



Date:

March 9, 2020

To:

Cathy Sandeen, Chancellor

From:

John Stalvey, Interim Provost Solur RA Stalvey

Cc:

Kenrick Mock, Interim Dean, College of Engineering

LuAnn Piccard, Associate Professor, Department Chair, Program Committee Chair,

Project Management

Roger Hull, Term Assistant Professor, Project Management

Susan Kalina, Vice Provost for Academic Affairs Claudia Lampman, Vice Provost for Student Success

Re:

AY20 Expedited Program Review Findings - Project Management MS

I have reviewed the dean's findings and the completed Expedited Program Review Template for the Project Management MS. The Provost's Office did not receive an Optional Program Response Form from the program.

Recommendations

My recommendation is to accept the decision and recommendations of the dean with the additional commentary that in AY21 the program should propose and put forward curriculum to be implemented in fall 2021 for an Accelerated Masters with CTC baccalaureate programs Construction Management and Advanced Technology Leadership, as well as other Engineering programs within the College. An interim progress report on all recommendations is due to the dean by March 1, 2021. The dean will submit a review along with the program's interim progress report to the provost by April 1, 2021. A follow-up Program Review will be conducted in AY22.

Decision

Recommend Continued Review



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Date: February 14, 2020

To: John Stalvey, Interim Provost

From: Kenrick Mock, Interim Dean, College of Engineering

Cc: LuAnn Piccard, Associate Professor & Department Chair, Program Committee Chair

Roger Hull, Term Assistant Professor

Re: AY20 Expedited Program Review Findings

Program/s in this review: Project Management (MS)

Specialized accrediting agency: Project Management Institute General Accreditation Council (PMI GAC)

Campuses where the program is delivered: UAA

Members of the program review committee:

- LuAnn Piccard, Associate Professor & Department Chair, Program Committee Chair, UAA
- Roger Hull, Term Assistant Professor, UAA

Centrality of Program Mission and Supporting Role

The program meets UAA's mission to support workforce development in the high demand job field of project management. While the PM program is in the College of Engineering, graduates can and do work in a variety of fields from Engineering to IT to Healthcare. PM students have applied their skills internally, for example, PM students have managed projects for student clubs such as UAA Robotics or the Rocketry club. The advisory board is active and the chair of the PM department is a leader in the profession as a member of the PMI Board of Directors. The PM program also has a new minor, which has been heralded by local industry as highly relevant to the engineering disciplines, and teaches the ESM course that is required by most undergraduate engineering programs.

Program Demand (including service to other programs), Efficiency, and Productivity

Industry demand is high inside Alaska and globally with demand projected to grow.

The most glaring statistic is the number of majors, which has trended down from a high of 73 in 2016 to 31 majors in 2019. The reasons for the downturn are laid out in the report and include a number of concomitant factors (downgrade in certain sectors, location in the University Center, supertuition issues, elimination of the ESM program, among others). Prior to the enrollment drop in the last few years, the program was quite strong with steady enrollment and tuition revenue that exceeded costs.

For several years the program has exceeded instructional capacity; with only two faculty members, overloads were used to cover the curriculum. Due to the budget pressure, overloads were not offered in summer 2019 and AY20 and the program responded by changing the number and frequency of course offerings, meeting budget challenges while still satisfying program requirements at some cost of convenience to students. These constraints will likely remain until the fiscal picture improves.

Class size is small as expected for a standalone graduate program, and exacerbated by the decline in enrollment.

Program Quality, Improvement and Student Success

The program has been continuously accredited by PMI-GAC since 2007 and the PM program is considered a leader in Project Management assessment. By multiple measures, the program is of high quality with PM students and graduates contributing to the PM needs of many companies and organizations. Furthermore, PM graduates are now placed in senior positions in many organizations and PM students have won several awards, including highly competitive PMI awards. The program is also offered online and adheres to the Quality Matters standards.

