Impacts of Federal Budgeting on Research Programs at State Institutions

Enabling and Enhancing Innovation, Workforce, and Community Impact for New Mexico

Presented by Lique Coolen, Ph.D.; Vice President for Research, NM Tech

Content provided by Vice Presidents for Research

from NMSU, NMT, UNM, and UNM HSC

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Federal Funding to New Mexico Research Universities

Powers innovation across New Mexico — fueling breakthroughs and developing technologies in energy, water, defense, education, agriculture, transportation and health that directly benefit our communities.

Drives Economic Development: Drives statewide job creation and retention, and attracts new industries

Expands research-driven small business and start-up growth & diversifies the NM Economy

Enhances Workforce Growth : student experiences and retention to jobs in NM

Strengthens rural & Tribal communities and improves overall quality of life

Research Aligned with New Mexico's Science & Technology Roadmap

Research and development priorities align directly with state innovation clusters

Institutional collaboration ensures efficiency and reduces duplication

Infrastructure investment ensures readiness for new federal and industry opportunities

Testbeds link university R&D to state economic sectors
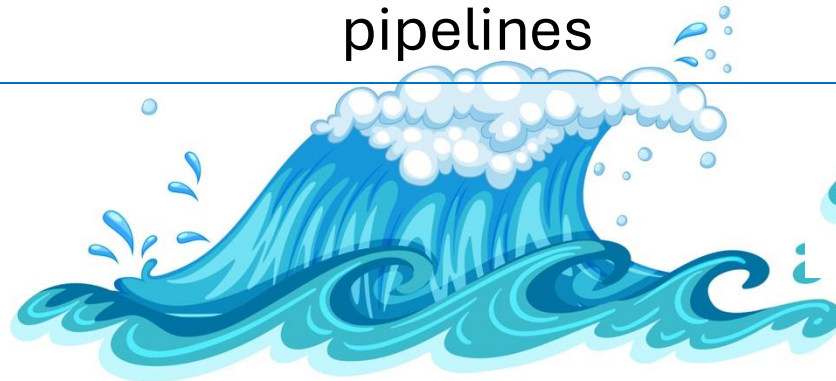
Ongoing Challenges

Current:
- Award terminations
- Uncertainty

Future Impacts:
- Grants that were awarded, now canceled/not renewed
- Funding opportunities not available
- Proposed F&A cuts
- Shattered workforce pipelines

Future Impacts:
- Federal Funding opportunities evolving toward narrower mission areas
- Overall decrease in Federal R&D $$

NM universities are seeking ways to protect programs critical to New Mexico and exploring mechanisms to enhance alignment with federal priorities to remain competitive

A Call to Action and Invest in Future

Redefining scope by refocusing, resizing, aligning, and reprioritizing research areas

Diversifying research funding to remain competitive for federal funding and non-federal sources

Creating new paradigms through innovative and robust partnerships and consortia

Modernizing facilities and infrastructure, while retaining and recruiting top talent

Build on Existing Strengths to Further Align with Emerging Federal Priorities
while Maintain Focus on State Priorities

