

Midwest Big Data Innovation Hub

Collaboration Cafe

April 2022



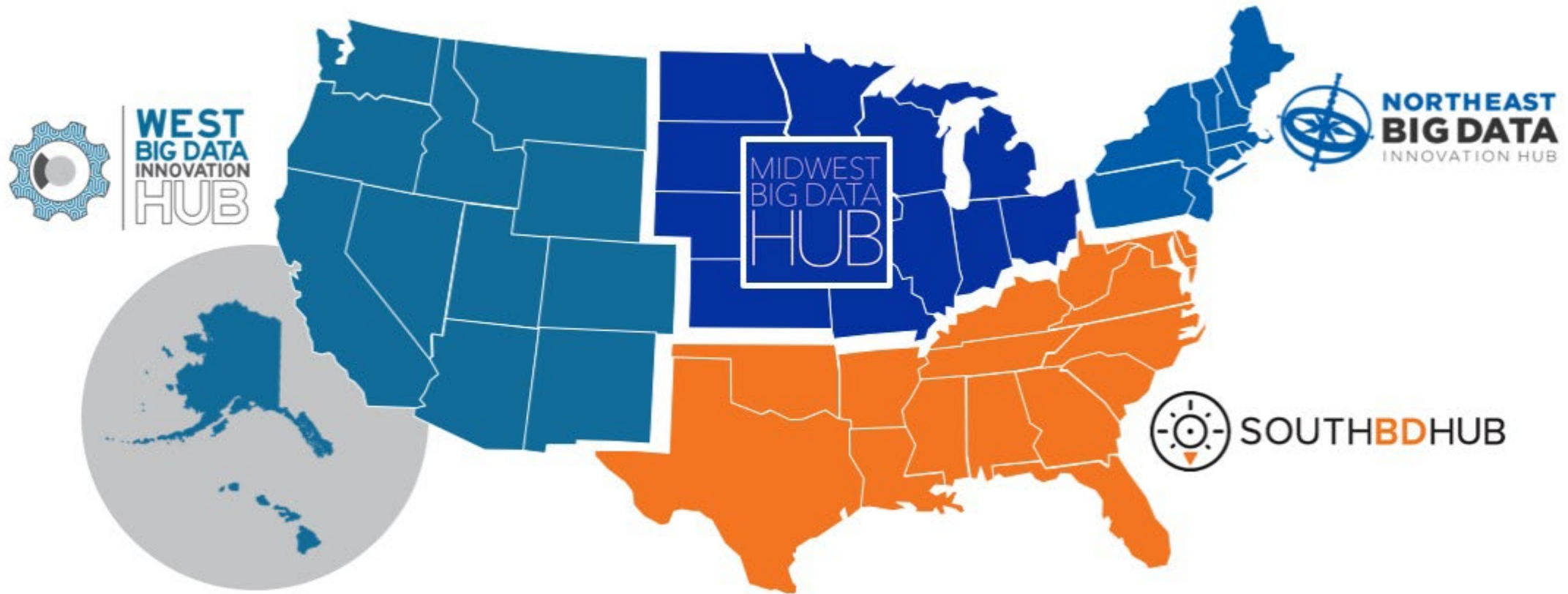
IOWA STATE
UNIVERSITY



supported by NSF [1916613](#)



Four Hubs, One Mission



What We Do

Engage communities, share resources, and build partnerships that harness data science to address societal and scientific challenges.



Priority Areas and Cross-cutting Themes

- Advanced Materials and Manufacturing
 - Big Data in Health
 - Digital Agriculture
 - Smart & Resilient Communities
 - Water Quality
-
- Data Science Education and Workforce Development
 - Cyberinfrastructure and Data Sharing

Collaboration Cafe webinar series

Goals:

- Building regional capacity for large-scale proposal response
- Growing a cross-disciplinary network of data science collaborators
- Elevating early career researchers
- Creating a more diverse data science community by actively engaging with non-R1 institutions, including minority-serving institutions (MSIs), tribal colleges and universities (TCUs), and predominantly undergraduate institutions (PUIs)
- Partnering with industry, government, nonprofits, and civic organizations to support translational research and transition-to-practice activities

Regular segments:

- Funding opportunity walkthroughs
- Lessons learned from prior awardees
- Researcher lightning talks
- Speed networking
- Small group discussions

Collaboration Cafe resources

- [MBDH website](#)
 - Web page with upcoming sessions
 - Short form for engagement
- [Slack community](#)
 - Networking
 - Input on future sessions
 - New solicitations
- [Shared Google Drive](#)
 - Running notes doc
 - Relevant prior awards to Midwest institutions
- [YouTube playlist](#) of webinar recordings