Program Duplication / Distinctiveness

The MSPM at UAA is unique in the state. In addition, the program has the expertise to offer professional short courses that can generate additional revenue. The fact that the curriculum was designed for hybrid distance/face-to-face delivery means that there are already numerous opportunities for delivery outside of Anchorage.

Commendations and Recommendations

The faculty are commended for delivering a quality program with an extremely small number of faculty. The program is focused on increasing enrollment and efforts are beginning to bear fruit, as PM was the only engineering program to increase enrollment in spring 2020. A few initiatives that appear to be highly promising include:

- Growth and advertising of the PM Minor is allowing the department to reach an undergraduate audience for the first time
- Creation of a Fast-Track option with other engineering disciplines, Construction Management, and Applied Technologies Leadership will make the program more visible to a targeted audience of students who are likely to find the MSPM attractive
- Expanding interdisciplinary concentrations is allowing the department to make its unique offerings available to MBA students and also generate additional SCH

The program has strong prospects for growth and revenue generation that are relatively unique to PM.

Decision: Continued Review

I recommend continuing review for the program to determine within two years if the initiatives result in increased enrollment.

Submission date: 1/31/2020

Program/s in this review: Project Management (MS)

Specialized accrediting agency (if applicable): PMI-GAC (continuous since 2007)

Campuses where the program is delivered: UAA-Anchorage + Hybrid Synchronous Distance

Members of the program review committee:

LuAnn Piccard, Associate Professor & Department Chair, Program Committee Chair, UAA

Roger Hull, Term Assistant Professor, UAA

1. Centrality of Program Mission and Supporting Role (700 words or less)

By 2027, employers globally will need 88 million individuals in project management roles working in a dynamic and rapidly changing global landscape to drive \$20.2T GDP contributions from project-oriented industries. However, much available talent is retiring. Project Management Institute (PMI) estimates a talent gap could result in loss of \$207.9B GDP through 2027 among 11 countries surveyed. These factors create extraordinarily positive job outlooks for skilled project professionals globally, domestically, and in Alaska. *Globally projections include 2.2M new project-oriented roles each year through 2027 to fill demand due to attrition and expansion.* Nationally, 2017's most significant annual percentage increase in project-oriented job openings among key sectors was Healthcare (17%). In manufacturing and construction, 97% of job openings were attributable to attrition, followed by 57% in management and professional services. Lack of key skills is second only to commodity price volatility on oil and gas CEOs' issues lists. (PMI, 2020).

Alaska is a project state. Predominantly, outcomes are derived through projects spanning all sectors driving today's economy, and leveraging emerging sectors fueling future growth. These include energy, construction, telecommunications, healthcare, IT, cybersecurity, financial services, transportation, logistics, government, military and tourism. Similar global and domestic workforce challenges exist in Alaska, making Project Management (PM) a State of Alaska (SoA) Department of Labor & Workforce Development high demand "cross-cutting" management and operations career. In Alaska, 350-400 jobs annually and \$50,000,000 in salary attributed to project managers (PMs) planning and executing a multi-billion dollar project portfolio of statewide infrastructure, modernization and development. Average US salary for project managers is \$116,000. In Alaska, average salary for PMs with 5-10 years' experience is \$150,000 (jobs.usa, et al).

Given strategic importance worldwide, PM degree programs are cited among newest, most relevant and fastest growing in academia. American Society of Engineering Educators cites PM as one of top five least served yet most essential skills for graduating engineers. UAA PM is well- positioned to capitalize on growth opportunities, support critical state employment needs, and provide skills critical to engineers and other professional disciplines. Since 2004, more than 300 students have graduated, holding senior leadership positions with key employers in Alaska and beyond (see details, Section 3). A single qualified PM leverages 100s of other disciplines. These are Alaska-educated PMs with place-based insights and experience key to understanding and addressing Alaska's unique challenges, including being the vanguard of climate change impacts. Alaska PMs address challenges "Rooted in Alaska and Relevant to the World."

