

NUCLEAR ENERGY: THE MOMENTUM MONTANA NEEDS

Coordinating Nuclear Education to Meet Montana's Emerging Workforce Needs

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Purpose

Montana's passage of House Bill 623 in 2025 opened the door to nuclear waste facilities and accelerated the push for a statewide nuclear energy education pipeline, prompting MSU, Montana Tech, and Idaho National Laboratory (INL) to launch a Nuclear Energy Certificate as the first step toward a future nuclear engineering degree.

The Department of Energy calls to expand U.S. nuclear capacity from 100 GW to 400 GW by 2050. (U.S. Department of Energy)

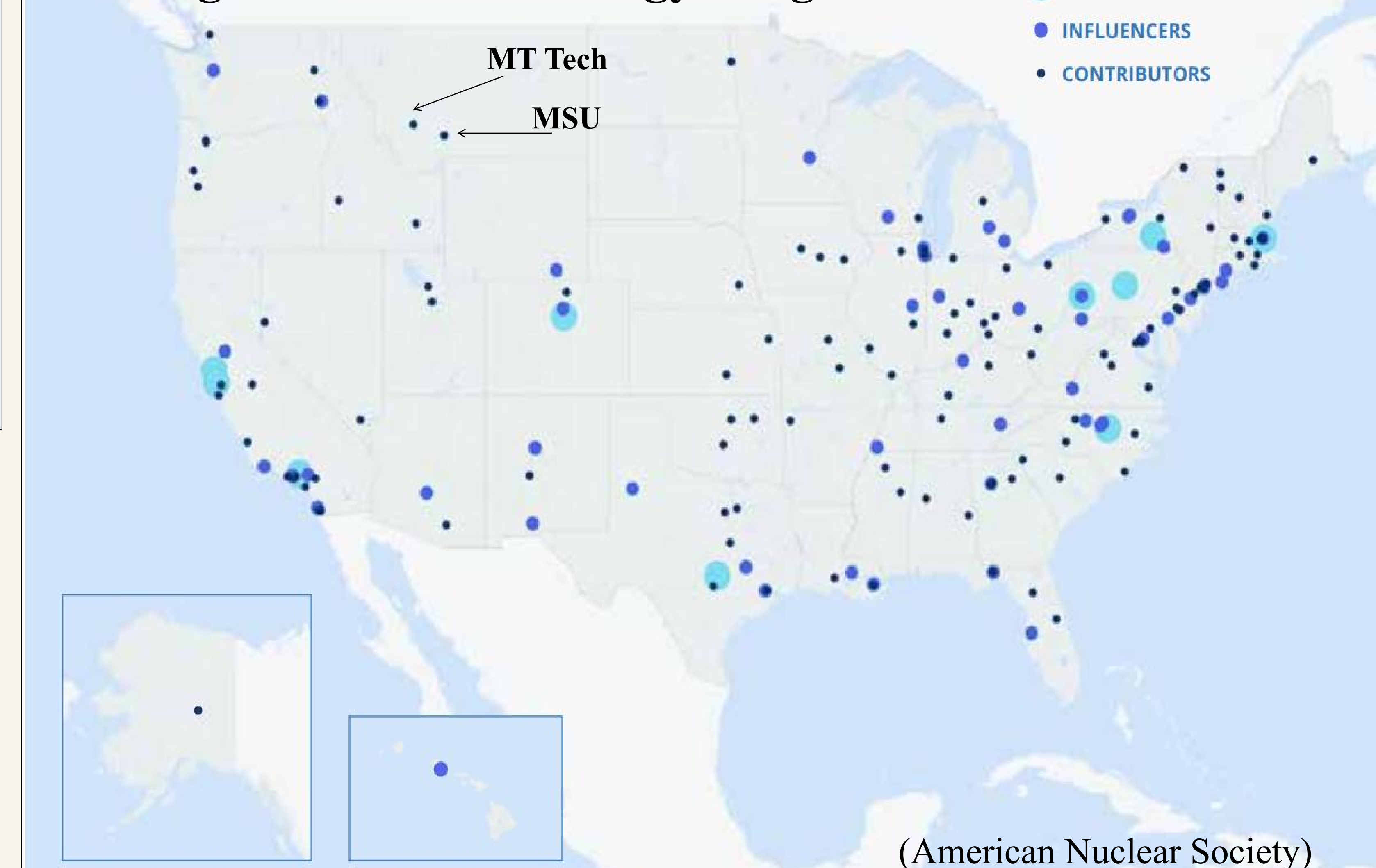
"The nuclear energy future we have long envisioned is no longer a distant possibility and we are partnering with institutions across the country possibility to make it a reality." (INL, 2026)



