

# 2019

# SOCIO-ECONOMIC MONITORING REPORT FOR THE MARY RIVER PROJECT

# PREPARED FOR



Baffinland Iron Mines Corporation 2275 Upper Middle Road East, Suite 300 Oakville, Ontario L6H 0C3



**Stratos Inc.** 1404-1 Nicholas Street Ottawa, Ontario K1N 7B7 Tel: 613 241 1001 www.stratos-sts.com

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LA 15, 2020

# A Message from our Director of Sustainable Development

Baffinland is pleased to submit the Mary River Socio-Economic Monitoring Report for the 2019 calendar year to the NIRB, in conformance with our Project Certificate requirements.

2019 marks 5 full years of operations at the Mary River Project. This milestone has seen Baffinland continue its phased development of the Mary River Project with proposed future positive socio-economic growth on the horizon. As of 2019, the Project has;

- Provided over \$65 million in wages to Inuit Project Employees;
- Reached over \$1.2 billion in contracts signed and awarded to Inuit Firms;
- Provided almost \$800,000 through our Sponsorship and Donation Program since 2016;
- Seen 435 graduates of pre-employment training programs; and
- Closed in on 100,000 hours of training provided directly to Inuit Project employees.

The Company continues to implement the amended 2018 Mary River Project Inuit Impact and Benefit Agreement, complete work at Site to improve working and living conditions for employees, introduce new programs and activities to support and encourage the promotion of Inuit culture, heritage, and language. Baffinland has also placed an increased focus on partnership with the Government of Nunavut to find constructive solutions to mutual areas of interest through our Memorandum of Understanding, which was signed at the Nunavut Mining Symposium in April.

In 2019 the Company created a new department based in Iqaluit. The Community and Strategic Development Department is headed up by its first Vice-President Ms. Udloriak (Udlu) Hanson. Her department will focus on enhancing the benefits of the Mary River Project for Inuit in the Qikiqtaaluk region, and across Nunavut. This department is part of Baffinland's approach to responsible mining in Nunavut and reflects the Company's desire to be a true community partner in community wellness and development.

This year also marked the development of new partnerships, which enhance the Project's socio-economic impact in Nunavut and Canada. We signed new agreements

with Inuit firms for the provision of airline services, perishable goods, and ground transportation services in our point of hire communities. The new contract for the provision of air transportation services is with Arctic Cooperatives Limited. This contract is delivering an essential service to Baffinland and the Project but is also delivering benefits to Co-op members across the North Baffin region by way of direct Economic Benefits to Community Co-ops for use according to their local priorities. Additionally, as Baffinland's Air Transportation contractor, Arctic Co-ops was able to offer meaningful support to the Ilisaqsivik Society in Clyde River, the Food Banks in both Clyde River and Arctic Bay plus the Qajugturvik Food Centre in Igaluit. The ability to deliver these benefits in the North Baffin Communities are a direct result of working with Baffinland at the Mary River Project.

Due to unforeseen circumstances, the last quarter of 2019 witnessed a scale back in the contractor workforce at the Project. Delays in permitting processes and access to financing forced Baffinland to put on hold all non-essential Projects which resulted in the demobilizing of approximately 600 team members from the Project. To date, there is no plan in place to restart works that were suspended in the fourth quarter of 2019. The socioeconomic impact of permitting delays has also impacted the Company's ability to allocate sustained funding to training programs. This is not readily evident in the socioeconomic monitoring presented in this report but will be evident in the 2020 Socio-Economic Monitoring Report to be submitted to the board March 31, 2021.

The Company remains committed to the phased development of the Mary River Project and looks forward to its positive growth and development in 2020.

Lou Kamermans Director of Sustainable Development

May 15, 2020

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**<sup>6</sup>bΔ**<sup>4</sup><**<sup>c</sup>cdt**<sup>6</sup>**<sup>c</sup>fcbb***t*<sup>1</sup>**c**<sup>6</sup>**,bf**<sup>5</sup>**cdc**<sup>6</sup>**ttc**<sup>6</sup>**fc**<sup>1</sup>**c**<sup>1</sup>**c**<sup>6</sup>**tt**<sup>1</sup>**c**<sup>6</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup>**c**<sup>1</sup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

**ᡆᠴᡆ᠋᠘ᡃ᠔ᢗ᠋᠅**: ᡆᠴᡆ᠘ᡃ᠔ᢗᢩᠻ᠕᠋ᡝᠯᡇ᠋ᡃᡅ᠋ᢁ᠋᠘ᡄᢉᡃ᠈ᢂ᠋ᠴ᠋᠕᠅᠘᠋᠅᠕᠅᠆ᡘᠺ᠕ᡩ᠆ᡘᠺ᠕᠋᠆ᡘ᠂᠖ᡔ᠘᠅᠔ᢗ ᡆ᠘ᡃᠺ᠋᠋᠋ᡔ᠆ᡘ᠘ᡃ᠙᠆ᠺ᠅ᠺᢕᢁ᠋ᡄ᠘᠋᠋ᢣᢄ᠋᠖ᡔ᠘᠅᠘ᡔ᠋᠅᠘᠘᠋ᡬ᠘᠋᠁᠘

٬٬٬۶۲۶ م۰٬٬۰۵۶ م۰٬۰۶۲ ۹۹۹ ۲۰۰۵ ۴۲٬۰۶۲ ۲۰۰۰ ۴۲٬۰۶۲ ۴۲٬۰۶۲

**Ϥ·σᇿᢣϷ·ՈϤʹჼϽ**ϼ· <mark>Δၨ៰/ᡃݸ</mark> <mark>ᠺ᠊ᡧ᠊ᡄ᠋?ՈՈͿ·ᠴ ᠘ᡄϷ⊀</mark>ϼ·: (៸Ϥ<sup>ᡪ</sup>ᡅ<sup>ϲ</sup> Ϲ<sup>ͼ</sup>ᡪᠲ᠋᠕᠋᠋᠋ᠰᠭ᠋ᡗ᠆ᢂᠵᡐ᠋ᢕᡄᡃ ▷ᠲᢧᠯᠲ᠈᠊ᢂ᠘ᡄᠲᡲᠧᠣᠴ **Ϥ·σᡅᢣϷ·ᡴᡆᡃᢪᠫᢛ** ᠘ᢩᡠᢊᠯ᠋᠋ᡗ᠕ᢤ᠆᠋ᡔ᠒ᠺ᠋᠋᠋ᢖ᠆᠘ᡄᢂ᠊ᠯ᠊ᢑ

**୶ଽ୷**ଢ଼୵ୢ୵୵ୄ୵ୢ୷ୢ୷୷ୢ୵୵୵ୢ

⊴•ՇՎን⊳ິ∩⊲"⊃௳ິ Ճօ՞հօ՞

۷خ-د-۵UUL-ک ⊽۲⊃,

⊳₅⊳५,८ % ∽¬¬⊽,۹С-¬

৺৽৵৸৾৾৾৴৽৴৺৻৸৾৾৾ ৵৾৽৾৾৾৴৸৾৾৾৴৾৾৾৴৾৾৾৴ ৾৾৾৾৾৾৾৾৾৾৾৾৾৾৾৾৾৾৾৾	ϷϧϩͺϷϚ ϧϲ·ϽϹ·	Ϸ <b>ͻ</b> ϲ·ͽͿ ͿϹ <sub>;</sub> Ϣϲ	۹ <sup>₅</sup> ۹₋بر مرزع	<b>⊲</b> °Ր൳ <sup>ኈ</sup>	ح∆ف <sup>≈</sup> ۲۲⊀⊂
∆۵۲⊲≁۶۰۵۰ ۹۲۵۹۵۲	<u>ተ</u> ተ	↑ ↑	↑ ↑	ᠴᠴᡄ᠆ᠳ ᠸ ᢦᢣ᠋᠆ᡘ᠕ᡩᢕ᠋᠕ᢒ ᢁ᠘ᢣᢡ	6 రా చోషిరా 2013Γ్ 2018⊔్, <sup>6</sup> PPింఉు Þచి∿ చిరా ొంPిన్నరిగరా అడెం Þఅిగి రెడెలి సింక్ 5,941Γ్ 6,716ల్ (13.0% సిని పెర్ సిని రెడెల్ దిగి అద్ Þలి గిళించర్ చిగి ఆద్ Þర్యా రెడెల్ సిగ్ ల్ ల్ ల్ ల్.
᠗᠆ᡧᡐ᠋᠆ᢓᢦᠧ᠘᠋᠆ᢓ᠅ᢕ ᢁᡄ᠆ᡏᡃᡠ <sup>ᡄ</sup>	↑	/	↑	⊲&⁵⊃≌イL⊀⁵	∧ిటడ్ చోష్రెర్ చెర్ఫెల్ రెంొిరిద్దిం చెలిం వెండెండిందిందిందిందిందిందిందిందిందిందిందిందింది
᠘ <sup>ᢎ</sup> ᡋᡆ᠘ᡃᡪᡦᡃᡊ᠋ᡗᡅᢄ ᡖᢅᠫᡩᡃᠬ᠌᠌ᢄᢣᠴ᠋᠋ᠫᡩ᠌᠋᠋ᡔ᠋ ᡏᢧ᠘᠆᠋᠋᠋ᡶᡠ᠊ᠺ᠂᠘ᡃᠴ᠋ᢐᡝᠦ᠋᠋᠋ ᠣᠴ᠘᠆᠋ᡶᡠ᠊᠄᠂ᠺᡟ᠍᠊ᡘᠴᠴ ᡱ᠂ᠳ᠌ᠫᠮ᠊ᠥᡅ᠊ᡕ᠋᠘ᡃ᠈ᡳᡄ	᠕᠋ᢗ᠊᠋ᡃᠲ᠋ᡩᡗ᠊	᠕᠋ᢕ᠋᠋᠋᠋᠋᠋᠋᠋᠋ᡐ	/	ᠫᡆᠧ <sup>᠆</sup> ᠦ ᠋ᡃᢐ᠋᠋ᠵᢣ᠋ᡃᢌ᠌᠌ᠵᡃᢦ	12 ব/\*'/*CD+' PD_D*D' (16.9%) <`a_D*D' ব/ ব_D A'_D b* d'or_D*D' 4'/*Do 120 C*Po 46 <`a_D' (65% b\*). *bD+\'oD' dD_CDo*\Do' C'L*DJ' 2019F, %D2+D*\D_TC_ A'_D'of of CLDJ\ Do*\of aD' 4'\$J4_0.
᠘ <sup>ᢎ</sup> ᡃᡖᡄ᠘ᢣ᠋᠋᠋᠋ᡨᠺᡊᡗᢣᢈ᠋ᢄ᠂ᢆᢑ᠊᠋ᠫ᠋᠋᠋ᡇᡃᡣᢂ᠆ᠴ ᡄᢩᢨ᠋᠋᠆ᡶᡝ᠋ᡒ᠂ᡘ᠊ᡄ	᠕᠋ᢗ᠊ᠲ᠋᠂ᡗᡗᠫ᠋᠉	<b>^</b>	ſ	᠕᠆ᡣᠦ᠋᠋	2019Γ 366 417৮ና <ాచార్ రాండిందిందిందిందిందిందిందిందిందిందిందిందింది
<u></u> 2·∆ᠭᢩᠳᡏᡩ <sup>c</sup> ᠘᠆ᢣ᠋᠋ᢐᢗᢂᡠ	د-				
᠕᠌ᢓ <sup>᠄</sup> ᡷᠯ᠌ᢦᡅᢣ᠌᠌ᢣ᠅᠋᠘ᡄᢩ᠂ᡔ᠊ᠳ᠋᠋ᡏᡃ᠖ᠺ᠋ᡁ ᠕ᡗ᠊ᡆ᠋᠋᠋᠋᠋᠋᠋ᡗ	᠕ᢗ᠊ᡃ᠋ᠲᡩᡗ᠊ᠫ᠉	<b>^</b>	Ŷ	ᠫᠧ᠆ <sup>ᢐ</sup> ᠦ ᠕ᡩᠺᢒᢤ	ለলቢσ <sup>®</sup> Δbላቼናርፈ▷ <sup>®</sup> > <sup>®</sup> Δሎ <sup>®</sup> σďል <sup>®</sup> ዾና ጋ <sup>®</sup> ሁላታ <sup>®</sup> ለቦላዖበታ <sup>®</sup> 2019Γ bላ <sup>j</sup> <sup>®</sup> ፝ω <sup>®</sup> ጋነሪና ጋታኣቼናርናታሪና ለቼለሥራ ጋቦና ቼናኣ▷ንታ ጋታንቃና (54 2019Γ), ጋ <sup>®</sup> σ <sup>®</sup> dበታ <sup>®</sup> Δሎ <sup>®</sup> σď <sup>®</sup> ም ሥ <sup>2</sup> ጋየΓርናታ <sup>®</sup> .
ዄ፞፞ <sup>γ່ϲ</sup> ⊲∿Ⴑ∜ዯኇ ∆ඌኇ⊲∿ጋኇ ∧ፇሲ <sup>ኈ</sup> ፞፞፞ <sup></sup> ᠯ <sup></sup>	↑ ↑	↑ /	↑ ↑	এএ⊂ <sup>∿</sup> ত ৢ৳>১ৢ১ ১ৢৢৢৢৢৢৢৢ ১ৣৢৢৢৢ	ి సిగిరిటి రాగ్ ద్రారాలి సిర్' రిగిించు రాగి లాగా లాలు లాలు లాలు సాలా ది, సిదించించి రాగా లాలు రాగా లాలు సిగించించి రాగా లాలు రాగా లాలు రాగా లాలు సిగించిందించిందిం రాగా లాలు సిగిందిందిందిం సిగిందిందిందిం సిగిందిందిందిం సిగిందిందిం సిగిందిందిం సిగిందిందిం సిగిందిం
⊲°し∜ቍኇ∆ቍኇ⊲፝°⊃ኇ ለሃሲ <sup>ኈ</sup> ዸኇሲን℃	↑	ſ	Ŷ	Region	⊲ిటిసింధా దూరారెడు సి⊃్ 2016Γ్ 2017 అంోగి రెడెలిసి>్ ొ గిరిపొరెడ్ (36.6%Γ్ 48.8%ఎ్) గి ఆరాగ్ (56.1%Γ్ 56.4%ఎ్), అండింగా దెండిందింది (41.7%Γ్ 47.7%ఎ్). లంగాం ఫ్ చెంది దారారెడి చెంది కులగి కిలింగా రాగి (31.5%Γ్ 30.6%ఎ్).
᠘ᡄᢂ᠋ᡦᠧᢂᡩ᠘ᢁᢅᡃᠣᡆ᠘ᡃᠵᡄᡃ᠋᠋᠘ᡃ᠋ᢣᡪᠯᠥ	᠕ᢗᡃᠲ᠋᠂ᡤ᠊ᢅ᠋ᠴ᠉	<b>^</b>	Ŷ	∧~∿σ <sup>™</sup>	2019Γ 99 ΛϧϞͺͽϟͺϘϷʹ϶ Δ΅ϧϫϪ;ϲ;ͳ; ϷϤʹϞͺͼͺͳϲϫϫϫϫϫϫ Δ΅ϧϫϲͺʹϷϫϫϫϫϫϫϫϫ Δ΅ϧϫϲͺʹϷϫϫϗϫϫϫϫϫϫϫϫϫϫϫ Δϲϧϫϥ;ͺϿϫͼͺͻϲͻ

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≪৽৵১৮°∩⊲°⊃៰° ۵۵''ə ∧≪-⊂२∩∩J-⊃ ۵८৮२៰ <sup>с</sup> , ⊳Ֆ⊳ł∿১° & ﺩ-کهد∠'ט	Ϸϧϩ͵ϷϥϚϧ ·ͻႱ·Ͻ	Ϸ <b>ኦና</b> ∿σ⊲ϲ <sup>ኈ</sup> ነ Lϲ <sup>ኈ</sup> Ո· <b>ℶ</b> Րʹ	۹ <sub>°</sub> ۹۰, ج⊲	<b>ዻ</b> ℉ኇ <sup>ኈ</sup>	ح∆ف <sup>∞</sup> ۲L⊀⊂
					ద౬ాΡిరిలాిర్ రిర్ోంచోనిగ్రాగ్⊃ో దోరందిరాటినర్ి దుి౧ుింౖ౧ి. 2012్, 435 ద౯ిరెడిసిగిళ్ నేఇంట్ దోరందిరాటినిగారి.
᠘ᡃ᠋ᢐᡃᠺᡏᢄ᠘᠆ᢣ᠋᠋᠋ᡨᢗᡔᢑ ᠕ᡃᡕ᠋ᡅᢩ᠉᠊ᢗᢂᢞ ᠖ᡃᠫᡬ᠋᠕ᠴᡃᠴ᠘ᠴ᠈ᡔᡄ ᠘᠍᠋ᢐᡄ᠘ᡃ᠈ᡨ᠒ᡔ	᠕᠋ᢗ᠊᠋ᢐ᠂ᡗᡗᠫ᠋᠋᠉	ſ	↑	᠕᠆ᡅᠣ᠋᠋	2019Г, ᲮᲘ֊ୈᲐ୮ና 93,367 ᠘Ხናናና ᠘᠆ᢣ᠌ᡝ᠌ᢄ᠆᠘ᢣ᠋᠅ᡔ᠄ 44,135σና ᠘Ხናና (47.3᠅ᡷ᠊ ለኦሲዮር▷╴ኌቡ ᠘᠌᠌᠉ᢆ᠂᠘᠂ᡬ ዮሁኈጋ᠘ቃዀ ▷᠋ᢩᢛᡝᡗ᠊ᠺᠮ᠊ᢑᠻᠮᡅ 9,506σት ᠘ᠴ᠘ና ᠘᠆ᢣ᠋ᢞᢗᡄᢦ᠆ᡗᠬ᠌᠌ᠴᡗ᠂ᡘ᠘ᢑᠬᢋᡡ᠋᠍ᢣᠦ᠊᠍ᡆᠥ 2018.
ౕఅద్రం ద్చంద్రం నంజిందిందిందిందిందిందిందిందిందిందిందిందింది	᠕᠋ᠿ᠋᠋ᢞ	Ţ	Ŷ	<b>Λ</b> ΓΩσ <sup>™</sup>	$\langle a^{+}c^{+}d^{-}b + t^{+}a^{+}b^{-}c + t^{+}t^{+}c^{+}c^{+}c^{+}d^{-}b^{-}a^{-}a^{-}a^{+}ba + b^{+}c^{-}a^{-}a^{-}a^{-}a^{-}a^{-}a^{-}a^{-}a$
᠘ <sup>ᢐ</sup> ᡃᠤᡅ᠘ᡃᢆᡏ᠘᠋᠋ᠧᢇᠳᢦ᠋᠋᠋᠋ᡩᡄ᠋ ᠕᠋᠖ᡃᢐᡩᡄ	᠕᠋ᢗ᠊᠋ᡃ᠋ᡨ᠋ᡗ	<b>^</b>	Ŷ	᠕᠆᠒ᢌ	2019F, Þ۵ <sup>®</sup> łՐ⊲∠Ϸ <sup>®</sup> > <sup>c</sup> Δ <sup>®</sup> bad <sup>i</sup> F Δ <sup>~</sup> <sup>*</sup> σ <sup>4<sup>®</sup>)<sup>c</sup></sup> (16 Δ <sub>2</sub> Ϸ <sup>4<sup>c</sup></sup> Ϸ <sup>3</sup> <sup>®</sup> łՐ <sup>4<sup>®</sup>)<sup>c</sup></sup> 9 <sup>σ<sup>c</sup></sup> 2018F <sup>c</sup> ). <sup>4</sup> / <sup>*</sup> <sup>°</sup> <sup>c</sup> <sup>4</sup> ) <sup>C</sup> Δ <sup>~</sup> <sup>*</sup> σ <sup>4<sup>*</sup></sup> σ <sup>4</sup> <sup>5</sup> <sup>®</sup> <sup>*</sup> <sup>2</sup> Δ <sup>®</sup> bad <sup>2</sup> 2 <sup>®</sup> <sup>*</sup> <sup>°</sup> <sup>1</sup> <sup>C</sup> Δ <sup>~</sup> <sup>*</sup> σ <sup>4<sup>*</sup></sup> <sup>5<sup>c</sup></sup> , <sup>5</sup> <sup>4</sup> LΔ <sup>c</sup> <sup>2</sup> <sup>-</sup> <sup>*</sup> <sup>1</sup> <sup>10<sup>c</sup></sup> <sup>4</sup> <sup>*</sup> <sup>c</sup> <sup>1</sup> <sup>2</sup> <sup>*</sup> <sup>5<sup>c</sup></sup> , <sup>4</sup> <sup>5</sup> <sup>4</sup> <sup>4</sup> Δ <sup>-</sup> <sup>*</sup> <sup>5</sup> <sup>4</sup> <sup>5</sup> <sup>5<sup>*</sup></sup>
᠘ <sup>ᢐ</sup> ᡃᠣ᠋ᡄ᠘ᢣ᠋᠋᠅ᡤᡄ᠋᠕ᡔ᠆ᡇ᠋᠘᠋᠆᠆ᡘ ᠘ <sup>ᢐ</sup> ᡃᠣ᠋ᢩᡄ᠘ᢣᡄᢩᢂ᠂ᠬ᠂ᠣ᠋᠂ᠮ᠊ᠦ᠋ᠴ ᡃᢐᠴ᠘᠆᠋᠋᠋᠋ᡶᠣᢩ᠌ᡶ	᠕᠋ᢗ᠊᠋ᡃ᠋ᢞ᠋᠆ᡗ᠉	⋏⊂⅌℉⊃⅌	Ŷ	᠕᠆᠒ᢧ	
3 · Δ <sup>∞</sup> baΔ <sup>5</sup> σ <sup>∞</sup> PaP <sup>5</sup> c <sup>5</sup>	్ర్ ఎ				
∆bჼϚ <sup>ϲ</sup> ለኦ <sup>ϲ</sup> በϚჼ <i>ჲ</i> <sup>ϲ</sup> ለ⊢ <b>ሲ</b> ን⊳לσ	᠕ᢗ᠊᠋ᡃᠲ᠋ᡥᡗᠫ᠉	<b>↑</b>	Ŷ	᠕᠆ᡣᢧ	2019Г, 2,159<>>> Δ <sup>®</sup> baΔtΔ <sup>a</sup> a <sup>®</sup> Dσ <sup>a</sup> ac-J <sup>c</sup> Dσ <sup>a</sup> Δσσ <sup>a</sup> (P <sup>i</sup> l <sup>®</sup> DΔ <sup>a</sup> -D <sup>a</sup> <sup>b</sup> 4,351,683 Δb <sup>6</sup> Gσ <sup>b</sup> Λλ <sup>2</sup> ΠϚ <sup>®</sup> CDtσ <sup>a</sup> <sup>c</sup> Δ <sup>a</sup> bat <sup>b</sup> CDt <sup>c</sup> bttn <sup>2</sup> n <sup>a</sup> -Jσ <sup>b</sup> D <sup>a</sup> <sup>b</sup> <sup>b</sup> <sup>b</sup> CD <sup>b</sup> <sup></sup>
ᡣᡄᠬᠦᡏ᠘ᡋᡃᡪᠻ ᠘᠋᠋ᠲᠣ᠘ᢣ᠋᠅᠋ᢗ᠌Þᢣᡝ᠊᠌ᠴᡆ᠆ᢆᠦ ᡃ᠋ᠳ᠋ᠵ᠋ᢣ᠋ᡬᢀᠵᡟᢦ᠊ᢅ᠄᠆᠅᠆᠅᠆ᠴ ᡖ᠋ᢆ᠆ᠫ᠋᠋ᡇᡃᠬᠴ᠋᠊ᠴ᠘᠋᠋ᢞᡉ᠋ᡅ᠘ᢣ᠍ᡣᠴ	᠕᠆᠋᠋ᠧᢐ᠋᠂ᡘ᠆ᢅ	Ţ	Ŷ	<b>∧</b> ᡄᡅᠦ <sup>ᢐ</sup>	2019F 248 <sup>°</sup> JLD <sup>®</sup> > <sup>c</sup> Dac <sup>®</sup> σ <sup>®</sup> B> <sup>2</sup> 1 <sup>°</sup> SD <sup>2</sup> 48 <sup>°</sup> JL <sup>®</sup> C

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ᡧᡃᢦᡅᢣᢄᠿᡏ᠉᠋ᠴ᠖ᢋ᠘ᡷ᠕᠆ ᠺ᠊᠋᠅᠆ᡄ᠘ᡁ᠘᠆ᠴ᠘ᡄᢣᠯᠴᢩ ᢄ᠋ᠳᢄᢣᢥᡃᠺ᠊᠌᠊᠌᠘᠂ᠴᡆ᠘ᡃᡆᢗ᠊ᠴ	Ϸ;ϲͺ ͽͺͳͶ·ϿႱͺ	⊳ትና`σ⊲сኾ≀ LcႪ∩י⊃רַ	۹ <sup>∞</sup> J₋ڂ₋ ⊲ۥڔٵۦ	<b>ዻ</b> ፞፞፞፞፞፞፞፝፞፝፝ ፞	م۵ف <sup>۵</sup> ۲۲۹۰
					ొందిని సిందిని సింగా
᠘ᠴ᠘᠋ᡗ᠘᠋᠋ᡃᢐᠣ᠘ᢣ᠋᠋᠅ᡤᢆᡄ ᡔᢐ᠋᠋᠋ᡔᢑ᠋᠋ᢐ᠋᠆᠘ᠿᢐ᠋ᢗᢂ᠊ᢐᢕ	᠕᠋ᢗ᠊ᠲᡃᡳᡗ᠊᠋ᠫ᠅	<b>^</b>	Ŷ	᠕᠆ᡣᢧ᠋	b∩ ሩ ኢዮና Δ Δ Δ Ϛ Δ ፝ b Δ Δ ኦ ້ ຕ ሰ ໌ > ໊ Ͻ σ ໊ ኣ J ປ ϲ Þ ໊ > ໌ (7 ປ ኣ ປ ຕ ໌ , 1 ປ ໌ ໑ ໊ ) 2019Γ, Þ ລ ໊ ሃ Γ ປ ້ ໍ ບ ຳ ζ ຳ ຼ ଦ ໌ > ໊ Ͻ σ ໊ ኣ ມ ປ ໊ Ͻ ມ ິ ኣ ມ ປ ້ ວ 2018 Λ ኄ ປ イ ປ ມ ອ ປ ິ Ć ໊ Ͻ ມ ປ ມ ັ ມ ໂ ມ ໂ ບ ປ ິ
∆౨∆్ ∆ <sup>ౣ</sup> రంచి⊁ి౧్ ౨ొరర్⊂్రో	⋏⊂⅌℉⊃⅌	¥	Ţ	᠕᠆ᡣ <i>ᡆ</i>	2019Γ 34 ΔΔΔ <sup>ς</sup> Δిర్దదిర్గం అిర్దెల్లిన్, ర్దార్ చిందిం దిర్దించిర్గం అిర్రెల్లించింది దిరిగించిందింది 2017Γ-ఎ (45%0. దవద్దిందిందింది బిరిగం లిర్లించిందిందిందిందిందింది దిరిగందింది లిరిగిందిందిందింది విరిగిందిందిందింది విరిగిందింది విరిగిందింది విరిగిందింది విరిగిందింది పింది పి పింది పి పి పి పి పి పి పి పి పి పి పి పి పి
దర్ఁ దిందిింౖంఁ <≪ఁాింౖ ⊲ౕంంౖ దంరిందింం	⋏⊂⅌℉⊃⅌	ſ	Ţ	<b>∧</b> ᡄᡅᠣ <sup>ᢐ</sup>	2019Г, 20రా సంశోగిండిం సింద్రం దోందిని సిందిని సిందిని సిందిం ఇం లెంది దాంది నిరించిని సిందిం దోందిందిని సిందిని సిందిం దోందిందిని సిందిని సిందిం దారిందిని సిందిని సిందిం ఇం లెందిందిని సిందిని సిందిం సిందిని సి సిందిని సిందిని సిందిని సి సిందిని సిందిని సిందిని సిందిని సిందిని సి సింద
┟₽ィᠴᢩᡄ᠂ᢩ≪ᢪᠻᢣᢂ᠋ᡭᢐ᠌ᢪ᠆ᡅᢩ᠂ᠳᢞᡗ <sup>ᡄ</sup>	⋏⊂⅌℉⊃⅌	∧⊂ъ°r°⊃°	₽₽₽₽₽₽	এএে৺র উ⊳১১ৢ৻ঀৢ৾৾৵৻ঽ	>>> >>> >>> >>> <
4·b·D٩° خ· ٨٢٩٩ هـ ٨٤	᠕ᡃᡃᡉ <sup>᠂</sup> ᡠ᠂				
ᢦ᠋ᠫᡣ᠋ᡃᢐᡃ᠋ᢛ᠋᠋ᡐᡫ ᢆᡠ᠌ᠫᡬᡃᡟ᠋ᠴᠥ᠘ᠴ᠘᠄ ᠋᠋ᡣ᠋᠋ᡗ᠆ᡥᠬᢩ᠂ᡔᠤᡃ	᠕᠋ᢗ᠊ᢐᡃ᠋ᠬᡗ᠊᠋ᠫ᠅	<b>↑</b>	Ŷ	᠕᠆ᡣᠴ᠋ᢦ	\$289 F ເ ເ ເ ເ ເ ເ ເ ເ ເ ເ ເ ເ ເ ເ ເ ເ ເ ເ

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ᡧ᠊ᠥᡅᢣᢄ᠊ᠬᡆ᠋᠋ᡨ᠌ᢅᡔᠴ᠋᠘ᡩᡟᡃᡆ ᠺᢩ᠊᠅᠆ᡔᡗᠺ᠋᠋ᢖ᠋᠊᠘ᡄᢂᡱ ᠈ᡆ᠘᠈ᡆᡄ	Ϸϧϩ͵ឩϭ ՟՟ֈԱ՟ຠԱ	ϷͻϟϧϿϲϧϧ ͳϲϣ⋃;⊃Ⴑշ	۹ <sup>₅</sup> ٦-بے۔ مربخ۱	<b>⊲</b> °Րσ <sup>ኈ</sup>	ح∆ف <sup>≈</sup> ۲۲۲⊂
ϼᢏ᠆ <sup>∿</sup> ℱ ⅌Ϸ <b>ኦ</b> ነናልϷ <b>Ϟ</b> ℱ ΔϼΔ <sup>ϲ</sup> Δ <sup>ኈ</sup> ϷͼϪϧͽ⋂ϼ <sup>ϲ</sup> ⊲₽ϲ΅ϟ΅ϹϷϭ·ϒϹ Ϸϼʹϭ·ϒϲ	৻৻৻	Ŷ	Ŷ	᠕᠆ᡣᡗᠣ	Δ
ᡃ᠋ᢐᡃᡝᡗ᠄ᡏᢕᡄᢂ᠋᠅᠘ᡩ᠘ᢞ ᠴ᠌ᡆᡄ᠅ᠳ᠋᠖ᢂᢣ᠋ᢩ᠖ᢕᢣᡆ	᠕ᢗ᠊᠋ᡃᢐᡃᡗᡗᠫ᠋᠅	↑ ↑	↑ ↑	౨ౖౖౖౖార్ ౖౖౖౖౖౖౖౖౖౖ దౖౖౖౖౖౖౖౖౖౖౖౖౖౖ	2019Γ ిరిగిరాిగ్ చ౧ౖౖారిిగికి దంద్ ౧్ిర్ ండ్ిరి రిరిగికితరిశం దిరిపిరా రంజిగిడిండింగి 27రి 40రింపి 2013్, రెరి.
<sup>5</sup> · Δ⊿Δ <sup>ϲ</sup> ʹͽσLʹͽʹʹ <sup>2</sup> ϹϽϹͼϭʹ	∿പം ശൗഹംപം	-^ل-∽			
Ϸᠴ᠋᠋᠋ᢐᢛ᠋ᡥᡴᡄ᠂ᡬᡇᠨᠴ᠋ᢄ᠕ᡆ᠋᠋᠕ᢁᡘ ᠘᠋᠋᠋᠋ᢄᢣᡄ᠘ᡃᠮ᠋ᢑᡄᢄ᠂ᡬᡆ᠌᠌᠌ᢂᢣᡄ᠊᠍᠆ᠮᠴᢄ	$\downarrow$	↓ ↓	↑ → →	ᠵ᠆ᡔᠴᡅ ᠊ᠤᢣᢂᡷ᠘ᡃᠺ᠊ᡆ᠍ᡦ ᠫᡄᢞ᠘ ᠈ᡧᠴᡆ	Þ౨ౕరాిగ౦ ౪ి౧<ు⊲రర్౦్ ౦రిగ౨్ ∧ౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖౖ ని ౖౖౖౖౖౖౖౖౖౖ
ᡩ᠋ᡣᠵᠴ᠍᠍᠍᠊᠕ᢟᡃᢐ᠋ᠴ᠘ᡃᡝᡏ <sup>ᡄ</sup> ᡬ᠋ᠴ᠌᠌᠌ᢣ᠆᠆ᡏᠣ᠊	↑ ↑ ↑	→ → →	↑ → ↑	ᡔᠴᡄ᠆ᡨ ᢦᢣᢙᢧ᠘ᡃᢋᠿᡏ ᠘ᡄ᠕᠘ ᢁᠴᢩᢁᠫ	<ul> <li>۹ Ω</li> <li>۹ Δ<sup>%</sup>baΔ<sup>j</sup>σ<sup>c</sup> P<sup>a</sup>D<sup>j</sup>σ<sup>c</sup></li> <li>۹ Δ<sup>%</sup>baΔ<sup>j</sup>σ<sup>c</sup> P<sup>a</sup>D<sup>j</sup>σ<sup>c</sup></li> <li>9 P<sup>*</sup>C<sup>j</sup>2<sup>3</sup></li> <li>9 Δ<sup>*</sup>a<sup>2</sup>b<sup>3</sup> D<sup>3</sup>c<sup>3</sup></li> <li>16,790 Δ<sup>c</sup></li> <li>16,790 Δ<sup>c</sup></li> <li>Δ<sup>*</sup>b<sup>-3</sup>σ<sup>c</sup> 0.6%, \$72,580 σ<sup>c</sup> \$73,000 Δ<sup>c</sup></li> <li>Δ<sup>*</sup>b<sup>-3</sup>σ<sup>c</sup> 5% J<sup>c</sup>, \$29,270 σ<sup>c</sup> \$30,670 Δ<sup>c</sup></li> </ul>
>Ϟ°Ϟ Δͻ°σ· Δϧϟν⊳∩Ċνσ·	↓ ↓	↑ ↑ ↓	↑ ↑ ↓	এ <b>ে<sup>∿</sup>ত</b> ৬৮১১ এড⊃এ <sup>c</sup> এড⊅ <sup>c</sup>	>\ ບັງ ເມັນ ເປັນ ເປັນ ເປັນ ເປັນ ເປັນ ເປັນ ເປັນ ເປ
د⁺ݥݲﺩ⊳٦∆ ²ݥݲᡄ٦ ²ݭݸ ℃∆2℃ ݰ√∜ᢏᡣ∿ ²ᡆᢣᢈ⊂∜ ∧∽∩ݬݥ	᠕᠋᠆ᢗ᠆ᡐ᠆ᡗ᠆ᢅ	ſ	¥	᠕᠆᠋ᡅᠣ <sup>ᠲ</sup>	24 Гఎం్ ద్రించిందు రింగింగం ఉినింది కిరిగిరింది సంగారించింది సిందిందు దికిందికింగం 2019Г, రింకం రికిరిక్ కిందా 2018Гం
هبر حياله عروب	ተ ተ ተ	ተ ተ ተ	ተ ተ ተ	౨ౖౖౖౖార రి⊳ినౕశి⊃రం దిటి౨ర్ ౨ౖౖ౨ౖం	ిం 'గ్రామం' చింది చింది సింది సి

