



**SDEPSCoR**  
RESEARCH. EDUCATION. ECONOMIC DEVELOPMENT.

Linking South Dakota's Future to Science and Technology

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# South Dakota EPSCoR NSF EPSCoR Track-1 Research Focus Selection Overview

**February 15, 2022 &  
February 25, 2022**

# NSF EPSCoR Goals

- Develop Research Infrastructure
- Support STEM Education
- Expand Diversity
- Outreach
- Economic Development
- Sustainable Activities

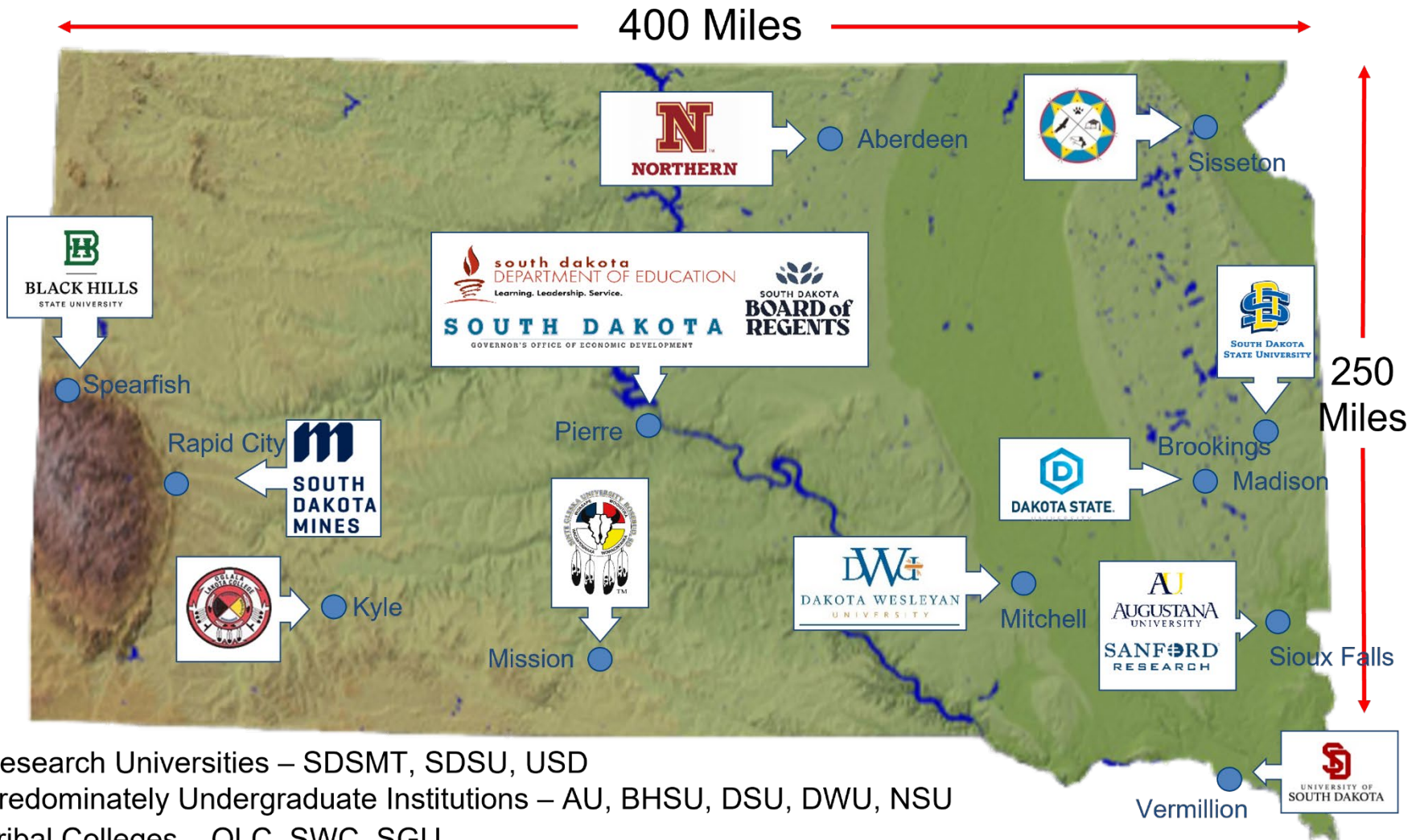
# NSF & SD REACH Considerations

- Research Capacity, Excellence and Competitiveness
- Aligned with NSF Big Ideas and SD Science and Innovation Strategic Plan
- Recognized National or Global Interest
- Statewide Impacts
- Partnerships and Integration

# South Dakota NSF Track-1 Awards

Dates	Amount	Title and Research Focus
1989-1992	\$1,811,466	EPSCoR In South Dakota
1982-1995	\$3,850,000	SD EPSCoR Advanced Development Program
1995-1998	\$4,500,000	South Dakota EPSCoR Improvement Plan
1998-2001	\$3,072,434	South Dakota EPSCoR Cooperative Agreement
2001-2004	\$9,307,237	Rushmore Initiative for Excellence in Research
2004-2006	\$208,494	South Dakota Planning Grant (Unsuccessful Track 1 Proposal)
2006-2009	\$7,292,143	The 2010 Initiative: Science Based Leadership in South Dakota (Light Activated Materials)
2009-2014	\$20,000,000	Beyond the 2010 Initiative: Partnerships for Competitiveness (Light Activated Materials)
2014-2019	\$20,000,000	The 2020 Vision: Building Research, Education and Innovation Partnerships in South Dakota (Visualization at the cell level)
2019-2024	\$20,000,000	Building on the 2020 Vision: Expanding Research, Education and Innovation in South Dakota (Biofilms)

