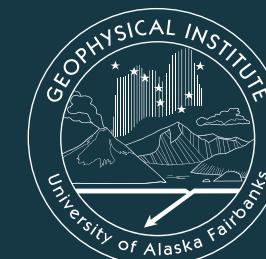




# Alaska as the Arctic Hub of Critical Minerals Innovation

Lee Ann Munk, Director,  
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# Alaska is Foundational for Critical Minerals in the Arctic

- Defense systems
- Energy transition
- Infrastructure & logistics
- Industrial resilience

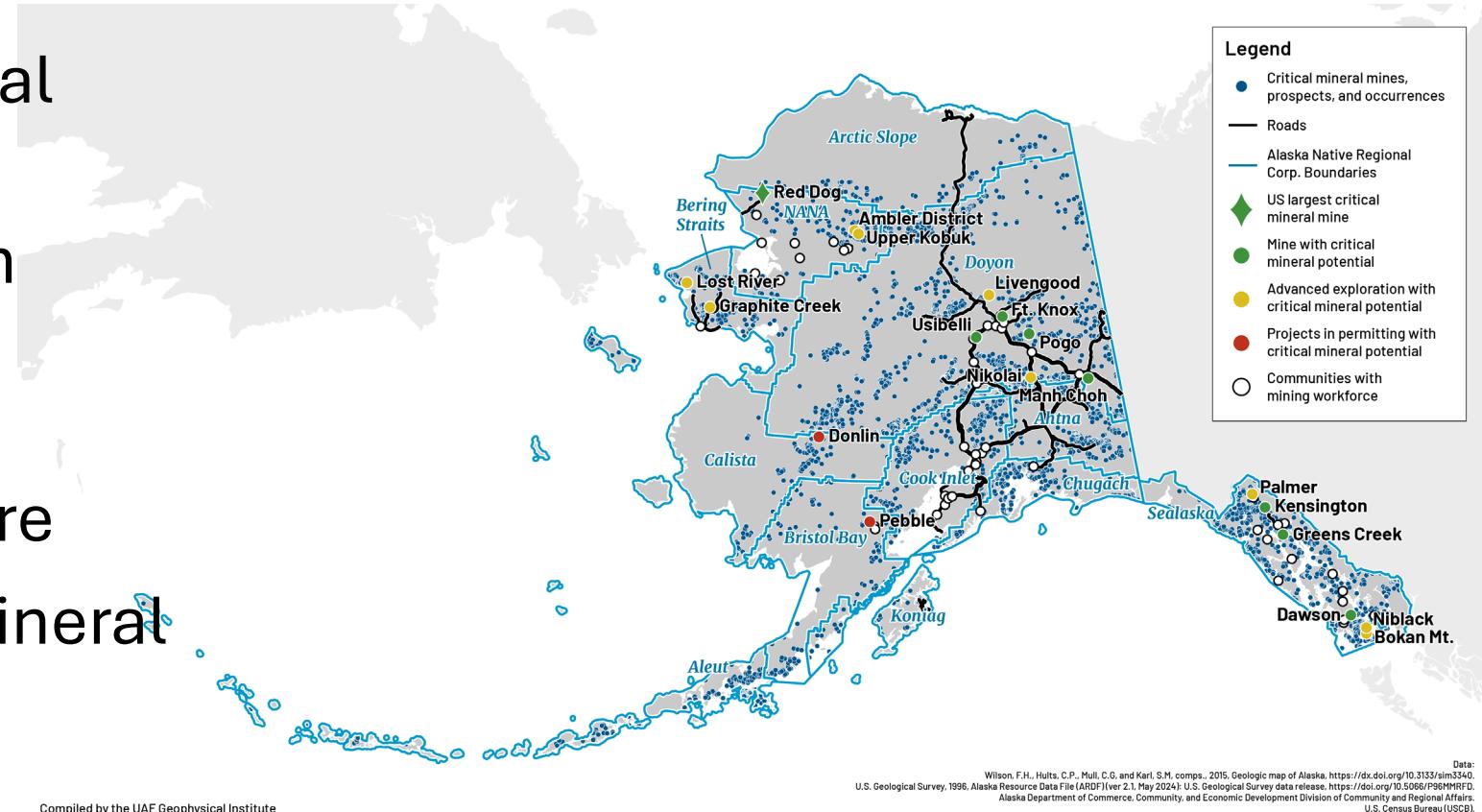
Critical minerals underpin Arctic security and sovereignty