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ᡧᡃᢦ᠊ᡅᢣᢄ᠋ᠬᠿ <sup>ᢐ</sup> ᠋ᠫᠣ᠋᠊᠘ᡠᡟᡃᡝ ᠕᠊᠋᠅᠆ᠻ᠋ᡗ᠋ᠬ᠋᠋᠋ᢖᡃᠴ᠘ᡄᢂ᠂ᡏᠥ ᢂ᠋ᢣᡟᡃᡃᠺ᠊᠌& ᡄᠴᡄ᠋᠘ᡃᡆᢗ᠆ᠴ	ϷͻϷ϶ʹϿϹ·ʹ ʹʹʹϹ·ʹʹ	Ϸንና <sup>∿</sup> σ⊲ϲ <sup>ϧ</sup> ≀ Lϲ <sup>ͺ</sup> ʹ∩· <i>ℶ</i> Ր <sup>ϲ</sup>	۹ <sup>∞</sup> J-∹ ⊲٬ċJ₋	<b>ዻ</b> ኄዮ፞፞፝፝፝ኇ፝	م∆ف°۲L⊀ <sup>c</sup>
ۥ۹۹, ۵۳ مح∿ور ا	ተ ተ ተ	↓ ↓ ↓	$\downarrow$ $\uparrow$	ᠴᡄ᠆ <sup>ᢐ</sup> ᠦ ᠣᢣᠺ᠋ᡬ᠕ᠮ ᠘ᡦᠴ᠘ <sup>ᢏ</sup> ᠴᡄᢞ <sup>ᡄ</sup>	కి'గ్రా ్ ఎ్ల్ గ్రాద⊀్ రా ోరింకి√ర్లెంగిందిన్ రిగిందిన్ రిచించింది అండాిఠా కిరిగిళిదిరిశా (38ళ్ 22౨్), దిరిఎద్ (60ళ్ 28౨్), అంల్ఎ (203Г్ 144౨్).
ᠳᢣᡝᡃᡄ᠋᠘ᡃᢦᡰᠫᡄ᠘᠋᠙ᡃᢑᢒ᠅᠋ᠧᢑᡟᢁᡃ᠋᠅ᠫ	$\downarrow$ $\uparrow$	↑ ↑ ↓	↑ ↑ ↓	౨ <b>ౖ</b> ⊂ీ౮ ౕరి≻ి\'నిరి దోరి౨ద <sup>ం</sup> ౨ౖౖ౨	'రా⊲రా 2017, ⊳్లోరో \ెండెస్లో \ెండెస్లో దిశిరించించింది సిందింది సిందింది అండాిరా కింెంగింది (22రో 26లో) దికింది (18రో 39లో)), and decreased in అం౨ో (154రో 139లో)).
∧ᡪᢣ <sup></sup> ᠊ᠣ⊳< > <sup>ᢐ</sup> ⊃ᠣ <sup></sup>	↓ ↑ ↑	↑ ↓ ↓	↑ ↓ ↓	ᠫᡄᠧ <sup>᠆</sup> ᠦ ᠳᢣ᠋ᢩ᠘ᡬ᠕ᡬ ᠘ᠳᠫᡄ ᡔᡄᢩ᠌᠌ᢁᡄᢩ᠉ᡩ	కి <sup>,</sup> గ <sup>2</sup> ∧ీఈరా గ్రద⊀్ ⊲ెరా 100,000 ద్రార్ 2017Γ: • 'PP <sup>\$</sup> Cَ:` ≻ెని ౖిటరా రాద్ రా కురిసినిపిరిశరా: 6% ర్రాగి/ెందింది, 22,610ర్ 24,169ర్ • దికి ారా: 0.1% ర్రార్ కోన్, 62,143ర్ 62,065ర్ • దింది Γ : 2% రిహిగిె చింది 35,740ర్ 36,485ర్
ᡃ᠋ᡃᢐᡃᠡ᠌ᡃ᠌ᠵ᠋᠅ᡔᡗ᠅᠅ᡧ ᠘᠅ᡃᠦ᠘ᢣ᠅ᡣᠴ᠋᠘ᢣᡃᡣᡄ ᡏ᠋᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆	᠕᠋ᢗ᠊᠋ᡃᠲ᠋᠂ᡗᡗ᠊ᠫ	<b>^</b>	ſ	᠕᠆᠋ᡣᠣ᠋᠋	<శాపాదా ⊲⊳ుిిగ∠రిో∩్⊃్ దిిరందికిొ∩్ దంగంాు దరిగేదా, ⊳ూిగా చిగాంి>్ ⊲ెొె 2019్ు <ేంది ⊲ెొ౦ెంటెింం సంఘు (46% ⊳ూరి నెంం 2018్రా).
ᠵᡃ᠋ᢣ᠋ᡃᡫ᠂ᢩᠯᢆ৽ᡔᢦ᠋ᠺᡊ᠊ᡆᡃ᠉ᠫ᠂᠂᠋ᠰᡃ᠋᠌᠌ᡔᠯᠴ ᢦ᠘᠄ᠫ᠋᠋ᠶᠴ᠘᠂ᢏ᠉᠋ᠫᠴ᠋᠋᠂᠂ᢐᠥ᠘᠈ᠮᠴ	$\downarrow$	↑ ↑ ↑	<u>ተ</u>	৹ <b>ঀ৾৾৾৵</b> ৶৵৴৻৶ ৵৵৵ৢ ৵৵৵ৢৢ	>५ <sup>,</sup> ৬ ৰ <sup>.</sup> ৮ ৰ. ব১ <sup>-</sup> ০ <sup>,</sup> ০ <sup>,</sup> ০ <sup>,</sup> ৬৮৮৫ <sup>,</sup> ০ <sup>,</sup> ৮৯ <sup>,</sup> /۲۹ ৬৮ <sup>,</sup> > <sup>,</sup> (2.1%Γ <sup>,</sup> 3.5% ៤), ১৬০১ <sup>(</sup> (0.2%Γ <sup>,</sup> to 1.7% ៤), ০০ <i>,</i> ০ 2.2%Γ <sup>,</sup> 4.6% ៤).
ᡏ᠋᠆᠆᠆ ᠆᠆᠆᠆ ᠆᠆᠆᠆᠆᠆					ᠵ᠋ᠳᠵᡙᢣ᠘ᢋᢘ᠅᠊ᡆᠵ᠋ᠺ᠋᠋᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆
<sup></sup> ల్ దెరి సి⊃్ ⊲ట⊃ో గాదెం సింటం సి⊃్	_				ᠳ᠔ᢣᡧ᠋᠋ᡥᡤᢄᡃᡋᡅᠦ᠋ᡨᡗᡣᡗ᠂ᠴ᠋ᡄ᠆ᡷᠣᡄᠴ ᠋᠋᠋᠋ᡔ᠋᠋ᢣ᠋᠋ᡪᡘᢥ᠋᠋ᢦ᠋᠋᠂ᡒᡄ᠘᠋ᢂᡄ᠋ᢕᢣᠯᠥ᠋ᢄ᠋ᠺᡄᡅᠥ᠋᠋᠋ᡗ
᠘ᡄᡤ᠊ᠣ᠂ᡩ᠊ᠣ᠋᠋᠋᠋᠅ᢐᢈ᠋ᢕ᠉᠋᠌᠌᠌	_				
<∆ <sup>&lt;</sup> <ఉ*లో౨్ ⊲b产**Ր౨२∩ౕక్౬ి⊃్	_				
ᢄ᠂᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆					
int'sך אי¢רעילז 6 ₪ פֿ ₪ פֿ ₪ פֿ ₪	د ٔما <del>م</del> م <sup>،</sup>	ለት፡ገናነት፡			
ᡃ᠋ᡦᡃᠨᡝᡃᢆᡄᢂ᠆ᠺᡃᠫᡄ᠕᠆ᡄᡅᠦ᠋ᠮ ᠘ᠴᡃ᠋ᢣ᠘ᡟᡄᡅᢣ᠋ᠴ ᠵ᠋ᡧ᠆᠆ᡆ᠋ᠮ᠂ᠴᡆ᠆᠅ᡔᡃ ᡏ᠋	৻৻৻৽৻৽৻	₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽	Ŷ	᠕᠆ᡣᢧ	ቴ⊳ትነ⊳ና 2019Γ ቴ⊳ትናምናና ໑໑.Δ <sup>&amp;</sup> /ቓ <sup>c</sup> 17 Δ.Δ <sup>c</sup> (26.6%

Γ

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۹۰۵۳٫۵۵ ۵۵۵ ۵۵۵ ۵۵۵ ۸۹۰۵۵ ۵ د۲۹۵۹۲ ۵۵۹۵۵ ۵ ۵۲٬۹۹۹ ۹	⋗ケϚ <sup>ኊ</sup> ኇ⊲∟⋗ ՟ԴՐՈ· <b>ℶ</b> Ր՟	⊳ኦና <sup>֊</sup> 균⊲ϲ <sup>⊷</sup> ≀ Lϲ <sup>ͺ</sup> ∩⁻⊃רכ	۹ <sup>؞</sup> ٵ₋بے ⊲ۥڂٵ؞	⊲∿Րσኈ	ح∆ف <sup>≈</sup> ۲۲۲⊂
ᢐᡃᠨᡝᡄ᠊ᠯᢩ᠂ᢦ᠆ᡏᡧ᠆᠆ᡧ᠉ᠫᡄ(᠖ᡣᡄ᠋ᠫᡄ)	᠕ᢗ᠊᠋᠋᠋᠋ᢞᠧᠫ᠉	Ŷ	Ŷ	⊃এ⊂ <sup>∿</sup> ত হি/4⊲∂	చించింది సారా సారా సిగింది సింగా సి
ిర్ ాంచిన్ చిల్లె (ద౨గెచిందిగి Γ్ గెల్లెగి	⋏⊂⅌℉⊃ѷ	Ţ	Ŷ	এএল <sup>∿</sup> ড ডি⊳⊁\'&⊳৻ড	⊲రిళా సిిందిం దేళా నిందిం దిందిం దిందిందిం దిందిందిందిందిం దిందిందిందిం దిందిందిందిందిందిందిందిందిందిందిందిందింద
ᡃ᠋ᢐᡃᠨᡝᡃᡄ ᢂ᠆ᡧᠫᡄ᠕᠆ᡅᠦᠮ ᠘ᠴᡃ᠘ᠡ᠆ᡅᢣ᠋᠋ᠴ	᠕᠆᠋ᠿ᠋ᡨᡗ	Ŷ	Ť	᠕᠆᠋ᡣᠣ᠋᠋	2019 6,436 >ΔノナአΔ <sup>™</sup> CÞ∠Þ <sup>™</sup> > <sup>C</sup> >ċ ሲ⊲ <sup>™</sup> Ͻ <sup>°</sup> Δώ\Δ/ ϲ ኪ λ <sup>⊥</sup> <sup>G</sup> , Þ ഛ <sup>™</sup> / ſ ⊲ <sup>™</sup> 、 σ 2.1%Γ <sup>™</sup> 2018Γ <sup>°</sup> . 2019Γ → Þ ഛ <sup>™</sup> / ſ ⊲ ⊂ Ի ሊ ອ <sup>°</sup> Λ ⊂ ኪ <sup>*</sup> & Þ <sup>°</sup> Δώ\Δ/ ⊂ ኪ λ ⊲ Δ ⊲ <sup>™</sup> Ͻ <sup>°</sup> 1,648 b Ո <sup>°</sup> 、 J <sup>°</sup> <sup>C</sup> ▷ < <sup>™</sup> , 25.3% Γ <sup>™</sup> Þ ഛ <sup>™</sup> / ſ ⊲ <sup>™</sup> 、 σ 2018Γ <sup>°</sup> . 2016Γ <sup>°</sup> ▷ ഛ <sup>®</sup> <sup>°</sup> <sup>C</sup> Δ Δ Δ <sup>°</sup> ▷ < <sup>™</sup> ) <sup>°</sup> ▷ <sup>™</sup> / ≪ <sup>°</sup> ⊂ ⊲ <sup>™</sup> <sup>°</sup> <sup>™</sup> , 2019Γ → Δ Δ Δ <sup>°</sup> ▷ < c ▷ <sup>™</sup> > <sup>°</sup> 34% ໑ <sup>°</sup> ▷ < <sup>™</sup> ) <sup>°</sup> <sup>−</sup> <sup>C</sup> .
৾৵৽৾ঀ৾৾৽ ঢ়৾৾৽৾৾৾৽৾৾৽৾৾৾৾৾৾৾৾৾৾৾৾ ড়৾৾৾৾৾৾৾৾৾৾৾৾৾৾৾	᠕ᢗ᠊᠋ᡃ᠋ᡥ᠋ᢅ᠋᠆ᡘ	<b>↑</b>	↑	এএ⊂ <sup>∿</sup> ত উ⊳⊁५⊗ে৮	<శి౬ిద్ ⊲⊃∆ి ఒౖలి ి>్ ౨్ౖౖౖ అంలిగ్ వింగా నిరిగి నిరిగ్రం రిగించింది నిరిగి నిరిగి నిరిగి రిగిల్, ోిలినించు ౨్ౖౖ నిగ్ సిరిదించు నిరి సింగాలు ౨్ౖౖ నిరి లెంగా కింగి నిరిగు ఎ్ౖ రింగా కింగా ప్రంగింది నిరిగి
్రీ'⁄ <sup>ic</sup> ∧్ఒర్ aircraft పి⊂్ర్ ౨ౖౖౖౖౖౖ ౨ౖౖౖౖౖౖ న్రి≻ిుకిరిగర్ గ్రిగింగా	᠕ᢗ᠊᠋ᡃ᠋ᡥ᠋ᢅ᠌᠆ᡘ	Ŷ	ſ	ᠴᡄ᠆ <sup>ᢐ</sup> ᠦ ᠊ᠳᢣ᠋᠊᠋ᢙ᠈ᡝᢩᡟᠺᡆ᠍ᡏ	2019Γ, ⊲⊃్రాి\⊳ౖ⊳ి>్ ౨ౖౖ~్౮ ి⊳ి\్&⊳⊀ర్ Γి&ిగి రి. రి. రి. రి. రి. పి⊂్ర్ ౨ౖౖౖ (⊳్రాి ఎ్ౖౖ రి. శ్రికిగర్, 22.5%ప్ర్ 2018Γౖ]
ً ୵⋅∆~℠ⅆ≀⊃℔՝ⅆና ⊲⊃Ⴑ՝ኣና					
᠖᠋᠌᠌ᠵ᠋ᢣ᠋᠅ᢗᠵ᠖ᡃᡄ᠋ᠧ᠉᠋᠋ᠴ	᠂ᠳᠴ᠘᠆᠅ᡫᠣ᠅ᡗ᠂	੶ <u>ຉ</u> Ⴝ⊃៶ჼ∩⊂⊳ჾ	۰٬۲۰⊳۰٬۹		
🎫 8.⊲⊃೬ಿ\ರ್ ೨೬ರ್'೨ ⊲⊃್ರ	.c				
ిరి సిల్ ⊃దిరినది సెం అందం సింహింది దింగిందిందింది గంగిళింగం	᠕᠋ᢗᡃᠲ᠋᠂ᡗ᠊ᠫ᠉	Ŷ	Ţ	᠕᠆ᡣᡅᠣᢩ᠉	2019Г, b∩ پ۲ 892 ۵۵۵۵ ۵۳ン ח۲ン ۵۵ ۲ ۵۰ ۵۰ ۵۰ ۵۰ ۵۰ ۵۰ ۸ ۲ ۵۶ ۲ ۵۰ ۵۰ ۵۰ ۲ ۵۰ ۵ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲
⁵ᢣᡃᡝᡄ᠂ᡓᢩ᠈ᠺᠾᡄ ᠕ᡄᠰᠫᡄ	᠕ᢗᡃᡃ᠋ᡃᢞᡗᠫ᠋᠉	Ť	⅌⊳ϟ⅃ϟ⊳ϯ ⅌个Ր⊃⅌	᠕ᡄᡅᠣ <sup>ᢐ</sup>	<sup>6</sup> PP <sup>®</sup> Cσ <sup>4</sup> d <sup>2</sup> ⊲⊃ <sup>5</sup> σ <sup>4</sup> ς∠P <sup>®</sup> ⊃ <sup>2</sup> \$66,410 σ <sup>4</sup> 1Ω <sup>2</sup> ⊲P⊂PΩ <sup>2</sup> P <sup>2</sup> D <sup>2</sup> P <sup>4</sup> σ <sup>5</sup> 2018Γ <sup>2</sup> 2019J <sup>2</sup> , P <sup>2</sup> dσ <sup>5</sup> B <sup>2</sup> L <sup>2</sup> D <sup>4</sup> σ <sup>6</sup> ΛC <sup>3</sup> b <sub>2</sub> D <sup>4</sup> Γ <sup>2</sup> <sup>3</sup> B <sup>2</sup> L <sup>2</sup> C <sup>4</sup> σ <sup>4</sup> σ <sup>4</sup> L <sup>4</sup> C. <sup>6</sup> PL <sup>4</sup> C <sup>2</sup> N <sup>4</sup> σ <sup>4</sup> A <sup>2</sup> A <sup>2</sup> S <sup>2</sup> CDP <sup>2</sup> Γ <sup>1</sup> Λα <sup>2</sup> D <sup>2</sup> 2017Γ (⊲ <sup>4</sup> Γ <sup>8</sup> CD <sup>2</sup> →σ), L <sup>2</sup> D <sup>2</sup> → Λα <sup>2</sup> D <sup>2</sup> 2016Γ (⊲CD <sup>2</sup> M <sup>3</sup> ⊲ <sup>4</sup> Γ <sup>8</sup> CD <sup>2</sup> →σ).

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۹⁺ݗᡅᢣᡅᢄ᠐ᠫ᠅᠐ᠫ᠅᠙ ؉ڟ:᠆ᠺᢄ᠕᠆᠆᠘ᡄ᠙ᢋ ᡬ᠕ᡩ᠆ᡄ᠘᠐ᡗ᠆ᠴ	⋗ケ₠ <sup>֊</sup> ┏⊲∟⋗ ግՐՈ⁻⊐Ր⁻	Ϸ <b>ኦ</b> Ϛ <sup>ኈ</sup> σ⊲ϲ <sup>ͺ</sup> Lϲ <sup>ͺ</sup> ʹՈ·ͻՐʹ	۹ <sub>°</sub> ج₋ م <sub>ن</sub> ج٦	ⅆ℩Ր๛՞	ح∆ف <sup>≈</sup> ۲۲4۲
9∙∆~%₩⊃%₩⊂ %	ᠳ᠋				
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10 · ₱₽₽≯∩J° ለ₽₻<-⊂⊲«	ᡔ᠍᠘ᡃᠮᠳᡃ᠋ᠴ᠌ᢂ	>८४॰२°७°			
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2019 Socio-Economic Monitoring Report for the Mary River Project | Page x

# **Executive Summary**

This report assesses the socio-economic performance of the Mary River Project in 2019, as well as Baffinland's compliance with various Project Certificate Terms and Conditions. Performance was assessed using socio-economic indicators and information for several Valued Socio-Economic Components (VSECs) included in the Final Environmental Impact Statement (EIS).

This report has identified various positive effects of the Project and presents information that is consistent with several EIS predictions.

# **Employment and Livelihood**

- 4.35 million hours of Project labour were performed by Baffinland and contractor employees in 2019, equal to approximately 2,159 full-time equivalent positions (FTEs)
- Of this total, 580,197 hours were worked by Inuit, representing approximately 288 FTEs and a 33% increase from 2018
- Inuit turnover rate in 2019 was 18.4%, continuing a substantial improvement from 2018 (30% turnover) and 2017 (45% turnover)

# **Contracting and Business Opportunities**

- \$20.2 million in income was paid to Baffinland and contractor Inuit employees in 2019
- \$288.8 million was committed to contracting activities with Inuit Firms in 2019, representing nearly 38% of total contract commitments and an increase from 2018 levels

### **Education and Training**

- 93,367 hours of training were completed by Baffinland and contractor employees in 2019
- Of this total 44,135 hours (or 47.2%) of training were completed by Inuit

# Benefits, Royalty and Taxation

• In 2019, Baffinland paid \$8.675 million in employee payroll tax and \$6.987 million in fuel tax to the Government of Nunavut

Some monitoring data has revealed negative observed trends related to human health and well being. For example, the Local Study Area communities saw an increase in impaired driving violations in the North Baffin LSA since Project development. Given the complex nature of this indicator, however, it is difficult to determine whether the project is contributing to this trend. Long-term monitoring will be necessary to track Project outcomes more fully over time and may contribute to an improved understanding of observed trends and causality. No need has been identified to substantially modify Baffinland's existing management and mitigation approach at this time.

Table 1 on the following page provides an overview of monitoring results for this year's report, summarizing findings and trends in 2019 compared to previous years.

#### Guide to Using the Table

**VSEC**: (the light grey rows with red icons) refers to 'Valued Socio-Economic Component' and includes a selection of VSECs assessed in the Mary River Project EIS.

**Indicator**: Indicators are an important aspect of socio-economic monitoring. Indicators are metrics used to measure and report on the condition and trend of a VSEC.

**Trends (Pre-dev, Post-dev and LY):** Refers to whether an indicator has exhibited change and describes the direction of that change. Black arrows indicate:  $\uparrow$  - an upward or increasing trend  $\checkmark$  A downward or decreasing trend  $\rightarrow$  A stable trend. Where there are insufficient data or other issues preventing a trend analysis, N/A (not applicable), ND (no data) or / (no discernable trend) are used. **Pre-dev** (Pre-development trend) refers to the five-year period preceding Project construction (i.e. 2008 to 2012). In some cases, averaged data from this period have been compared against averaged data from previous years (i.e. 2003- 2007, where available) to determine a trend. **Post-dev** (Post-development trend) refers to the period after Project construction commenced (i.e. 2013 onwards). Averaged data from this period may have also been compared against averaged data from the pre-development period to determine a trend and LY (trend since last year) refers to the two most recent years in which indicator data are available.

**Scale**: 'Territory' refers to data that is available for Nunavut. 'Region' refers to data that is available for the Qikiqtani Region. 'North Baffin LSA' refers to data that is available for the North Baffin Local Study Area communities of Arctic Bay, Clyde River, Hall Beach, Igloolik, and Pond Inlet. 'Project' refers to data is are available for the Mary River Project.

Summary: A brief description of the trend and/or related data.

#### Table 1. 2019 Socio-economic monitoring reporting summary

VSEC, Topics & Indicators	Pre-dev	Post-dev	LY	Scale	Summary
1 · Population Demographics					
Known in-migrations of non-Inuit Baffinland and contractor employees	N/A	↑	→	LSA	One non-Inuk migrated into the LSA in 2018, no change in 2019.
In-migration of non-Inuit to the LSA	N/A	ND	→	LSA	While LSA-level migration data is not available, the proportion of Inuit to non-Inuit in LSA communities has remained relatively similar to pre- development levels.
Known out-migrations of Inuit Baffinland and contractor employees	÷	/	↑	LSA	Nine Inuit Baffinland and contractor employees were known to have moved out of the North Baffin LSA in 2019.
Out-migration of Inuit from the LSA	ND	$\checkmark$	ND	LSA	While LSA-level migration data is not available, the proportion of Inuit to non-Inuit in LSA communities has remained relatively similar to pre- development levels.
Population estimates	↑ ↑	↑ ↑	↑ ↑	LSA Territory	During the six years comprising 2013 to 2018, the North Baffin LSA communities grew from a population of 5,941 to 6,716 (or 13.0%). Post-development growth rates are similar to those pre-development.
Nunavut net migration	↑	/	↑	Territory	The past 3 years have seen a large increase in net-migration across the territory from a low of -163 in 2016 to +179 in 2018.
Employee and contractor changes of address, housing status, and migration intentions	N/A	N/A	/	LSA	In 2019, 12 survey respondents (16.9%) planned to move residences in the next 12 months while 46 did not (almost 65%). Due to a survey administration error in 2019, no data was collected on housing status for this reporting year.
Employee and contractor origin	N/A	1	1	Project	In 2019, 366 of the 417 Baffinland and contractor Inuit employees were based in LSA communities, with total Inuit employment increasing by 32% from 2018 levels
2 · Education and Training					
Investments in school-based initiatives	N/A	1	1	LSA	The Project supported school-based initiatives in 2019 through its ongoing donations including laptop donations (54 in 2019), as well as specific IIBA

VSEC, Topics & Indicators	Pre-dev	Post-dev	LY	Scale	Summary
					commitments annual scholarship fund (7 recipients in 2019, up from 5 in 2018), and contributions to school lunch programs.
Number of secondary school graduates	ተ ተ	↑ /	<u>ተ</u>	LSA Iqaluit	The average number of graduates in the North Baffin LSA and Iqaluit for both pre- and post-Project development periods have remained relatively constant, following an initial increase of 11 graduates post 2003-2007 period. The slight increase in graduation rate could be attributed to a number of broad-scale factors beyond the Project.
Secondary school graduation rate	ſ	↑	↑	Region	Secondary school graduation rates from 2016 to 2017 increased in Qikiqtani Region (from 36.6% to 48.8%) and Kivalliq Region (from 56.1% to 56.4%), as well as Nunavut as a whole (from 41.7% to 47.7%). A small decrease in graduation rates was observed in Kitikmeot (from 31.5% to 30.6%).
Participation in pre-employment training	N/A	↑	↑	Project	In 2019, there were 99 Work Ready Program graduates, of which 86 were from the North Baffin LSA and 13 from Iqaluit (up from 59 graduates in 2018) as well as the addition of the off-site Work Ready Program offered in Inuktitut. Since 2012, there have been 435 graduates of Baffinland pre- employment training programs.
Hours of training completed by Baffinland and contractor Inuit employees	N/A	↑	↑	Project	In 2019, a total of 93,367 hours of training were completed, of which 44,135 hours (or 47.3%) were completed by Inuit. This represents an increase of 9,506 Inuit training hours compared to 2018.
Types of training provided Baffinland and contractor Inuit employees	N/A	ſ	↑	Project	Baffinland continues to diversify the training offered to Inuit employees. Training with the highest levels of Inuit participation in 2019 included the Q- STEP Apprenticeship Program (20,703 hours), Q-STEP Morrisburg HEO Training Program (6,915 hours), standard HEO program (5,716 hours), Work Ready off-site program (1,848), and site orientation (2,866 hours).
Apprenticeships and other opportunities	N/A	↑	1	Project	In 2019, there was an increase in the Apprenticeship Program (16 participants, up from 9 in 2018). Other relevant programs include the Pre- Trades program, Heavy-Equipment training, and the Summer student internship program.
Employee education and pre- employment status	N/A	N/A	↑	Project	More than half of 2019 Inuit survey respondents (52.9%) left casual or part- time employment to work at the Project, while only 5 (7%) were enrolled in an academic or vocational program at the time of hiring.
3 · Employment and Livelihood	ł				
Hours of Project labour performed	N/A	↑	↑	Project	In 2019, there were approximately 2,159 FTEs (representing 4,351,683 hours of project labour performed) working at Mary River, continuing an increase from 2017 (1,182 FTEs) and 2018 (1,529 FTEs).
Project hours worked by LSA Baffinland and contractor employees	N/A	↑	↑	Project	In 2019 there were 248 LSA-based FTEs (representing 500,337 hours of project labour), a growth of 60 FTEs or 120,381 hours from the previous year. These LSA employment opportunities likely reflect both the increase in labour demand from the growth in Project activities, as well as commitments Baffinland has made to Inuit employment through the IIBA and other initiatives such as the IHRS.
Inuit employee promotions	N/A	ſ	↑	Project	A total of eight Inuit employee promotions (seven males, one female) occurred in 2019, an increase of two promotions as compared to 2018 and the third consecutive year of growth following an initial sharp decrease from 2016 – 2017.
Inuit employee turnover	N/A	Ŷ	Ŷ	Project	In 2019, there were 34 Inuit employee departures, which equates to an approximate Inuit employee turnover rate of 18%. This represents a substantial improvement since 2018 (30%) and 2017 (45%). While the Inuit employee turnover rate remains higher than the non-Inuit employee turnover rate of 14.6%, the gap between these rates has narrowed substantially over the last two years.
Hours worked by Baffinland and contractor female employees	N/A	↑	1	Project	In 2019, there was an increase of 20 Inuit female FTEs as compared to 2018. The proportion of Inuit females in the workforce remains roughly the same as last year. The proportion of non-Inuit female FTEs increased from 3.4% of the total workforce in 2018 to 6.1% in 2019.

VSEC, Topics & Indicators	Pre-dev	Post-dev	LY	Scale	Summary				
Childcare availability and costs	N/A	N/A	ND	LSA	Comments on the lack of childcare in LSA communities have been made previously by Project stakeholders and can be found in previous SEMRs (Baffinland, 2019). This topic continues to be tracked through the QSEMC process and community engagement conducted for the Project.				
4 · Contracting and Business Opportunities									
Value of contracting with Inuit Firms	N/A	↑	↑	Project	Approximately \$289 million in contracts were committed to Inuit firms in 2019 – more than double the 2018 Inuit contract commitments – and representing nearly 38% of total contract expenditure.				
LSA Inuit employee payroll amounts	N/A	↑	ſ	Project	Inuit income from Baffinland and contractor employees totalled \$20.3 million in 2019 and representing 14.4% of total Project payroll. Of this, nearly \$13.3 million went to Inuit who reside in the LSA. This represents a large increase over 2018 Inuit payroll, largely due to both additional Inuit employment as well as the inclusion of contractor payroll due to better reporting requirements.				
Number of registered Inuit Firms in the LSA	N/A	↑ ↑	↑ ↑	LSA Iqaluit	In 2019, the number of registered Inuit firms in the LSA and Iqaluit continued to increase steadily, with the number of firms up 27 and 40 since 2013, respectively.				
5 · Human Health and Wellbei	ng								
Proportion of tax filers with employment income	$\downarrow$ $\uparrow$	$\overset{\checkmark}{} \overset{\checkmark}{}$	↑ → →	LSA Iqaluit Nunavut	The average proportion of tax filers with employment income in the North Baffin LSA increased slightly in 2016 (from 78.8% to 79.4%), whereas Iqaluit and Nunavut remained the same (88.0% and 82.0%, respectively).				
Median employment income	ተ ተ ተ	$\rightarrow$ $\rightarrow$ $\rightarrow$	↑ → ↑	LSA Iqaluit Nunavut	The median employment income increased in 2016 in the: • North Baffin LSA by 5%, from \$15,998 to \$16,790 • Iqaluit by 0.6%, from \$72,580 to \$73,000 • Nunavut by 5%, from \$29,270 to \$30,670				
Percentage of population receiving social assistance	$\downarrow$ $\uparrow$ $\uparrow$	↑ ↑	$\uparrow \uparrow \checkmark$	LSA Iqaluit Nunavut	The percentage of the population receiving social assistance in the North Baffin LSA increased slightly in 2018 (from 58.4% to 59.0%), Iqaluit saw a decrease of 2% (from 15.0% to 13.0%), and there was a substantial increase in Nunavut (from 39% to 50%).				
Number of drug and alcohol related contraband infractions at Project sites	N/A	↑	Ą	Project	Twenty-four drug and alcohol-related contraband infractions occurred at Project sites among Baffinland and contractor employees in 2019, a slight decrease from 2018 (28).				
Number of impaired driving violations	↑ ↑ ↑	↑ ↑ ↑	↑ ↑ ↑	LSA Iqaluit Nunavut	The number of impaired driving violations increased in 2018 in the North Baffin LSA (from 38 to 41), Iqaluit (from 41 to 77) and Nunavut (from 240 to 376).				
Number of drug violations	↑ ↑ ↑	$\downarrow$ $\uparrow$ $\downarrow$	$\rightarrow \rightarrow \rightarrow$	LSA Iqaluit Nunavut	The number of drug violations decreased substantially in 2018 in the North Baffin LSA (from 38 to 22), Iqaluit (from 60 to 28), and Nunavut (from 203 to 144).				
Number of youths charged	$\stackrel{\checkmark}{\rightarrow}$	↑ ↑ ↓	↑ ↑ ↓	LSA Iqaluit Nunavut	Compared to 2017, The number of youths charged increased in 2018 in the North Baffin LSA (from 22 to 26) Iqaluit (from 18 to 39), and decreased in Nunavut (from 154 to 139).				
Crime rate	↓ ↑ ↑	<b>↑</b> ↓	$\begin{array}{c} \uparrow \\ \downarrow \\ \downarrow \end{array}$	LSA Iqaluit Nunavut	<ul> <li>The number of criminal violations per 100,000 persons in 2017:</li> <li>North Baffin LSA: 6% increase, from 22,610 to 24,169</li> <li>Iqaluit: 0.1% decrease, from 62,143 to 62,065</li> <li>Nunavut: 2% increase, from 35,740 to 36,485</li> </ul>				
Number of times Baffinland's Employee and Family Assistance Program (EFAP) is accessed	N/A	ſ	↑	Project	Since Baffinland launched the Employee and Family Assistance Plan (EFAP), usage has been steadily increasing and in 2019 the plan was accessed 60 times (up by 46% over 2018 usage).				
Percent of health centre visits related to infectious diseases	$\downarrow$ $\uparrow$	ተ ተ ተ	↑ ↑ ↑	LSA Iqaluit Nunavut	The percentage of health centre visits related to infectious diseases increased in 2016 in the North Baffin LSA (from 2.1% to 3.5%), Iqaluit (from 0.2% to 1.7%), and Nunavut (from 2.2% to 4.6%).				