## EPSCoR Participating Institutions



3 Research Universities – SDSMT, SDSU, USD

5 Predominately Undergraduate Institutions – AU, BHSU, DSU, DWU, NSU

3 Tribal Colleges – OLC, SWC, SGU

# Alignment with Science & Innovation Plan

*RII Targets Key Industry Sectors*

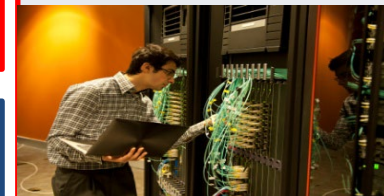
**Human Health &  
Nutrition**



**Value-Added  
Agriculture /  
Agribusiness**



**Information  
Technology**



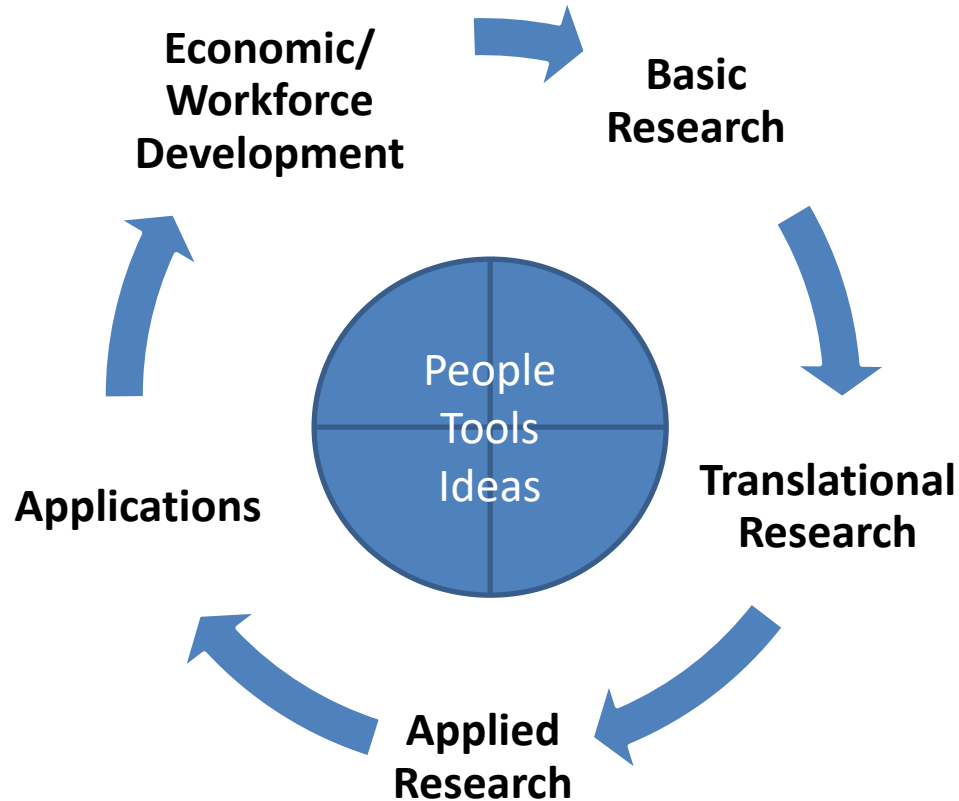
**Advanced  
Manufacturing  
& Materials**



**Energy &  
Environment**



## Path to Sustainability



Partnerships with public and private sectors provide sustainability.

# REACH Committee

Research, Excellence: A Critical Hallmark (REACH)

Non-Profit Overseeing SD EPSCoR programs

33 Members Representing

- Academic — Universities, Tribal Colleges
- Government — State Agencies & Legislators
- Private Sector — Industry (16 members)



# South Dakota Proposal Preparation Process

March 11 — Letters of Interest Due

March 17 — REACH Committee Reviews

April — Workshop on Proposal Development

June 10 — Research Proposals Due

External Proposal Review

July — Presentations to REACH & REACH Selection

August — Submission of Planning Grant to NSF

October-June — Proposal Development

July 2023 — Submission of Proposal to NSF

# Letter of Intent

## **Project Title**

## **Research Team**

Leadership team must include representation from all South Dakota research institutions.  
Research team's qualifications to successfully develop and execute the proposed work;

## **Project Summary**

### **Intellectual Merit and Broader Impacts**

What is the broader research question to be addressed and is it relevant to State priorities and NSF big ideas?

How does the research push the knowledge frontier and help South Dakota?

### **Research Infrastructure:**

Key research infrastructure gaps (physical, cyber and human capital) to be addressed and relevance to the research question and state workforce development priorities;

### **Sustainability:**

How will the research infrastructure form the foundation for externally funded research during and following the five-year project period?



# Review & Development Process

- REACH Committee review March 17 meeting
- Feedback provided to applicants
- Letters of intent shared to facilitate potential collaboration
- Proposal development workshop April (TBD)



Goal:

Develop the most competitive  
NSF EPSCoR Track-1 proposal  
for submission to NSF

Questions