- Advanced Manufacturing
- Aerospace and Autonomous Robotics
- Agriculture
- Bioscience
- Defense and National Security
- Energy Initiatives
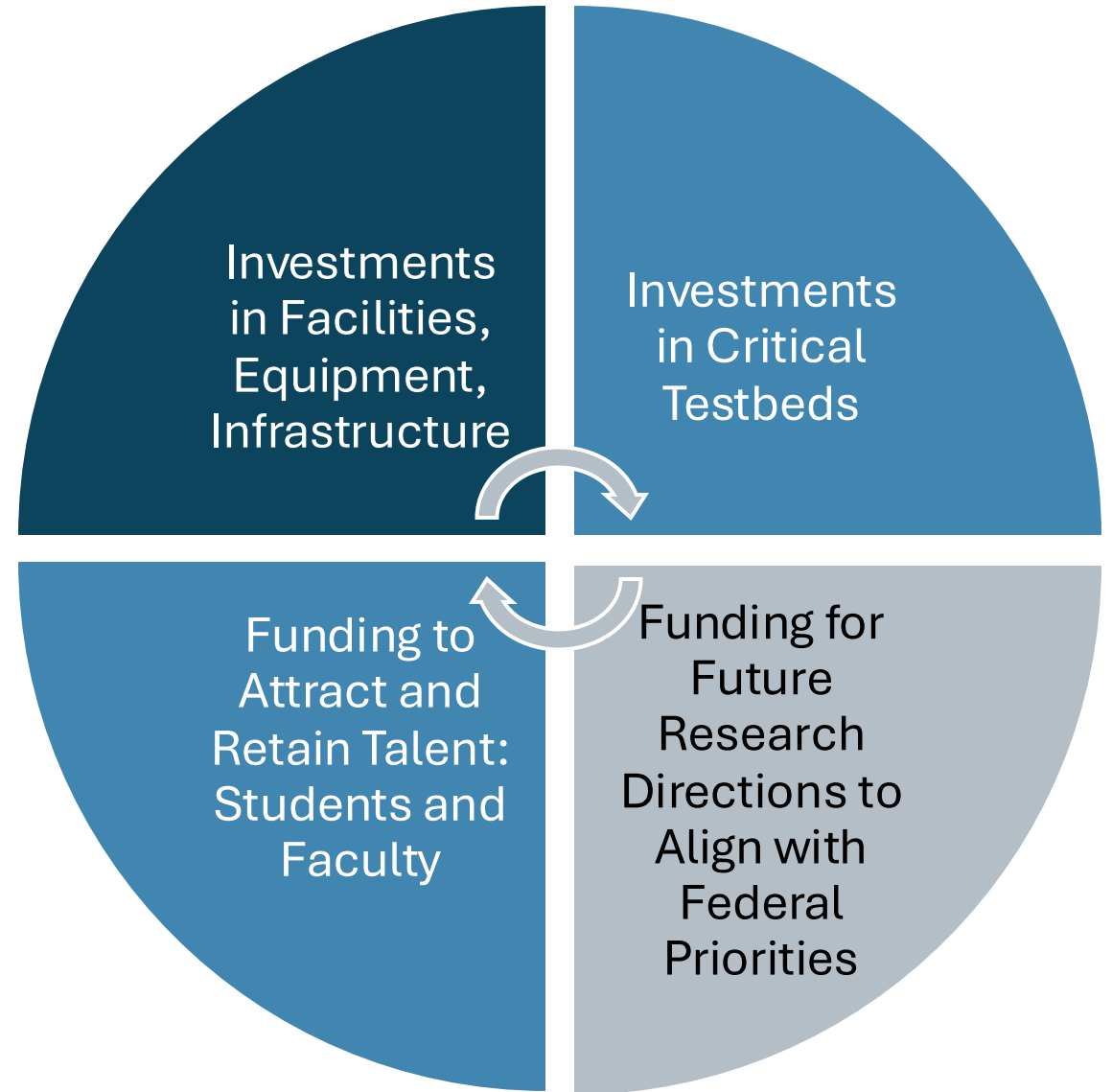- Public Health & Medical Sciences
- Water Resource and Technology
- Quantum Computing and Artificial Intelligence

INVEST IN THE FUTURE

- Increase competitiveness
- Ensure sustainability
- Address NM "brain drain"
- Enable innovation
- Build economic development capacity across the state of NM

Investments in Facilities, Equipment, Infrastructure

Investments in Critical Testbeds

Funding to Attract and Retain Talent: Students and Faculty

Funding for Future Research Directions to Align with Federal Priorities

Appendix

Examples of Federal Funding Impacts: NMSU

South Central Thriving Communities Technical Assistance Center (TCTAC)—EPA

- Focus on strengthening local capacity for rural, Tribal, and underserved communities to compete for federal and state funding that enhance quality of life and critical infrastructure.

- Through **training, technical assistance, and leadership development**, the Center supported **100+ community and Tribal organizations** across a five-state region—**35% from New Mexico.**

- Program Impact:
    - **77 technical assistance requests fulfilled** (23% focused on grant writing; 18% on funding navigation).
    - **236 New Mexico organizations** connected through community engagement and outreach.
    - **$2.1 million in new federal awards** secured through TCTAC-supported proposals.
    - Launch of **NM EDGE Environmental Leadership Certification** for 20 local leaders.
    - Early federal termination in 2025 ended a **$10 million regional program**, halting ~$2.5 million/year in direct capacity-building and community support for New Mexico.

