures are addressed in that process. An institution-wide Faculty Program Review Committee examines information concerning the quality, productivity, and efficiency of each program including any specialized accreditation reviews, comments on programmatic strengths and weaknesses, and suggestions for improvement. The committee recommends whether the

program should be continued or discontinued and any improvements that need to be made. An Administrative Program Review Committee examines the recommendation and summary drafted by the Faculty Program Review Committee, asks for further information from the program if necessary, and recommends whether the program should be continued or discontinued, and any improvements that need to be made. The provost reviews the recommendations and comments by these two committees and makes a recommendation to Chancellor's Cabinet, which informs a final decision by the chancellor.

During this process the institution-wide Faculty Program Review Committee answers the following two questions for each certificate or degree program:

- What is the evidence that students are achieving the program's intended learning outcomes?
- Have curricular improvements been made as a result of the outcomes assessment process?

Our first indicator for this objective is the proportion of programs that the Faculty Program Review Committee, Administrative Program Review Committee, and provost have identified as having evidence that students are achieving their intended learning outcomes. We also look at the proportion of programs with evidence that curricular improvements have been made as a result of the assessment process.

Rationale: This indicator results from the internal program review process, which is conducted on a regular basis so the results are measurable. The results have validity because faculty external to the program, an administrative committee, and the provost, in consultation with the Chancellor's Cabinet, conduct the review much like a promotion and tenure process. The results are meaningful because achieving student learning outcomes is paramount to the Educate theme and continuous improvement is intended.

Indicator: Students perform similarly to peers on programmatic national exams.

The following state and national examinations with institutional or individual percentile outcomes are administered for specific baccalaureate programs:

- Mathematics - ETS major field test in mathematics
- Computer science - ETS major field test in computer science
- Business administration - ETS major field test in business administration
- Social work - Social work areas of concentration test
- Chemistry - American Chemical Society Examinations

Rationale: State and national exams provide a meaningful external assessment of UAF's education of students. While not all programs require such exams, a wide variety of baccalaureate programs do. Student performance in the 40 to 60 percentile range is considered similar to peers. Because these exams are administered on a regular basis and pass rates or percentile performances are available, they provide measurable evidence of educational outcomes. Exam results with specific passing levels, which are common for certificate, applied associate, and professional baccalaureate programs, are included as an indicator in the Prepare theme.

Objective: Retain and graduate degree-seeking undergraduate students

Indicator: First-time undergraduate degree-seeking students persist and graduate.

Rationale: The six-year baccalaureate graduation rates within the UA System (24 percent) and UAF (31 percent) are low by national standards (46 to 52 percent depending on the source). Completion rates for certificate and associate programs also need improvement. Although UAF has improved first-time undergraduate degree-seeking student (including certificate and associate students) retention rates over the past decade and is working hard to improve these rates, 60 to 65 percent retention is the current range.

Retention rates will be reported by preparation level. A high proportion of underprepared and non-traditional students and limited state financial aid support contribute to this problem. Degree completion rates for graduate programs are generally comparable to national levels, so these will not be reported as part of this indicator. The governor's education priorities include increasing the number of high school graduates who are prepared for postsecondary education or job training, and increasing the number of Alaska high school graduates who graduate from Alaska universities and job training programs. The university is committed to improving undergraduate degree program completion rates, so we will track the impact of our efforts to improve these rates.

Indicator: Academically underprepared undergraduate degree-seeking students complete collegiate-level coursework.

This will be assessed by the percentage of degree-seeking students with ACT math scores <23 who complete DEVM F105 or MATH F103X and students with ACT English scores <18 who complete ENGL F070 during the first year of enrollment.

Rationale: Success in the selected courses qualifies students to take collegiate-level coursework. Large percentages (~40 percent) of students entering our open admission institution need developmental coursework. Thus, helping these students become prepared for collegiate level coursework is paramount to their persistence and degree completion.

Objective: Prepare undergraduate students for further study, future employment, and contemporary life

Indicator: Seniors score similarly to their peers at other institutions on the ETS Proficiency Profile examination.

Rationale: UAF has agreed to take part in the Association of Public and Land-Grant Universities' (APLU) Voluntary System of Accountability (VSA). The VSA requires adopting and reporting the results of one of three national examinations. UAF has implemented the ETS proficiency profile examination for a sample of students during the FY11 academic year to assess its utility and will summarize student performance. This indicator aligns with the commitment to take part in the VSA and is likely to provide a valuable mission assessment tool. Because this is the first implementation of such a test, we will assess its utility for future self-evaluation reports. The average senior score will be compared to the mean score for doctoral I and II institutions, as reported by ETS, to assess similarity to peers.

Indicator: Graduates complete further higher education programs.

Rationale: UAF graduates who complete subsequent programs at other universities provide external meaningful validation that our educational programs prepare students for further study. However, because of Alaska's geographic isolation, many Alaska students continue their education at UAF. Thus, we include subsequent degree completion at UAF as additional evidence. The National Student Clearinghouse provides the mechanism to make the external component of this indicator measurable while the Banner student information system provides the internal information. Our intention is that at least ten percent of graduates go on to complete further higher education programs.

