



Chapter 21

Infrastructure and Services Effects Assessment



Eskay Creek Mining Ltd is a wholly owned subsidiary of Skeena Resources Ltd, and will be the holder of all permits and authorizations. References to Skeena Resources Ltd as the project proponent in this chapter should be understood to be the same as Eskay Creek Mining Ltd.

CONTENTS

ACRONYMS AND ABBREVIATIONS	VI
SYMBOLS AND UNITS OF MEASUREMENT	IX
21.0 INFRASTRUCTURE AND SERVICES EFFECTS ASSESSMENT	21-1
21.1 Introduction.....	21-1
21.1.1 Linkages with Chapter 4, Tahltan Application Information	21-4
21.2 Regulatory and Policy Framework	21-4
21.3 Assessment Boundaries.....	21-10
21.3.1 Spatial Boundaries.....	21-10
21.3.1.1 Project Footprint	21-10
21.3.1.2 Local Assessment Area	21-10
21.3.1.3 Regional Assessment Area	21-11
21.3.1.4 Transportation Corridor Assessment Area	21-14
21.3.1.5 Tahltan Areas of Interest.....	21-15
21.3.2 Temporal Boundaries	21-16
21.3.3 Administrative and Technical Boundaries	21-17
21.3.3.1 Regional Districts Administrative Boundaries.....	21-17
21.3.3.2 Local Health Authorities and Emergency Services	21-17
21.3.3.3 Indian Reserve	21-21
21.3.3.4 Nisga'a Final Agreement	21-22
21.4 Existing Conditions and Future Trends	21-22
21.4.1 Information Sources.....	21-22
21.4.1.1 Project-specific Field Studies	21-22
21.4.1.2 Additional Data Sources.....	21-24
21.4.1.3 Indigenous Knowledge	21-25
21.4.2 Regional and Historical Overview	21-26
21.4.2.1 Regional Overview	21-26
21.4.2.2 Historical Overview.....	21-26
21.4.3 Characterization of Existing Conditions	21-27
21.4.3.1 Population Demographics and Trends	21-27
21.4.3.2 Health Care and Social Services and Facilities	21-31
21.4.3.3 Utilities	21-37
21.4.3.4 Educational and Daycare Services and Facilities	21-42
21.4.3.5 Local and Regional Transportation Infrastructure	21-46
21.4.3.6 Housing and Accommodation.....	21-52
21.4.3.7 Emergency Response Services and Crime	21-58
21.4.3.8 Community Recreational Infrastructure and Services.....	21-66
21.4.3.9 General Future Trends for Infrastructure and Services.....	21-67
21.4.4 Tahltan Knowledge-weaving Highlight: Ancient, Past and Existing Conditions and Barriers to Tahltan Relating to Infrastructure and Services ...	21-67
21.5 Potential Effects and Mitigation	21-68
21.5.1 Identification of Potential Interactions	21-68

21.5.2	Identification of Potential Effects and Their Mitigation	21-74
21.5.2.1	Pressure on Health Care Services and Facilities	21-81
21.5.2.2	Pressure on Utilities.....	21-89
21.5.2.3	Pressure on Education and Daycare Services.....	21-91
21.5.2.4	Pressure on Transportation Infrastructure.....	21-92
21.5.2.5	Pressure on Availability and Affordability of Housing and Accommodations	21-95
21.5.2.6	Pressure on Emergency and Law Enforcement Services.....	21-97
21.5.3	Mitigation Measures and Effectiveness	21-102
21.5.3.1	Mitigation for Pressure on Health Care Services and Facilities.....	21-109
21.5.3.2	Mitigation for Pressure on Utilities.....	21-111
21.5.3.3	Mitigation for Pressure on Education and Daycare Services and Facilities.....	21-111
21.5.3.4	Mitigation for Pressure on Transportation Infrastructure	21-111
21.5.3.5	Mitigation for Pressure on Availability and Affordability of Housing	21-112
21.5.3.6	Mitigation for Pressure on Emergency and Law Enforcement Services.....	21-112
21.6	Characterization of Residual Effects	21-112
21.6.1	Pressure on Health Care Services and Facilities	21-113
21.6.2	Pressure on Availability and Affordability of Housing.....	21-115
21.6.3	Summary of the Assessment of the Residual Effects	21-117
21.7	Cumulative Effects Assessment.....	21-119
21.7.1	Assessment Boundaries	21-119
21.7.1.1	Spatial Boundaries	21-119
21.7.1.2	Temporal Boundaries	21-120
21.7.2	Potential Cumulative Effects and Mitigation	21-120
21.7.2.1	Identification of Potential Cumulative Interactions	21-120
21.7.2.2	Mitigation Measures and Effectiveness.....	21-128
21.7.3	Cumulative Residual Effects Characterization.....	21-128
21.7.3.1	Pressure on Health Care Services and Facilities.....	21-129
21.7.3.2	Pressure on Availability and Affordability of Housing	21-131
21.7.3.3	Summary of the Assessment of Residual Cumulative Effects ..	21-133
21.8	Tahltan Sustainability Requirements and Tahltan Risk Assessment Factors for Understanding Potential Effects to Current and Future Generations.....	21-135
21.9	Follow-up Strategy	21-138
21.10	Conclusions.....	21-139
21.11	References	21-140

LIST OF TABLES

Table 21.1-1: Interconnections between the Infrastructure and Services Effects Assessment and Other Valued Components	21-2
Table 21.2-1: Legislation, Policy, Standards, and Guidelines of Relevance to Infrastructure and Services	21-4
Table 21.3-1: Local Health Authorities within the Local Assessment Area and Regional Assessment Areas	21-20
Table 21.4-1: Population Estimates, including by Gender, in the Local and Regional Assessment Areas	21-30
Table 21.4-2: Indigenous Populations in the Local and Regional Assessment Areas, 2021	21-31
Table 21.4-3: Future Population Trends by Municipality	21-32
Table 21.4-4: Future Population Trends by Local Health Area	21-32
Table 21.4-5: Electricity and Gas Supply within the Local Assessment Area and Regional Assessment Area	21-41
Table 21.4-6: Private Dwellings in Local Assessment Area Communities, 2021	21-53
Table 21.4-7: Household Affordability in Local Assessment Area Communities, 2021	21-54
Table 21.4-8: Private Dwellings in Regional Assessment Area Communities, 2021	21-55
Table 21.4-9: Household Affordability in Regional Assessment Area Communities, 2021	21-56
Table 21.4-10: Royal Canadian Mounted Police Detachments in the Local Assessment Area and Regional Assessment Area Communities	21-58
Table 21.4-11: Criminal Code Offences in the Regional District of Kitimat-Stikine, Regional District of Bulkley-Nechako, and British Columbia	21-60
Table 21.5-1: Potential Interactions between Project Activities and the Infrastructure and Services Valued Component	21-69
Table 21.5-2: Ranking Potential for Effects on the Infrastructure and Services Valued Component	21-75
Table 21.5-3: Ranking Potential for Infrastructure and Services Valued Component Effects on Diverse Subgroups	21-79
Table 21.5-4: Project Direct, Indirect, and Induced Employment and Workforce Procurement	21-86
Table 21.5-5: Population Projections	21-88
Table 21.5-6: Proposed Infrastructure and Services Valued Component Mitigation Measures and Their Effectiveness	21-104
Table 21.5-7: Mitigation Measures that Contribute to the Mitigation of Multiple Potential Effects	21-106
Table 21.6-1: Characterization of Residual Effects for Pressure on Health Care Services and Facilities	21-114
Table 21.6-2: Characterization of Residual Effects for Pressure on Health Care Services and Facilities in Consideration of Gender-based Analysis Plus	21-115
Table 21.6-3: Characterization of Residual Effects for Pressure on Availability and Affordability of Housing	21-116
Table 21.6-4: Characterization of Residual Effects for Pressure on Availability and Affordability of Housing in Consideration of Gender-based Analysis Plus	21-117

Table 21.6-5: Summary of Residual Effects on Infrastructure and Services Valued Component.....	21-118
Table 21.6-6: Summary of Residual Effects on Infrastructure and Services Valued Component in Consideration of Gender-based Analysis Plus	21-119
Table 21.7-1: Potential Interactions between the Residual Effects of the Project on Infrastructure and Services Valued Component Topics and the Residual Effects of Other Projects	21-122
Table 21.7-2: Characterization of Residual Cumulative Effects	21-130
Table 21.7-3: Characterization of Residual Cumulative Effects on Pressure on Health Care Services and Facilities in Consideration of Gender-based Plus Analysis.....	21-131
Table 21.7-4: Characterization of Residual Cumulative Effects	21-132
Table 21.7-5: Characterization of Cumulative Residual Effects on Pressure on Availability and Affordability of Housing in Consideration of Gender-based Plus Analysis.....	21-133
Table 21.7-6: Summary of Residual Cumulative Effects on the Infrastructure and Services Valued Component.....	21-134
Table 21.7-7: Summary of Residual Cumulative Effects on Infrastructure and Services Valued Component in Consideration of Gender-based Plus Analysis	21-135

LIST OF FIGURES

Figure 21.3-1: Infrastructure and Services Assessment Area Boundaries and Tahltan Areas of Interest	21-12
Figure 21.3-2: Tahltan Communities	21-13
Figure 21.3-3: Structure of Northern Health	21-18
Figure 21.3-4: Northern Health Authority Regions within the Infrastructure and Services Local and Regional Assessment Areas	21-19
Figure 21.3-5: Nisga'a Final Agreement Lands.....	21-23
Figure 21.4-1: Local Assessment Area and Regional Assessment Area Communities and Electoral Areas by Population Level in 2021 (left graph) and Population Change 2016–2021 (right graph).....	21-28
Figure 21.4-2: Administrative Boundaries within the Infrastructure and Services Local and Regional Assessment Area	21-29
Figure 21.4-3: Transportation Routes and Traffic Count Sites within the Infrastructure and Services Local and Regional Assessment Areas.....	21-47
Figure 21.4-4: British Columbia Fire Centres.....	21-63
Figure 21.5-1: Potential Effect for Health Care Services and Facilities	21-81
Figure 21.5-2: Project-related In-migration as a Pathway for Effects on the Infrastructure and Services Valued Component.....	21-85
Figure 21.5-3: Potential Effect for Utilities (Waste Management)	21-90
Figure 21.5-4: Potential Effect for Education and Daycare Services and Facilities	21-91
Figure 21.5-5: Potential Effect for Transportation Infrastructure	21-93
Figure 21.5-6: Potential Effect for Housing and Accommodations.....	21-95
Figure 21.5-7: Potential Effect for Emergency Services	21-98
Figure 21.5-8: Potential Effect for Law Enforcement Services	21-100

Figure 21.5-9: Infrastructure and Services Valued Component Effects and Relevant
Mitigation Measures21-103

Figure 21.7-1: Cumulative Effects Assessment Area for Infrastructure and Services
Valued Component.....21-121

APPENDICES

- Appendix 21-1 Regional Socio-economic Baseline Report
- Appendix 21-2 Tahltan Socio-economic Baseline Report
- Appendix 21-3 Tahltan Country Foods Baseline Report
- Appendix 21-4 Socio-economic Baseline Addendum Report

ACRONYMS AND ABBREVIATIONS

2011 National Assessment	<i>National Assessment of First Nations Water and Wastewater Systems – British Columbia Regional Roll-up Report, FINAL</i>
24/7	24 hours a day, 7 days a week
AADT	Annual Average Daily Traffic
Access Road	Eskay Mine Access Road
ACP	Advanced Care Paramedic
AOI	Areas of Interest
BC	British Columbia
BCEHS	BC Emergency Health Services
CBC	CBC News
CEA	cumulative effects assessment
CEAA	Cumulative Effects Assessment Area
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
<i>Declaration Act Agreement</i>	<i>Declaration Act Consent Decision-Making Agreement for Eskay Creek Project</i>
EAC Application	Application for an Environmental Assessment Certificate / Impact Statement
EAO	British Columbia's Environmental Assessment Office
EMCR	Ministry of Emergency Management and Climate Readiness
Engaged Indigenous Nations	Defined as the Indigenous Nations identified by the EAO in section 2 of "Schedule B – Assessment Plan" (EAO 2023a), which refers to the Tahltan Central Government / Tahltan Nation, Tsetsaut Skii km Lax Ha Nation, Nisga'a Lisims Government / Nisga'a Nation, Gitanyow Nation, and Métis people as represented by the Métis Nation British Columbia.
Eskay Creek MAR	Eskay Creek Mine Access Road
FNHA	First Nations Health Authority
GBA Plus	Gender-based Analysis Plus
HEMBC	Health Emergency Management BC
HMSP	Health and Medical Services Plan
HSDA	Health Service Delivery Area
Hybrid AIR	Hybrid Application Information Requirements
IVHS	Iskut Valley Health Services
KII	Key Informant Interview
KSM	Kerr-Sulphurets-Mitchell
LAA	Local Assessment Area

LHA	Local Health Authority
LNG	liquified natural gas
LOS	level of service
MERP	Mine Emergency Response Plan
MOTI	Ministry of Transportation and Infrastructure
MRSA	Mine Rock Storage Area
MWTP	Mine Water Treatment Plant
N/A	not applicable
ND	no data
Newcrest	Newcrest Mining Ltd.
Nisga'a Treaty	<i>Nisga'a Final Agreement</i>
NLG	Nisga'a Lisims Government
NPAG	non-potentially acid generating
NVHA	The Nisga'a Valley Health Authority
NWRHD	Northwest Regional Hospital District
OCAP®	ownership, control, access, and possession
OCP	official community plan
PEOPLE 2020	Population Extrapolation for Organizational Planning with Less Error 2020
PHSA	Provincial Health Services Authority
Project	Eskay Creek Revitalization Project
RAA	Regional Assessment Area
RCMP	Royal Canadian Mounted Police
RDBN	Regional District of Bulkley-Nechako
RDKS	Regional District of Kitimat-Stikine
RHD	regional hospital district
RN	Registered Nurse
SD	school district
Skeena Resources	Skeena Resources Limited
TAC	Technical Advisory Committee
Tahltan Survey	Tahltan Nation Social Community Survey
Tahltan – Allnorth	Tahltan – Allnorth Consultants Limited Partnership
TBC	Tahltan Band Council

TCAA	Transportation Corridor Assessment Area
TCG	Tahltan Central Government
TEEM	Tahltan ERM Environmental Management
THREAT	Tahltan Heritage Resources Environmental Assessment Team
TMSF	Tom MacKay Storage Facility
TNDC	Tahltan Nation Development Corporation
TSKLH	Tsetsaut Skii km Lax Ha Nation
TWILD	Tū'desē'cho Wholistic Indigenous Leadership Society
UNBC	University of Northern British Columbia
VC	Valued Component
WAGE	Women and Gender Equality Canada
WSAP	Wilp Sustainability Assessment Process

SYMBOLS AND UNITS OF MEASUREMENT

%	percent
ha	hectare
KM	kilometre marker
km	kilometre
km ²	square kilometre

21.0 INFRASTRUCTURE AND SERVICES EFFECTS ASSESSMENT

21.1 Introduction

This Infrastructure and Services Effects Assessment chapter describes the potential effects of the proposed Eskay Creek Revitalization Project (the Project) on the Infrastructure and Services Valued Component (VC). The process for selecting VCs is described in Chapter 9, Valued Component Selection, and entailed engagement with Engaged Indigenous Nations,¹ and stakeholders, including federal and provincial government agencies, local governments, and the general public.

This chapter considers how the Project will affect a range of infrastructure and services, including:

- Health care and social services and facilities;²
- Utilities, including water, sewage, waste management, electricity and natural gas, and communications;
- Education and daycare services and facilities;
- Transportation infrastructure and traffic;
- Housing and accommodations;
- Emergency response services and facilities; and
- Community recreation services and facilities.

Project-related activities during Construction, Operations, Reclamation and Closure, and Post-closure (e.g., transportation of goods, services, and people), together with Project-driven population changes, have the potential to put pressure on the Infrastructure and Services VC. The Project may also have effects on diverse subgroups and, as such, the assessment considers Project effects using Gender-based Analysis Plus (GBA Plus³; described in Appendix 20-3, Diverse Subgroups Existing Conditions Supplement).

¹ Engaged Indigenous Nations are defined as the Indigenous Nations identified by British Columbia's Environmental Assessment Office (EAO) in section 2 of the "Schedule B – Assessment Plan" (2023a), which refers to the Tahltan Central Government/Tahltan Nation, the Tsetsaut Skii km Lax Ha Nation, the Nisga'a Lisims Government / Nisga'a Nation, Gitanyow Nation, and Métis people, represented by the Métis Nation British Columbia.

² Social services broadly refer to government services intended to benefit the community and can include, but may not be limited to, education, daycare, and mental health services. In the case of this assessment, social services refer to services focused on mental health, women, housing/shelter, training and employment, multiculturalism, and literacy (these services are described in Section 21.4.3.2 Health Care and Social Services and Facilities). The assessment recognizes that there are social services that support housing and education; considering the potential interactions of the Project with housing and education, as well as the level of information available for these services, they are discussed under distinct headings and introduced in Section 21.4.3.4, Education and Daycare Services and Facilities, and Section 21.5.3.6, Housing and Accommodation.

³ "Gender-based Analysis Plus (GBA Plus) is an analytical tool used to support the development of responsive and inclusive policies, programs, and other initiatives. GBA Plus is a process for understanding who is impacted by the issue or opportunity being addressed by the initiative; identifying how the initiative could be tailored to meet diverse needs of the people most impacted; and anticipating and mitigating any barriers to accessing or benefitting from the initiative. GBA Plus is an intersectional analysis that goes beyond biological (sex) and socio-cultural (gender) differences to consider other factors, such as age, disability, education, ethnicity, economic status, geography (including rurality), language, race, religion, and sexual orientation" (Women and Gender Equality Canada [WAGE] 2024).

The Project is located within Tahltan Territory and Tsetsaut Skii km Lax Ha (TSKLH) Territory, while the associated transportation corridor traverses Tahltan Territory; TSKLH Territory; the Nass Area and Nass Wildlife Area, as per the “Nisga’a Final Agreement” (Nisga’a Treaty; 1999), given effect by British Columbia (BC) in 1999 under the *Nisga’a Final Agreement Act* (SBC 1999, c 2) and by Canada in 2000 under the *Nisga’a Final Agreement Act* (SC 2000, c 7); Gitanyow Nation Territory; and lands used by Métis Nation British Columbia (MNBC) members (see Chapter 1, Project Overview, Figures 1.3-9, 1.3-10, 1.3-11, and 1.3-12).⁴

This chapter discusses the regulatory context, scope, and boundaries of the assessment, existing conditions of the Project site and surrounding areas, potential effects of the Project, proposed mitigation of such potential effects, and potential residual and cumulative effects of the Project. The contents of this chapter conform with the “Hybrid Application Information Requirements” (Hybrid AIR; BC’s Environmental Assessment Office [EAO] 2023b) established for the Project. The findings of this chapter are considered in other chapters of the Application for an Environmental Assessment Certificate / Impact Statement (EAC Application), including the following chapters:

- Chapter 20, Human Health Effects Assessment; and
- Chapter 24, Employment and Economy Effect Assessment.

Publicly available Indigenous Knowledge for Engaged Indigenous Nations is also considered in this chapter, particularly in regard to the ways in which Project effects on infrastructure and services may have implications for traditional use of land and water. Of particular concern to Indigenous land users are how roads may both improve and disrupt access to land- and water-based activities and complicate Indigenous uses.

Indirect effects on traditional use and their implications are further examined in Chapters 26 and 27 (Current and Future Use of Land and Resources for Traditional Purposes Effects Assessment and Quiet Enjoyment of Land Effects Assessment, respectively). Additionally, the selection of Infrastructure and Services as a VC supports the Tahltan Values discussed in Chapter 4, Tahltan Application Requirements.

Table 21.1-1 shows the interconnections between the Infrastructure and Services effects assessment, other VCs, and associated subject areas.

Table 21.1-1: Interconnections between the Infrastructure and Services Effects Assessment and Other Valued Components

Interconnections with Other Subject Areas and Valued Components		
Topic	Linked VCs	How Effects Assessments Informed Other VCs
Health care services and facilities	Human Health VC	Results of the assessment of Project effects on health care services and facilities inform the assessment of potential effects on human health due to the decreased availability of health services.
Housing and accommodation	Human Health VC	Results of the assessment of Project effects on housing and accommodation inform the understanding of community safety and mental health, as well as effects related to infectious disease due to influx and accommodation of workers.

⁴ As in the Hybrid AIR (EAO 2023b), for the purposes of this chapter, “territory” is defined as the established or asserted traditional territories of Indigenous Nations, except in relation to the Nisga’a Nation, which refers to Nisga’a Lands, the Nass Area, and the Nass Wildlife Area, as applicable.