VSEC, Topics & Indicators	Pre-dev	Post-dev	LY	Scale	Summary					
Absence from the community during work rotation					Topics will continue to be tracked through the QSEMC process and community engagement conducted for the Project.					
Prevalence of gambling issues										
Prevalence of family violence										
Prevalence of marital problems										
Rates of teenage pregnancy										
6 · Community Infrastructure 8	6 · Community Infrastructure & Public Service									
Number of Baffinland and contractor employees who left positions in their community	N/A	ND	≁	Project	Results from the 2019 survey indicate 17 individuals (or 26.6% of known respondents) resigned from a previous job in order to take up employment with the Project. Of these individuals, nine were in casual/part-time positions and seven were in full- time positions (one was unknown). This is a 5% decrease from 2018.					
Number of health centre visits (total)	N/A	ſ	↑	LSA	The average number of health centre visits in the North Baffin LSA increased by 28.4%, and in Iqaluit by 14.3% between the pre-development and the post-development periods.					
Number of health centre visits (per capita)	N/A	ſ	↑	LSA	The average number of health centre visits per capita also increased in the North Baffin LSA by 17.1% (from 8.2 to 9.7) and in Iqaluit by 5% (from 1.9 to 2.0) between these two periods. Note that an increase in visits to community health centres has also been observed throughout Nunavut since the earliest years data became available (2003 - 2007).					
Number of visits to Project physician assistant	N/A	ſ	↑	Project	In 2019, there were 6,436 recorded visits to the on-site physician's assistant, up 2.1% from 2018. 2019 also saw an increase in the number of Inuit who visited the Project site physician's assistant with 1,648 total visits, up 25.3% from 2018. Since 2016, the proportion of Inuit visits to the clinic has steadily increased, and in 2019, Inuit represented 34% of visits.					
Baffinland use of LSA community infrastructure	N/A	ſ	↑	LSA	Baffinland continued to utilize LSA community infrastructure to support ongoing Project development in 2019, including renting community office space and meeting facilities, and using community airport infrastructure in the LSA.					
Number of Project aircraft movements at LSA community airports	N/A	1	↑	LSA	In 2019, there was increased usage of all LSA airports, for a total of 2,253 Project aircraft movements across all LSA airports (up by 451, or 22.5% over 2018).					
7 · Cultural Resources										
Monitoring is conducted through the	e Archaeol	ogy Status U	pdate F	Report						
8 · Resource and Land Use										
Number of recorded land use visitor person-days at Project sites	N/A	ſ	1	Project	In 2019, a total of 892 land use visitor person-days were recorded at Project sites, which is a 73% increase from 2018. Significant increases were seen at both Mary River and Milne Port in both 2018 and 2019.					
Number of wildlife compensation fund claims	N/A	1	ND	Project	The QIA reported \$66,410 spent on the Wildlife Compensation Fund in 2018- 19, though no data was available on number of claims. Historical claims include one claim in 2017 (which was approved), and two claims in 2016 (of which one was approved).					
9 · Cultural Well-Being										
Monitoring is conducted through the	e Archaeol	ogy Status U	pdate F	Report.						
10 · Economic Development ar	nd Self-Rel	iance								
Project harvesting interactions and food security	N/A	↑	1	LSA	Data from the 2012 and 2017 Aboriginal Peoples Surveys indicate that an increasing proportion of Inuit households are experiencing some level of food insecurity. In the North Baffin LSA, just over half of survey respondents (56%) reported that they cut the size of or skipped meals entirely over the					

VSEC, Topics & Indicators	Pre-dev	Post-dev	LY	Scale	Summary			
					last year because there wasn't enough money for food (up from 37% in 2012), while just under half of respondents (45%) said that they went hungry because they couldn't afford food (up from 35% in 2012).			
					The rise in food insecurity in LSA households from 2012 - 2017 has occurred in concert with a decline in traditional harvesting activities. 2017 data for the LSA show a 10% decline in respondents who report they have hunted, fished or trapped over the past year, and a 7% decline in gathering wild plants. The number of land use visitor person-days recorded at both Mary River and Milne report increased substantially in both 2018 and 2019, which may signal a resurgence in hunting, trapping and/or gathering at the Project sites. Baffinland continues to make contributions to the components of food security it can affect through initiatives commensurate with its role as a regional mineral developer			
11 · Benefits, Royalty, and Tax	ation							
Payroll and corporate taxes paid by Baffinland to the territorial government	N/A	ſ	1	Nunavut	The value of tax payments made by Baffinland to the Government of Nunavut increased in 2019, reflecting the growth of the Project's workforce and increased level of Project activity. In 2019, Baffinland paid approximately \$8.7M in employee payroll tax and \$7.0M in fuel tax			
12 · Governance and Leadersh	12 · Governance and Leadership							
Data indicators for monitoring the G	iovernance	and Leaders	hip VS	EC have not l	been developed.			

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# Introduction

# Mary River Overview

Baffinland Iron Mines Corporation (Baffinland) is a Canadian open-pit mining company, mining iron ore at the Mary River Project in the Qikiqtani Region of Nunavut. Baffinland has been in operation since 2015. It is jointly owned by ArcelorMittal and funds managed by The Energy & Minerals Group, with a corporate head office located in Oakville, Ontario, and a northern head office located in Iqaluit, Nunavut.

The Project consists of three currently active main project locations - the Mine Site, the 100-km long Milne Inlet Tote Road, and Milne Port. The Project also includes a proposed railway and Steensby Port, both located to the south of the mine site. At the end of 2012, the Nunavut Impact Review Board (NIRB) issued Project Certificate No. 005 authorizing the construction, operation, and closure of an 18 million tonne per annum (Mt/a) operation which included a 149-km railway and year-round shipping of iron ore from a port facility at Steensby Inlet (Steensby Port). Mine construction began in 2013. An Inuit Impact and Benefit Agreement (IIBA) for the Project was also finalized between Baffinland and the Qikiqtani Inuit Association (QIA) in 2013; this agreement was subsequently renegotiated and amended in 2018 (QIA and Baffinland, 2018).

In 2013, Baffinland applied to the NIRB to amend its Project Certificate to allow for an Early Revenue Phase (ERP) operation. On May 28, 2014, the NIRB issued an amended Project Certificate No. 005 approving the ERP. Mining of ore began in the last quarter of 2014 and the first shipment of ore occurred in the summer of 2015. Baffinland applied to the NIRB again in 2018 to amend its Project Certificate to allow for an increase in production. On October 30, 2018, the NIRB issued an amended Project Certificate No. 005 approving this on a time limited basis (until the end of the 2019 shipping season). On October 5, 2018, Baffinland submitted to the NIRB an EIS Addendum for the Phase 2 Proposal. The Phase 2 Proposal is part of Baffinland's approach to develop the Mary River Project in a phased and economically feasible manner. The NIRB has determined the EIS Addendum conforms to the EIS guidelines it issued and has initiated a public technical review process. At the time of writing, the final hearings for the Phase 2 expansion have been put on hold, initially due to a request from Nunavut Tunngavik Inc. (NTI) and subsequently due to concerns around COVID-19. Additional information on Baffinland's regulatory submissions and approvals can be found on the <u>NIRB Public Registry</u>.

# Socio-Economic Monitoring Requirements and Guidance

Project-specific socio-economic monitoring programs in Nunavut are generally expected to focus on two areas: effects monitoring and compliance monitoring. Effects monitoring measures the socio- economic effects of a project to determine whether management plans are working or if unexpected effects are occurring. Compliance monitoring ensures that proponents follow the terms and conditions of the licences, decisions, and certificates issued by authorizing agencies (NIRB, 2013). This focus is commensurate with socio-economic monitoring best-practice (Noble, 2015; Vanclay, Esteves, Aucamp, & Franks, 2015) and can assist companies with achieving their sustainable development goals. Socio-economic monitoring also supports adaptive management, as findings can alert proponents to the emergence of unanticipated effects and help initiate a management response. Furthermore, regular review of monitoring plans helps determine whether existing socio-economic indicators and monitoring methods remain appropriate (Vanclay, Esteves, Aucamp, & Franks, 2015).

Project-related socio-economic monitoring requirements originate from the Nunavut Agreement and NIRB Project Certificate No. 005. The Nunavut Agreement is a comprehensive land claims agreement signed in 1993 between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada. As a result of signing the Nunavut Agreement, Inuit exchanged Aboriginal title to all their traditional land in the Nunavut Settlement Area for a series of rights and benefits. The Nunavut Agreement also created various 'institutions of public government' such as the NIRB and established conditions for the review and oversight of resource development projects. Article 12, Part 7 of the Nunavut Agreement provides details on monitoring programs which may be required under a NIRB project certificate and notes the purpose of these programs shall be:

- a) to measure the relevant effects of projects on the ecosystemic and socio-economic environments of the Nunavut Settlement Area;
- b) to determine whether and to what extent the land or resource use in question is carried out within the predetermined terms and conditions;
- c) to provide the information base necessary for agencies to enforce terms and conditions of land or resource use approvals; and
- d) to assess the accuracy of the predictions contained in the project impact statements.

Although, the Compliance Assessment section of this report incorporates some information on Terms and Conditions specific to socio-economic monitoring, NIRB should be consulted for further specific information included in the Project Certificate No. 005.

Some Terms and Conditions included in Project Certificate No. 005 relate to Baffinland's engagement with the Qikiqtaaluk Socio-Economic Monitoring Committee (QSEMC). The QSEMC is one of three regional socio-economic monitoring committees in Nunavut. These committees were established in 2007 to address project certificate requirements for project-specific monitoring programs and to create a discussion forum and information sharing hub that supports impacted communities and interested stakeholders to take part in monitoring efforts (SEMCs, 2018). Baffinland is actively involved in the QSEMC and regularly participates in its meetings. Most recently, Baffinland participated in the QSEMC's May 2019 meeting in Iqaluit, which included a day visit for QSEMC members to the Mary River Mine Site. Summaries and minutes from this meeting can be found on the <u>QSEMC's website</u> as well as in Appendix A.

The Mary River Socio-Economic Monitoring Working Group (SEMWG or Working Group) Terms of Reference (TOR) also provides guidance on Baffinland's socio-economic monitoring program. Baffinland, in addition to the Governments of Nunavut, and Canada, and the QIA, is a member of the SEMWG. The SEMWG is intended to support the QSEMC's regional monitoring initiatives through Project-specific socio-economic monitoring. The SEMWG also supports the fulfillment of Terms and Conditions set out in Project Certificate No. 005 that relate to socio-economic monitoring. The SEMWG TOR has been included in Baffinland's Socio-Economic Monitoring Plan (Baffinland SEMR, 2019)<sup>1</sup>. It describes the Working Group's purpose; membership and member roles; objectives; and reporting, communication, and meeting requirements. Furthermore, Section 5.1 of the TOR notes that Baffinland:

... will prepare an annual socio-economic report for the Project (the "Program Report"), which will be attached to its Annual Report submission to the NIRB. Annual Program Reports ... contain data with respect to the previous calendar year (January to December) and may be presented at the Project, community, and/or regional scale of operations. The Program Report will further describe Baffinland's participation on the QSEMC, other collaborative socio-economic monitoring processes, and other relevant activities related to understanding socio-economic processes.

As established in the TOR, the Working Group members agreed that collaboration is required to effectively monitor the socio-economic performance of the Project. It was acknowledged that Baffinland is best able to collect and provide data concerning employment and training in relation to the Project, and the Government of Nunavut and the Government of Canada are best able to report public statistics on general health and well-being, food security, demographics, and other socio-economic indicators at the community and territorial level. The QIA was noted to be best able to provide information and data relating to Inuit land use and culture at the community and regional level.

Baffinland is actively involved in the SEMWG and regularly participates in its meetings. Most recently, Baffinland met with the SEMWG in February 2019 (by teleconference). Baffinland responded to all questions and comments directed to them at these meetings; no follow-up items were identified.

<sup>&</sup>lt;sup>1</sup> Baffinland worked with SEMWG members to revise the TOR in 2018 and 2019. The previous TOR was somewhat dated (December 2012) and did not fully reflect the current scope of Working Group activities. Revisions to the TOR were completed in March 2019.

The Project's Socio-Economic Monitoring Plan (Baffinland SEMR, 2019) was designed to help address Project-related socio-economic monitoring requirements and guidance associated with the Nunavut Agreement, NIRB Project Certificate No. 005, and SEMWG TOR, described above<sup>2</sup>. An annual monitoring report (i.e. this report) assists with the implementation of this Plan. Baffinland has been undertaking socio-economic monitoring for the Project since 2013. It took a stepwise approach to developing its socio-economic monitoring program, focusing its initial reporting on a small number of Valued Socio-Economic Components (VSECs) and indicators. A framework for this initial socio-economic monitoring program was described in the EIS ( (Baffinland FEIS, 2012); Volume 4, Section 15. However, the program's design has evolved substantially over time. This has been a result of lessons being learned, internal refinements to the program (and its indicators) being identified, and valuable feedback being obtained from monitoring stakeholders. Ongoing changes to this program have been described in Baffinland's annual Socio-Economic Monitoring Reports. Baffinland has committed to continue to address its socio-economic monitoring requirements as the Project advances.

# Report Objectives and Organization

This is the seventh annual Socio-Economic Monitoring Report prepared by Baffinland for the Project, which supersedes all previous reports. The content of this report is guided by the Project's Socio-Economic Monitoring Plan (Baffinland SEMR, 2019). More specifically, this report will assess the socio-economic performance of the Project as it progresses from construction through operations and eventual closure. This report represents a departure from the design of previous year's, building on a strong foundation by maintain alignment to the report's requirements while improving the accessibility through updated organization and focus on clear visuals. This report supports the achievement of the following objectives of the monitoring program identified in the Socio-Economic Monitoring Plan:

- 1. Evaluate the accuracy of selected socio-economic effect predictions presented in the Mary River Project EIS and identify any unanticipated effects<sup>3</sup>.
- 2. Identify areas where Baffinland's existing socio-economic mitigation and management programs may not be functioning as anticipated.
- 3. Assist regulatory and other agencies in evaluating Baffinland's compliance with socio-economic monitoring requirements for the Project.
- 4. Support adaptive management, by identifying potential areas for improvement in socio- economic monitoring and performance, where appropriate.

<sup>&</sup>lt;sup>2</sup> Baffinland presented a revised Socio-Economic Monitoring Plan in the EIS Addendum for the Phase 2 Proposal in October 2018.

<sup>&</sup>lt;sup>3</sup> References to the Mary River Project EIS in this report include any subsequent addendums to the EIS that have been approved (i.e. had a Project Certificate issued) by the NIRB.

#### This report is structured as follows

Introduction (this section)	introduces the report and the scope of its contents
Methods	Describes the methods used in this report and how they support the findings that are provided
Results (Sections 1 through 12)	Assesses the socio-economic performance for VSECs included in the EIS
Report summary	Provides summary of regional and cumulative economic effects, and comments on adaptive management for the Project
Appendix A	Includes meeting minutes from 2019 QSEMC meeting

# Methods

This report is intended to assess the socio-economic performance of the Project on an annual basis. To help focus this assessment, monitoring indicators have been identified for VSECs in the EIS. Annually produced, community-level data has then been obtained in support of monitoring indicators where readily available. The analyses presented in this report generally focuses on one of three spatial scales: The Local Study Area (LSA), Regional Study Area (RSA), or Project level. As identified in the EIS, the LSA includes the North Baffin point-of-hire communities of Arctic Bay, Clyde River, Sanirajak, Igloolik, and Pond Inlet, in addition to Iqaluit (which is also a point-of-hire). In some cases, data for the LSA communities have been aggregated to facilitate trend analyses in this report. The RSA includes the entire territory of Nunavut. For clarity, references to the RSA throughout the report are simply noted as Nunavut or the Territory.

Following the presentation of available indicator data, relevant management and mitigation measures are discussed and an assessment of residual effects predicted to occur in the EIS is made. Structuring the report in this manner allows predictions to be evaluated against current monitoring data and provides insight into the effectiveness of existing mitigation measures. A compliance assessment of Project Certificate Terms and Conditions relevant to the monitoring of each VSEC is also presented at the end of the report. The status of other socio-economic Terms and Conditions unrelated to monitoring is discussed in Baffinland's Annual Report to the NIRB.

Indicator trends are discussed throughout this report and describe whether an indicator has exhibited change (and the direction of that change). A 'pre-development' trend in this report refers to the five-year period preceding Project construction (2008 to 2012). In some cases, averaged data from this period have been compared against averaged data from previous years (2003-2007) to determine a trend. Likewise, a 'post-development' trend refers to the period after Project construction commenced (2013 onwards). Averaged data from this period may have also been compared against averaged data from the pre-development period to determine a trend. A trend 'since previous year' refers to the two most recent years for which indicator data is available. Available data and trends may then be assessed in the context of potential Project influences on the indicator(s) in question.

Where monitoring thresholds have been identified, available data is discussed with this context. For example, residual effects may be assessed against some of the relevant EIS predictions, including direction (e.g. positive, negative) and where appropriate, magnitude<sup>4</sup>. Furthermore, management action may be triggered if annual performance is observed to be below a monitoring threshold. Baffinland acknowledges threshold development has been otherwise limited to-date and additional monitoring thresholds may be developed in consultation with the SEMWG in the future. Opportunities may also exist to incorporate monitoring thresholds associated with the Project's IIBA, although this would be done in consultation with the QIA.

<sup>&</sup>lt;sup>4</sup> Effect magnitude is only assessed in this report where quantitative metrics were provided in the EIS.

The process of socio-economic monitoring may require many years of data to effectively discern some trends and their causality. Even then, various factors (including non-Project ones) may influence causality, and these may not be easy to individually measure or confirm. Baffinland's monitoring program is not intended to describe the causes of every socio-economic change that is reported on. Rather, the program is intended to identify potential areas of socio-economic concern; once identified, these areas may benefit from additional examination or a management response. More generally, successful socio-economic monitoring for the Project will require appropriate long-term data, the regular input of Project stakeholders, and a focus on continuous improvement.

# Socio-Economic Monitoring Indicators

Socio-economic monitoring indicators have been developed as part of the Project's Socio-Economic Monitoring Plan (Baffinland SEMR, 2019) and are presented in Table 2-1. 'Indicators' are an important aspect of socio-economic monitoring. Indicators are metrics used to measure and report on the condition and trend of a Valued Component (VC)<sup>5</sup>, and help facilitate the analysis of interactions between a project and a selected VC (BCEAO, 2013). Indicators can also provide an early warning of potential adverse effects and are considered the most basic tools for analyzing change (Noble, 2015). Table 2-1 presents indicators and data sources for VSECs assessed in the EIS; this includes indicators for VSECrelated residual effects and for topics requested through the Project Certificate.

The structure and content of Baffinland's socio-economic monitoring program may benefit from additional refinement in the future; suggestions from reviewers on how indicators and data sources could potentially be improved are welcome. It is further acknowledged that any significant changes to the socio-economic monitoring program will require discussion with the SEMWG. Likewise, Table 2 includes several instances where indicators have not been identified by Baffinland for various reasons (e.g. monitoring is already conducted elsewhere, no residual effects were identified in the EIS, insufficient data availability). In some additional cases, other forms of issue tracking will take place (e.g. through the QSEMC process or community engagement conducted for the Project). Should new indicators be required for these topics in the future, they will be selected in consultation with the SEMWG.

The left-hand column of Table 2 denotes whether topics and indicators are in relation to residual effects (**RE**) or Project Certificate Terms and Conditions (**T&C**). The table also includes linked concordance (**Concord.**) to where data and discussion on the appropriate indicators is included throughout the report.

	Торіс	Indicators	Concord.	Source
222	1 · Population Demographics			
RE	In-migration of non-Inuit Baffinland employees into the North Baffin LSA	<ul> <li>Known in-migrations of non-Inuit Baffinland and contractor employees</li> </ul>	1.2 (p. 11)	BIMC
		<ul> <li>In-migration of non-Inuit to the North Baffin LSA</li> </ul>	1.2 (p. 11)	Limited
RE	Out-migration of Inuit residents from	· Known out-migrations of Inuit Baffinland and contractor employees	1.2 (p. 11)	BIMC
	the North Baffin LSA	· Out-migration of Inuit from the North Baffin LSA	1.2 (p. 11)	Limited
T&C	Demographic Change	Population estimates	1.3 (p. 15)	NBS
		Nunavut net migration	1.3 (p. 15)	NBS
T&C	Employee changes of address, housing status, and migration intentions	<ul> <li>Employee and contractor changes of address, housing status, and migration intentions</li> </ul>	1.2 (p. 11)	BIMC Survey

Table 2. Socio-economic monitoring plan

<sup>&</sup>lt;sup>5</sup> Valued Components are typically referred to as Valued Ecosystem Components (VECs) and Valued Socio-Economic Components (VSECs) in Nunavut.

	Торіс	Indicators	Concord.	Source			
T&C	Employee origin	Employee and contractor origin	1.1 (p. 9)	BIMC			
Ş	2 · Education and Training						
RE	Improved life skills among young adults	Participation in pre-employment training	2.3 (p.21)	BIMC			
		LSA employment and on-the-job training	2.3 (p.21)				
RE	Incentives related to school attendance	Number of secondary school graduates	2.2 (p. 19)	NBS			
		Secondary school graduation rate	2.2 (p. 19)	NBS			
		Investments in school-based initiatives	2.1 (p. 18)	BIMC			
RE	Opportunities to gain skills	<ul> <li>Hours of training completed by Baffinland and contractor Inuit employees</li> </ul>	2.3 (p. 21)	BIMC			
		<ul> <li>Types of training provided to Baffinland and contractor Inuit employees</li> </ul>	2.3 (p. 21)	BIMC			
		Apprenticeships and other opportunities	2.3 (p. 21)	BIMC			
T&C	Employee education and pre- employment status	Employee education and pre-employment status	2.4 (p. 24)	BIMC			
۵	3 · Employment and Livelihood						
RE	Creation of jobs in the LSA	Hours of Project labour performed	3.1 (p. 31)	BIMC			
RE	Employment of LSA residents	Project hours worked by LSA Baffinland and contractor employees	3.1 (p. 31)	BIMC			
RE	New career paths	LSA employment	3.1 (p. 31)	BIMC			
		Inuit employee promotions	3.3 (p. 34)	BIMC			
		Inuit employee turnover	3.4 (p. 35)	BIMC			
T&C	Barriers to employment for women,	· Hours worked by Baffinland and contractor female employees	3.2 (p. 33)	BIMC			
	availability and costs	Topic will continue to be tracked through the QSEMC process and community engagement conducted for the Project.					
	4 · Contracting and Business Opportunit	ties					
RE	Expanded market for business services to the Project	Value of contracting with Inuit Firms	4.2 (p.41)	BIMC			
RE	Expanded market for consumer goods	LSA Inuit employee payroll amounts	4.2 (p.41)	BIMC			
	and services	Number of registered Inuit Firms in the LSA	4.3 (p. 42)	NTI			
	5 · Human Health and Wellbeing						
RE	Changes in parenting	Number of youth charged	5.2 (p. 46)	StatsCan			
RE	Household income and food security	<ul> <li>Proportion of tax filers with employment income and median employment income</li> </ul>	5.1 (p. 45)	NBS			
		Percentage of population receiving social assistance	5.1 (p. 45)	NBS			
RE	Transport of substances through Project site	<ul> <li>Number of drug and alcohol related contraband infractions at Project sites</li> </ul>	5.2 (p. 46)	BIMC			
RE	Affordability of substances	Number of impaired driving violations	5.2 (p. 46)	NBS			
	Attitudes toward substances and addictions	Number of drug violations	5.2 (p. 46)	NBS			
RE	Absence from the community during work rotation	Topic will continue to be tracked through the QSEMC process and common the Project.	inity engage	ment conducted for			
T&C	Prevalence of substance abuse	Monitoring already conducted through other 'human health and well-be	ing' indicator	·s.			

	Торіс	Indicators	Concord.	Source							
T&C	Prevalence of gambling issues	Topics will continue to be tracked through the QSEMC process and comm	nunity engage	ement conducted							
	Prevalence of family violence	for the Project.									
	Prevalence of marital problems										
	Rates of teenage pregnancy										
T&C	Rates of sexually transmitted infections and other communicable diseases	Percent of health centre visits related to infectious diseases	5.3 (p. 50)	NBS							
	High school completion rates	Monitoring already conducted through other 'education and training' indicators.									
	Other	Crime rate	5.3 (p. 50)	NBS							
		Number of times Baffinland's EFAP is accessed	5.3 (p. 50)	BIMC							
	6 · Community Infrastructure & Public Se	ervices									
RE	Competition for skilled workers	<ul> <li>Number of Baffinland and contractor employees who left positions in their community</li> </ul>		BIMC Survey							
	Labour force capacity	Training and experience generated by the Project		BIMC							
		Inuit employee turnover									
r&c	Pressures on existing health and social	• Number of health centre visits (total and per capita)	6.1 (p. 58)	NBS							
	services provided by the GN that may be impacted by Project-related in- migration of employees	Number of visits to Project physician assistant	6.1 (p. 58)	BIMC							
Pro	Project-related pressures on	Baffinland use of LSA and Igaluit community infrastructure	6.3 (p. 61)	BIMC							
	community infrastructure	Number of Project aircraft movements at LSA and Iqaluit community airports	6.3 (p. 61)	BIMC							
ì	7 · Cultural Resources										
N/A	N/A	Monitoring already conducted through Archaeology Status Update Repo	rts								
<b>19</b>	8 · Resource and Land Use										
RE	Caribou harvesting	Potential effects will continue to be tracked through Baffinland's environmental monitoring progra									
	Marine mammal harvesting	Ierrestrial and marine monitoring are reviewed bi-annually by the Terrestrial Environment Working Group (TEWG) and Marine Environment Working Group (MEWG). While not all these effects were									
	Fish harvesting	considered residual effects in Project EIS documents, they are included h	ere for compl	eteness.							
RE	Safe travel around Eclipse Sound and Po	nd Inlet									
	Safe travel through Milne Port										
	Emissions and noise disruption at camps	;									
	Sensory disturbances and safety along N	filne Inlet Tote Road	8.1 (p. 66)								
	Detour around mine site for safety and t	ravel Number of recorded land use visitor person- days at Project sites Number of wildlife		DIA							
	Difficulty and safety relating to railway c	rossing compensation fund claims									
	Detour around Steensby Port										
	HTO cabin closures										
	Restriction of camping locations around	Steensby Port									
2	9 · Cultural Well-Being										
N/A	N/A	No monitoring required. No residual effects identified in the EIS.									
	10 · Economic Development and Self-Rel	liance									
RE	N/A	As noted in the EIS, an integrated assessment of other VECs/VSECs was a Development and Self-Reliance VSEC. No new residual effects specific to Relevant monitoring of residual effects is conducted through other VECs,	conducted for this VSEC we VSECs.	the Economic re identified.							

	Торіс	Indicators	Concord.	Source
T&C	Project harvesting interactions and food security, which includes broad indicators of dietary habits	Topic will continue to be tracked through the QSEMC process, communit, Project, and related information	y engagemer	t conducted for the
÷.	11 · Benefits, Royalty, and Taxation			
RE	Project revenues flowing to the territorial government	Payroll and corporate taxes paid by Baffinland to the territorial government	11.1 (p. 75)	BIMC
	12 · Governance and Leadership			
N/A	N/A	No monitoring required. No residual effects identified in the EIS.		



# 1 · Population Demographics

The makeup and movement of peoples from, to and within Nunavut and its communities

# **FEIS Prediction**

"Residual effects arising from in-migration and out-migration are expected to arise due to the Project. At the anticipated levels, however, these effects are not expected to be sufficient to cause adverse effects on demographic stability of the affected communities. Therefore, these residual effects are assessed to be not significant."

# **Key Findings**

- In 2019, 366 of the 417 Baffinland and contractor Inuit employees were based in LSA communities, with total Inuit employment increasing by 32% from 2018 levels.
- Since 2015, there has been a net migration of 19 Baffinland and contractor Inuit employees out of the LSA, including one Inuk who moved to Iqaluit and 18 who moved to locations outside of Nunavut. The Project may contribute to some migration by employees but does not appear to impact demographic stability of the North Baffin LSA communities when compared to population growth in those communities or Territory-wide net migration.
- The average annual growth rates over the post-development period for North Baffin LSA communities was 2.2%, Iqaluit 2.0%, and Nunavut 1.4%, higher than the Canadian average growth rate of 1.2%.

# 1.1 Employee and contractor origin

# **Data and trends**

Figure 1 and Figure 2 below provide an overview of Baffinland and contractor employment by location of origin. Employment in this section reflects employee headcounts, derived by taking an average of quarterly headcounts of Baffinland and contractor employees (i.e. measured on four different days throughout the year).

Figure 1. Nunavut-based Baffinland and contractor employment (headcount) by community (2019)







Source: (Baffinland, 2019)

#### Figure 3 below provides an overview of Baffinland and contractor Inuit employment by origin.



Figure 3. Baffinland and contractor Inuit employment (headcount) by origin (2019)

Source: (Baffinland, 2019)

#### The detailed composition of Mary River's workforce in 2019 is presented in Table 3 below.

	Baffinland		Con	tractor	Total	
	Inuit	Non-Inuit	Inuit	Non-Inuit	Inuit	Non-Inuit
Arctic Bay	33	1	27	-	60	1
Clyde River	25	-	30	-	55	-
Sanirajak	23	-	36	-	59	-
Igloolik	15	-	32	-	47	-
Iqaluit	32	1	53	1	85	2
Pond Inlet	27	-	33	-	60	-
Other Qikiqtani communities	6	-	3	-	9	-
Kivalliq communities	-	-	1	-	1	-
Unknown	-	1	9	220	9	221
Other Canadian	26	957	6	1,175	32	2,132
2019 Total	187	960	230	1,396	417	2,356
2018 Totals	151	803	164	936	315	1,739

Table 3. Baffinland and Contractor Employment (Headcount) by Origin and Ethnicity (2019)

Source: (Baffinland, 2019)

#### Interpretation

In 2019, there were 417 Baffinland and contractor Inuit employees working at Mary River, representing ~15% of the total workforce of 2,773. This represents an increase of 32% - or 111 Inuit employees – over 2018 levels. This large increase in employment can be largely attributed to additional initiatives and commitments stemming from the amended IIBA. Further details and discussion on employment, training and advancement are provided in the Education and Training and Employment and Livelihood sections of this report.

Baffinland and contractor Inuit employees were primarily based in LSA communities (366 people), with Iqaluit hosting the highest average number of Baffinland and contractor Inuit employees (85 people). Igloolik had the lowest (47 people) within the North Baffin LSA, while the other four communities had between 55 to 60 Baffinland and contractor Inuit employees. A small number of Baffinland and contractor Inuit employees (9) originated from other Qikiqtani communities, Kivalliq communities (1) or from other unknown locations (9 people). An additional 32 Baffinland and contractor Inuit employees are known to have resided outside of Nunavut.

The high proportion of Baffinland and contractor Inuit employees from the LSA is due in part to the Project's hiring commitments such as the Minimum Inuit Employment Goal (MIEG) established in the October 2018 Inuit Impact Benefit Agreement (IIBA) between Baffinland and Qikiqtani Inuit Association (Impact Economics, 2018). MIEG objectives established in the IIBA are also intended to contribute to increasing Inuit employment over time. Regular flight access from LSA communities directly to the Project site as well as the relative proximity of the communities to the Project are also likely contributors. While not specific to LSA residents, strong wages and benefits and an industry-attractive rotation schedule (2 weeks on, 2 weeks off) are also incentives towards Mary River employment.

Baffinland and contractor non-Inuit employees whose residence was known were almost exclusively from Canadian locations outside of Nunavut (1,292 people). A small number of these non-Inuit employees (3 people) were based in Nunavut (Arctic Bay or Iqaluit). The remaining non-Inuit employees (1,065 people) were based in unknown locations.