SOUTH CENTRAL
ENVIRONMENTAL RESOURCE CENTER
A THRIVING COMMUNITIES TECHNICAL ASSISTANCE CENTER

Program ended 3 years early – $6M in federal capacity-building support lost

Example of Federal Funding Impacts: NMT

Four Corners Carbon Storage Hub: CarbonSAFE Phase III Project (DOE)

- This project aimed to develop a regional CO_2 storage hub within the Four Corners region and perform comprehensive commercial-scale characterization of three storage facilities within San Juan basin to verify these sites can securely store a minimum of 50 million metric tons of anthropogenic carbon dioxide (CO_2) captured from at least three industrial sources in a 30-year period.

- This project was supporting the **Navajo Nation Four Corners** power plant to provide storage options for the long-term sustainability of the coal mine and power plant.

- The project had **multiple Subrecipients**, including NM and non-NM universities, national laboratories and industry partner: University of New Mexico, Los Alamos National Laboratory, Sandia National Laboratories, University of Utah, The University of Houston, Wheaton College, Tallgrass.

Funding terminated (10/2025; in first year): **$41,491,560** Department of Energy FE0032442

Example of Federal Funding Impacts: NMT

Engineering highly-scalable and efficient sorption materials for direct air capture (DOE)

- This project aimed to advance highly-scalable and efficient sorption materials for Direct Air Capture of CO_2.

- Specifically, a novel enzyme- catalyzed hollow fiber sorbent with fast CO_2 adsorption kinetics was planned to be fabricated by combining catalysis and membrane separation.

- These new technologies would promote high CO2 adsorption capacity, fast CO2 adsorption rate, and low heat of adsorption at dilute CO2 conditions, leading to effective CO2 removal from the air.

Funding Terminated (within first year of award): **$1,333,866** as of October 1, 2025. Department of Energy FE0032442

Example of Federal Funding Impact: UNM

NM FIRST: Promoting Inclusive Excellence in Neuroscience and Data Science (NIH)

- Aimed to transform UNM by hiring biomedical researchers whose research targets neuroscience and data science to help cure neurological diseases like Parkinson's disease.

- UNM sought to recruit and retain a biomedical faculty workforce aligned with the population of New Mexico with great potential to train the next generation of New Mexican scientists seeking discovery and innovation toward improving human health.

- Funding was terminated, partially reinstated, but program was eliminated at NIH – no further funding will be provided.

$8.4M was terminated; $2.1M reinstated – total lost $6.3M

Example of Federal Funding Impact: UNM

Center for Equity in Engineering at UNM (NSF)

- UNM's School of Engineering was establishing a Center for Equity in Engineering (CEE), to enhance equity for Hispanic, Indigenous and Black students, faculty, and staff, as well as first-generation and low-income students.

- Goals: (1) build infrastructure for equity; and (2) use equity-centered and culturally-relevant curriculum and (co)curricular strategies to enhance student success

- Anticipated outcomes included: decrease inequity in student experiences, learning outcomes, time to degree, and graduation rates.

~$1.1M lost from $1.2M grant; terminated

Example of Federal Funding Impact: UNM-Health Science Center

Use of Advanced Systems to Study Alphavirus (NIH)

- A collaborative effort between 2 flagship NM institutions—UNM & Sandia National Laboratories.

- Goals: (1) Strengthen collaboration between the two institutions and foster the interconnection of virology, microchip technology, and next-generation sequencing. (2) Train young scientists at all levels from areas throughout the state by leveraging long- and short-term programs, including summer undergraduate programs, high school internships, and PhD studies.

- Employed several New Mexicans, benefitting NM by providing both job opportunities and advanced scientific training.