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# Alaska is Unique

- Unmatched critical mineral occurrences (>5,000)
- Alaska Native Corporation partnership and revenue sharing model
- Proven Arctic infrastructure
- Nation's largest critical mineral mine (Red Dog)
- National momentum



# Alaska is Unique

Arctic Region	~Arctic Critical Mineral Endowment (%)	Critical Mineral Diversity Index	Context
Russian Arctic	45–50%	~15–18	Largest tonnage; dominated by Ni–Cu–PGM and REE systems
Alaska (USA)	20–25%	~40–50	Exceptional breadth across most U.S. critical mineral list
Northern Canada	15–20%	~25–30	Broad mineral suite across large, underexplored terranes
Nordic Arctic	8–12%	~15–20	Concentrated battery and REE minerals; smaller footprint
Greenland	5–8%	~10–12	Fewer minerals overall, but some very large individual deposits

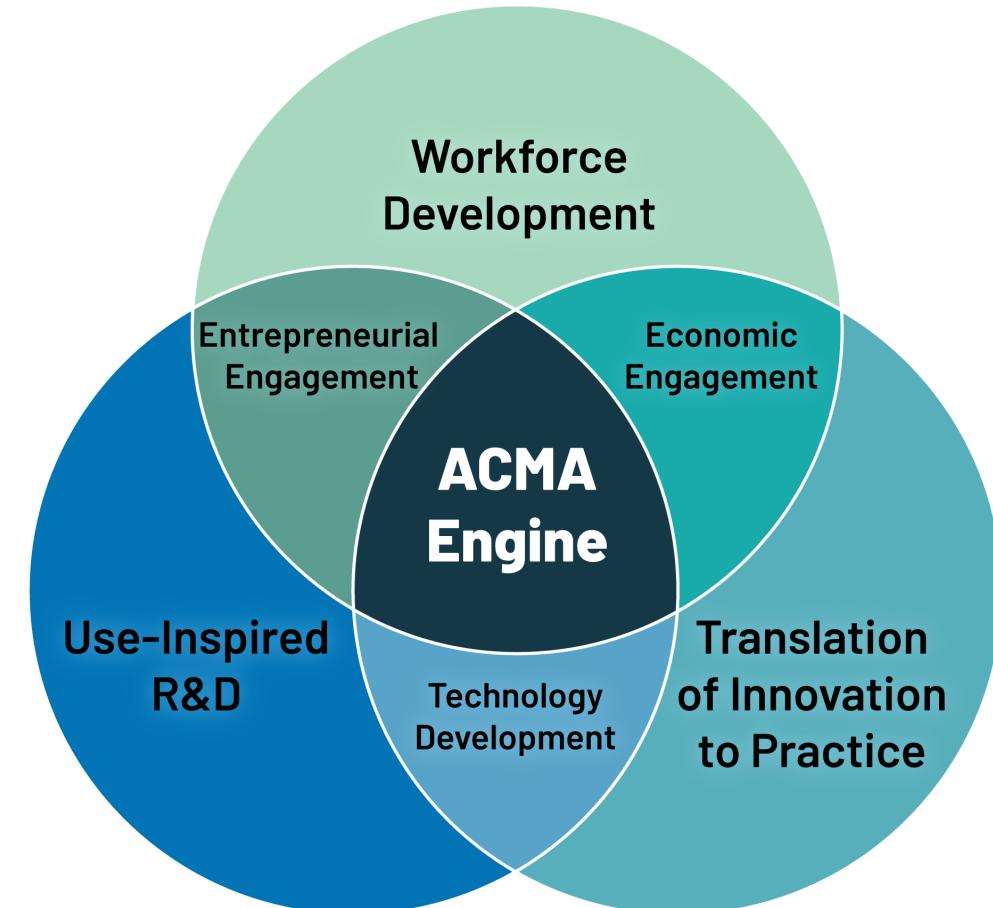
# From Resource Province to Innovation Engine

