

## Invest in security and economic prosperity



State investment in critical minerals will build upon existing momentum within the UA system to develop Alaska's critical mineral industry.

### ARPA Invests in Critical Minerals REECM-based components (e.g.,

magets for wind turbines, electric vehicles, military applications) in Alaska. Alaska, as a state, has tremendous critical rare earth potential to maximize this opportunity for long-term economic benefits of developing robust critical minerals industry in Alaska for both the short-term gains of the initial investment.

### Investment Priorities

- Initiate a Critical Minerals Group (CMG) within the existing Mineral Industries Research Lab (MIRL) at UAF (\$5.8M).
  - The CMG would focus research and development efforts on the innovations to most effectively develop a critical minerals industry in Alaska. With this initiative UAF will grow the critical minerals industry in Alaska from exploration, to mining, to processing, and includes workforce mine training through Mining and Petroleum Training Service (MAPTS).
- Develop techniques in conjunction with industry partners to improve yields and develop markets for products from critical and prospective mines.
- Hyperspectral imaging exploration to augment DGGs activity.
- Expansion of programs in Mining Industry Workforce Development (\$500K).
  - Enhanced Recovery of Alaska Rare Earth Elements through Bio-Weathering Technology through the UAA College of Arts & Sciences (CAS) (\$1.25M). Development of a novel bio-weathering process can alleviate safety and environmental concerns of traditional acid mining.
- Comparing Petroleum and Mineral Development in Alaska to World Standards through the Institute of Social & Economic Research (ISER) (\$250,000). Project will conduct comparative research evaluating Alaska's regulatory and environmental standards for petroleum and mineral development. The project analyzes the effects of Alaska regulatory standards and social institutions related to extractive activities with those elsewhere in the world.