RESEARCH TRENDS IN

IQALUIT

BASED ON SCIENTIFIC RESEARCH LICENSES

(2004-2019)







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Thank you Merçi

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Cover photo: Alison Perrin

For more information visit

TABLE OF

CONTENTS

- ∠ ABOUT THIS REPORT
- 3 RESEARCH IN AND AROUND IQALUIT
- 5 WHO IS DOING RESEARCH IN AND AROUND IQALUIT?
- 6 TYPE OF RESEARCH IN AND AROUND IQALUIT
- 7 TOP 10 RESEARCH TOPICS
- 8 RESEARCH METHODS
- 9 COMMUNITY ENGAGEMENT IN RESEARCH
- 10 RESEARCH REPORTING TOOLS
- 12 RESEARCH LICENSE REVIEW
- 13 RESEARCH TRENDS ACROSS NUNAVUT
- 16 UNDERSTANDING THE NUMBERS
- 17 RESOURCES

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 IOALUIT (2004-2019)

523

419

TOTAL LICENSES CONNECTED TO IOALUIT

TOTAL PROJECTS CONNECTED TO IQALUIT

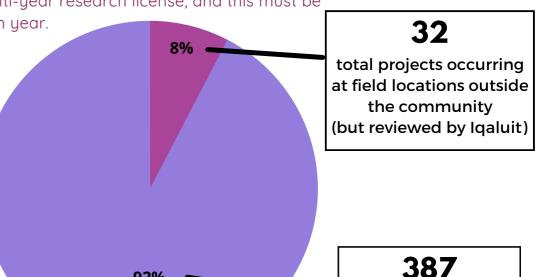
WHERE RESEARCH IS HAPPENING

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.

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

Research project

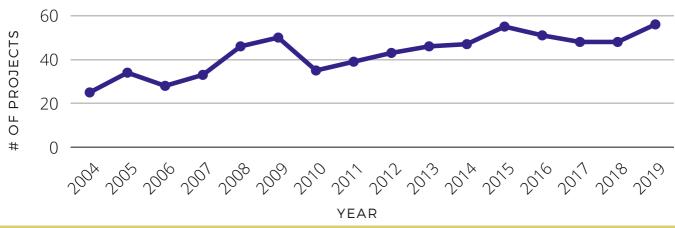
numbers represent an individual project (which may hold several licenses over multiple years).



