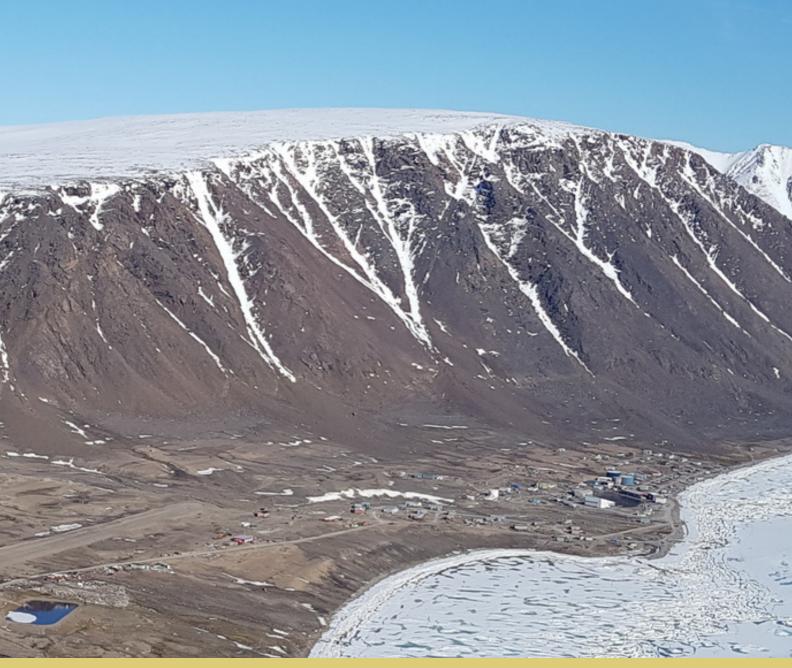
RESEARCH TRENDS IN

GRISE FIORD

BASED ON SCIENTIFIC RESEARCH LICENSES (2004-2019)







Prepared by:

Alexis Polidoro, Alison Perrin, Charlotte Buttle, Regena Sinclair, Gita Ljubicic

In collaboration with:

Jamal Shirley, Nunavut Research Institute



أه والمارة وا

Thank you Merçi

We wish to acknowledge everyone who has supported and contributed to the analysis of the Nunavut research licensing database.

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SSHRC = CRSH









Cover photo: Derek Mueller

For more information visit

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RESEARCH INSTITUTE RECHEMENT RECHEMENTS

Photo: Nunavut Research Institute (Iqaluit, Nunavut) by Jamal Shirley

RIGHTS AND RESPONSIBILITIES IN RESEARCH

Obtaining Information on Research Projects

All NRI license holders must provide a plain language summary of research activities completed each year. These summaries are published each year in the NRI compendia for research (see Resources p. 17). These annual summary reports are available in English and Inuktitut, and for some locations in Inuinnagtun. They are meant to provide a snapshot of research fieldwork including when, how, and by whom, and what information was collected. To obtain summary reports for any research projects conducted in or near your community or region please contact the NRI Manager, Research Liaison (see contact information below).

Researchers' Ethical Obligations

Nunavummiut must be treated with fairness and respect. Researchers are required to abide by the laws of each community and to follow ethical principles and codes of conduct (see Resources p. 17). Researchers are expected to engage in culturally appropriate behaviour following local protocols. Researchers are responsible for learning what is respectful and responsible in the local context, as each community is different.

Important information for Nunavummiut

Your Rights in Research

Remember, you always have the right to refuse to participate in a research project even if your community has approved the research. Researchers must obtain your informed consent before they ask you any questions, and they must always respect your privacy and confidentiality.

It is against the law to conduct research in Nunavut without a license. Researchers must follow the terms and conditions in their research licenses and ensure their work does not cause harm or disruption to the community or to wildlife and the environment. Research licenses can be suspended or revoked, and a researcher may face fines or other penalties, when there is documented proof that research is causing harm.

If you have concerns that a researcher working in your community has not secured your informed consent, or may be causing harm or disruption, please **contact the**Nunavut Science Advisor (see contact below).

Manager, Research Liaison

researchlicenses@arcticcollege.com

(867) 979-7279

Nunavut Science Advisor

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(867) 979-7290

ABOUT THIS REPORT

About the Nunavut Research Institute (NRI)

The NRI has been responsible for developing, facilitating, and promoting scientific research in Nunavut since 1994. The NRI works to ensure that research is a resource for the wellbeing of Nunavummiut (people of Nunavut).