The Project has been successful at attracting LSA-based Inuit employment; approximately 16.4% of the LSA workforce who are old enough and have a high-school education (or equivalent) worked at Mary River in 2019. The large number of Baffinland and contractor employees from outside of Nunavut is in part attributed to a skills gap within the territory as individuals with advanced mining and/or technical skill sets are known to be in limited supply (Gregoire, 2014; Conference Board of Canada, 2016; Impact Economics, 2018; MIHR, 2016). The Inuit workforce from LSA communities will likely continue to grow as the Project's activities and labour demands increase, efforts to achieve and surpass MIEGs, and as awareness of employment opportunities and benefits from the Project continues to increase. However, while the Mary River mine requires a range of technical and non-technical skill sets, the Project's labour demand is anticipated to continue to exceed LSA Inuit labour supply over the entire life of the Project (Impact Economics, 2018). Baffinland will continue efforts to increase Inuit employment from LSA communities and monitor results.

# 1.2 Employee migration and housing status

# **Data and trends**

Migration data for Baffinland and contractor employees provides insight into potential migration trends in the North Baffin LSA. For instance:

- In-migration: The number of employees who moved into the LSA
- Out-migration: The number of employees who moved out of the LSA
- Net migration: The number of employees who moved into the LSA minus the number who moved out of the LSA

Figure 4 below outlines the North Baffin LSA migrations of Baffinland and contractor employees.



#### Figure 4. Known LSA migration of Baffinland and contractor employees (Inuit and non-Inuit) \*

Source: (Baffinland, 2019) | \*Note: Data was provided by Baffinland Community Liaison Officers (BCLOs) who were asked to report on the number of Baffinland and contractor employees they knew who had moved into or out of each of their community during the previous year. Inuit or non-Inuit status were also recorded as well as the locations where those individuals had moved to and from, if known. Family members that may have migrated with employees were not accounted for. When the origin/destination community of a migrant was unknown, it was conservatively assumed they were migrating to/from outside the North Baffin LSA. Migration data collected prior to 2015 is not presented below it does not specify if both Inuit and non-Inuit individuals and if both Baffinland and contractor employees were included.

BCLOs in each of the North Baffin LSA communities administered a voluntary Inuit Employee Survey in January/February 2019. The survey was developed to address Project Certificate Term and Condition No. 133 which requests that the company collects information on Baffinland and contractor Inuit employee changes of address, housing status, and migration intentions. Seventy-one Inuit employees completed the survey, representing 20% of the North Baffin LSA Inuit staff in 2019. The survey results presented here are the same results that were presented in the 2018 SEMR.

Figure 5 below summarizes survey results pertaining to any change in employee and contractor residence and communities.



Figure 5. Changes in Inuit employee and contractor community of residence\*

Source: (Baffinland (survey), 2019)

Of the 2 people who moved to another community, both stated that they had moved from outside the LSA to an LSA community.

#### Figure 6 below summarizes survey results pertaining to Inuit employee and contractor migration intentions

Figure 6. Employee and contractor migration intentions\*



Source: (Baffinland (survey), 2019) | \*Notes: Because the 2019 survey was administered only in the North Baffin LSA communities, Inuit residing outside of these communities (e.g. in Iqaluit or non-Nunavut communities) were not included.

# Of the 8 respondents who intended to move in the next 12 months, 2 planned to move to Iqaluit, 2 to other LSA communities, 2 to southern provinces and 2 were unknown.

Due to a survey administration error in 2019, no data was collected on housing status for this reporting year. The interpretation section provides a short summary of housing status information obtained from previous surveys (2017 and 2018), which was also provided in the 2017 and 2018 SEMRs.

# Interpretation

There was little Project-related in-migration into the North Baffin LSA, with only two Baffinland and contractor Inuit employees known to have moved into the communities in 2019. An additional two Inuit employees moved between the North Baffin LSA communities; these individuals were not counted as in-migrants. In terms of out-migration, nine Inuit employees were known to have moved out of the North Baffin LSA in 2019.

Since 2015, there was net migration of 20 Baffinland and contractor Inuit employees out of the North Baffin LSA and one non-Inuit employee into the North Baffin LSA. The majority of Inuit employees who left the North Baffin LSA moved to locations outside of Nunavut.

Among the 71 Inuit employees who participated in the voluntary Inuit Employee Survey, 53 (74.6%) indicated that their residence had not changed in the past 12 months, and 15 (21.1%) did not say if they had moved (unknown result). Three people (4.2%) stated that they changed residence over the past year, two of which had moved from outside the North Baffin LSA into the North Baffin LSA. When 'unknown' results are removed, 5.4% of respondents indicated their residence had changed in the past 12 months.

In terms of migration intentions for the next 12 months, 12 survey respondents (16.9%) planned to move residences while 46 did not (almost 65%). When 'unknown' results are removed, these figures increase to 20.7% and 79.3% of respondents, respectively. Eight of the 12 respondents planning to change residences intended to do so by moving to a different community (13.8%) in the LSA. Similar results in previous surveys were 17.6% in 2018 and 16.3% in 2017 (Baffinland, 2019). Of the 8 respondents who intended to move in the next 12 months, 2 (2.8%) planned to move to lqaluit, 2 (2.8%) to other LSA communities, 2 (2.8%) to southern provinces and 2 (2.8%) were unknown. As in previous
surveys, a few respondents in 2019 indicated they had moved to a different community in the past 12 months (3.6% in 2019, 9.9% in 2018, and 7.0% in 2017).

The 2018 survey indicated that approximately 61% of respondents lived in public housing. Results on home ownership intentions, however, provide some insights on this point. Twenty-two respondents (31.0%) said they had considered purchasing a home in their community, 34 (47.9%) had not considered purchasing a home in their community, 4.2% already owned their own home.

The Project may be a contributing influence on Inuit migrating out of the North Baffin LSA, but the exact magnitude of this effect (if any) is difficult to determine given: the relatively low numbers over the past five years; the small number of survey respondents who indicated their intentions to move out; and that decisions to move can be influenced by several factors. Conversely, the Project does not appear to be a major influence on migration into the North Baffin LSA, whether Inuit or non-Inuit. Baffinland will continue to track employee changes of address, housing status, and migration intentions through future Inuit Employee Surveys to see if future trends emerge.

# 1.3 Regional and community migration and population

## **Data and trends**

Figure 7 displays the average annual population growth of LSA communities pre- and post-development.



Figure 7 Average annual population growth, pre- and post-development

Source: (Nunavut Bureau of Statistics (NBS), 2016)

Figure 8 below compares the average Inuit and non-Inuit population in LSA communities pre- and post-development. The percentages in the charts show the average Inuit percentage of the population for that time period.



Figure 8. Average Inuit and non-Inuit LSA community population, pre- and post-development

Population estimates for the LSA communities of Arctic Bay, Clyde River, Sanirajak, Igloolik, Pond Inlet, and Iqaluit are provided by the (Nunavut Bureau of Statistics (NBS), 2019b) and presented in Figure 9.



Figure 9. LSA community population (2018)

Figure 10. Annual Nunavut net-migration (2004 – 2018)



Source: (Nunavut Bureau of Statistics (NBS), 2019b)



## Interpretation

The North Baffin LSA communities, Iqaluit, and Nunavut have all shown positive population growth since Project development. During the six years comprising 2013 to 2018, the North Baffin LSA communities grew from a population of 5,941 to 6,716 (or 13.0%). Over the same time, Iqaluit's population increased 10.9% from a population of 7,429 to 8,242, while Nunavut's overall population increased 8.4% from 35,414 to 38,396 (Figure 9 highlights the most recent LSA community populations).

The average annual growth rates over the post-development period was 2.2% for the North Baffin LSA communities, 2.0% for Iqaluit, and 1.4% for Nunavut. These are all higher than the Canadian average growth rate of 1.2% (Statistics Canada). However, Figure 7 shows that the average annual population growth rates in LSA community populations for the pre-development and post-development periods are similar. Furthermore, population growth was occurring throughout

Source: (Baffinland, 2019)

Nunavut prior to Project development and continues to occur at high rates across the territory. As such, it is unlikely that the Project has been a major influence on these trends.

Additional perspective into potential Project-induced trends is limited as annual community-level migration data for the North Baffin LSA was unavailable. However, some insight can be obtained by assessing any change in the percentage of Inuit versus non-Inuit residents since Project development. The percentage of Inuit residents in communities would be expected to decrease if substantial levels of non-Inuit in-migration and Inuit out-migration were occurring. However, Figure 8 below compares the average Inuit and non-Inuit population in LSA communities pre- and post-development. The percentages in the charts show the average Inuit percentage of the population for that time period.

Figure 8 shows that the residents have remained relatively constant since 2003. In the pre-development period, an average 94.5% of residents were Inuit, whereas, based on the most recent year data were available, an average of 94.8% residents were Inuit in the post-development period (Baffinland, 2019). This outcome, combined with the results from the Inuit Employee Survey (see Section 1.2), suggests that the Project has not been a major influence on the ratio of Inuit/non- Inuit residents living in the North Baffin LSA.

Broad migration and population patterns occurring in Nunavut can be ascertained by examining Territorial annual net migration, as well as births and deaths estimates. A net of 179 individuals migrated into Nunavut in 2017/18 despite Nunavut recording 1,453 out-migrants that year, the largest out-migration of the data set. Estimates for preceding years have been variable with a substantial out-migration trend extending from 2004 through 2008, and another out-migration trend from 2012 through 2017 (Nunavut Bureau of Statistics (NBS), 2018a). Compared to the pre-development period average, fewer people overall have been migrating out of Nunavut in the post-development period. While a decreasing post-development trend has occurred, net migration estimates for the territory are not specific enough to determine Project-related influences. Data on births and deaths indicate that there are on average five live births for every death in Nunavut (Nunavut Bureau of Statistics (NBS), 2018a). The ratio of birth-to-death strongly suggests that the population is increasing through natural growth, both in the LSA and in Nunavut.

# 1.4 VSEC Effects assessment

There were two residual effects for the Population Demographics VSEC assessed in the Mary River EIS. Monitoring results applicable to these are summarized below.

Residual effect	In-Migration of Non-Inuit Baffinland Employees to the North Baffin LSA
Summary	The EIS predicted some in-migration of non-Inuit employees hired to work at the Project could occur in the North Baffin LSA (i.e. <5% change in the non- Inuit baseline population). In 2012 (the year before Project construction commenced), 5% of the North Baffin non-Inuit population would have equaled approximately 28 individuals.
Existing mitigation	Designation of Iqaluit as a "point of hire" and an additional southern location as a transportation hub, with no cost transportation provided to Project employees from these locations to the mine site
Monitoring results	Cumulative Baffinland (i.e. BCLO survey) data since 2015 indicates a net of one non-Inuit employee/contractor is known to have in-migrated to the North Baffin LSA. Government data on changes in the percentage of Inuit versus non-Inuit residents in the North Baffin LSA have not revealed a substantial Project-induced trend at this time. It is acknowledged the data present only a partial assessment of migration trends and more detailed in-migration data for the North Baffin LSA are currently unavailable from government sources.
	Furthermore, the factors involved in deciding to migrate can be complex and specific to an individual. While these limitations are acknowledged, available migration data appear to support the EIS predictions that were made. There is no evidence to suggest mitigation measures need to be modified at this time. Without substantial in-migration to the North Baffin LSA occurring because of the Project, negative effects on local housing opportunities are considered negligible. In fact, wages earned through Project-related work may enable individuals in the North Baffin LSA to improve their housing situations over time (e.g. through greater capacity to rent and/or own their residence). Out-migration of residents may also relieve some local housing strains.

Residual effect	Out-Migration of Inuit Residents from the North Baffin LSA
Summary	The EIS predicted some out-migration of Inuit residents from the North Baffin LSA could occur (i.e. 1% to <5% of the total population). In 2012 (the year before Project construction commenced), 5% of the total North Baffin LSA population would have equaled approximately 306 individuals.
Existing mitigation	Designation of all North Baffin LSA communities as 'points of hire', with no cost transportation provided to Project employees from these points of hire to the mine site.
Monitoring results	Cumulative Baffinland (i.e. BCLO survey) data since 2015 indicates a net of 13 Baffinland and contractor Inuit employees are known to have out-migrated from the North Baffin LSA. Government data on changes in the percentage of Inuit versus non-Inuit residents in the North Baffin LSA have not revealed a substantial Project-induced trend at this time. It is acknowledged these data present only a partial assessment of migration trends and more detailed out-migration data for the North Baffin LSA are currently unavailable from government sources.
	Furthermore, the factors involved in deciding to migrate can be complex and specific to an individual. While these limitations are acknowledged, available migration data appear to support the EIS predictions that were made. There is no evidence to suggest mitigation measures need to be modified at this time.



# 2 · Education and Training

Education and skills attainment among youth and adults through investments and employment

## **FEIS Predictions**

"Positive residual effects on life skills amongst youth and adults are anticipated to arise from the Project through access to industrial work in a context that is supported through pre-employment preparation and on-the-job training."

"The Project will have significant beneficial residual effects on education and skills across the LSA. Some potential that individuals may drop out of school or forego further education in order to pursue work at the Project is recognized. However, the overall effect of the Project will be to increase the value of education and thereby the "opportunity cost" of dropping out of school."

## **Key Findings**

- The Project supported school-based initiatives in 2019 through its ongoing donations including laptop donations (54 in 2019), as well as specific IIBA commitments annual scholarship fund (7 recipients in 2019, up from 5 in 2018), and contributions to school lunch programs.
- The average number of graduates in the North Baffin LSA and Iqaluit for both pre- and post-Project development periods has remained relatively constant, following an initial increase of 11 graduates post 2003-2007 period.
- Baffinland has a variety of employee training and advancement programs, with 2019, showing an increase in participation in the Work-Ready program (99 graduates, up from 59 in 2018) and the Apprenticeship program (16 participants, up from 9 in 2018). The types and hours of training provided to Inuit and non-Inuit employees increased in 2019, due to larger workforce requirements and additional initiatives and commitments stemming from the amended IIBA.

# 2.1 Investments in school-based initiatives

## Data and trends

Table 4 provides an overview of school-based initiatives supported by Baffinland from 2017 to 2019.

Program	Description	2017	2018	2019
Laptop donations	Laptops donated to secondary school graduates in the North Baffin LSA communities	63 laptops	38 laptops	54 laptops
Annual scholarship fund	Per Article 8.8 of the IIBA, Baffinland continues to contribute to an annual scholarship fund (\$5,000 per recipient)	* (5 recipients)	\$50,000* (5 recipients)	\$35,000 (7 recipients)
School Lunch Program	Per Article 7.21 of the IIBA, School Lunch program in the North Baffin LSA	n/a	\$300,000	/ year budgeted
Nunavut Arctic College donations	Donations to Nunavut Arctic College Programs and graduations		\$25,000	\$5,000

Table 4. Investments in school-based initiatives (2017 – 2019)

Source: (Baffinland, 2019) | \*2017 scholarships funds provided in 2018 due to administrative oversight

## Interpretation

The Project supported school-based initiatives in 2019 through its ongoing donations program, as well as specific IIBA commitments. These initiatives seek to support educational success and encourage youth to stay in school.

Secondary school graduates in the North Baffin LSA communities have received donated laptops from Baffinland since 2007 as part of a broader incentive program to encourage and motivate youth to complete their high school education and pursue post-secondary education. In 2019, a total of 54 laptops were provided to graduates in all five of the North Baffin LSA communities (up from 38 in 2018). In 2019, Baffinland representatives also spoke to High-School students in Pond Inlet about the important role education plays in future employment opportunities in the mining industry. Baffinland also maintains a relationship with Nunavut Arctic College to discuss and encourage employment opportunities in the mining industry.

Baffinland continued contributing to an annual scholarship fund for Nunavut Inuit (with priority given to applications from the North Baffin LSA communities), as well as to the North Baffin LSA School Lunch Program, as per Article 8.8 and Article 7.21 of the IIBA, respectively. Seven scholarships totalling \$35,000 were awarded to LSA residents in 2019, an increase in the usual five scholarships per year due to the number of strong applications received. Since 2014, Baffinland has cumulatively awarded \$170,000 in scholarships to 34 recipients. As noted in the IIBA (2018), \$300,000 is made available for school lunch programs annually.

## 2.2 Secondary school success

### **Data and trends**

Figure 11 below depicts the number of secondary school graduates in Iqaluit and the North Baffin LSA to 2017, the latest year for which data is available.



Figure 11. Secondary school graduates by community (1999 – 2017)

Source: (Nunavut Bureau of Statistics (NBS), 2018)

# Table 5 displays the average number of secondary school graduates in Iqaluit and the North Baffin LSA for selected periods. In 2017, there were 51 graduates from the North Baffin LSA and 59 graduates from Iqaluit.

	North	Baffin LSA	lc	qaluit
Period	Average graduates	Change from previous period	Average graduates	Change from previous period
2003 - 2007	34	-	32	-
Pre-Development Period (2008 – 2012)	45	+11	42	+10
Post-Development Period (2013 – 2019)	43	-2	42	0

Table 5: Secondary School Graduates (averages for selected periods)

Source: (Nunavut Bureau of Statistics (NBS), 2018)

#### Figure 12 depicts the secondary school graduate rate by region to 2017, the latest year for which data is available.





Source: (Nunavut Bureau of Statistics (NBS), 2019d)

# Table 6 displays the average secondary school graduation rate across the Qikiqtani Region and Nunavut for selected periods.

Table 6: Secondary school graduation rates (averages for selected periods)

	Qikiqtar	ni Region	Nunavut		
Period	Average graduation rate	Change from previous period	Average graduates	Change from previous period	
2003 - 2007	32.8%	-	27.1%	-	
Pre-Development Period (2008 – 2012)	38.0%	+5.1	34.3%	+7.2	
Post-Development Period (2013 – 2017)	35.7%	-2.3	37.5%	+3.2	

Source: (Nunavut Bureau of Statistics (NBS), 2019d)

### Interpretation

From 2016 to 2017 (the latest year for which data is available), the number of graduates in the LSA increased from 48 to 51, in Iqaluit from 30 to 59, and in Nunavut from 252 to 292. Over the Project's post-development period, there has been an upward trend in the number of secondary school graduates in both Nunavut (increasing 35.2%) and the LSA (37.8%). The number of graduates in Iqaluit over this same period has been variable, with no consistent trend. By comparison, the average number of graduates in the LSA and Iqaluit for both pre- and post-Project development periods has remained relatively constant, following an initial increase over the 2003 - 2007 period.

As shown in Figure 12, graduation rates from 2016 to 2017 increased in Qikiqtani Region (from 36.6% to 48.8%) and Kivalliq Region (from 56.1% to 56.4%), as well as Nunavut as a whole (from 41.7% to 47.7%). A small decrease in graduation rates was observed in Kitikmeot (from 31.5% to 30.6%). The post-development average graduation rate in the Qikiqtani Region is slightly lower than pre-development average (from 38.0% to 35.7%), however an upward trend has emerged in Qikiqtani since 2014. Graduation rate averages during the post-development period are also broadly showing upward trends as compared to pre-development in Kivalliq (from 37.5% to 47.3%), Kitikmeot (from 20.2% to 25.9%) and Nunavut (from 34.3% to 37.5%).

This data may indicate a positive Project influence within the LSA and more broadly in the Qikiqtani Region. The EIS predicted the Project would provide incentives related to school attendance and success in the LSA, including the potential for employment with the Project, access to scholarships, and laptop donations. Further, Baffinland's Inuit hiring efforts to date have focused on the LSA communities. However, given the broadly comparable trends in graduation rates and number of graduates throughout Nunavut, this suggests that external broad-scale factors may also be driving these trends. This data will continue to be monitored for ongoing trends and potential Project attribution.

## 2.3 Training and advancement programs

#### **Data and trends**

Table 7 presents the number of Inuit participants over time in four programs offered by Baffinland.

Table 7. Inuit involvement in advancement	t programs (2015 – 2019)
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Program	2015	2016	2017	2018	2019
Summer students hired	-	-	-	4	7
Pre-trades program / entrance exams passed	-	-	-	9	8
Work Ready Program graduates	-	-	-	59	99
On-Site Work Ready Program Graduates	-	-	-	-	16
Active apprenticeships	4	1	1	9	16
Inuit internship program participants	-	-	-	-	8

Source: (Baffinland, 2019)

Figure 13 below depicts the number of training hours completed by Baffinland and contractor Inuit and non-Inuit employees. Figure 14 provides an overview of the average number of training hours provided per FTE.



Figure 14. Baffinland and contractor average training hours / FTE by Inuit status (2013 – 2019)



Source: (Baffinland, 2019)

Figure 15 presents the number of training hours per type of training completed by Baffinland and contractor employees in 2019.





Source: (Baffinland, 2019)

#### Interpretation

Baffinland continues to offer pre-employment training as per Article 8.12 of the IIBA. This type of training supports development of basic employment skills that are readily applicable not only to employment with Baffinland, but also to other employers and industries. In 2017, Baffinland developed a new Work Ready Program in partnership with the Mining Industry Human Resources Council (MIHR) which it began to offer in 2018. The program offered in 2019 was revised based on feedback from course participants. The revised program is a five-day training program facilitated in communities, and addresses the following areas: Self Awareness, An Introduction to Mining, Essential Skills for the Workplace, Money Management and Preparing for Fly-In, Fly-Out. Further, in 2019, in line with the IIBA commitments, the Work Readiness Program also offered on-site Work Readiness sessions held at the Mary River Mine. For both 2018

and 2019, the Work Ready Program was administered in Iqaluit, Clyde River, Pond Inlet, Igloolik, and Sanirajak; it was also offered in Arctic Bay in 2019. There were 99 graduates from this program in 2019, of which 86 were from the North Baffin LSA and 13 from Iqaluit (up from 59 graduates in 2018). Since 2012, there have been 435 graduates of Baffinland preemployment training programs.

In 2019 Baffinland expanded the Work Ready Program to include an on-site component of training. Participants from Iqaluit and the North Baffin Communities had the opportunity to spend seven (7) days at site. They completed the site orientation and then over the next five (5) days they had the opportunity to job shadow five (5) entry level positions at the mine with both Baffinland and contractors. Participants had the opportunity to express their interest in any of the roles, and where possible interviews were conducted. This resulted in employment for some participants. The On-Site Work Ready experience allowed participants to understand life at site, as well as some of the roles available to them. In 2019 16 participants completed the on-site work ready program.

Participants of the Apprenticeship Program, initially launched in 2017, join Baffinland as trades assistants for six months and participate in job shadowing activities to learn about the trade and Baffinland's operations. In 2019, 16 Inuit apprentices were employed by Baffinland in the Apprenticeship Program, up from nine in 2018. Candidates who have successfully completed their six-month term and subsequent Trades Entrance Exam are offered full-time, permanent apprenticeship positions with Baffinland.

Baffinland started a Pre-Trades Program with Nunavut Arctic College at site in 2018 as an additional means to support the Apprenticeship Program and prepare trades assistants for the Trades Entrance Exam. The Pre-Trades Program assists individuals in gaining a foundation in the physical sciences and improving their English and Mathematics skills, which are intended to assist these individuals when taking the Trades Entrance Exam. In 2019, nine Inuit completed the Pre-Trades Program and passed the Trades Entrance Exam (up from 8 in 2018).

Baffinland, along with the Qikiqtani Inuit Association (QIA) and Employment and Social Development Canada continued to run the Q-STEP Heavy Equipment Operator Program in Morrisburg, Ontario. The program was revised in 2019 with trainees dedicated to only two pieces of equipment, Skid Steer and Articulated Rock Truck, with increased seat time through a reduction in simulator time. Graduate Trainees are offered employment as trainees. An additional Heavy Equipment Operator (HEO) program provides the essentials of safety, equipment characteristics, operating techniques, transportation and pre-operational inspections that apply to heavy equipment.

Further, Baffinland makes summer employment opportunities available to Inuit students as per IIBA Article 7.19. In 2019, seven students were hired from the communities of Sanirajak, Igloolik, Clyde River and Pond Inlet. Per IIBA Article 7.20, Baffinland developed and operated an Inuit Internship Program related to the disciplines of: Finance, Information Technology, Procurement, Organizational Effectiveness, Sustainable Development, and Human Resources. This program will operate for a minimum of ten years and will offer a minimum of four internship positions per year. A total of eight interns were successfully placed in 2019 from Iqaluit, Pond Inlet, Arctic Bay, Igloolik and Ottawa.

Figure 13 presents the total hours of training completed since 2013. In 2019, a total of 93,367 hours of training were completed, of which 44,135 hours (or 47.3%) were completed by Inuit. This represents an increase of 9,506 Inuit training hours compared to 2018. It further represents an average of 153 hours of training per Inuit employee and contractor FTE in 2019 (as shown in Figure 14). In total, 288,358 hours of training have been completed since Project development, of which 94,631 hours (or 32.8%) were completed by Inuit.

Figure 15 displays the hours of training provided to Baffinland and contractor Inuit and non-Inuit employees in 2019 by type of training. Training with the highest levels of Inuit participation in 2019 included the Q-STEP Apprenticeship Program (20,703 hours), Q-STEP Morrisburg HEO Training Program (6,915 hours), standard HEO program (5,716 hours), Work Ready off-site program (1,848), and site orientation (2,866 hours).

The training data in this section provide a good indicator of the magnitude of Baffinland's annual training efforts for both Inuit and non-Inuit Baffinland and contractor employees. The increase in training opportunities in 2019 likely reflects the commitments made by Baffinland to Inuit training through the IIBA, including the IHRS and Q-STEP. The Inuit Human Resources Strategy (IHRS) is a strategy document collaboratively developed by Baffinland and QIA. It includes goals and initiatives to increase Inuit employment at the Project over time. Baffinland and QIA successfully secured funding through Employment and Social Development Canada's (ESDC) Skills and Partnership Fund for their Qikiqtani Skills and Training for Employment Partnership (Q-STEP) training program. Q-STEP is a four-year initiative that will be undertaken by QIA in close partnership with Baffinland to provide Inuit with skills and qualifications to meet Project-related employment needs as well as other employment opportunities in the region. The program includes both work readiness measures as well as targeted training programs directed at apprenticeships, skills development, supervisor training, and formal certification in heavy equipment operation. The total value of the program is \$19 million, with the Government of Canada providing \$7.9 million, Baffinland \$9.4 million of in-kind support, and Kakivak Association up to \$1.6 million of in-kind support. The Government of Nunavut also offers operational support to Q-STEP.

In 2019 Baffinland introduced their Inuit Success Assurance team to strengthen their engagement in developing people, and to become the employer of choice for Inuit in Nunavut. The team delivers Work Ready training on-site and in the North Baffin communities, and works with operations leaders and Inuit employees to enhance career success, retention and advancement. They also support the delivery of the Adult Basic Education Program and Management and Advanced Skills Training Program. Baffinland has engaged with the Nunavut Literacy Council to complete a Workplace Needs Assessment at Mary River in 2019, with other sites planned for 2020 to enable the effective delivery of these and other programs. Outcomes of these efforts will be reported as they are available.

Finally, Baffinland introduced the Inuit Cultural Engagement (ICE) Workshop in 2019 for all Baffinland and contractor employees working at the Mary River site to create awareness and understanding of Inuit customs, history and traditions. Three pilot programs were successfully delivered in the summer of 2019. Attendees included 10 Inuit and 38 non-Inuit participants and feedback was used to strengthen the workshop. The Inuit Success Assurance team reviewed and updated the Inuit Cultural Engagement Session in November 2019. This team now delivers the ICE workshops. Based on continued feedback and review the program will be further refined and expanded in 2020.

With these cumulative efforts, it is apparent the Project has had a positive effect on education and skills development amongst LSA residents. In 2019, Baffinland continued to provide many training and skills development opportunities to its Inuit employees, and a number of other Baffinland programs and IIBA initiatives have contributed to the development of a more experienced Inuit workforce. Baffinland employees are also regularly exposed to 'informal' training and skills development opportunities through contact with more experienced coworkers and the process of everyday work.

# 2.4 Employee education and pre-Mary River employment status

BCLOs in each of the North Baffin LSA communities administered a voluntary Inuit Employee Survey in January/February 2019. The survey was developed to address Project Certificate Term and Condition No. 140, requesting information on employee education and pre-employment status at the time of hiring. Seventy-one Inuit employees completed the survey, representing 20% of the North Baffin LSA Inuit staff in 2019. The survey results presented here are the same results that were presented in the 2018 SEMR.

Figure 16 presents survey results relating to the highest level of education obtained by the 71 Baffinland and contractor Inuit employees.



Figure 16. Highest level of education obtained by Inuit employees (2019)

Source: (Baffinland (survey), 2019)

# Figure 17 below provides the 2016 census results of the highest level of education obtained by Nunavut and North Baffin LSA residents.

Figure 17. Highest level of education obtained by Nunavut and North Baffin LSA residents (2016)





Source: ( (Statistics Canada, 2017)

Figure 18 below summarizes survey results relating to the interest of Baffinland and contractor Inuit employees to attend a financial literacy course.

Figure 18. Inuit employee desire to attend financial literacy courses (2019)



Source: (Baffinland (survey), 2019)

Figure 19. below summarizes survey results relating to the employment and academic status of Baffinland and contractor Inuit employees prior to their employment at Mary River.



Figure 19. Inuit employee academic and employment status pre-Mary River employment

Of the 17 employees who answered yes, respondents noted a previous employment status of casual (6); parttime (3); full-time (7) and unknown (1). Of the 5 employees who answered yes, none of them suspended or discontinued their education because they were hired to work at Mary River.

Source: (Baffinland (survey), 2019)

#### Interpretation

Results from the 2019 and earlier surveys show varied educational backgrounds among Inuit employees. Approximately half of the respondents (35 of 71 respondents) noted that as of January 2019 they had less than a high school education. A further 17% (12 respondents) reported having a high school diploma or equivalent. With respect to post-secondary education, three respondents (4.2%) had an apprenticeship or trades certificate or diploma, eleven (15.5%) had a college or other non-university certificate or diploma, and no respondents had any type of university certificate or diploma.

2016 Census data indicate that a higher proportion of survey respondents had either no high-school diploma or had a high-school diploma as their highest educational attainment as compared to the North Baffin LSA or Nunavut populations (see Figure 17 for additional details).

Survey respondents expressed strong interest in attending an informational course about managing personal finances, setting up monthly bill payments, and establishing savings goals if it was offered (Figure 18). Approximately two-thirds of respondents (64.8%) stated they would attend such a course, and one quarter (25%) would not. When 'unknown' results are removed, almost 72% of respondents said they would attend such a course.

The survey also explored whether respondents were employed or pursuing education prior to Baffinland employment. A total of five respondents were enrolled in an academic or vocational program at the time of their hire, and 55 were not (Figure 19.). None (n=0) of the respondents that were enrolled in an academic or vocational program stated that they had suspended or discontinued their education as a result of being hired to work at the Project. While it is difficult to draw firm conclusions from this relatively small sample size, the past three surveys provide similar results, with 0% in 2019, 3% in 2018, and 0% in 2017 suspending their education as a result of being hired to work at the Project.

In terms of employment status prior to Baffinland employment (as shown in Figure 19.), 17 respondents stated that they had resigned from a previous job in order to take up employment with the Project, while 47 did not. By comparison, 22 respondents had resigned from a previous job in 2018, and nine in 2017. Of the 17 respondents who resigned from a previous job, six had casual employment status, three had part-time employment status, and seven were employed full-time. More than half of these 17 respondents (53%) left casual or part-time employment to work at the Project, which may suggest that Baffinland employment offered a higher degree of security and certainty to these respondents than their previous employment.

Baffinland will continue to track the education and employment status of its Inuit employees prior to Baffinland employment through the Inuit Employee Survey to see if any future trends emerge.

# 2.5 VSEC Effects assessment

There were three residual effects for the Education and Training VSEC assessed in the Mary River EIS. Monitoring results applicable to these are summarized below.

Residual effect	Improved Life Skills Among Young Adults
Summary	The EIS predicted positive effects on life skills development among young adults in the LSA would arise from the Project. This would occur primarily through access to industrial work supported by pre-employment preparation and on-the-job training.
Existing mitigation	<ul> <li>Pre-employment training (e.g. Work Ready Program)</li> <li>On-the-job training</li> <li>Creation of a supportive work environment</li> <li>A no drugs/no alcohol policy on site</li> <li>Inuit Internship Program</li> <li>Summer student employment</li> <li>Measures included in the IIBA to enhance Inuit employment, training, and skills development at the Project</li> </ul>
Monitoring results	In 2019, Baffinland continued to provide various opportunities for life skills development among LSA residents. This included a Work Ready Program (81 graduates) and employment (377,956 hours worked by LSA residents) and training opportunities (44,135 hours of training completed by Inuit). Since Project development, there have been 435 graduates of Baffinland pre-employment training programs, 1,833,574 hours have been worked by LSA residents, and 94,631 hours of training have been provided to Inuit. These opportunities are notable, especially when considering the lack of employment and training opportunities that have historically existed in the LSA.
	While not all individuals who received pre-employment training, employment, and other training opportunities from Baffinland can be considered 'youth', it can reasonably be assumed that: a) some youth were included in this group, and b) some other individuals stood to benefit from the life skills development opportunities provided. It is further acknowledged that life skills development for some individuals can take time to be achieved.
	Furthermore, Baffinland strives to maintain a healthy and supportive work environment and provides access to counselling and support resources. The Company fully funds a Community Counsellor Program, access to on-site Cultural Advisors, and has increased its delivery of Inuit cultural programming on site in 2019.
	There are indications that positive effects on life skills development among young adults in the LSA continue to result from the Project, as predicted in the EIS. There is no evidence to suggest mitigation measures need to be modified at this time.

