Pat Pitney Interim President

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March 13, 2021

Mr. Neil Steininger, Director Office of Management and Budget P.O. Box 110020 Juneau, AK 99811

Re: Federal COVID Relief Funding for Economic Recovery

Dear Mr. Steininger:

The University of Alaska is uniquely positioned to provide the training and coordination necessary to ensure Alaska has the workforce to support the core and emerging sectors that long-term economic recovery relies on. As the state considers priority investments from the American Rescue Plan funding, the University proposes an investment of \$102 million to provide education, training, and applied research support in key industry areas necessary for Alaska's post-COVID recovery:

- Oil, Gas, and Energy
- Mining and Strategic Minerals
- Construction and Infrastructure
- Fisheries, Mariculture and Maritime
- Aviation

Support workforce training (\$70 million)

- Arctic and National Defense
- Unmanned Aviation and Aerospace
- Health
- Teacher Education

This proposal provides for training of 2,000 students per year over three years in industry-specific oneand two-year workforce programs that directly address identified labor needs. Over the three years, this funding would produce an estimated 5,000 additional trained and credentialed workers in high economic impact industries. The intent is to support Alaskans who lost their jobs or were otherwise impacted during the pandemic.

- \$60 million in direct student support, including tuition, books, and fees (average \$10,000 per student per year). This assumes an average of 30 credits per year; programs range from 9 credits for an occupational endorsement to 60 credits for two-year programs like process technology. Although not included in the request, the State may consider providing wrap around support such as living expenses and childcare through DOLWD.
- \$8.5 million for additional equipment, teaching, and support capacity for certain hands-on programs to meet expanded student demand.
- \$1.5 million in advertising (\$500K/year) developed in partnership with Department of Commerce, Community, and Economic Development and Department of Labor and Workforce Development.

The attached pages provide an industry workforce overview, a listing of available university programs, and estimated numbers of students supported through each program.

The University estimates more than a 300% return on investment for this funding. Average annual payroll per year for these 5,000 credentialed workers post training is conservatively estimated at \$225 million per year and more than \$1.1 billion in the first five years post training.

Support key industry partnerships and applied industry research (\$32 million)

This proposal will expand expertise in the critical future economic areas and bridge UA existing research capacity directly with industry partners to address key applied research and pilot projects in:

- Oil, Gas, and Energy
- Mining and Strategic Minerals
- Fisheries, Maritime, and Maricultural
- Arctic and National Defense
- Unmanned Aviation and Aerospace

Examples of pilot projects could include:

- Navigating protocols and setting the standards necessary to utilize unmanned aerial vehicles to supply an exploratory mining camp;
- Developing renewable and battery power innovations for mine or remote community;
- Deploying artificial intelligence (AI) robotics to isolate and separate rare earth minerals;
- Making imaging available to detect permafrost changes to protect North Slope infrastructure;
- Exploring natural gas and blue hydrogen technology advances for use in Alaska;
- Developing techniques with large and small scale mariculture farmers to support the expansion of this industry; and
- Modeling ice and shipping paths in the Bering sea for commercial and National Security interests.

Applied expertise will be expanded through hiring recently trained specialists (post-doctoral fellows) and sponsoring graduate and student assistants to directly bridge industry partners with UA's existing research strengths. Post-doctoral fellows are the most up-to-date trained experts in specific industry areas and would be attracted from all over the world. These specialists would be matched with existing UA research expertise, industry partners, and student assistants focused on innovative and applied solutions. UA's existing research capacity is already very competitive and brings in nearly \$160 million of funding each year. Maintaining that level of external research funding while adding significant focus on applied state/industry needs through expanded short-term capacity will have a lasting impact on Alaska's economy.

The proposal would provide 3 years of support for:

30 specialists/post-doctoral fellows	\$10 million
 70 graduate and undergraduate student assistants 	\$10 million
 Matching grants and equipment for pilot projects 	\$10 million
 8-10 specific industry focused conferences 	\$2 million

In partnership with appropriate state and federal agencies UA would organize and host industry focused conferences to highlight best practices and innovative solutions that can be applied in Alaska's Arctic environment.

- Alaska strategic minerals and rare earth elements,
- New Alaska fisheries and mariculture markets, and
- Strengthening Alaska's Arctic position (conferences focusing on aerospace, unmanned aerial vehicles, energy, and Alaska based Arctic national security)

By investing in growth industries and training Alaskans, the State is poised to recover from COVID with a stronger, more diverse, more stable economy than ever before. The investment decisions made today will determine our economic outlook five years from now.

Thank you for considering this initial proposal for how UA can support Alaska's post-COVID economic recovery. While the industry sectors identified are based on UA's analysis of Alaska's economic future, we welcome additional guidance based on priority interests from the Administration. We look forward to discussing these projects further as we work toward our shared vision of a stronger Alaska.

Sincerely,

Pat Pitney Interim President

cc Sheri Buretta, Board of Regents Chair
 Michelle Rizk, Vice President for University Relations
 Paul Layer, Vice President for Academics, Students and Research
 Chad Hutchison, State Relations Director