UAA PM includes an MSPM degree (since 2004), in addition to new offerings added within the last academic year to leverage great potential of PM to foster interdisciplinary collaboration. These include Minor in Project Management and, in partnership with CBPP, three concentrations: MSPM with Leadership, MSPM with General Management, and MBA with PM concentration. A Minor in Project Management is available to students in any UAA discipline (engineering, business, healthcare, arts and sciences, and technical). CoEng MSCE and MSME degrees require taking one PM course for non-thesis students (majority enrolled in both programs). We are currently developing "fast track" MSPM options from all CoEng disciplines and CTC's BS-CM and BS-ATL programs because many students focus

on project roles in chosen fields vs. pursuing technical paths. Many ANSEP students choose PM for advanced degrees.

PM provides revenue-generating professional training for individuals and tailored cohort sessions for local companies, state and federal government agencies.

PM contributes to DHS-funded Arctic Domain Awareness Center (ADAC) supporting initiatives, research outcomes, and accelerating technology transfer to operations.

PM graduate students mentor CoEng undergraduate clubs, applying and building PM capacity: Rocketry, Baja Car, Robotics.

PM's active 24-member advisory board (PMAB) ensures program's curriculum reflects industry needs and best practices; includes senior executives and several program alumni representing Alaska's key sectors.

PM leverages seasoned relationships with military/VA programs; significant percentage of students are active duty or transitioning military to civilian careers. PM provides a natural path for transition, and enhanced post-service opportunity.

PM chair serves on PMI's Board of Directors advancing the profession on behalf of 1.8M members and credential holders worldwide. Locally, PM is closely aligned with the PMI-Alaska Chapter, which provides students and alumni opportunities for scholarships, professional development, and networking. Current students and alumni hold the majority of PMI-AK Board positions.

2. Program Demand (including service to other programs), Efficiency, and Productivity (7 year trend; 1400 words or less)

UAA PM is currently recovering from a downturn in historically strong enrollments and steady growth through AY16-17 resulting from numerous factors. Originally, the Engineering Science and Project Management (ESPM) Department was comprised of three graduate programs: MS Engineering Management (MSEM), MS Science Management (MSSM) and MSPM all located at University Center Campus from 2000-2016.

As early as AY14-15, PM recommended reducing the 100% supertuition for the MSPM degree when signs of economic downturn emerged and timing of ESPM move to main campus from UC in fall 2016 was finalized, eliminating a \$150K+ annual mall-side rent and utility charge paid directly by the program from tuition revenue. PM recommended normalizing tuition to increase access and affordability for all students, especially as we observed diminishing levels of employer tuition reimbursements. In parallel, a survey of undergraduates indicated that a minor in project management would be highly desirable.

AY14-15 Program Prioritization recommended enhanced support for PM and transformation for MSEM/SM. AY16-17 Strategic Pathways and internal CoEng priority and resource decisions discontinued MSEM/SM due to lower enrollments, recommending concentrated support to grow PM. The department physically moved to main campus from University Center in fall 2016. At UC, PM benefitted from a strong visual presence, including external and internal PM signage. That visible presence was lost, and due a simultaneous UAA website restructuring in fall 2017, access to and relevant PM program information was invisible to potential students, leading to cascading negative perception issues.

In AY17-18, two out of four full-time Department faculty associated with MSEM and MSSM programs were released (both tenured), and MSEM/SM programs were taught out by remaining PM faculty and adjuncts. PM enacted significant efforts to graduate any MSEM and MSSM students previously admitted (back to 1978) and current students impacted by program discontinuance after MSEM/SM faculty left. These actions by PM and fully supported by administration support resulted in 24 MSEM/SM students completing their degrees.

These issues concomitant with continued oil & gas and construction industry downturns, and throttling of program advertising to a narrow channel of word of mouth, contributed to a "perfect storm" misperception that our entire ESPM Department (including PM) had been eliminated, resulting in a sharp decline in enrollment from new students in AY18.