Interconnections with Other Subject Areas and Valued Components		
Topic	Linked VCs	How Effects Assessments Informed Other VCs
Housing and accommodation	Employment and Economy VC	Results of the assessment of Project effects on housing and accommodation inform the assessment of effects on employment and the economy due to the influx and accommodation of workers.
Law enforcement services	Human Health VC	Results of the assessment of Project effects on law enforcement services inform the understanding of safety and community well-being resulting from worker influx and shift work.
Emergency response services	Human Health VC	Results of the assessment of Project effects on emergency response services inform the assessment of Project effects on human health due to the decreased availability of emergency response services.

Notes:

Project = Eskay Creek Revitalization Project; VC = Valued Component

Baseline studies and additional analyses used to inform this assessment include the following appendices to this EAC Application:

- Regional Socio-economic Baseline Report (Appendix 21-1);
- Tahltan Socio-economic Baseline Report (Appendix 21-2);⁵
- Socio-economic Baseline Addendum Report (Appendix 21-4);
- Diverse Subgroups Existing Conditions Supplement (Appendix 20-3); and
- Economic Benefit Modelling Results (Appendix 24-1).

Gender-based Analysis Plus Highlight

Gender-based Analysis Plus (GBA Plus) is an analytical process used to evaluate how diverse subgroups of people may experience policies, programs, and initiatives. The “plus” in GBA Plus acknowledges that this analysis goes beyond biological sex (determined based on a variety of physical and physiological features, including chromosomes, anatomy, etc.) and gender (i.e., socially constructed roles, behaviours, and expressions), and includes other identity factors like racial identity, ethnicity, identification as part of the two-spirit, lesbian, gay, bisexual, trans, queer, questioning, intersex, and asexual (2SLGBTQIA+)⁶ community, religion, age, and mental or physical challenges.

The assessment of the Infrastructure and Services VC includes further consideration of ways that existing conditions and predicted effects may differ among diverse subgroups of the population. Due to the relatively low population of visible minorities when compared with the overall population, race beyond Indigeneity has not been considered in the GBA Plus analysis.⁷ Throughout this chapter, analyses that include this additional GBA Plus focus are highlighted in boxes formatted like this one to enable reviewers to find and follow the GBA Plus assessment throughout.

⁵ The Regional Socio-economic Baseline Report (Appendix 21-1) and Tahltan Socio-economic Baseline Report (Appendix 21-2) are collectively referred to as the 2022 socio-economic baseline reports throughout this chapter.

⁶ The plus sign acknowledges the many sexual and gender minority people who do not see themselves under the umbrella abbreviation and prefer other identity terms such as pansexual, gender-free, or intersex.

⁷ As described in Chapter 20, Human Health, Table 20.4-1, there are no reported visible minorities in the Local Assessment Area; there are six in the Regional Assessment Area and seven in the Northwest Health Service Delivery Area. Visible minorities are defined as “people, other than Indigenous Peoples, who are non-Caucasian in race or non-white in colour;” by the *Employment Equity Act* (SC 1995, c 44).

21.1.1 Linkages with Chapter 4, Tahltan Application Information

Chapter 4, Tahltan Application Information, of this EAC Application, under the authorship of the Tahltan Central Government, lays the foundation for the Tahltan Assessment through the identification of potential effects to Tahltan Values and barriers to the Tahltan Way of Life, based on the effects assessment presented within the EAC Application. The chapter considers effects and barriers in relation to Tahltan Areas of Interest across the Tahltan Continuum, which will inform the application of Tahltan Risk Assessment Factors and Sustainability Requirements during the Effects Assessment and Recommendation phase of the environmental assessment process.

While not assessed as a Tahltan Value, the topic of Infrastructure and Services is considered in Chapter 4, Tahltan Application Information Requirements. Relevant information relating to ancient and past conditions, existing conditions and barriers to Tahltan, and assessment of the potential effects of the Project, is provided in Section 4.3, Tahltan Socio-Cultural Assessments, and Section 4.4, Tahltan Values. In collaboration with Tahltan Central Government, some information from Chapter 4 pertaining to Infrastructure and Services has been included in this chapter in Sections 21.4.4 (Tahltan Knowledge-weaving Highlight: Ancient, Past and Existing Conditions and Barriers to Tahltan Relating to Infrastructure and Services) and 21.8 (Tahltan Sustainability Requirements and Tahltan Risk Assessment Factors for Understanding Potential Effects to Current and Future Generations).

21.2 Regulatory and Policy Framework

This section describes federal and provincial legislation, policies, guidance, and land use plans relevant to the management of infrastructure and services. Table 21.2-1 describes relevant regulatory documents and processes considered in the Infrastructure and Services VC assessment.

Table 21.2-1: Legislation, Policy, Standards, and Guidelines of Relevance to Infrastructure and Services

Name	Year	Type	Level of Government	Description
<i>Declaration on the Rights of Indigenous Peoples Act (2019)</i>	2019	Act	Provincial	Also known as the <i>Declaration Act</i> , the legislation establishes the United Nations Declaration on the Rights of Indigenous Peoples as the Province's framework for reconciliation, as called for by the Truth and Reconciliation Commission's Calls to Action (SBC 2019).
<i>Declaration Act Agreement (2022)</i>	2022	Agreement	Provincial, Indigenous	This Agreement between the Province of BC and Tahltan Central Government recognizes Tahltan's Title and Rights and acknowledges Tahltan's jurisdiction in land management decisions in Tahltan Territory. It includes provisions for consent-based decision-making and outlines Tahltan Values-based approach to environmental assessment and permitting related to the Project.

Name	Year	Type	Level of Government	Description
"Tahltan Tribal Council Resource Development Policy Statement" (Tahltan Tribal Council 1987)	1987	Policy	Indigenous	This statement asserts that any resource development within Tahltan Territory must adhere to Tahltan Values as land stewards, as well as principles developed by Tahltan Tribal Council.
"1910 Declaration of the Tahltan Tribe" (Tahltan Tribe 1910)	1910	Declaration	Indigenous	This Declaration asserts ownership and sovereignty over Tahltan lands and resources. It is a guiding principle for the TCG.
"Tahltan Impact Assessment Policy" (TCG 2022)	2022	Policy	Indigenous	This policy guides Tahltan decision-making in relation to projects and provides information to the Crown, Crown regulatory agencies, and proponents in relation to Tahltan's implementation of impact assessments.
"Klappan Plan" (TCG and Province of BC 2017)	2017	Management Plan	Provincial, Indigenous	The "Klappan Plan" management objectives outline the approach to protect the core of the Tla'bane ⁸ (Klappan) area, the Sacred Headwaters of Tūdeše chō (Stikine River). The Klappan Plan builds on information in the Klappan Technical Report, which was one of the outcomes of the BC Tahltan Klappan Strategic Initiative (2013 to 2015), in which BC and the TCG worked collaboratively to advance reconciliation (TCG and Province of BC 2017).
<i>Transportation Act</i> (SBC 2004, c 44)	2004	Act	Provincial	This Act regulates the management of construction, maintenance, and use of public roads.
<i>Local Government Act</i> (RSBC 2015, c 1)	2015	Act	Provincial	This Act establishes the legal framework for regional districts to structure operations and defines requirements for elections and land use planning.
<i>Canada Health Act</i> (RSC 1985, c C-6)	1985	Act	Federal	The section 4 of this Act describes requirements "to protect, promote, and restore the physical and mental well-being of residents of Canada and to facilitate reasonable access to health services without financial or other barriers" (<i>Canada Health Act</i> [RSC 1985, c C-6]).
<i>Public Health Act</i> (SBC 2008, c 28)	2008	Act	Provincial	This Act provides local governments and regional health authorities with tools to respond to public health emergencies, with a focus on communicable diseases and environmental health hazards. The <i>Health Act</i> Communicable Disease Regulation (BC Reg 4/83) is authorized under the Act.

⁸ Tahltan terms are from the online "Tāltān Dictionary" (TCG 2024) unless otherwise indicated.

Name	Year	Type	Level of Government	Description
<i>Environmental Assessment Act</i> SBC 2018, c.51	2018	Act	Provincial	The Act provides a mechanism for reviewing major projects to assess their potential impacts.
<i>Drinking Water Protection Act</i> (SBC 2001, c 9)	2001	Act	Provincial	This Act describes requirements for drinking water supply systems.
<i>Fire Services Act</i> (RSBC 1996, c 144)	1996	Act	Provincial	This Act defines fire safety, fire prevention, and fire inspections requirements.
<i>School Act</i> (RSBC 1996, c 412)	1996	Act	Provincial	This Act regulates primary and secondary education in BC.
<i>Teachers Act</i> (SBC 2011, c 19)	2011	Act	Provincial	This Act establishes standards for education and delivery.
<i>First Nations Jurisdiction over Education in British Columbia Act</i> (SC 2006, c 10)	2006	Act	Federal	This Act establishes jurisdiction for education on First Nations lands in BC.
<i>Community Care and Assisted Living Act</i> (SBC 2002, c 75)	2002	Act	Provincial	This Act describes licensing for community care facilities including child daycare, child and youth facilities, as well as adults in residential settings. The Act promotes health and safety for these groups.
<i>Emergency Health Services Act</i> (RSBC 1996, c 182)	1996	Act	Provincial	This Act establishes measures for the provision of first aid or other health care in circumstances that require emergency assistance.
<i>Police Act</i> (RSBC 1996, c 367)	1996	Act	Provincial	This Act establishes municipal policing and law enforcement responsibilities and liabilities. It also establishes a process for complaints against police and investigation of police activities. It further details the code of professional conduct for municipal police.
OCPs and charters	Various	Strategies and Plans	Municipal	Strategies and plans describe the objectives and policies that guide decisions for municipal and regional district planning and land use management. The development of OCPs is described under the <i>Local Government Act</i> (RSBC 2015, c 1). Due to the number of communities included in the study, individual OCPs are not summarized here. LAA/RAA communities that have OCPs include Terrace, Smithers, the town of Stewart within the District of Stewart, Hazelton, and the District of New Hazelton. OCPs typically provide a comprehensive policy framework to guide the physical, environmental, economic, social, and cultural development of the communities.

Name	Year	Type	Level of Government	Description
Regional growth strategies	2023	Strategies	Regional	Regional growth strategies provide long-term planning direction for regional district and municipal OCPs. They provide a foundation for decisions about implementation of programs in a regional district. The RDKS and RDBN strategic plans are relevant to this assessment, as the Project is located within the RDKS and RDBN. These plans outline regional district priorities, decisions, and allocation of resources, including finances and human resources.
Municipal and regional district bylaws	Various	Bylaw	Municipal/ Regional	Bylaws have many purposes, including establishing meeting procedures, regulating services, prohibiting activities, or requiring certain actions for municipal councils and regional district boards.
Service provider management and development plans and strategies	Various	Strategies and Plans	Provincial, Regional	These strategies and plans guide the work of service providers, including planning and allocating resources. Examples include Strategic Plan Northern Health, Service Plan Northern Health, and strategic plans of school boards.
"Health and Medical Services Plan Best Management Guide for Industrial Camps" (Northern Health 2015)	2015	Guideline	Provincial	This guideline prescribes onsite health and safety programs at industrial camps, in compliance with WorkSafeBC legislation.
"B.C. Guidelines for Industrial Camps Regulation" (Government of BC 2017)	2017	Guideline	Provincial	This guideline establishes minimum safe-practice standards for industrial camps to be established and operated in compliance with the Industrial Camps Regulation and as advised by health authorities.
"Health and Safety During the Opioid Overdose Emergency: Northern Health's Recommendations for Industrial Camps" (Northern Health 2018)	2018	Guideline	Provincial	This guideline outlines how industrial camps manage opioid use and overdose emergencies amongst residents of a workforce camp.
"Best Practices for Industrial work Setting No. 2 – Communicable Disease Management Guide" (Northern Health 2023a)	2023	Guideline	Provincial	This guideline establishes expectations by Northern Health for effective communicable disease management and provides general guidance for the development of infection prevention and outbreak protocols.

Name	Year	Type	Level of Government	Description
"Traffic Management Manual for Work on Roadways" (MOTI 2020)	2020	Guideline	Provincial	This guideline provides traffic management and traffic control guidelines intended to protect employees and support safe and efficient movement of road users through a work zone. The guidelines are used for all work on provincially controlled highways, unless otherwise stated.
Resources from the First Nations Information Governance Centre	Various	Guideline and Resources	Indigenous	These resources provide data, reports, papers, policies, and other sources related to First Nations health, education, employment, and other topics. They provide guidance on OCAP® principles for Indigenous cultural, knowledge, data, and information. Skeena Resources has engaged with Indigenous Nations and incorporated Indigenous Knowledge into the development of this EAC Application.
"Let's Talk: Language of Health Equity" (National Collaborating Centre for Determinants of Health 2023)	2023	Guideline	N/A	This guideline establishes principles for use of language to respectfully describe populations, in consideration of discriminatory beliefs and changing practices to address unequal power relationships. The intent of this resource is to encourage transparent discussion and intentionality about the choice of words used to build health equity language.
<i>Hospital District Act</i> (RSBC 1996, c 202)	1996	Act	Provincial	This Act establishes principles for hospital district governance, taxation, and funding. Some health facilities in the RAA communities may be used to provide emergency and non-emergency support for Project employees.
<i>Indian Act</i> (RSC 1985, c 1-5)	1985	Act	Federal	This Act defines Band membership and governance, land and resources, health care, and education systems on reserves.
<i>Nisga'a Final Agreement Act</i> (SBC 1999, c 2)	1999	Act	Indigenous, Provincial	This Act establishes an agreement between the Nisga'a Nation and the Government of BC regarding Nisga'a rights to self-government, and the authority to manage lands and resources. The Nisga'a Treaty was given effect by BC in 1999 under the <i>Nisga'a Final Agreement Act</i> (SBC 1999, c 2).

Name	Year	Type	Level of Government	Description
<i>Nisga'a Final Agreement Act</i> (SC 2000, c 7)	2000	Act	Indigenous, Federal	This Act establishes an agreement between the Nisga'a Nation, the Government of BC, and the Government of Canada regarding Nisga'a rights to self-government, and the authority to manage lands and resources. The Nisga'a Treaty was given effect by Canada in 2000 under the <i>Nisga'a Final Agreement Act</i> (SC 2000, c 7).
<i>Nisga'a Emergency Program Act</i> (2004)	2004	Act	Indigenous	This Act sets out the structure and activities of the NLG and the four Nisga'a Village governments to manage emergencies.
"Emergency Response Roles and Responsibilities" (Northern Health Authority 2022)	2022	Guideline	Municipal/Regional	This guideline sets out roles and responsibilities for emergency response in BC.
"Gitanyow Ayookxw for Wilp Sustainability Assessment" (Gitanyow Hereditary Chiefs 2020) ⁹	2020	Guideline	Indigenous	This document sets out the expectations and processes for participating in Gitanyow's assessment of new projects in Gitanyow Lax'yip (Territory), including for engagement, assessment, decision-making, funding, and monitoring and compliance; adopted by Gitanyow Hereditary Chiefs as a pilot in 2021, it has subsequently been extended.
Hybrid AIR (EAO 2023b)	2022	Application Requirements	Provincial, and Indigenous	The Hybrid AIR establishes data requirements for this Project's Application for an EAC Application.

Notes:

BC = British Columbia; EAC Application = Application for an Environmental Assessment Certificate / Impact Statement; Declaration Act Agreement = Declaration Act Consent Decision-Making Agreement for Eskay Creek Project; EAO = British Columbia's Environmental Assessment Office; Hybrid AIR = Hybrid Application Information Requirements; LAA = Local Assessment Area; MOTI = Ministry of Transportation and Infrastructure; N/A = not applicable; Nisga'a Treaty = Nisga'a Final Agreement; NLG = Nisga'a Lisims Government; OCAP® = ownership, control, access, and possession; OCP = official community plan; Project = Eskay Creek Revitalization Project; RAA = Regional Assessment Area; RDBN = Regional District of Bulkley-Nechako; RDKS = Regional District of Kitimat-Stikine; TCG = Tahltan Central Government; WSAP = Wilp Sustainability Assessment Process

¹ Refer to Section 21.3.1, *Spatial Boundaries*, for a description of the LAA and RAA.

² As in the Hybrid AIR (EAO 2023b), for the purposes of this table, "territory" is defined as the established or asserted traditional territories of Indigenous Nations, except in relation to the Nisga'a Nation, which refers to Nisga'a Lands, the Nass Area, and the Nass Wildlife Area, as applicable.

⁹ The Gitanyow Nation, represented by the Gitanyow Hereditary Chiefs, has engaged with Skeena Resources Limited to pursue an Indigenous-led assessment process under the Gitanyow Wilp Sustainability Assessment Process. Key materials and outcomes developed during the Wilp Sustainability Assessment Process will be provided to British Columbia's Environmental Assessment Office. As such, Gitanyow Indigenous Knowledge is not incorporated into this environmental assessment; instead, key materials and outcomes developed during the Wilp Sustainability Assessment Process (including the Wilp Sustainability Assessment Report) will be provided to the EAO.

21.3 Assessment Boundaries

Assessment boundaries define the geographic and temporal scope or limits of expected potential effects of the Project (as identified in Chapter 10, Valued Component Assessment Methods) and define the focus of the assessment. These boundaries encompass geographic areas where (spatial boundaries) and when (temporal boundaries) the Project is expected to interact with selected VCs, in this case, Infrastructure and Services. Additionally, these boundaries encompass constraints that may be placed on the assessment of those interactions due to political, social, and economic factors (administrative boundaries), and limitations to predicting or measuring changes (technical boundaries).

While the spatial boundaries for assessment defined in Sections 21.3.1.1 through 21.3.1.4 address the above considerations, the Tahltan Areas of Interest (AOIs; EAO 2023b), as outlined in Section 21.3.1.5, Tahltan Areas of Interest, were also used to provide an understanding of Tahltan spatial concerns in relation to this assessment. Similarly, Project temporal boundaries, as outlined in Section 21.3.2, Temporal Boundaries, were also considered in relation to Tahltan temporal frameworks and concerns, as discussed in the Hybrid AIR (EAO 2023b).

21.3.1 Spatial Boundaries

The following sections describe the spatial boundaries for the assessment of potential effects on the Infrastructure and Services VC. This section also describes the relationship of these boundaries to the Tahltan Nation AOIs (Section 21.3.1.5, Tahltan Areas of Interest), which will be considered in Chapter 4, Tahltan Application Information Requirements.

21.3.1.1 Project Footprint

The Project Footprint: is the smallest scale boundary and includes existing infrastructure and newly constructed infrastructure that will be utilized at the Project mine site. The footprint includes temporary (e.g., borrow areas, laydowns, and ore processing facilities) and permanent (e.g., waste rock storage areas, and Tom MacKay Storage Facility) infrastructure where Project physical works and activities will occur. Refer to Chapter 1, Project Overview, for a detailed description of the Project components that comprise the Project Footprint.

21.3.1.2 Local Assessment Area

The Local Assessment Area (LAA)¹⁰ represents geographic areas where the Project is expected to have direct, indirect, and/or induced impacts in relation to the Infrastructure and Services VC (Figure 21.3-1). The LAA overlaps with the territories of the Tahltan Nation and the TSKLH; parts of the Regional District of Kitimat-Stikine (RDKS); and parts of the Stikine Region, an unincorporated area in northwestern BC.¹¹ In the RDKS, the LAA overlaps with the Electoral Areas of Kitimat-Stikine A, Kitimat-Stikine D, and Kitimat-Stikine F. While the administrative boundaries of the Stikine Region and Kitimat-Stikine A do not align with

¹⁰ For the purposes of this chapter, LAA refers to the Infrastructure and Services LAA.

¹¹ The eastern part of the Tahltan Territory overlaps the Peace River Regional District in an area that includes the Tatlatui Provincial and other highlands. In the area where Tahltan Territory and the Peace River Regional District overlap, there are no communities or settlements. Consequently, there are no anticipated interactions of the Project on Infrastructure and Services.

the LAA boundary, for census data collection, they are assumed to be part of the LAA. The communities included in the Infrastructure and Services LAA are listed below:¹²

- The Tahltan communities of Tl̓égōhīn (Telegraph Creek; which includes the Telegraph Creek 6 and 6A¹³ and Guhthe Tah 12 reserves), T'ātlah (the Dease Lake 9 reserve), and the Iskut 6 reserve;¹⁴ (Figure 21.3-2 shows the location of these reserves);
- T'ātlah (Dease Lake unincorporated; Figure 21.3-2);
- Bell II* (located in Kitimat-Stikine A);
- Bob Quinn Lake* (unincorporated settlement, located in Kitimat-Stikine D);
- Tatogga* (unincorporated settlement, located in Kitimat-Stikine D);
- Eddontenajon* (unincorporated settlement, located in Kitimat-Stikine D);
- Good Hope Lake* (located in the Stikine Region); and
- Jade City* (located in the Stikine Region).

Apart from Good Hope Lake and Jade City, the remaining LAA communities fall within Tahltan Territory.

The LAA encompasses all Tahltan AOIs, with the exception of the southern portion of the Tahltan Cumulative Effects AOI (Section 21.3.1.5, Tahltan Areas of Interest).

