UAA College of Engineering
University of Alaska Anchorage

Strategic Plan 2015-2020

Final Version Including Inputs from Fall Retreat
October 20, 2014

Steering Committee

Bart Quimby, Interim Dean
Kenrick Mock, Associate Dean
Yuan Fang Dong, Institutional Research
Alex Hills, Distinguished Affiliate Professor, Advisory Board Member
Jeffrey Hoffman, Associate Professor and Department Chair, Mechanical Engineering
Karen Lee, Sr. HR Consultant
LuAnn Piccard, ESPM Department Chair & MSPM Program Chair
Kimberly Riggs, Facilities Manager
Beth Rose, Senior Development Officer
Meuy Saechao, Administrative Support
Crickett Watt, Student Success

Prepared by:
Belinda V. Breaux
Breaux Leadership Solutions LLC
Edits by:
Terrie Gottstein
Kenrick Mock
LuAnn Piccard
Kim Riggs

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INTRODUCTION

The UAA School of Engineering became the College of Engineering in January 2014. As we continue our journey to be a globally recognized education, research and service institution, it is essential that we be aligned with a common passion for our mission to develop leaders in engineering, project management and technology. We will be inspired to action by a challenging, yet achievable vision of the future, while remaining firmly grounded in our core values of Innovation, Collaboration and Excellence.

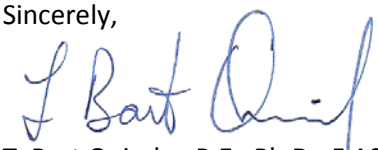
This Strategic Plan will guide us for the 2014 to 2020 horizon. The Strategic Plan defines and documents our vision, mission and values. The Plan creates a roadmap for the future, with objectives we will strive to achieve and initiatives we will undertake in order to reach these goals. While focused on the plans for the UAA College of Engineering, this plan is also intended to fully align and support the strategies and goals of the University of Alaska Anchorage and the overall UA Engineering expansion initiatives.

The Strategic Plan was developed under the direction of a Steering Committee made up of a cross section of College of Engineering leaders. The planning process was guided and supported by a local management consultant, Belinda Breaux of Breaux Leadership Solutions, and benefited from broad input and engagement from key stakeholders including faculty, staff, students, alumni, Advisory Boards and Committees, University administration, employers, and community leaders. An online survey was conducted in January with over 250 respondents. The input from the survey was used in developing the vision, mission, values and key strategies of the plan. In addition, three Planning Committee workshops were conducted during the Spring 2014 semester with the participation of over 60 individuals.

This plan is fully endorsed by the Steering Committee and incorporates input received at the College of Engineering faculty and staff he Fall 2014 College Kickoff Retreat as a precursor for faculty and staff to develop specific action plans during the Fall 2014 semester for carrying out Strategic Plan initiatives . This will be a living plan that we will actively use to guide our efforts and align our priorities. A dashboard of key performance metrics will be monitored throughout the year to chart our progress in attaining our goals. The Strategic Plan will be reviewed and Action Plans will be updated on an annual basis.

Thanks are due the Steering Committee members, Planning Committee members and all other stakeholders who contributed to this Strategic Plan. We are inspired by Alaska's unique blend of tradition and frontier spirit, and working together to execute the strategic objectives and initiatives in the College of Engineering 2020 Strategic Plan, we will achieve our vision to be globally recognized as an excellent education, research and service institution rooted in Alaska and relevant to the world.

Sincerely,



T. Bart Quimby, P.E., Ph.D., F.ASCE
Interim Dean, UAA College of Engineering

VISION, MISSION AND VALUES

The vision, mission and values statements are the foundation of the College of Engineering Strategic Plan.

The Vision statement describes our aspiration for the future - what we want to become, not just for ourselves, but also for the benefit of our community and stakeholders. In some ways, the College of Engineering is already well on its way to achieving this vision; in others, we will have to take some crucial actions in order to move forward.

VISION

Inspired by Alaska's unique blend of tradition and frontier spirit,
the UAA College of Engineering excels as a globally recognized
education, research and service institution
that is rooted in Alaska and relevant to the world.

Our Mission statement defines our core purpose – why we exist and what we do to deliver value to our stakeholders. Our mission statement brings focus for setting priorities and making choices for the actions we take.

MISSION

The UAA College of Engineering develops leaders
in engineering, project management and technology
who solve critical problems and explore opportunities that
benefit Alaska and beyond through education, research and service.

Our values are the principles and beliefs that guide how we act. This is what we stand for.

VALUES

Innovation
We search for and welcome diversity of ideas and act as leaders for positive change.

Collaboration
We focus on the common good through teamwork, collegiality and partnership to make valuable contributions to our communities.

Excellence
We aspire to greatness and continuous improvement.

STRATEGIC ANALYSIS

The UAA Engineering program has continued to grow since its formation in the 1970's and is recognized for providing an excellent engineering education in Alaska. Undergraduate degrees are currently offered in Civil Engineering, Computer Science, Geomatics and Engineering with concentrations in Computer Systems, Electrical and Mechanical. Graduate degrees are offered for Applied Environmental Science and Technology, Arctic Engineering, Engineering Management, Project Management and Science Management. Certificates are offered in Geographic Information Systems, Earthquake Engineering, Environmental Regulation and Permitting and Coastal, Ocean and Port Engineering.

Enrollment has significantly increased over the past several years. In the most recent academic year (FY13), a total of 149 degrees and certificates were awarded. The majority (approximately 90%) of undergraduate students are Alaska residents.

