Navigating the New Arctic (NNA)

• One of NSF’s 10 “Big Idea” Initiatives
• Innovative action-oriented and societally-relevant research that addresses the interactions among natural and built environments and social systems
• Strong emphasis on co-production of knowledge
• 90+ awards/collaborative awards funded
NNA projects have a wide geographic reach, but most are in Alaska.
Advancing Sustainable Arctic Infrastructure through NNA

- Community Water Infrastructure
- Migration & Community Relocation
- Climate–Ecosystem–Infrastructure Interactions
- Impacts of Permafrost Degradation
- Landslides, debris flows, and slope failures
- Seismic Resiliency
- New forms for monitoring: from citizen-science to machine learning to community-scale sensor networks
Themes throughout NNA Infrastructure Research

- Mapping hazards & critical infrastructure
- Local community engagement
- Education and outreach
- Supporting early career researchers
- Developing foundations for future research collaborations:
  - Needs assessments (data, training, decision-making tools, etc.)
  - Building relationships
Potential NNN-CO support for Sustainable Arctic Infrastructure research:

1. Outreach and Engagement Materials:
   - Bi-annual print "Periodical" to support and strengthen research dissemination to community and Tribal leaders
   - Quarterly Podcast to center Indigenous Voices

(Illustration design: Coral Avery and Molly Tankersley)
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2. Developing an NNA Project Mapping System & Research Synthesis Reports
   • Potential for synthesis report on NNA infrastructure research

3. Convergence Working Groups
Convergence Working Groups

• Bringing together NNA projects and key partners for cumulative and broader impact
• Supported by Early Career Fellows
• Documenting and sharing collaboration process and best practices
• Creating custom data web-portals (with Arctic Data Center)
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