21.3.1.3 Regional Assessment Area

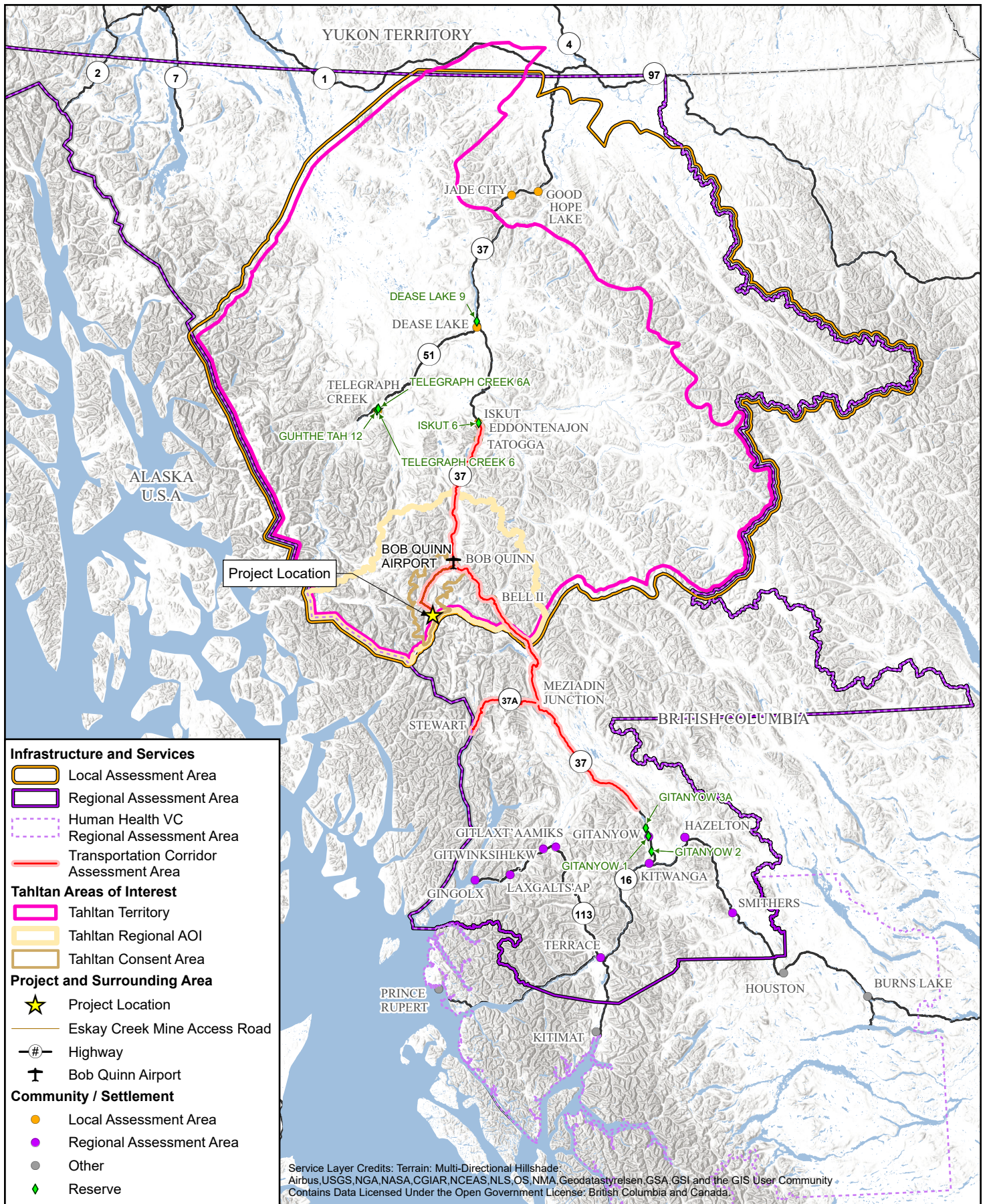
The Regional Assessment Area (RAA)¹⁵ for the Infrastructure and Services VC includes areas and communities where indirect and induced effects of the Project may occur. The RAA encompasses the LAA, overlaps with part of the RDKS, and the Regional District of Bulkley-Nechako (RDBN) Electoral Area A. In the RDKS, the RAA includes the Electoral Areas of Kitimat-Stikine B, Kitimat-Stikine E, and Kitimat-Stikine C (Part 1). While the administrative boundary of Kitimat-Stikine C (Part 1) is not entirely within the RAA, for the purpose of presenting any census-related information, Kitimat-Stikine C (Part 1) is assumed to be part of the RAA (Figure 21.3-1).

¹² Communities are marked with an asterisk (*) when the 2021 Census of Population data are not available. Instead, Census data for those communities are reported as part of the respective Electoral Areas which are indicated in the parentheses.

¹³ "Designated Places" of Telegraph Creek 6 and Telegraph Creek 6A are together considered as a "Census subdivision" of Telegraph Creek reserve.

¹⁴ Iskut and Telegraph Creek community boundaries are almost identical to the co-located Tahltan Nation reserve boundaries; when these two communities are referenced in this Chapter it is in reference to Telegraph Creek 6 and 6A reserves and Guhthe Tah 12 for the community of Telegraph Creek, and Iskut 6 reserve for the community of Iskut. When Dease Lake is referenced in this Chapter, it includes both Dease Lake community and Dease Lake 9 reserve (see Figure 21.3-2). When Dease Lake 9 reserve is referenced, this is solely the reserve.

¹⁵ For the purposes of this chapter, the RAA refers to the Infrastructure and Services RAA.



Skeena Resources Ltd.
 Date: 05-Mar-2025
 Figure: 21.3-1
 Author: curtis.morrison
 Filename: ESK-16-033

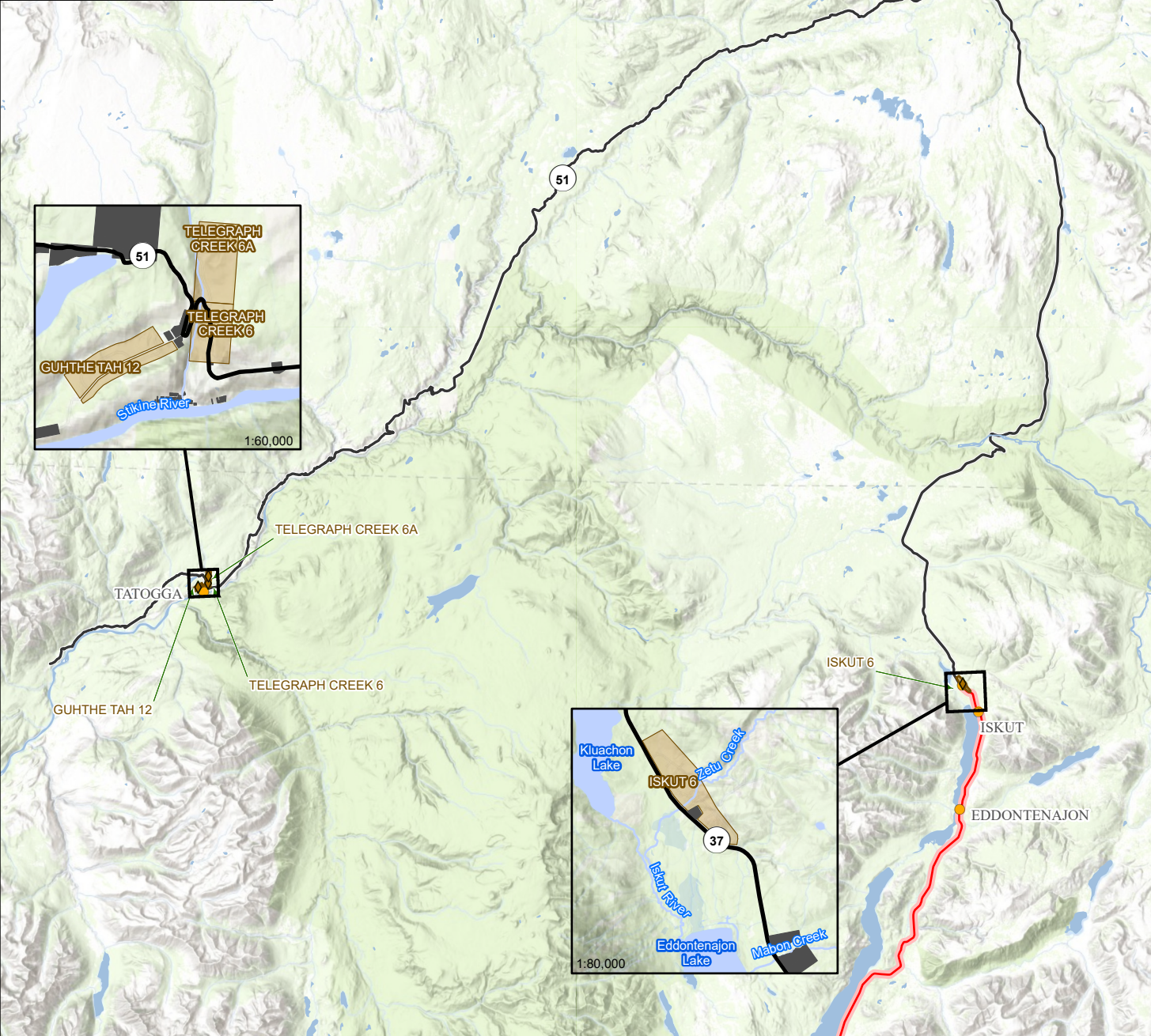
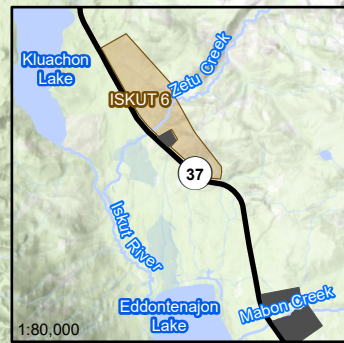
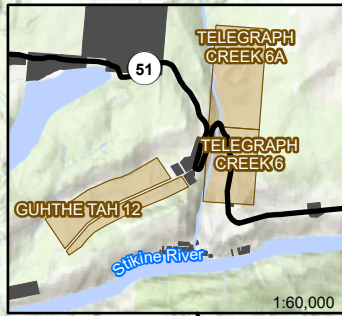
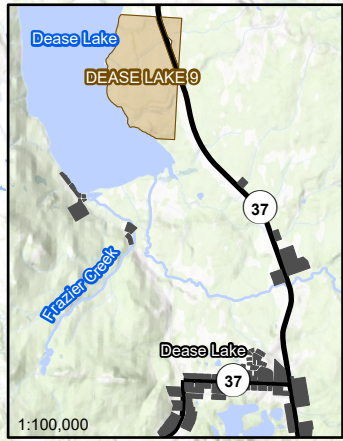


Eskay Creek Revitalization
Figure 21.3-1:
Infrastructure and Services Assessment Area
Boundaries and Tahltan Areas of Interest
 Skeena Mining Division - NTS 104B09
 British Columbia, Canada

Scale: 1:3,500,000
 Coord. System: NAD 1983 UTM Zone 9N
 0 25 50 75 100
 Kilometres



- Tahltan Reserve**
- ◆ Tahltan Reserve
 - Tahltan Reserve Administrative Boundary
- Project and Surrounding Area**
- ⊖ Highway
- Infrastructure and Services**
- ▭ Regional Assessment Area
 - ▭ Local Assessment Area
 - Transportation Corridor Assessment Area
- Community/Settlement**
- Local Assessment Area
 - ◆ Reserve
 - Privately Owned Land



Skeena Resources Ltd.
 Date: 05-Mar-2025
 Figure: 21.3-2
 Author: curtis.morrison
 Filename: ESK-16-033

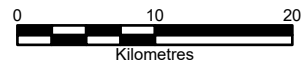


Eskay Creek Revitalization

**Figure 21.3-2:
 Tahltan Communities**

Skeena Mining Division - NTS 104B09
 British Columbia, Canada

Scale: 1:550,000
 Coord. System: NAD 1983 UTM Zone 9N



The Infrastructure and Services RAA for the Project includes the following communities (Figure 21.3-1)

- Terrace;
- Smithers;
- District of Stewart;
- Village of Hazelton and District of New Hazelton, locally referred to as “The Hazeltons”;¹⁶
- Nisga’a Villages of Gitlaxt’aamiks, Gingolx, Gitwinksihlkw, and Laxgalts’ap;
- Kitwanga* (located in Kitimat-Stikine B);
- Gitanyow,¹⁷ reserves of Gitanyow 3a*, Gitanyow 1, and Gitanyow 2* (located in Kitimat-Stikine B); and
- Meziadin Junction* (located in Kitimat-Stikine A).

The Project has the potential to affect health infrastructure in communities outside the Infrastructure and Services RAA. During the development of the Hybrid AIR (EAO 2023b), Northern Health requested that the assessment area for the Human Health VC include the additional communities of Prince Rupert, District of Kitimat, District of Houston, and Village of Burns Lake. Northern Health indicated that these four communities rely on health services or infrastructure in Smithers and Terrace (two communities in the socio-economic RAA), and therefore a change in service availability in Smithers or Terrace could affect them. These four additional communities are captured within the Human Health RAA boundary in the Hybrid AIR (EAO 2023b). Figure 21.3-1 shows the extent of the Hybrid AIR Human Health RAA boundary, in relation to the Infrastructure and Services LAA and RAA. Health infrastructure of these four communities is described in the Socio-economic Baseline Addendum Report (Appendix 21-4).

The Infrastructure and Services RAA fully encompasses the Tahltan AOIs, including the southern portion of the Tahltan Cumulative Effects AOI (Section 21.3.1.5, Tahltan Areas of Interest).

21.3.1.4 Transportation Corridor Assessment Area

The Transportation Corridor Assessment Area (TCAA) includes the Eskay Creek Mine Access Road (Eskay Creek MAR), Highway 37 from Łuwechōn (Iskut) to Meziadin Junction, and the portion of Highway 37 south of Meziadin Junction within the Nass Area and the Nass Wildlife Area. The TCAA also includes Highway 37A west of Meziadin Junction to the port facilities located in the District of Stewart.

The TCAA will be used to transport Project-related concentrate, supplies, and personnel; however, no concentrate will be hauled south of Meziadin Junction. In addition to the use of Highway 37, Project activities related to the TCAA will also include the loading, unloading, handling, and storage of concentrate at the port facilities, up to and including the point at which the loading of concentrate onto a vessel is complete. The TCAA is located entirely within the RAA.

¹⁶ It is understood that a large percentage of TSKLH members live in the Hazeltons (Rescan Environmental Services Ltd. [Rescan] 2013a).

¹⁷ The Gitanyow Nation, represented by the Gitanyow Hereditary Chiefs, has engaged with Skeena Resources Limited to pursue an Indigenous-led assessment process under the Gitanyow Wilp Sustainability Assessment Process. Key materials and outcomes developed during the Wilp Sustainability Assessment Process will be provided to British Columbia’s Environmental Assessment Office.

The portion of the TCAA where the Eskay Creek MAR extends from the Project Footprint and then turns to run along the Iskut River is located within the Tahltan Lower and Upper Elevation AOIs, as well as the Tahltan Consent Area, Regional AOI, and Cumulative Effects AOI. Highway 37 from Iskut to between Bowser Lake and Meziadin Lake falls within the Tahltan Cumulative Effects AOI. It lies within the Tahltan Regional AOI from approximately Bowser Lake to just south of K'ineskehne (Kinaskan Provincial Park). The northeastern boundary of the Tahltan Consent Area runs along Highway 37 from north of Bob Quinn Lake to Ningunsaw Provincial Park.

21.3.1.5 Tahltan Areas of Interest

Tahltan Nation spatial assessment boundaries, or AOIs, are described in section 4.5.1 of the Hybrid AIR (EAO 2023b) and include consideration of the Tahltan Consent Area described in the “*Declaration Act Consent Decision-Making Agreement for Eskay Creek Project*” (*Declaration Act Agreement 2022*).

As noted in section 4.2.9 of the Hybrid AIR, the AOIs were developed by the Tahltan Nation “through confidential Tahltan Knowledge and tools like the confidential Land Use and Occupancy Studies” (EAO 2023b, 44). As emphasized in section 4.2.9 of the Hybrid AIR, the AOIs are more than technical boundaries; they have cultural significance and meaning. For example, key features used to define the AOIs, such as place names,

record a history of relationship to the land, provide a map of how to interact with the land, and memorialize a cultural identity that is tied to the land...placenames tell a story, how a boy drowned in a lake, or a smokehouse collapsed, or a porcupine escaped in a rockpile. Other placenames indicate a point of navigational importance, such as Kiniskan (Kinaskan Lake), which means “raft crossing”. Many names demonstrate an intimate knowledge of the flora and fauna of the country (section 4.2.9 of the Hybrid AIR; EAO 2023b, 43).

The Tahltan AOIs are depicted on Figure 21.3-1. Each VC effects assessment chapter includes a discussion of the alignment of the Tahltan spatial assessment boundaries with the spatial boundaries defined for the effects assessment, including:

- **Project Footprint:** section 4.5.1 of the Hybrid AIR identifies the Project Footprint as “the area of land or water associated with the proposed sites for all physical structures and activities that comprise the Project” (EAO 2023b, 60). Per section 4.2.9 of the Hybrid AIR, the Project Footprint also includes “the access corridor(s), power infrastructure, and general Project area” (EAO 2023b, 44). This area is identical to the Project Footprint defined above.
- **Site-specific AOIs:** section 4.5.1 of the Hybrid AIR identifies the Site-specific AOI as “an area within [which] effects are expected to occur at a scale or magnitude specific to the sensitivity of the value. Multiple AOIs can be found within the Regional AOI” (EAO 2023b, 61). “Value” refers to Tahltan Values (per section 4.3 of the Hybrid AIR). Section 4.2.9 of the Hybrid AIR further clarifies that “the project footprint and infrastructure as defined in the Process Order documents will be considered as site-specific AOIs”, as well as sites identified within the Tahltan Consent Area and Transportation Corridor Assessment Footprint (EAO 2023b, 45).
- **Tahltan Landscape AOI:** section 4.5.1 of the Hybrid AIR identifies the Landscape AOI as “an area defined at a broader scale but still with effects expected to occur at a scale or magnitude specific to the sensitivity of the value” (EAO 2023b, 61). Section 4.2.9 of the Hybrid AIR lists some of the features

considered in the development of the Site-specific and Landscape AOIs, including “Head Family Territories; Family Areas; Tahltan High Sensitivity Areas; Ethnographic and Tahltan History; Cultural Area(s); Sacred Area(s); Place Names; Settlement and Assembly Area(s); Harvesting and Gathering Area(s); Environmentally Sensitive Areas; Trade Area(s); and, Warfare/Boundary Area(s)” (EAO 2023b, 44). According to section 4.2.9 of the Hybrid AIR, the following are included as AOIs in Tahltan Territory, and are further described below: the Tahltan Consent Area, Lower Elevation Level AOI, and Upper Elevation Level AOI (EAO 2023b, 44).

- **Tahltan Consent Area:** the Tahltan Consent Area is described in section 4.3 of the *Declaration Act* Agreement as the area in which consent of the Tahltan Central Government (TCG) “is required for the Project to proceed” (*Declaration Act* Agreement 2022, 13). Section 4.5 further clarifies that “the Consent Area does not limit the geographic scope of Project effects” that will be subject to the effects assessments.
- **Tahltan Lower Elevation Level AOI:** as described in section 4.2.9 of the Hybrid AIR, the following lower elevation areas are included as AOIs (EAO 2023b, 44):
 - Lower elevation river valleys of the Iskut and Ningunsaw rivers north and south of the consent area, including its tributaries;
 - The Unuk River lower elevation valley from the mouth of Ketchum Creek and downstream to the Tahltan Nation’s border; and
 - The lower elevation river valleys of the Bell-Irving River, including its tributaries.
- **Tahltan Upper Elevation Level AOI:** as described in section 4.2.9 of the Hybrid AIR, the following upper elevation areas are included as AOIs: the upper elevation areas of the Oweegee and Snowslide ranges; the Bell-Irving headwaters; the Skeena Mountain Ranges east of the Bob Quinn Upper More and Forrest Kerr creeks drainages, the Jekili River, and the Zippa Mountain Range (EAO 2023b, 44).
- **Tahltan Regional AOI:** section 4.5.1 of the Hybrid AIR identifies the Tahltan Regional AOI as “the broadest spatial extent over which project-specific related effects of [the Project] are to be assessed against Tahltan Values [...]. However, when considering cumulative effects, the AOI may expand to capture all the relevant Tahltan Values and resource development pressures” (EAO 2023b, 61). Multiple AOIs, including the Site-specific and Landscape AOIs, can be found within the Regional AOI. Section 4.2.9 of the Hybrid AIR lists some of the features considered in the development of the Regional AOI, including “Clan Area(s); Head Family Territories; Sacred Area(s); Place Names; and, Ethnographic and Tahltan History” (EAO 2023b, 44).
- **Tahltan Cumulative Effects AOI:** as identified in section 4.5.7 of the Hybrid AIR (EAO 2023b, 47).