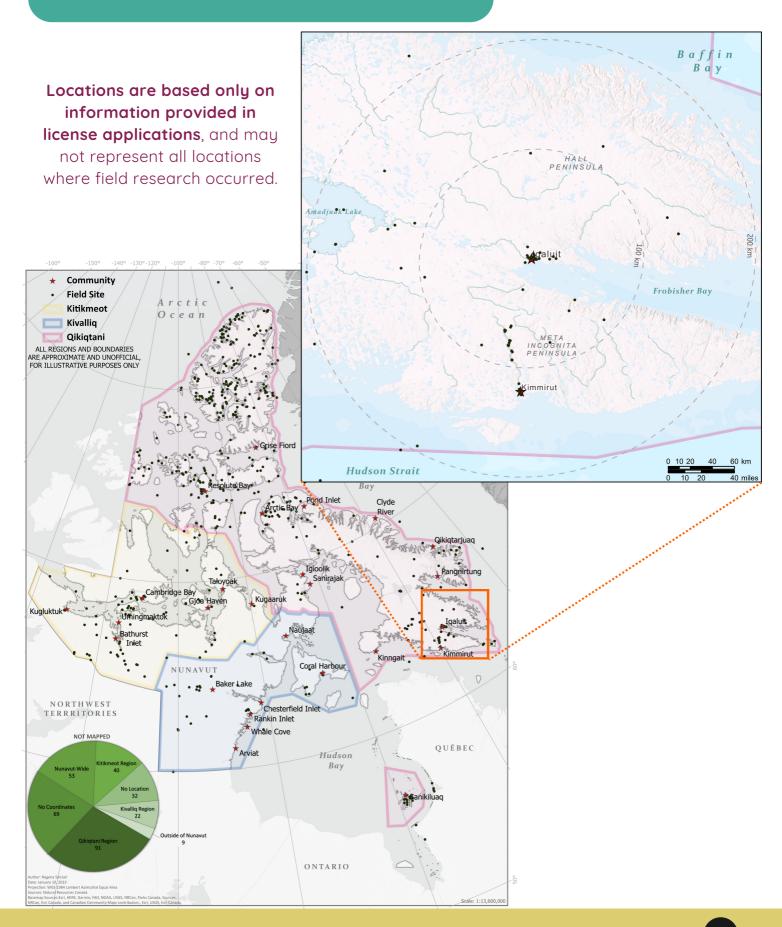
total projects in the community

TOTAL NUMBER OF PROJECTS

92%



RESEARCH LOCATIONS



WHO IS DOING RESEARCH IN AND AROUND IQALUIT?

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

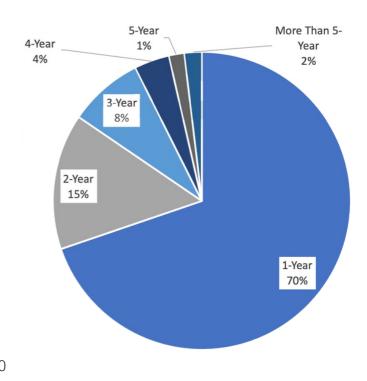
(FROM A TOTAL OF 419 PROJECTS)



52

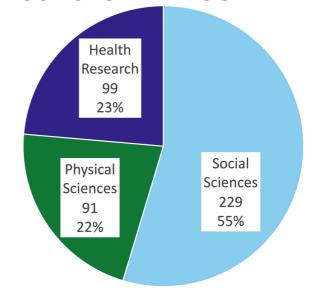
NUNAVUT-BASED PRINCIPAL INVESTIGATORS

DURATION OF PROJECTS(FROM A TOTAL OF 419 PROJECTS)



TYPE OF RESEARCH IN AND AROUND IQALUIT

DISTRIBUTION OF ALL PROJECTS BY DISCIPLINE

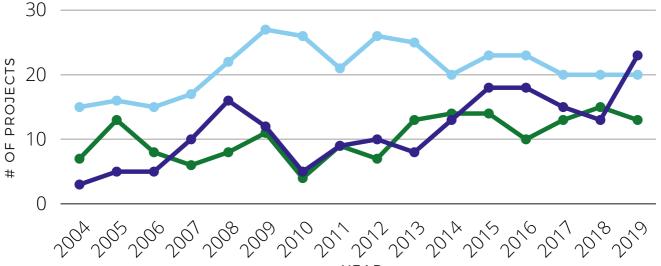


SOCIAL SCIENCES
AND TRADITIONAL
KNOWLEDGE (SS)

PHYSICAL AND NATURAL SCIENCES (P)

HEALTH RESEARCH (H)

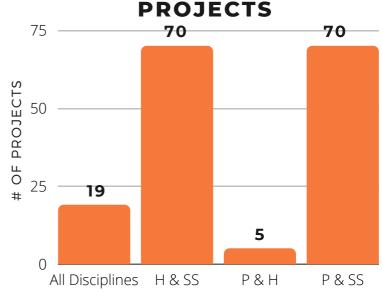
PROJECTS OVER TIME BY DISCIPLINE



DURATION OF PROJECTS BY DISCIPLINE

1-Year 2-Year 3-Year 4-Year 5-Year Over 5-Year 0 100 200 300 # OF PROJECTS

INTERDISCIPLINARY



TOP 10 RESEARCH TOPICS



Research topics refer to the focus of a research project.