Cafe Ground Rules

- Multi-disciplinary team science is a core focus here - all proposal ideas are welcome for discussion
- Research proposals are competitive; some people may not be willing to discuss the details of their projects in this venue
- Private conversations in breakout rooms or Slack private messages are private
- Participating in Collaboration Cafe activities falls under our [NSF Code of Conduct](#)

MBDH engagement on proposals

There are multiple opportunities to have MBDH participate on proposals for this program, or other projects:

- Engagement partner: Communications, outreach, community assessments, participation in Hub events and activities
 - Non-exclusive Letter of Collaboration
 - Minimal to no funding to MBDH
- Collaborative partner: Engagement roles + involvement in developing and managing project activities
 - Non-exclusive Letter of Collaboration, subaward, co-PI roles, etc.
 - Funding to recover costs of MBDH staff time and other expenses
- **Note:** The MBDH is a neutral party and often provides non-exclusive Letters of Collaboration to multiple proposers to a solicitation

April Solicitation: NSF Smart & Connected Communities program



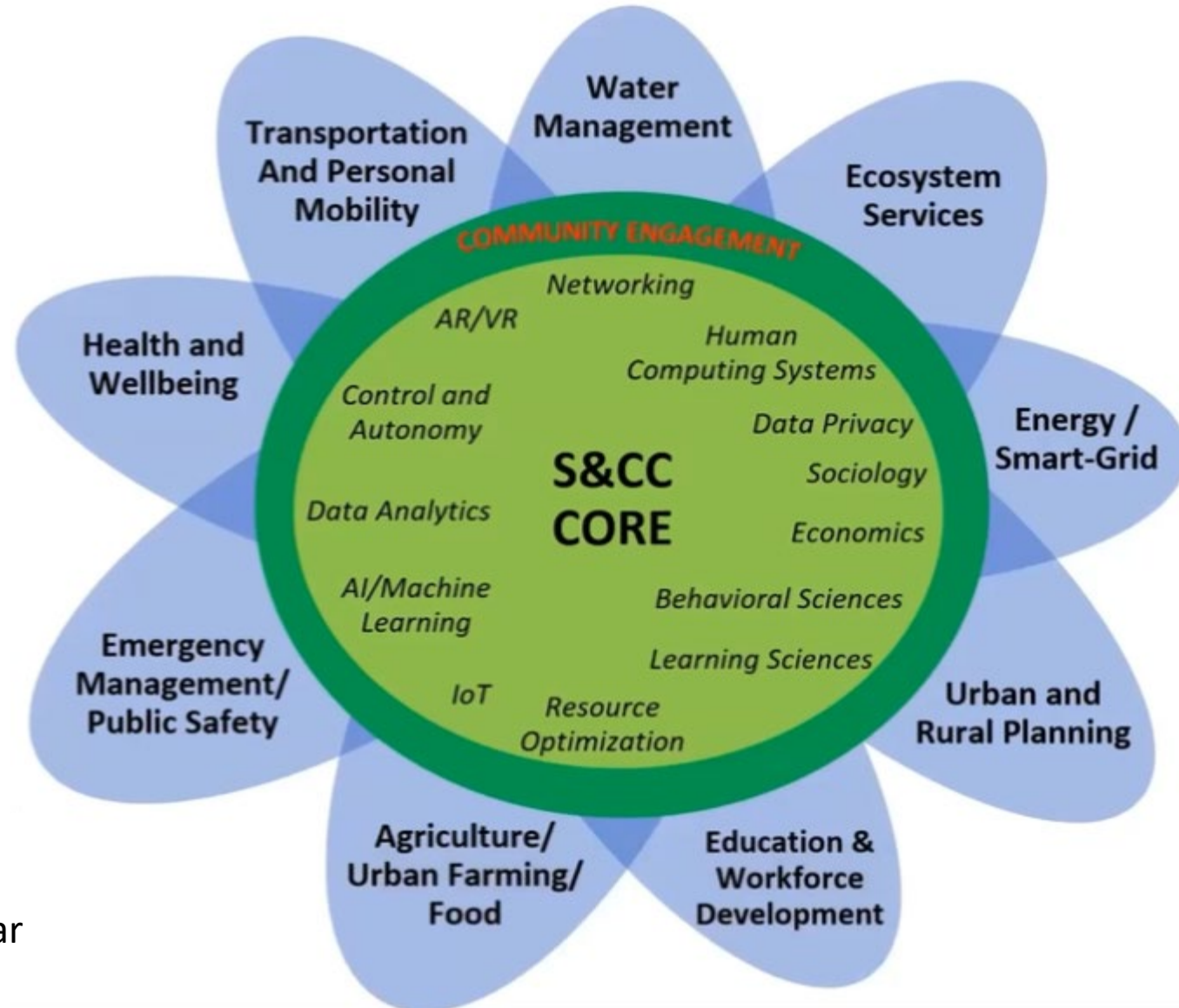
	Proposals due: anytime [Program overview]
Program goals	<ul style="list-style-type: none"> “Accelerate the creation of the scientific and engineering foundations that will enable smart and connected communities to bring about new levels of economic opportunity and growth, safety and security, health and wellness, accessibility and inclusivity, and overall quality of life.”
Size and duration (max)	Integrative Research Grants <ul style="list-style-type: none"> Track 1: \$1,500,001 - \$2,500,000 over 4 years Track 2: up to \$1,500,000 over 3 years Planning Grants <ul style="list-style-type: none"> Up to \$150,000 for 1 year
Number of awards (est)	<ul style="list-style-type: none"> Integrative Research Grants: 10-15 Planning Grants: 20-30
LOI/preproposal?	No, but consider contacting an NSF Program Officer to discuss the expectations of the NSF Division most aligned with your research
Eligibility limits & other guidance	<ul style="list-style-type: none"> Participation on no more than 2 proposals per 12-month period as PI, co-PI, or Senior Personnel (all tracks)