College and campus administrative priorities delayed approval of supertuition reduction until fall 2018. In 2017, PM initiated curricular changes to stack courses to encourage undergraduate access and support implementation of the PM minor that was formally approved in spring 2019.

Prior to and in response to these challenges, PM has been proactive in launching initiatives to increase enrollments. UAA PM is gritty, resilient, and unafraid to embrace, lead and drive necessary change both internally and externally, in response to our dynamic environment. Actions taken within past two years include:

- MSPM supertuition was lowered from 100% to 20% (consistent with other CoEng and CBPP) to remove cost barrier and increase access to more students in spring 2019
- The successful "reach back" initiative approved for MSEM and MSSM students was approved for MSPM
 allowing seamless readmission of previously admitted students and credit for courses past the seven-year
 limit
- UAA website errors have been corrected to provide access to/visibility of PM program information
- PM content is now included in CoEng promotional material
- 400 level courses were stacked with existing 600 level course to encourage affordable undergraduate enrollment in AY18 and AY19
- Implementation of Minor in Project Management (approved spring 2019) was accelerated to recruit from a new audience and enhance PM capabilities of UAA undergraduates entering workforce (all disciplines)
- Adjunct faculty and staff costs were proactively reduced, and summer course offerings were streamlined in 2019, increasing instructional efficiency
- Three new PM degree concentrations with CBPP MBA were approved fall 2019
- A PM Alumni Association was approved and launched in summer 2019
- The PMAB was engaged actively to help increase enrollments beginning in 2018
- A partnership to actively recruit ANSEP graduates was initiated in 2019
- Creation of "fast track" MSPM degrees from all CoEng undergraduate disciplines and two CTC programs was launched in AY2019-20

In AY19-20, we see fruits of these initiatives: in spring 2020, MSPM was only program in CoEng to see an increase in enrollments. A "bubble" seems to have passed through our system; course enrollment data have an upward trajectory in current and future semesters. These initiatives along with modest investments in proactive marketing and recruitment, analysis-based enrollment forecasts and admissions will meet or exceed historic levels given employment demand. Despite an enrollment downturn and associated reduction of revenue (including reduction of supertuition), PM's key productivity metrics exceed a positive mean among UAA graduate programs.

As the FTEF data indicates, the program has two highly productive and experienced faculty members whose teaching is supplemented by industry expert adjuncts. This approach allows for nimble directional changes each semester while maintaining critical core expertise and continued current "industry in the classroom". PM does not have a single, natural undergraduate program pipeline nor undergraduate degree program "legs" to leverage faculty resources. However, PM is a crosscutting, interdisciplinary career; students from any UAA undergraduate discipline can benefit from PM and contribute PM pipeline growth, especially with the new Minor in PM and fast-track options. Regardless, PM remains the CoEng's largest and most cost effective graduate program. Our average cost/SCH, \$552.58 over this review period, is well below UAA average for graduate programs of \$780.58. Admitted/active majors per year from AY13-AY17 averaged a healthy level of 64 even with 100% supertuition.

For years prior to AY18-19, revenue/SCH exceeded cost/SCH due to strong enrollments and 100% supertuition. Reduction from 100% supertuition to 20% differential tuition (consistent with CoEng overall) was implemented in spring 2019. We anticipated an associated drop in revenue/SCH given the 80% tuition surcharge decrease (from 1005).

to 20%) and discontinuance of MSEM/SM programs. Active external marketing, internal undergraduate promotion and advising, partnerships with CBPP and CTC, and the Minor in PM will boost enrollments and revenue to offset the 2018-19 decline and continue to grow to meet market demand. *For the next two years, increasing enrollments capitalizing on demand is our top priority.*