The undergraduate programs rank 23rd among regional engineering programs in the west, 8th among engineering programs in Western Interstate Commission for Higher Education Western University Exchange (WICHE/WUE) schools, and 64th on the national list of *US News and World Report's "2013 100 Best Undergraduate Engineering Programs"* rankings.

Strengths

The College has several key strengths that provide a strong foundation for future growth and success. This Strategic Plan builds on these strengths to pursue opportunities and mitigate threats.

The College is recognized for its focus on educating students for the challenges and opportunities in the state of Alaska. Class sizes are small with very accessible and well-qualified faculty and staff.

There is a high level of local employer (industry, Alaska Native Corporations and government agencies) engagement with individual programs and departments through internships, scholarships, capstone projects and Advisory Boards. Local employers actively seek graduates from the UAA College of Engineering because our graduates are well prepared for the workplace with practical experience and both strong technical and interpersonal skills. As a result, graduates have a high rate of success in finding employment within 6 months of graduation.

The College has unique expertise in addressing engineering, applied science and management challenges in the arctic. Our location in the largest city in Alaska, with access to the arctic "in our backyard," positions the College to educate students who go on to develop innovative solutions, conduct relevant research and make a profound difference in this unique environment. The College also has key capabilities for research and service in areas of health, energy, infrastructure, transportation, systems security and instrumentation.

These strengths, combined with the fact that the cost of education at UAA is still quite affordable in comparison to other US universities, provide a strong foundation for future growth and success.

Weaknesses

There are some weaknesses that the College will need to overcome in order to be successful. The Strategic Plan includes objectives and initiatives designed to address the most critical of these weaknesses. Despite a proven record of generating successful graduates, the College lacks a strong brand reputation to attract top local students as well as out of state students. As is typical across the UA system, most local high school students tend to seek college experiences in the Lower 48 and UAA does not have high visibility with students outside of Alaska.

Though the focused research currently conducted at the College is well respected and effective, our research effort is still relatively small. Research funding is primarily focused on transportation, energy and Alaska infrastructure issues.

Service projects exist, but are not yet well integrated across the College and within the community.

Programs and work processes are structured in silos, with limited cross-disciplinary integration and collaboration. A current lack of clear policies and common work processes leads to inefficiency and missed opportunities.

In order to meet the objectives of the Strategic Plan, the College will need to take steps to reduce these key areas of weakness.

Opportunities

There are several external conditions that pose distinct opportunities for the future of the College. The Strategic Plan defines key strategic objectives and initiatives designed to pursue these areas of opportunity.

Growing challenges and problems across the state of Alaska and in other arctic regions will require highly trained and skilled engineers, scientists and managers. The expanding and aging of local and national infrastructure, changes in the technology used in the energy industry, and growth in the healthcare industry will increase demand for engineering, applied science and management capabilities. These issues present some unique opportunities to establish Areas of Distinction which build on existing strengths of current programs and capabilities.

In addition, emerging new technology offers opportunities to improve how we educate students and conduct research.

Threats

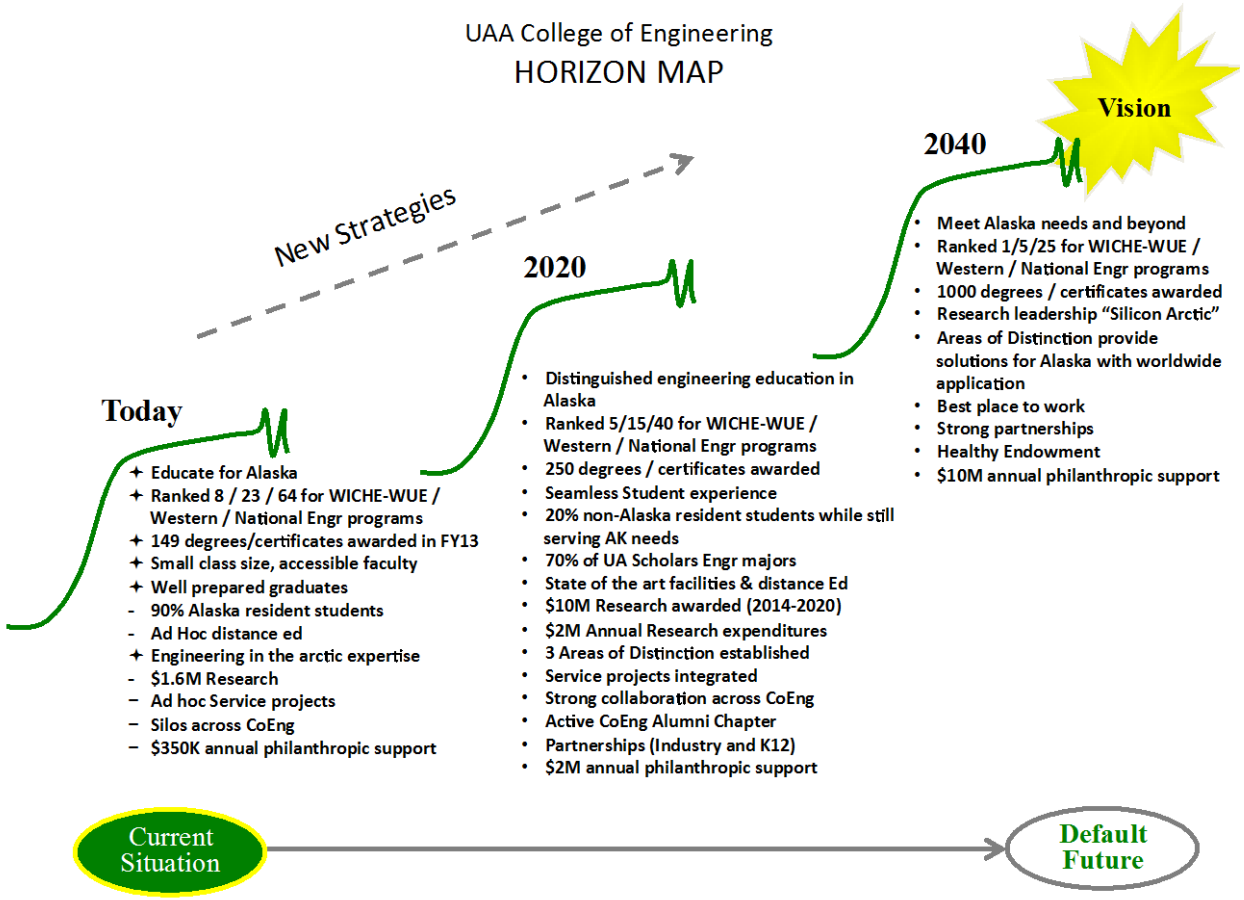
External threats and challenges that the College will need to overcome include declines in state and federal funding for the University of Alaska and the potential for rising student costs. With expansion of distance education providers across the country and globally, there is also a growing level of competition. These threats, combined with the changing demographics and student expectations for their college experience, require that the College define very deliberate strategies to achieve its vision.