Residual effect	Incentives Related to School Attendance and Success The EIS predicted the Project would have a positive effect on education and skills development across the LSA by providing incentives related to school attendance and success. While there is some potential that individuals may drop out of school or forego further education to work at the Project, the overall effect of the Project will be to increase the value of education and thereby the 'opportunity cost' of dropping out of school.				
Summary					
Existing mitigation	<ul> <li>The establishment of a minimum age (i.e. 18) for Baffinland employment</li> <li>Priority hiring for Inuit</li> <li>Investments in school-based initiatives (e.g. laptop donations, scholarships, school lunch programs)</li> <li>Inuit Internship Program</li> <li>Summer student employment</li> <li>Measures included in the IIBA to enhance Inuit employment, training, and skills development at the Project.</li> </ul>				
Monitoring results	The impact of the Mary River Project on graduates and graduation rates remains unclear. While average pre- and post-development graduation rates show little change, the Qikiqtani region has seen a steady increase in graduation rates between 2014 and 2017 (the latest year for which data is available). School attendance and success can be influenced by many socio-economic factors and determining causality between Project effects and school attendance can be difficult. Regardless, Baffinland continues to make investments in various school-based initiatives (e.g. laptop donations to secondary school graduates, scholarships, school lunch program) which are believed to provide incentives in this area. Baffinland employment opportunities may motivate individuals to complete their education to improve their ability to obtain a desired career. Baffinland employment may also contribute to role-modelling behaviour in communities. There is no evidence to suggest mitigation measures need to be modified at this time. However, this indicator will continue to be monitored for emerging trends.				

Residual effect	Opportunities to Gain Skills				
Summary	The EIS predicted the Project would have a positive effect on education and skills development by providing opportunities for training and skills acquisition among LSA residents.				
Existing mitigation	<ul> <li>Provision of various training programs</li> <li>Upgrading and career development opportunities</li> <li>Career counselling to employees</li> <li>Measures included in the IIBA to enhance Inuit employment, training, and skills development at the Project</li> <li>Commitment to contribute \$10 million toward the Baffinland Inuit Training Centre</li> </ul>				
Monitoring results	In 2019, Baffinland continued providing training and skills development opportunities to Inuit. This included 44,135 hours of training for Inuit in dozens of training programs. Eight Inuit apprentices were also employed by Baffinland along with seven Inuit summer students and 8 participants in the Inuit internship program. A total of 94,631 hours of training have been provided to Inuit since Project development. Furthermore, Baffinland employees are regularly exposed to various 'informal' training and skills development opportunities through contact with more experienced coworkers and the process of everyday work. Several other initiatives have (or are expected to) contribute to the development of a more experienced Inuit workforce including training opportunities identified in the IIBA, IHRS, and Q-STEP program. This includes the delivery of pre- employment training, employee skills upgrading courses (e.g. GED, literacy and numeracy), training in apprenticeships and heavy equipment operation, and various career advancement programs for existing employees. The opportunities provided by the Project are notable, particularly when considering the existing skills gaps and limited employment options in many parts of Nunavut. Available information suggests the Project has had a positive effect on education and skills development among LSA residents, as was predicted in the EIS. There is no evidence to suggest mitigation measures need to be modified at this time.				



# 3 · Employment and Livelihood

The local labour market and employment opportunities for the North Baffin LSA residents

## **FEIS Predictions**

"The Project will have a positive effect on wage employment in the North Baffin by introducing new job opportunities and actively assisting local residents to access these jobs."

"The Project will have a positive effect on the ability of local residents to progress in their jobs and career choices. This effect will arise as a result of the new career paths that will be introduced to the region, from entry-level through step-by-step advancement to higher level jobs."

## **Key Findings**

- The number of FTEs from the LSA grew by 60 people over the previous year. These LSA employment opportunities likely reflect both the increase in labour demand from the growth in Project activities, as well as commitments Baffinland has made to Inuit employment through the IIBA.
- In 2019, there was an increase of 20 Inuit female FTEs as compared to 2018. The proportion of Inuit females in the workforce remains roughly the same as last year. The proportion of non-Inuit female FTEs increased from 3.4% of the total workforce in 2018 to 6.1% in 2019.
- A total of eight Inuit employee promotions (seven males, one female) occurred in 2019, an increase of two promotions as compared to 2018 and the third consecutive year of growth following an initial sharp decrease from 2016 2017. The growth in total Inuit FTEs, increasing to 288 FTEs in 2019 (see Section 3.1), provides additional opportunities to identify potential candidates for future promotion.
- In 2019, there were 34 Inuit employee departures, which equates to an approximate Inuit employee turnover rate of 18%. This represents a substantial improvement since 2018 (30%) and 2017 (45%). While the Inuit employee turnover rate remains higher than the non-Inuit employee turnover rate of 14.6%, the gap between these rates has narrowed substantially over the last two years.

# 3.1 Mary River Inuit and LSA employment

## Data and trends

Figure 20 presents an overview of Baffinland and contractor, Inuit and non-Inuit full time equivalent positions (FTEs) since 2013. Presenting the data in terms of FTEs is a way to control for the differences in the number of hours worked by different individuals, thereby providing a more accurate and comparable picture of employment over time and between projects than a snapshot at one point in time. One FTE represents 2,016 hours, or the approximate time one person works on a full-time basis for a year.

#### Figure 20. Contractor and Baffinland employment (FTEs) by Inuit status



Source: (Baffinland, 2019)

#### Table 8 provides additional detail on FTEs and hours worked by ethnicity and employee origin in both 2018 and 2019.

	2018	8	2019		
Employee Ethnicity & Origin	FTEs (hours) % of Total		FTEs (hours)	% of Total	
Inuit			-		
North Baffin LSA	142 (287,040)	9.3%	187 (377,956)	8.7%	
Iqaluit	40 (81,432)	2.6%	59 (118,307)	2.7%	
Other	34 (67,436)	2.2% 42 (83,934	42 (83,934)	1.9%	
Inuit totals	216 (435,908) 14.1%		288 (580,197)	13.3%	
Non-Inuit					
North Baffin LSA	0 (0)	0%	1 (1,648)	0%	
Iqaluit	6 (11,484)	0.4%	1 (2,426)	0%	
Other	1,307 (2,634,348)	85.5%	1,869 (3,767,412)	86.6%	
Non-Inuit total	1,313 (2,645,832) 87.7%		1,871 (3,771,486)	86.7%	
Grand Totals	1,529 (3,081,740)	100.0%	2,159 (4,351,683)	100.0%	

Table 8: Baffinland and contractor employment (FTEs and hours worked) by ethnicity and origin in 2018 and 2019

Source: (Baffinland, 2019)

## Interpretation

Comparing the total number of FTEs at the Mary River Project each year provides a clear indicator of the Project's overall labour demand. It also helps to highlight the extent to which new job opportunities have become available to LSA residents. In 2019, there were approximately 2,159 FTEs working at Mary River, continuing an increase from 2017 (1,182 FTEs) and 2018 (1,529 FTEs). These FTEs are equivalent to 4,351,683 hours of project labour performed in 2019. Proportionately, this represents a 41.2% increase in labour demand over the previous year, which is largely attributed to the increase in Project-related activities in 2019.

In 2019, there was approximately 288 Inuit FTEs working at the Mary River Project, up from 216 in 2018. This represents a single year increase of 33.3% in Inuit labour contribution. There has been an upward trend in total Inuit FTEs working at the Project since 2016, following a small decrease in 2015. The increasing trend in total Inuit FTEs indicates that new job opportunities continue to be made available to Inuit LSA residents. This can be attributed to additional initiatives and commitments stemming from the amended IIBA.

Of the Inuit FTEs working at the Mary River Project, 246 were full-time, Baffinland and contractor employees from the LSA. 187 Inuit FTEs were North Baffin LSA residents and an additional 59 were based in Iqaluit. This represents a cumulative increase of 64 Inuit FTEs from the LSA as compared to 2018. These LSA employment opportunities likely reflect the increase in labour demand from the growth in Project activities, as well as commitments Baffinland has made to Inuit employment through the IIBA.

# 3.2 Mary River employment by gender

#### Figure 21 and Figure 22 outline the number of Inuit and non-Inuit FTEs by gender from 2013 to 2019.

Figure 21 Baffinland and contractor Inuit FTE's by gender





Source: (Baffinland, 2019)

#### Table 9 provides additional detail on FTEs and hours worked by gender and ethnicity in 2018 and 2019.

Table 9: Baffinland and contractor FTEs and hours worked by gender and ethnicity (2018 – 2019)

		2018			2019	
	Hours Worked	FTE	% of 2018 Total	Hours Worked	FTE	% of 2019 Total
Inuit						
Male	314,530	156	10.2%	418,190	207	9.6%
Female	121,378	60	3.9%	161,635	80	3.7%
Non-Inuit						
Male	2,541,130	1,261	82.5%	3,508,642	1,740	80.6%
Female	104,702	52	3.4%	262,844	130	6.1%
All ethnicities						
Male	2,855,660	1,416	92.7%	3,926,832	1,948	90.2%
Female	226,080	112	7.3%	424,479	211	9.8%
Total	3,081,740	1,529	100.0%	4,351,683*	2,159*	100.0%

Source: (Baffinland, 2019) | \* Note: values may not add up due to rounding

Figure 22: Baffinland and contractor Non-Inuit FTE's by gender

### Interpretation

Female participation in the Canadian mining industry is typically low. Although women represent 48% of the general Canadian workforce, women comprise only 16% of the total Canadian mining workforce (MIHR, 2019). Indigenous women are also less likely than non-Indigenous women to be employed in Canada (Arriagada, 2016). The number of FTEs and total hours worked by Inuit and non-Inuit female Baffinland and contractor employees on the Project provides insight into efforts made by Baffinland to recruit, retain, and reduce employment barriers for women.

In total, there were 211 female FTEs in 2019, representing 9.8% of the total workforce. This was a substantial increase over 2018, when there were 112 female FTEs (7.3% of the total workforce). The female workforce in 2019 included approximately 80 Inuit FTEs (up from 60 in 2018) and 130 non-Inuit FTEs (up from 52 in 2018). As a percentage of the workforce, Inuit women represented 28% of the Inuit workforce (which is consistent with the proportion in 2018), and non-Inuit women represented 7.5% of the non-Inuit workforce (up from 3.4% in 2018). Since 2013, Inuit women have comprised a greater proportion of the Inuit workforce as compared to the proportion of non-Inuit females within the non-Inuit workforce. When compared to the total workforce in 2019, Inuit women comprised 3.7% of the total workforce (Table 9). The proportion of Inuit FTEs in the workforce remained roughly the same in 2019 as in 2018, whereas non-Inuit female FTEs increased proportionally from 3.4% of the total workforce in 2018 to 6.1% in 2019.

Access to adequate childcare is frequently cited as an issue for some individuals in Nunavut and can act as a barrier to employment for women in general, and rotational work schedules in particular (Pauktuutit, Czyzewski, Tester, Aaruaq, & Blangy, 2014; Paukuutit). Comments on the lack of childcare in LSA communities have been made previously by Project stakeholders and can be found in previous SEMRs (Baffinland, 2019). Baffinland continues to make efforts to examine the issue of childcare availability through its 'Arnait Action Pan' and has the opportunity to discuss this subject directly with the Government of Nunavut through their Memorandum of Understanding. This topic continues to be tracked through the QSEMC process and community engagement conducted for the Project.

The growth in total female FTEs working at the Project, as well as the growth in the proportional representation of the non-Inuit female workforce, indicates that the Project has had some success in attracting more women into Project employment. To further encourage Inuit female employment and retention at the Project, Baffinland collaboratively developed goals, priorities, and measures with the QIA in the IHRS and through the 2018 renegotiation of the IIBA. Article 7.17 of the IIBA, for instance, requires Baffinland to implement human resource policies that ensure equal access to employment for Inuit men and women, whereas Article 11.5 highlights affirmative steps to take for attracting female employees. The success of initiatives on Inuit female employment and retention will continue to be tracked by Baffinland.

# 3.3 Employee advancement

#### Data and trends

Figure 23 presents data on the total number of Baffinland Inuit employee promotions over time.



Figure 23. Inuit employee promotions at Baffinland

Source: (Baffinland, 2019)

## Interpretation

The Project was predicted to have a positive effect on the ability of local residents to progress in their jobs and career choices. Enabling career path progression involves successfully recruiting Inuit employees, supporting skills development, career path planning, and creating an environment geared towards skills development and progression.

In 2019, Baffinland focused on increasing Inuit employment (see Section 3.1). A larger Inuit workforce provides additional opportunities to identify potential candidates for future promotion. As described in Section 2.4, of the new Baffinland and contractor Inuit employees who completed the Inuit employee survey in 2019, nine had moved from part-time or casual employment with a different employer to full-time Baffinland employment. This provides some indication of new career paths made available to LSA residents as they started their work at Mary River.

The total number of Inuit employee promotions at Baffinland provides another indicator of Inuit career progression at the Project. A total of eight Inuit employee promotions occurred in 2019, six in 2018 and three in 2017. This is the third consecutive year of growth following an initial sharp decrease from 2016 – 2017. Of the eight Inuit employees promoted in 2019, one was female. Advancements or promotions depend on available openings; that is, for an advancement to occur, a position must be available.

In 2019 Baffinland updated its Operations Progression Plan and struck the Career Path Working group with QIA. This working group was tasked with creating career path progression planning for each Inuit employee of the Mary River Project. The work completed by this working group will be launched in 2020. The Inuit Success Assurance team was also introduced in 2019 as another means for Baffinland to strengthen employee engagement and development and become the employer of choice for Inuit in Nunavut. These team members facilitate, engage and work with operations leaders and their Inuit employees towards success, retention, and career advancement in their career at Baffinland. Outcomes in this area will continue to be monitored.

## 3.4 Employee turnover

## **Data and trends**

Figure 24 and Figure 25 display information on Baffinland employee turnover rate and total departures since 2015. Comparable employee turnover rates for 2013-2015 are not provided due to differences in how employee numbers and departures were previously calculated by Baffinland. Turnover rate is calculated by dividing the total number of departures in a calendar year by the average headcount over the same period. Figure 24. Baffinland employee turnover rate (Inuit and non-Inuit) Figure 25. Baffinland employee departures (Inuit and non-Inuit)



Source: (Baffinland, 2019)

#### Interpretation

Employee turnover and departure data ('turnover' includes resignation, layoff, termination, end of contract, and retirement) provides an indication of employment stability, which is valuable to the individual, the LSA and Baffinland.

Comparatively speaking, the mining industry is broadly recognised as having a relatively high turnover rate of 10%, with half of the turnover representing terminations and layoffs, and the remainder comprised of voluntary turnover and retirement (MIHR, 2019). However, remote mining operations such as the Mary River Project are known to experience even higher turnover than the industry average, largely due to the remote and rotational nature of the work, as well as cultural factors. High rates of employee turnover are not unique to Baffinland and have also been an issue in the past for other Nunavut-based organizations, including the Government of Nunavut and other mining operations in the territory.

In 2019, there were 34 Inuit employee departures, which equates to an approximate Inuit employee turnover rate of 18.4%. This represents a substantial improvement over 2018 (when the turnover rate was 30%), and 2017 (when the turnover rate was 45%). The turnover rate for non-Inuit employees has also substantially improved since 2017, at 14% in 2019 down from 28% in 2018. Since 2015, turnover rates for Inuit team members have tended to be higher than non-Inuit team members, however in 2018 and 2019 that gap has narrowed substantially.

While the total workforce has increased substantially since 2017 (which affects the calculation of the turnover rate), it is noteworthy that the number of both Inuit and non-Inuit departures also fell substantially in 2019. Decreasing employee departures can likely be partially attributed to efforts made by Baffinland to reduce employee turnover. Developed through its amended IIBA and IHRS, some of these initiatives include: instituting a mid-probationary review program to evaluate new employee performance and identify potential issues, consideration of alternative rotational schedules better aligned with familial and community activities, placing greater emphasis upon cultural awareness training and cultural activities, providing formalized support systems for Inuit employees, implementing effective employee concern and workplace conditions review processes, and the introduction of the Inuit Success Assurance team, among others.

Common reasons Inuit employees cited for resigning in 2019 included fly-in-fly-out impact on the employee and their family, work-life balance, accepting another position and/or a position closer to home. With respect to employee dismissal or involuntary terminations, common reasons for Inuit turnover included violation of company policy, workplace conduct, performance, and absenteeism. Many of these reasons were similarly identified in both 2017 and 2018. Baffinland continues to monitor employee turnover causes and outcomes and has committed to reducing turnover and increasing Inuit employment as the Project advances.

In 2018, Baffinland began tracking the rehiring of Inuit at the Project. A rehire constitutes an employee who departed the Project workforce voluntarily or involuntarily and was rehired as an employee of Baffinland. This data does not include rehiring that may have been carried out by contractors. In 2019, 18 Inuit were rehired by Baffinland (compared with 22 in 2018). For someone to be rehired there must be a position open.

# 3.5 VSEC Effects assessment

There were three residual effects for the Employment and Livelihood VSEC assessed in the Mary River EIS. Monitoring results applicable to these are summarized below.

Residual effect	Creation of Jobs in the LSA
Summary	The EIS predicted the Project would have a positive effect on wage employment in the LSA (i.e. a 5%+ change in baseline labour) by introducing new job opportunities and assisting local residents to access these jobs. Under baseline conditions, the labour markets of the North Baffin LSA and Iqaluit were estimated to generate a labour demand of 2.0 million and 4.7 million hours per year, respectively. 5% of these values would equal 335,000 hours per year (i.e. 100,000 hours in the North Baffin LSA and 235,000 hours in Iqaluit). The Project was predicted to generate a total labour demand of approximately 0.9 million hours per year during ERP operations. With the addition of the 18 Mt/a phase, annual labour demand would increase to 2.9 million hours. Labour demand during construction would average roughly 4.1 million hours per year over a six-year period but peak at approximately 7.3 million hours per year. Closure phase labour demand estimates do not currently exist but will be developed by Baffinland in the future.
Existing management / mitigation	<ul> <li>Designation of all LSA communities as points of-hire</li> <li>Provisions within the Mary River IIBA (i.e. priority Inuit hiring)</li> </ul>
Monitoring results	In 2019, the Project continued to generate substantial labour demand and employment opportunities. The generation of 4,351,683 hours of Project labour in 2019 is in line with the EIS prediction of a 5%+ change in baseline labour (i.e. at least 335,000 hours created per year). As such, the positive effect on LSA job creation predicted to occur in the EIS is confirmed.

Residual effect	Employment of LSA Residents
Summary	The EIS predicted the Project would have a positive effect on wage employment in the LSA (i.e. a 5%+ change in baseline labour) by introducing new job opportunities and assisting local residents to access these jobs. This equates to at least 335,000 hours of new employment being created per year, in a baseline environment that was estimated to create 6.7 million hours of labour per year. The Project was predicted to result in the employment of an estimated 300 LSA residents each year. These residents would supply approximately 342,000 hours of labour per year to the Project, of which 230,000 hours would be provided by North Baffin LSA residents and 112,000 hours would be provided by Iqaluit residents.
Existing management / mitigation	<ul> <li>Management commitments and Company policies related to Inuit employment and retention, including commitments made in the IIBA</li> <li>Designation of all LSA communities as points of-hire</li> <li>Training-to-employment programs such as Baffinland's Apprenticeship Program, Morrisburg HEO Training Program, Inuit Internship Program, and Work Ready Program</li> <li>Hiring of Inuit Recruiters</li> <li>Creation of a supportive work environment (e.g. EFAP, Cultural Advisors, Human Resource Advisors – Inuit Relations, introduction of Inuit Success Assurance team, on-site cultural initiatives)</li> </ul>
Monitoring results	In 2019, a total of 500,337 hours was worked by LSA residents on the Project. 379,604 hours were worked by North Baffin LSA residents and 120,733 hours were worked by Iqaluit residents. The 2019 LSA employment numbers exceeded expectations in the North Baffin LSA, while in Iqaluit they are largely consistent with EIS predictions. Baffinland has committed to improving its Inuit employment levels over time. This is expected to occur through ongoing implementation of IIBA provisions on Inuit employment and retention. Likewise, Baffinland's Apprenticeship Program, Morrisburg HEO Training Program, Inuit Internship Program, Work Ready Program, and other initiatives are anticipated to improve Inuit employment levels over time. Ongoing monitoring of employment levels against EIS predictions and the IIBA's MIEGs will provide a means of tracking the success of Baffinland's efforts in this area. Comments shared during community engagement for the Project have highlighted the importance of employment opportunities in the LSA and the desire for this Project benefit to continue. Insights such as these, combined with the data presented above, confirm the Project has had positive effects on employment of LSA residents. However, it could take several years to fully realize the Project's Inuit employment potential and for the success of mitigation measures to ultimately be determined.

Residual effect	New Career Paths
Summary	The EIS predicted the Project would have a positive effect on the ability of LSA residents to progress in their jobs and careers. This effect would occur because of new career paths introduced to the region, from entry-level through step-by-step advancement to higher-level jobs.
Existing mitigation	<ul> <li>Management commitments and Company policies related to Inuit employment and retention, including commitments made in the IIBA</li> <li>Training-to-employment programs such as Baffinland's Apprenticeship Program, Morrisburg HEO Training Program, Inuit Internship Program, and Work Ready Program</li> <li>Career support and advancement initiatives, including career path development plans for every Inuk employee and career paths for each Baffinland department (in development)</li> <li>A 'Lines of Progression Policy' and Career Path Working Group</li> <li>Creation of a supportive work environment (e.g. EFAP, Cultural Advisors, Human Resource Advisors – Inuit Relations, introduction of Inuit Success Assurance team, on-site cultural initiatives)</li> </ul>
Monitoring results	Eight Inuit were promoted to new positions in 2019. Some Project careers represent an opportunity for individuals to improve their existing employment status (e.g. from unemployed to employed, from part-time to full-time, from lower-skilled to higher-skilled positions) and/or may form the basis of future promotion and advancement at the Project. The career opportunities introduced to the region represent a positive effect of the Project and likely reflect the commitments and mitigation measures Baffinland has developed in this area. However, there were several Baffinland Inuit employee departures in 2019 (34 individuals) and high turnover has been documented in previous years (although 18 Inuit were also rehired in 2019). High rates of employee turnover have also been an issue for other Nunavut organizations in the past. Baffinland continues to monitor employee turnover causes and outcomes and has committed to reducing turnover, increasing Inuit employment, and providing opportunities for Inuit career advancement where feasible. Note that it could take several years to fully realize the Project's Inuit employment potential and for the success of mitigation measures to ultimately be determined.



# 4 · Contracting and Business Opportunities

The contribution of the Project to the economy of Nunavut and its communities through payroll and contract expenditures

## **FEIS Prediction**

"The Project will have a significant positive effect on the level of opportunities available for local businesses to pursue. These opportunities will be available over the relatively long-time horizon of the Project, and many will be available on a continuous basis. These are considered to be important attributes of the Project's impact on business opportunities as they should support the developmental context seen in the LSA."

## **Key Findings**

- Inuit income from Baffinland and contractor employees totalled \$20.3 million in 2019 and representing 14.4% of total Project payroll. Of this, nearly \$13.3 million went to Inuit who reside in the LSA. This represents a large increase over 2018 Inuit payroll, largely due to both additional Inuit employment as well as the inclusion of contractor payroll due to better reporting requirements.
- Approximately \$289 million in contracts were committed to Inuit firms in 2019, representing nearly 38% of total contract commitments and an increase from 2018 levels.
- In 2019, the number of registered Inuit firms in the LSA and Iqaluit continued to increase steadily, with the number of firms up 27 and 40 since 2013, respectively.

## 4.1 Employee payroll by Inuit status, scale

## **Data and trends**

The figures below provide an overview of payroll expenditures for Baffinland and contractor employees. Figure 26 displays Inuit payroll by year; Figure 27 displays 2019 Inuit payroll by community; and Figure 28 displays 2019 Inuit and non-Inuit payroll.



Source: (Baffinland, 2019) | \*Note that the 2019 increase is in part due to the inclusion of contractor income, which was not included in previous years

## Interpretation

Payroll expenditures to LSA employees indicate the degree to which an expanded market for consumer goods and services has been created by the Project. As shown in Figure 26, Baffinland and contractor Inuit employee income totalled \$20.3 million in 2019. Of this, nearly \$13.3 million went to Inuit who reside in the LSA. Through the creation of employment opportunities in the LSA, the Project has created new sources of income for LSA residents. It is reasonable to expect that some of this new income is available for residents to spend on consumer goods and services. The substantial 2019 increase in Inuit payroll over 2018 values is due to both additional Inuit employment as well as the inclusion of contractor payroll due to better reporting requirements.

Figure 27 displays the proportion of Baffinland and contractor Inuit employee payroll by LSA community in 2019. The top three LSA communities in terms of Inuit payroll expenditure in 2019 were Arctic Bay (\$3.64 million), Clyde River (\$2.96 million) and Pond Inlet (\$2.72 million). Igloolik continued to be the lowest earning LSA community in 2019, earning about \$1.61 million. The difference in total payroll expenditure between communities is due to the number of employees from each community, and the income earned by each individual.

The \$20 million paid to Inuit employees represents approximately 14.4% of the total Baffinland and contractor payroll (Figure 28). Since 2017, Baffinland and contractors have provided \$37.8 million in payroll to Inuit employees. Baffinland's commitments to Inuit employment (and by extension those of contractors), including those made through the IIBA help maintain and grow payroll expenditures for Inuit employees, including those residing in LSA communities.

# 4.2 Contract expenditures to Inuit firms

Figure 29. Contract commitments on Inuit firms

## **Data and trends**

Figure 29 displays the value of contracting that has occurred with Inuit Firms at the Project since 2015. Total contract commitments on Inuit and Non-Inuit firms is shown in Figure 30.



Figure 30: Contract commitments on Inuit and Non-Inuit firms (2019)

Source: (Baffinland, 2019)

## Interpretation

In 2019, approximately \$289 million worth of contracts were committed to Inuit firms, representing nearly 38% of all contracts awarded by the Project (\$760.7 million). Contract commitments to Inuit firms were \$147.9 million higher than in 2018, but lower than the peak level of \$387 million in 2017, during which there were several large construction contracts. Since Project development, a total of \$1.2 billion worth of contracts has been awarded to Inuit Firms. These contracting

opportunities likely reflect the commitments Baffinland has made on Inuit firm procurement through the IIBA and other initiatives such as the IPCS.

# 4.3 Registered Inuit firms

## **Data and trends**

Nunavut Tunngavik Inc. (NTI) maintains an Inuit Firm Registry database for Nunavut. This database provides the name of each registered Inuit Firm<sup>6</sup>, describes each firm's area of business operations, and location where the firm is based. The number of registered Inuit Firms in the LSA since 2013 are presented in Figure 31.



Figure 31. Registered Inuit firms in Iqaluit and the North Baffin LSA

Source: (Eegeesiak, 2016; NTI, 2020)

## Interpretation

The number of registered Inuit Firms in the LSA is a potential indicator of the degree to which an expanded market for consumer goods and services has been created by the Project. This is because new Project-generated consumer discretionary income is expected to result in increased demand for (and spending on) local goods and services. Subsequently, the number and offerings of local businesses may increase to meet this demand. In 2019, a total of 160 active Inuit Firms were registered in the LSA. Forty-three of these firms were based in the North Baffin LSA communities and 117 were based in Iqaluit. Since 2013, the number of active Inuit Firms registered in Iqaluit has increased by twenty-seven, while the number of active Inuit Firms registered in Iqaluit has increased by forty.

<sup>&</sup>lt;sup>6</sup> As noted by (NTI, 2020), 'Inuit Firm' means an entity which complies with the legal requirements to carry on business in the Nunavut Settlement Area, and which is a limited company with at least 51% of the company's voting shares beneficially owned by Inuit, or a cooperative controlled by Inuit, or an Inuk sole proprietorship or partnership.

# 4.4 VSEC Effects assessment

There were two residual effects for the Population Demographics VSEC assessed in the Mary River EIS. Monitoring results applicable to these are summarized below.

Residual effect	Expanded Markets for Consumer Goods and Services
Summary	The EIS predicted the Project would expand the market for consumer (i.e. non-Project related) goods and services across the LSA. This would result in a positive effect.
Existing mitigation	Company commitments related to Inuit employment and contracting (e.g. in the IIBA) which support the development of an expanded market for consumer goods and services in the LSA. This is because of the increased purchasing power local residents are expected to have due to Project-induced direct and indirect employment income.
Monitoring results	The Project continued to expand the market for consumer goods and services across the LSA in 2019. Considerable amounts were spent on Baffinland's LSA Inuit employee payroll and contracting with Inuit Firms (approximately \$289 million committed) in 2019. These new contributions to the Nunavut economy are a direct result of Project development and represent a positive effect. This is because increased income from direct and indirect Baffinland employment can provide LSA residents with a greater capacity to purchase local goods and services. Increased income may also stimulate business growth (e.g. existing businesses may expand to meet increased consumer demand or new businesses may emerge, wealth generated through employment may increase an individual's ability to start a new business). The number of Inuit Firms registered in the LSA communities has also increased (by 27) since 2013, which is consistent with a potential positive Project effect. It's possible that continued monitoring may uncover additional positive Project effects (e.g. it may take an extended period for some businesses to respond to emerging commercial opportunities). There is no evidence to suggest mitigation measures need to be modified at this time.

Residual effect	Expanded Markets for Business Services to the Project
Summary	The EIS predicted the Project would have a positive effect on creating market opportunities for businesses in the LSA and RSA to supply goods and services to the Project.
Existing mitigation	<ul> <li>Implementation of several Inuit contracting policies, and the development of the IPCS. These have been designed to give Inuit firms preferential treatment and assistance in the contract bidding process.</li> <li>Baffinland's IIBA with the QIA includes several provisions related to Inuit contracting. In addition, a Business Capacity and Start-Up Fund has been created to assist Inuit Firms. Baffinland contributes \$275,000 annually to the fund, which assists with locating start-up capital and financing, management development, ongoing business management, financial management, contracts and procurement, and human resources management. This fund is managed by the QIA.</li> </ul>
Monitoring results	Since Project development, a total of \$1.2 billion worth of contracts have been committed to Inuit Firms. \$289 million in contracts was committed to Inuit Firms in 2019. Baffinland contracting data confirms the Project has had a positive effect on creating market opportunities for businesses in the LSA and RSA to supply goods and services to the Project. There is no evidence to suggest mitigation measures need to be modified at this time.



# 5 · Human Health and Wellbeing

The wellbeing and health of communities and individuals within the North Baffin LSA

## **FEIS Predictions**

"Positive residual effects of the Project on human health and well-being are anticipated to significantly improve the wellbeing of most children of parents working at the Project. The potential that some children may experience an overall decline in well-being is acknowledged, and is assessed to be not significant, based on low magnitude and infrequent occurrence."

"During an early period of transition, the potential for negative residual effects on substance abuse to be experienced is acknowledged but assessed to be not significant due to its short duration and moderate magnitude. Over the medium term and extending beyond Project termination, an overall positive residual effect on substance abuse is anticipated. This is assessed to be not significant based on the moderate magnitude and a moderate level of uncertainty related to its occurrence."

"Negative residual effects arising from the absence of workers from the community are recognized to occur, although not at a high enough magnitude for significant effects on community social stability and are therefore assessed to be not significant."

## **Key Findings**

- The average proportion of tax filers with employment income in the North Baffin LSA increased slightly in 2016 (from 78.8% to 79.4%), whereas Iqaluit and Nunavut remained the same (88.0% and 82.0%, respectively).
- The median employment income increased in 2015 in the:
  - North Baffin LSA by 5%, from \$15,998 to \$16,790
  - Iqaluit by 0.6%, from \$72,580 to \$73,000
  - Nunavut by 5%, from \$29,270 to \$30,670
- The percentage of the population receiving social assistance in the North Baffin LSA increased slightly in 2018 (from 58.4% to 59.0%), Iqaluit saw a decrease of 2% (from 15.0% to 13.0%), and there was a substantial increase in Nunavut (from 39% to 50%).
- 24 drug and alcohol-related contraband infractions occurred at the Project sites among Baffinland and contractor employees in 2019, a slight decline from 2018.
- The number of impaired driving violations increased in 2018 in the North Baffin LSA (from 38 to 41), Iqaluit (from 41 to 77) and Nunavut (from 240 to 376).
- The number of drug violations decreased substantially in 2018 in the North Baffin LSA (from 38 to 22), Iqaluit (from 60 to 28), and Nunavut (from 203 to 144).
- The number of youths charged increased in 2018 in the North Baffin LSA (from 22 to 26) Iqaluit (from 18 to 39) and decreased in Nunavut (from 154 to 139).
- The number of criminal violations per 100,000 persons in 2017:
  - $\circ$   $\,$  North Baffin LSA: 6% increase, from 22,610 to 24,169  $\,$
  - o Iqaluit: 0.13% decrease, from 62,143 to 62,065
  - Nunavut: 2% increase, from 35,740 to 36,485
- Since Baffinland launched the Employee and Family Assistance Plan (EFAP), usage has been steadily increasing and in 2019 the plan was accessed 60 times (up by 46% over 2018 usage).
- The percentage of health centre visits related to infectious diseases increased in 2016 in the North Baffin LSA (from 2.1% to 3.5%), Iqaluit (from 0.2% to 1.7%), and Nunavut (from 2.2% to 4.6%).

# 5.1 Income and social assistance

### **Data and trends**

Figure 32 below displays the proportion of tax filers with employment income in Iqaluit, the North Baffin LSA and Nunavut, while Figure 33 display the median employment income of residents in Iqaluit, the North Baffin LSA and Nunavut.