A PM Department capability not covered in IR data is the provision of revenue-generating professional training for individuals (open enrollment) and tailored cohort sessions for local companies, and state and federal government agencies. When PM was located at University Center and had greater classroom use flexibility, annual professional development revenue (incremental to tuition revenue) averaged \$100,000 per year and in some years exceeded \$250,000. We have pivoted to using Gorsuch Commons as a training venue. In summer 2019, we successfully delivered a 2-day tailored PM training course for Alyeska generating \$15K. They have expressed interest for an ongoing series. SoA DoT has approached PM for a similar series for statewide delivery this year. PM delivered a yearlong 30-student cohort training program to CH2MHill, generating over \$250,000. Other tailored cohort training sessions for ASRC and Chugach generated approximately \$10-20K each. Opportunity exists to expand delivery of open enrollment and cohort-based professional development courses because access to quality, place-based PM professional development training is limited in Alaska. These courses represent a strong potential source of incremental revenue with modest investments in marketing/promotion and administrative support.

Additionally, PM delivered our MSPM degree program to two separate 12-15 executive level student cohorts handpicked by Alaska Airlines when deciding to transform their organization from functional silos to customer focused, project driven programs. Alaska Air chose UAA PM over UAA MBA, UAF MBA and UW MBA degree programs. These leaders were part of Alaska Airlines' transformation contributing to its current market leadership. Faculty delivered MSPM courses in Seattle over compressed 18-month cycle. This tailored cohort MSPM degree program delivery generated over \$1.5M in tuition revenue and represents a growth opportunity to revitalize for other companies in Alaska seeking similar internally driven transformation programs.

Given high teaching workloads, only one of two full-time faculty members has an active research workload component. Externally funded applied research for projects (e.g., State of Alaska Election Security Project and intra-State agency RSAs) have contributed to program income. There is clear demand for PM focused research initiatives. However, given resource limitations, emphasis has been placed on restructuring and initiatives to grow enrollments.

3. Program Quality, Improvement and Student Success (1500 words or less)

PMI-GAC has continuously accredited UAA's MSPM program since 2007. One of 13 programs initially receiving accreditation by 2007, PM is considered a leader among 125+ now-accredited programs worldwide. Since 2001, UAA's PM department has also been a certified PMI-Registered Education Provider (REP) to deliver PMI-approved professional development courses required for initial and ongoing Project Management Professional (PMP) certification.

PMAB reviews curricula annually to reflect best practices aligned with global and local industry needs. Annually, PMI-GAC reviews/approves program continuous improvement aligned with standards. PM benefits from collaboration with a global network of PMI-GAC accredited programs advancing and sharing best practices and innovative learning approaches relevant to PM. From 2013-2018, PM chair served as director and chair for PMI-GAC's accreditation board, responsible for establishing accreditation standards, approving applicant programs, and reviewing annual quality assurance reports for accredited programs. PM Chair is currently serving a 3-year term (2019-2021) as one 12 elected directors on PMI's Board, accountable for strategic and fiduciary oversight and governance, focused on global PM profession advancement. These global insights combined with subject matter expertise and professional experience of place-based full-time and adjunct faculty ensure our PM curriculum spearheads our PM profession globally and meets Alaska's specific needs.

Since 2004, PM has adopted innovative approaches to learning. Industry insights, student needs and academic rigor drive learning objective and programmatic decisions. Virtually all students are working professionals. Many have rotational assignments, are deployed overseas, live outside of Anchorage or Alaska for all or part of their degree

program. Students choose PM because of its professional relevance and academic rigor, and for our flexible, hybrid in-class/synchronous distance delivery environment. This student-centric approach provides place-based flexibility while maintaining a real-time, collaborative and engaged learning environment with peers/faculty. All classes are offered during evening hours to accommodate working students' schedules. Students join class in-person or via live video for sessions, coursework or program activities; 100% of students benefit from this flexible modality. Integration of distance technology is a key element of our learning environment, as a significant percentage of project managers lead teams that are geographically separated and leverage an ability to confidently communicate and lead in that environment. All class sessions are recorded and posted to Blackboard for reference/review within minutes of class conclusion. Program courses are reviewed against Quality Matters accessibility standards, and faculty/staff receive QM training.

