

UAF USArray Earthquake Monitoring Network**FY2021 Request: \$19,000,000****Reference No: 62656****AP/AL:** Appropriation**Project Type:** Information Technology /
Systems / Communication**Category:** University**Location:** Statewide**House District:** Statewide (HD 1-40)**Impact House District:** Statewide (HD 1-40)**Contact:** Michelle Rizk**Estimated Project Dates:** 07/01/2020 - 06/30/2025**Contact Phone:** (907)450-8191**Brief Summary and Statement of Need:**

This \$2.5 million state investment will leverage \$16.5M of Federal support to improve Alaska's ability to assess and prepare for earthquakes and tsunamis. The University will purchase 80 seismic stations from the National Science Foundation and integrate part of the USArray into the Alaska Earthquake Center's seismic monitoring network.

Funding:	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
1002 Fed Rcpts	\$16,500,000						\$16,500,000
1004 Gen Fund	\$2,500,000						\$2,500,000
Total:	\$19,000,000	\$0	\$0	\$0	\$0	\$0	\$19,000,000

☐ State Match Required
 ☒ One-Time Project
 ☐ Phased - new
 ☐ Phased - underway
 ☐ On-Going
 0% = Minimum State Match % Required
 ☐ Amendment
 ☐ Mental Health Bill

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
Totals:	0	0

Prior Funding History / Additional Information:**Project Description/Justification:**

This initiative dramatically improves Alaska's ability to assess and prepare for earthquakes and tsunamis by establishing a true statewide monitoring network. As the National Science Foundation decommissions the \$50 million USArray project, there is a one-time opportunity to acquire infrastructure—at a steep discount—and integrate it with existing UA facilities operated by the Alaska Earthquake Center. USArray provides, for the first time, earthquake assessments across all of mainland Alaska including: the North Slope, Western Alaska, and Southeast. Products derived from this network help determine building codes, insurance rates, tsunami evacuation zones, emergency response plans, and the design of every major infrastructure project in Alaska. Other scientific instrumentation deployed on the USArray stations have improved our ability to monitor weather patterns, wildfire conditions, soil temperatures, flying conditions, and volcanic eruptions. The USArray project will end in 2020 and the network will be removed for use elsewhere without this funding. When the network is removed, these capabilities will stop.

A vigorous campaign is underway to acquire and sustain this network and these capabilities for long-term use in Alaska. UAF will achieve this by developing annual federal support. Several federal agencies have indicated support for portions of the network. One-time general funds from the state will catalyze this federal support and ensure that the state's interests are well represented in these negotiations. This will be achieved by (i) carrying out a suite of research (on earthquakes, tsunamis, weather, fire, permafrost, etc.) that specifically leverage the USArray data, and (ii) owning and operating a strategic subset of the field stations and integrated scientific instrumentation.

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