Figure 32. Proportion of tax filers with employment income (2006 – 2016)





Source: (Nunavut Bureau of Statistics (NBS), 2019)

# Figure 34 displays the proportion of the population in Iqaluit, the North Baffin LSA and Nunavut receiving social assistance.

Figure 34. Proportion of population receiving social assistance (2009 – 2018)



Source: (Nunavut Bureau of Statistics (NBS), 2019e)

## Interpretation

Employment income indicators are useful for tracking household financial performance in the LSA communities. 2016 was the most recent year data on the proportion of tax filers with employment income were available. Compared to 2015, 2016 saw a slight increase in the average proportion of tax filers with employment income in the North Baffin LSA (from 78.8% to 79.4%), whereas Iqaluit and Nunavut remained the same (88.0% and 82.0%, respectively). Compared to pre-

development period averages, there has been a decrease in the average proportion of tax filers with employment income by 4% in the North Baffin LSA, 1% in Iqaluit, and 4% in Nunavut in the post-development period.

The data do not currently appear indicative of a positive Project influence, as decreasing trends in the proportion of tax filers with employment income have been noted in the LSA since Project development. However, a decreasing post-development trend was also noted throughout Nunavut, and prior to Project development in the North Baffin LSA. This suggests longer-term (in the case of the North Baffin LSA) and/or broad-scale factors may be driving these trends rather than the Project. However, Baffinland predicted the Project could improve household income in the LSA over time; as such, this indicator will continue to be monitored for emerging trends.

2016 was the most recent year data on median employment income was available from the (Nunavut Bureau of Statistics (NBS), 2019). Compared to 2015, there have been increases in median employment income in the North Baffin LSA (from \$15,998 to \$16,790) and Nunavut (from \$29,270 to \$30,670), but an increase in Iqaluit (from \$72,580 to \$73,000). Compared to pre-development period averages, there have been increasing trends in average median employment income in the North Baffin LSA (from \$14,905 to \$16,386), Iqaluit (from \$60,513 to \$72,243), and Nunavut (from \$25,270 to \$29,518) in the post-development period.

The percentage of the population receiving social assistance can also provide insights into household financial performance. 2018 was the most recent year data on the percentage of social assistance recipients were available (Nunavut Bureau of Statistics (NBS), 2019e). Note that no data are available for 2014. Compared to 2017, 2018 saw a slight increase in the percentage of the population receiving social assistance in the North Baffin LSA (from 58.4% to 59.0%) and a more substantial increase in Nunavut (from 39% to 50%), whereas Iqaluit saw a decrease of 2% (from 15.0% to 13.0%). Compared to pre-development period averages, there has been a decreasing trend in the average percentage of the population receiving social assistance in Iqaluit (from 19.0% to 14.6%) in the post-development period. However, the North Baffin LSA saw a small increase in social assistance uptake in the post-development period (from 55.7% to 57.4%), as did Nunavut (from 40.8% to 41.6%).

## 5.2 Infractions and criminal violations

#### Figure 35 depicts the number of drug and alcohol related contraband infractions at Project sites.



Figure 35. Drug and alcohol related contraband infractions at Project sites

Source: (Baffinland, 2019)

#### Impaired driving violations within Nunavut and the communities is shown in Figure 36.

Figure 36. Impaired driving violations within Nunavut and communities



Source: (Nunavut Bureau of Statistics (NBS), 2018d)

#### Figure 37 displays the total drug violations processed by local law enforcement within Nunavut and the communities.



Figure 37. Drug violations processed by local law enforcement within Nunavut and communities

Source: (Nunavut Bureau of Statistics (NBS), 2018d)

#### Figure 38 shows the number of youth charged by local law enforcement within Nunavut and the communities.



Figure 38. Youth charged by local law enforcement within Nunavut and communities

Source: (Statistics Canada, 2019)

#### Crime rate within Nunavut and the communities is represented in Figure 39.

Figure 39. Crime rate within Nunavut and communities



Source: (Nunavut Bureau of Statistics (NBS), 2018c) | \*Data for crime was not available in June 2000 for Clyde River, or in June or December 2000 for Pond Inlet. Data from 1999 was copied over for these months and, as such, 2000 should not be compared to other years.

#### Interpretation

#### **Contraband Infractions**

The number of drug and alcohol related contraband infractions at Project sites is a useful indicator for the transport of substances that may be occurring at the Project. The drug and alcohol related contraband infractions in Figure 35 include confiscated drugs, alcohol, or related paraphernalia. In 2019, 24 drug and alcohol-related contraband infractions occurred at Project sites among Baffinland and contractor employees – a decrease of 4 infractions from 2018 values. This topic will continue to be monitored for emerging trends.

#### **Impaired Driving**

The number of impaired driving violations in the LSA may provide insight into whether rates of alcohol abuse are changing. 2017 was the most recent year data on the number of impaired driving violations were available from the Nunavut Bureau of Statistics (2018d). Compared to 2016, 2017 saw an increase in the number of impaired driving violations in the North Baffin LSA (from 38 to 41), Iqaluit (from 41 to 77) and Nunavut (from 240 to 376). Compared to pre-development period averages, there has been an increasing trend in the average number of impaired driving

violations in the North Baffin LSA (from 24.8 to 34.0) and decreasing trends in Iqaluit (from 57.8 to 54.2) and Nunavut (from 257.2 to 252.6) in the post-development period.

The data may be indicative of a negative Project influence, as the average number of impaired driving violations has increased in the North Baffin LSA since Project development. However, this trend was also evident prior to Project development and the change in the average number of impaired driving violations (+9.2) remains similar to the predevelopment (or baseline) period change in average (+9.0). Conversely, decreasing trends have occurred in Iqaluit and Nunavut in the post-development period and were not evident prior to Project development (they were previously increasing). Reasons for the lack of a similar trend reversal in the North Baffin LSA are currently unknown. While it's possible the Project may be a contributing factor, current trends could also be a continuation of pre-development trends. Substance use issues can be influenced by several factors and Baffinland will continue to monitor this topic for new insights that may emerge.

### **Drug Violations**

The number of drug violations in the LSA may provide insight into whether rates of drug abuse are changing. 2017 was the most recent year data on the number of drug violations were available (Nunavut Bureau of Statistics (NBS), 2018d). Compared to the previous year data were available, there has been a substantial decrease in the number of drug violations in the North Baffin LSA (from 38 to 22), Iqaluit (from 60 to 28), and Nunavut (from 203 to 144). Compared to pre-development period averages, there has been a decreasing trend in the average number of drug violations in the North Baffin LSA (from 39.4 to 38.8), Iqaluit (from 112 to 76.8), and Nunavut (from 332 to 253.8) in the post-development period.

The data do not currently appear indicative of a negative Project influence, as the average number of drug violations has declined in the LSA since Project development, unlike prior to Project development (where the number was increasing). A comparable situation has also been noted across Nunavut, which suggests broad-scale factors may be driving these trends rather than the Project. However, Baffinland's 2017 Socio-Economic Monitoring Report (Baffinland, 2019) showed an increasing post-development trend in the North Baffin LSA (suggestive of a negative Project influence at the time); the change to a decreasing trend is a positive reversal. Substance use can be influenced by several factors and Baffinland will continue to monitor this topic for new insights that may emerge.

#### **Youth Charges**

The number of youths charged may be one indicator of youth well-being in the LSA communities. 2018 was the most recent year data on the number of youths charged were available from (Statistics Canada, 2019). Compared to 2017, The number of youths charged increased in 2018 in the North Baffin LSA (from 22 to 26) Iqaluit (from 18 to 39), and decreased in Nunavut (from 154 to 139). Compared to pre-development period averages, there have been decreasing trends in the average number of youth charged in the North Baffin LSA (from 10 to 5.7), Iqaluit (from 55.8 to 27.7), and Nunavut (from 535.7 to 173.2) in the post-development period.

The data may be indicative of a positive Project influence, as the average number of youths charged has declined in the LSA since Project development. The change in average number of youths charged in the North Baffin LSA (-17.0) has also more than doubled since the pre-development (or baseline) period (-6.6). However, decreasing trends in the LSA were also evident in the pre-development period and a comparable situation has been noted across Nunavut. This suggests longer-term and/or broad-scale factors may be driving these trends, rather than the Project. Youth charges can be influenced by several factors and Baffinland will continue to monitor this topic for new insights that may emerge.

#### **Crime Rate**

Project Certificate Term and Condition No. 154 states other indicators should be monitored "as deemed appropriate". Members of the SEMWG previously requested that community crime rate data be included in Baffinland's socio-economic monitoring program. The data are useful for indicating whether crime is increasing or decreasing in an area. 2017 was the most recent year crime rate data were available (Nunavut Bureau of Statistics (NBS), 2018c). Compared to 2016, there was an increase in the number of violations per 100,000 persons in the North Baffin LSA (from 22,610 to 24,169) and Nunavut (from 35,740 to 36,485), and a small decrease in Iqaluit (from 62,143 to 62,065). Compared to pre-development period averages, there has been an increasing trend in average crime rates in the North Baffin LSA (from 21,458 to
21,749) and decreasing trends in Iqaluit (from 75,459 to 63,273) and Nunavut (from 39,459 to 34,775) in the post-development period.

The data may be indicative of a negative Project influence, as average crime rates have increased in the North Baffin LSA since Project development. Conversely, a decreasing post-development trend has been noted in Iqaluit that was not evident prior to Project development (it was previously increasing) and a comparable situation has been noted across Nunavut. Reasons for the lack of a similar trend reversal in the North Baffin LSA are currently unknown. However, the current North Baffin LSA increasing trend was also evident prior to Project development, and the post-development change in average (+291) is less than the pre-development (or baseline) period change in average (+1,060). While it is possible the Project may be a contributing factor, the North Baffin LSA post-development trends could also be a continuation of pre-development trends. Crime issues can be influenced by several factors and Baffinland will continue to monitor this topic for new insights that may emerge.

## 5.3 Employee and public health

# Figure 40 shows the total number of times that Baffinland's Employee and Family Assistance Plan was accessed since the start of the program in 2015.



Figure 40. Number of times Baffinland's Employee and Family Assistance Plan (EFAP) was accessed

Source: (Baffinland, 2019)

Figure 41 displays the proportion of health centre visits related to the diagnosis or treatment of infectious diseases in the communities within the North Baffin LSA and Iqaluit. Within the diagnostic grouping termed "infectious diseases" the most common visitation categories are viral infection, tuberculosis of the lung, genital yeast infections, viral warts, and candida stomatitis.

#### Figure 41. Proportion of public health centre visits related to infectious disease



Source: (Nunavut Bureau of Statistics (NBS), 2018b)

#### Interpretation

#### Baffinland's Employee and Family Assistance Plan

Members of the SEMWG previously requested that data on the number of times Baffinland's EFAP is accessed be included in Baffinland's socio-economic monitoring program. Baffinland implemented its Employee and Family Assistance Plan (EFAP) in 2015 to provide its employees with access to a network of certified professionals who deliver personal, mental, and financial wellness programs. The program (administered by Homewood Health Solutions) is free, confidential, and covers a broad range of wellness subjects including but not limited to depression, addiction, family, work-life balance, etc. The program can be accessed both over the phone and online with the phone service being offered in both English and Inuktitut. Since the program's creation, usage has been steadily increasing and in 2019 the plan was accessed 60 times (up by 19 over 2018, or an increase of 46%).

On-site Cultural Advisors are also available for all of Baffinland's Inuit employees to meet with and all employees have regular access to an on-site Project physician's assistant. Per Article 11.7 of the IIBA, a Community Counsellor Program has been established by Baffinland in the North Baffin LSA communities. In 2019, Baffinland worked closely with the Ilisaqsivik Society to hire community councillors in Igloolik, Clyde River and Sanirajak, with efforts ongoing to hire individuals in Arctic Bay and Pond Inlet. Since the start of the program in June 2019, well over 100 interventions have happened, providing counselling support to individuals and their families.

At the 2019 Annual Project Review Forum, it was recommended that Baffinland undertake a review of its corrective action policy (particularly regarding intoxication), and work to enhance awareness of the EFAP and the community counsellor program (alcohol and addictions). Baffinland is investigating support for related substance abuse/alcohol and addictions through a medical practitioner as well as the establishment of alcohol and narcotic anonymous programs at Project sites. One of Baffinland's 2019 IIBA implementation priorities was to establish the community counsellor support in the North Baffin LSA. Various forms of personal assistance may be obtained through these programs, as needed. This topic will continue to be monitored for emerging trends.

#### **Community Health Centre Visits Related to Infectious Disease**

Community health centre visit data can help identify health issues occurring in a community. Information on how the Project may affect rates of sexually transmitted infections and other communicable diseases in the LSA has been specifically requested in the Project Certificate. As such, indicator data on the percentage of health centre visits by the diagnostic group 'infectious diseases' is tracked through Baffinland's monitoring program. 2016 was the most recent year

data on the percentage of health centre visits related to infectious diseases were available (2018b). Compared to 2015, there was an increase in the percentage of health centre visits related to infectious diseases in the North Baffin LSA (from 2.1% to 3.5%), Iqaluit (from 0.2% to 1.7%), and Nunavut (from 2.2% to 4.6%). Compared to pre-development period averages, there has been a slight increasing trend in the average percentage of health centre visits related to infectious diseases in the North Baffin LSA (from 2.6% to 2.7%) and decreasing trends in Iqaluit (from 2.0% to 1.0%) and Nunavut (from 4.8% to 3.1%) in the post-development period.

The data may be indicative of a negative Project influence, as the average percentage of health centre visits related to infectious diseases has increased in the North Baffin LSA since Project development. This trend was not evident in the pre-development period (it was previously decreasing). Conversely, the decreasing or stable trends that were evident in Iqaluit and Nunavut prior to Project development are all decreasing in the post-development period. Reasons for the lack of a similar trend in the North Baffin LSA are currently unknown. However, the change in average percentage of health centre visits related to infectious diseases in the North Baffin LSA is small (+0.1%) and the current average (2.7%) is similar to that documented in the pre-development (or baseline) period (2.6%). Likewise, there was a notable spike in health centre visits across Nunavut in 2016, which suggests the occurrence of a territory-wide infectious disease issue that may have influenced monitoring results. Health-related issues can be influenced by several factors and Baffinland will continue to monitor this topic for new insights that may emerge.

The Project continues to provide all workers with regular access to a physician assistant, with whom they can confidentially address health-related issues (including those unrelated to the workplace).

### 5.4 VSEC Effects assessment

There were six residual effects for the Human Health and Well-Being VSEC assessed in the EIS. Monitoring results applicable to each of the residual effects are summarized below.

Residual effect	Changes in Parenting
Summary	The EIS predicted the Project would have a positive effect on parenting (particularly as it applies to well- being of children) in the LSA communities (e.g. from increased confidence and financial independence gained through employment, improved mental well-being from having a job and income). The EIS also predicted the Project could have some negative effects on parenting.
Existing mitigation	<ul> <li>A predictable rotational schedule</li> <li>Meaningful employment and incomes</li> <li>Work readiness training</li> <li>Counselling and support resources (e.g. EFAP for permanent employees and their dependents, on-site Cultural Advisors, Community Counsellor Program in the North Baffin)</li> <li>Contributions to the INPK Fund which provides up to \$1.1 million/year for community wellness-focused projects in the North Baffin LSA</li> <li>Baffinland Sponsorship and Donation Fund</li> </ul>
Monitoring results	Monitoring data on the number of youths charged are currently consistent with the presence of positive Project effects, as the average number of youths charged in the LSA have declined since Project development. However, crime rates can be influenced by several factors and Baffinland will continue to monitor this topic for new insights that may emerge. Further, Baffinland I=plans to increase its interactions with LSA RCMP Detachments other public service providers to discuss socio-economic Project affects including changes in parenting. Baffinland also has in place an MOU with the Government of Nunavut will discuss these and other issue of interest to the parties. There are other positive indications the Project is contributing to the enhanced well- being of children by providing LSA residents (and parents) with opportunities to obtain meaningful employment and incomes. These opportunities can help reduce the various family stresses and uncertainties associated with un- and under- employment. Baffinland also provides counselling and support resources for individuals who may require family-related or other forms of personal assistance. There is no direct evidence to suggest mitigation measures need to be modified at this time.

Residual effect	Household Income and Food Security
Summary	The EIS predicted the Project would have a positive effect on increased household income and food security (particularly as they apply to well-being of children) in the LSA.
Existing mitigation	<ul> <li>Meaningful employment and incomes</li> <li>Work readiness training</li> <li>Financial literacy training</li> <li>Assistance provided to hunters accessing the Project Area</li> <li>Contributions to the INPK Fund which provides up to \$1.1 million/year for community wellness-focused projects in the North Baffin LSA</li> <li>School Lunch Programs</li> <li>Baffinland Sponsorship and Donation Fund</li> <li>Other contributions and initiatives related to food security in the LSA (as described in Section 10.2)</li> </ul>
Monitoring results	Monitoring data on median employment income are currently consistent with the presence of positive Project effects, as increasing income levels have occurred in the LSA since Project development. Monitoring data on the proportion of tax filers with employment income and social assistance levels are currently not consistent with the presence of positive Project effects, with decreasing trends in the LSA and increasing trends in social assistance having occurred since Project development. However, income levels and social assistance applications can be influenced by several factors and Baffinland will continue to monitor this topic for new insights that may emerge. It's also possible that some Project- related trends will take time to emerge. Beyond these measures, there are positive indications the Project makes contributions to improved household income and food security in the LSA. This has occurred by providing LSA residents with meaningful employment opportunities and through related contributions and initiatives. Employment income facilitates the purchase of food and other family goods, while also providing a means to participate in harvesting if desired. Additional discussion on food security and Baffinland initiatives in this area is provided in Section D. There is no direct evidence to suggest mitigation measures need to be modified at this time.
Residual effect	Transport of Substances Through Project Site
Summary	The EIS predicted the Project could increase availability of substances such as alcohol and illegal drugs in the North Baffin LSA due to their possible transportation through Project sites, resulting in a negative effect.
Existing mitigation	<ul> <li>Zero tolerance policy for alcohol/ drugs on site</li> <li>Baggage searches for all Baffinland and contractor employees arriving at site</li> <li>Increased screening and security procedures implemented in 2019</li> </ul>
Monitoring results	Baffinland notes that all contraband infractions are of concern and are taken seriously. The infractions that have occurred to date appear to represent a small number of individuals from the Project workforce. All individuals who do not comply with Baffinland's no drugs/no alcohol policy are immediately removed from site and disciplinary action (up to and including termination) is commenced. This management response supports Baffinland's goal of 'Safety First, Always,' while also preventing further transport of contraband

substances through Project sites. While relevant mitigation measures are in place, an increasing trend in

contraband infractions has been noted and will continue to be monitored.

Residual effect	Affordability of Substances Attitudes Toward Substances and Addictions
Summary	The EIS predicted increased income from employment at the Project could increase the ability of LSA residents to afford substances such as alcohol and illegal drugs. However, the EIS also predicted the Project could improve attitudes toward substances and addictions in the LSA (i.e. by providing positive incentives for individuals to reduce substance abuse). The overall effect of the Project on substance abuse was expected to be determined by the balance between these two effects. The EIS predicted a negative outcome may be noticeable during a transitional period of adaptation. Over the medium-term and extending beyond Project termination, an overall positive effect was anticipated.
Existing mitigation	<ul> <li>Zero tolerance policy for alcohol/ drugs on site Baggage searches for all Baffinland and contractor employees arriving at site</li> <li>Counselling and support resources (e.g. EFAP for permanent employees and their dependents, on-site Cultural Advisors, Community Counsellor Program in the North Baffin LSA)</li> <li>Contributions to the INPK Fund which provides up to \$1.1 million/year for community wellness-focused projects in the North Baffin LSA</li> <li>Increased screening and security procedures implemented in 2019</li> </ul>
Monitoring results	Monitoring data on impaired driving violations are currently consistent with the presence of negative Project effects in the North Baffin LSA, as the average number of impaired driving violations has increased since Project development. However, this increasing trend was also evident prior to Project development, and the change in average number of impaired driving violations (+9.2) has remained similar to the pre- development (or baseline) period change in average (+9.0). While it's possible the Project may be a contributing factor, current trends could also be a continuation of pre-development trends or the result of other factors.
	Conversely, monitoring data on drug violations are currently not consistent with the presence of negative Project effects, as the average number of drug violations have declined in the LSA since Project development. Substance use concerns raised by Project stakeholders are acknowledged. Substance use issues can be influenced by several factors and Baffinland will continue to monitor this topic for new insights that may emerge.
	There are additional positive indications the Project contributes to improved attitudes toward substances and addictions in the LSA, by providing LSA residents with meaningful employment opportunities within a drug- and alcohol-free environment. Baffinland also provides (or supports) various counselling, support, and well-being programs that may be relevant to drug- and alcohol-related issues. Further, the company will increase its direct engagement of LSA community services providers to discuss socio-economic Project affects including this residual effect. Baffinland also has in place an MOU with the Government of Nunavut will discuss these and other issue of interest to the parties. There is no direct evidence to suggest mitigation measures need to be modified at this time.

Residual effect	Absence from the Community During Work Rotations		
Summary	The EIS predicted the absence of workers from communities during their work rotations may lead to some negative effects on community processes (e.g. local coaching, politics, and social organizations) in the LSA. However, it was also predicted that organizations and activities would be able to adapt and carry on their functions in light of these effects.		
Existing mitigation	<ul> <li>A two week in/two week out rotation that allows employees to spend considerable time in their home communities</li> <li>Contributions to the INPK Fund which provides up to \$1.1 million/year for community wellness-focused projects in the North Baffin LSA</li> <li>Pre-employment training that reviews strategies for successful rotational work with prospective employees, so they can come better prepared to deal with challenges that may arise</li> <li>Consideration of alternative rotation schedules that are better aligned with familial and community activities</li> </ul>		
Monitoring results	The potential for some negative effects on community processes to arise as a result of workers being absent during their work rotations is acknowledged. However, the Project's overall effect remains unclear. This is because appropriate community-level indicator data are currently unavailable for this topic. Relevant mitigation is in place and there is no direct evidence to suggest mitigation measures need to be modified at this time. This topic will continue to be monitored for emerging trends through the QSEMC process and community engagement conducted for the Project.		



# 6 · Community Infrastructure & Public Services

The use of community and Project site infrastructure and impacts on community development

#### **FEIS Prediction**

"The Project may lead to some residual adverse effects on the ability of hamlets to recruit and retain workers as the level of competition for these workers increases through Project hiring. However, these effects are not considered to be significant, based on their short-term duration as Project-initiated training leads to improved levels of skill and experience in the labour force. As training and experience increases, this labour force capacity development effect will lead to significant positive outcomes on hamlet abilities to recruit workers."

#### **Key Findings**

- The average number of health centre visits per capita increased in the North Baffin LSA by 17.1% (from 8.2 to 9.7) and in Iqaluit by 5% (from 1.9 to 2.0) between the pre- and post-development period, consistent with Nunavut-wide increases since data was available.
- In 2019, there were 6,436 recorded visits to the on-site physician's assistant, up 2.1% from 2018. Of these visits, 1,648 were from Inuit employees, up 25.3% from 2018. Since 2016, the proportion of Inuit visits to the clinic has steadily increased, and in 2019, Inuit represented 34% of visits.
- Baffinland continued to utilize some LSA community infrastructure to support ongoing Project development in 2019, including renting community office space and meeting facilities, and using community airport infrastructure in the LSA. In 2019, there was increased usage of all LSA airports, for a total of 2,253 Project aircraft movements across all LSA airports (up by 451, or 22.5% over 2018).

### 6.1 Use of community health centres

#### **Data and trends**

Figure 42 below displays per capita health centre visits by community within the LSA.





Source: (Nunavut Bureau of Statistics (NBS), 2018b)

# Table 10 displays average per capita health centre visits for the pre- and post-development periods for both the North Baffin LSA and Iqaluit.

	North Baffin LSA		Iqaluit	
Period	Average	Change from previous period	Average	Change from previous period
2003 - 2007	8.0	-	1.1	-
2008 – 2012 (pre-development period)	8.2	+0.2	1.9	+0.8
2013 – 2016 (post-development period)	9.7	+1.4	2.0	+0.1

Table 10: Health centre visits per capita in the North Baffin LSA and Iqaluit averaged over selected time periods

Source: (Nunavut Bureau of Statistics (NBS), 2018b)

#### Figure 43 displays the number of health centre visits in Iqaluit and the North Baffin LSA communities.

Figure 43. Visits to community health centres by community (2003 – 2016)



Source: (Nunavut Bureau of Statistics (NBS), 2018b)

#### Table 11 displays average values for health centre visits in the North Baffin LSA and Iqaluit for both pre- and postdevelopment periods.

Table 11. Average health centre visits in the North Baffin LSA and Iqaluit (select time periods)

	North Baffin LSA		Iqaluit	
Period	Average	Change from previous period	Average	Change from previous period
2003 - 2007	39,915	-	7,009	-
2008 – 2012 (pre-development period)	46,264	+6,348	13,020	+6,011
2013 – 2016 (post-development period)	59,402	+13,138	14,786	+1,856

Source: (Nunavut Bureau of Statistics (NBS), 2018b)

#### Interpretation

The use of health centres provides an indication of the demands placed on community health services. At the time of report preparation, the most recent data was for 2016 (Nunavut Bureau of Statistics (NBS)). When comparing the average visits across communities for the pre-development (2008 – 2012) and post-development (2013 – 2016) periods, we see an increase in both per capita and total visits to community health centres. The average number of health centre visits increased by 28.4% in the North Baffin LSA, and by 14.3% in Iqaluit between the pre-development and the post-

development period. The average number of health centre visits per capita increased by 17.1% in the North Baffin LSA (from 8.2 to 9.7) and by 5% in Iqaluit (from 1.9 to 2.0) between the pre-development and the post-development period.

This data could be indicative of the Project's influence on usage of health care services, however an increase in visits to community health centres has also been observed throughout Nunavut. There has been an increase in both total and per capita visits to community health centres since the earliest years that data became available (2003 - 2007), as well as during the pre- and post-development phases. That this trend can bee seen throughout the province and across years suggests that longer-term and/or broad-scale factors may be driving these trends rather than factors associated with the Project.

There may also be trends that have not yet become evident. When comparing the data year-over-year, the per capita number of health centre visits decreased from 2014 to 2015 (10.1 to 9.4 in the North Baffin LSA, and 2.6 to 2.2 in Iqaluit) and decreased further from 2015 to 2016 (9.4 to 8.9 in the North Baffin LSA, 2.2 to 1.0 in Iqaluit). Health centre visits can be influenced by several factors and Baffinland will continue to monitor this topic for new insights that may emerge.

The Government of Nunavut remains responsible for health care delivery and data collection in the LSA communities. It is unknown if the Government of Nunavut has information that would provide additional clarity on the trends observed. An MOU has also been signed between Baffinland and the Government of Nunavut's Department of Health regarding site health services and medevac procedures.

## 6.2 Use of Project site physician assistants

#### **Data and trends**

Figure 44 displays the number of recorded visits to the Project site physician's assistant since 2013.

Inuit Non-Inuit 5K to physician's assistant 4K ЗK 5.1K 5.0K 4.8K 2K Visits 3.2K 2.6K 2.1K 1K 1.6K 1.3K 1.2K 1.2K 0.9K 0.8K 0.8K 0 3K 0K 2018 2013 2014 2015 2016 2017 2019 Year

Figure 44. Visits to Project site physician's assistants by Inuit status

Source: (Baffinland, 2019)

## Interpretation

Baffinland provides all employees with regular access to an on-site physician's assistant. Project site physician's assistant visit data can be used to track demands placed on Project health services. In 2019, there were 6,436 recorded visits to the physician assistant, up 2.1% from the 2018 total of 6,301 visits. 2019 also saw an increase in the number of Inuit who visited the Project site physician's assistant with 1,648 total visits, up 25.3% from the 1,315 visits recorded in 2018. Since 2016, the proportion of Inuit visits to the clinic has steadily increased. This trend continued in 2019, where Inuit represented 34% of visits to Project site physician's assistant, up from 26% in 2018. This increase in both total visits and the proportion of visits attributed to Inuit use does not necessarily represent a negative trend with respect to health and

wellness. Additional visits to the physician's assistant may be indicative of Baffinland and contractor employees proactively maintaining their health and seeking care or treatment for ailments. The trend does not necessarily indicate an increase in the number of ailments afflicting the communities. The data demonstrate that the clinics are serving an increasingly important function in addressing the medical needs of Baffinland and contractor employees.

The data also provide insight into the role the Project may have in reducing demands placed on community health services (e.g. visits to the Project site physician's assistant may lessen the burden on local healthcare infrastructure). The increase in usage by Inuit could potentially be linked to the decrease in usage of community health care centres in some LSA communities over the last year.

## 6.3 Baffinland use of LSA community infrastructure

#### Data and trends

Figure 45 shows the total number of Project aircraft movements, both rotary and fixed wing, at LSA community airports each year since 2014.



Figure 45: Project aircraft movements at Iqaluit and North Baffin LSA community airports

Source: (Baffinland, 2019)

#### Table 12 outlines 2019 health-related evacuations, including the number, type, and location of the evacuation.

Table 12: Health related evacuations and charters from Baffinland project sites (2019)

Site	Evacuation type	Number
	Air evacuation to the Iqaluit Regional Hospital	3
Milne Port	Charter to the Iqaluit Regional Hospital	2
	Charter to other health centre	0
	Air evacuation to the Iqaluit Regional Hospital	2
Mary River	Charter to the Iqaluit Regional Hospital	3
	Charter to other health centre	1

Source: (Baffinland, 2019)

Table 13 provides on overview of meetings and events held in LSA communities in 2019 related to Mary River.

Table 13. Meetings and events held in LSA communities (2019)

Month	Meeting or event
January	<ul> <li>Phase 2 public information sessions</li> <li>IIBA program update, mine and Milne Post MHTO Cabins relocation</li> <li>Meeting with Pond Inlet HTO on IIBA commitments</li> </ul>
February	<ul> <li>Meeting with QIA</li> <li>Meeting with MHTO on 2018 Narwhal Harvest Season, community-based monitoring</li> </ul>
March	<ul> <li>Community visit</li> <li>Presentation to Baffin Regional Mayors Forum</li> <li>Meetings on Phase 2 with Clyde River HTO and North Baffin Mayors</li> <li>Meeting with GN on MOU, QSEMC planning</li> </ul>
April	<ul> <li>Training center update</li> <li>Meeting with Government of Nunavut on investor confidence</li> <li>NIRB Phase 2 Technical meeting</li> <li>Community based monitoring meeting with Hamlet of Pond Inlet, QIA, MHTO</li> </ul>
May	<ul> <li>NIRB meeting on shipping and marine environment</li> <li>General discussion on recruitment with MLA</li> <li>General discussion on project with MLA</li> <li>Annual in person meeting with SEMWG</li> <li>Annual SEMC meeting</li> <li>Hunting season meeting with MHTO, QIA, Hamlet of Pond Inlet</li> </ul>
June	<ul> <li>Phase 2 community tour</li> <li>Technical meeting with GN on Phase 2</li> <li>Terrestrial Environment Working Group meeting</li> <li>Marine environment working group meeting</li> <li>Follow up meeting on Harvesting with MHTO, Hamlet of Pond Inlet, QIA</li> <li>2019 pre-shipping season meeting with MHTO, Hamlet of Pond Inlet, QIA</li> <li>Radio show on 2019 pre-shipping season</li> </ul>
July	GN Department of health meeting on pre-employment medical check ups
August	<ul> <li>Phase 2 information meeting for Pond Inlet residents</li> <li>Phase 2 update to mayor and SAO</li> <li>NIRB public meeting on Mary River monitoring</li> <li>Hamlet and HTO update on Day Care funding announcement</li> </ul>
September	<ul> <li>MHTO meeting on Phase 2 update</li> <li>North Baffin HTO meeting on Phase 2 update</li> <li>Elder and HTO representative meeting on community risk assessment</li> <li>Hamlet of Igloolik meeting on Phase 2 update</li> <li>Pond Inlet and MHTO meeting on rail alignment</li> <li>Hamlet council meeting on Phase 2 update</li> <li>Hamlet and HTO meeting on community benefit opportunities</li> <li>Clyde River Council and HTO meeting on Phase 2 update</li> <li>Meeting with CIRNAC on Phase 2 update</li> <li>Meeting with Government of Nunavut on Phase 2 update</li> <li>Meeting with Nunavut Premier on Baffinland update</li> <li>Information session with North Baffin MLAs</li> </ul>
November	<ul> <li>NIRB Phase 2 public hearings</li> <li>Public meeting with Hamlet / HTO</li> <li>Hamlet of Pond Inlet and MHTO discussion post Phase 2 public hearing</li> </ul>
December	Hamlet of Igloolik meeting on Phase 2 public hearing follow up and 2020 work planning

#### Interpretation

Baffinland continued to utilize some LSA community infrastructure to support ongoing Project development in 2019. To support the movement of workers, freight, and other materials to and from the Project, Baffinland uses community airport infrastructure in the LSA. This is due to the remote location of the Project and lack of viable alternative transportation methods (aside from seasonal marine re-supply). This use is small in comparison to other ongoing community uses but does add some incremental pressure on LSA facilities.

In 2019, there were 2,253 Project aircraft movements at LSA community airports, which is 451 more aircraft movements than in 2018. This includes fixed-wing aircraft (e.g. passenger, cargo, and 'combi' type) and rotary-wing aircraft (e.g. helicopters used for site activities). Figure 45 provides information on the number of Project aircraft movements at LSA community airports since 2014. It is noted that, given the increasing level of Project activity in 2019, Project-related aircraft movements increased at all of the LSA community airports. Project-related aircraft movements add some incremental pressure on LSA community airport facilities. However, LSA community airports regularly accommodate various non-Project passenger, cargo, and other aircraft (both scheduled and charter). In 2018 (the most recent year for which data is available), there were a total of 26,699 aircraft movements in the LSA. This includes 7,540 aircraft movements (Statistics Canada, 2020) and 19,159 aircraft movements at the Iqaluit airport (Statistics Canada, 2020). Project-related aircraft movements at LSA community airports in 2018 represented a small portion (8.4%) of this total.