HORIZON MAP

A Horizon Map is a planning tool used to identify critical objectives that an organization wants to achieve over a very long time span. Looking out 20 to 30 years encourages thinking about the future without the confines of current limitations and mindsets. After describing the desired long-term outcomes and the current situation, the goals for the planning horizon (typically 3 – 5 years) are established.

The College of Engineering Horizon Map (Exhibit 1) is a high level overview of the strategic shifts that are necessary to achieve by 2020 in order to reach the College of Engineering's longer-term aspirations.

Exhibit 1. Horizon Map



2020 Goals

Three critical goals are to be achieved by 2020 in order to move toward the College of Engineering vision of being a "globally recognized education, research and service institution." These three goals are briefly described in this section.

1. Be ranked in the top 5 among WICHE/WUE, top 15 among Western Region, and top 40 among National Engineering programs.

Achieving this goal will position the College of Engineering for national recognition for the quality of our education and research. National recognition supports our ability to attract students, faculty, staff and investments necessary to sustain progress.

The peer group for the College of Engineering is ABET-accredited engineering programs that are primarily bachelors and masters degree-granting institutions. Factors used by *US News and World Report's "Best Undergraduate Engineering Programs"* to rank national and regional engineering programs include:

- Undergraduate academic reputation from peer assessments and high school counselor ratings
- Student selectivity (acceptance rate, high school class standing in top 10%, high school class standing in top 25%, Reading/Math scores from SAT/ACT)
- Faculty Resources (compensation, terminal degrees, % full-time, student/faculty ratio, class size)
- Graduation and freshman retention rates
- Financial resources per student
- Alumni giving rate
- Graduate rate performance

The *US News and World Report's* ranking of Engineering Programs in the UAA peer group is based on peer judgments of deans and senior faculty who rated each program they were familiar with from 1 (marginal) to 5 (distinguished). Therefore, in addition to improving performance against hard metrics, we also need to reach out, market ourselves to peer institutions, create partnerships and collaboration opportunities for students, faculty and staff with the institutions that do the peer ranking. Improving the UAA College of Engineering ratings is a significant priority if we are to be globally recognized. Increased public recognition of the value of the education and research provided by the College will enhance our ability to attract top students within Alaska and from other locations and also attract increased research funding.

2. Increase number of degrees / certificates awarded to 250 per year.

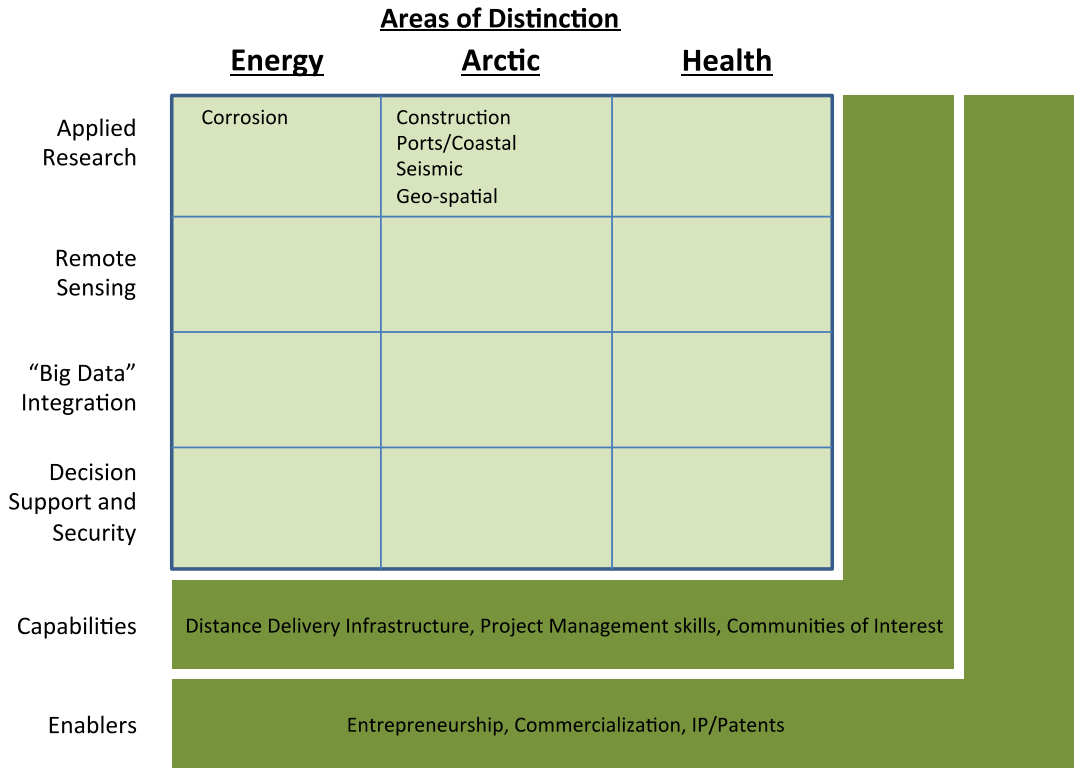
This is an important goal to meet the demand in Alaska and beyond for qualified engineering, project management and technology professionals. Achieving this goal will require that we increase both Alaska based students and attract more out of state students.