21.3.2 Temporal Boundaries

The Infrastructure and Services VC assessment considers four Project phases:

- Construction phase: 2 years;
- Operations phase: 13 years;
- Reclamation and Closure phase: 3 years; and
- Post-closure phase: timeframe will be in accordance with permit conditions.

Please refer to Chapter 1, Project Overview, for a detailed description of the Project phases and activities.

Note that, per the Hybrid AIR discussion of time frames to be considered by the Tahltan Risk Assessment (EAO 2023b), this chapter takes into consideration the outlined approach of forecasting across one to three generations (short-term) and across four to seven generations (long-term). This forecasting is done as a means of applying a perspective consistent with the Tahltan Continuum of ancient, contemporary, and future knowledge, understandings, and practices, as they are grounded in the Tahltan's interconnectedness with the land. For example, Section 21.4.2, Regional and Historical Overview, provides historical context that situates the region's infrastructure and services in relation to a past time scale consistent with a backcasting approach, while Section 21.8, Tahltan Sustainability Requirements and Tahltan Risk Assessment Factors for Understanding Potential Effects to Current and Future Generations, takes a forecasting approach of multiple generations.

21.3.3 Administrative and Technical Boundaries

Administrative boundaries relevant to the Infrastructure and Services VC include the regional districts, hospital districts and local health authorities, Indian reserves, and Nisga'a Treaty (1999) boundaries. These boundaries shape the approach to the effects assessment through:

- Information and data about populations and services that differ within these boundaries; and
- The mandates of organizations that provide social services within these boundaries.

21.3.3.1 Regional Districts Administrative Boundaries

The LAA and RAA overlap with the RDKS and RDBN:

- The RDKS provides services and facilities to unincorporated areas and municipalities within its boundaries, such as utilities, community facilities, parks, transit, and emergency services. Communities served by the RDKS include Iskut; Telegraph Creek; Dease Lake (unincorporated) and Dease Lake Indian Reserve 9; Tatogga; Bell II; Bob Quinn Lake; Terrace; District of New Hazelton; Village of Hazelton; District of Stewart; the Nisga'a Villages of Gitlaxt'aamiks, Gingolx, Gitwinksihkw, and Laxgalts'ap; Kitwanga; and Meziadin Junction (RDKS 2020b).
- The RDBN provides 65 services that are funded by resident taxpayers, including utilities, fire protection, emergency preparedness, transit, recreation, and other community services (RDBN 2019). The Town of Smithers is serviced by the RDBN and located within the RAA.

21.3.3.2 Local Health Authorities and Emergency Services

The major health authorities and emergency services administrative boundaries that overlap with the Infrastructure and Services LAA and RAA are listed below, followed by a summary description of their structure and mandates.

Health authorities include Northern Health, the First Nations Health Authority (FNHA), and the Nisga'a Valley Health Authority (NVHA). Emergency services include BC Emergency Health Services (BCEHS).

Health Authorities

The Project is located within Northern Health's service area. For planning, reporting, and assessment purposes, Northern Health is divided into Health Service Delivery Areas (HSDAs), which are subdivided into local health authorities (LHAs; Figure 21.3-3). The RAA overlaps three HSDAs; the largest area overlapping the RAA is in the Northwest HSDA, with smaller areas of the Northeast HSDA and Northern Interior HSDA overlapping the northern and eastern parts of the RAA (Figure 21.3-4).

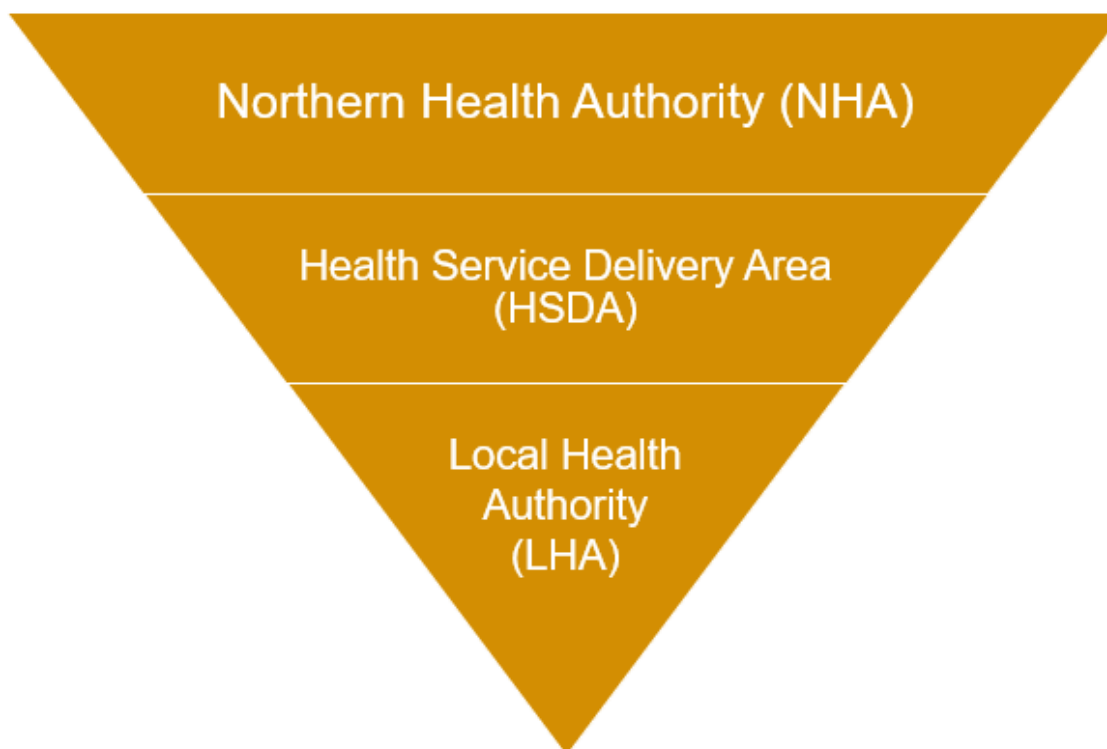
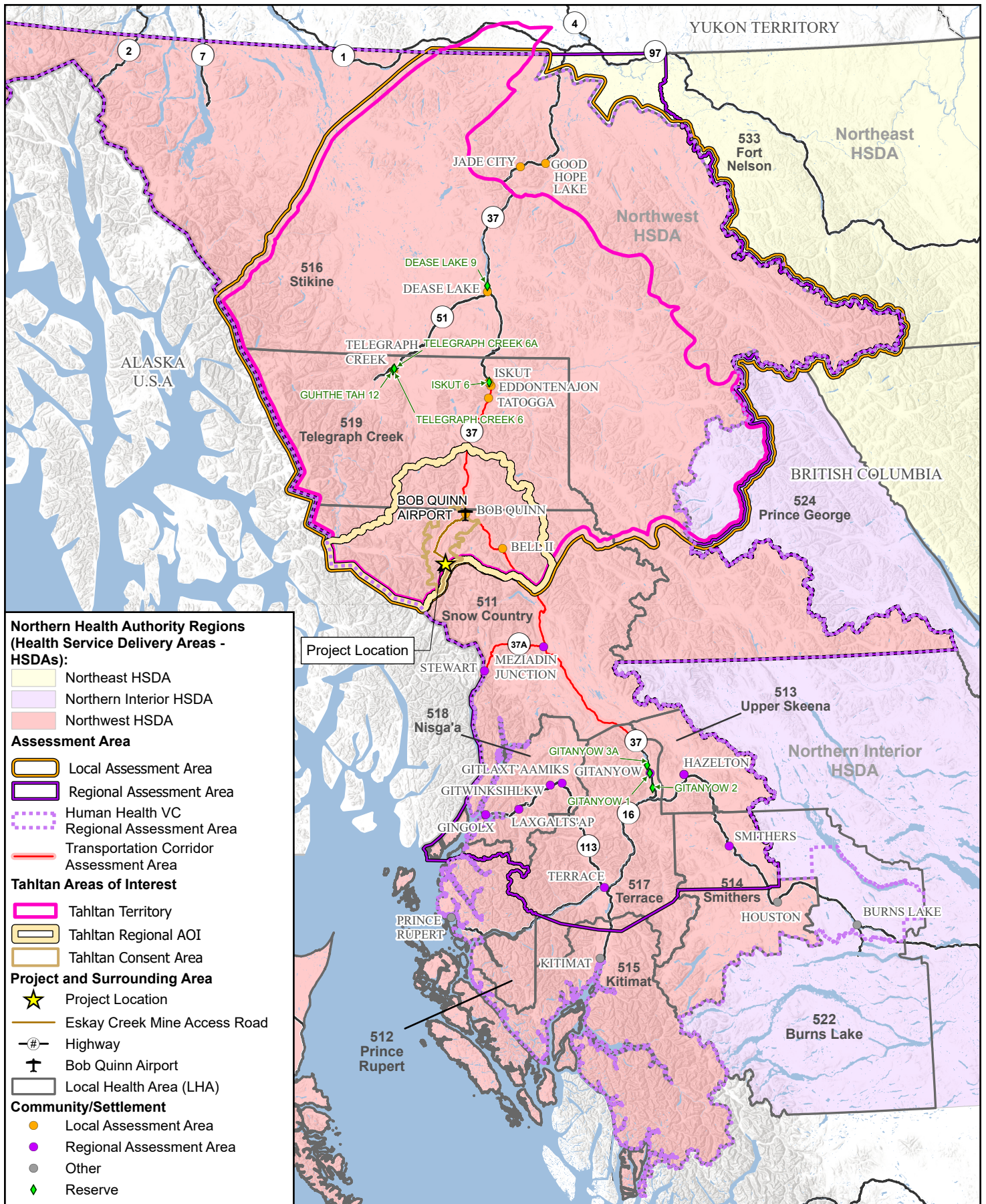


Figure 21.3-3: Structure of Northern Health

The LAA and RAA overlap with eight LHAs in the Northwest HSDA, one LHA in the Northern Interior HSDA, and one LHA in the Northeast HSDA (Figure 21.3-4). LHA 524 (Prince George), LHA 515 (Kitimat), and LHA 533 (Fort Nelson) overlap with the LAA or RAA but do not provide services to any of the LAA or RAA communities.

Table 21.31 includes LHAs (512 and 522) that are in service of Prince Rupert, the District of Kitimat, the District of Houston, and the Village of Burns Lake. Although these four communities are located outside the RAA for the Infrastructure and Services VC, they are within the Human Health RAA. The Project has the potential to affect health infrastructure in these four communities due to potentially overlapping demand for health infrastructure and services in Smithers and Terrace (both within the Infrastructure and Services RAA). These four communities rely on Smithers and Terrace for health services and infrastructure, and therefore a change in availability of these services in Smithers and Terrace due to the Project can have implications for Prince Rupert, the District of Kitimat, the District of Houston, and the Village of Burns Lake.



Skeena Resources Ltd.
 Date: 05-Mar-2025
 Figure: 21.3-4
 Author: curtis.morrison
 Filename: ESK-16-033



Eskay Creek Revitalization
Figure 21.3-4: Northern Health Authority Regions within the Infrastructure and Services Local and Regional Assessment Areas
 Skeena Mining Division - NTS 104B09
 British Columbia, Canada

Scale: 1:3,700,000
 Coord. System: NAD 1983 UTM Zone 9N
 0 50 100
 Kilometres



Table 21.3-1: Local Health Authorities within the Local Assessment Area and Regional Assessment Areas

HSDA	LHA	Communities LHAs Are Working With
LAA		
51 Northwest	LHA 516 Stikine ¹	Jade City, Good Hope Lake, Dease Lake 9, and Dease Lake (unincorporated)
	LHA 519 Telegraph Creek	Telegraph Creek (6 and 6A), Guhthe Tah 12, Iskut, Iskut 6, Eddontenajon, and Tatogga
	LHA 511 Snow Country ¹	District of Stewart, Bob Quinn Lake, Bell II, and Meziadin Junction
52 Northern Interior	LHA 524 Prince George	No LAA/RAA communities
RAA		
51 Northwest	LHA 518 Nisga'a	Nisga'a Villages of Gitlaxt'aamiks, Gingolx, Gitwinksihlkw, and Laxgalts'ap
	LHA 513 Upper Skeena	Incorporates District of New Hazelton and New Hazelton
	LHA 517 Terrace	Terrace and Kitwanga
	LHA 514 Smithers	Smithers and District of Houston ²
	LHA 515 Kitimat	No LAA/RAA communities, only District of Kitimat ²
53 Northeast	LHA 533 Fort Nelson	No LAA/RAA communities
Additional Communities Linked to the Human Health VC (Social Determinants)		
51 Northwest	LHA 512 Prince Rupert	Prince Rupert ²
52 Northern Interior	LHA 522 Burns Lake	Village of Burns Lake ²

Notes:

LAA = Local Assessment Area; HSDA = Health Service Delivery Area; LHA = Local Health Authority; RAA = Regional Assessment Area; VC = Valued Component

¹ LHA 516 and LHA 511 overlaps both the LAA and RAA.

² Outside of the LAA and RAA.

The LAA and RAA also overlap with the following health authorities and service districts:

- **FNHA:** the FNHA is focused on improving health outcomes for First Nations in BC. The FNHA plans, designs, manages, and funds the delivery of First Nations health programs across BC and works in collaboration with Northern Health (Ministry of Health 2023). The LAA and RAA are located within the FNHA's Northern Region, specifically the Northwest subregion (FNHA 2024).
- **Nisga'a Lisims Government (NLG) and NVHA:** the NLG is responsible for health care delivery within the four communities of Gitlaxt'aamiks, Gingolx, Gitwinksihlkw, and Laxgalts'ap (RDKS 2020c). Health care is delivered through the NVHA, a society that operates health care facilities and services in the Nisga'a Villages.
- **North West Regional Hospital District:** the North West Regional Hospital District (NWRHD; RDKS 2020c) is the largest of 23 regional hospital districts (RHDs) in the province. The NWRHD supports two health authorities (i.e., Northern Health and the NVHA) and 20 community facilities (Northern Health 2023b; Ministry of Health 2023). The main purpose of an RHD is to operate and maintain hospitals and hospital facilities (*Hospital District Act* [RSBC 1996, c 202]). The NWRHD pays up to 40% of the cost of capital funding for these health facilities and their medical equipment.

Emergency Response Authorities

BCEHS provides pre-hospital emergency services and inter-facility patient transfer services throughout BC (Provincial Health Services Authority 2024a). The LAA communities are within the Northwest BCEHS District, and the RAA communities are located within the Nechako BCEHS District and the Northwest BCEHS District. BCEHS is part of the Provincial Health Services Authority (PHSA). In addition to delivering emergency health and ambulance services across BC, BCEHS is responsible for planning and coordinating interfacility transfers that require paramedic care, as well as overseeing the community paramedicine program, which provides scheduled care to community members with chronic health conditions in remote and rural areas. BCEHS Operations encompasses clinical operations, such as the care provided by front-line paramedics, emergency call-takers and dispatchers, and staff involved in Patient Transfer Services (BCEHS 2024).

Health Emergency Management BC (HEMBC) is a program of the PHSA. HEMBC provides emergency management leadership and support to the BC health system, including all regional health authorities, PHSA, and the Ministry of Health (Provincial Health Services Authority 2024b). Northern Health works with HEMBC to develop emergency plans and ensure continuity of healthcare services during crises.

The Ministry of Emergency Management and Climate Readiness (EMCR) serves British Columbians as the primary coordinating agency for mitigating climate risk impacts and responding to emergencies and disasters at the provincial level. EMCR leads provincial emergency management using a four-phased approach—mitigation, preparedness, response, and recovery—working closely with First Nations, local authorities, other provinces and territories, federal departments, industry, non-governmental organizations, and volunteers (EMCR 2024).

21.3.3.3 Indian Reserve

Indian reserve administrative boundaries are established within the *Indian Act* (RSC 1985, c I-5) and identify land held in trust by the federal government and for use by an Indian Band. Band members have the right to live on reserve lands. Under the *Indian Act* (RSC 1985, c I-5), Band councils have limited authority in terms of the administration and retention of the reserve.

The following Indian reserves are located within the LAA and were included in this assessment of Project effects on the Infrastructure and Services VC:¹⁸

- Dease Lake 9;
- Guhthe Tah 12;
- Telegraph Creek 6a;
- Telegraph Creek 6; and
- Iskut 6.

¹⁸ Populated Tahltan reserves were included in this assessment. Other Indian reserves located in the RAA were included in this assessment on a case-by-case basis, taking into account the potential for Project-related effects on infrastructure and/or services on the reserves.

21.3.3.4 *Nisga'a Final Agreement*

The Nisga'a Treaty (1999; *Nisga'a Final Agreement Act* [SC 2000, c 7]) is a treaty and land claims agreement established between the Nisga'a Nation, Canada, and the Province of BC. The Agreement, which came into effect in 2000, sets out the Nisga'a right to self-government, and the authority to manage its lands and resources. Within the Agreement, chapter 10 details the requirements for environmental assessments for projects occurring on Nisga'a Lands or may reasonably be expected to have adverse environmental effects on Nisga'a Lands, residents of Nisga'a Lands, or Nisga'a interests, as set out in the Agreement. Chapter 10 (8)f, requires proponents to assess the effects of projects on the existing and future economic, social, and cultural well-being of Nisga'a Citizens who may be affected by a project. The Agreement establishes three categories of lands with different specified Nisga'a interests: Nisga'a Lands, the Nass Wildlife Area, and the Nass Area.

Project activities that will interact with Nisga'a Lands, the Nass Wildlife Area, and the Nass Area comprise transportation and concentrate hauling along Highways 37 and 37A to the port facilities in the District of Stewart (Figure 21.3-5). However, no concentrate hauling will occur south of Meziadin Junction (Section 21.3.1.4, Transportation Corridor Assessment Area).

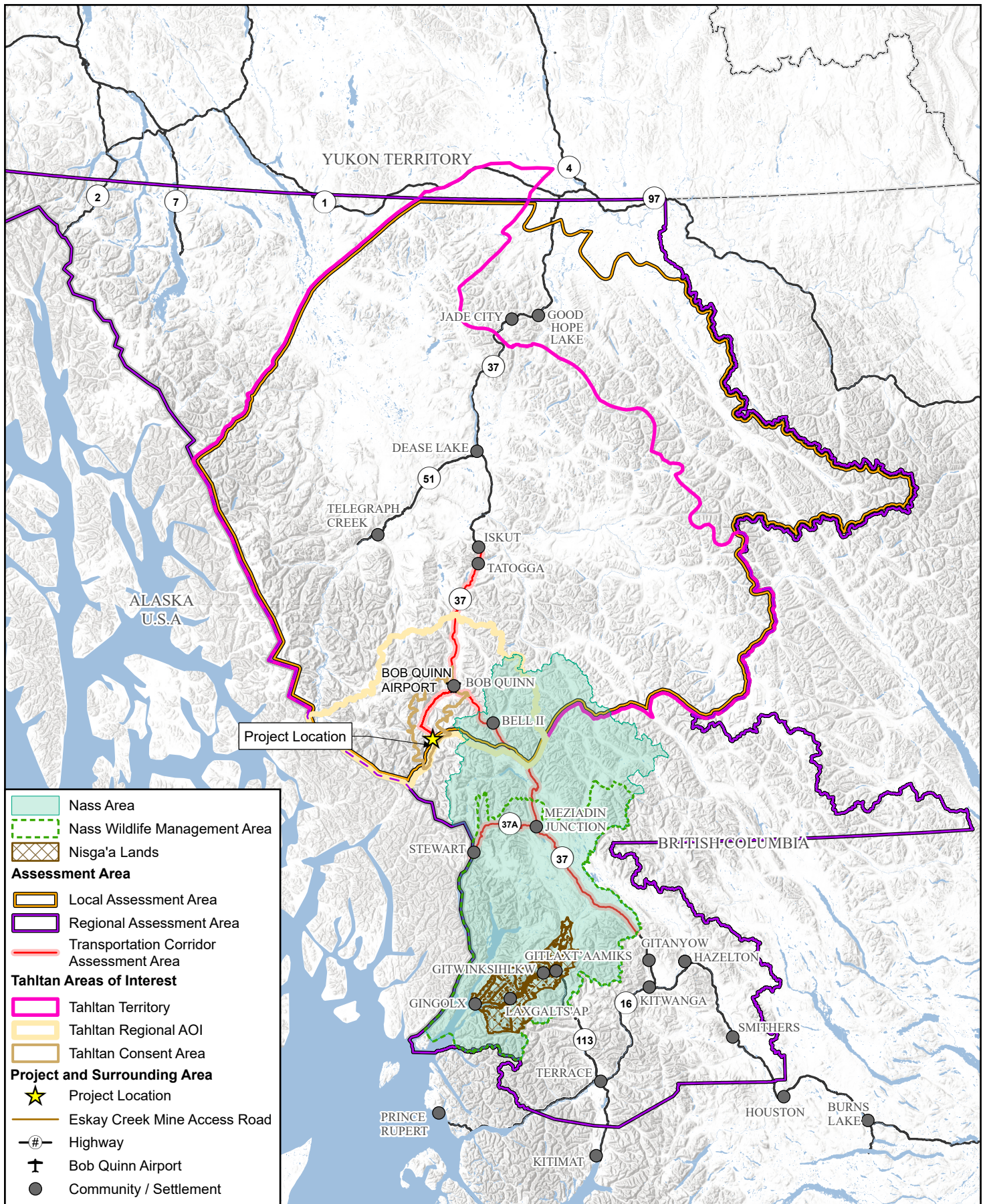
21.4 Existing Conditions and Future Trends

This section describes and, where possible, quantifies existing conditions and future trends of the Infrastructure and Services VC in the LAA and RAA. It considers both regional and historical contexts of the Project, field studies that have been conducted to support the assessment, and other information sources, as applicable, including Indigenous Knowledge. There are limited publicly available data for some LAA communities, including Bell II, Bob Quinn Lake, Tatogga, Eddontenajon, Good Hope Lake, and Jade City. This section focuses on LAA and RAA communities that have greater interactions between their infrastructure and services and the Project itself.