- Alaska as the hub for a critical minerals innovation center
- Lower impact extraction technologies
- Energy-efficient processing
- Waste-to-wealth innovation
- Arctic-ready workforce development



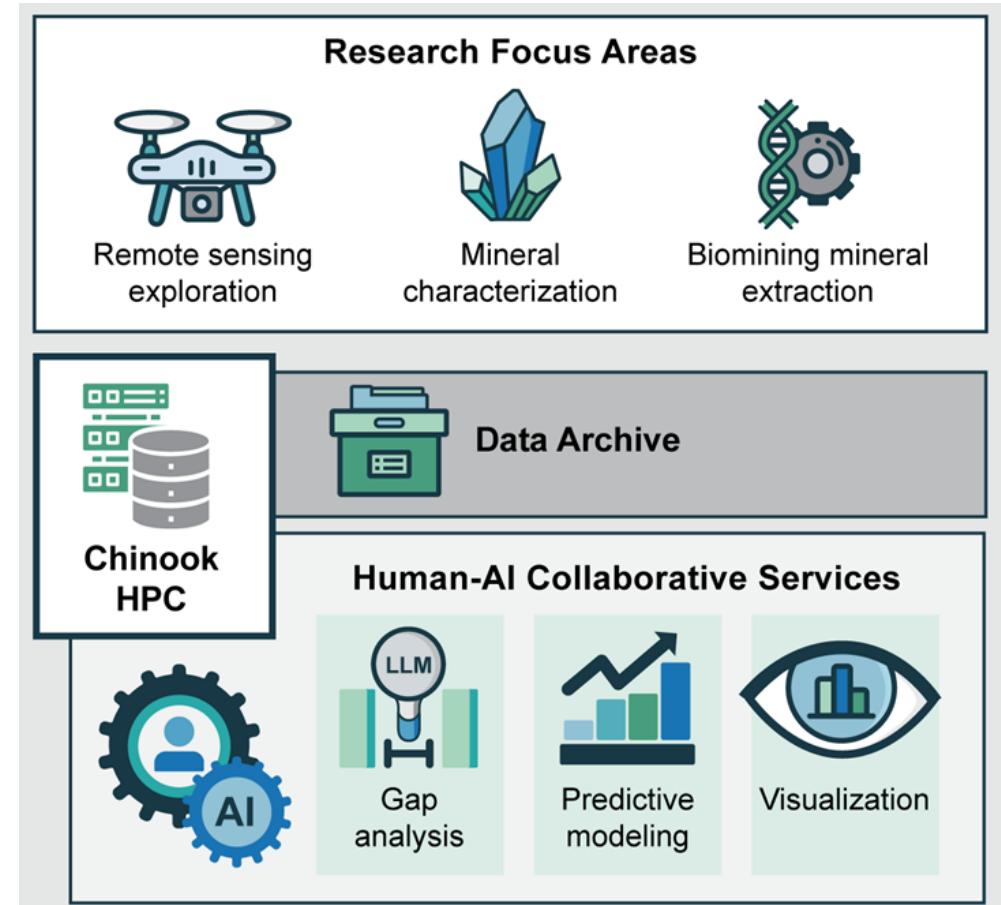
# UAF NSF Engine: Alaska Critical Mineral Accelerator will Launch the Innovation Ecosystem in Alaska

- Industry drives use-inspired R&D
- The R&D hub translates R&D to useable services and products
- A new mining sector will be created that will:
  - Attract deep tech to Alaska (testbeds)
  - Support new high-tech jobs