Indicator: Seniors respond similarly to their peers at other institutions to select National Survey of Student Engagement (NSSE) questions.

Senior student responses to NSSE section 11 questions on diversity, use of technology, collaboration, integration of knowledge, and solving complex real world problems are used to assess student preparation for contemporary life.

Rationale: The NSSE provides the student perspective on the experiences important to a higher education and contemporary life. This survey has been implemented in 2007 and 2009 to date. Student experiences with diversity, use of technology, collaboration, integration of knowledge, and solving complex real

world problems have been selected as a means to evaluate student preparation for contemporary life. Seniors' responses will be considered similar to peers if NSSE reported effect sizes for each question are between -.2 and +.2.

Objective: Enable master's and PhD students to master a subject area or advance knowledge

Indicator: Graduates secure jobs or continue their education.

Rationale: Because subsequent employment of master's and doctoral graduates typically is competitive and resume- and interview-based, placement of graduates provides a meaningful indicator. Similarly, admission into doctoral programs is a competitive process so master's graduates placement into these programs provides meaningful information about our graduate programs. All UAF graduate programs are asked to report on the subsequent placement of graduate students in the program review process so this information is available and measurable.

Indicator: Students produce independently reviewed research and creative products.

Rationale: Research and creative products by graduate students, especially those externally reviewed, provide a meaningful measure that graduate programs educate students to master a subject area or advance knowledge. Although this information has not been historically collected centrally, we collected it this year through the deans of colleges and schools and plan to collect it on a regular basis through the Annual Unit Plan process beginning in 2012. Thus, this information is measurable and a plan is in place to collect it regularly. This indicator also appears in the Discover theme.

Objective: Involve baccalaureate students in extracurricular and co-curricular activities

Indicator: Students participate in extracurricular and co-curricular activities.

The percentage of graduates indicating participation in student activities by type from the UA Graduate Survey, and student perceptions from the NSSE section on enriching educational experiences and supportive campus environment will be summarized.

Rationale: A college education includes out-of-class experiences and interactions in a broad array of activities. Thus, involvement in extracurricular and co-curricular activities is a meaningful component of students' education. The regular administration and summarization of the UA Graduate Survey and the NSSE make this information available. While student surveys are not direct evidence of education, positive student opinion of an institution and student participation in university activities provides valuable guidance for institutional planning, especially related to student persistence and graduation, and student support area budget allocation.

Indicator: Students participate in formal international experiences.

Rationale: Annual participation in exchanges, study abroad, and faculty-led international courses will be reported. UAF is an international research university, so we value the global exchange of ideas, knowledge, and experiences. Students are encouraged to take part in international experiences, and therefore we include this as an indicator of extracurricular and co-curricular activities.

Core Theme 2 Discover: Through Research, Scholarship, and Creative Activity including an Emphasis on the North and its Peoples

Brief Description

UAF, America's arctic university and Alaska's only Land, Sea, and Space Grant university, is Alaska's only Carnegie-classified high research activity institution. The university's faculty, staff, and graduate

and undergraduate students perform research, scholarship, and creative activity that reach across the North and beyond. Our focus on high impact, applied, locally engaged, and transformative scholarship demonstrates our prominence in the global research community. UAF has nationally and internationally recognized research programs in fields ranging from anthropology to zoology. Currently, UAF is focusing most of its new state research funding in areas of significant interest to Alaska and national needs, where federal research funding has been increasing, including climate, biomedical sciences, and energy. The research and creative work conducted is especially significant to Alaska and the circumpolar North, but our work stretches beyond the North to include many other areas of the world, and extends beyond our planet to the atmosphere and space above. Part of our mission is to educate researchers to meet the critical needs of the future; we educate graduate students and undergraduate students in the responsible conduct of discipline-based and interdisciplinary research. To that end, faculty integrate research and education by incorporating original research findings and creative work into classes, involving students in research, and collaborating with colleagues across disciplinary boundaries.

The National Research Council (2008; [A Revised Guide to the Methodology of the Data-Based Assessment of Research Doctoral Programs in the United States](#); Washington, D.C.: The National Academies Press) indicates that quality measures of research activity are publications per faculty member, citations per publication, and grants and awards per faculty member. We have used this guidance in selecting indicators for the Discover theme, but we supplement these to represent the fine and performing arts and humanities. The objectives and indicators for the Discover theme are given below with indicators of achievement and the rationale for each.

Objective: Conduct and disseminate basic and applied research

Indicator: Faculty publish peer-reviewed journal articles, book chapters, and books.

Rationale: Because the National Research Council views peer-reviewed publications by faculty members as a meaningful measure of research quality, we have adopted it as a research mission indicator. Between 0.75 and 1.25 publications per full-time equivalent faculty member in research or creative activity workload per year will indicate achievement. UAF reports publications annually to the UA System for use in preparing the Mission and Measures report for the state of Alaska. Therefore, this information is available and measurable. Because some publications take a year or more to appear in print after acceptance, a two-year lag for reporting publications is used. For example, 2008 publications were reported by faculty in 2010.

