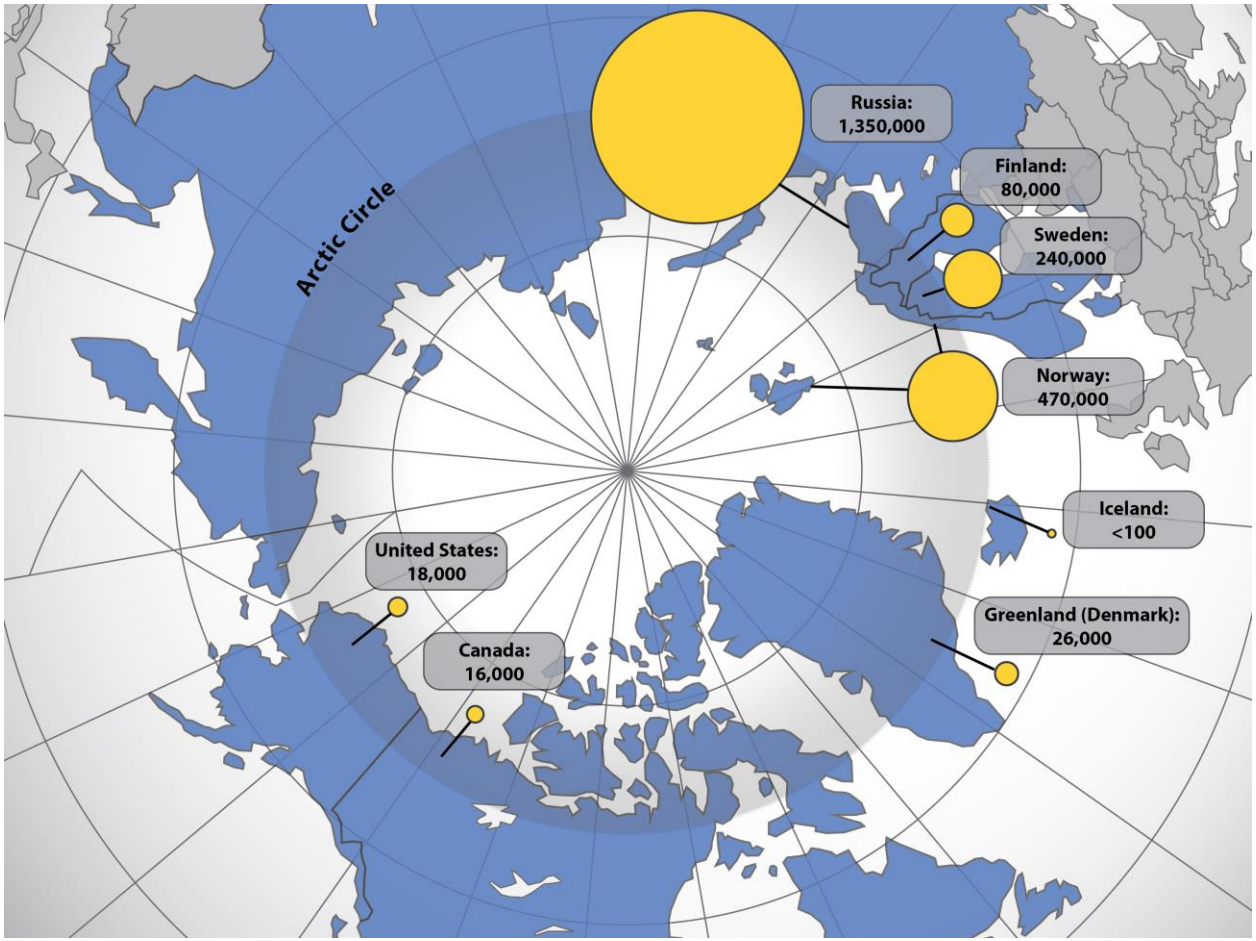

Arctic Circle
Russia:
1,350,000
Finland:
80,000
Sweden:
240,000
Norway:
470,000
Iceland:
<100
Greenland (Denmark):
26,000
United States:
18,000
Canada:
16,000

- **WORK IN PROGRESS – PRELIMINARY RESULTS SUBJECT TO CHANGE**

•

INDEX OF ARCTIC INFRASTRUCTURE CAPABILITIES (IAIC)

- **Many Problems are present in this preliminary index and criticisms, comments, and recommendations are welcome. Please contact Harry Bader at hrbader@alaska.edu**

INDEX OF ARCTIC INFRASTRUCTURE CAPACILITIES (IAIC)

WORK IN PROGRESS NOT READY FOR PUBLICATION

Examines the ability to

- **MOBILIZE**
- **MANUEVER**
- **SUSTAIN**

assets in order to successfully complete a mission related to

- **MASS SEARCH & RESCUE**
- **DISASTER RESPONSE**
- **ENVIRONMENTAL PROTECTION**
- **BOREDER SECURITY**
- **CRIMINAL LAW ENFORCEMENT**

The IAIC is based upon the density (per unit area) of infrastructure present and is calculated from the following:

- **HIGHWAY KILOMETERS**
- **RAIL KILOMETERS**
- **ENERGY DISTRIBUTION KILOMETERS (electrical transmission lines, pipelines, etc.)**
- **FUEL STORAGE CAPACITY (tank farm capacity)**
- **PORTS CAPABLE OF CONTAINER TRANSFER and DEEP DRAFT**
- **AIRPORTS**
- **BILLETS AVAILABLE**