Research Methods

1. Identify Montana's nuclear workforce needs.
2. Review MSU's curriculum to locate strengths and gaps
3. Compare MSU's approach with leading national nuclear programs.
4. Build partnerships with INL, Montana Tech, and industry professionals.

Existing U.S. Nuclear Energy Programs



"I want Montana to become the central hub—capable of meeting the energy needs of the entire U.S. and much of Canada."

- Gary Parry, MT Representative

MSU Course Content for Nuclear Energy Integration

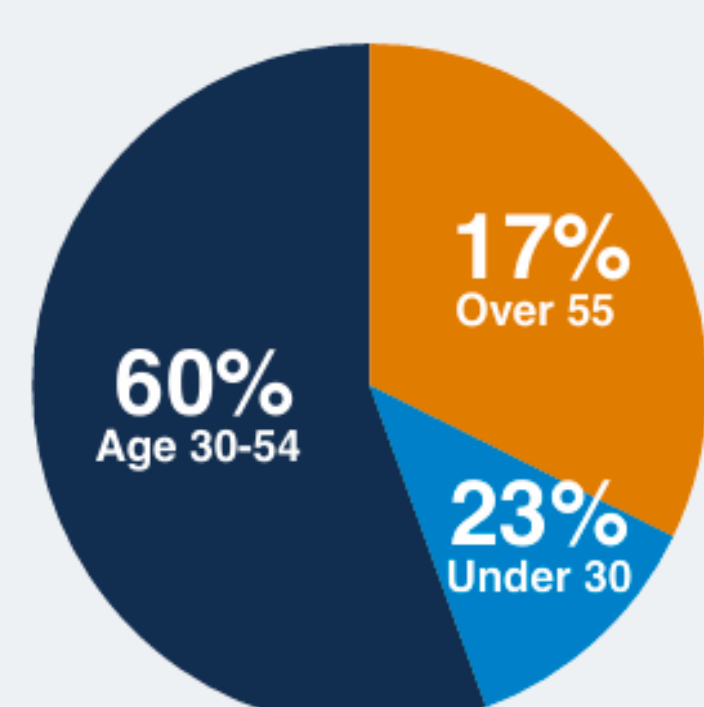


"Montana must prepare for a nuclear energy future; Montana's university system must lead the way"

- Dr. Duane Catlett, Advisor for Nuclear Technology Programs

Nuclear Workforce Surge Meeting Clean Energy Goals


4 Million
Professionals
Needed Worldwide
by 2050



Urgent need
to recruit
new talent


375,000
Additional U.S.
Jobs by 2050


100,000
Operators


275,000
Construction/
Manufacturing


10,000+
Skilled Trades

50,000
needed by
2030 (U.S.)



**ORAU
Roadmap**



**Example
Problems**



**Student
Interest**



Key Findings:

- Montana must align nuclear workforce needs, energy goals, and education
- MSU and MUS provide a strong base.
- Core nuclear curriculum needs expansion
- National models and MT Tech/INL Partnerships strengthen momentum
- Montana is positioned to build a coordinated, future-focused framework