Indicator: Faculty conduct externally funded research at a rate comparable to peer research institutions.

Rationale: The [Center for Measuring University Performance](#) ranks institutions according to total research expenditures nationally among public universities, so this indicator is a nationally recognized meaningful indicator of research quality and productivity. While peer-reviewed publications provide a more direct measure of quality and outcomes than expenditures, the UA Strategic Plan 2009 lists research excellence as a goal and states as an objective “rely to a greater extent on competitively obtained financial support for research.” In addition, grant-funded research expenditure is a UA System performance metric, so this information is reported annually, making the information available and measurable. Grant research expenditures per faculty member between \$75,000 and \$125,000 per year would indicate that we are comparable to peer research institutions.

Indicator: Faculty conduct research in areas of significant interest to Alaska.

Rationale: UA in Review reports direct research expenditures in areas of significant importance to Alaska (ASIA). Annual ASIA expenditures comprising 65 to 70 percent of all research expenditures will indicate achievement.

Objective: Exhibit and perform creative works

Indicator: Faculty perform and exhibit at the state, national, and international level.

Rationale: Public productions are a widely recognized benchmark in the visual and performing arts and provide an important cultural connection to Fairbanks, Alaska, the rest of the United States, and internationally. Between 0.75 and 1.25 creative exhibitions and performances at the state, national, and international level per full-time faculty equivalent in scholarly and creative workloads per year will indicate achievement.

Articles and poems in journals and books are represented in an indicator above. This indicator provides an equivalent measure for the fine and performing arts by summarizing creative scholarship in notable state, national, and international venues. This information has not historically been collected centrally and so was collected for this report. Beginning in 2012, this information will be gathered in the Annual Unit Plan process.

Objective: Engage graduate and baccalaureate students in research, scholarship, and creative activity

Indicator: Baccalaureate students complete a research course or project.

Rationale: Undergraduate research and scholarly activity are conducted across the university as both curricular and extracurricular activity. Completing a senior thesis is a degree requirement for several academic programs and is an attractive skill-building elective for others, such as the Honors Program. Many students participate in undergraduate research informally through faculty-funded research projects and through student-selected projects that are sometimes funded through formal undergraduate research solicitations. Additionally, students participate in professional society paper competitions and contests which may or may not be formally funded (See Undergraduate Research Committee Report in [Exhibits](#)).

The percentage of graduating baccalaureate students who have completed a research, thesis, or honors project-based course with a passing grade will be summarized using the Banner student information system. Students responding affirmatively on the NSSE question “Work on a research project with a faculty member outside of course or program?” will be summarized also. These two sources provide a meaningful and measurable assessment of baccalaureate student engagement in research, scholarship, and creative activity. This indicator is consistent with the goal to “Increase opportunities for undergraduate and graduate student participation in research” in the UA Strategic Plan 2009.

Indicator: Students produce independently reviewed research and creative products.

Rationale: Independently reviewed student products provide an external and, therefore, meaningful assessment that UAF engages students in research, scholarship, and creative activity. This information has not historically been collected centrally and so was collected for this report. Beginning in 2012, this information will be gathered in the Annual Unit Plan process.

Objective: Demonstrate leadership in research and artistic expression

Indicator: Faculty with a research workload report one or more peer-reviewed publications with at least 12 lifetime citations.

Rationale: Citations of peer-reviewed publications indicate that a paper has had an impact on the field, in part, because about half of all scholarly publications are never cited (see for example, [How Should We Rate Research Universities?](#) by Nancy Diamond and Hugh Davis Graham). Thus, citations are a meaningful measure of demonstrating leadership in research. Four UAF research units (the International Arctic Research Center, the Geophysical Institute, the School of Fisheries and Ocean Sciences, and the Institute of Arctic Biology) have been using the number of papers with at least 12 citations as a measure

of faculty performance for several years. Twelve citations was a negotiated figure among the institutes because the number of citations per paper varies considerably among fields and by the number of researchers in a field. Fifteen to twenty percent of faculty reporting at least one paper with 12 or more citations will indicate achievement.

Indicator: Faculty members hold national and international leadership positions.

Rationale: Faculty service or performance meeting at least one of the following criteria demonstrates meaningful leadership in research or artistic expression:

- National or international board member
- Editor or associate editor of a professional journal or similar publication
- National or international professional association officer
- National or international grant review panel or fine or performing arts jury
- Juror's choice, media, category choice (e.g., ceramics) 1st place or honorable mention at a national or international event

In addition, the UA Strategic Plan 2009 includes the objective "Provide venues for faculty and staff to demonstrate excellence." For this report, we asked units to list faculty meeting these criteria. In the future, the Annual Unit Plan process will be used to collect this information.