3. Establish 3 Areas of Distinction (Arctic, Energy and Health)

Areas of Distinction are areas of focused collaboration in education, research and service which the College can build upon. These focus areas are distinguished by the quality of their outcomes at a national level. Based on the analysis of the College's strengths and the potential external opportunities, three proposed areas of distinction upon which to build are: the Arctic, Energy and Health. See Exhibit 2 for a preliminary model of the Areas of Distinction concept for the College.

Exhibit 2. Areas of Distinction Concept

Note - This is a very rough draft conceptual model that will be further defined and developed with faculty / staff during the Spring 2015 semester.



Objectives, Initiatives and Actions

This section of the Strategic Plan defines the objectives and initiatives that the College will pursue in order to accomplish the 2020 goals.

"Objectives" define what the College must accomplish in order to move toward the vision and achieve the goals set for 2020. The objectives are organized into 3 categories: Value Proposition, Internal Excellence and Resources.

"Initiatives" explain how we will achieve our objectives. The initiatives listed under each objective are the "critical few" improvement efforts that will be pursued in order to deliver the strategic objectives.

The plan also includes draft actions that were identified during the Planning Committee workshops as the specific activities to be taken to carry out the Initiatives. Steering Committee members will serve as the Champions for each initiative to work with faculty, staff and Advisory Committees to finalize, prioritize and schedule the actions.

Value Propositions

Value Propositions are the objectives that define what the College must achieve in order to satisfy key stakeholders. In other words, these objectives state the value that the College provides to key stakeholders. As a state land grant university the State of Alaska is a primary stakeholder but other key stakeholders include students, alumni, employers, and the community. There are three critical values for the College: Education, Research and Service.

Objective A1. Education: We provide a world-class education in Alaska that prepares graduates to be leaders in their professions and communities.

Initiatives:

- Ensure that students enter the College ready to succeed
- Strengthen the student experience with the College
- Enhance student and graduate outcomes
- Realign curriculum to ensure consistency with CoEng vision, as outlined in Strategic Plan and respective missions of UAA and the UA system
- Prepare for emerging trends and expectations

Objective A2. Research**:** We do innovative, relevant research that is a catalyst for improving Alaska and the world.

Initiatives:

- Increase research focus tied to areas of distinction
- Increase internal and external awareness of value of research activities.

Objective A3. Service: We engage with our diverse communities to lead sustainable improvements to social, economic and environmental conditions.

Initiatives:

- Align and strengthen service activities that are tied to Areas of Distinction

Internal Excellence: Process, People, Plant

The objectives for Internal Excellence define the critical few internal processes, organizational capabilities and infrastructure at which the College must excel in order to deliver the Education, Research and Service value objectives.

Objective B1. Areas of Distinction**:** We will strategically focus on interdisciplinary areas of distinction based on our unique location and expertize.

Initiatives:

- Define model and approach for Areas of Distinction
- Establish 3 Areas of Distinction

Objective B2. Employee Teamwork & Efficiency: We will nurture administrators, faculty and staff to be leaders in their fields who work together to streamline and improve teaching effectiveness, research results and community impact.

Initiatives:

- Hire, develop and retain the best faculty, staff and administration
- Use Strategic Plan to build strong alignment and teamwork
- Establish continuous improvement program to identify, assess and capture opportunities to improve efficiency of internal processes

Objective B3. Infrastructure: We will have a dynamic physical and virtual infrastructure that facilitates a project-based, engaged learning and research environment.

Initiatives:

- Establish the physical facilities to support the mission and vision of the College
- Develop a strategy and architecture for multi modal distance education

Resources

The Resources objectives identify the things that the College must do to secure the resources necessary to achieve internal excellence objectives and deliver the Education, Research and Service value propositions.

Objective C1. Investments: We will diversify and increase external funding to support our mission and strategies.

Initiatives:

- Increase individual and institutional giving to the College
- Establish/Activate a CoEng Development Committee
- Establish endowment plan for the College
- Create new commercial/entrepreneurial business technology licensing to generate earned income to support the College

Objective C2. Reputation: We will improve public recognition of who we are and the unique value we offer to attract investment, enrollment and research activity.

Initiatives:

- Determine and address the criteria for achieving ratings of top 5 of WICHE/WUE, top 15 in Western Region, and top 40 of National Engineering programs
- Create awareness of College strengths and unique location, within Alaska and nationally
- Establish and maintain a selective environment for enrollment in the College (similar to UAA Nursing program) in order to increase caliber of students, and thereby, our reputation
- Develop and execute a Student Recruiting Plan

Objective C3. Partnerships: We will strengthen partnerships and foster community within UAA, the UA system and externally to leverage resources and expand opportunity.