Like in previous years, Baffinland has continued to use some LSA community infrastructure to support ongoing Project development. This included full-time rental of five offices for BCLOs in the North Baffin communities of Arctic Bay, Clyde River, Sanirajak, Igloolik, and Pond Inlet, and one office for Baffinland's Community Strategic Development and Northern Affairs team in Iqaluit. This also included short-term use of meeting rooms and other local services for meetings and events held in various LSA communities. Additional details on stakeholder and community meetings and events Baffinland has participated in may be found in the Company's Annual Reports to the NIRB as well as in Table 13 above. Baffinland's rental of office spaces in the LSA is generally limited to small facilities (i.e. to support individual BCLOs and Northern Affairs staff), and the use of local meeting rooms and accommodations is often intermittent and short-term in nature. Furthermore, the use of these spaces is a positive contribution of the Project to local economies (e.g. through payments of rental fees, purchase of related goods and services).

#### 6.4 VSEC Effects assessment

There were two residual effects for the Community Infrastructure and Public Services VSEC assessed in the EIS. Monitoring results applicable to each of the residual effects are listed in the following Tables.

Residual effect	Competition for Skilled Workers
Summary	The EIS predicted the Project could negatively affect the ability of Hamlets to maintain their staff in the short-term, due to increased competition for skilled workers created because of the Project.
Existing mitigation	• Provision of ongoing skills training to local residents, combined with work experience generated by the Project. These measures are expected to increase the pool of skilled workers in the local labour force in the medium- to long-term and negate any short- term, negative Project effects.
Monitoring results	Inuit Employee Survey results continue to indicate the Project may be having some negative effect on competition for workers in local communities. Results from the 2019 survey indicate 17 individuals (or 26.6% of known respondents) resigned from a previous job in order to take up employment with the Project. Of these individuals, nine were in casual/part-time positions and seven were in full- time positions (one was unknown). The highest recorded number and percentage of survey respondents who left positions in their communities (22, or 31.4%) occurred in the 2018 survey; however, not all these individuals were in full-time positions or necessarily all located in the North Baffin LSA. Ongoing training and experience generated by the Project (see Section 2.3, Section 2.4, and Section 3.3), in addition to regular employee turnover (see Section 3.4), are expected to continue increasing the pool of skilled workers in the local labour force and may negate negative Project effects over time. Community engagement also continues to indicate a high demand for new employment opportunities exists in the LSA. However, this topic will continue to be monitored for emerging trends. There is no direct evidence to suggest mitigation measures need to be modified at this time.

Residual effect	Labour Force Capacity
Summary	The EIS predicted the Project could positively affect the ability of Hamlets to maintain their staff in the medium- to long-term, due to increased labour force capacity created because of the Project.
Existing mitigation	<ul> <li>Provision of ongoing skills training to local residents, combined with work experience generated by the Project. Together, these are expected to increase the overall pool of skilled workers in the local labour force from which hamlets (and other local and regional organizations) can draw upon.</li> </ul>
Monitoring results	The Project continues to generate substantial training and experience opportunities for its employees (see Section 2.3, Section 2.4, and Section 3.3). Employee turnover also continues to occur at the Project (see Section 3.4), which ensures at least some previous Baffinland employees become available for employment elsewhere. Together, these help to increase the overall pool of skilled workers in the local labour force from which hamlets (and other local and regional organizations) can draw upon. There is no direct evidence to suggest mitigation measures need to be modified at this time.



# 7 · Cultural Resources

The preservation of archeological sites and other cultural resources within the North Baffin LSA

### **FEIS Prediction**

"The Project will not result in significant adverse effects on archaeological sites. Appropriate procedures including excavation and flagging will be undertaken prior to development to limit the effect of the Project on cultural resources in the area."

## 7.1 VSEC Effects assessment

Monitoring is conducted through the Archaeology Status Update Report, as such there were no residual effects identified in the EIS.



# 8 · Resource and Land Use

Land use and harvesting activities at Project sites, including issues resulting in wildlife compensation claims

### **FEIS Prediction**

"The Project will not have a significant effect on harvesting within the land use study area as a result of Project development. Although potential exists for wildlife to avoid areas of intensive Project interaction, the amount of country food harvested per level of effort is not anticipated to change meaningfully."

"Baffinland acknowledges that shipping, port activities and rail line operations related to the Project may potentially affect Inuit travel. However, these effects of the Project will not result in significant adverse effects on travel and camps. Individuals' ability to travel and camp throughout the land use study area will not be meaningfully altered—the negative effects are only evident at points of Project interaction including Milne Inlet, Milne Inlet Tote Road, Mine Site, Railway, and Steensby Port."

### **Key Findings**

- In 2019, a total of 892 land use visitor person-days were recorded at Project sites, which is a 73% increase from 2018. Significant increases were seen at both Mary River and Milne Port in both 2018 and 2019.
- The QIA reported \$66,410 spent on the Wildlife Compensation Fund in 2018, though no data was available on number of claims. Historical claims include one claim in 2017 (which was approved), and two claims in 2016 (of which one was approved).

## 8.1 Recorded land use visitor person-days at project sites

#### Figure 46 displays the number of recorded land use visitor person-days at Project sites since 2013.

Figure 46. Recorded land use visitor person-days at project sites



Source: (Baffinland, 2019)

### Interpretation

The number of recorded land use visitor 'person-days' at Project sites provides some indication of how often the Project area continues to be accessed for land use activities. Because groups of individuals may travel together and/or use Project sites over multiple days, person-days can capture the extent of site visitations in a year (i.e. one person-day is equal to

one person visiting a site during one day, while ten person-days could equal one person visiting a site during ten days or five people visiting a site during two days).

Baffinland maintains a Hunter and Visitor Access Log to track land use parties that pass through or use Project areas. In 2019, a total of 892 land use visitor person-days were recorded at Project sites, which is a 73% increase from 2018. As in previous years, the most person-days were recorded at Milne Port (594, a 57% increase from 2018). However, the greatest number of person-days since 2013 were recorded at Mary River in 2019 (298, a 115% increase from 2018). Data from the past three years indicate an increase in the access of Project sites for land use activities. However, this increase may also in part be due to better reporting through active engagement for record keeping.

## 8.2 Wildlife compensation fund claims

The number of annual Wildlife Compensation Fund (WCF) claims provides insight into land use and harvesting issues which may be arising because of the Project. Established under Article 17.6 of the IIBA, the WCF is administered by the QIA and functions to compensate Inuit for loss or damage relating to wildlife suffered by such claimant or claimants as a result, directly or indirectly, of development activity related to the Project. The QIA reported \$66,410 spent on the Wildlife Compensation Fund in 2018-19, though no data was available on number of claims. In 2017, one claim was submitted to QIA for review and was approved. It resulted in compensation of \$14,200 being paid. In 2016, two claims were submitted to QIA for review; of these, one claim was approved and resulted in compensation of \$600, while the second claim was reviewed and denied.

Residual effect	Caribou Harvesting   Marine Mammal Harvesting   Fish Harvesting
Summary	The EIS predicted the Project could have a negative effect on caribou harvesting. Negligible effects on marine mammal and fish harvesting were also predicted.
	*While not all these effects were considered residual effects in Project EIS documents, they are included here for completeness.
Monitoring results	Potential effects continue to be tracked through Baffinland's environmental monitoring programs. Terrestrial and marine monitoring are reviewed bi-annually by the Terrestrial Environment Working Group (TEWG) and Marine Environment Working Group (MEWG). Please see Baffinland's Annual Reports to the NIRB for detailed monitoring information and coverage on these topics.
	Additional discussion relevant to Project harvesting interactions and food security is provided in Section 10.1 of the Socio-Economic Monitoring Report, which acknowledges that some stakeholder concerns have been expressed about Project effects on harvesting. However, several mitigation measures are in place (e.g. Wildlife Compensation Fund, Harvesters Enabling Program) and Baffinland continues to make contributions to components of food security through initiatives commensurate with its role as a regional mineral developer (see Table 18: Food security components and Baffinland's role (Availability and Accessibility)Table 18). This includes providing LSA residents with income for the purchase of food, support for participation in harvesting activities, and other related initiatives. Inuit employee harvesting is also permitted at the Project (subject to certain restrictions) although Baffinland's 2018 Inuit Employee Survey indicates only minimal harvesting is currently conducted (12.1% of respondents indicated they participated in traditional activities such as hunting, fishing, harvesting during their leisure time on site).

## 8.3 VSEC Effects assessment

Residual effect	Safe travel Around Eclipse Sound and Pond Inlet   Safe Travel Through Milne Port   Emissions and Noise Disruption at Camps   Sensory Disturbances and Safety Along Milne Inlet Tote Road  Detour Around Mine Site for Safety and Travel   Difficulty and Safety Relating to Railway Crossing   Detour Around Steensby Port   HTO Cabin Closures   Restriction of Camping Locations Around Steensby Port		
Summary	The EIS predicted the Project could have some negative effects on Inuit travel and camping. These include effects on safe travel around Eclipse Sound and Pond Inlet, safe travel through Milne Port, emissions and noise disruption at camps, sensory disturbances and safety along the Milne Inlet Tote Road, detouring around the Mine Site for safety and travel, difficulty and safety relating to railway crossing, detour around Steensby Port, HTO cabin closures, and restriction of camping locations around Steensby Port.		
Existing mitigation	<ul> <li>Shipping-related mitigation developed and/or proposed by Baffinland includes:</li> <li>Provision of community public safety awareness campaigns (e.g. informing the community of vessel movements, tracking the route and timing of passage, periodic public meetings and information sessions)</li> <li>Establishing a detour around Steensby Port, and providing food, shelter, and fuel to detouring travellers. In addition, other mitigation measures have been identified for Steensby Port that will be implemented once that component of the Project is constructed.</li> <li>Road and rail-related mitigation developed and/or proposed by Baffinland includes: <ul> <li>Development of a Roads Management Plan (e.g. establishing speed control and signage, ensuring truck operator vigilance, reporting of non-Project individuals)</li> <li>Public education</li> <li>The addition of railway crossing locations</li> </ul> </li> <li>Mine site-related mitigation developed by Baffinland includes: <ul> <li>Various public safety mechanisms (e.g. establishing signage and access barriers, restrictions on entering industrial sites)</li> <li>Development of a mine closure plan</li> </ul> </li> </ul>		
	<ul> <li>Development of a mine closure plan</li> <li>A Hunter and Visitor Site Access Procedure (an appendix to the Roads Management Plan; Baffinland 2016), which describes how land users can safely access Project facilities at Milne Port and the Mine Site. It further describes Baffinland's policy prohibiting the public from unescorted travel on the Tote Road. Baffinland will instead transport land users and their equipment on the Tote Road in order to prevent land user-Tote Road traffic interactions.</li> </ul>		
Monitoring results	Monitoring data suggest Inuit land use activities coexist to some degree with the Project, as local land users have continued to access Project sites since construction began (e.g. 892 land use visitor person- days were recorded in 2019), with a substantial increase in visitor person-days over the past three years. Various mitigation measures have been established by Baffinland to address effects on Inuit travel, camps, and harvesting. In addition to those already listed above, Baffinland has contributed \$750,000 to a Wildlife Compensation Fund (administered by the QIA under the terms of the IIBA) to address the potential for wildlife-related impacts from the Project. Baffinland has also established a Harvesters Enabling Program in Pond Inlet through the amended IIBA, whereby Baffinland will contribute \$400,000/year for 10 years for a gas program to allow for more accessible travel for Inuit in the area. Relevant mitigation is in place and there is no direct evidence to suggest mitigation measures need to be modified at this time. However, limited monitoring data prevent a more detailed assessment from occurring. In addition, note that some effects related to the Steensby Inlet rail/port components are not anticipated until those components are built.		



# 9 · Cultural Well-Being

The influence of the Project on Inuit culture and cultural development through its interactions with Inuit cultural values

#### **FEIS Prediction**

"The Project will affect Inuit culture and cultural development through its interactions with Inuit cultural values. To a large degree, these interactions will be positive. The opportunities for productive livelihoods based on self-reliance and sharing of resources, learning and sharing experience through supervisory and role-model functions, and for monitoring the environment are all relevant and supportive of these values. This conclusion that productive employment is aligned with Inuit culture in the contemporary context is something that has also been expressed by Elders during community consultations. It is acknowledged, however, that culture has many facets. Different perspectives on industrial development and its effects on culture have been heard during community engagement. Some individuals have deep concerns about the effect of on-going economic development and expansion of the wage economy on Inuit culture. What may be a positive cultural effect for some—access to a job that enables one to provide for family and relatives—may be a negative cultural effect for some else. For these reasons, Project effects on culture are considered to be diverse in their direction — neither positive nor negative. No significant impact is assessed."

## 9.1 VSEC Effects assessment

There were no residual effects identified in the EIS.



# 10 · Economic Development and Self-Reliance

The combined effects of the project on economic development, Inuit autonomy and general wellbeing

#### **FEIS Prediction**

"The overall direction of the effects of the Project on the Economic Development and Self-Reliance VSEC are assessed, with a high level of confidence, to be positive. Direct and indirect economic expansion associated with the Project will create new opportunities for employment and business across the RSA, and particularly within the LSA. The Project will enhance labour force capacity and may increase Inuit business capacity. The assessment of Project interactions on land and land use dimensions of this VSEC suggest that these effects will be multi-dimensional. No significant adverse effects on the underlying VECs are assessed. The integrated analysis of the combined effects of the Project does not lead to an assessment of adverse effects on harvesting. Considering the Project's interactions with these multiple dimensions related to Economic Development and Self-Reliance, the residual effects of the Project are assessed to be positive and significant."

#### Note to readers

This VSEC relates to a number of other VSECs and indicators within this report. As such, an assessment of economic development and self-reliance would need to consider data and information from the following sections:

- 2. Education and Training
- 3. Employment and Livelihood
- 4. Contracting and business opportunities
- 5. Human health and wellbeing, and
- 8. Resource and land use.

As noted in the EIS, following an integrated assessment of these other VECs/VSECs, no new residual effects specific to this VSEC were identified. Therefore, this section focuses on investments in community and wellness initiatives, harvesting activities and food security; monitoring of other relevant residual effects is provided under these other VSECs.

#### **Key Findings**

- Data from the 2012 and 2017 Aboriginal Peoples Surveys indicate that an increasing proportion of Inuit households are experiencing some level of food insecurity. In the North Baffin LSA, just over half of survey respondents (56%) reported that they cut the size of or skipped meals entirely over the last year because there was not enough money for food (up from 37% in 2012), while just under half of respondents (45%) said that they went hungry because they could not afford food (up from 35% in 2012).
- The rise in food insecurity in the North Baffin households from 2012 2017 has occurred in concert with a decline in traditional harvesting activities. 2017 data for the North Baffin LSA show a 10% decline in respondents who report they have hunted, fished or trapped over the past year, and a 7% decline in gathering wild plants. As described in Section 8.1, the number of land use visitor person-days recorded at both Mary River and Milne report increased substantially in both 2018 and 2019, which may signal a resurgence in hunting, trapping and/or gathering at the Project sites.
- Baffinland continues to make contributions to the components of food security it can affect through initiatives commensurate with its role as a regional mineral developer

#### **Data and trends**

Table 14 below provides an overview of Baffinland's contributions to a variety of community wellness and recreational initiatives and programs. Note that this data was first prepared for the 2019 report.

Table 14.	Baffinland	contributions	to I SA	community	sponsorships
TUDIC 14.	Dummunu	contributions	10 20/1	community	sponsorsnips

Initiative	Description	2019
Cultural exchange program	Hockey exchange trip between Pond Inlet and Mimico, ON	\$46,000.00
Elders gathering	Flights to enable LSA residents' participation in the Elder's gathering	\$47,273.50
Arctic Bay Daycare	Baffinland provided Arctic Bay Day Care with funds toward securing a building and other capital expenses for the Tununirusiq Daycare	\$50,000.00
Mittima Food Bank Society	Based in Pond Inlet Hamlet, the Mittima Food Bank Society is committed to working toward providing Pond Inlet residents with an established Food Bank and Soup/ Community Kitchen	\$57,500.00
Various sports and recreational initiatives	A variety of contributions to community sports and recreational initiatives, including community sporting teams and events	\$96,277.30
Various Cultural and wellness initiatives	A variety of contributions to cultural and wellness initiatives, including contributions to food centers and the Arctic Inspiration Prize	\$99,235.98
Total		\$396,286.78

Source: (Baffinland, 2019)

#### Interpretation

Baffinland continues to contribute to a variety of LSA-based recreational and wellness programs, in addition to other contributions to education and school based initiatives outlined in Section 2.1. These sponsorships and contributions, outlined in Table 14 are based on the needs and requests of community members and include, local sports teams sponsorships, support for cultural programming, including youth exchanges and Elders gatherings and health and wellness programming including food back and country food contributions.

### 10.2 Project Harvesting Interactions and Food Security

#### **Data and trends**

Harvesting and consumption of country food remains a valued and important part of Inuit culture and diet. However, statistical data on these topics are limited. In lieu of appropriate community level indicator data on how the Project affects LSA residents' interactions with country foods, this section includes data from national surveys of First Nations living off reserve, Metis, and Inuit people, called the Aboriginal Peoples Survey.

The Aboriginal Peoples Survey, which monitors the social and economic conditions of Inuit in Canada, includes questions on both food security and harvesting. It should be noted that participation in the APS is voluntary and the questions vary between surveys which are conducted only every 5 years. These surveys recorded responses from members the North Baffin LSA, Iqaluit, as well as Nunavut as a whole. Pertinent results related to food security and harvesting practices from the 2012 and 2017 surveys are presented below in Table 15, Table 16, Table 17. Values reported in Table 15 represent the proportion of survey respondents who responded "yes" to each of the listed survey questions. Values in Table 16 and Table 17 represent the proportion of survey respondents who answered "yes" to the question on whether or not they participated in the harvesting activity, and then the proportion of those who confirmed participating that answered "yes" to each subsequent question about how often they participated.

Table 15: Results from the food security section within the Aboriginal Peoples Survey from both 2012 and 2017.

Survey Question		Nunavut			Iqaluit			North Baffin		
	2012	Δ	2017	2012	Δ	2017	2012	Δ	2017	
In the past 12 months, since last [month of interview], did [you/you and other household members] ever cut the size of your meals or skip meals because there wasn't enough money for food?	33.7%	↑	42.5%	19.4%	↑	26.9%	37.0%	↑	56.4%	
In the past 12 months, did you [personally] ever eat less than you felt you should because there wasn't enough money to buy food?	34.1%	↑	41.5%	20.9%	↑	28.4%	38.3%	↑	51.3%	
In the past 12 months, were you [personally] ever hungry but didn't eat because you couldn't afford enough food?	28.0%	↑	33.2%	16.4%	↑	23.9%	34.6%	↑	44.9%	

Sources: (Statistics Canada, 2012) (Statistics Canada, 2017)

Table 16: Results from the hunting, fishing, and trapping section within the Aboriginal Peoples Survey from both 2012 and 2017.

urvey Question Nunavut		ut	Iqaluit			North Baffin			
	2012	Δ	2017	2012	Δ	2017	2012	Δ	2017
In the last year, did you hunt, fish or trap?	65.5%	$\downarrow$	64.6%	54.0%	$\uparrow$	64.2%	66.7%	$\checkmark$	56.4%
Did you do this? - For pleasure or leisure	52.8%	$\uparrow$	64.5%	72.4%	$\checkmark$	62.8%	46.7%	$\uparrow$	77.8%
Did you do this? - For your own use or your family's use	76.0%	$\uparrow$	91.5%	69.0%	↑	86.0%	73.3%	$\uparrow$	93.3%
Did you do this? - To share with others in the community	44.8%	$\uparrow$	64.5%	27.6%	$\uparrow$	44.2%	40.0%	$\uparrow$	80.0%

Sources: (Statistics Canada, 2012) (Statistics Canada, 2017)

Table 17: Results from the gathering wild plants section within the Aboriginal Peoples Survey from both 2012 and 2017.

Survey Question	Nunavut		Iqaluit			North Baffin			
	2012	Δ	2017	2012	Δ	2017	2012	Δ	2017
In the last year, did you gather wild plants, for example, berries, rice or sweet grass?	42.6%	$\downarrow$	36.5%	54.0%	$\downarrow$	41.8%	38.1%	$\downarrow$	30.8%
Did you do this ? - For pleasure or leisure	59.1%	↑	71.2%	62.1%	↑	64.3%	60.7%	↑	87.5%
Did you do this? - For your own use or your family's use	72.0%	↑	89.5%	69.0%	↑	82.1%	60.7%	↑	91.7%
Did you do this ? - To share with others in the community	28.4%	↑	49.0%	13.8%*	↑	32.1%*	28.6%*	↑	70.8%

Sources: (Statistics Canada, 2012) (Statistics Canada, 2017) | \*Note: data based on small sample, interpret with caution.

The other source of information relevant to this VSEC is input and observations provided through community engagement conducted for the Project. As mentioned in previous SEMRs, some Project stakeholders have suggested adverse effects on harvesting and wildlife have been experienced because of the Project. These included comments on the impacts of shipping and noise on wildlife, water pollution from shipping practices, dust contamination and marine life, and the effects of mining and shipping on harvesting in the Project area. For example:

We worry about the hunters, and the lack of animals is noticeable. Wildlife is affected by the ships in the summer where there is a lot of sound pollution; we have less seals, less narwhals. We feel that and it's hard to pinpoint what is directly affected. We need to better monitor to understand what's happening. Those were the two main things I wanted to bring: employment and ship traffic affecting hunters [Joshua Katsak, Representative for Pond Inlet at the 2019 QSEMC Meeting]

Concerns have also been expressed elsewhere about declining rates of country food consumption and the lack of food security in Nunavut, generally. Additional comments (not necessarily all related to the Project) on country food and/or food security were recorded in 2019, for example:

In Sanirajak, our hunting style has changed. They used to be able to hunt walrus in all 3 seasons. In the winter they had to go to the moving ice and use dog teams, the dogs know how thick the ice is. It's hard to express this, but a lot of things are tied to climate change and our wildlife. Maybe you should talk to climate change experts on the effects in North Baffin. In Sanirajak you have to wait for the tide to be coming from a certain direction and wait until the ice comes back, these are the changes we are seeing due to equipment changes, hunting patterns, and sea ice changes. I encourage Baffinland to talk with some climate change people to find out what you can learn from them and on the impacts to wildlife. It's possible in 20 years from now that Sanirajak might blame Baffinland for a lack of walruses. [Jayko Simonie, Representative for Sanirajak at the 2019 QSEMC Meeting]

#### Interpretation

Improving food security remains a pressing issue in Nunavut (Nunavut Food Security Coalition, 2014; Nunavut Food Security Coalition, 2016). Aboriginal People's Survey (2014) notes food insecurity refers to situations when, for example, the food that was purchased does not last, and there is not enough money to buy more; a household cannot afford to eat balanced meals; or household members cut the size of their meals or skip meals because there is not enough money for food. According to the APS conducted in 2017, a majority of households in the North Baffin LSA experienced some level of food insecurity within the year prior to the survey.

Data from the food security section of the 2012 and 2017 Aboriginal Peoples Surveys indicate that an increasing proportion of Inuit households are experiencing some level of food insecurity. In Nunavut, as many as approximately 42.5% of households had reduced food intake due to budgetary constraints. In the North Baffin LSA, the figures are even more dramatic, with 56.4% of survey respondents reporting that they had to cut the size of, or skip meals entirely over the last year because there wasn't enough money for food (up from 37% in 2012), while 44.9% of respondents said that over the last year they went hungry because they couldn't afford food (up 10.3% from 2012). The rise in food insecurity in North Baffin households over the five-year period of 2012 - 2017 has occurred in concert with a decline in traditional harvesting activities. For example, The North Baffin LSA has seen a decline in the number of respondents who report they have hunted, fished, trapped or gathered wild plants over the past year, including 10% decreases in hunting, fishing and trapping activity over this five-year period (from 66.7% to 56.4%) and a 7% decrease in respondents who had gathered wild plants in the previous year (from 38% to just under 31%).

As described in Section 8.1, the number of land use visitor person-days recorded at both Mary River and Milne report has increased substantially in both 2018 and 2019. This may indicate a resurgence in hunting, trapping and/or gathering at the Project sites, though may also be due to better reporting in 2019.

The Nunavut Food Security Coalition (2014) has outlined four components of food security (i.e. availability, accessibility, quality, and use) and factors affecting each component (Table 18). Baffinland has acknowledged it can play a role in each of these food security components. However, the Nunavut Food Security Coalition (2014) also highlights food security components "are influenced by many complex factors" and notes "this critical and complex issue is larger than the mandate of any one organization. A collaborative approach is essential."

Baffinland continues to make contributions to the components of food security it can affect through initiatives commensurate with its role as a regional mineral developer (Table 18). Baffinland has also developed mitigation and monitoring programs that aim to avoid or minimize adverse effects on terrestrial, freshwater, and marine resources important to LSA residents. Baffinland's Annual Report to the NIRB provides monitoring results and information specific to these topics. Harvesting and food security are complex issues that can be influenced by several factors and this topic will continue to be monitored for emerging trends. Additionally, Baffinland continues to work on the development of thresholds and actions for the Project's socio-economic monitoring program.

Components of Food Security	Factors Affecting Each Component	Baffinland's Role
Availability	<ul> <li>Family size</li> <li>Human population size</li> <li>Grocery supplies</li> <li>Wildlife stocks</li> <li>Distribution of wildlife</li> <li>Environmental conditions</li> </ul>	<ul> <li>Providing employees with ample and healthy food choices while on site</li> <li>Avoidance/minimization of adverse effects on the biophysical/socio- economic environment and on terrestrial/freshwater/marine resources utilized by LSA residents (verified through annual monitoring)</li> </ul>
Accessibility	<ul> <li>Cost of food</li> <li>Income levels</li> <li>Gambling and substance abuse</li> <li>Transportation effectiveness</li> <li>Strength of sharing networks</li> <li>Access to hunting grounds</li> <li>Climate change</li> </ul>	<ul> <li>Providing LSA residents with meaningful incomes through employment that enables the purchase of food and support the participation in harvesting activities</li> <li>Direct and indirect contributions to community well-being initiatives (e.g. INPK Fund, school lunch program, seasonal country food exchange program, community food bank donations, community feasts, and indirect contributions to the QIA Legacy Fund and QIA Benefits Fund)</li> <li>Employee support through the EFAP, on-site Cultural Advisors, and the Community Counsellors Program</li> <li>Avoidance/minimization of adverse effects on the biophysical/socio-economic environment and on terrestrial/freshwater/marine resources utilized by LSA residents (verified through annual monitoring)</li> <li>Permitting Inuit employee harvesting during leisure hours (subject to certain restrictions)</li> <li>Permitting Inuit non-employees to access Project sites and participate in harvesting activities (subject to certain restrictions)</li> <li>Establishment of a Wildlife Compensation Fund to address potential impacts (\$750,000 in compensation has been set aside for Inuit harvesters for incidents of loss or damage relating to wildlife due to the Project)</li> <li>Establishment of the Harvesters Enabling Program in Pond Inlet (\$400,000/year for 10 years, to provide gas to support local travel and harvesting activities)</li> </ul>
Quality	<ul> <li>Nutritional knowledge</li> <li>Health of store-bought food</li> <li>Wildlife health</li> <li>Food spoilage</li> <li>Environmental contaminants</li> </ul>	<ul> <li>Providing employees with ample and healthy food choices while on site</li> <li>Establishment of country food kitchens at the Mary River and Milne Port sites</li> <li>Avoidance/minimization of adverse effects on the biophysical/socio-economic environment and on terrestrial/freshwater/marine resources utilized by LSA residents (verified through annual monitoring)</li> </ul>
Use	<ul> <li>Traditional knowledge</li> <li>Food preparation skills</li> <li>Budgeting skills</li> <li>Literacy rates</li> <li>Language barriers</li> </ul>	<ul> <li>Completion of a comprehensive Inuit Qaujimajatuqangit study (on several topics, including harvesting), the results of which are publicly available</li> <li>Establishment of country food kitchens at the Mary River and Milne Port sites</li> <li>Commitment to offer financial management training and support to employees</li> <li>Commitment to offer literacy and numeracy training to employees</li> <li>Support for the use of Inuktitut at Project sites</li> </ul>

Table 18: Food security components and Baffinland's role (Availability and Accessibility)

Notes: Food security components and factors affecting each component were sourced from the Nunavut Food Security Coalition (2014).

## 10.3 VSEC Effects assessment

No residual effects specific to the Economic Development and Self-Reliance VSEC were assessed in the EIS. Rather, an integrated assessment of other VECs/VSECs was conducted for this VSEC. Monitoring of residual effects continues to be conducted through other VECs/VSECs.



# 11 · Benefits, Royalty, and Taxation

The value of Project revenues accrued by the territorial government through taxation

### **FEIS Prediction**

"The flow of revenues generated by the Project to the Government of Nunavut is assessed to be significant relative to the GN's own-source revenues."

#### **Key Findings**

• The value of tax payments made by Baffinland to the Government of Nunavut increased in 2019, reflecting the growth of the Project's workforce and increased level of Project activity. In 2019, Baffinland paid approximately \$8.7M in employee payroll tax and \$7.0M in fuel tax.

## 11.1 Payroll and Corporate Taxes Paid by Baffinland to the Territorial Government

### **Data and Trends**

Figure 47 below provides an overview of taxes paid to the Government and Nunavut since 2017, including payroll tax and fuel tax.



Figure 47. Baffinland taxes paid to the Government of Nunavut

(Baffinland, 2019) | Note that the 2018 Payroll tax figure was incorrectly reported as \$5.1 million but revised in this report after an administration error was corrected.

#### Interpretation

The Project's effect on revenues flowing to the territorial government is largely established by the value of its payroll as well as the assessment of corporate tax payments by Baffinland. In 2019, Baffinland paid \$8,674,791 in employee payroll tax and \$6,986,839 in fuel tax to the Government of Nunavut. This represents an increase over 2018 figures and is largely attributed to the increase in Project activity that occurred throughout 2019.

## 11.2 VSEC Effects assessment

The EIS assessed one residual effect for the Benefits, Royalty, and Taxation VSEC. The Project Certificate contains no specific Terms and Conditions that pertain to monitoring of the Benefits, Royalty, and Taxation VSEC. The applicable monitoring results for the residual effect are summarized in Table 19.

Table 19: Effects Assessment for the Benefits, Royalty, and Taxation VSEC

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Residual effect	Project Revenues Flowing to the Territorial Government
Summary	The EIS predicted the Project would have a beneficial effect on revenues (e.g. through taxes) flowing to the territorial government. No specific mitigation measures were developed to support this prediction.
Monitoring results	The Project continued to pay taxes to the Government of Nunavut in 2019. This is consistent with the EIS prediction of positive effects from the Project occurring on revenues flowing to the territorial government.



# 12 · Governance and Leadership

Alignment with regional and communities' priorities through local involvement, leadership, and agreements

### **FEIS Prediction**

"The Project is considered to fit well with the strategic priorities identified for both the RSA as well as for the communities of the North Baffin LSA. An effective governance regime will be in place with the signing of an IIBA and, through partnership with the Q-SEMC, Baffinland will contribute to socio-economic monitoring of importance to the region's leadership. Therefore, the Project is considered to have a positive and significant impact on the Government and Leadership VSEC."

## 12.1 Governance and Leadership Monitoring Data and Analysis

Data indicators for monitoring the Governance and Leadership VSEC have not been developed. However, the Project continues to provide socio-economic monitoring data of importance to the region's leadership, including through the provision of 2019 data included herein on demographic change, direct and indirect economic contributions, barriers to employment for women, Project harvesting interactions and food security, and potential indirect Project effects such as substance abuse, gambling, rates of domestic violence, and education rates, among others. Baffinland also continues to engage the QSEMC and SEMWG on its socio-economic monitoring program.

## 12.2 VSEC Effects assessment

The EIS did not identify residual effects for the Governance and Leadership VSEC.

# Concluding Remarks

### Summary

#### **Report Summary**

This report helps to accomplish the objectives of the monitoring program (outlined in Table 2)n several ways.

- This report has provided an assessment of selected socio-economic effects that were predicted to occur in the Project's EIS.
- This assessment has also provided insight into the functioning of Baffinland's socio-economic management and mitigation measures.
- This report has provided information (see Compliance Assessment section) that may assist regulatory and other agencies in evaluating Baffinland's compliance with socio- economic monitoring requirements for the Project.
- Finally, this report supports adaptive management for the Project, as issues identified in this report will continue to be monitored and opportunities for potential performance improvements may be assessed. The Adaptive Management Section contains additional information on adaptive management measures.

#### **Cumulative Economic Effects Summary**

The Project continues to make positive contributions to Nunavut's economy. As noted previously, 4.35 million hours of Project labour were performed by Baffinland and contractor employees in 2019, equal to approximately 2,159 FTEs. Of this total, 580,197 hours were worked by Inuit, representing approximately 288 FTEs. A total of 16.2 million hours of Project labour have been performed since Project development, of which 2.5 million hours have been performed by Inuit. In addition, \$20.23 million in payroll was provided to Baffinland Inuit employees in 2019 and, since 2014, Baffinland has provided \$65.5 million in payroll to its Inuit employees. Likewise, \$288.8 million was committed to contracting with Inuit Firms in 2019. A total of \$1.25 billion dollars has been awarded to Inuit Firms since Project development.