- This research would have aided our understanding of how biodefense-related pathogens cause encephalitis, which is directly applicable to the safety of military personnel in New Mexico
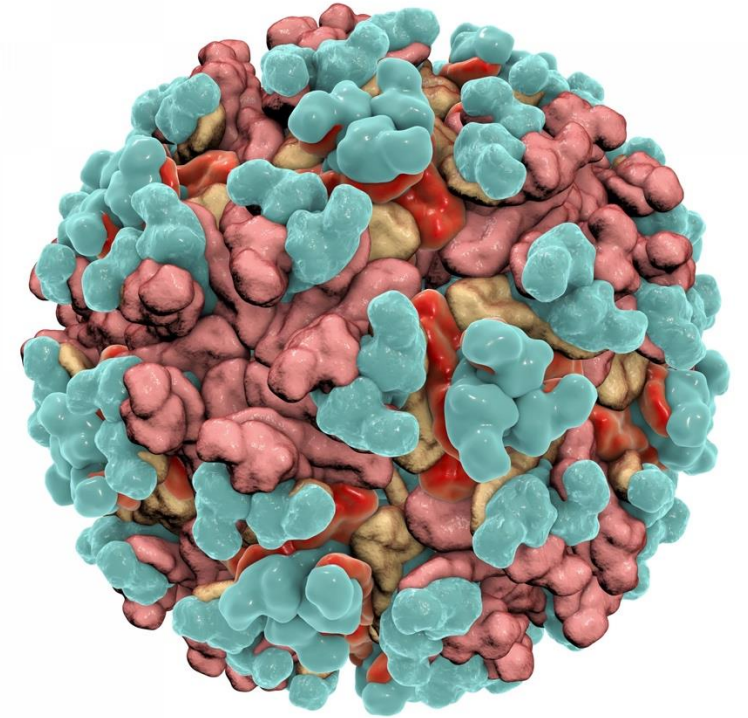
Amount lost : $1,462,629 (almost $1.5M); HDTRA12310005

Example of Federal Funding Impact: UNM-Health Science Center

Related project: Rapid Identification of Virus Particles using Artificial Intelligence (AI)

- Goal: Use artificial intelligence to rapidly identify drugs to treat biodefense viruses that cause deadly encephalitis

- Support the development of AI technology throughout New Mexico at the private, government, and academic levels.

- Essential in supporting the scientific training and employment of multiple trainees and scientists from New Mexico

- Directly related to discovery of countermeasures against biodefense viruses, critical to the protection of military personnel
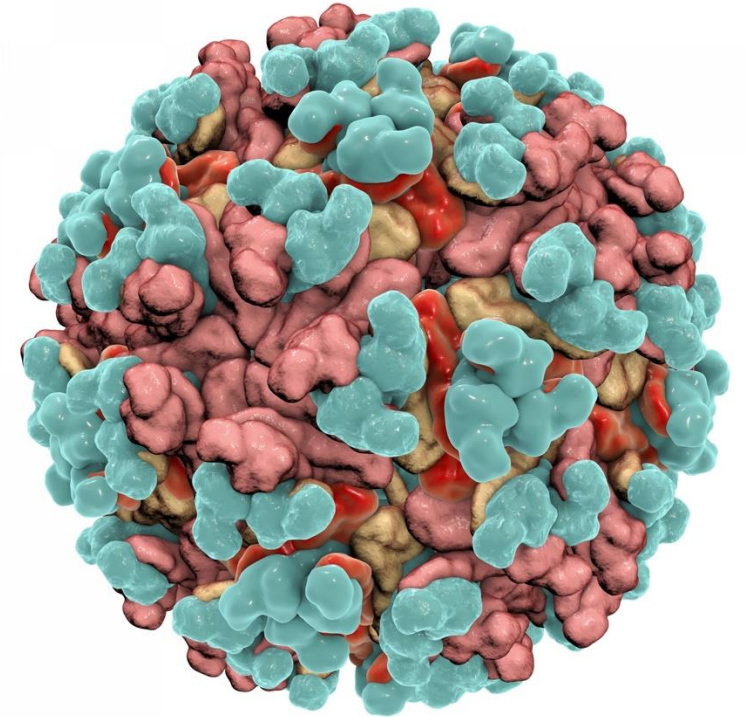
Amount lost: $998,349 (almost $1M); HDTRA12320005