21.4.1 Information Sources

21.4.1.1 *Project-specific Field Studies*

Skeena Resources Limited (Skeena Resources) and Newcrest Mining Ltd. (Newcrest) collaborated with the TCG, with support from Falkirk Environmental Consultants Ltd., to develop a Tahltan Nation Social Community Survey (the Tahltan Survey), that included data collection associated with Infrastructure and Services VC topics, such as mobility, health and well-being, community life and well-being, education, housing, and safety. Over 300 respondents participated in the Tahltan Survey, with 63% of them living in Tahltan Territory. Of those who participated in the survey, over 80% of respondents were a Tahltan Nation member or Associate member, and nearly 14% identified as non-Tahltan, but living in the Tahltan Territory. A response rate was not calculated as a specific sample was not set for the survey (survey links were shared via different means). The survey included 100 quantitative and qualitative questions delivered via Survey Monkey; space was provided to allow for additional responses and open-ended questions were asked where appropriate. An option was provided for each question to opt out from providing a response or select "not applicable" to ensure respondents' privacy, comfort, and confidentiality. The survey link was delivered to TCG e-mails, posted on Facebook pages, communicated verbally, and communicated via posters. Tablets were provided in communities to remove technology barriers; the survey was also delivered verbally to those lacking the literacy skills needed to complete surveys independently, and one-on-one supports were provided for survey respondents as needed.



Skeena Resources Ltd.
 Date: 05-Mar-2025
 Figure: 21.3-5
 Author: curtis.morrison
 Filename: ESK-16-033



Eskay Creek Revitalization
**Figure 21.3-5:
 Nisga'a Final Agreement Lands**
 Skeena Mining Division - NTS 104B09
 British Columbia, Canada

Scale: 1:3,500,000
 Coord. System: NAD 1983 UTM Zone 9N
 0 25 50 75 100
 Kilometres



Key informants were chosen based on their roles in community, government, and health care within Tahltan Territory. In total, 12 key informant interviews were completed with individuals occupying key roles in the TCG and employed in the mining and resource sectors. The interviewees were all Tahltan, of diverse genders and ages, and with those who lived and worked in the Territory or in nearby communities. Respondents answered all or some questions depending on their roles and positionality, however, the identities of key informants were kept confidential to protect their privacy.¹⁹

The Tahltan Socio-economic Baseline Report (Appendix 21-2) recognizes that, in regard to the conducted Tahltan Survey and the key informant interviews, answers are subjective and experiential, and differ among age groups, genders and sexualities, home community, financial status, education, and other positionalities. This subjectivity adds a valuable nuance to desktop and census research and contributes to a better cultural understanding of lived experience for Tahltan people and non-Tahltan alike in Tahltan Territory.

The Tahltan Survey was complemented by key informant interviews (KIIs) conducted in 2021 (further referred to as Tahltan KIIs), which focused on gathering socio-economic information from representatives of Tahltan communities. Interview topics also addressed Infrastructure and Services VC topics, such as Tahltan Nation health and well-being; health services; other community services; access and challenges related to services, education, and effects and interactions of major projects on communities.

The Regional Socio-economic Baseline Report (Appendix 21-1), the Tahltan Socio-economic Baseline Report (Appendix 21-2), and the Tahltan Country Foods Baseline Report (Appendix 21-3) compile the Tahltan Survey results, Tahltan key information interview findings, and other publicly available information. These reports have been used to inform the existing conditions and effects assessment of the Project on the Infrastructure and Services VC.

21.4.1.2 Additional Data Sources

In 2023 and 2024, Tahltan ERM Environmental Management (TEEM) undertook a desktop study to collect additional baseline data to fulfill information requirements identified in the Hybrid AIR. Data collection included a compilation of 2021 Census of Population, released in 2022, and secondary data to complement and update the 2022 socio-economic baseline reports (Appendices 21-1 and 21-2). The results of this desktop research are presented in the Socio-economic Baseline Addendum Report (Appendix 21-4).

In October 2023, TEEM facilitated an internal workshop to consider the analytical framework for GBA Plus with Skeena Resources staff, subject matter experts, and environmental assessment practitioners. Results from this workshop informed the development of the Diverse Subgroups Existing Conditions Supplement (Appendix 20-3), which identifies potential effects pathways for disproportionate effects of the Project on diverse subgroups and describes related existing conditions. The content of this Diverse Subgroups Existing Conditions Supplement supports the integration of GBA Plus in the description of existing conditions and assessment of potential effects of the Project on human-focused VCs, including the Infrastructure and Services VC, as applicable.

¹⁹ The Tahltan Survey segregates data by gender without consideration of other identity factors, limiting its applicability to the GBA Plus analysis.

From March to May 2024, TEEM also undertook KIIs to inform the Infrastructure and Services VC assessment, largely for RAA communities. KIIs included representatives from different services and RAA communities including: BCEHS, Northern Health, WorkBC Centre, and municipalities.

21.4.1.3 *Indigenous Knowledge*

As outlined in the Hybrid AIR (EAO 2023b), Indigenous Knowledge was also considered in the development of this application. Specifically, for the Tahltan Nation, TSKLH, and MNBC, relevant public literature sources were identified and submitted to the respective Engaged Indigenous Nations to secure approval for their use. Chapter 5, Nisga'a Nation, which was developed in partnership with the Nisga'a was also considered in this assessment. In some instances, further information was received from these Indigenous Nations and used to support this application, with specific permissions. These sources include:

- Ethnographic and academic sources, including some Tahltan-authored graduate theses;
- The TCG's official website, online dictionary (TCG 2024), and newsletters;
- Indigenous Knowledge contributed by the TCG to the Hybrid AIR (EAO 2023b) and received in the context of a joint Indigenous Knowledge workshop presented by Tahltan Heritage Resources Environmental Assessment Team (THREAT) and Skeena Resources on 12 April 2024 (THREAT 2024);
- Tahltan Knowledge shared with Skeena Resources by the TCG in accordance with the protocol and agreement entered into by both parties;
- Policy and governance materials produced by the TCG and its predecessor organizations;
- Correspondence and supporting documentation, including the 2021 report "Tsetsaut Skii km Lax Ha: Review of Ethnographic and Historical Sources" (Ministry of Attorney General 2021) by the BC Attorney General's office, received from TSKLH;
- Correspondence received from MNBC; and
- Previous environmental assessment applications, which in addition to synthesizing some of the above sources, also include publicly released information from non-public studies (e.g., country food studies in advance of previous projects) that inform the current work.

The Gitanyow Nation is working directly with Skeena Resources to apply the Wilp Sustainability Assessment Process to the Project. For this reason, Gitanyow Indigenous Knowledge is not incorporated into this Infrastructure and Services Effects Assessment; instead, key materials and outcomes developed during the Wilp Sustainability Assessment Process (WSAP; including the Wilp Sustainability Assessment Report) will be provided to the EAO and appended to Chapter 6, Gitanyow Nation.

For the Nisga'a Nation, environmental, economic, social, and cultural assessments consistent with the requirements of chapter 10, paragraphs 8(e) and 8(f) of the Nisga'a Treaty have been carried out and are provided in Chapter 5, Nisga'a Nation. Associated Indigenous Knowledge for the Nisga'a Nation has been drawn from these assessments and can be consulted in relation to paragraphs 8(e) and 8(f) assessments in that chapter.

21.4.2 Regional and Historical Overview

21.4.2.1 *Regional Overview*

The Project site is located within the territories of the Tahltan Nation and TSKLH. Bob Quinn Lake is located 3 kilometres (km) north of the Project's access road and is considered the closest community to the Project site; Bob Quinn Lake has a trailer camp and no permanent residents. The Tahltan community of Iskut, with 478 residents as of 2021, is the closest Indigenous community to the Project site, and is located 125 km north from the Project, or 170 km via road. The District of Stewart, with 517 residents (2021), is 83 km to the south of the Project site, or about 260 km by road.

The RAA overlaps with the RDKS and RDBN. The RDKS is the second largest regional district in BC, and includes Terrace, with 12,017 residents (2021), which provides access to goods and services to other municipalities in the RDKS. The RDBN includes Smithers, the second largest community in the RAA with 5,738 residents (2021), which also provides access to goods and services for other communities.

The region's low population density and long distances between communities limit the overall availability and accessibility of infrastructure and services. Accessibility of health, education, and emergency services has been raised as an issue within Tahltan and other communities within the RAA.

Economic activity in northwestern BC stems largely from development of the area's abundant natural resources, mainly mineral deposits. Major projects and operations in the RDKS include LNG Canada in Kitimat, the Brucejack Mine (a gold-silver mining operation), and the Galore Creek gold-silver-copper mineral exploration project. Historically, the development of infrastructure and services in the region has significantly influenced settlement and traditional practices of Indigenous communities, particularly the Tahltan Nation.

21.4.2.2 *Historical Overview*

In the past, Indigenous people in this region historically moved between different villages and camps based on the seasons and associated traditional practices, such as hunting. However, as new economic opportunities, such as mining, big-game guiding, and railway and highway construction were introduced to the region, Tahltan families moved to take advantage of these opportunities (McIlwraith 2007; Sheppard 1983). As well, McIlwraith (2007) describes that specifically how such moves were sometimes encouraged by government officials who believed that Indigenous people would be "better off" living near services like schools and stores.

The development of infrastructure and services influenced the more permanent settlement of the Tahltan, which began in the late 1800s at the historic Tahltan village located at the confluence of the Stikine and Tahltan Rivers, and later at Telegraph Creek. Sheppard (1983) notes that the decline in regional mobility for families at this location, as well as those associated with Iskut, was particularly noticeable following the 1930s, with mothers and children staying near the local church and school in the winter, and men leaving villages in the summer to engage in wage labour. This approach allowed many Tahltan students to attend as day students, rather than residential students. However, schools for Indigenous children commonly promoted cultural assimilation under the guise of providing educational services (MNBC and BC OPHO 2021). As a result, imposition of schooling and associated negative experiences (e.g., TCG 2020, 43) have resulted in intergenerational trauma and other effects among Indigenous people, including reluctance

to access government-provided services, such as health care, due to historically founded distrust (Vogel 2015).

The development of infrastructure and services in the region has been largely influenced by the evolution of mining activities in the region, with the development of roads, a telegraph line, mail service, and steamboat service in response to demand related to gold rushes in northern BC starting in the mid-nineteenth century and furthered by the large surge of gold seekers who passed through the region on their way to the Yukon during the 1898 Klondike gold rush (Sheppard 1983). While mining development in the region has historically increased services available to local residents, mine closures and associated cessation of supporting activities at other times has resulted in the reduction of services as well. For example, Sheppard (1983, 240) notes that during the 1920s to 1940s, there were four competing general stores operating in Telegraph Creek in response to demand from “hunters, adventurers, miners, and airport construction”. However, by the late 1950s, mining, big-game hunting, and construction activities had declined, and only one general store remained in Telegraph Creek. As well, the local office for the Indian agent responsible for fulfilling governmental obligations under the *Indian Act* (RSC 1985, c I-5; including management of housing and other infrastructure) closed around this time (Sheppard 1983).

Since then, notable infrastructure developments of geographic significance to the LAA include the opening of the Cassiar asbestos mine in the 1950s (Albright 1982), the completion of the Stewart-Cassiar Highway in the 1970s (McIlwraith 2007), and the construction of the BC Rail grade in the mid-1970s (McIlwraith 2007). This last development did not see installation of the planned track and therefore never supported a functional railway; however, its creation facilitated off-road and pedestrian access to the areas it crosses and continues to be used today.

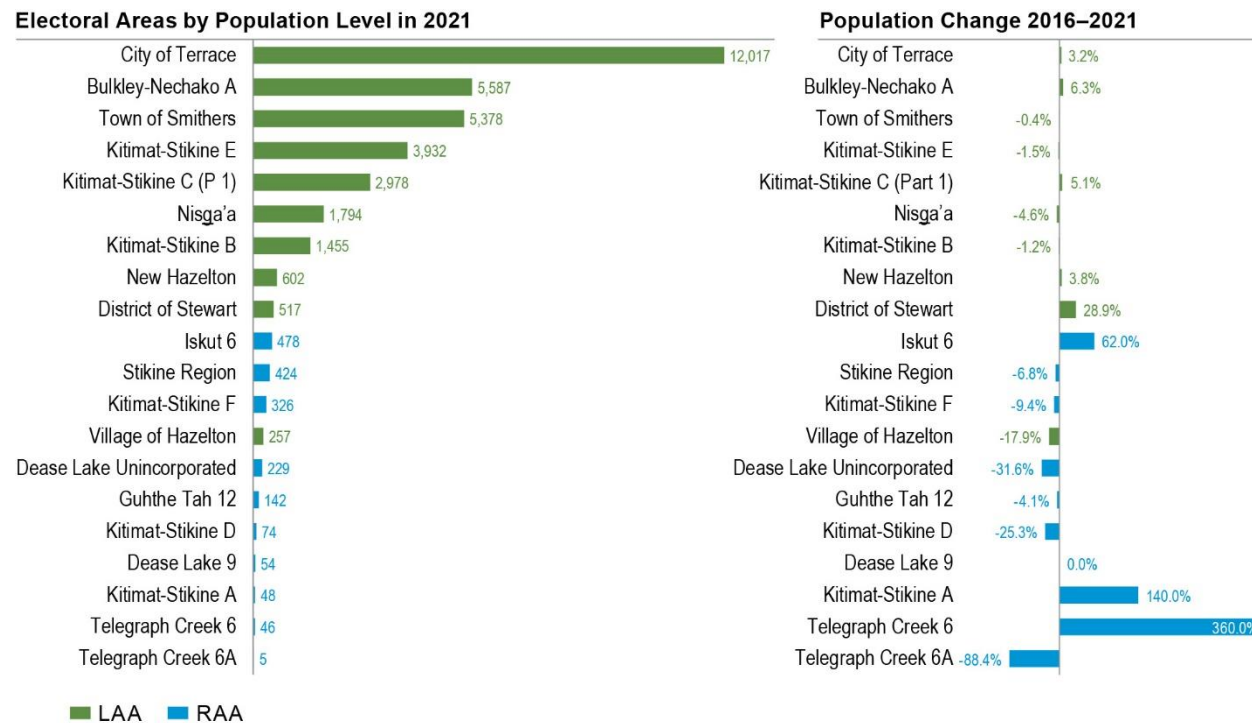
21.4.3 Characterization of Existing Conditions

This section describes the existing conditions and future trends of community infrastructure and services in the LAA and RAA, based on information gained from currently available and publicly accessible sources. The focus is on those LAA and RAA communities that are anticipated to experience the most interactions between the Project and their infrastructure and services. There are limited publicly available data for some LAA communities, including Bell II, Bob Quinn Lake, Tatogga, Eddontenajon, Good Hope Lake, and Jade City.

21.4.3.1 *Population Demographics and Trends*

Population Demographics

In 2021, the RAA had a population of 37,201, representing 0.7% of the total provincial population. Population growth is lower in the LAA and RAA, as compared to the broader BC growth rate. Within the LAA, there were 1,826 residents in 2021, an increase of 0.4% from 1,819 in 2016. Within the RAA (excluding the LAA), there were 35,375 residents in 2021, indicating an increase of 2.1% from 34,638 in 2016. In contrast, the provincial population growth rate was 7.6% between 2016 and 2021. Population levels and population changes for each LAA and RAA community, from 2016 to 2021, are provided on Figure 21.4-1. The LAA and RAA communities and administrative boundaries are shown on Figure 21.4-2.



Source: Statistics Canada 2023

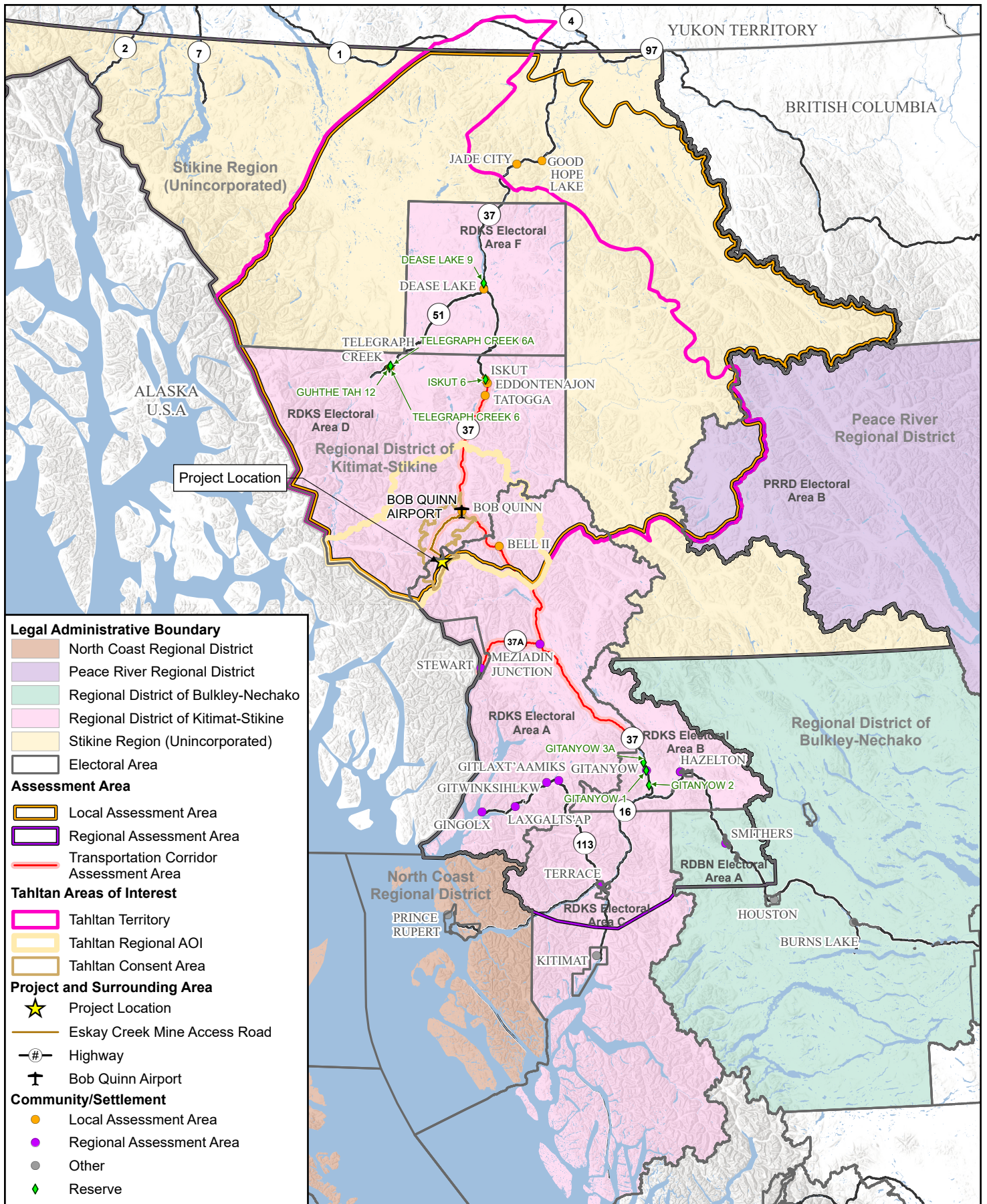
Notes:

LAA = Local Assessment Area; RAA = Regional Assessment Area

Blue bars and data labels refer to the LAA, while green bars and labels refer to RAA communities and areas.

