

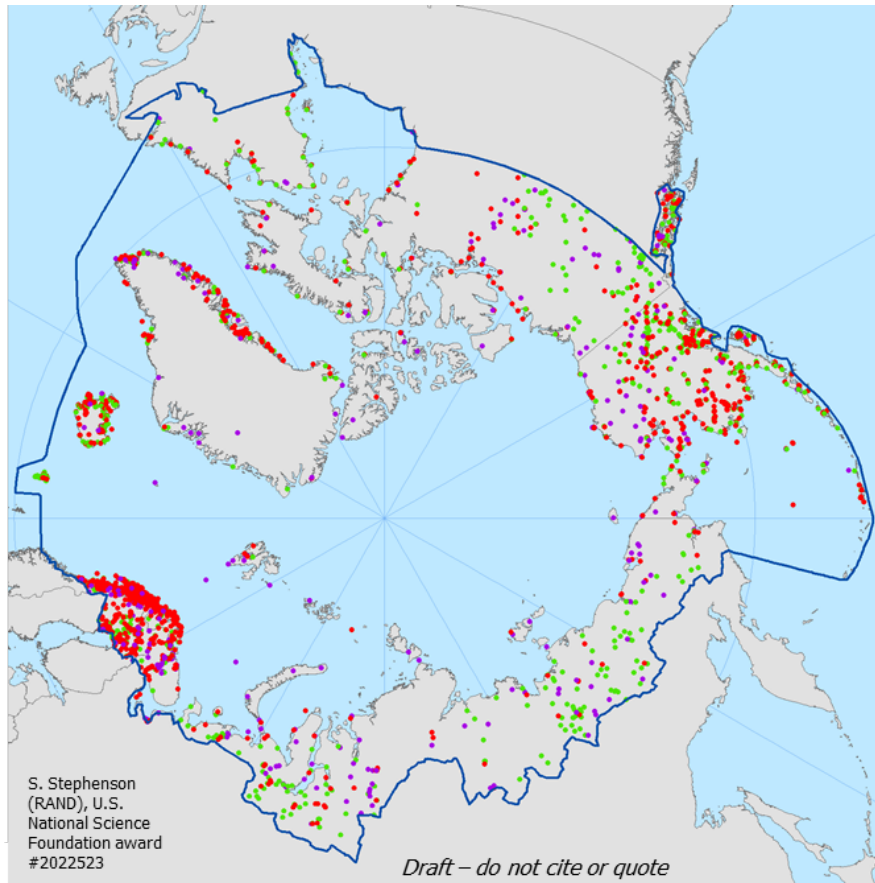
Issues in Arctic Governance and Implications for Capabilities

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Where Is the Arctic?



Definitions of region vary, and include:

- Line of latitude ($\sim 66^{\circ}30' \text{ N}$)
- Climate (e.g., isotherms or treeline)
- Political boundaries (e.g., Arctic 8, Arctic 5, state-by-state Arctic definition)
- Demographic patterns (northernmost settlements, relevant regional linkages)