Scientific Research Licenses

The NRI administers scientific research licensing under Nunavut's Scientists Act. The Scientists Act only applies to research in the Physical and Natural Sciences (P), Health Sciences (H), and Social Sciences and Traditional Knowledge (SS), which is about 60% of all research that happens in

Nunavut. Research on archaeology, parks, and wildlife (including all terrestrial and aquatic animals, plants, birds, and fish) is licensed under different legislation and is not included in this report.

The NRI's Scientific Research
Licensing Guidelines (see Resources,
p. 17) provide information about the
types of permits required for research
in Nunavut, and how to apply for an
NRI Scientific Research License in each
discipline.

Did you know that the NRI only licenses about 60% of research happening in Nunavut?

Why we created this report

The goal of this report is to help Nunavummiut learn about who is doing research, what they are studying, and where. This report was developed by analyzing research summaries from NRI license applications. To learn more about the numbers presented in this report, see Understanding the Numbers (p. 16). This work is part of the NRI's ongoing efforts to:

- 1. improve Inuit engagement in research;
- 2.make research results more accessible to Nunavummiut:
- 3. reduce community research fatigue; and,
- 4. encourage research that addresses Inuit priorities.

Other Research Permits

Even when researchers have a license, they might require other approvals to conduct their project. Other approvals are usually required for fieldwork, depending on the location and type of research activity. Examples of other authorizations a researcher may need include:

- Review by the Nunavut Planning Commission
 (NPC) for all land and water based activities;
- Screening by the Nunavut Impact Review Board (NIRB) - environmental impact screening;
- Authorization from the Nunavut Water Board (NWB) - to use water or deposit waste in the environment;
- Approval from Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) - to use Federal Crown Lands in Nunavut for research purposes; and,
- Approval from a Regional Inuit Association (RIA) - to access or use Inuit Owned Lands for research purposes.

RESEARCH IN AND AROUND GRISE FIORD (2004-2019)

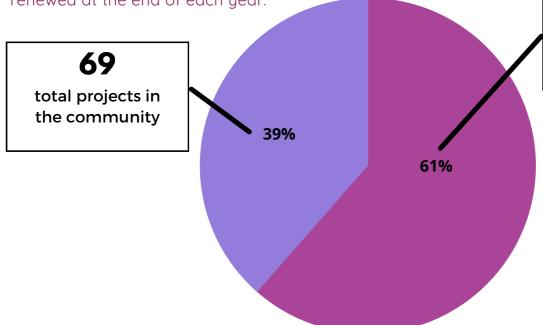
398 TOTAL LICENSES CONNECTED TO GRISE FIORD

179

TOTAL PROJECTS
CONNECTED TO
GRISE FIORD

WHERE RESEARCH IS HAPPENING

A research license is required for each year that a research project takes place in Nunavut. Projects that are conducted for longer than one year can receive a multi-year research license, and this must be renewed at the end of each year.



110

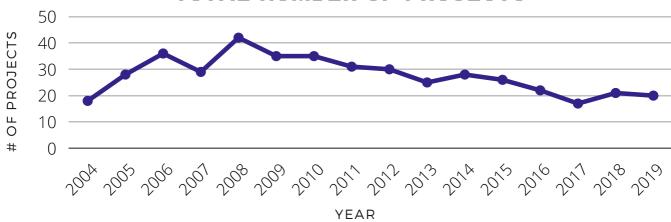
total projects occurring at field locations outside the community (but reviewed by Grise Fiord)

In this report, **research license** numbers
represent the individual
license issued each year.