For small communities with low population levels, it should be noted that small changes in population counts can result in large percentage changes, such as for the Indian reserves of Telegraph Creek 6 or Telegraph Creek 6A, which together with Guhthe Tah 12 represent the community of Telegraph Creek. For example, the population of Telegraph Creek 6A decreased from 43 in 2016 to 5 in 2021, while the population of Telegraph Creek 6 increased from 10 in 2016 to 46 in 2021. Together, those numbers represent a change of 53 people in 2016 to 51 people in 2021, and thus, a small change of 3.8% in population size. It is important to note that there might have been a change in how population counts were reported for Telegraph Creek 6 and Telegraph Creek 6A in 2016, compared to the 2021 Census of Population. This, therefore, shows misleadingly large changes in populations. Further, because the community of Telegraph Creek includes Telegraph Creek 6 and 6A and Guhthe Tah 12, the total population of the community of Telegraph Creek was 193 in 2021.

Figure 21.4-1: Local Assessment Area and Regional Assessment Area Communities and Electoral Areas by Population Level in 2021 (left graph) and Population Change 2016–2021 (right graph)



- Legal Administrative Boundary**
- North Coast Regional District
 - Peace River Regional District
 - Regional District of Bulkley-Nechako
 - Regional District of Kitimat-Stikine
 - Stikine Region (Unincorporated)
 - Electoral Area
- Assessment Area**
- Local Assessment Area
 - Regional Assessment Area
 - Transportation Corridor Assessment Area
- Tahltan Areas of Interest**
- Tahltan Territory
 - Tahltan Regional AOI
 - Tahltan Consent Area
- Project and Surrounding Area**
- Project Location
 - Eskey Creek Mine Access Road
 - Highway
 - Bob Quinn Airport
- Community/Settlement**
- Local Assessment Area
 - Regional Assessment Area
 - Other
 - Reserve

Eskey Creek Revitalization
Figure 21.4-2: Administrative Boundaries within the Infrastructure and Services Local and Regional Assessment Area
 Skeena Mining Division - NTS 104B09
 British Columbia, Canada

Scale: 1:3,700,000
 Coord. System: NAD 1983 UTM Zone 9N

0 50 100
Kilometres



In 2021, the gender split was 51.5% men+²⁰ and 48.5% women+²¹ in the LAA, and 50.6% men+ and 49.4% women+ in the RAA (Table 21.4-1). The gender split in the LAA and RAA is different from the overall provincial composition of 49% men+ and 51% women+.

Table 21.4-1: Population Estimates, including by Gender, in the Local and Regional Assessment Areas

Assessment Areas	2021 (Number of People)	2016 (Number of People)	Percentage Change 2016–2021	Men+ (2021) (Number of People)	Women+ (2021) (Number of People)
LAA	1,826	1,819	0.4%	51.5%	48.5%
RAA (less LAA)	35,375	34,638	2.1%	50.6%	49.4%
BC	5,000,879	4,648,055	7.6%	ND	ND

Source: Statistics Canada 2023

Notes:

BC = British Columbia; LAA = Local Assessment Area; RAA = Regional Assessment Area

“Men+” includes men and boys, and some nonbinary persons. “Women+” includes women and girls, and some non-binary persons. All references to men and women in the context of the 2021 Census of Population of Canada should be understood as reflecting this data aggregation, even where the ‘+’ symbol is not present.

ND = no data available

The Indigenous population in the LAA and RAA includes primarily First Nations people. Based on available statistics, 34.3% of the LAA population self-identifies as First Nations and 1.4% as Métis, differing from 3.7% and 2.0%, respectively, from the BC population. In the RAA, 20.7% of the total population self-identifies as First Nations, 3.3% as Métis, and 0.5% as belonging to other groups²² (Table 21.4-2).

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) provides information about registered First Nations populations. CIRNAC reports that, as of December 2023, the Tahltan Nation had 2,116 members, including 157 males and 132 females living on their own reserve. In Nisga’a Villages, the registered population, as of December 2023, was 6,097 people, including 1,089 males and 959 females living on their own reserve. Populations reported by Indigenous Nations can be different from those reported by CIRNAC. For example, the Tahltan Nation reported 4,500 to 5,000 members in total (including registered and non-registered members; Tahltan Nation Development Corporation [TNDC] 2023).

Information about birth and death rates is provided in the Socio-economic Baseline Addendum Report (Appendix 21-4).

²⁰ The plus symbol (+) indicates an inclusive perspective, where Men+ includes men (and/or boys), as well as some non-binary persons.

²¹ The plus symbol (+) indicates an inclusive perspective, where Women+ includes women (and/or girls), as well as some non-binary persons.

²² The “other” grouping can include Inuk (Inuit) or multiple responses.

Table 21.4-2: Indigenous Populations in the Local and Regional Assessment Areas, 2021

	Gender	First Nations (Number of People)	Métis (Number of People)	Other (Number of People)	First Nations (% of Total Population)	Métis (% of Total Population)	Other (% of Total Population)
LAA	Total	625	25	0	34.3%	1.4%	0.0%
	Men+	360	10	0	38.7%	1.1%	0.0%
	Women+	305	25	0	34.7%	2.8%	0.0%
RAA (less LAA)	Total	7,310	1,170	190	20.7%	3.3%	0.5%
	Men+	3,570	605	75	19.9%	3.4%	0.4%
	Women+	3,740	555	120	21.4%	3.2%	0.7%

Source: Statistics Canada 2023

Notes:

LAA = Local Assessment Area; RAA= Regional Assessment Area; % = percent

Indigenous identity for populations in private households are based on a 25% of the sample data and, as such, should be interpreted with caution. For the LAA, information on Indigenous identity was not available for Telegraph Creek 6A, Good Hope Lake, or Kitimat-Stikine A.

“Men+” includes men and boys, and some non-binary persons. “Women+” includes women and girls, and some non-binary persons. All references to men and women in the context of the 2021 Census of Population of Canada should be understood as reflecting this data aggregation, even where the ‘+’ symbol is not present.

Future Trends

Increases in populations are projected for Terrace, Smithers, and the Village of Hazelton, with population growth of 25% or more anticipated from 2023 to 2046 (Table 21.4-3, BC Stats [2024]). Population projections are based on past trends (e.g., births, deaths, and migration by age). Terrace has the largest projected increase of 36.3%. The District of Stewart has the smallest population growth projection at 7.3% (Table 21.4-3). Population projections made for LHAs (Table 21.4-4) provide information about the LAA and RAA communities that are not included in Table 21.4-3.

21.4.3.2 Health Care and Social Services and Facilities

Health Care Services and Facilities

This subsection provides a description of the health care services and facilities available within LAA and RAA communities.

Local Assessment Area

Northern Health provides the following health services (Northern Health 2024a):

- Acute care services at hospitals, and diagnostic and treatment centres;
- Long-term care at complex and acute care facilities; and
- Community health services, including:
 - Home health services;
 - Mental health and substance use services, including an extensive network of inpatient, clinic, and community services; and

- o Population and public health services focusing on promoting health and preventing injuries to improve the health of people across northern BC.

Table 21.4-3: Future Population Trends by Municipality

Municipality ¹ within the RAA	Population 2023 ² (Number of people)	Population 2030 (Number of people)	Population 2046 (Number of people)	Year-to-year Percent Change Predicted 2023–2046 ³ (%)
Terrace	13,926	15,685	18,984	36.3%
Smithers	5,879	6,129	7,340	24.9%
District of New Hazelton	667	653	742	11.2%
District of Stewart	438	411	470	7.3%
Village of Hazelton	347	384	444	28.0%

Source: BC Stats (2024)

Notes:

BC = British Columbia; RAA = Regional Assessment Area

¹ Municipality is defined by BC Stats as a legal entity, in BC, including a city, town, village, or district municipality (Government of BC 2023a).

² Population statistics are as of 1 July 2023 and are adjusted for census net under coverage (a statistical adjustment process that helps prevent underestimation of true population counts).

³ BC Stats uses Population Extrapolation for Organizational Planning with Less Error (PEOPLE) 2020 to provide annual sub-provincial population projections within BC regions including the Northwest. PEOPLE 2020 is a methodology that uses a “Component/Cohort-Survival” population model with assumptions dealing with fertility, mortality, and migration. BC Stats states that “These forecasts are based on past trends modified to account for possible future changes and, consequently, should be viewed as only one possible scenario of future population” (Government of BC 2024a).

Table 21.4-4: Future Population Trends by Local Health Area

HSDA	LHA	Communities	Population 2023 (Number of people)	Population 2030 (Number of people)	Population 2046 (Number of people)	Year-to-year Percent Change Predicted 2023–2046 (%)
LAA						
51 Northwest	511 Snow Country ¹	District of Stewart, Bob Quinn Lake, Bell II, and Meziadin Junction	567	546	612	7.9%
	516 Stikine ¹	Jade City, Good Hope Lake, Dease Lake 9, and Dease Lake (unincorporated)	1,085	1,165	1,352	24.6%
	519 Telegraph Creek	Telegraph Creek (6 and 6A), Guhthe Tah 12, Iskut, Iskut 6, Eddontenajon, and Tatogga	637	670	824	29.4%

HSDA	LHA	Communities	Population 2023 (Number of people)	Population 2030 (Number of people)	Population 2046 (Number of people)	Year-to-year Percent Change Predicted 2023–2046 (%)
RAA						
51 Northwest	513 Upper Skeena	Village of Hazelton and District of New Hazelton	4,670	4,836	5,694	21.9%
	514 Smithers	Smithers and District of Houston ²	18,461	19,313	23,119	25.2%
	515 Kitimat	No LAA/RAA communities, only District of Kitimat ²	9,820	10,010	11,715	19.3%
	518 Nisga'a	Nisga'a Villages of Gitlaxt'aamiks, Gingolx, Gitwinksihlkw, and Laxgalts'ap	1,936	2,028	2,409	24.4%
Additional Communities Linked to the Human Health VC						
51 Northwest	512 Prince Rupert ²	City of Prince Rupert ²	14,939	15,716	18,727	22.8%
52 Northern Interior	522 Burns Lake ²	Village of Burns Lake ²	6,731	6,787	7,989	17.3

Source: BC Stats (2024)

Notes:

BC = British Columbia; HSDA = Health Service Delivery Area; LAA = Local Assessment Area; LHA = Local Health Area; RAA = Regional Assessment Area; VC = Valued Component

¹ LHA 516 and LHA 511 also overlap with the Regional Assessment Area.

² Outside of the LAA and RAA.

Within the LAA, health infrastructure and service providers in the Tahltan communities include Iskut Valley Health Services (IVHS) in Iskut, Stikine Regional Health Centre in Dease Lake, and Telegraph Creek Health Centre in Telegraph Creek. These facilities offer the services described below:

- **The IVHS** is operated by FNHA in collaboration with the Iskut Band, and provides holistic health services, including mental health services. Treatment services are available from registered nurses on weekdays, and there is a “Doctor’s Day” once a week (Appendix 21-2, Tahltan Socio-economic Baseline Report). It has been noted that the lack of Royal Canadian Mounted Police (RCMP) in Iskut puts pressure on the two nurses at the IVHS when they are involved in patient care associated with drug and alcohol related incidents (Paul 2021).
- **The Stikine Regional Health Centre** is operated by Northern Health, provides 24 hours a day, 7 days a week (24/7) emergency care, as well as ambulance services. The facility has a two-bay ambulance base, two staff physicians who provide emergency and clinic-based care, nurses, and administrative staff (Northern Health 2024b). Mental health support services are also available (Appendix 21-2, Tahltan Socio-economic Baseline Report). The centre is not equipped to handle medical emergencies that may require surgery (Pathways n.d.).

- **The Telegraph Creek Health Centre** is operated by the FNHA, provides community nursing services on weekdays, and a 24/7 emergency on-call service. Physician and laboratory services are available one day a week, by appointment (Northwest Aboriginal Health Improvement Committees 2016). Mental health care is also available (Appendix 21-2, Tahltan Socio-economic Baseline Report).

As of 2022, there were no clinical counsellors or registered mental health therapists living permanently in Iskut or Tahltan Band communities. In addition to the facilities listed above, mental health care is available through the Peoples' Haven in Dease Lake. Engagement data collected for the 2020 Tahltan Band Council (TBC) Comprehensive Community Plan noted that 25% of respondents indicated a desire for trauma, addictions, and mental health supports as a priority. Respondents also noted an overall need for increased specialists and family doctors (Appendix 21-2, Tahltan Socio-economic Baseline Report). Additional health services include a pregnancy outreach program in Dease Lake offered by the Smithers Dze Ɓ K'ant Friendship Centre Society, which provides perinatal information and resources to families with children aged 0 to 6 years old through group, drop-in, and one-on-one sessions (Dze Ɓ K'ant Friendship Centre 2023).

As noted in the Tahltan Socio-economic Baseline Report (Appendix 21-2), both geography-related and health care provider-related barriers exist for Tahltan members living in the LAA, including transportation and travel costs, high turnover rates for health care providers, and lack of access to training and professional development for health care professionals (Appendix 21-2, Tahltan Socio-economic Baseline Report). As well, as further described in Chapter 20, Human Health Effects Assessment, access to health services is shaped by culture, as culture influences the ways in which health services are offered, withheld, or to whom services are offered (and to what degree). As described by Mayhew, the Canadian health system has been "...shaped by the mainstream, colonial beliefs, and historically dominant culture" (Appendix 21-2, Tahltan Socio-economic Baseline Report, p. 61).

Of the more than 300 respondents to the Tahltan Survey (Section 21.4.1, Information Sources), 45% thought there were enough health services in the community, and 43% thought there were not enough. Some respondents lamented the loss of the pharmacy in Dease Lake and the challenge of having prescriptions digitally filled and ordered. An Elders' facility, home, or supported living services were also among the most requested health facilities and services, and some Elders who answered the Tahltan Survey indicated that health needs lead them to consider moving elsewhere.

Some Tahltan Survey respondents commented on the need for improved medical evacuation services. Residents of Dease Lake rely on medical evacuation services to transport them to larger hospitals in cases where surgery is required. Medical evacuation planes or helicopters have to land at the Stikine Regional Airport (located in Dease Lake), which is primarily run by part-time volunteers. Recent improvements at Dease Lake Airport are intended to alleviate some of the concerns regarding emergency response times and medical accessibility.

Responses to the Tahltan Survey did not mention traditional healers or what role they play in addressing community health priorities.

Regional Assessment Area

Within the RAA, major health care facilities include the Mills Memorial Hospital in Terrace, the Bulkley Valley District Hospital in Smithers, and the Stewart Health Clinic in the District of Stewart:

- **The Mills Memorial Hospital** has “Level 4” care, which offers 24/7 care covering critical care to trauma Level 5 (i.e., stabilize and recover adult patients), a physician on call with onsite or response commitment, some specialist surgery, some specialized registered nurses, general surgical call coverage, and urban deployment of ambulance services (Northern Health 2017; Northwest Regional Office, Northern Health, pers. comm., 2024).
- **The Bulkley Valley District Hospital** has “Level 3” care, which offers 24/7 care, including emergency care, a physician on call, 24-hour observation of acutely ill patients, visiting specialists, and rural deployment of ambulance services (Northern Health 2017). The hospital has an acute care unit, cancer services, an infusion clinic and maternity department. There are no surgeons or specialists who live in Smithers; however, a total of 25 specialists provide care on rotation through out-of-town and provincial mechanisms (Bulkley Valley District Hospital, Northern Health, pers. comm., 2024). The hospital also serves as a rural centre for surrounding communities including Village of Witset, Village of Granisle, Village of Telkwa, Quick community, Village of Burns Lake, and District of Houston, and maternity services are offered to residents from the Hazeltons.
- **The Stewart Health Clinic** has “Level 1” care, which offers limited services provided by a physician and/or registered nurses or nurse practitioners, often using visiting or shared call arrangements. The Stewart Health Clinic offers 24/7 care with one in-community physician, one full-time site manager/registered nurse, one full-time registered nurse, two part-time registered nurses, and one full-time lab and x-ray technician (Stewart Health Clinic, Northern Health, pers. comm., 2024).

Other large health facilities include the Wrinch Memorial Hospital in the Village of Hazelton. The NVHA is in service of the Nisga’a Villages in the Nass Valley (RDKS 2020c). There are no health facilities in Meziadin Junction, based on publicly available information.

Main challenges related to health care services in the LAA and RAA are related to long distances between health care facilities, limited capacity of the facilities, and difficulties in recruiting health care professionals to rural and remote areas. Capacity concerns for existing health care services and facilities across the RAA are prevalent, emphasizing the pressure and strain current conditions are putting on northern BC’s health care system. Examples of concerns are as follows:

- The Bulkley Valley District Hospital is experiencing a lack of beds available in acute care, with an over-capacity Emergency Room. Residents from other communities, such as the Hazeltons, travel to Smithers or Terrace for higher levels of care (e.g., dental care; Bulkley Valley District Hospital, Northern Health, pers. comm., 2024). In Terrace, it is common for residents to be on a waitlist for a family physician, and there is a perception that major projects can exacerbate the accessibility of health professionals (Terrace Chamber of Commerce, pers. comm., 2024).
- In the District of Stewart drop-in patients at the Stewart Health Clinic are often employees of mining, logging, or highway operations. In response to long drop-in lines, residents who require ongoing services often travel outside of the District of Stewart to receive primary care. For higher levels of care, including specialist treatments, patients are sent to Terrace, City of Prince Rupert, or the District of Kitimat through the BC Ambulance Service (Stewart Health Clinic, Northern Health, pers. comm., 2024).
- There is a perception that the prevalence of drug addiction and homelessness in Terrace have discouraged health care workers to move to the community (Terrace WorkBC Centre, pers. comm., 2024).

- Health practitioners have expressed that having a registered nurse employed at worksites and work accommodations can help relieve the pressure on existing health care services and facilities (Bulkley Valley District Hospital, Northern Health, pers. comm., 2024).

Gender-based Analysis Plus Highlight

Identity factors influence how some groups of people in the LAA or RAA experience health care services, as described in Appendix 20-3, Existing Conditions for Diverse Subgroups Supplement. An example of this is how individuals living in rural and remote areas and Indigenous people living on-reserve may face challenges in accessing services considering time and expenses necessary for travel to attend health services. In the GBA Plus Workshop (TEEM 2023), participants noted the long distances rural residents travel to access medical services, as well as the shortage of emergency services in rural communities.

Future Trends

Future developments include the Mills Memorial Hospital Redevelopment Project in Terrace, which has been under construction since July 2021. The hospital redevelopment will include a new acute care hospital double the size of the current Mills Memorial Hospital.

Effective 1 April 2024, the Government of BC announced a \$73.1 million²³ addition to the Provincial Rural Retention Incentive for health care workers living and working in rural and remote communities, with a \$8,000 per year per person incentive (Ministry of Health 2024). LAA and RAA communities that are eligible for this funding include Dease Lake, Smithers, Terrace, and the District of Stewart, in addition to the District of New Hazelton that was previously eligible (Bain 2024).

Social Services and Facilities

This subsection provides a description of the social services and facilities available within LAA and RAA communities.

Local Assessment Area

Social services provided in the LAA communities include the Tahltan Health and Social Services Authority, Peoples' Haven in Dease Lake, and the Ku we gahn Program in Telegraph Creek and Dease Lake:

- **The Tahltan Health and Social Services Authority** is a non-profit organization that delivers health programs to the on-reserve population. It offers the following social services: Tahltan mobile support team, Aboriginal Head Start Program, home and community care, patient travel, and community health resources (Tahltan Health Services 2014).
- **The Peoples' Haven:** is a community-gathering space that facilitates cultural and language programs, is used as a community learning and meeting space, secures funding for community-directed programming and priorities, and offers courses and training, as well as early learning programs.
- **The Ku we gahn Program** is a community-developed and community-based justice program, and facilitates peacemaking circles, victim services, and mediation processes. The program is facilitated by the BC First Nations Justice Council (BC First Nations Justice Council 2024).

²³ All dollar amounts reported in Canadian dollar (CDN), unless noted otherwise.

Tahltan key informants (Appendix 21-1, Regional Socio-economic Baseline Report) noted that during the coronavirus 2019 pandemic, the lack of an appropriate community/Elder space was particularly evident and resulted in people putting their health at risk to meet up with others at the community store.

Regional Assessment Area

Public and private organizations of Terrace and Smithers offer the majority of social services and facilities for communities in the RAA. These services include female resources and support; housing and shelter services; counselling and mental health services; employment and training support; early childhood, infant development, and daycare services; multicultural services; literacy and adult learning services; and transit and government-forms support (Appendix 21-4, Socio-economic Baseline Addendum Report).

The Stewart Health Clinic collaborated with the Stewart Public Library to provide free mental health workshops for youth aged 18 to 25 (District of Stewart 2023a). Awareness programs have been established with Northern Health through collaborations with various organizations in rural communities such as the District of Stewart (Stewart Health Clinic, Northern Health, pers. comm., 2024).

Health status information is provided in Appendix 20-2, Existing Conditions for Community Health.