TOTAL	# of rojects
1. Culture and society	114
2. Inuit Qaujimajatuqangit	70
3. Policy and Governance	64
4. Education	51
5. Climate Change	44
6. Sovereignty and Self-Determination	37
7. Land use and Traditional Activities	34
8. Marine (ocean, coastal areas, sea	26
ice)	
9. Wellbeing	25
10. Economy	20
11. Public Health & Health Promotion	20

SOCIAL TOPICS	# of Projects
1. Culture and society	114
2. Inuit Qaujimajatuqangit	70
3. Policy and Governance	64
4. Education	51
5. Sovereignty and Self-Determination	37
6. Land Use and Traditional Activities	34
7. Economy	20
8. History	16
9.Justice and Law	14
10.Gender	12

LAND & WATER TOPICS	# of Projects	HEALTH TOPICS	# of Projects
1. Climate Change	44	1.Wellbeing	25
2. Marine (ocean, coastal areas, sea ice)	26	2.Public Health & Health Promotion	20
3. Wildlife*	18	3. Epidemiology	19
4. Resource Development	16	4. Health Practitioners & Workers &	19
5. Climate & Weather	16	Learners	
6. Hazards	12	5. Health Systems & Monitoring	17
7.Plants*	12	6. Health Services	14
8. Infrastructure	10	7. Community Wellness	12
9. Fish*	8	8. Clinical & Medical Research	5
10.Air & Atmosphere	7	9. Population Health	3
		10. Rehabilitation	2

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 SOCIAL & HEALTH RESEARCH METHODS

(OUT OF 333 PROJECTS)

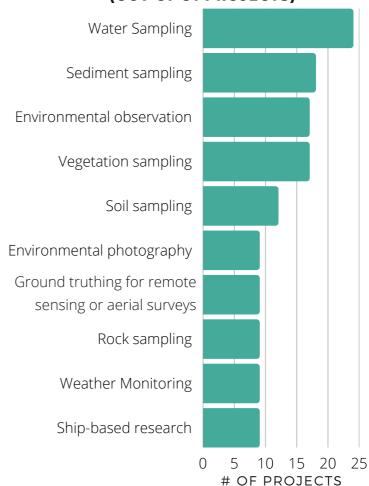


TOP 10 RESEARCH METHODS

of **Projects** 1. Interviews 208 2. Surveys 56 3. Focus Groups 40 4. Research & Training Workshops 32 5. Experiential Learning & 28 **Observation** 6. Water Sampling 24 7. People/ Community Photography 24 8. Case Studies 21 9. Sediment Sampling 18 10. Vegetation Sampling 17 11. Descriptive Studies 17 12. Environmental Observation **17**

TOP 10 LAND & WATER RESEARCH METHODS

(OUT OF 91 PROJECTS)