Core Theme 3 Prepare: Alaska's Career, Technical, and Professional Workforce

Brief Description

Historically, Alaska relied on out-of-state skilled workers such as farmers, miners, fishermen, teachers, welders, and engineers to meet local employment demands. Even today, almost 20 percent (19.6) of Alaska jobs are held by non-residents. Based on high-demand jobs identified by the Alaska Department of Labor and Workforce Development (DLWD), industry and business, UA and UAF are working to prepare more Alaskans for regional and state high-demand job areas. Local and regional partnerships with Native and village corporations, regional health corporations, and local businesses contribute significantly to this effort. The Alaska Career and Technical Education Plan, prepared by state and university representatives, details employment demand and identifies strategies to prepare Alaskans for employment. The pending retirements of the baby boomer generation (14.8 percent of all positions today are occupied by workers 55 years of age or older) and the potential for large-scale projects such as a natural gas pipeline create well-identified employment opportunities for qualified individuals. Growing Alaska's workforce from within saves relocation expenses and reduces employment turnover, especially in high growth or vacancy areas such as health care and education. Because the DLWD forecasts a 13.9 percent increase in jobs between 2006 and 2016, the Alaska Legislature holds UA accountable, which in turn, holds UAF accountable for preparing qualified graduates. DLWD released its 2006-2016 occupational forecast in January 2009 and provides updates periodically. The [governor's education priorities](#) include increasing the number of Alaska high school graduates who graduate from Alaska universities and job training programs. Thus, Prepare is an essential element of our mission.

Another important aspect of preparing Alaska's workforce is evident in UAF's efforts in continuing education and professional development to keep incumbent workers up-to-date in their current jobs. Changing technology, changing local, state, and federal standards, and area-specific advances require that workers spend time on upgrading training. External advisory councils provide guidance for the adequate preparation of students in many programs, helping to ensure that these changes are being addressed in the curriculum.

The UAF Academic Development Plan addresses economic and workforce development and states that it intends to “produce graduates who are job-ready in areas of high employer demand, and conduct training and research applied to the development, planning, and management activities of the state.” The following areas of emphasis are identified:

- Resource exploration, development, and management: Enhance programs that enable the state to develop and manage its natural resources effectively.
- Engineering and applied technologies: Enhance programs aimed at training engineers and technicians to meet the needs of Alaska industry.
- Educator preparation: Further develop programs that train and provide continuing education for pre-K and K-12 teachers and counselors.
- Health careers and pre-professional programs: Enhance and develop programs that prepare students for careers in health care and for post-graduate professional degree programs.
- Business leadership and entrepreneurship: Enhance programs that develop knowledge, skills, and abilities in business and accounting to increase Alaskans’ success in the global economy.

Once the university has identified an employment need, it takes a comprehensive approach to filling the need. Often career preparedness starts at the high school level – before a student sets foot on a college campus. Dual credit options and tech prep programs are examples of the university’s partnerships with school districts to offer college credit to high school students who complete approved courses.

Objective: Prepare students for jobs in Alaska

Indicator: Students graduate in Alaska Department of Labor and Workforce Development (DLWD) high-demand job area programs.

Rationale: A UA System strategic planning objective is to assess and meet Alaska’s current and projected workforce needs (see Goal 5: Responsiveness to State Needs). DLWD high-demand job area programs (HDJA) are listed [online](#). The number of graduates in high-demand job areas is directly related to meeting this goal and Alaska’s need to grow its own workforce. UAF reports the number of HDJA graduates annually in a performance report to the UA System and provides projected numbers of these graduates for future years. A five-year average number of DLWD high-demand job area program graduates between 580 and 650 will indicate achievement.

Indicator: Graduates find employment and indicate their program prepared them for employment. Specifically,

- Percentage of graduates employed as recorded in the [UA Graduate Survey](#) and of those employed, the proportion employed in Alaska.
- Percentage of graduates satisfied or very satisfied with their preparation for their career as recorded in the UA Graduate Survey.

Rationale: Because employment is the ultimate goal of the Prepare theme, the percentage of graduates indicating they are employed is meaningful. While student surveys addressing satisfaction do not provide direct evidence of preparation, they do provide a student perception that is important for persistence and graduation. The UA Graduate Survey is administered external to UAF annually by the UA System and the information is summarized on a public website.

Indicator: Students pass programmatic state or national exams.

Rationale: Many professional programs require graduates to pass a state or national examination to work in the field. UAF tracks the examination pass rates for 30 programs. The list of programs requiring such

tests and their pass rates is given in the Prepare section of Chapter 4. High pass rates on these exams indicate that UAF prepares students for jobs in their respective areas. Forty to 60 percent of the programs with state and national exams for certification will have pass rates of 80 percent or higher to indicate achievement.

Objective **Provide Alaskans opportunities to update their job skills**

Indicator: Professionals complete post-baccalaureate courses to update their job skills.

Rationale: Several UAF colleges and schools, especially the School of Education, the College of Rural and Community Development, and the School of Natural Resources and Agricultural Sciences, offer post-baccalaureate professional courses, designated with 500-level numbers, for professionals (e.g., teachers) to update and maintain their education. These courses are offered at a level distinct from graduate level courses, which are designated 600-level, and do not apply toward any degree, certification, or credential program. 500-level courses are not interchangeable with 600-level courses for graduate degree programs.