Gender-based Analysis Plus Highlight

Identity factors, such as ability, gender, sexuality, and Indigeneity influence the experience of accessing social and/or community services, and the level of social or community services available to different diverse subgroups, as described in the Appendix 20-3, Existing Conditions for Diverse Subgroups Supplement.

Future Trends

The Government of BC has committed \$215 million toward maintaining existing mental health programs over the next 3 years. BC's Ministry of Mental Health and Addictions has set an imperative to ensure that mental health and addictions care does not lag overall health spending (Canadian Mental Health Association 2024).

21.4.3.3 Utilities

Utilities provided to communities within the LAA and RAA include water, sewage and waste management, electricity and natural gas, and communications. The availability of utilities varies by community within the LAA and RAA, as presented in the subsections below. Information about future trends is limited; however, available public information has been presented at the end of this subsection. Information about the influence of identify factors in relation to utility access or usage is not available in public sources.

Approximately 37% of Tahltan Survey respondents answered that community infrastructure, including water and sewer, were one of the top three factors important to their quality of life in Tahltan communities.

Water

This subsection provides a description of the water supply infrastructure available within LAA and RAA communities.

Local Assessment Area

For Dease Lake, Telegraph Creek, and Iskut (within the LAA), water is supplied from community wells, and is treated and then stored in reservoirs for distribution (Appendix 21-1, Regional Socio-economic Baseline Report). Available information sources (Appendix 21-4, Socio-economic Baseline Addendum Report) do not indicate whether this existing infrastructure meets the needs of residents in those communities.

Following forest fires in 2018, the TBC received Indigenous and Northern Affairs Canada funding for a water system upgrade assessment in Dease Lake and Telegraph Creek, and this assessment is in its design phase (TBC 2019). As of 2022, this assessment was still reported to be in the design phase (TBC 2022).

According to the 2011 “National Assessment of First Nations Water and Wastewater Systems – British Columbia Regional Roll-up Report, FINAL” (2011 National Assessment; Neegan Burnside 2011), Telegraph Creek 6 is a high-risk (7.7 out of 10)²⁴ system. High risk indicates that the system has major deficiencies, and point to potential water quality issues, leading to potential health and safety or environmental concerns. A water system with major deficiencies could also result in water quality advisories against drinking the water (Neegan Burnside 2011). No risk assessment data were available for Telegraph 6A and Guhthe Tah 12. According to the 2011 National Assessment, Dease Lake 9 is a high-risk system as well (8.0 out of 10). Water supply for Iskut was assessed as having a medium risk in the 2011 National Assessment. Medium risk indicates that the system has deficiencies that do not generally require immediate action but should be corrected to avoid future problems (Neegan Burnside 2011).

As of September 2023, there were eight current boil water advisories in the LAA (Northern Health 2023c): five active advisories in Dease Lake, one in Iskut 6, one in Bob Quinn Lake, and one in Jade City.

Regional Assessment Area

The Regional Socio-economic Baseline Report (Appendix 21-1) indicates that water infrastructure in the RAA is sufficient for existing populations. Within the RAA, Terrace, Smithers, the District of Stewart, and the Village of Telkwa have full municipal water systems. The Regional Socio-economic Baseline Report (Appendix 21-1) characterizes the water treatment facilities of Indigenous communities within the RAA, including Nisga'a Villages.

The District of Stewart noted that their water infrastructure can handle larger populations than its current level, given that it was constructed to support a larger population base (District of Stewart, pers. comm., 2024).

As of September 2023, there were 22 boil water advisories in the RAA (excluding the LAA; Northern Health 2023c): there were 2 advisories in Terrace, 15 in Smithers, 1 in the District of Stewart, 1 in the Hazeltons, and 3 in Kitwanga.

Sewage

This subsection provides a description of the wastewater infrastructure available within LAA and RAA communities.

²⁴ The 2011 National Assessment of First Nations Water and Wastewater Systems (Neegan Burnside 2011) ranked “1” as low risk and “10” as high risk.

Local Assessment Area

Within the LAA, homes in Telegraph Creek, Dease Lake, and Iskut have individual septic systems connected to leaching fields. Every 2 to 5 years, all the systems are pumped out and disposed of at the Iskut Landfill (Appendix 21-1, Regional Socio-economic Baseline Report). As of 2022, the development of Indian Reserve 13²⁵ in Dease Lake has received funding for the final stage of design work, including a wastewater treatment plant (TBC 2022).

Regional Assessment Area

Within the RAA, Terrace, Smithers, and the District of Stewart have sewage systems.

Nisga'a Villages and Kitwanga have wastewater treatment facilities (Appendix 21-1, Regional Socio-economic Baseline Report).

Waste Management

This subsection provides a description of the waste management infrastructure available within LAA and RAA communities.

Local Assessment Area

Telegraph Creek and Dease Lake 9 have weekly curbside garbage and recycling collection, while Iskut 6 has weekly curbside pickup of solid waste. Telegraph Creek has a community-operated waste transfer station, which includes recycling facilities (Appendix 21-1, Regional Socio-economic Baseline Report). Dease Lake 9 has a waste management facility that includes recycling, which is operated by the BC Ministry of Transportation and Infrastructure. The Iskut Landfill is a waste management facility operated by the RDKS, and offers a lagoon for septic tank effluent dumping, and wood and metal recycling.

Meziadin landfill is a controlled solid and liquid waste facility managed by the RDKS Solid Waste Management department, located near the junction of Highways 37 and 37A. It accepts waste from the Stewart Transfer Station located in the District of Stewart, several mines and workforce accommodations, and is utilized by 20 residents in the nearby area (RDKS 2023). The landfill capacity was designed to be sufficient to accept waste from residents, mines, and industrial work camps (RDKS Solid Waste Management, pers. comm., 2024). Clean wood waste is not accepted at RDKS landfills and industrial users are requested to manage all clean wood waste onsite. Construction and demolition waste that is free of clean wood may be accepted in limited quantities, with an approved Controlled Waste Permit. Liquid waste and organic wastes are not accepted at the Meziadin landfill but may be accepted at other RDKS solid waste facilities with an approved Controlled Waste Permit (Regional District Solid Waste Department 2024).

During recent years, the RDKS has experienced an influx of waste from industrial projects along the Highway 37 corridor. This influx has had an impact on the Meziadin landfill by reducing its available space for residential waste and shortening of the operational lifespan of the landfill. As part of this issue, RDKS requests proponents of industrial projects to use alternative waste management facilities. In particular, some waste has been diverted to the Forceman Ridge Waste Management Facility for a short period (Regional District Solid Waste Department 2024). The landfill also has a liquid lagoon facility which is facing

²⁵ Indian Reserve 13 in Dease Lake has a proposed community mixed use development including single and multi-family homes, the future Tahltan Central Government Building, community gathering space and other community building(s) such as daycare, wastewater treatment plant and new Tahltan operations and maintenance work yard (TCG 2022b).

issues including high levels of ammonia, as some of their customers have not been depositing waste properly. Liquid waste is not accepted from any workforce accommodations, only from residents (RDKS Solid Waste Management, pers. comm., 2024).

Regional Assessment Area

Regional districts provide landfill and transfer station services for communities within the RAA (Appendix 21-2, Tahltan Socio-economic Baseline Report). Terrace, Smithers, and the District of Stewart each have waste management systems. The District of Stewart provides waste and recycling services at the Stewart Transfer Station (District of Stewart 2024). There is recycling and garbage disposal at the Hazelton Waste Management Facility (landfill) and Kitwanga Transfer Station (RDKS n.d.). Nisga'a Villages have access to the Nass Valley Landfill for garbage disposal.

In February 2023, the Province of BC provided \$8 million to Terrace and the RDKS to upgrade the Terrace landfill and the regional district's waste-management facility.

Electricity and Natural Gas

This subsection provides a description of the electricity and natural gas supply within LAA and RAA communities.

Electricity in the Local Assessment Area and Regional Assessment Area

BC Hydro provides electricity to most of the LAA and RAA communities through the power grid. In the northern area of the RAA, electricity is mainly supplied through diesel-generating stations.

Most of the LAA is dependent on diesel-generated power and wood to heat homes (Appendix 21-1, Regional Socio-economic Baseline Report), as the electrical and natural gas grids do not extend into the Stikine Region. In 2014, the BC Hydro power grid was extended from Terrace to a substation at Bob Quinn Lake (within the LAA), and then the Iskut extension was connected with a new BC Hydro substation near Tatogga Lake. This extension has the capacity to supply power to additional mines or projects in the future (BC Hydro 2014a; 2014b). The Dease Lake community is powered by the Hluey Lake Hydroelectric Facility, with backup energy available through diesel generation (Appendix 21-1, Regional Socio-economic Baseline Report).

Natural Gas in the Local Assessment Area and Regional Assessment Area

As noted above, the natural gas grid does not extend into the LAA. Therefore, most of the LAA is dependent on diesel-generated power and wood to heat homes (Appendix 21-1, Regional Socio-economic Baseline Report).

For the RAA communities that are connected to gas services, FortisBC is the largest services provider. Northern Gas services are being expanded in the Smithers and Terrace areas, with expansions slated to be completed by 2024 (Government of BC 2023b). Much of the RAA is not serviced by natural gas and therefore relies on supplementary sources (diesel, propane, etc.; Appendix 21-1, Regional Socio-economic Baseline Report).

Table 21.4-5 provides an overview of gas supply in the LAA and RAA communities.

Table 21.4-5: Electricity and Gas Supply within the Local Assessment Area and Regional Assessment Area

Communities	Electricity	Gas Supply
The LAA communities	Iskut, Dease Lake, Bob Quinn Lake are supplied by BC Hydro facilities. Other LAA communities—diesel generation.	Most LAA communities rely on supplementary sources (diesel, propane, etc.)
The RAA communities	Most of the RAA communities are connected to the BC Hydro grid.	Gas services are being expanded to Smithers and Houston. Most of other RAA communities rely on supplementary sources (diesel, propane, etc.).

Source: BC Hydro (2024); Appendix 21-1, Regional Socio-economic Baseline Report

Notes:

BC = British Columbia; LAA = Local Assessment Area; RAA = Regional Assessment Area

Communications

This subsection provides a description of the communication services available within LAA and RAA communities.

Local Assessment Area

Within the LAA, communication services vary by location:

- **Stikine Region:** much of the Stikine Region is dependent on high-cost satellite internet service, supplied by out-of-province providers. The communities of Iskut 6, Dease Lake 9, and Telegraph Creek (Telegraph Creek 6/6A and Guhthe Tah 12) have no cellular phone service.
- **Dease Lake 9:** the Dease Lake 9 reserve has a Yukon-based radio station, CHON-FM, run by the Northern Native Broadcasting not-for-profit group.
- **Dease Lake 9 and Iskut 6:** a high-speed, fibre optic connectivity project is planned for Dease Lake 9 and Iskut 6.

Regional Assessment Area

The District of Stewart, Kitwanga, and the Nisga’a Villages have cellular coverage. Highway 37A and the northerly part of the RAA along Highway 37 do not have cellular coverage. Most of the highways in the RAA do not have cellphone coverage (Appendix 21-2, Tahltan Socio-economic Baseline Report).

Most recently, a \$75 million initiative through the Connecting British Columbia program was announced in March 2023 to help fund projects that will expand cellular service to at least another 550 km of highway by 2027 (*BC Gov News* 2023). The project underway include highway cellular expansion along 252 km of highway and within two rest areas to complete continuous coverage along the stretch of Highway 16 between Prince George and Prince Rupert, known as the Highway of Tears (Prince George Citizen 2023; Section 21.4.3.5, Local and Regional Transportation).

Future Trends

Future trends for utilities include the advancing initiatives of the Northwest BC Resource Benefits Alliance, a regional association consisting of 21 local governments, including Terrace, Smithers, the District of New Hazelton, the Village of Hazelton, the RDBN, and the RDKS. In February 2024, 5-year funding of

\$250 million was announced for the 2024 BC Budget, which will be spent to support the planning and construction of infrastructure, such as water and sewage, with more details on funding activities to come (Northwest BC Resource Benefits Alliance 2024).

Improving communication connectivity in northern BC is a priority for communities and Indigenous Nations; federal and provincial government funding has been committed toward this priority. For example, the TCG, through the TNDC, has secured funding from the provincial and federal governments to provide Dease Lake 9 and Iskut 6 with high-speed, fibre optic connectivity, where four fibre optic strands from BC Hydro will be used to connect Iskut 6 to New Aiyansh, in the Nass Valley, and also connect Dease Lake 9 to the communities within the RAA. The fibre optic connectivity extension to Telegraph Creek is at the detailed design stage as of 2023 (TNDC 2019; Government of BC 2023c). High-speed internet expansion in these communities can positively impact both local and provincial economies, increasing the opportunity for better environmental sustainability and social well-being.

21.4.3.4 Educational and Daycare Services and Facilities

Daycare Facilities and Services

This subsection provides a description of the daycare facilities and services within the LAA and RAA communities.

Local Assessment Area

Telegraph Creek, Dease Lake, and Iskut have daycare services based on the Aboriginal Head Start Program. The Aboriginal Head Start Program is an early learning program designed to support learning and development for young children living on-reserve and programming is centred on education, culture and language, health, nutrition, social support, and family/parent involvement (TBC 2014). The program is administered through the Tahltan Health and Social Services Authority in Telegraph Creek and Dease Lake, and through the Iskut Band Council in Iskut (Pacific Northwest Division of Family Practice 2021). As of 2022, the Language Nest program was offered for infants and preschool children in Dease Lake and Iskut. Program activities are centred around Tahltan language learning through caregiving, playing, reading, and other activities (Appendix 21-1, Regional Socio-economic Baseline Report).

Regional Assessment Area

The RAA includes 46 daycare facilities, most of them in Terrace or Smithers. There are 33 daycare facilities in Terrace, with 640 licenced daycare spaces. A total of 68% of census families in the Terrace LHA have access to licenced daycare (Big River Analytics Ltd. 2020). Within the Terrace LHA, there is unmet demand for daycare spaces for the majority of daycare licence types, with the greatest unmet demand for daycare for children under 3 years old (Big River Analytics Ltd. 2020).

The City of Terrace opened a before- and after-school daycare program for 30 school-aged children through the ChildCareBC New Spaces Fund in October 2023 (City of Terrace 2023). The program has a bus system and stays open later than most daycares. The City of Terrace recognizes that there is greater need for daycare, including affordable daycare. The city noted that labour conditions of shift work can increase the need for daycare, as long hours can exceed regular school hours, requiring additional after-school daycare (City of Terrace, pers. comm., 2024).

There are 14 daycare facilities in Smithers, with 296 licenced daycare spaces. A total of 36% of children under 12 years have access to a licenced daycare. In northwestern BC, 19% of children under 12 years have access to a licenced daycare, and in BC, 19.5% of children under 12 years have access to a licenced daycare (Town of Smithers 2021). At the same time, daycare facilities in Smithers serve a child population double its size, and the surrounding RDBN area has a few daycare spaces and minimal coverage rate (3%; Town of Smithers 2021). Since 2018, the Government of BC has been supporting the creation of 236 new licenced daycare spaces in RAA communities, including Kitwanga, Smithers, and Terrace (and Prince Rupert, which is outside the RAA).

Gender-based Analysis Plus Highlight

Tahltan Survey respondents commented that limited availability of daycare was one of several reported barriers to successful employment. Participants in the GBA Plus Workshop noted that women, specifically those residing in the Tahltan communities, are more likely than men to assume the role of caregiver (Appendix 20-3, Diverse Subgroups Existing Conditions Supplement). Additional information regarding the current context for diverse subgroups, including information on how they currently interact with daycare facilities and services, can be found in Appendix 20-3, Existing Conditions for Diverse Subgroups Supplement.

Future Trends

Future developments include the federal government's commitments toward affordable daycare spaces nationwide, totalling a commitment of \$69.9 million through the Early Learning Child Care Infrastructure Fund for BC. The fund will target underserved communities, including rural and remote regions and communities that face barriers to access, such as racialized groups, Indigenous people, newcomers, as well as parents, caregivers, and children with disabilities (Prime Minister of Canada 2024).

Since 2018, the Government of BC has been supporting the creation of 236 new licenced daycare spaces in RAA communities, including Kitwanga, Smithers, and Terrace (Government of BC 2021a). Add to this, as of 2023, the Northern Healthy Communities Fund was supporting Coast Mountain Children Society, a not-for-profit organization providing care in Terrace (and Kitimat) for infants, toddlers, and school-age children. Coast Mountain Children Society received funding toward classroom renovations and staffing to support 52 new childcare spaces in Terrace (Government of BC 2023d).

Grade School Educational Services and Facilities

This subsection provides a description of the grade school (i.e., Kindergarten to Grade 12) facilities and services within LAA and RAA communities. Information about the influence of identify factors on access to grade school education services is not available in public sources.

Local Assessment Area

The LAA overlaps with School District (SD) 87—Stikine, which provides education services for the LAA communities of Telegraph Creek and Dease Lake (Ministry of Education 2024).

There are three schools in SD 87 (Ministry of Education 2024):

- **The Tahltan School:** based in Telegraph Creek; provides curricula at the levels of Kindergarten to Grade 9. The school had an enrolment of 39 students in the 2023/2024 school year, of whom 69% was Indigenous.

- **The Dease Lake School:** based in Dease Lake; provides education from Kindergarten to Grade 12. The school had an enrolment of 103 students in the 2023/2024 school year, of whom 94% were Indigenous.
- **The Klappan Independent Day School:** based in Iskut; provides education from Kindergarten to Grade 9 (Ministry of Education 2024). The school had an enrolment of 31 students in the 2023/2024 school year, of whom all were Indigenous. The school has a focus on incorporating Tahltan culture and language into everyday teaching, with specific teaching positions maintained for Tahltan subjects (Appendix 21-1, Regional Socio-economic Baseline Report).

The Survey found that child (and adult education) was the primary reason that Tahltan members left Tahltan communities. Nearly one third of Survey respondents stated that leaving Tahltan Territory provided more educational opportunities for their children, including to pursue opportunities in high school and post-secondary education. In particular, students from Telegraph Creek and Iskut either travel to or move to Dease Lake to attend school beyond Grade 9, or their families move to larger population centres (such as Smithers or Terrace). The Survey found that access to high school education is an important factor for Tahltan community members to stay in their communities (Appendix 21-2, Tahltan Socio-economic Baseline Report).

Regional Assessment Area

The RAA overlaps with three SDs, in addition to SD 87 (Ministry of Education 2024):

- **Coast Mountains SD 82** includes schools in Terrace, the District of Stewart, the Village of Hazelton and the District of New Hazelton, and Kitwanga. In the 2023/2024 school year, SD 82 had 4,290 students.
- **Bulkley Valley SD 54** includes schools in Smithers. In the 2023/2024 school year, SD 54 had 1,945 students.
- **Nisga'a SD 92** includes schools in the Nisga'a Villages of Gingolx, Laxgalts'ap, Gitwinksihlkw, and Gitlaxt'aamiks. In the 2023/2024 school year, SD 92 had 352 students.

Future Trends

Minor capital projects approved for the 2024/2025 school year within the LAA and RAA schools include interior construction upgrades and roofing upgrades at Smithers Secondary School, as part of the School Enhancement Program (School Enhancement Program 2024).

Post-secondary Education

This subsection provides a description of the post-secondary education facilities and services within LAA and RAA communities.

Local Assessment Area

Post-secondary education programs are offered in communities within the LAA, as follows:

- **Northern Lights College:** this college operates campuses across northern BC, including in Dease Lake. The college offers certificate, diploma, and associate degree programs, and trades and apprenticeship programs.
- **The Contact North BC Program:** launched in January 2021, this program is available in three Tahltan communities (Telegraph Creek, Iskut, and Dease Lake), and offers online programs and courses available from public colleges, universities, and other education and training providers in BC. Students registered for more than 400 online courses during the first months of the program. A high-speed fibre

optic connectivity project that is planned for Dease Lake 9 and Iskut 6 may facilitate availability of these courses for Tahltan members.

In 2018, the TCG's Education and Training Department introduced two funding programs to provide financial support for Tahltan members pursuing post-secondary education and training opportunities: the Post Secondary and Trades Training Funding Program and the Short-Term Training and Certifications Funding Program (TCG 2023). As of 2020, the TBC reported that there were 56 Tahltan members enrolled in post-secondary education programs across BC and Canada (Appendix 21-2, Tahltan Socio-economic Baseline Report).

As well, the Tū'desē'cho Wholistic Indigenous Leadership Society (TWILD) provides programming that connects education to employment based in Tahltan Ways of Knowing (Appendix 21-1, Regional Socio-economic Baseline Report). The Tene Mehodihi component of TWILD is a youth-developed land-based adventure program that combines Tahltan Knowledge with scientific knowledge and is sponsored by the University of British Columbia and various mining and development companies. TWILD also operates an annual Potlatch School, which teaches Tahltan youth about seasonal ceremonies, language protocols, governance, and other cultural practices, and has research and community partnership elements as well (Appendix 21-1, Regional Socio-economic Baseline Report).