COMMUNITY ENGAGEMENT IN RESEARCH

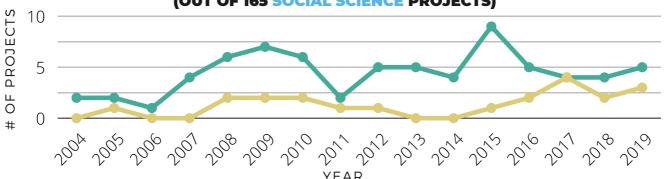
PROJECTS WITH

NUNAVUT ARCTIC COLLEGE INVOLVEMENT

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

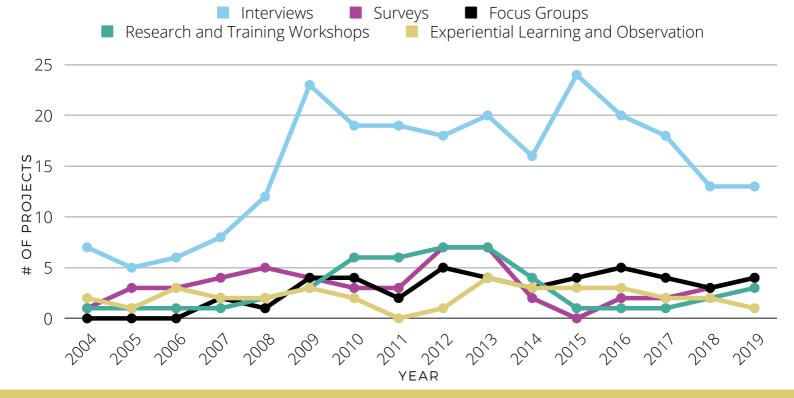
Community-partnered projects involve a research partnership between a Principal Investigator and community members or organizations where the community plays an active role in all parts of the research.

(OUT OF 165 SOCIAL SCIENCE PROJECTS)



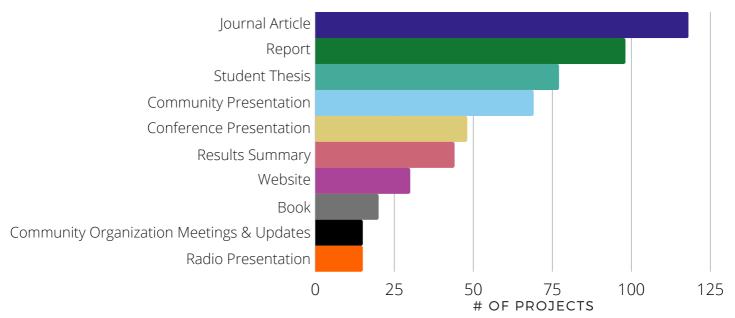
SOCIAL RESEARCH METHODS

(OUT OF 165 SOCIAL SCIENCE PROJECTS)



RESEARCH REPORTING TOOLS

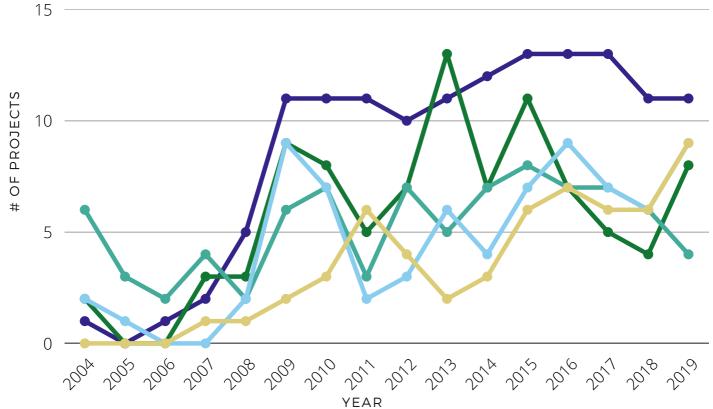
TOP 10 REPORTING TOOLS (OUT OF 240 PROJECTS)



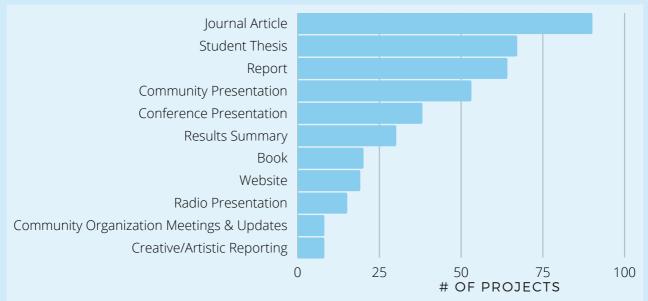
TOP 5 REPORTING TOOLS OVER TIME

(OUT OF 165 SOCIAL SCIENCE PROJECTS)