Indicator: Vocational rehabilitation students complete courses to update their job skills.

Rationale: Vocational rehabilitation funding is directly related to updating job skills. Therefore, tracking student numbers for such students is meaningful to the objective.

Objective: **Help prepare secondary students for postsecondary career pathways**

Indicator: High school students complete tech prep programs with school districts and training centers.

Rationale: The Alaska Tech Prep Consortium was formed in 2004 as a result of discussions among members of VTEP (vocational/technical education providers) to build a statewide system for tech prep and to carry out activities under the Carl Perkins Act. This was funded by federal Carl Perkins money and was passed through the Alaska Department of Education and Early Development. The purpose was to link career and technical education programs offered at the high school level to degree and certificate programs at the postsecondary level to help keep the United States competitive.

Three staff members coordinate the articulation of tech prep courses in the Fairbanks North Star Borough School District and the surrounding area. These staff members are located within CRCD, Interior-Aleutians Campus and the UAF Community and Technical College and are associated with different tech prep programs. These programs are intended to assist students preparing for high-skill, high-wage or high-demand occupations. The UA System tracks articulations in tech prep programs so indicator information is available and measurable.

Core Theme 4 **Connect: Alaska Native, Rural, and Urban Communities through Contemporary and Traditional Knowledge**

Brief Description

This theme addresses three key elements of UAF's mission: access to higher education across a large area of Alaska with limited access, partnerships that enhance educational opportunities or delivery, and collecting, preserving, and disseminating Alaska Native and rural development information.

UAF provides access to higher education through close relationships with the communities it serves, through community campuses and centers, distance education, the Cooperative Extension Service, the Marine Advisory Program, and via the students that it recruits to the Fairbanks and UAF Community and Technical College campuses from throughout the state. Ensuring educational access for our widely distributed constituents is a key component of the Connect theme.

Community partnerships are critical to UAF’s success. Our campuses partner with Alaska Native and rural elders and leaders, school districts, cities, tribes, health corporations, and industry to enhance student educational opportunities. Our partners help us provide opportunities for sharing traditional knowledge, internships, and shared programs. For example, the Chukchi Campus has partnered with the Alaska Technical Center and the UAA Mining and Petroleum Services program to build a construction trades technology program. Students are educated so they pass the National Center for Construction and Engineering Research certification programs in the carpentry, electrical, and plumbing trades.

Early in its history as Alaska’s first university, UAF allocated resources to the study, preservation, and dissemination of Alaska Native language and culture, Alaska history, and rural development. This continues to be a significant element of our mission. For example, the Alaska Native Language Center is internationally known and recognized as the major center in the United States for the study of Eskimo (Inupiaq and Yup’ik) and northern Athabascan (Dene’) languages. Faculty and staff members provide contemporary and traditional materials for bilingual teachers and other language workers throughout the state, assist social scientists and others who work with Native languages, and provide consulting and training services to teachers, school districts, and state agencies involved in bilingual education. Our role in this area is guided by the UA Strategic Plan 2009, which indicates that we should:

- Celebrate the unique contributions to Alaska by its Native peoples;
- Continue to conduct research and provide instruction in Alaska Native languages and cultures; and
- Build on the role university campuses play as centers for cultural activity.

Educational opportunities provided by the Cooperative Extension Service, the Marine Advisory Program, and other non-credit programs are included in the Engage theme. The Connect theme focuses on student access for credit-based courses and programs related to the North and its peoples, community partnerships, and the preservation and dissemination of contemporary and traditional knowledge.

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Objective: Partner with Alaska communities on issues of mutual interest

Indicator: Community partnerships share resources and responsibility and are well distributed geographically.

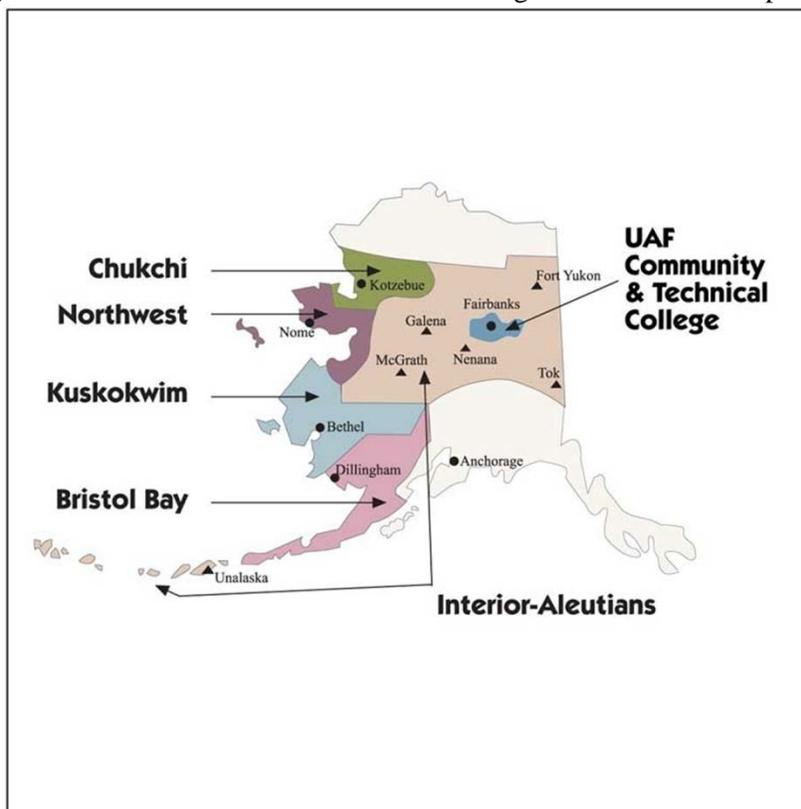
Rationale: Partnerships indicate that UAF is connecting to the communities and constituents served. The traditional knowledge of Alaska Natives aids contemporary instruction, research, and service and vice versa. While a special request was made of units to report this information this year, a template for collecting partnership information has been developed and will be used in the accreditation process in future years. A summary of significant partnerships describing the purpose, longevity, shared decision-making responsibility and resources, and the impact of partnership will be assessed to determine achievement.