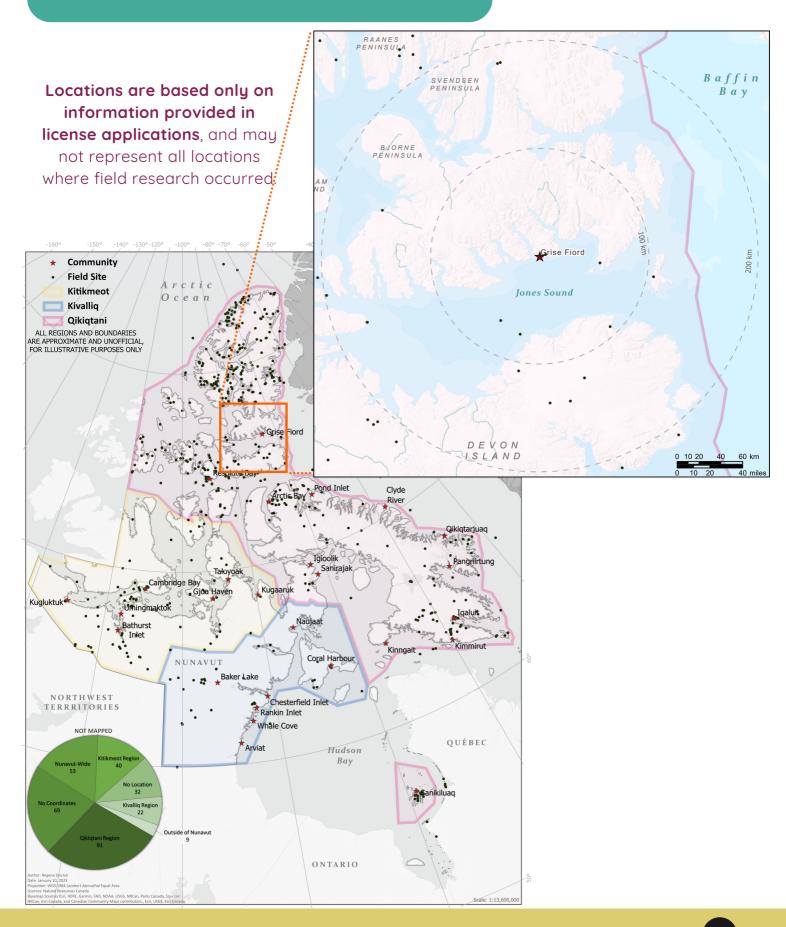
Research project

numbers represent an individual project (which may hold several licenses over multiple years).

TOTAL NUMBER OF PROJECTS



RESEARCH LOCATIONS



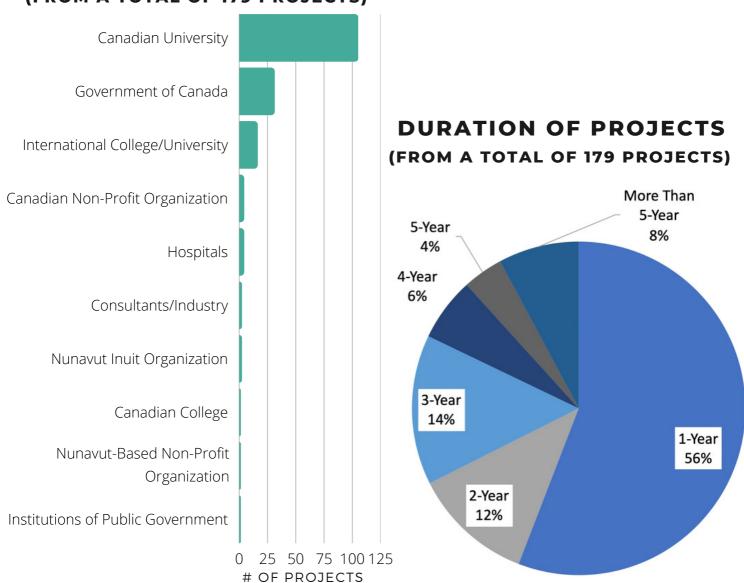
WHO IS DOING RESEARCH IN AND AROUND GRISE FIORD?

A **Principal Investigator (PI)** is the lead researcher on a project. The PI takes responsibility for submitting the license application, and making sure that the proposal is followed or adjusted as needed. The PI often lists other **research team members** in their application. However, numbers shown here only represent the affiliation of the PI.

PRINCIPAL INVESTIGATOR AFFILIATION (FROM A TOTAL OF 179 PROJECTS)

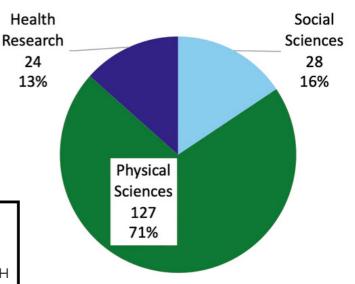
8

NUNAVUT-BASED PRINCIPAL INVESTIGATORS



TYPE OF RESEARCH IN AND AROUND GRISE FIORD

DISTRIBUTION OF ALL PROJECTS BY DISCIPLINE



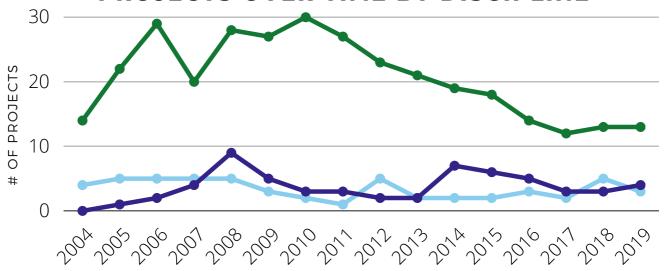
SOCIAL SCIENCES AND TRADITIONAL KNOWLEDGE (SS)