When compared to annual economic outputs for Nunavut as a whole, these values are notable. In 2018 (the most recent year estimates were available), for example, there were a total of 16,655 jobs held in Nunavut and 29,179,000 total hours worked with average weekly earnings of \$1,375.30 per employee (Nunavut Bureau of Statistics (NBS), 2019a). By comparison, hours worked by Baffinland and contractor employees in 2018 (i.e. 3,081,740) represent 10.6% of the Nunavut total.

Mining remains an important contributor to the Nunavut economy. Nunavut's real gross domestic product (GDP) for all industries in 2018 was \$2,995.0 million. Of this amount, 'mining, quarrying, and oil and gas extraction' was responsible for contributing \$680.7 million (or 22.7%). Mining may also make economic contributions to supporting industries such as 'construction' (\$647.8 million contribution to the Nunavut economy in 2018), 'transportation and warehousing' (\$66.8 million contribution to the Nunavut economy in 2018), and 'accommodation and food services' (\$30.0 million contribution to the Nunavut economy in 2018), and 'accommodation and food services' (\$30.0 million contribution to the Nunavut economy in 2018), among others (Nunavut Bureau of Statistics (NBS), 2019c). The Mary River Project, in addition to other mines in the territory have been substantial contributors to this increase. In 2018, the minerals sector directly and indirectly contributed \$97 billion, or 5% to the country's nominal GDP. The Mining industry also directly employs more than 409,000 individuals and remains the largest proportional private sector employer of Indigenous peoples in the country (Mining Association of Canada, 2019).No negative regional or cumulative socio-economic effects directly associated with the Project were identified in 2019. As such, no additional socio-economic mitigation measures have been proposed to manage negative effects.

### Adaptive Management

This report has identified various positive effects of the Project and presents information that is consistent with several EIS predictions. However, some monitoring data has revealed unclear, inconsistent, or otherwise negative trends. Long-term monitoring will be necessary to track Project outcomes more fully over time and may contribute to an improved

understanding of observed trends and causality. No need has been identified at this time to substantially modify Baffinland's existing management/mitigation approach to the socio-economic environment. Project benefits are being delivered and actions continue to be taken by the Company to address issues that have been identified by the Company, Inuit, and regulators. It is also likely some Project benefits will take time to be fully realized. Likewise, the negative trends observed for some monitoring indicators are not all necessarily due to the Project, and there is currently no direct evidence to suggest key EIS predictions are inaccurate.

Employment in the North Baffin LSA and Iqaluit in 2019 was largely consistent with EIS predictions. LSA employment in 2019 was above EIS predictions (584,271 hours, compared with predictions of 335,000 hours), although the balance of these hours was realized more in the North Baffin LSA and less in Iqaluit as compared to predictions. Inuit turnover is down substantially for the second year in a row, indicating successful efforts on the part of Baffinland through its human resource programming and other efforts. Inuit employment, contracting, and Inuit employee turnover are areas Baffinland has committed to continue addressing in 2020, and several initiatives are occurring in support of these efforts. This includes ongoing implementation of the IHRS (Baffinland, 2018) and IPCS (Baffinland, 2017)

Baffinland and QIA are also partners in the Q-STEP training program. Q-STEP is a four-year initiative being undertaken to provide Inuit with skills and qualifications to meet the employment needs of the Mary River Project as well as other employment opportunities in the region. The program consists of both work readiness measures as well as targeted training programs directed at apprenticeships, skills development, supervisor training, and formal certification in heavy equipment operation.

Likewise, the IIBA was renegotiated in late 2018 (QIA and Baffinland, 2018) and includes various commitments that may assist with increasing Inuit employment over time (e.g. Work Ready Program, Baffinland Apprenticeship Program, Inuit Internship Program, hiring of Inuit Recruiters, \$10 million commitment to a Baffinland Inuit Training Centre in Pond Inlet, establishment of annual Minimum Inuit Employment Goals). Continued monitoring of Inuit employment hours, Inuit employee turnover, and initiatives described in the IHRS, IPCS, Q-STEP, and IIBA will be needed to evaluate outcomes over time. More generally, Baffinland has committed to using adaptive management as a tool to identify and make necessary improvements to the Project's socio-economic performance in the future.

Given the large changes to the design and layout of this year's socio-economic monitoring report as compared with previous years, the effectiveness of the Project's socio-economic monitoring program will also continue to be evaluated in an ongoing manner. This may lead to future modifications of the Project's Socio-Economic Monitoring Plan (Baffinland SEMR, 2019), indicators used, and/or methods of analysis employed. Likewise, Baffinland has acknowledged data limitations currently exist for certain aspects of the monitoring program and welcomes feedback on potential program improvements. Baffinland also anticipates monitoring may cease for some indicators in the future, especially where EIS predictions have been sufficiently verified over time. Should the need arise to substantially modify the Project's monitoring program, the SEMWG will be consulted.

# Compliance Assessment

Table 20 Compliance Assessment Table

#	Description	Status	Concordance	Summary
129	The Proponent is strongly encouraged to engage in the work of the QSEMC along with other agencies and affected communities, and it should endeavour to identify areas of mutual interest and priorities for inclusion into a collaborative monitoring framework that includes socio- economic monitoring priorities related to the Project, communities, and the North Baffin region as a whole.	In-Compliance	Section Socio- Economic Monitoring Requirements and Guidance (pg. 1), Section Socio- Economic Monitoring Indicators (pg. 5), and Appendix A (pg. 87)	Baffinland continues to engage with the QSEMC and participates in the SEMWG, whose members include Baffinland, the GN, the Government of Canada, and QIA.
130	The Proponent should consider establishing and coordinating with smaller socio-economic working groups to meet Project specific monitoring requirements throughout the life of the Project.	In-Compliance	Section Socio- Economic Monitoring Requirements and Guidance (pg. 1), Appendix A (pg. 87)	Baffinland continues to engage with the QSEMC and SEMWG on socio-economic monitoring for the Project. In addition, Baffinland regularly engages other committees which operate under provisions of the IIBA on various socio-economic topics.
131	The QSEMC is encouraged to engage in the monitoring of demographic changes including the movement of people into and out of the North Baffin communities and the territory as a whole. This information may be used in conjunction with monitoring data obtained by the Proponent from recent hires and/or out- going employees in order to assess the potential effect the Project has on migration.	In-Compliance	Section 1.1 (pg. 9), Section 1.2 (pg. 11), and Section 1.3 (pg. 14)	Baffinland has provided demographic change information in the Socio- Economic Monitoring Report.
133	The Proponent is encouraged to work with the QSEMC and in collaboration with the GN's Department of Health and Social Services, the NHC and other relevant stakeholders, design and implement a voluntary survey to be completed by its employees on an annual basis in order to identify changes of address, housing status (i.e. public/social, privately owned/rented, government, etc.), and migration intentions while respecting confidentiality of all persons involved. The survey should be designed in collaboration with the GN's Department of Health and Social Services, the NHC and other relevant stakeholders. Non-confidential results of the survey are to be reported to the GN and the NIRB.	Partial-Compliance	Section 1.2 (pg. 11) and Section 2.4 (pg. 24)	Baffinland has implemented an Inuit Employee Survey, which collects information related to employee and contractor changes of address, housing status, and migration intentions. However, a survey has not yet been administered for the 2019 reporting year.
134	The Proponent shall include with its annual reporting to the NIRB a summation of employee origin information as follows: a. The number of Inuit and non-Inuit employees hired from each of the North Baffin communities, specifying the number from each,	In-Compliance	Section 1.1 (pg. 9)	Baffinland has presented employee and contractor origin information in the Socio- Economic Monitoring Report.

#	Description	Status	Concordance	Summary
	<ul> <li>b. The number of Inuit and non-Inuit employees hired from each of the Kitikmeot and Kivalliq Regions, specifying the number from each,</li> <li>c. The number of Inuit and non-Inuit employees hired from a southern location or other province/territory outside of Nunavut, specifying the locations and the number from each, and</li> <li>d. The number of non-Canadian foreign employees hired, specifying the locations and number from each foreign point of hire.</li> </ul>			
140	The Proponent is encouraged to survey Nunavummiut employees as they are hired and specifically note the level of education obtained and whether the incoming employee resigned from a previous job placement or educational institution in order to take up employment with the Project.	Partial- Compliance	Section 2.4 (pg. 24)	Baffinland has implemented an Inuit Employee Survey, which collects information related to current education levels of employees, and their employment and education status prior to taking up employment with the Project. However, a survey has not yet been administered for the 2019 reporting year.
145	The Proponent is encouraged to work with the GN and the QSEMC to monitor the barriers to employment for women, specifically with respect to childcare availability and costs.	In-compliance	Section 3.1 (pg. 31), Section 3.2 (pg. 33) and Section 3.3 (pg. 34)	Baffinland has presented information on hours worked by female Baffinland and contractor employees on the Project in the Socio-Economic Monitoring Report.)
148	The Proponent is encouraged to undertake collaborative monitoring in conjunction with the Qikiqtaaluk Socio-Economic Monitoring Committee's monitoring program which addresses Project harvesting interactions and food security, and which includes broad indicators of dietary habits.	In-compliance	Section 7 (pg.65), Section 9 (pg. 69) and Section 10.1 (pg. 71)	Baffinland has presented some information on Project harvesting interactions and food security in the Socio- Economic Monitoring Report. Baffinland has also presented related information on household income and food security, and on land user-Project interactions in this report.
154	The Proponent shall work with the GN and the QSEMC to monitor potential indirect effects of the Project, including indicators such as the prevalence of substance abuse, gambling issues, family violence, marital problems, rates of sexually transmitted infections and other communicable diseases, rates of teenage pregnancy, high school completion rates, and others as deemed appropriate.	In-compliance	Section 2.2 (pg. 19), Section 5.2 (pg. 46) and Section 5.3 (pg. 50)	Baffinland has presented information (where available) relating to this requirement in this report.
158	The Proponent is encouraged to work with the GN and other parties as deemed relevant in order to develop a Human Health Working Group which addresses and establishes	In-compliance	Section 1.1 (pg. 9), Section 1.3 (pg. 14), Section 5.1 (pg. 45), Section 5.2 (pg. 46),	Baffinland continues to engage the QSEMC and SEMWG on its socio- economic monitoring

#	Description	Status	Concordance	Summary
	monitoring functions relating to pressures upon existing services and costs to the health and social services provided by the GN as such may be impacted by Project-related in-migration of employees, to both the North Baffin region in general, and to the City of Iqaluit in particular.		Section 6.1 (pg. 58)	program; the GN actively participates in both these groups.
159	The Proponent is encouraged to work with the GN to develop an effects monitoring program that captures increased Project-related pressures to community infrastructure in the Local Study Area communities, and to airport infrastructure in all point-of-hire communities and in Iqaluit.	In-compliance	Section Socio- Economic Monitoring Requirements and Guidance (pg. 1), Section 6.3 (pg. 61)	Baffinland continues to engage the QSEMC and SEMWG on its socio- economic monitoring program; the GN actively participates in both these groups.
168	The specific socioeconomic variables as set out in Section 8 of the Board's Report, including data regarding population movement into and out of the North Baffin communities and Nunavut as a whole, barriers to employment for women, Project harvesting interactions and food security, and indirect Project effects such as substance abuse, gambling, rates of domestic violence, and education rates that are relevant to the Project, be included in the monitoring program adopted by the QSEMC.	In-compliance	Section Introduction (pg. 1), Section Socio- Economic Monitoring Indicators (pg. 5), Section 1.4 (pg. 16), Section 5.1 (pg. 45), and Section 10.2 (pg. 71)	Baffinland has presented information (where available) on demographic change, barriers to employment for women, Project harvesting interactions and food security, and potential indirect Project effects such as substance abuse, gambling, rates of domestic violence, and education rates in the Socio-Economic Monitoring Report.
169	The Proponent provide an annual monitoring summary to the NIRB on the monitoring data related to the regional and cumulative economic effects (positive and negative) associated with the Project and any proposed mitigation measures being considered necessary to mitigate the negative effects identified.	In-compliance	Section: Cumulative Economic Effects Summary (pg. 78)	Baffinland has provided a summary of regional and cumulative economic effects in the Socio-Economic Monitoring Report.

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# Appendix A : 2019 QSEMC Minutes

# **QIKIQTAALUK SOCIO-ECONOMIC MONITORING COMMITTEE MEETING**

May 15-16, 2019 Franco Centre, Iqaluit

#### **Attendance**

RK Rhoda Katsak – GN-EDT (Chair)

ET Emily Taylor – GN-EDT

EZ Erika Zell – GN-EDT

Robert Clift – GN- Family Services Andrew Wong – GN-Family Services Joan Wamiti – GN-Education

Louisa MacIntosh – GN-Education

Tatenda Chimhanda – Nunavut Housing Corporation Beatrice Petitclerc – GN-Health

David Abernethy - CIRNAC Robert Tookoomee - CIRNAC Brian Rumbolt - CIRNAC

**QIA** Jared Ottenhof – Qikiqtani Inuit Association **NBS** Service Opare – Nunavut Bureau of Statistics **NBS** Meeka Mearns – Nunavut Bureau of Statistics **NTI** Bert Dean – Nunavut Tunngavik Inc. – Wildlife

TD Terry Dobbin – NWT & Nunavut Chamber of Mines

AM Andrew Moore – Baffinland

JP Jason Prno – Baffinland Consultant

**DW** David Willis – DeBeers Frank May - **Arctic Bay** Timoon Toonoo – **Cape Dorset** Sandy Kautuq – **Clyde River** Jayko Simonie – **Hall Beach** Celestino Urayuk – **Igloolik** Madeleine Redfern – **Iqaluit** Malicktoo Lyta – **Kimmirut** 

Stevie Komoartuk – Pangnirtung Joshua Katsak – Pond Inlet Mary Ann Qiyutaq - Qikiqtarjuaq Eli Kavik – Sanikiluaq

#### **Opening prayer, introductions**

# **Community Round Table**

**Iqaluit** - Through the NIRB process and IIBA negotiation, Iqaluit was recognized for priority hire. Quite a number of employees work at the mine. Some people from smaller communities have moved to Iqaluit after working at the mine. We have more childcare options, schools, and amenities. After a while, they move to the south where cost of living is cheaper. It would be interesting to see from Baffinland how many employees started in Igloolik and then moved to Iqaluit. And how many people who work at the mine then move to the south, some beneficiaries and non-beneficiaries. Iqaluit is an expanding hub and forming more partnerships with Inuit businesses. We've revised our business licence to capture more data. If we could combine the information from Baffinland with QIA and city of Iqaluit. The housing vacancy rate is 0% so even when people started making money there is no place for them to live, so they use our shelters more. The QSTEP courses are not enough, there needs to be more modules in financial management. People need someone to turn to who can advise them on decisions to relocate, build homes, and buy homes because right now there is little to no help. There are a lot of entities, but not always the kind of help that we need.

**Arctic Bay** - I talked about this last year: The socio-economic issues can be taken back to the need for housing. More money should be available for first time homeowners. People are making more money and maybe spending it on alcohol, numbers are up in Cape Dorset and Grise Fiord, impacting the health of our community. I don't know if it falls under a mining impact.

**Pond Inlet** – Pond Inlet has a large workforce at Baffinland, and they do provide detailed updates. We haven't had recent reports this year, but last year the employment numbers were going down. I think there's around 49 employed from Pond

Inlet which is good. We worry about the hunters, and the lack of animals is noticeable. Wildlife is affected by the ships in the summer where there is a lot of sound pollution; we have less seals, less narwhals. We feel that and it's hard to pinpoint what is directly affected. We need to better monitor to understand what's happening. Those were the two main things I wanted to bring: employment and ship traffic affecting hunters.

**Clyde River** - The elders are concerned about increased liquor in the community, there are a lot of bootleggers. Employees are doing well and buying more hunting gear, but they also want to party.

**Hall Beach** - We have seen a lot of good benefits; the education system has improved in Hall Beach. We show the students the benefits of working at Baffinland, to inform them about the mine and employment options. Economic development has to be monitored, some days we deal with Baffinland, housing, education. We need more support in acquiring contracts in the communities, there are very few businesses. We need to plan and be informed, when we don't hear from the project, the communities start to hate the project. We need more communication. We have to be vocal and look at ways to improve different scenarios.

**Sanikiluaq** - We don't hear too much about Baffinland in our community, which is understandable. People want employment in our community.

**Igloolik** – We've noticed improvements in Igloolik. I understand the North Baffin mayors and the concerns they have. I worry about the role of QIA and how difficult it is to work with them. We want to improve relations with NTI and find more Inuit associations to work with us. Money goes to the Inuit associations, but we don't know what happens to it. I won't be running for mayor again; my term is up in October. We heard through the news that Pond Inlet wanted their own Inuit Association. We heard NAC is an avenue we need to use. Employment and training are important.

**Cape Dorset** - We know that the economy is improving. Hamlets are getting more money, Inuit are benefitting. We want to work with Baffinland if there's going to be activity, we want to work. Thank you to Baffinland for supporting communities, we can see improvements happening in smaller communities.

**Kimmirut** - We are not too affected by Baffinland. I'm happy we have employees working at the mine. You have to be prepared, educated; I want people to be trained, to take heavy equipment training. I got to see Inuit employees at the mine yesterday.

**Pangnirtung** - To actually see what they're doing and where they're doing it, (site visit yesterday) it was very useful to go through the observations. We know Andrew comes in to inform us what's happening. The issue of royalties seems to only go towards the QIA, when it should be for the whole Baffin Region and affected communities. We wonder what's happening and when royalties will reach the affected communities. I appreciated Baffinland for the site tour, my view of it has changed, and it was a very good opportunity.

Arctic Bay - We have seen a mine come and go (Nanisivik). After closure, there is a garage left behind by EDT, waste and spills seeping into the water.

#### **Nunavut Bureau of Statistics presentation**

**TD** - There's no guidance counsellors in Nunavut schools, other than 1 in Iqaluit. There's nobody guiding the youth and that needs to change.

**Arctic Bay** - The slide on crime violations - every month the RCMP reports to council. Your numbers are going down, but it doesn't reflect reality. The RCMP has shown us that crime is doubling.

**NBS** - The Department of Justice gives us data from the RCMP.

**Iqaluit** - Is this information broken down by gender, ethnicity, age, etc.? We are focusing on the mining activity. The RCMP came to a NIRB meeting in Baker Lake.

**NBS** - It's difficult to say that it is because of mining. To isolate mining statistics takes more resources and time.

**Education** - It can be difficult to see where the relationships lie. If the mine offered scholarships or incentives, we could compare attendance from this year to last year, how many students were in the program or not, etc. If you have a specific program to improve this metric, we could see the relationship better.

**Family Services** - Statistics will never tell us why it happened. You need to go out and test interventions. Speak to individuals on the ground to find out who is buying alcohol; ideally people in your community could be trained to ask these questions. I have a concern about demography, between 2017-2018 the growth of 300 people surprised me, and I wonder if this was a mistake.

**Igloolik** - I have the same concern. RCMP is dealing with a lot of crimes and run out of space. Drunk people could not stay long enough to sober up.

Kimmirut - Since the beer store has opened maybe these numbers will go up

**Iqaluit** - Stakeholders have discussed and there are some negative impacts resulting from the opening of the beer store. Increase in certain types of crime. More public drunkenness.

Contributing to problems at the boarding home. Opening of a wet shelter for people too intoxicated for the medical boarding home has occurred. Through the federal budget, there will be an addiction services facility built in the territory. Hoping to have a facility built in each region. What role do the airlines and RCMP have so that alcohol doesn't come into the dry communities (from Iqaluit)? Need awareness on this. It raises issues that we shouldn't ignore.

**Hall Beach** - Too many people smoke (marijuana). Last month there were 5 children who had a joint in school. We are going to see more instances like this. The loss related to marijuana we see now to have little effects on the issue. The government has legalized it but not provided any assistance. We need treatment centres; we keep saying that, but it seems to fall on deaf ears. I worry about our children; the families of mine employees (splitting up, spending money on drugs). We have to work together. We don't have proper rules and procedures.

**AM** - In our 2018 Socio-Economic Monitoring Report we investigate the effect of the mine on alcohol abuse in the community. We do this through statistics on impaired driving violations and through community engagement meetings where we have received comments about that.

**JP** - The main thing we do with our statistics is look at data trends from before the project and compare if they've changed after the project. It is currently very difficult to separate the mining effects, if any.

Baffinland presentation – Population Demographics CIRNAC - Do you have information on employing females?

JP – Yes, we include information in our report on hours worked by Inuit and non-Inuit female employees and contractors. Baffinland has also begun work on the Arnait Action Plan to address barriers Inuit women entering non-traditional occupations may face.

**Arctic Bay** – Information that may be useful especially for NHC, the 4 people who left Arctic Bay, where did they go? Do you have that information?

**JP** - Baffinland collects migration data through two surveys. The first is an annual survey of BCLOs, who are asked about the number of employees/contractors who moved into/out of their communities, and where those individuals moved from/to if known. The second is an Inuit employee survey, where respondents are asked if they moved residences in the past 12 months and, if so, where they moved to.

**RK** - Comment from last SEMC - for the number of employees that Baffinland wants to have, there's not enough in the pool of the 5 communities. Other communities were asking, can our people get jobs at Baffinland, and the answer was yes, but who pays for the airfare etc.?

**AM** - We have jobs posted on the Baffinland website, as well as on our Inuktitut web portal; we will work with mayors to have economic development officers send out job postings. And yes, Baffinland pays for airfare and accommodations of Inuit employees.

NBS - Is it possible to get detailed information on job types available?

**AM** - Number of positions, vacancies, type of position can be provided.

**Cape Dorset** – The communities that don't have liaison officers still need information and employment. It would be beneficial for Baffinland to visit outside of the affected communities.

AM - You and I can talk about how something like that might happen.

#### Baffinland presentation cont'd - Education & training VSEC

**Arctic Bay** - I'd be interested in your Work Ready program: of those who go through the program, how many are hired? And in 20 years it would be good to know the retention rate.

AM - I can get you that information, that is something we track. I will send you an email.

Hall Beach - Are we going to see a Work Ready program in our communities?

**AM** - Yes, it is running in Hall Beach. Outside the North Baffin communities, through the IIBA, pre-employment training is offered in the North Baffin communities. If we don't get a minimum number of participants then we will look to have a session in different communities.

#### **Department of Education Presentation**

- Can collect high school students' attendance by period instead of only in the morning or afternoon
- Suicides affecting low attendance; hard to know the factors
- Small populations show small changes more drastically (i.e. family moves out of town and graduation rate drops lower) → see notes on graduation slide

Igloolik - I am concerned with the drop in attendance numbers. How do you get these numbers?

**Education** - Every student that goes through school, their teachers are supposed to enter their attendance into a system. I go through and calculate averages from that.

**Igloolik** - Is there any way the department can work with district education to increase the numbers? We are working in the community to find out what's causing the big drop off, especially in the last 2 years. The graduation rates tell me something is not working. How can we as a community help our students graduate?

**Education** - One thing I'm happy to report is that this attendance data is being used internally to work on student engagement campaigns to target specific communities. Efforts will be focused where maximum impact can be achieved.

Arctic Bay - When you come up with percentage attendance, I'm wondering if a class is cancelled for the day, are they all recorded as absent or present?

Education - For the purpose of calculation they would be marked as absent if they are not at school.

Arctic Bay - Do you keep track of how many people are challenging the Alberta departmental exams?

Education - I am keeping track and looking at report grades and grade distribution.

**Cape Dorset** - We sometimes lose students in 12th grade. If we look at the education system, we talk about Alberta curriculum, I wonder if it is adequate for the north. We know there are issues, but we often don't hear about the ones that are dropping out. We lose more attendance as the grades go up. The system needs to change in Nunavut.

**Education** - Speaking about the Alberta exams, they're not necessarily appropriate for Nunavummiut. We participate in a pilot project where we look at graduates by cohort. How many students entered grade 10 and graduated 3 years later. We divided Indigenous vs non-Indigenous from all over Canada. Nunavut lands somewhere in the middle and it shows that these populations are having the same challenges with curriculum, staffing schools, and lack of internet access. That data will be published by Statistics Canada end of this year. We also look at a 5-year cohort.

**RT**- The biggest challenge for Inuit kids is poverty. We have to look at the intergenerational trauma for Inuit and First Nations. If you want to find out why kids aren't going to school, ask them. We need to look at education in a holistic way.

There's a program in Ontario that looks at it in a holistic way – starting with housing, counselling needs, adult educators, etc.

## Baffinland Presentation cont'd - livelihood, employment, contracting, business opportunities

**RK** - I want to understand the non-Inuit workforce, whether the large hours are by non-Inuit? What kind of jobs are available? They don't seem to look at other parts of the workforce. If you can't drive, there are other opportunities there. What opportunities are outside the heavy equipment operators?

**AM** - Having a driver's license is not a prerequisite to work for Mary River. We offer training for on-site driving. There are a few main areas for employment: equipment operators, equipment maintainers and trades people, as well as support services such as house keeping and catering. The mine site runs like a small town with mine related and specialized trades positions. Training programs - we have a partnership under QSTEP, which is \$19 million for 4 years (Morrisburg Heavy Equipment Operator training program, Work Ready Program, Apprenticeship Program). We are also conducting an Inuit Internship Program specifically targeting roles not traditionally occupied by Inuit. Inuit tend to work in mine operations (driving and hauling are the largest sources of Inuit employment), second largest source of Inuit employment is in the site services (housekeeping). We are running an Inuit internship program this year; there will be interns in finance, procurement, port and logistics (Milne port & shipping). For example, one successful candidate spoke up and said she wants to work with ships and is now the first intern in our and port logistics team.

## **Family Services Presentation**

Career development division involved in commenting on socio-economic issues for past 2 years in writing, this is our first time at an SEMC

- Career development officer responsible for each community
- Working with CGS and NNI secretariat where capital projects will be to get training for your communities
- Career Development Officers (CDOs) are more effective when actually present in the community
- If there's anything we can do for you to help residents get off of income assistance, we can work with you on that
- Qik CDOs (career development team slide)

**Pangnirtung** - I know students down south who have young kids, are there plans to increase FANS payment for students studying down south? They say they are having a hard time meeting ends regarding food; they said they could use more FANS money.

**Family Services** - Yes there are plans. The MLAs got the message and we did a review of FANS. No, we are not providing enough support, the living allowance hasn't gone up for 10 years and 10 years ago it wasn't enough. We are working on closing that gap.

**Hall Beach** - Mold is a major problem in our housing. We look for options to remediate but it's hard to find professionals to clean. Maybe find help through CGS, a lot of hamlet buildings have mold issues.

**Family Services** - We know it's an issue too. The housing maintainer trade is a joint trade with NWT. We expect by end of the year we will change requirements for housing maintainer, and in the new year change the curriculum for housing maintainer to include mold remediation. At this time, we don't have training for mold remediation, but Housing Corporation can bring us a proposal and we can look into it.

#### NBS - Does FANS pay for travel down south?

**Family Services** - FANS pays travel for each major city in Canada. In a few years it will be in any city in Canada. Building a case for the same for ALTS training. The adult population consists of people ages 15 and over. When you're on training with ALTS you get \$400 a week, which is more than welfare.

**Arctic Bay** - I brought up with our MLA the issue of cut off. A single person on income support earns more than \$500, but only if they work a certain number of hours. People stop working at 2PM so that they can still collect income support.

Family Services - That's a myth. There is no cut off. It's graduated dollar for dollar.

**AM** – We had a lengthy discussion at site about apprenticeships. Important that companies like Baffinland are part of these conversations because we've had challenges and are willing to go above and beyond to be successful. An MOU with the GN was recently signed by Baffinland - apprenticeship should be a part of our agenda going forward.

**Family Services** - We know there are a lot of problems with our apprenticeship program. We have a new person working on policy.

#### Baffinland presentation cont'd - Health and Well-Being

**Arctic Bay** - I'd like to point out that 90% of the guys who go to work will buy a truck. It's hard to say these indicator trends are mine-related since there was an increase in DUI's. These DUI's might occur alongside the increase in trucks shipped to town; with more trucks, there is more likelihood for DUI's.

**AM/JP** - Thank you for your feedback. It's definitely a challenge in monitoring. Baffinland is willing to have these conversations and help when we can, whether Baffinland is the direct cause or not. From a company perspective, we want to support community well-being.

#### End of Day 1

#### **QSEMC Day 2**

No comments from round table.

#### Baffinland presentation - Community infrastructure & public services Data limitations

**Arctic Bay** - Turnover is high - do you track it for non-beneficiaries as well? If there's a big difference it could be worth looking into "why".

JP - Inuit employee turnover rate was 30% in 2018 and the non-Inuit rate was 28%, but in past years Inuit turnover has been higher.

**AM** - For voluntary terminations, the key reasons identified through exit interviews include family issues, difficulty adjusting to rotational schedule, found a different job in my community.

Arctic Bay - Upcoming carbon tax will impact you for next sealift. Any idea how much extra you'll be paying to the GN?

**AM** - In 2018 we paid \$5.9 million in fuel tax to the GN. Yes, the carbon tax will have an effect on our bottom-line. I can get you an estimate in the next two months.

Hall Beach – The Wildlife Compensation Fund, who is that paid to?

**AM** – As per the IIBA in 2013, a one-time contribution of \$750,000 was provided to the QIA. QIA manages the money.

QIA - To make a claim, go to your HTO, they will give you a form to fill out and send it back to the QIA.

**NBS** - Statistics Canada is collecting data on childcare. Should have the findings in 3 months. It will be posted on the NBS website.

**Kimmirut** – If we aren't catching as many animals, does this affect South Baffin too or just North Baffin? Are we able to request the wildlife compensation?

**QIA** - Our IIBA says any Inuit can apply to the Wildlife Compensation Fund.

#### Baffinland presentation cont'd - Food security

**Kimmirut** - For low income families, when we don't have income assistance, can the HTO provide more food for the communities? A lot of Inuit is not employed, the assistance provided isn't enough. The HTO should take a larger role in feeding the community.

**NTI** - It's up to each HTO/community. The HTO in Pangnirtung is buying seal meat from their hunters and making it available for free to those who need it. How are they doing that? They get royalties from Baffin Fisheries so there is flexibility with the funding and the community has control over those royalties. There are different opportunities there. What can we do to help alleviate food security?

**Pond Inlet** - Looking at the people that are hungry, maybe we should look at poverty reduction. We can look at solutions with communities. There is a process in place at annual meetings and I think we should have a seat at these meetings.

RK - In the past they did harvest surveys with hunters collecting data. Where is that data?

**NTI** – It was the Nunavut Wildlife Harvest Study. After creation of NLCA, surveys were done, and reports are available from 20 years ago. The Nunavut Wildlife Management Board has done a community-based monitoring pilot project. Individual mining companies have done harvest studies. We don't want people duplicating efforts so there are opportunities to coordinate.

#### RK - Do you think the data was reliable?

**NTI** - It varied by community. For some, there was a lot of turnover, concerns as to how accurate the data is. Other areas were very consistent. People want to be self-reliant, and if there are impacts, we have the opportunity to help minimize those impacts. When we go home to our communities, how do we take advantage of the opportunities?

**AM** - In partnership with QIA through the IIBA, we have a hunter support program for Pond Inlet residents who travel further to harvest. We fund fuel purchases of 300L to every lnuk over the age of 12Pond Inlet. There's also funding provided for the community food bank and fishing derby. Thank you for your comments; it's a very big issue.

# Baffinland concluding remarks (Discussion on monitoring thresholds/actions was left aside due to time restrictions. However, slides on this topic were included in participant handout packages and Baffinland committed to provide additional information to the QSEMC on this topic in the future)

Hall Beach - In Hall Beach, our hunting style has changed. They used to be able to hunt walrus in all 3 seasons. In the winter they had to go to the moving ice and use dog teams, the dogs know how thick the ice is. It's hard to express this, but a lot of things are tied to climate change and our wildlife. Maybe you should talk to climate change experts on the effects in North Baffin. In Hall Beach you have to wait for the tide to be coming from a certain direction and wait until the ice comes back, these are the changes we are seeing due to equipment changes, hunting patterns, and sea ice changes. I encourage Baffinland to talk with some climate change people to find out what you can learn from them and on the impacts to wildlife. It's possible in 20 years from now that Hall Beach might blame Baffinland for a lack of walruses.

**AM** - I appreciate those comments. Climate change is a common topic for discussion; we have had many conversations with the Pond Inlet HTO on this. In the Phase 2 EIS we factor in climate change. Our colleagues in our environment department are working on it.

#### **De Beers - Chidliak Presentation**

Chidliak - 120 km NE of Iqaluit

- Peregrine 2007-2018 purchased by De Beers
- Last SEMC visit 2014
- Kimberlite volcanoes lift diamonds and deposit them on surface. These volcanoes are 300,000 years old (not active). Drilled 500 m deep in CH-6 best potential for mining
- July and August field season
- Desktop studies engineering for renewable energies to power the mine
- Environmental baseline studies 2009-2017

• Archaeology surveys sites registered with Department of Culture & Heritage and Canadian museums

RK - When is the proposal going to NIRB?

**De Beers** - The draft plan will go to NPC this May.

#### **CIRNAC** presentation

**RK** - Closing remarks. Please fill out the evaluation forms. Feedback will help us plan next year's meeting. Iqaluit is a convenient location to meet, but we can think about other communities.

**Igloolik** – It was a good experience seeing Mary River firsthand. I'm not running for mayor again; we will have a new mayor. For the next mayor, we need to continue to work together. This committee needs to continue, we have work to do in our communities. Thank you.

**Cape Dorset** - Thank you. It is all very clear. We don't have too many outstanding issues, we know there are topics for discussion and grateful for the opportunity and thank you to all the presenters, we will see you again at all the meetings.

#### **End of QSEMC meeting**