Objective Provide higher education access for Alaska Native, rural, and urban populations

Indicator: Alaska Natives and male students enroll at each campus and via e-learning.

Rationale: UAF provides access to higher education to Alaska Native, rural, and urban populations in Fairbanks and throughout Alaska. Campuses are located in the major “hub” communities of western and southwestern Alaska: Bristol Bay Campus (Dillingham), Kuskokwim Campus (Bethel), Northwest Campus (Nome), and Chukchi Campus (Kotzebue). The Interior-Aleutians “campus” serves many

smaller communities in remote areas of the state. The Center for Distance Education provides e-learning opportunities regardless of location. Alaska Natives are represented at all levels of postsecondary education, ranging from vocational/technical certificates through master's and PhD programs.



Alaska Native students make up a significant minority (21.3 percent; [see Table 1.04 in UA in Review](#)) of UAF as a whole, but a majority at some campus locations. Staff travel to rural Alaska on a regular basis to provide information on academic programs and financial aid. Rural Student Services, with a staff of six, provides academic advising, study skills, career exploration, and helps students adjust to life at the Fairbanks campus.

Females outnumber males significantly in both enrollment and graduates. Therefore, UAF has implemented new programs, such as high latitude range management and construction trades technology, intended to recruit and graduate male students. Tracking male student enrollment by campus will help us assess the impact of our efforts.

UAF has campuses and learning centers in communities with population sizes that would not justify a higher education campus or center in most states. However, because of the state's limited road system and large size, rural Alaskans typically cannot commute to a nearby town to attend a community college or university. Course completions at each campus and by distance delivery represents the extent to which students in all areas of the state have access to – and take advantage of – higher education. The Banner student information system makes this information available.

Indicator: Financial aid provides Alaska Native students with access to higher education.

Rationale: Alaska has a high proportion of Alaska Native students, many of whom come from rural locations and are low-income. Because state-provided financial aid has been significantly less than other states (recent legislation is changing this landscape), funding is an important access issue for students. Tracking financial aid distribution for Alaska Native students is, therefore, an evaluation of accessibility.

Indicator: Alaska Native and rural high school students earn certificates and degrees at rates similar to other students.

Rationale: While financial aid and course completion by ethnicity and student origin (rural or not) indicate access, the ultimate goal of higher education access is degree completion. Comparing the percentage of graduates who are Alaska Native or rural students to the percentage of these categories in overall enrollment will demonstrate whether the university is fulfilling its mission of connecting to a diverse population, with an emphasis on Alaska Native achievement in education. Alaska Native and rural students graduating in a proportion to enrollment at 70 to 85 % of the rate of other students will indicate achievement; our aspiration is equity.

Objective: Engage students in learning about Alaska Native languages and cultures, and rural development

Indicator: Students complete Alaska Native and rural-related courses and programs.

Numbers of graduates will be tracked for the following academic programs:

- Alaska Native studies BA
- Alaska Native languages (Yup'ik BA and Inupiaq BA)
- Indigenous studies PhD
- Native language education AAS and certificate
- Rural development BA and MA
- Rural human services certificate
- Tribal management AAS and certificate
- Yup'ik language and culture BA
- Yup'ik language proficiency AAS and certificate

In addition, the student headcount and credit hour completion will be tracked for a collection of courses that have Alaska Native or rural content (see Alaska Native and Rural Related Courses in the Exhibits).

Rationale: As part of Alaska's state university system, UAF has a responsibility to the indigenous peoples of the state to honor and preserve their heritage, and to disseminate contemporary and traditional knowledge related to Alaska and the North. The Banner student information system makes this information available.

Core Theme 5 Engage: Alaskans via Lifelong Learning, Outreach, and Community and Economic Development

Brief Description

UAF's Land, Sea, and Space Grant status mandates statewide outreach as an essential element of our mission. Founded in 1917 as the Alaska Agricultural College and School of Mines, UAF engages the public through the Cooperative Extension Service and Agricultural and Forestry Experiment Station in education and outreach in agriculture and horticulture, forest management, health, home and family development, natural resource and community development, and 4-H youth development. Since UAF became a Sea Grant college in 1980, the Alaska Sea Grant Marine Advisory Program has provided extension services to foster coastal community sustainability, wise use, conservation, and enjoyment of Alaska's marine and coastal resources. Since being designated a Space Grant institution in 1991, UAF has

sponsored a broad range of programs to enhance educational outreach within aerospace, earth science, and other NASA-related STEM disciplines throughout Alaska.

Our engagement activities include interpreting and extending relevant research-based knowledge and information in an understandable and usable form, and helping to apply this knowledge to solve problems and meet challenges that face the people of Alaska. Through our engagement activities, we also bring community concerns back to the university's research and education programs. Our goal is to have an active dialogue of sharing and reciprocity between the university and Alaska communities, resulting in positive change.

UAF also enjoys an engaged constituency of lifelong learners enrolled in a wide variety of academic, cultural, and athletic activities. The enrollment of non-degree seeking students and their completion of a wide variety of credit and non-credit courses is a significant indicator of how UAF engages Alaskans in lifelong learning. UAF offers a wide variety of youth development programs for Fairbanks-based and rural students, while the Osher Lifelong Learning Institute provides learning opportunities for midlife and older adults (50+) from the Fairbanks area. Arts and music academies and events, the Science for Alaska lecture series, UA Museum of the North, and athletic events engage the public in a plethora of university activities. The Fairbanks Symphony Orchestra integrates the Engage and Educate themes; the symphony is highly valued as Interior Alaska's community orchestra and is also the university's for-credit orchestral ensemble.

Alaska's economy is heavily resource-based. It depends primarily on petroleum exploration and development. The state is home to one of the nation's and the world's most productive sustainable fisheries. Tourism and mining are secondary but important economic factors. Urban communities lack commercial infrastructure, so engagement in value-added activities is limited, and primarily associated with the petroleum and fishing industries. Many rural communities cannot be reached by road or rail and depend on air transport with seasonal ocean and river transport; these communities have extremely high energy costs. Communication infrastructure is improving but still somewhat limited. Live video communication among UAF's widely dispersed centers has achieved reliability only within the last two to three years. Smaller rural communities, with populations under 500, may not have even the most basic amenities such as adequate sanitation and efficient energy sources that would attract appropriate resource developers. UAF is partnering with local governments, Alaska Native corporations, tribal non-profit groups, and private enterprise to afford both urban and rural communities the opportunity to diversify their economies.

For several decades UAF has impacted community and economic development in Alaska communities by preparing students for employment, providing development expertise, and injecting external research funding. Efforts are ongoing to expand community involvement with the university, increase technology transfer and entrepreneurship activities, and provide training, marketing, and planning assistance to both startup and established small businesses.

The UA Strategic Plan 2009 (Goal 5: Responsiveness to State Needs) includes "Build community engagement programs. Encourage faculty, student, and staff involvement in service to Alaska's diverse communities." As a result of this system goal and our Land, Sea, and Space Grant status, the UAF Academic Development Plan states the following goal: "Sustaining Alaskan communities: In collaboration with Alaska communities and in the context of the global economy, develop more effective approaches to alternative/renewable energy, food sources and subsistence, and economic development."

The objectives and indicators for the Engage theme are as follows:

Objective: **Involve Alaskans in lifelong learning, cultural, and athletic activities**

Indicator: Alaskans complete non-credit courses and workshops.

Rationale: Workshops organized by faculty and staff of the Cooperative Extension Service, the Alaska Sea Grant Marine Advisory Program, and the School of Natural Resources and Agricultural Sciences Agricultural and Forestry Experiment Station constitute a significant component of UAF’s engagement mission. These units engage with the public across Alaska through an array of non-credit workshops directly relevant to local needs or issues. Public participation in these workshops is recorded by the units offering them but is generally not entered into the Banner system. Annual workshop participant numbers between 12,000 and 14,000 indicate achievement.

In response to individual and community demands, UAF also provides other non-credit courses, workshops, and supervisory skill seminars for local businesses and agencies, and general programs for cultural enrichment. Short-term training programs identified in this indicator help Alaskans update their job skills and are reasonable to track. UA implemented the [Non-Credit Instructional Productivity Unit \(NCU\) metric](#) in FY09 to track these activities. One non-credit instructional unit (NCU) is equivalent to 10 non-credit student contact hours. For example, delivering a 10-hour non-credit course to 150 students equates to 150 NCU. This measure considers all non-credit courses, including continuing education (CEU) courses. This information is entered in the Banner system. However, this metric does not include workshops offered by the Cooperative Extension Service, the Marine Advisory Program, or the Agricultural and Forestry Experiment Station; attendance at these workshops is addressed above. Non-credit instructional productivity units between 4,100 and 4,700 per year indicate achievement.

Indicator: Residents attend or participate in lifelong learning, cultural, and athletic activities.

Rationale: UAF Vision 2017 indicates that UAF should “Expand community access to and involvement with the university campus” and “The number of activities for the local community and the number of community members participating in these activities are measured and evaluated.” While not comprehensive, the list of indicator activities and events below provides a diverse measure of engagement of primarily the Fairbanks community:

- UA Museum of the North
- Registered public users at the Rasmuson Library
- Science for Alaska lecture series
- Large Animal Research Station tours and events
- Fairbanks Summer Arts Festival
- Fairbanks Symphony Orchestra events
- Music Department-sponsored events
- Athletic events
- Osher Lifelong Learning Institute

Objective: Communicate research-based knowledge and engage the public in defining priorities

Indicator: Research-based publications intended for the general public are distributed to Alaskans.

Rationale: Purchases, distributions, and downloads of UAF research-based products indicate public demand for these products. In particular, the number of publications by the following units will be assessed:

- UA Press
- Cooperative Extension Service

- Alaska Sea Grant College Program
- Marketing and Communications (*Aurora* magazine)
- School of Natural Resources and Agricultural Sciences and Agricultural and Forestry Experiment Station (*Agroborealis* magazine)
- Center for Research Services (*Frontiers* magazine)

Indicator: Alaskans participate in advisory board meetings and consultations with service faculty and staff.

Rationale: Advisory meetings and in-person and phone consultations provided by the Alaska Sea Grant College Program and the Cooperative Extension Service will be used to assess this indicator. Engagement requires a dialogue between those being served and service providers. Public participation in advisory meetings and inquiries received by UAF's federally mandated service programs demonstrate that a dialogue is occurring and that Alaskans view the university as a source of information. These meetings make service units aware of opportunities and provide a sounding board and valuable input for new ideas and initiatives. Public meetings allow for dissemination of information and for obtaining community input.

An important component of an extension agent's duties is to be available to community members who have questions or need assistance. The number of consultations provided by each agent is one measure of the agent's impact in the community, but more important from a program point of view is the anecdotal information on issues that are of concern to the community. When key issues are identified, agents elicit additional input and/or respond by providing written or verbal information or more formally through workshops, presentations, and training sessions.

Objective: Promote positive youth development

Indicator: Youth participate in school-age programs.

Rationale: As a Land, Sea, and Space Grant institution, UAF is federally mandated to engage youth in education. Participation numbers in the following select university-sponsored activities will be used to assess youth engagement:

- 4-H (unduplicated)
- Summer Music and Visual Art academies
- Alaska Summer Research Academy
- Rural Alaska Honors Institute
- National Ocean Science Bowl
- FIRST High School Robotics Championship

Objective: Collaborate with individuals, businesses, and agencies to diversify and grow local and state economies

This objective and the indicators below constitute a new and developing area for UAF. While preparing graduates for the workforce and employment have contributed to local and state economies for decades, purposeful partnerships and intellectual property development through patents and licensing agreements are a recent and developing focus. Feedback from evaluators of this developing area will provide further guidance to UAF.

Indicator: Partnerships involve local entities and private partners in economic development activities.

Rationale: The intent of these new activities is for UAF to be an active participant in the growth of the Fairbanks, North Pole, and state economies. Beginning in 2009, the Chancellor's Office initiated specific activities to better engage UAF in the economic development of the community. A summary of these recent activities and their impact to date constitute this indicator. Partnerships with at least two local entities or private partners indicate achievement during this early stage of development.

Indicator: Businesses engage with UAF in agreements that lead to economic development.

Rationale: The UA Strategic Plan 2009 guides UAF to do the following:

- Encourage the commercial utility and application of university intellectual property;
- Increase the number of patents filed by university supported investigators; and
- Expand interaction between university faculty and the state's business community.

Intellectual property and licensing agreements are indicators of accomplishments in this developing area.

The ultimate goal of this objective is economic return, but the number of agreements serves as an indicator to demonstrate impact as the program matures. The Office of Intellectual Property and Commercialization (OIPC), which opened in January 2011, is responsible for intellectual property development and licensing. The documents that best describe progress are:

- Invention disclosures - Indication that a university employee may have made a new discovery.
- Non-disclosure agreements - Indication that the university is engaged with business to discuss new inventions.
- Provisional patents - Indication that the university sees economic value in a potentially patentable invention.
- Patents - Indication that the US Patent Office recognizes the invention as new intellectual property.
- Licensing agreements - Indication that private industry/business sees value in a patented invention and seeks to commercialize the new product, process, or plant.

Not all invention disclosures lead to non-disclosure agreements or provisional patents. Not all provisional patents lead to patents, and not all patents lead to licensable products. We seek to average ten invention disclosures per year. From this we seek to establish seven non-disclosure agreements leading to five provisional patents. From this we seek three to lead to patents, which would lead to one new licensing agreement per year.

Since licensing agreements are an important goal of OIPC, they are an indication that the first four steps were effective. If licensing agreements are not achieved, we will analyze where in the process we are failing to get ideas to inventions to non-disclosures to patents to licenses. Two non-disclosure agreements between UAF and private business will indicate achievement at this early stage of development.

(1.B.1, 1.B.2)