Program and course learning outcomes are clearly documented in syllabi; student achievement is reviewed during each course and at conclusion of each semester by lead faculty. Learnings are incorporated throughout each semester and included in future deliveries using PM's continuous improvement process. PM is designed around iterative, hands-on reflective learning resulting from theory learned then practiced in professional settings. Throughout PM course of study, students capitalize on multiple opportunities to plan and execute end-to-end projects across a spectrum of complexity and domains. Students apply best practice PM processes and advanced concepts in scope, risk, time, quality, and resource management, project controls and stakeholder engagement. They practice and demonstrate communication and leadership skills, critical thinking and strategic alignment. The two highly experienced full-time faculty maintain quality and consistency of the core, supplemented by working professional, subject matter expert adjuncts that bring current industry challenges and practices into the classroom.

Student success is measured frequently based on applied growth through course assignments and demonstrated ability to combine theory and class assignments applied to students' professional environment, followed by their reflections on achievement of learning objectives. Students complete independent summative capstone projects that contribute meaningfully to PM's body of knowledge, demonstrate mastery of PM knowledge areas and processes, and support learning of other students. Many projects contribute tangible value to companies through improved practices, processes, outcomes and research.

PM students are highly diverse, including a broad spectrum of industry experience, age, gender and ethnicity. PM student population is gender-balanced and represents Alaska's diverse and vibrant culture, including many students ranging in source from ANSEP to an ethnically diverse local and global population of international students seeking best in class advanced PM education. Diversity of students contributes an essential component of our learning environment.

Faculty advise students directly in focused, personal interaction. PM prides itself on a sense of family and fostering mutual commitment and ongoing support. Students and alumni are present daily in PM spaces to discuss admission, planning coursework and receive professional career mentoring. Alumni are active as adjuncts, capstone advisors, guest lecturers, and members of PMAB. They actively recruit PM students and graduates to fill full-time PM positions in their organizations and create internship opportunities. We have had four separate married couples graduate; one partner begins, inspires their spouse to join the program, and both graduate. PM students and alumni volunteer in community organizations, contributing leadership and introducing PM practices to enhance organizational outcomes for clients served. Examples include Habitat for Humanity, Beans Café, Campfire, Catholic Social Services, Covenant House, Boy Scouts, Alaska Native Professional Association, Oil Spill Recovery Institute, etc. Ultimately, student success is measured by contribution, advancement within their current careers and enhancement of communities, and their ability to quickly pivot to new or adjacent opportunities based on knowledge gained from their education, experience and outcomes delivered.

PM students and graduates deliver tangible value and outcomes to companies and organizations across all sectors critical to Alaska's financial growth including GCI, Alaska Communications, ASRC, Alyeska, Alaska Airlines, BP/Hilcorp, Jacobs/CH2M, NANA, Doyon, Conoco-Philips, DOWL, Worley Parsons, Chugach, Providence, ANTHC, US Army Corps of Engineers, Davis Constructors, Amazon, Facebook, Microsoft, and multiple SoA agencies. PM graduates hold

senior leadership positions with titles including CEO, President, COO, Executive Director, Managing Director, Program Director, and Senior Project Manager. A representative sample includes:

- <u>Construction</u>: President, Davis Constructors, one of Alaska's largest statewide general contractors. President, ChemTrack Alaska, an 8(a) woman-owned construction, environmental engineering and remediation services company. Construction Supervisor, ASD.
- <u>Oil and Gas</u>: Senior Program Manager, Doyon Drilling. Responsible for design, construction, delivery and stand up of two most recent state of the art Conoco Phillips North Slope drill rigs. Subsea Project Manager, BP. Program Manager, Alyeska.
- <u>Logistics:</u> President and CEO, AIRSA, a buying alliance that lowers costs of goods and shipping for rural Alaska enterprises. Won State of Alaska Entrepreneur of the Year. COO, Colville.
- <u>Native Corporations</u>: President, Copper Mountain Foundation and Director of Shareholder Services, Tatitlek
 Corporation. President and CEO, ASRC Construction. Senior Vice President of Administration and Finance, ASRC
 Construction.
- Rural Energy and Infrastructure: Program Manager, Rural Energy, ANTHC. General Manager, QAP.
- <u>Telecommunications and Cybersecurity:</u> Senior Director Enterprise Security, Business Continuity/Emergency
 Management and Facilities, Alaska Communications. Also Program Manager for \$150M project to lay undersea
 fiber optic cable from Anchorage to Florence, OR. Senior Project Manager, AT&T.
- <u>Engineering and Design:</u> Division Manager, Atkins. Program Manager, DOWL_Project Controls Engineer, Fluor. Engineering Program Manager, Jacobs/CH2M. Project Manager, Jacobs/CH2M. Senior Project Engineer, Golder.
- <u>Transportation</u>: Managing Director of Human Capital. Alaska Airlines Group. Previously Managing Director for Strategy. Works as part of executive committee to oversee execution of corporate strategy and other key initiatives. Program Manager Advanced Train Control Systems, Alaska Railroad. Director of Strategy, Cubic Corporation and Co-chair Intelligent Transportation of America.
- <u>Healthcare:</u> Executive Director of Information Technology, Kaiser Permanente. Senior Project Manager, Premera Blue Cross. Strategic Project Manager, Cook Children's Health Care System. Principal Project Manager, Providence.
- <u>Utilities:</u> Senior Manager, Chugach Electric Corporation. Project Manager, City Light and Power. Projects Administrator, Chugach Electric.
- <u>USACoE</u>: Area Engineer & Chief; Program Manager & Chief
- State of Alaska: Deputy Commissioner, Alaska Department of Transportation and Public Facilities
- <u>Information Technology</u>: Pubic Sector and Education Engagement Program Manager, Microsoft. Project Controls Lead, Facebook. Project and Proposal Manager, Amazon. Program Manager, Hankuri Data Solutions. Information Services Project Manager, Chugach Electric.

Active engagement with the PMI-AK chapter provides networking, community outreach, and professional development opportunities for students and alumni. PM students pursue chapter and chapter-member proposed projects for class assignments and Capstone projects. Current students and alumni hold PMI-AK Board positions. PMI-AK Chapter and local business leaders provide PM student scholarships.

PM students have been recognized as "Top 40 Under 40" and Alaska Entrepreneur of the Year. They have received prestigious and highly competitive PMI awards open to over 600,000 PMI members globally. In 2011, a PM student from Nigeria, won PMI's "International Student Paper of the Year" award. In 2019, PM students won two of four awards competed for globally: a PM student from Ghana won PMI's award for a student paper advancing the PM profession in engineering and construction, and a recent PM alumna and PMI AK Chapter President won a community engagement award for helping Campfire AK implement PM practices to improve organizational outcomes. That two of four annual awards for PMI in 2019 came from UAA PM and Alaska is unprecedented.

4. Program Duplication / Distinctiveness (300 words or less)

PM degree programs (MSPM, Minor in PM, MSPM with Leadership or General Management Concentration, and MBA with PM concentration) are unique to UA's system and are exclusive among all other Alaska institutions of higher

education (e.g., APU, Wayland Baptist). Without PM, Alaskans seeking a PM degree or electives would necessarily enroll in online programs offered by non-Alaska institutions or leave our state. PM, within CoEng, offers hybrid, inclass and synchronous course delivery modality, providing access for students located anywhere within or outside Alaska (domestic and international), for full degrees or electives. Many ANSEP students chose PM as a path for advanced degrees. An opportunity exists to expand and leverage PM program and courses to benefit UAF undergraduate and graduate students.