NSF S&CC proposal guidance (from the solicitation)

- “*Communities* are defined as having **geographically-delineated boundaries**—such as towns, cities, counties, neighborhoods, community districts, rural areas, and tribal regions—consisting of various populations, with the structure and ability to engage in meaningful ways with proposed research activities.”
- “A ***smart and connected community*** is, in turn, defined as a community that **synergistically integrates intelligent technologies** with the natural and built environments, including infrastructure, to improve the social, economic, and environmental well-being of those who live, work, learn, or travel within it.”
- ***Community stakeholders*** = “residents, neighborhood or community groups, nonprofit or philanthropic organizations, businesses, as well as municipal organizations such as libraries, museums, educational institutions, public works departments, and health and social services agencies.”

NSF S&CC Vision



Source: NSF S&CC program webinar

NSF S&CC Tracks

- Integrative Research Grants

- Integrative **research** that addresses fundamental technological and social science dimensions of smart and connected communities and pilots solutions together with communities. Community members should be partners, not just research subjects.
- Projects that consider the sustainability of the research outcomes beyond the life of the project, including the scalability and transferability of the proposed solutions
- Requires sections with plans for research, community engagement, project management, evaluation, and sustainability + Broader Impacts
- Required PI meeting attendance with other awardees annually
- 15-page Project Description

- Planning Grants

- These projects should prepare project teams to submit well-developed SCC-IRG proposals near or after the conclusion of the planning grant.
- Focused on plans for research and community engagement + Broader Impacts
- 5-page Project Description

NSF S&CC review guidance (from the solicitation)

- S&CC is a cross-directorate program supported by NSF's Directorates for Computer and Information Science and Engineering (CISE), Education and Human Resources (EHR), Engineering (ENG), and Social, Behavioral, and Economic Sciences (SBE).
- See the "Merit Review Principles and Criteria" section
- Additional Review Criteria for S&CC
 - For SCC-IRG proposals: How effectively does the proposal address integrative research, community engagement, project management, evaluation, and scalability, transferability, and sustainability?
 - For SCC-PG proposals: How effectively does the proposal address integrative research and community engagement?
- See also: S&CC program [webinar recording](#) from March 16, 2022

Discussion

- Prior experiences with S&CC proposals?
 - What would you do differently (or the same)?
 - What should new proposers be aware of?
 - What was most challenging for you?
 - How has your award influenced your research and collaborations?
- Opportunities for Midwest collaborations
 - Many awards - Where are the gaps?
 - What are the key challenges over the next 5 years?
- Other questions



Get involved

- <https://midwestbigdatahub.org/cafe>
- info@midwestbigdatahub.org

May 19, 2022

3:00–4:00 p.m. CT / 4:00–5:00 p.m. ET

- Topic: Multidisciplinary Data Science in Health
- Solicitation: NSF/NIH “Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science” program (NSF 21-530)



Get Involved ▾

MBDH Collaboration Cafe

Community Development and Engagement Program

Community Advisory Panel

Midwest Carpentries Community

Data Science Student Community

Regional Activities

Event in a Box Tool Kit

Explore Funding Opportunities

Join a Working Group