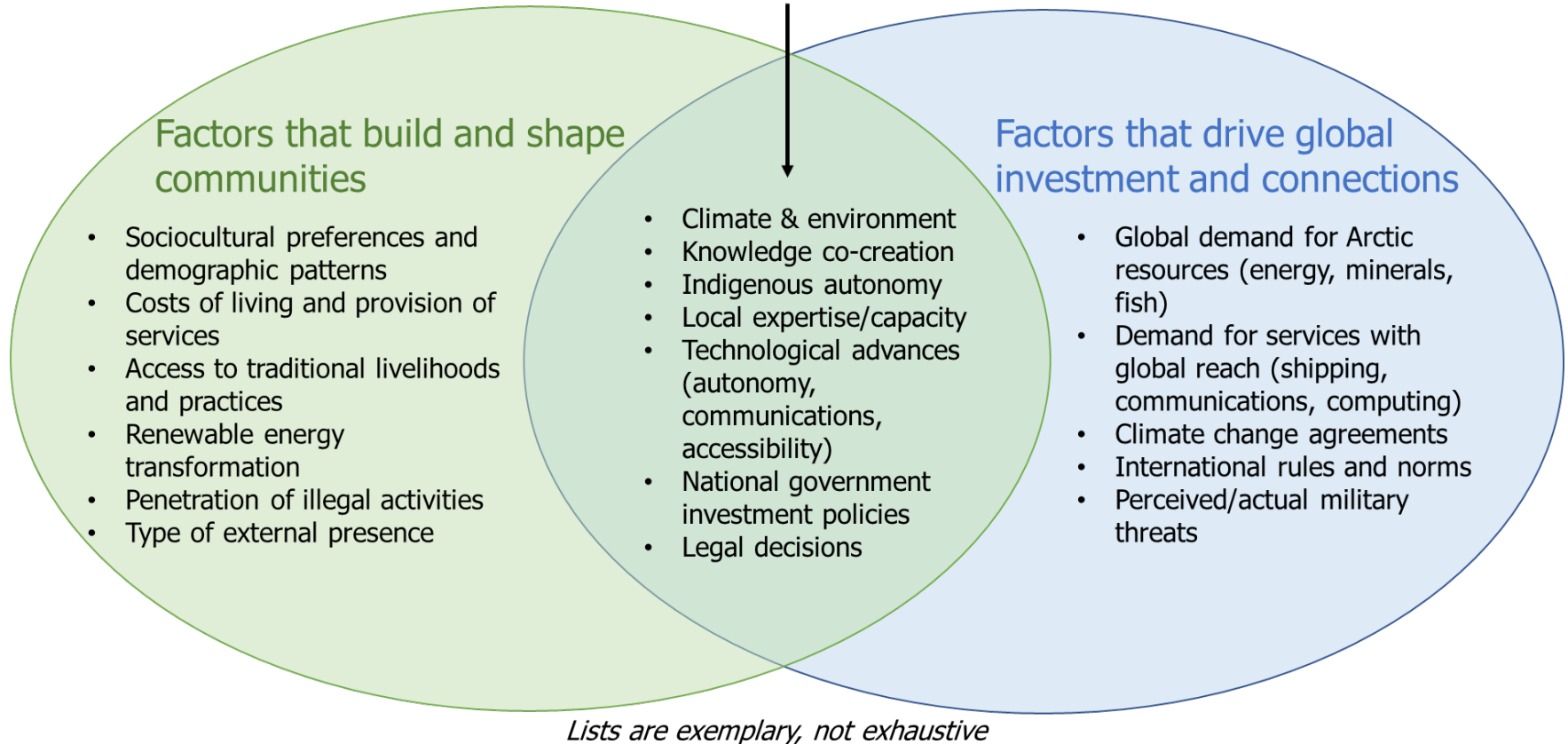
Map Key

1. **Populated places**
2. **Infrastructure**
3. **Other** (mineral deposits, military locations, national parks, etc.)

Funded through U.S. National Science Foundation grant #2022523, "Navigating the New Arctic"

The Arctic Is Changing Along Many Dimensions

Factors that both sustain resilient communities and drive global connections are key determinants of the Arctic's future



Tingstad, Abbie, Climate Change and U.S. Security in the Arctic. Santa Monica, CA: RAND Corporation, 2019. <https://www.rand.org/pubs/testimonies/CT517.html>

Governance Will Only Grow in Importance as Region Changes – Potentially Along Sub-Regional Trajectories



Adventure tourism in Alaska

Fishing in Canada, Greenland



Mining in North America



Liquid Natural Gas in Siberia



Nordic cities

Photo credits: Euan Rocha/Reuters, Qikiqtaaluk fisheries, Yamal LNG, Abbie Tingstad, Alaska Iditarod Tours