PHYSICAL AND NATURAL

SCIENCES (P)

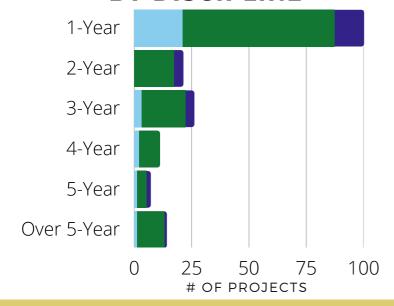
HEALTH RESEARCH (H)

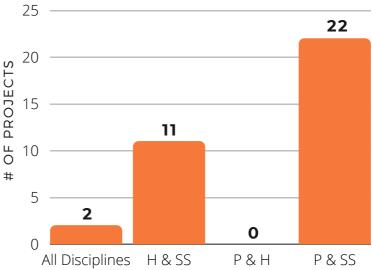
PROJECTS OVER TIME BY DISCIPLINE



DURATION OF PROJECTS BY DISCIPLINE

INTERDISCIPLINARY PROJECTS





TOP 10 RESEARCH TOPICS



Research topics refer to the focus of a research project.

TOTAL	# of Projects	SOCIAL TOPICS	# of Projects
1. Climate Change	49	1.Education	13
2. Marine (ocean, coastal areas, sea	35	2. Culture and Society	11
ice)		3. Inuit Qaujimajatuqangit	9
3. Climate & Weather	21	4. Policy and Governance	7
4. Ecosystems	16	5. History	4
5. Lands & Landforms	13	6. Colonization Impacts	3
6. Education	13	7. Sovereignty and Self-Determination	3
7. Culture and Society	11	8.Arts	3
8. Wildlife*	9	9. Land Use and Traditional Activities	3
9. Inuit Qaujimajatuqangit	9	10. Economy	2
10. Plants*	8	11.Justice and Law	2
11. Air & Atmosphere	8	12. Reconciliation	2

LAND & WATER TOPICS	# of Projects	HEALTH TOPICS	# of Projects
1.Climate Change	49	1. Health Practitioners & Workers &	7
2. Marine (ocean, coastal areas, sea ice)	35	Learners	
3.Climate & Weather	21	2.Wellbeing	5
4. Ecosystems	16	3. Epidemiology	4
5. Lands & Landforms	13	4. Health Systems & Monitoring	4
6.Wildlife*	9	5. Clinical & Medical Research	3
7.Plants*	8	6. Public Health & Health Promotion	2
8.Air & Atmosphere	8	7.Environmental Health	2
9.Fish*	6	8. Health Services	2
10.Freshwater (lakes, rivers, streams)	5	9. Professional Training & Accountability	1
		10. Population Health	1
		11 Community Wallness	1

RESEARCH METHODS

Numbers shown on p. 8-9 only represent the research methods and reporting tools that were described in license applications (not all licenses included this information).

TOP 10 RESEARCH METHODS

	# of
	Projects
1. Rock Sampling	22
2. Water Sampling	21
3. Sediment Sampling	21
4. Surveys	20
5. Interviews	19
6. Core Sampling	16
7. Weather Monitoring	12
8. Environmental Observation	12
9. Ground Truthing for Remote	11
Sensing or Aerial Surveys	
10. Soil Sampling	11

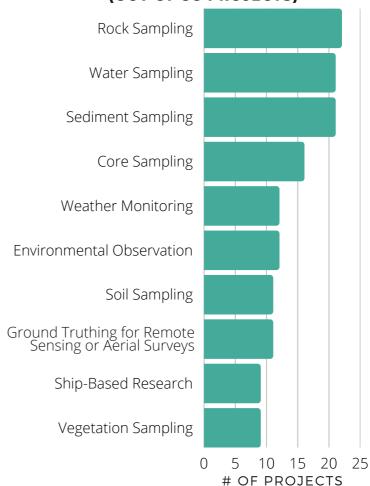
TOP 10 SOCIAL & HEALTH RESEARCH METHODS

(OUT OF 63 PROJECTS)