Initiatives:

- Collaborate across the UA system
- Establish partnerships with other universities to leverage resources and expand opportunities
- Expand partnerships with local industry and business community
- Strengthen partnership with the Anchorage School District

The 2020 Strategic Plan One Pager shown in Exhibit 3 provides a high level summary of the foundational elements of the Strategic Plan. The proposed Initiatives and Draft Action Plans are summarized in Exhibit 4.

Exhibit 3. 2020 Strategic Plan One Pager

STRATEGIC PLAN 2020

VISION: Inspired by Alaska's unique blend of traditions and frontier spirit, the UAA College of Engineering excels as a globally recognized education, research and service institution that is rooted in Alaska and relevant to the world.	**MISSION:** The UAA College of Engineering develops leaders in engineering, project management and technology who solve critical problems and explore opportunities that benefit Alaska and beyond through **education**, **research** and **service**.

VALUES:

Innovation – We search for and welcome diversity of ideas and act as leaders for positive change.
Collaboration – We focus on the common good through teamwork, collegiality and partnership to make valuable contributions to our communities.
Excellence – We aspire to greatness and continuous improvement.

2020 GOALS

Top 5 / 15 / 40 WICHE-WUE/ Western / National | **250 graduates / certificates per year** | **3 Areas of Distinction (Arctic, Energy, Health)**

OBJECTIVES	VALUE PROPOSITION	INTERNAL EXCELLENCE: PROCESS, PEOPLE, PLANT	RESOURCES
	A1. Education: We provide a world-class education in Alaska that prepares graduates to be leaders in their professions and communities. **A2. Research**: We do innovative, relevant research that is a catalyst for improving Alaska and the world. **A3. Service**: We engage with our diverse communities to lead sustainable improvements to social, economic and environmental conditions.	**B1. Areas of Distinction**: We will strategically focus on interdisciplinary areas of distinction based on our unique location and expertize. **B2. Employee Teamwork & Efficiency**: We will nurture administrators, faculty and staff to be leaders in their fields who work together to streamline and improve teaching effectiveness, research results and community impact. **B3. Infrastructure**: We will have a dynamic physical and virtual infrastructure that facilitates a project based, engaged learning and research environment.	**C1. Investments:** We will diversify and increase external funding to support our mission and strategies. **C2. Reputation**: We will improve public recognition of who we are and the unique value we offer to attract investment, enrollment and research activity. **C3. Partnerships**: We will strengthen partnerships and foster community within UAA, the UA system and externally to leverage resources and expand opportunity.

Exhibit 4. Initiatives and Draft Actions

Note – The Actions listed under each Initiative in this Exhibit are draft. They will be finalized with input of Faculty and Staff during Fall 2014 semester

A. VALUE PROPOSITION		
OBJECTIVES	**INITIATIVES & ACTIONS (*draft*)**	**CHAMPION**
A1. Education: We provide a world-class education in Alaska that prepares graduates to be leaders in their professions and communities.	**1. Ensure that students enter CoEng ready to succeed** *a. Leverage ANSEP model to take an end-to-end approach to creating a value chain for K12 STEM, enhance graduation success rates.* *b. Foster partnerships with the Anchorage School District which emphasize K12 STEM skills and their relationship to opportunities in engineering.* *c. Work with UAA to develop a University College to support students in becoming ready for CoEng* *d. Ensure strict enforcement of pre-requisites.* *e. Establish competitive standards for allowing student entry to CoEng at end of sophomore year.* ***2.* Strengthen the student experience with the CoEng** *a. Establish a systematic engagement process that connects with students from beginning to end, focused on positive student experience and outcomes* *i. Integrate students into CoEng immediately to help them feel part of the CoEng community, build a sense of pride and identity as a CoEng student* *ii. Establish mandatory advising for all programs* *iii. Develop/expand Tutoring Center* *b. Focus education around identified Areas of Distinction* *i. Identify and capture new opportunities for student engagement in research* *ii. Establish course guidelines for integrating hands on research and/or service* *c. Collaborate to improve access to key courses offered by other UAA colleges* *d. Identify and incorporate new interactive technology* *e. Establish annual Student Perception Survey* *f. Leverage/build on diversity of students, faculty and staff to improve educational experience* ***3.* Enhance student/graduate outcomes** *a. Engage with employers to increase the number of students participating in engineering internships and co-ops* *b. Expand opportunities for inter-university collaboration for delivering courses, research that will benefit future employment/advanced degree opportunities.* *c. Ensure that students develop leadership and interpersonal skills in addition to technical competency* *d. Increase knowledge of employer needs to improve curriculum and support student job search* *e. Leverage Advisory Boards to identify employer needs*	**1. Mock** **2. Watt** **3. Dean**

