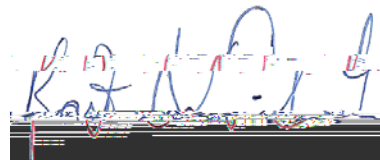


ERS
UTIONS

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 it. uiod



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

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 collabor

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

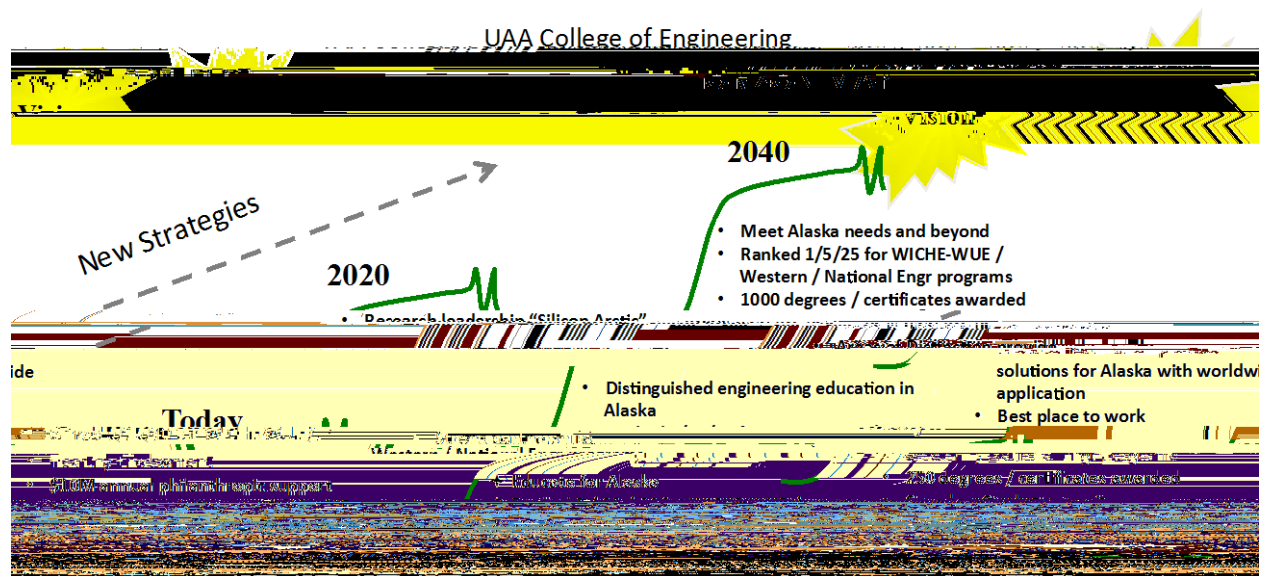


Exhibit 2. Areas of Distinction Concept

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

<u>Energy</u>	A	

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

Internal Excellence: Process, People, Plant

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:

- X 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
- X Create awareness of College strengths and unique location, within Alaska and nationally
- X 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
- X 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:

- X Collaborate across the UA system
- X Establish p

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 –

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



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 expertise.

1. Define model and approach for Areas of Distinction
 - a. *Validate and describe Areas of Distinction*
 - i.

	<ul style="list-style-type: none"> b. <i>Increase number of faculty in areas to support identified opportunities</i> c. <i>Consider how to optimize teaching resources with adjunct faculty, graduate students, how courses are assigned, etc.</i> d. <i>Establish an annual Faculty / Staff Teamwork survey and use results to identify improvement areas.</i> 	
<p>B3. Infrastructure: We will have dynamic physical and virtual infrastructure that facilitates a project based, engaged learning and research environment.</p>	<ul style="list-style-type: none"> 1. Establish the physical facilities to support mission and vision of CoEng <ul style="list-style-type: none"> a. <i>Finish / move to new building</i> b. <i>Define requirements and equip labs</i> <ul style="list-style-type: none"> i. <i>Define/establish consistent policies and procedures for labs such as:</i> <ul style="list-style-type: none"> 1. <i>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.</i> 2. <i>Establish consistent and transparent methods for requesting and distributing funds.</i> 3. <i>Improve reporting and tracking of lab usage/revenue-information mayh assist in resource allocation decisions.</i> c. <i>Identify needs / opportunities and establish satellite labs across Alaska to support Areas of Distinction</i> 2. Develop a strategy and architecture for multi modal distance education 	<ul style="list-style-type: none"> 1. Riggs 2. Piccard

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
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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

- x January 2014: Kickoff Workshop for Strategic Planning Committee
- x May 2014: Draft Strategic Plan issued for review
- x August 2014: Strategic Plan reviewed during Fall 2014 Semester kick off meeting
- x 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

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

Planning Committee Charter

CHARTER