TOP 10 LAND & WATER RESEARCH METHODS

(OUT OF 98 PROJECTS)



COMMUNITY ENGAGEMENT IN RESEARCH

PROJECTS WITH
NUNAVUT ARCTIC
COLLEGE INVOLVEMENT

21

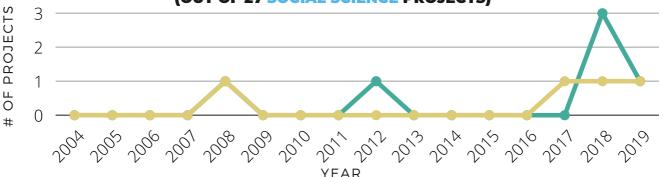
Community-connected projects are those that
involve community members
in some capacity, for
example, as local guides,
translators, or data providers.

12

Community-partnered projects involve a research partnership between a Principal Investigator and community members or organizations where the community plays an active role in all parts of the research.

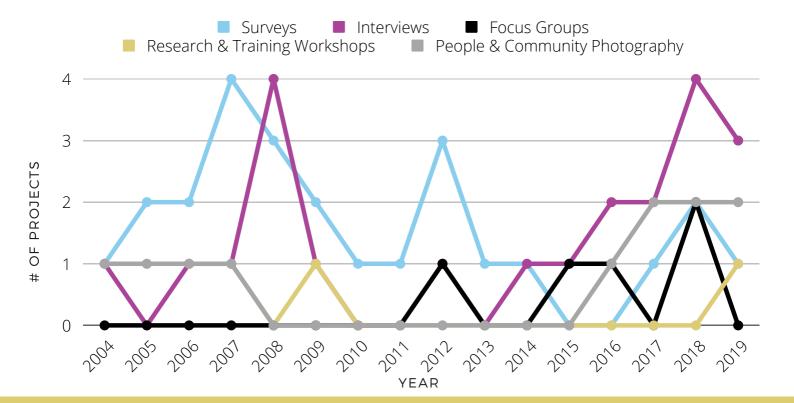
COMMUNITY ENGAGEMENT

(OUT OF 27 SOCIAL SCIENCE PROJECTS)



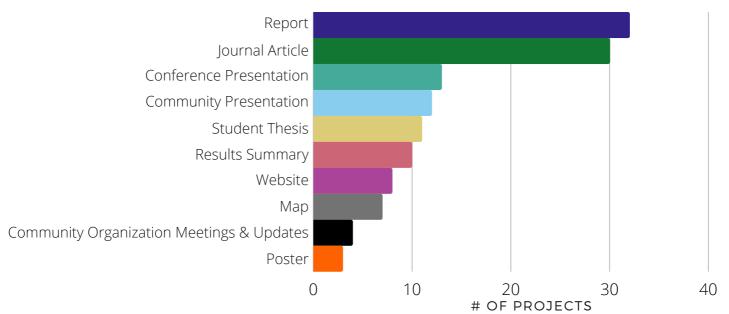
SOCIAL RESEARCH METHODS

(OUT OF 13 SOCIAL SCIENCE PROJECTS)



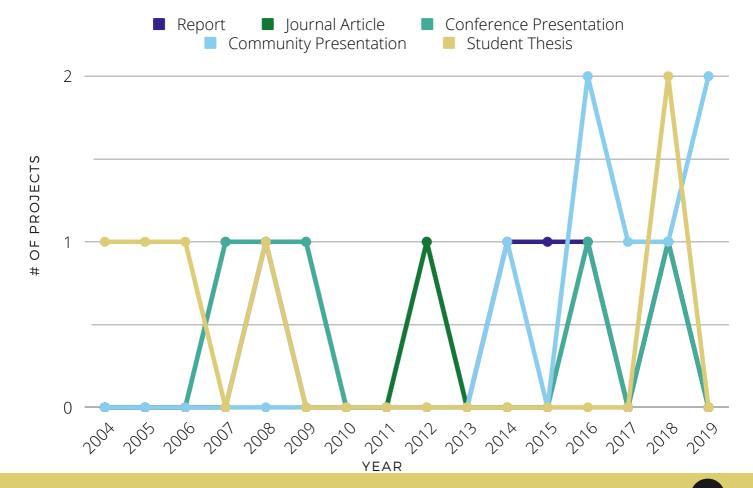
RESEARCH REPORTING TOOLS

TOP 10 REPORTING TOOLS (OUT OF 66 PROJECTS)