TOP 10 SOCIAL SCIENCES REPORTING TOOLS



TOP 10 PHYSICAL SCIENCES REPORTING TOOLS



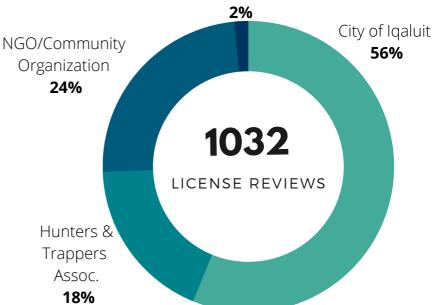
TOP 10 HEALTH RESEARCH REPORTING TOOLS



RESEARCH LICENSE REVIEW

LICENSE REVIEW BY COMMUNITY ORGANIZATION

Iqaluit District Education Authority*



TOTAL
NUMBER OF
PROJECTS:

TOTAL
NUMBER OF
LICENSES:

419

523

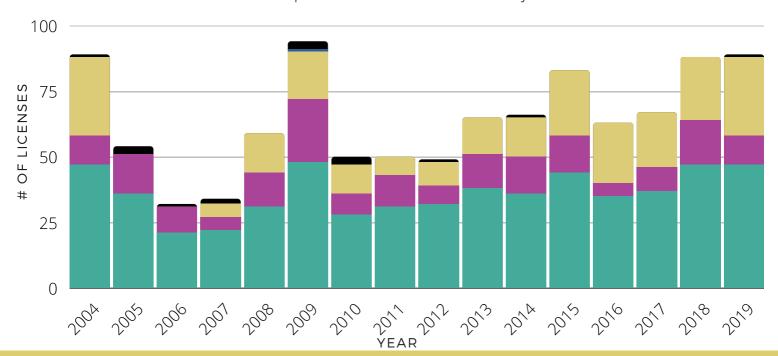
Review numbers only represent local community organizations that received research license applications to review.

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

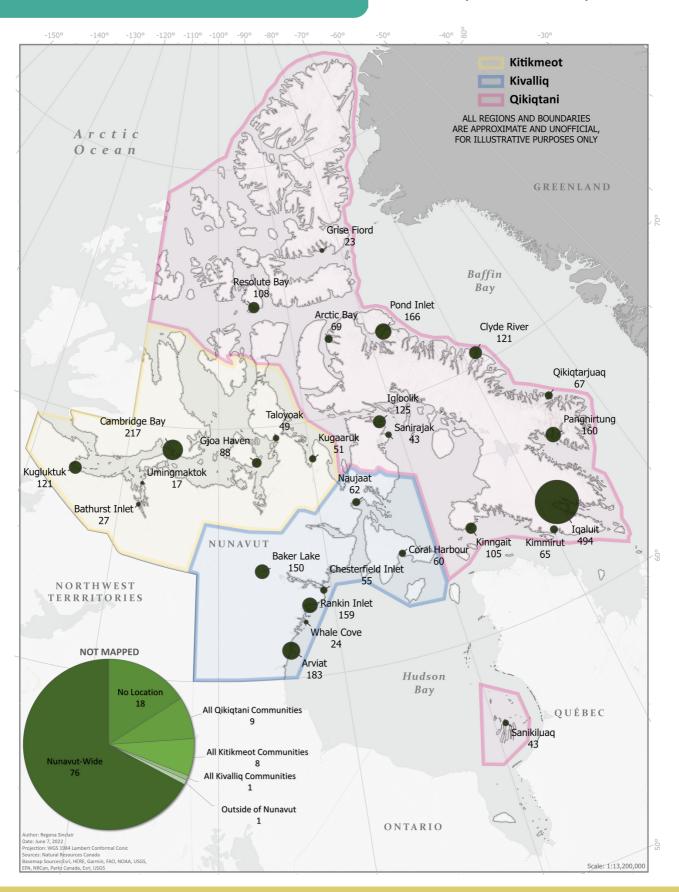
City of Iqaluit (Frobisher Bay)
 Amaruq Hunters and Trappers Association (Iqaluit)
 Qaujigiartiit Health Research Centre
 Tammaativvik Boarding Home

■ Igaluit District Education Authority*



RESEARCH TRENDS ACROSS NUNAVUT

Intensity of research in Nunavut communities (2004-2019)