COUNTRY AND JURISDICTION	INDEX (0-10 SCALE)
NORWAY	
Troms	**7.1**
Nordland (Ofoten, Lofoten, Vesteralen)	**4.8**
Finnmark	**3.2**
Russia	
Murmansk Oblast*	**6.0**
Nenets Autonomous Okrug*	**3.8**
Komi Republic*	**3.0**
Sweden	
Norbatten	**3.9**
Lappland	**3.7**
Finland	
Lapland	**2.7**
United States	
North Slope Borough	**0.2**
Northwest Arctic Borough	**<0.1**
Canada	
Yukon**	**<0.1**
Northwest Territory**	**<0.1**
Nunavut**	**<0.1**

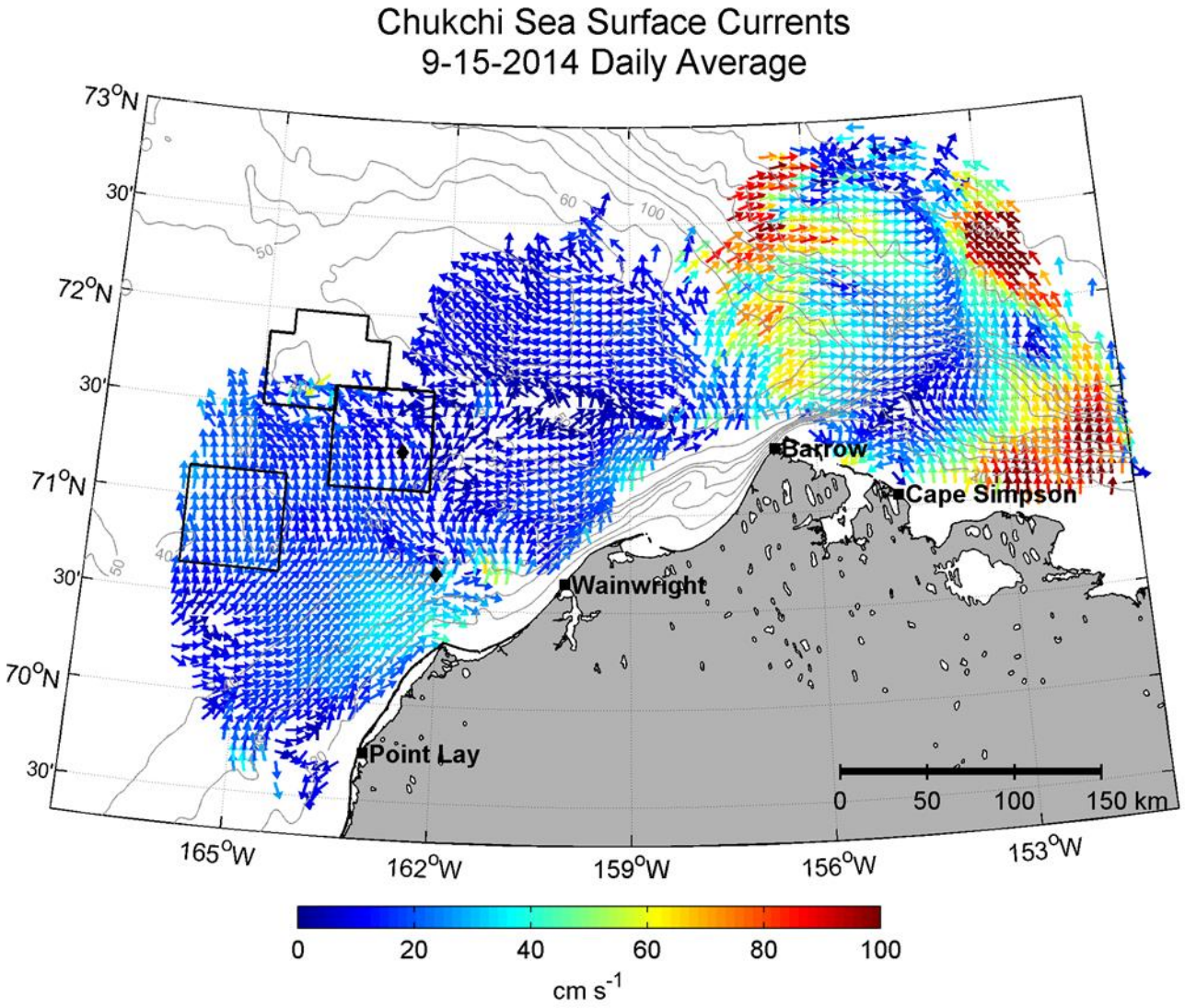
- Why is the NORTH AMERICAN ARCTIC so limited in capacity when compared to Europe?

- Climate & Permafrost
- Sea Ice
- Geography

- In the North American Arctic the U.S. and Canada CANNOT spend nor engineer our way to parity for Arctic infrastructure and capacity in relation to other Arctic nations because the environment is uniquely harsh and austere.
- Therefore, the focus must be on monitoring, detection, prevention, and deterrence rather than relying on building response capability.

- UAF ARCTIC SECURITY INNOVATION

- An Anecdotal Case Study from
  CIMES (2008-2014)
  Funded by the USDHS


Chukchi Sea Surface Currents
9-15-2014 Daily Average
73°N
30'
72°N
30'
71°N
30'
70°N
30'
165°W
162°W
159°W
156°W
153°W
Barrow
Cape Simpson
Wainwright
Point Lay
0 50 100 150 km
0 20 40 60 80 100
cm s-1


Westward Wind
WAIN
PTLY


ССВ-80