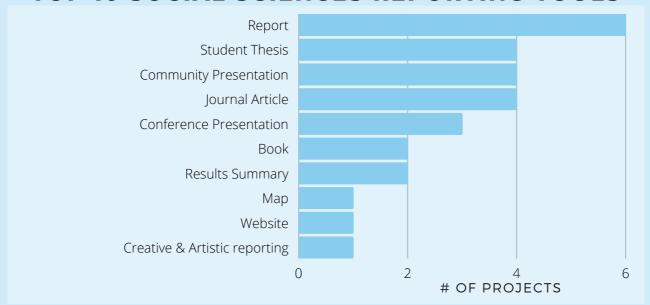


TOP 5 REPORTING TOOLS OVER TIME

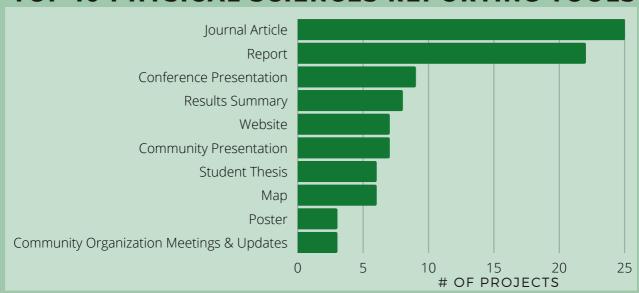
(OUT OF 13 SOCIAL SCIENCE PROJECTS)



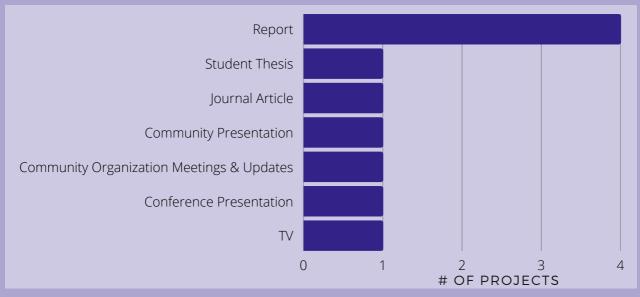
TOP 10 SOCIAL SCIENCES REPORTING TOOLS



TOP 10 PHYSICAL SCIENCES REPORTING TOOLS



TOP 10 HEALTH RESEARCH REPORTING TOOLS



RESEARCH LICENSE REVIEW

TOTAL
NUMBER OF
PROJECTS:

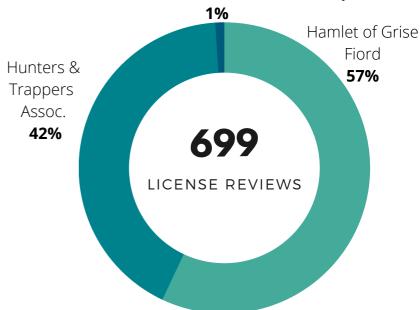
TOTAL
NUMBER OF
LICENSES:

179

398

LICENSE REVIEW BY COMMUNITY ORGANIZATION

Grise Fiord District Education Authority*

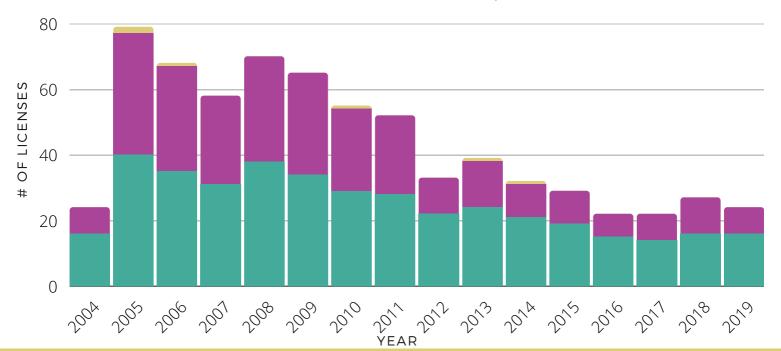


Review numbers only represent local community organizations that received research license applications to review.

The Government of Nunavut, Nunavut Tunngavik Incorporated, Regional Inuit Organizations, Institutes of Public Government, the Government of Canada, and Non-Governmental Organizations also review research licenses. These could not be easily associated with communities and so are included in regional numbers (p. 13) and the Nunavut-wide report.