PM also provides revenue-generating, non-academic professional development courses. Experienced faculty create and deliver courses that leverage academic content to serve individual working professionals, tailored to meet unique organizational needs in a cohort environment (e.g., CH2MHill, Alyeska, Chugach, State of Alaska, Doyon). These courses fill a critical niche for the professional workforce and serve as a pipeline for students ultimately choosing to purse an advanced degree in PM. Training courses are delivered using similar hybrid in-class and distance delivery capabilities, allowing professionals from across Alaska to attend without having to incur travel expenses. Since 2001, PM is the single PMI Registered Education Provider (REP) in Alaska, authorized to deliver Project Management Professional (PMP) Certification Exam preparation training and courses delivering PDUs approved and required for ongoing professional certification. Any other certified PM professional development courses offered in Alaska are provided by out-of-state trainers or delivered online. Without PM professional development capabilities, individuals and organizations would necessarily contract with organizations outside Alaska or send students out of state, either of which are costly and inflexible options.

5. Summary Analysis (500 words or less)

Key PM strengths are academic rigor and global-to-local industry insights partnered with flexible, engaged hybrid distance-learning environments tailored to needs of diverse working students in high-growth crosscutting leadership professions essential to critical business sectors in Alaska and beyond.

Increased, effective marketing support and leveraged distance delivery capabilities, will return PM to and exceed historically high enrollments given market potential and relevance across Alaska and beyond. Working professional students pursuing degrees via flexible delivery modalities represent a largely untapped/stable market in Alaska and a high growth sector US-wide (Wiley, 2019). Emphasis on graduate programs and associated graduate tuition streams will help offset projected UAA undergraduate revenue declines (all majors).

Specific growth initiatives currently underway to increase near-term enrollments:

- Continued growth of the Minor in PM and access to stacked courses will distinguish UAA undergraduates across all disciplines as they enter local and global workforces.
- Expanding PM interdisciplinary concentrations in graduate programs beyond CBPP MBA programs, including MPA and proposed MPP, CoH, Education Leadership, and science degrees (e.g. Geology), will provide options to expand students' academic portfolios with project management skills and credentials.
- Creating MSPM fast track programs for all CoEng undergraduate disciplines and CTC BS-CM and BS-ATL programs provide natural pathways to advanced degrees relevant to Alaska.
- Promoting more deliberate pipeline to PM from undergraduate programs in engineering/science/technology/ heath/social services/business will expand career opportunities for students choosing PM/leadership paths vs. technical ladder.
- ANSEP graduates returning for PM degrees will leverage Alaska's cultural expertise and expand diverse
 project leadership capabilities in all sectors.
- Expanding relationship with military and VA will support career growth for active duty and transitioning military leaders.
- UAF graduate and undergraduate degree programs will benefit from PM courses and build pipelines to advanced PM degrees from other Alaska-critical disciplines.

Promoting and expanding incremental paid professional development courses leveraging academic
expertise will improve skills of local project leaders across all sectors, develop cost-effective place-based
expertise, and generate \$100K incremental annual revenue.

Potential future, longer-term growth opportunities:

- Revitalize cohort-based delivery of PM degree programs tailored for local companies and organizations will
 accelerate achievement of successful project outcomes and facilitate rapid organizational transformations
 (see section 2 examples). Alaska Airlines reference example yielded over \$1.5M tuition and administrative
 support revenue.
- China and Africa represent particularly attractive international markets where advanced PM degree programs are in high demand; students desire degrees conferred internationally.
- Expand reach into K-12 to build life skills and introduce students to PM careers earlier in their academic journey.
- Expand PM contribution to social impact by working with non-profit organizations addressing critical social needs in our community though application of PM to improve outcomes.
- Alaska occupies a forefront of climate change impacts. Extend PM contribution as positive force for applied research projects responding to changing landscape and make insights available to others facing similar challenges globally.
- Engage early with investors and entrepreneurs using agile/transformative work practices to accelerate and expand value delivery of new ventures in Alaska.