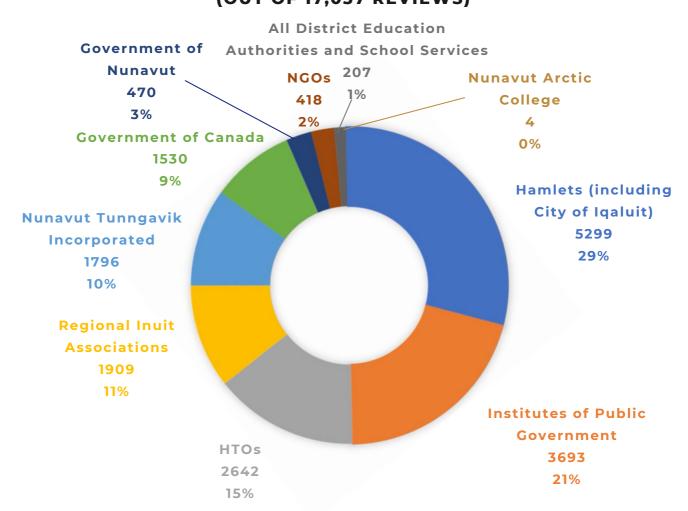


TOTAL LICENSES BY REGION

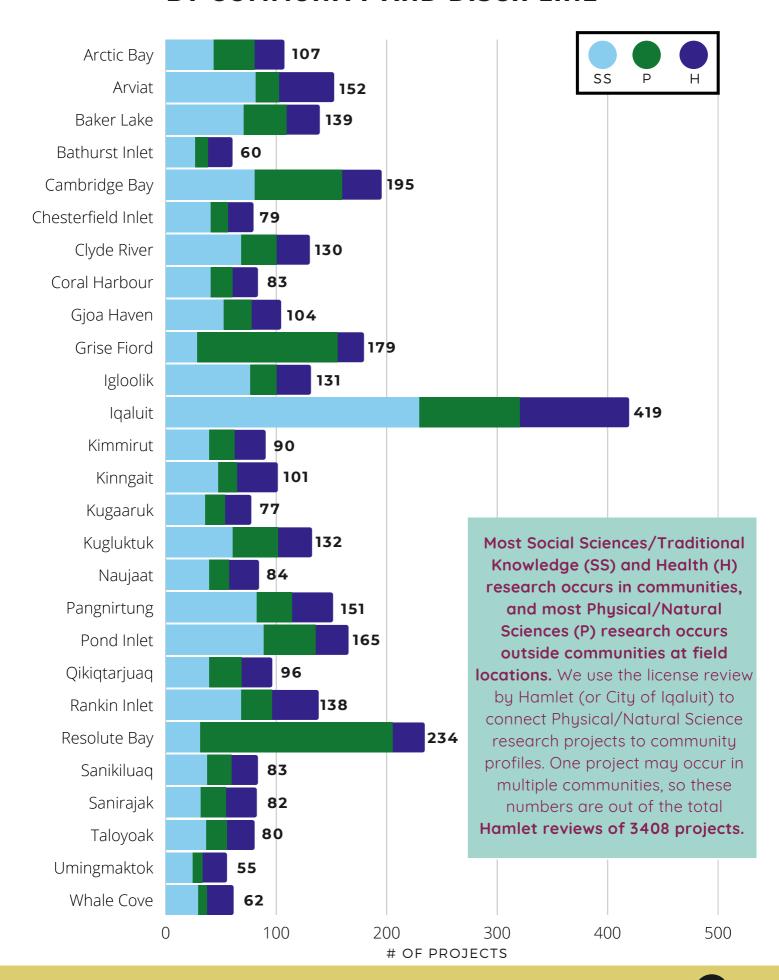




LICENSE REVIEW BY ORGANIZATION TYPE (OUT OF 17,037 REVIEWS)



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