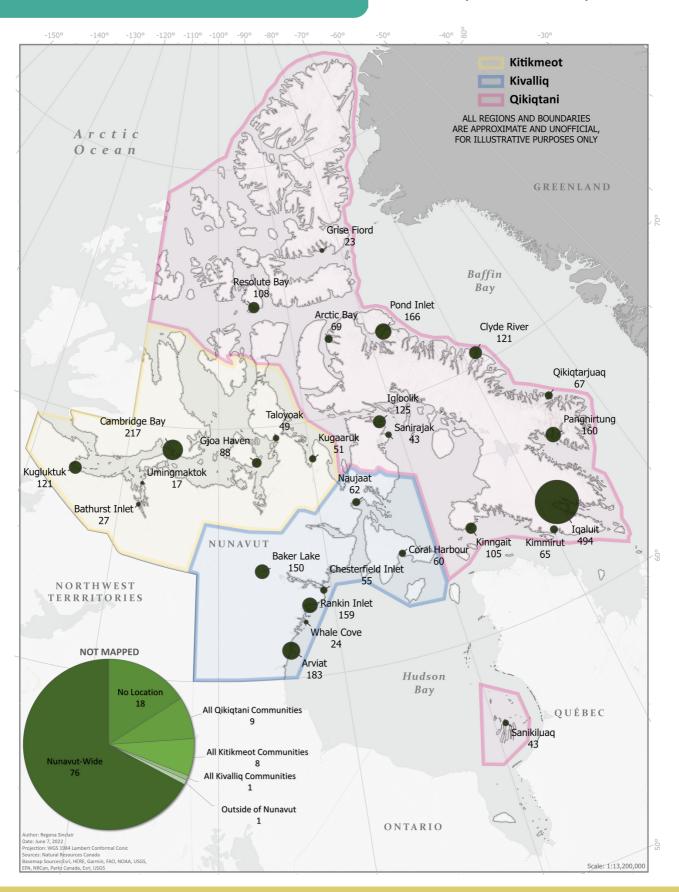
TOTAL LICENSES REVIEWED BY COMMUNITY ORGANIZATIONS

- Hamlet of Grise Fiord (Aujuittug)
- Ivig Hunters and Trappers Organization (Grise Fiord)
- Grise Fiord District Education Authority*



RESEARCH TRENDS ACROSS NUNAVUT

Intensity of research in Nunavut communities (2004-2019)