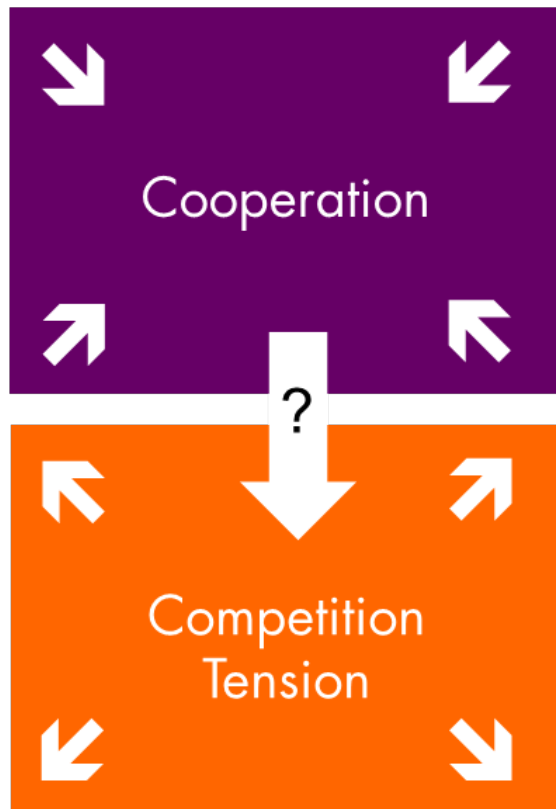
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There Are Many Possible, Overlapping Future Narratives

- Transit Shortcut: Realization of large increase in Arctic shipping and associated infrastructure
- Deep Blue: Major increase in Blue Economy, sustainable development of fisheries, seabed resources, and ocean-based renewables
- Resource hub: Heavy increase in extractive industries across the board
- Geostrategic Spill: Growing tensions from strategic competition and military activity
- Resilient Communities: Investment in sustainability, increasing autonomy for Indigenous communities, increasing availability of education, employment, and food
- Silicon Valley North: Growth of technology hubs, especially boutique software companies and infrastructure such as server farms
- Vacation Destination: Continued development of tourism, including ecotourism

Example scenarios; list not exhaustive; Funded through U.S. National Science Foundation grant #2022523, “Navigating the New Arctic”

Against this Backdrop, how Durable Is Arctic Cooperation?



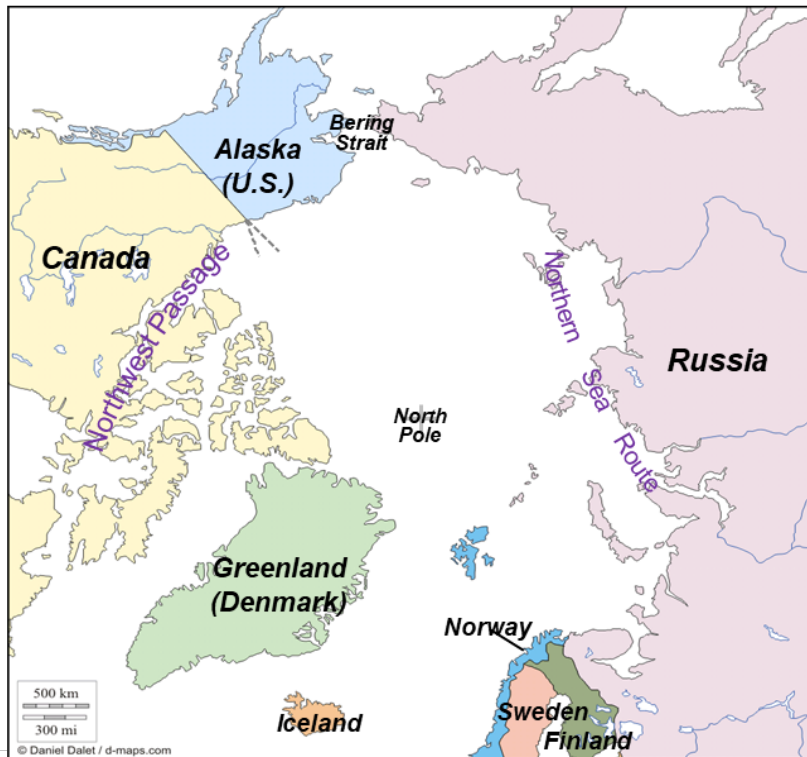
Cooperation held until now because everyone benefited from the system—including Russia, and (to a lesser extent) China