	4. Realign curriculum to ensure consistency with CoEng vision, as outlined in Strategic Plan, respective missions of UAA and UA system. *a. Separate Engineering Curriculum into 3 separate degrees (Electrical, Mechanical, Computer Systems)* **5. Prepare for emerging trends/expectations** *a. Conduct research to understand what future students might expect from their CoEng/University education, so that we can be ready for change. This may include sending faculty to training/education conferences to stay abreast of emerging trends.*	**4. Dean** **5. Piccard**
A2. Research: We do innovative, relevant research that is a catalyst for improving Alaska and the world.	**1. Increase research focus tied to areas of distinction** *a. Collaborate with industry and community to identify opportunities to create research/applied research solutions tied to identified areas of distinction* *b. Establish strong undergrad research program* *c. Identify and create Graduate research opportunities* *d. Identify target peer reviewed journals, conferences, etc.* *e. Hold/Sponsor conferences, communities of interest and forums in targeted areas* *f. Create environment to increase value/incentivize research efforts* *g. Support for faculty development (training, travel)* *h. Hire faculty in areas of distinction* **2. Increase internal and external awareness of value for research activities** *a. Educate key stakeholders on the impact of a strong research program on attracting and retaining top faculty talent and students, improving educational experience and outcomes, providing practical results that serve the community, etc.* *b. Initiate outreach/communications to ensure awareness of expertise available at CoEng which might be of benefit to stakeholders*	**1. Dean** **2. Rose**
A3. Service: We engage with our diverse communities to lead sustainable improvements to social, economic and environmental conditions.	**1. Align/strengthen service activities that are tied to areas of distinction** *a. Identify and engage in service activities which support increased sustainability for critical SOA communities tied to areas of distinction* *b. Develop/determine means for measuring impact of service* *c. Increase the number of students engaged in student clubs aligned with professional associations* *d. Service outreach to K12* *e. Community-based learning around areas of distinction*	**1. Dean**

B. INTERNAL EXCELLENCE: PROCESS, PEOPLE, PLANT		
OBJECTIVES	**INITIATIVES & ACTIONS (*draft*)**	**CHAMPION**
B1. Areas of Distinction: We will strategically focus on interdisciplinary areas of distinction based on our unique location and expertize.	**1. Define model and approach for Areas of Distinction** *a. Validate and describe Areas of Distinction* *i. Develop process to engage faculty in definition, emphasis and review process for Areas of Distinction* *b. Define the interdisciplinary connections within each Area of Distinction* *c. Define the core technical competencies and specific organizational capabilities and infrastructure enablers that are unique to each Area of Distinction* *d. Define the core technical competencies and specific organizational capabilities and infrastructure enablers that are universal across all Areas of Distinction* *e. Develop matrix to measure degrees of connectivity* **2. Establish 3 Areas of Distinction** *a. Arctic* *i. Expand presence in University of the Arctic* *ii. Use extended classroom of community, Alaskan environment and industry to enhance learning, education and resources.* *b. Energy* *i. Investigate requirements and potential opportunity to become a DOE Industry Assessment Center as a revenue source, benefit to local industry and learning opportunity for students.* c. *Health* i. Provide additional and/or more specific goals and objectives for this area of distinction.	**1. Piccard** **2. Dean**
B2. Employee Teamwork & Efficiency: We will nurture administrators, faculty and staff who are leaders in their fields who work together to streamline and improve teaching effectiveness, research results and community impact.	**1. Hire, develop and retain the best faculty, staff and administration** *a. Hire and develop strategically to align with Areas of Distinction* *b. Improve faculty, staff and adjuncts recruiting, onboarding, training / development and performance evaluation process.* *c. Foster a positive work environment for faculty / staff to focus on the common good.* *d. Recruit qualified adjunct professors and guest lecturers.* **2. Use Strategic Plan to build strong alignment and team work** *a. Communicate CoEng strategic plan and values in hiring, training / development and performance evaluation process.* *b. Align incentives and recognition to support strategic plan and core values.* *c. Improve communication and interaction between faculty members across departments.* *i. Increase knowledge about activities and projects in other departments to strengthen alignment and identify opportunities for collaboration.* **3. Establish continuous improvement program to identify, assess and capture opportunities to improve efficiency of internal processes.** *a. Streamline, improve efficiencies / effectiveness of internal processes to lower cost of operations, eliminate redundancy.*	**1. Lee** **2. Dean** **3. Mock**

	b. Increase number of faculty in areas to support identified opportunities *c. Consider how to optimize teaching resources with adjunct faculty, graduate students, how courses are assigned, etc.* d. *Establish an annual Faculty / Staff Teamwork survey and use results to identify improvement areas.*	
B3. Infrastructure: We will have dynamic physical and virtual infrastructure that facilitates a project based, engaged learning and research environment.	**1. Establish the physical facilities to support mission and vision of CoEng** *a. Finish / move to new building* *b. Define requirements and equip labs* *i. Define/establish consistent policies and procedures for labs such as:* *1. What level of support is provided to labs (e.g. funding for life cycle and replacement costs, building/IT costs, technician support, etc.): may vary between research and instructional labs.* *2. Establish consistent and transparent methods for requesting and distributing funds.* *3. Improve reporting and tracking of lab usage/revenue-information mayh assist in resource allocation decisions.* *c. Identify needs / opportunities and establish satellite labs across Alaska to support Areas of Distinction* **2. Develop a strategy and architecture for multi modal distance education**	**1. Riggs** **2. Piccard**
C. RESOURCES		
OBJECTIVES	**INITIATIVES & ACTIONS (*draft*)**	**CHAMPION**
C1. Investments: We will diversify and increase external funding to support our mission and strategies.	**1. Increase individual and institutional giving to the CoEng** **2. Establish/activate a CoEng Development Committee** **3. Establish an endowment plan for the CoEng** **4. Create new commercial / entrepreneurial business technology licensing to generate earned income to support the CoEng**	**1. Dean** **2. Dean** **3. Mock** **4. Dean**
C2. Reputation: We will improve public recognition of who we are and the unique value we offer to attract investment, enrollment and research activity.	**1. Determine the criteria for achieving Top 40 US / Top 15 Western Region CoEng rating.** ***a.*** *Establish key measures and dashboard to monitor progress against the criteria.* **2. Create awareness of CoEng strengths and unique location** *a. Develop and execute a Marketing Plan to create awareness of CoEng's strengths and unique location.* *b. Develop a Communications Plan with stakeholders* *c. Improve website* *d. Build on location of UAA at population and business center (industry, military, potential students…) to enhance reputation to highlight differences / uniqueness of programs and opportunities, promote success stories.* *e. Benchmark our competition to understand what they're doing that we're not.* *f. Align with UAA brand* *g. Publicize and promote abilities / strengths in Areas of Distinction* *h. Actively engage alumni as ambassadors and advocates for the strengths of the CoEng.*	**1. Piccard** **2. Dean**

	3. Establish and maintain a selective environment for enrollment in the College of Engineering (similar to UAA Nursing program) in order to increase caliber of students and thereby our reputation. **4. Develop and execute a Student Recruiting Plan.** *a. Conduct a baseline survey to cover knowledge and attitude of High School students, High School counselors, alumni, and employers.* b. *Recruit for strong diversity and high quality of students.*	**3. Mock** **4. Watt**
C3. Partnerships: We will strengthen partnerships and foster community within UAA, the UA system and externally to leverage resources and expand opportunity.	**1. Collaborate across the UA system** *a. Collaborate within the CoEngr departments and across UAA and other UAA Colleges/Departments in opportunity areas (e.g. Computer Science, Project Management, etc.)* *b. Collaborate with UAF / UAS to coordinate courses / distance ed / research with a focus on arctic engineering and technology* *c. Collaborate with UAA College of Business to provide courses to develop CoEng students' soft skills (leadership, communications, etc.)* *d. Collaborate with the College of Health to foster developments in biomedical engineering* **2. Establish partnerships with other universities to leverage resources and expand opportunities** *a. Build on partnership with CSU for work on arctic technology* *b. Washington State partnership for Chemical Engineering* *c. Increase participation in WICHE / WUE* **3. Expand partnerships with local industry and business community** *a. Develop internships, scholarships, research, lab and facilities* *b. Understand business issues and develop a collaborative partnership with industry to support research opportunities Establish Alaska Native partnerships (including ANSEP) to support / create Areas of Distinction (01 / S1)* *c. Alumni partnership for mentoring, etc* **4. Strengthen partnership with ASD** *a. ASD Honors Program participation* b. *Build strong connections with K12 STEM, K12 IGNITE, Engr Academies, etc. leading to future successful CoEng students*	**1. Dean** **2. Dean** **3. Dean** **4. Mock**

Metrics, Targets and Monitoring

The progress toward goals and objectives and the status of the initiatives and action plans will be routinely monitored by the Dean and Steering Committee and reported to faculty, staff, students and Advisory Committees each semester.

Key performance indicators will also be tracked to measure progress toward the 2020 Goals and the Strategic Objectives. Targets have been set for improvements to the metrics based on available data and trends. Baseline data will be gathered in the first year of the plan in order to set initial targets for metrics where historical data does not exist.

Exhibit 5. Key Performance Measure Dashboard

Note – the metrics and targets shown in this Exhibit are draft. They will be finalized with input of Faculty and Staff during Fall 2014 semester

OBJECTIVES	KEY MEASURES	2020 TARGETS
Education	• % Freshman graduate in 6 years	• 2014: 34%, 2016: 36%, 2018: 38%, **2020: 40%**
	• Student Perception Survey (TBD)	• Five Star rating TBD
	• # Undergraduate students engaged in research	• % in courses: 50% • % in sponsored research: 25%
	• # Students taking CoEng Distance Ed classes	• Increase TBD
	• % Placement Rate (Positions held by graduates or accepted into advanced degree) (DOL Data?)	• TBD
	• Average Class Size	• 20
	• Overall Full-Time Faculty : Student Ratio	• 1 : 30
Research	• $ Research funding awarded (total 2014-2020) • $ Research expenditures (annual) • # Publications in referred journals	• $10M • $1-2M/year • Average 2.5 per faculty / year
	• # Applied research projects underway	• TBD
Service	• # Leadership positions held in local and national professional organizations	• TBD
	• # K12 outreach service activities	• TBD
B1. Areas of Distinction	• # Areas of Distinction • Degree of Connectedness within CoEng and externally for each Area of Distinction	• 3 • TBD

OBJECTIVES	KEY MEASURES	2020 TARGETS
B2. Employee Teamwork & Efficiency	• % Faculty / Staff Performance evaluations "Meets Expectations" or better	• 100%
	• % Turnover other than retirement or life changes	• TBD, Reduced
	• % Faculty / Staff attendance at least 1 workplace culture development training per year	• 100%
	• % Faculty/ Staff attendance at least 1 technical professional development training per year	• 100%
	• # of work process continuous improvement efforts	• TBD
	• Results of annual Faculty/Staff Teamwork internal survey (TBD)	• TBD Five Star rating
B3. Infrastructure	• % Phase 1 complete	• 100%
	• % Fully equipped labs	• 100%
	• % Utilization of CoEng distance education infrastructure	• TBD
C1. Investments	• % CoEng Alumni giving to CoEng	• 15%
	• $ Philanthropic support	• $2M/yr
	• $ Earned revenue (not tuition or state funding)	• TBD
	• $ Venture capital for inventions / intellectual property	• TBD
C2. Reputation	• Regional/National Ranking Score	• Top 40 US / Top 15 West / Top 5 WICHE WUE
	• Brand Recognition by survey	• TBD Increase
	• % non-Alaska resident students	• TBD increase
	• Average SAT / ACT scores for CoEng Freshman	• TBD increase
C3. Partnerships	• # students / faculty / staff engaged in applied research, active learning and/or emerging issues with one or more community / industry / institutional partners	• TBD increase
	• # Partnering activities (UA, other universities, industry, institutions)	• TBD increase
	• # Engineering focused programs with K12, state education and community agencies	• TBD increase

Appendix

Steering Committee Charter

CHARTER
UAA College of Engineering Strategic Plan
Steering Committee
1/19/14

Objective
The objective of the Steering Committee is to develop a Strategic Plan for the UAA School of Engineering. The Strategic Plan should be outcome-focused, provide a framework for the College of Engineering to become a program of distinction and have broad ownership and support of faculty and other key stakeholders.