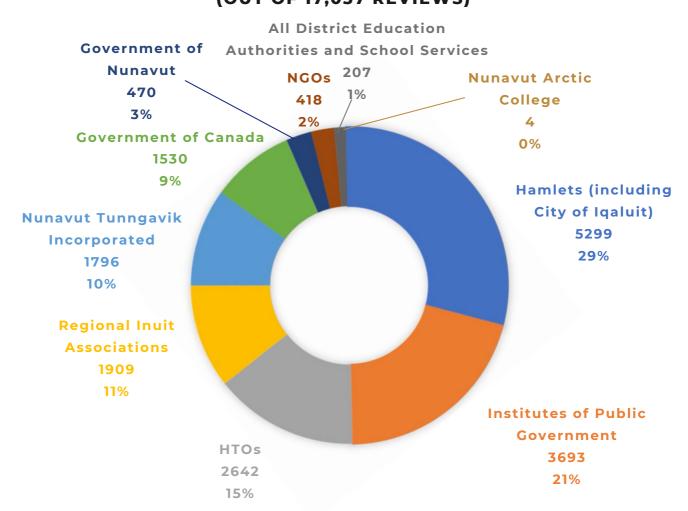


TOTAL LICENSES BY REGION

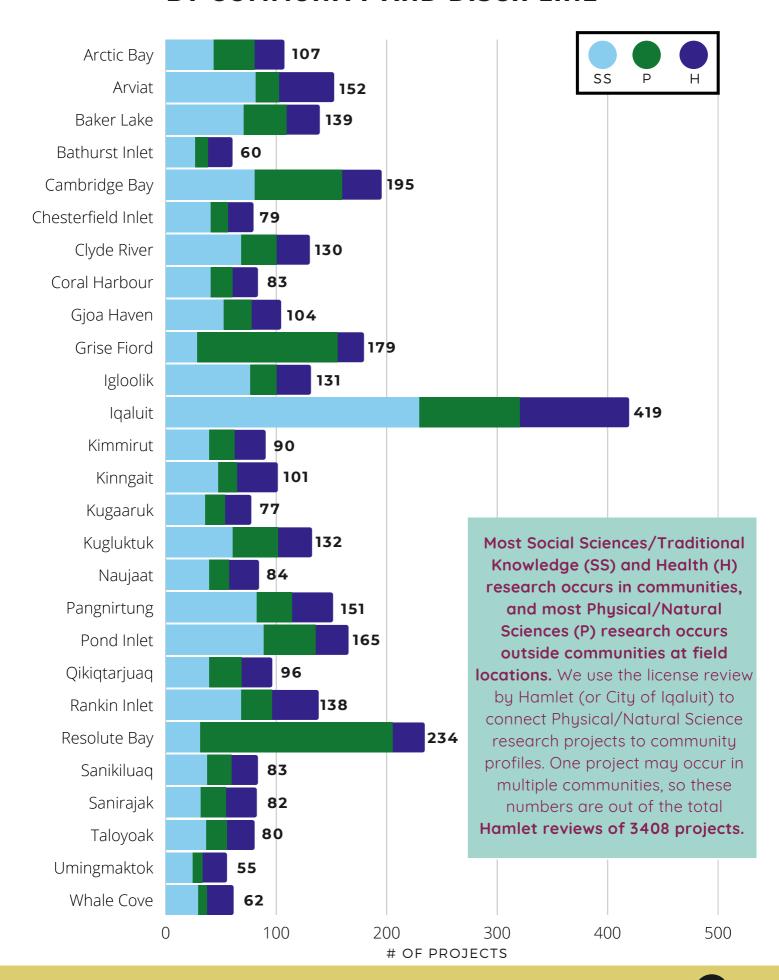




LICENSE REVIEW BY ORGANIZATION TYPE (OUT OF 17,037 REVIEWS)



TOTAL NUMBER OF PROJECTS BY COMMUNITY AND DISCIPLINE



UNDERSTANDING THE NUMBERS

The information we used to create this report is explained here, to help understand some of the limitations.

Analysis of License Applications

The research numbers and trends shown in this report are based on the analysis of Scientific Research License Applications. If a full application was not available, the research summary from the NRI annual compendium was used. This means that the analysis only reflects what a researcher proposed when first applying for their license.

The numbers do not reflect any final changes or adjustments that a researcher made when actually carrying out the project.

Types of Research

The research numbers and trends shown in this report only represent about 60% of the research that happens in Nunavut. This includes research in the Physical and Natural Sciences (P), Health Sciences (H), and Social Sciences and Traditional Knowledge (SS). Other kinds of research have a separate permitting process, and are not included in this report (see About this Report, p. 2).

Nunavut-led Research

Some scientific activities led by government agencies, Inuit organizations, and by individual Nunavummiut do not require licensing under the Scientists Act. For this reason, the number of Nunavut-led research activities is likely under-represented in the report. Refer to the NRI's Scientific Research Licensing Guidelines for a list of research activities that are currently exempt from licensing (see Resources p. 17).

Research Topics

For each project we reviewed the summary available in the license application, or annual compendium, to identify all topics relevant to the research (p. 7). This helped to identify the range of research topics covered in Nunavut, as well as to develop keywords that can be used to search research projects in the future.

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RESOURCES

Interested in learning more?

NRI Licensing Information

(https://www.nri.nu.ca/)

- Scientific Research Licensing Guidelines
- Compendiums of Research Licensed under the Scientists Act (since 1997)
- Health Research in Nunavut: Special Considerations for Remote Data Collection
- Scientific Research Licensing: Frequently Asked Questions

Inuit Tapiriit Kanatami

Resources (https://www.itk.ca/)

- National Inuit Strategy on Research (NISR)
- NISR Implementation Plan
- Negotiating Research Relationships: A Guide for Communities
- Negotiating Research Relationships with Inuit Communities: A Guide for Researchers

Nunavut Research Organizations

- Aggiumavvik Society (Arviat)
- Arctic Eider Society (Sanikiluaq)
- ArcticConnexion (multiple communities)
- <u>Ikaarvik</u> (multiple communities)
- Ittag Heritage and Research Centre (Clyde River)
- Kitikmeot Heritage Society (Cambridge Bay)
- Nattilik Heritage Society (Gjoa Haven)
- Qaujigiartiit Health Research Centre (Igaluit)
- Researchers are also encouraged to reach out to the Regional Inuit Association, Hamlet Office, Hunters and Trappers Association, Visitor's Centre, and other organizations in each community you work in, to get recommendations on important local research groups and initiatives.

Research Ethics and Guidelines

- Examples of Inuit-centred research frameworks
- Ethical Principles for the Conduct of Research in the North
- Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans