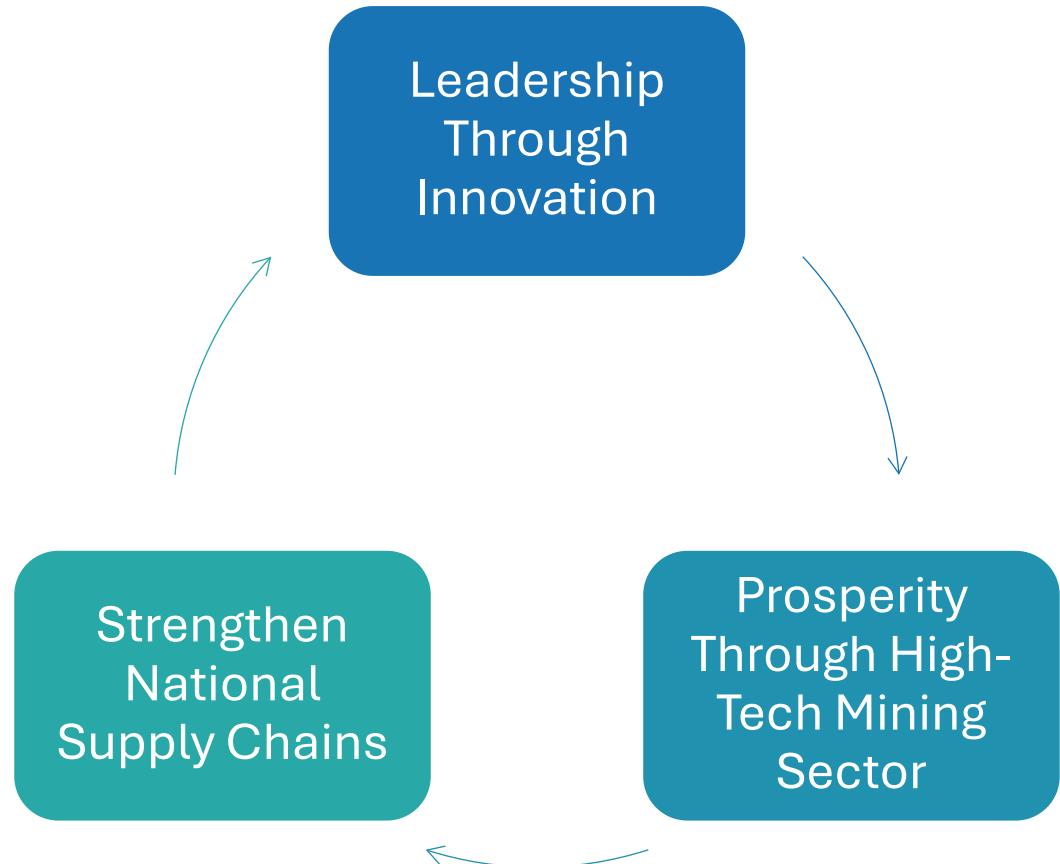


# UAF NSF Engine: Alaska Critical Mineral Accelerator R&D and Technology Focus

- R&D focus is on exploration, recovery, and production.
- Technologies to improve mineral deposit discovery, characterization, metal extraction, and recovery.
- Artificial Intelligence will be applied across technologies (e.g. gap analysis, modeling, and visualization)



# Alaska is the Arctic Future in Critical Minerals



## Alaska is ready to lead

- Security enables innovation.
- Innovation drives prosperity.
- Alaska delivers all three.

# Building a Resilient, Responsible, Trusted Arctic Supply Chain



## An Arctic Opportunity

- Shared values
- Shared challenges
- Shared responsibility

## A Trusted Path Forward

- Responsible production
- Innovation in extreme environments
- Secure, transparent supply chains

## A Collective Advantage

- Reduced dependence on high-risk suppliers
- Stronger resilience through Arctic cooperation
- Prosperity rooted in partnership



Bokan Mountain REE Deposit

# Thank you



Alaska Critical Minerals  
Collaborative

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