



UA's Research is an economic driver



Researchers at UAF's Energy Technology Facility conduct valuable research to address Alaska's energy needs.

In 2020, the economic impact of UA research activities to the state is estimated at \$242 million dollars.

An economic driver for the state

University research - whether social issue or scientific - is done in the public interest and is of economic benefit to the state. University of Alaska research activity has many benefits. It informs policy decisions; helps the state prepare for and respond to disasters and emergencies like the 2018 earthquake or COVID-19; and drives innovation and economic growth.

In a July 2021 report, Dr. Mouhcine Guettabi explored the "University of Alaska Economic Research Enterprise." (<https://iseralaska.org/2021/10/ua-research-activity-is-economic-driver-for-the-state/>) He analyzed the amount of external funding University of Alaska researchers bring to the state, the number of jobs their research creates, and the overall benefit to the state economy.

UA researchers do an exceptional job of generating external funding, especially compared to the national average. At the University of Alaska Fairbanks, the report found that for each dollar in state general funding a UAF

researcher received in 2020, an additional \$5.6 was generated from external resources. University of Alaska Anchorage researchers generated an additional \$6.3 for every dollar received. UA researchers have worked hard to bring in highly competitive grants from federal agencies like the National Science Foundation and the National Institutes of Health. In fiscal year 2020, UA institutions had research revenues of \$173.97 million dollars, an increase of 2.25 percent from FY 2019.

Since most of the funding that supports UA research comes from sources outside the state, the research enterprise helps to drive the state economy. "The infusion of research dollars into Alaska leads to economic expansion and in the absence of these dollars, the economy would be smaller," wrote Guettabi.

Guettabi estimated the total economic impact of UA research activities to the state at \$242 million dollars in 2020. This impact is measured by the number of jobs supported, total payroll produced, and business sales generated in the state by research dollars.

In 2020, 1,588 jobs could be traced back to university research spending. Of this total, 1,073 jobs were within the university-faculty, staff, student assistants, and another 515 were in a broad range of private businesses scattered throughout the state-in industries like construction, transportation, wholesale and retail trade, and services. The total payroll associated with these jobs was more than \$126 million, with almost 70 percent going to university employees and the rest to workers in the private economy. These direct jobs and related expenditures generate secondary economic activity that affect the broad Alaska economy.

If we think of the state general fund appropriation for research as "seed money," then we can calculate the return to the economy from that expenditure as the jobs and income created. Specifically the "bang per buck" for each \$1 million of general fund appropriation for research in 2020 was 45.21 direct jobs and \$3.66 million in payroll within the state.