Key Activities
1. Develop and carry out a Communication/Engagement Plan to ensure that all key stakeholders (faculty, students, alumni, etc.) have the opportunity to be involved, understand and support the plan.
2. Conduct a broad-based online survey of all stakeholder groups to collect input on College of Engineering vision, mission, strengths, weaknesses, opportunities and threats.
3. Form a Planning Committee to participate in 3 half-day workshops during the Spring 2014 semester to solicit feedback in the development of the Strategic Plan. The workshops will be designed and facilitated by a Strategic Planning Consultant under the direction of the Steering Committee.
4. Participate in 4 – 6 working sessions with the Strategic Planning Consultant to develop the draft Strategic Plan document. (Dates TBD)
5. Finalize and present the Strategic Plan to the College of Engineering.
6. Lead the development of the 2014-2015 Implementation Plan.

Milestones
- January 2014: Kickoff Workshop for Strategic Planning Committee
- May 2014: Draft Strategic Plan issued for review
- August 2014: Strategic Plan reviewed during Fall 2014 Semester kick off meeting
- December 2014: Define the Implementation Plan with key activities, accountabilities and target dates for operationalizing the Strategic Plan.

Meetings
The Committee will meet on an as-needed basis with the strategic planning consultant to establish expectations, monitor progress and provide feedback on draft deliverables. In addition, the Committee will participate in the 3 Planning Committee half-day workshops and 4 – 6 additional Steering Committee working sessions between February and May.

Committee Members
- Dr. Tien-Chien Jen, Dean
- Bart Quimby, Associate Dean & Professor, Interim Chair Geomatics
- Beth Rose, Senior Development Officer
- Crickett Watt, Student Success

- Kenrick Mock, Professor and Department Chair – Computer Science & Engineering
- LuAnn Piccard, ESPM Department Chair & MSPM Program Chair
- Alex Hills, Distinguished Affiliate Professor, Advisory Board Member
- Jeffrey Hoffman, Associate Professor and Department Chair, Mechanical Engineering
- Kimberly Riggs, Facilities Manager
- Karen Lee, Sr. HR Consultant
- Yuan Fang Dong, Institutional Research
- Meuy Saechao, Administrative Support

Planning Committee Charter

CHARTER
UAA School of Engineering Strategic Plan
Planning Committee
Revised 1/19/14

Objective

The objective of the Planning Committee is to provide broad stakeholder input to the Strategic Plan for the UAA School of Engineering. The Planning Committee will provide input and advice to develop the Strategic Plan document.

Key Activities

The Planning Committee will participate in 3 half day Strategic Planning workshops during the Spring 2014 semester:

- February 7: Input to Vision, Mission, Values
- March 7: Input to SWOT Analysis and Strategic Objectives
- May 2: Feedback on Draft Strategic Plan

Committee Members

The Planning Committee is made up of a broad cross section of key stakeholders in the UAA School of Engineering including faculty, students, alumni, administration, campus leaders, businesses, donors, government, etc.

FACULTY	**STUDENT**	**ALUMNI**
Robert Lang (Civil) Osama Abaza (Civil) Thomas Ravens (Civil) Jens Munk (EE) Matthew Kupilik (EE) Roger Hull (PM) Steve Wang (ESM) Martin Cenek (CSE) Dr. Nicolae Lobontiu (ME) Caixia Wang (Geomatic) Jennie Brock (ME) Orson Smith (Civil)	Sophia Huff (Civil) Weldon Johnson (EE) William Ruzicka (EE) Chris McConnell (ESM) Lena Petrova (PM) Jacob Dempsey (CS) Dustin Mendoza (CSE/EE) Elena Stutzer (ME)	Thomas Gill, (Civil) HDR Inc. Kris Homerding, (Civil) Jose Saettone Figueroa (EE) Chris Turletes (ESM) Megayla Franks (PM) George Newman (PM) Rob Schapper (PM) Jim Weller, Alaska USA (CS) DJ Enriquez, Honeywell (CSE) Christie Parkinson (ME) Christian Dougherty (ME)
ADVISORY BOARDS	**UAA STAFF**	**EXTERNAL**
James Amundsen, DOT (CE) Berry Kirksey (ESPM) Lance Ahern, MOA (CSE) Brian Walch, Resource Data Inc. (CSE) Christie Parkinson,(ME) Boyd Morgenthaler (CoEng) Dan Fawcett, ATS Alaska (CoEng) Patrick Coullahan, Corp of Engineers (CoEng) Steve Gebert, ACS (ESPM) Virgina Groeschel, DOT, P&F (CoEng)	Rashmi Prasad (CBPP) Karen Schmidt (CTC) Donald Ketner (CTC) Herb Schroeder (ANSEP) Bruce Schultz (Student Affairs) Andrew Tibor (CoEng Facilities, ESPM) Helena Wisniewski (GS) Cory Fisher (UAA Facilities) John Hansen (UAA Facilities)	Larry Custer, Honeywell Daniel Hart, Siemens Industry Mike Haynes, CH2M Hill Dave Lachance, BP Brian Minister, GeoNorth Steve Noble, Dowl HKM Scott Pessetto, Conoco Phillips Fran Ulmer, USARC