Yet opportunities and challenges in the Arctic might alter this calculation

And the Russian aggression against Ukraine has led to a “pause” in Arctic Council cooperation

Pezard, Stephanie, Abbie Tingstad, Kristin Van Abel, and Scott R. Stephenson, Maintaining Arctic Cooperation with Russia: Planning for Regional Change in the Far North, 2017. https://www.rand.org/pubs/research_reports/RR1731.html

Historically, Arctic Governance Has Focused on Issues of Mutual Importance



Arctic states **agree** on:

- UNCLOS to remain key set of rules
- No major territorial dispute
- Moratorium on fishing in the Central Arctic Ocean (at least until 2037)

Arctic states **disagree** on:

- Status of Northern Sea Route (Russia)
- Status of Northwest Passage (Canada)
- Continental shelf extensions (Canada, Denmark, Russia)

...and **non-Arctic states** (e.g., China) seek more involvement

Content: Stephanie Pezard, Map: Scott Savitz

Pezard, Tingstad, et al. 2017; Tingstad, 2019

Six Conflict Catalysts Threaten Arctic Stability

1. Challenges to the current rules of Arctic governance – including fallout from Ukraine
2. Russia's central role in Arctic access
3. China's increased economic and political involvement in the Arctic
4. The Arctic as a *gray zone*
5. Uncertainty about Greenland's geopolitical future
6. Increasing safety and environmental risks

Tingstad, Abbie, Stephanie Pezard, Benjamin Sacks, and Scott Stephenson, "Putin's Actions are Spilling North," The Hill, March 30, 2022: <https://www.rand.org/blog/2022/03/putins-actions-in-ukraine-are-spilling-north.html>; Sacks, Benjamin J., Scott R. Stephenson, Stephanie Pezard, Abbie Tingstad, and Camilla T. N. Sørensen, Exploring Gaps in Arctic Governance: Identifying Potential Sources of Conflict and Mitigating Measures, 2021. https://www.rand.org/pubs/research_reports/RRA1007-1.html

Shoring Up U.S. Arctic Capabilities Can Help Mitigate Challenges in Arctic Governance

Need types	Examples
Limitations in voice and data comms	<ul style="list-style-type: none">• Transmission of voice 24-7-365• More regular transmission of different data types
Lack of consistent threat/hazard awareness	<ul style="list-style-type: none">• Persistent coverage across Arctic• Information fusion• Clarification of sensor appropriateness and functionality
Challenges in ability to respond to incidents	<ul style="list-style-type: none">• Reduction of impact from threats and hazards• Command, control, and coordination of people and assets• Rapid on-scene arrival, and persistence once there• Support to all required response tasks
Deficiency in articulating needs and risks	<ul style="list-style-type: none">• Systematic identification and review of gaps and remediation measures• Illustration of risk using quantitative approaches

Tingstad, Abbie, Scott Savitz, Kristin Van Abel, Dulani Woods, Katherine Anania, Michelle D. Ziegler, Aaron C. Davenport, and Katherine Costello, Identifying Potential Gaps in U.S. Coast Guard Arctic Capabilities. Homeland Security Operational Analysis Center operated by the RAND Corporation, 2018.

https://www.rand.org/pubs/research_reports/RR2310.html

Capability Investments Must Consider Two Alternative Arctic Security Scenarios

Two scenarios of concern, representing different ends of the military security spectrum:

Too much security

- A race to increase military presence in the Arctic by multiple nations
- Increases likelihood of putting military assets into close proximity against a backdrop of eroding diplomatic (and potentially economic) conditions

Too little security

- Real or perceived void in capabilities to support presence, safety, law enforcement, etc.
- Opens a window for others to justify increased presence; could raise tensions over sovereignty and authority

Pezard, Tingstad, et al. 2017; Tingstad, 2019; Abbie Tingstad and Scott Savitz, "U.S. Military May Need to Invest More in Arctic Capabilities," United Press International, February 10, 2022, <https://www.rand.org/blog/2022/02/us-military-may-need-to-invest-more-in-arctic-capabilities.html>



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