Regional Assessment Area

There are post-secondary, advanced education, and training options in the RAA communities, including a range of options and specializations, although the offerings differ among institutions and communities within the RAA, as follows:

- **Coast Mountain College** is based in Terrace, with satellite campuses in RAA communities, including Smithers and the District of New Hazelton. The college offers degree programs, certificates, and diplomas in varied areas, including business, geosciences, human resources, and health care.
- **The University of Northern British Columbia (UNBC)** has campuses and offers regional programs throughout the RAA (e.g., Terrace, Smithers; Coast Mountain College and Wilp Wilxo'oskwhl Nisga'a Institute [UNBC 2021]).
- **The Wilp Wilxo'oskwhl Nisga'a Institute** is administered by the Nisga'a Nation and has three focus areas: academic, vocational and technical, and continuing education (NLG n.d.).

Gender-based Analysis Plus Highlight

Identity factors are associated with differential experiences of students, instructors, and administrators with regard to post-secondary schools and education. Participants in the 2023 GBA Plus Workshop (TEEM 2023) noted that a lack of training and access to training is a concern for youth in the LAA. Additional information regarding education (with a focus on skills development) for diverse subgroups is described in the Appendix 20-3, Existing Conditions for Diverse Subgroups Supplement.

Future Trends

Future developments include TradeUpBC, an online hub that supports trades professionals and employers in accessing professional development offerings, micro-credentials, and short-term training available at

public post-secondary institutions around BC. TradeUpBC offers education and training in both in-person and virtual formats. Launched in April 2024, TradeUpBC is part of the StrongerBC Future Ready Action Plan, released in May 2023 (Ministry of Post-Secondary Education and Future Skills 2024). The StrongerBC Future Ready Action Plan aims to expand in-community infrastructure and support for leaders in Indigenous and remote communities through the Contact North BC program (Government of BC 2023b).

21.4.3.5 Local and Regional Transportation Infrastructure

Highways and Roads

This subsection provides a description of the highways and roads within LAA and RAA communities.

Local Assessment Area

Highway 37, also known as the Stewart-Cassiar Highway, is the main route running north-south through the LAA and RAA (Figure 21.4-3). Highway 37 begins at the intersection of Highway 16 near Kitwanga and runs north for 725 km to where it meets the Alaska Highway in the Yukon Territory. This makes it the major transportation corridor within Tahltan Territory. Highway 37 provides an essential transportation link for LAA communities, including Iskut, Dease Lake, Bob Quinn Lake, Meziadin Junction, and Bell II. Road conditions on Highway 37 can be variable throughout the year, specifically with snow, ice, and cold temperatures in the fall, winter, and spring months. The road itself is mostly hard coated with either pavement or sealcoating, but there is a section, approximately 1 km long, of gravel surface near Iskut (Government of BC 2021b). Road markings may not be present, and line of sight on the highway may be limited due to the terrain of the area.

Highway 37A is located approximately 150 km north of Kitwanga and Highway 37A begins at Meziadin Junction and runs west for 65 km to Stewart.²⁶

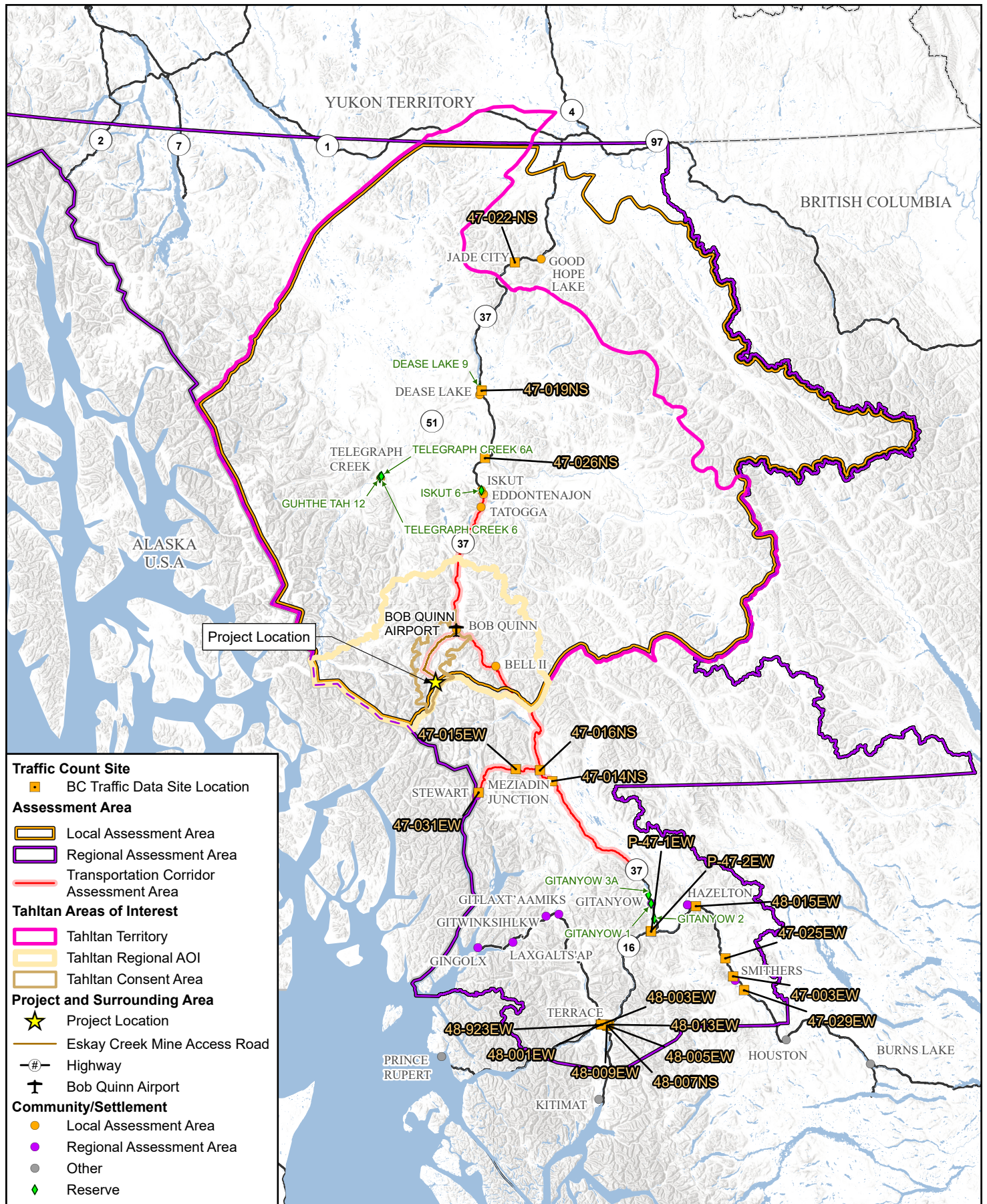
The following three traffic count sites are located within the LAA (Figure 21.4-3):

- Cassiar Junction 47 022NS – NY;
- Dease Lake Junction 47 019NS – NY; and
- Stikine River Bridge 47 026NS – NN.

The highest traffic volumes recorded within the LAA were on Highway 37 between Dease Lake (unincorporated) and Dease Lake 9 (traffic count site 47 019NS with an annual average daily traffic [AADT]²⁷ of 385 for 2014 to 2023). The lowest traffic volumes recorded in both the LAA (and the RAA) were in the northern part of Highway 37, near Jade City (traffic count site 47 022NS with AADT 174 for 2014 to 2023; Ministry of Transport and Infrastructure [MOTI] 2023). Summer traffic volumes on average exceed winter traffic due to the additional recreation and tourism-related travel. Appendix 21-4, Socio-economic Baseline Addendum Report, and the “Traffic Volume Study” (Tahltan – Allnorth Consultants Limited Partnership [Tahltan – Allnorth] 2024) detail this information.

²⁶ This is the location where data from one or more Traffic Measurement Station (site) represent a cross-section of the roadway (MOTI 2023).

²⁷ AADT is the average number of vehicles travelling past a traffic measurement location in a day for a given year. This value is calculated as the average of the Annual Average Weekday Daily Traffic, which is the average number of vehicles travelling past a traffic measurement site location on a given weekday in a given year (MOTI 2023).



Traffic Count Site
 ■ BC Traffic Data Site Location

Assessment Area
 □ Local Assessment Area
 □ Regional Assessment Area
 — Transportation Corridor Assessment Area

Tahltan Areas of Interest
 □ Tahltan Territory
 □ Tahltan Regional AOI
 □ Tahltan Consent Area

Project and Surrounding Area
 ★ Project Location
 — Eskey Creek Mine Access Road
 # Highway
 ✈ Bob Quinn Airport

Community/Settlement
 ● Local Assessment Area
 ● Regional Assessment Area
 ● Other
 ◆ Reserve

Skeena Resources Ltd.
 Date: 05-Mar-2025
 Figure: 21.4-3
 Author: curtis.morrison
 Filename: ESK-16-033



Eskay Creek Revitalization
Figure 21.4-3: Transportation Routes and Traffic Count Sites within the Infrastructure and Services Local and Regional Assessment Areas
 Skeena Mining Division - NTS 104B09
 British Columbia, Canada

Scale: 1:3,500,000
 Coord. System: NAD 1983 UTM Zone 9N

Kilometres



From 2014 to 2023, traffic volumes for three traffic count sites located in the LAA changed as follows: a 12% increase at the Stikine River Bridge traffic count site, a 15% increase at Cassiar Junction traffic count site, and a 3% decrease at Dease Lake Junction traffic count site (Appendix 21-4, Socio-economic Baseline Addendum Report).

Tahltan – Allnorth has completed a traffic volume study to support assessment of effects related to Project traffic. As part of the study, Tahltan – Allnorth completed a highway capacity analysis for Highway 37 (for traffic measurement station Nass River Bridge [47-014NS]) in accordance with the Transportation Research Board's Highway Capacity Manual. A highway's capacity is calculated by its level of service (LOS), which is rated in descending quality from "A" to "E". Highway 37 was assessed as being LOS "A", and the report indicates that the percentage of vehicles following another vehicle is low, drivers usually go at "free flow" speeds, and that operating speed is only constrained by the road alignment and surface conditions (Tahltan – Allnorth 2024).

Other roads in the LAA include:

- **The Eskay Creek MAR:** located near the Bob Quinn Lake Aerodrome, this road is approximately 138 km north of Meziadin Junction. The Eskay Creek MAR is about 59 km long and is a private industrial road that was built by Barrick Gold Corporation in the early 1990s. Some respondents to the Tahltan Survey noted that this road, as well as other access roads, have been both beneficial and problematic for traditional land use, as it opens up access to areas that were previously more difficult to access for both Indigenous and non-Indigenous land users. Land use activities are described in Chapter 22, Non-traditional Land and Resource Use, and Chapter 26, Current and Future Use of Land and Resources for Traditional Purposes Effects Assessment.
- **Telegraph Creek Road (Highway 51):** located approximately 115 km southwest of Dease Lake, this is the only road that connects to Telegraph Creek along the Stikine River. It is a gravel surface road with steep gradients of up to 20%, narrow passages, areas with no guardrails alongside the river canyon, and sharp-angled switchbacks (Government of BC 2021c). Travel time between Dease Lake and Telegraph Creek can take up to 3 hours each way, depending on conditions. This road was closed for part of 2021 due to a major road washout because of effects from forest fires and heavy snow melt. The 2021 washout required the community to rely on air transport for food, medicine, and supplies until the road was repaired (Appendix 21-2, Tahltan Socio-economic Baseline Report).
- **Various forest service roads:** forest service roads connect to Highway 37, supporting industries, and providing public backcountry access.
- **Other roads to mines and mineral tenure areas:** there are various private roads that do not allow public access; for example, the road to the Brucejack Mine has a security gate at its access point at Highway 37 (TCG 2021a). Additionally, the Coulter Creek Access Road will extend from the 55 km mark of the Eskay Creek MAR southwards to the Kerr-Sulphurets-Mitchell (KSM) mine site (Appendix 21-2, Tahltan Socio-economic Baseline Report).

There are no public transportation services available in Dease Lake, Iskut, or Telegraph Creek. BC Transit does not offer services on Highway 37; there is a BC Bus North route along Highway 16 between Prince George and Prince Rupert (BC Bus North 2020). Several private transportation services operate in the LAA, including (Appendix 21-2, Tahltan Socio-economic Baseline Report):

- **North Coast Shuttle and Expediting** provides transportation services to and from Dease Lake, mines in the area, and other work sites.
- **Northern Spirit Transportation/Tahltan NST Busing Ltd.** is a joint partnership company between the TNDC and Northern Spirit Transportation which offers motorcoach, shuttle services, and specialty vehicle services (including four-wheel drive vehicles).
- **Bandstra** provides truckload and less-than-truckload transportation services, refrigeration services, mining services, container hauling, and “hot shot” delivery services.²⁸ Bandstra has operated in partnership with the TNDC since 2015, and provides scheduled transportation service to Iskut, Dease Lake, and Telegraph Creek.

Approximately 37% of the Tahltan Survey respondents answered that roads were among the top three factors deemed important for the quality of life in the Tahltan communities.

The road network in the region, and particularly Highway 37, is important for the Tahltan Nation and TSKLH members for accessing lands and waterbodies to undertake fishing, hunting and trapping, plant gathering and participating in cultural activities, as described in in Chapter 26, Current and Future Use of Lands for Traditional Purposes Effects Assessment (McIlwraith 2007; Pretium Resources Inc. 2014a, 2014b; Sheppard 1983; Rescan 2009, 2013b).

The Highway of Tears Governing Body was established as a way to acknowledge the families and friends of victims of the Highway of Tears, a 725 km corridor of Highway 16 between Prince George and Prince Rupert, has been a site of numerous cases of missing and murdered Indigenous women, thereby raising safety and security concerns regarding the use of this road, particularly for Indigenous women and girls. The Highway of Tears Governing Body was established to support the implementation of recommendations outlined in the Highway of Tears Symposium Recommendations Report (Highway of Tears 2023a). This governing body includes, but is not limited to victim’s family members, RCMP members and a representative of the Ministry of Justice (Highway of Tears 2023b).

Regional Assessment Area

Transportation infrastructure within the RAA includes Highways 37, 37A, 16, and 113, local roads, forest service roads, and mine access roads.

Most of these highways do not have cellphone coverage—a limitation that can affect the ability to contact emergency services when needed (Balcerzak 2019).

The highest traffic volumes recorded within the RAA were near Terrace (traffic count site 48 009EW with AADT 13,002 for 2014 to 2023, Figure 21.4-3) and Smithers (traffic count site 47 003EW with AADT 4,694 for 2014 to 2023). As noted above, traffic near Jade City records the lowest volumes in the RAA (and LAA; MOTI 2023). There are seasonal variations in traffic volumes along Highway 37 associated with summer recreation and tourism. Appendix 21-4, Socio-economic Baseline Addendum Report, and the “Traffic Volume Study” (Tahltan – Allnorth Consultants Limited Partnership [Tahltan – Allnorth] 2024) detail this information.

²⁸ Hot shot trucking services usually consist of small loads transported within a specific timeframe over short distances or across provinces or territories, and may involve trucking companies partnering to provide the most appropriate service for the load or location (Hot Shot Trucking n.d.).

From 2014 to 2023, traffic volumes in the RAA changed as follows: a 51% increase at the Meziadin Lake Junction traffic count site, a 25% increase at the Highway 37A Windy Point Bridge traffic count site, and a 36% decrease at the Nass River Bridge traffic count site (Appendix 21-4, Socio-economic Baseline Addendum Report).

As noted, Highway 37 is important for Indigenous people to access lands and resources. The TSKLH have indicated that many of their land and resource use areas are concentrated along the segment of Highway 37 that passes through the Bell-Irving Valley (ERM Rescan 2014a; Rescan 2009, 2013b). TSKLH has also noted that this segment of the highway is near to graves, archaeological sites, and other heritage resources of importance (Chapter 25, Heritage Resources Effects Assessment). Although information for MNBC is limited, the available mapping of data from their annual survey of MNBC harvesting licence holders also suggests use of this stretch of Highway 37 (MNBC 2020).

The 2023 Inter-community Transportation Study examining transportation options in northern BC identified that ground transportation remains a gap in the District of Stewart and for communities along Highway 37 north of Terrace (Northern Development 2023b).

Air Transportation Infrastructure

This subsection provides a description of the air transportation infrastructure within LAA and RAA communities.

Local Assessment Area

The Dease Lake Airport (International Air Transport Association code YDL, CYDL) is run by the Stikine Airport Society and is open to the public. The airport is primarily run by part-time volunteers. There is no de-icer onsite in case of freezing rain, and the airport is not certified for nighttime landing, meaning the opportunity to fly-in and out is limited (CBC 2019). The services offered by the airport are susceptible to adverse winter conditions, including low cloud, poor visibility, and snow and ice covering the runway. In 2019, the funding application for the airport upgrades stated that the Red Chris Mine suffered from up to 20% of chartered flights being unable to land in Dease Lake during the winter months (Terrace Standard 2020). Since 2021, the Dease Lake Airport has undergone upgrades, including repaving of the runway, expansion of the apron, and modernization of the lighting system. These upgrades were at least in part funded by \$9 million in StrongerBC economic recovery funding (TCG 2021b).

The Telegraph Creek Airport (CAH9) is a registered aerodrome (airstrip) located northeast of Telegraph Creek. It is not open to the public and requires prior permission to be used.

The Bob Quinn Lake Aerodrome (YBO/CBW4) is located near Bob Quinn Lake, alongside Highway 37. This aerodrome's gravel airstrip is unstaffed, and the aerodrome is used by businesses in the area (largely mining), including Newcrest Ltd. for the Brucejack Mine, and Skeena Resources.

Regional Assessment Area

There are options for access to communities within the RAA by air, including airports based in Terrace and Smithers. The District of Stewart has an airport with unpaved runways (Government of BC n.d.a; Explore North n.d.).

Air Canada and Hawk Air offer flights from Vancouver to Terrace, Smithers, and Prince Rupert. Northern Thunderbird Air provides flights between Smithers, Dease Lake, and Bob Quinn Lake, and can make stops in Iskut, on request. Coast Mountain Air also provides flights from Prince George to Terrace and Smithers.

The Smithers Airport offers seven charter airlines including four helicopter charter services.

Rail Transportation Infrastructure

There is no rail infrastructure to communities within the LAA, including Dease Lake, Iskut, and Telegraph Creek.

Canada National Rail connects some communities within the RAA by way of a rail line along Highway 16, and with railway stations in Smithers and Terrace (Canadian National Railway Company n.d.).

Marine Infrastructure

This subsection provides a description of the marine (port) infrastructure within the RAA communities.

Port facilities located in the District of Stewart include the Stewart Bulk Terminals and the Stewart World Port.

Stewart Bulk Terminals is capable of handling 50,000 deadweight tonnage ships and offers roll on/roll off services to barges to support the movement of wheeled cargo (District of Stewart 2023b).

Gender-based Analysis Plus Highlight

Some diverse subgroups, such as rural populations/people without reliable transportation, Indigenous people, low-income or disabled individuals, face barriers related to transportation (e.g., lack of driver's licence or incompatibility of mobility aids). Some youth also face transportation barriers as they are reliant on adults around them for transportation.

In the 2023 GBA Plus Workshop (TEEM 2023), the lack of transportation and mobility within the region was raised as a barrier to employment, education, training, and health and social services access. Some Tahltan members do not have driver's licences or vehicles, and there is a lack of transportation services in the region for disabled and otherwise mobility-limited residents. These barriers and long distances to services mean that individuals must often stay overnight in larger communities to access services, which results in a need for accommodation and longer travel times. In some cases, these barriers and long distances also result in additional daycare costs, for example in the case of a parents' absence for appointments and to access services.

In terms of road infrastructure, safety of Indigenous women and girls is a current concern. A disproportionate number of Indigenous women and girls have disappeared in an area unofficially called the "highway of tears", on Highway 16, which meets Highway 37 at Kitwanga and connects Terrace and Smithers. The reference to the "highway of tears" refers to the impact to families and communities affected by the number of Indigenous women and girls that have been murdered or disappeared in this region (Saref 2021; Donovan 2021; Native Women's Association of Canada [NWAC] 2011). Because there is a lack of public transportation in the LAA and RAA, people are known to hitchhike along the roads, making themselves exposed to risks of anti social and criminal behaviours (Donovan 2021). There are currently billboards on the roads within the Project transportation corridor warning people against hitchhiking (Donovan 2021). There are ongoing efforts by Indigenous, provincial,

and federal authorities to better protect Indigenous women and girls. For example, in 2023, three new cellular towers were installed along Highway 16 in areas where cell coverage was previously not available; this cellular coverage was a result of a partnership between the governments of Canada, BC and Bell Mobility (Rogers 2023). This cellular coverage is anticipated to increase safety in the region (Government of BC 2021d).

Additional information is presented in the Appendix 20-3, Existing Conditions for Diverse Subgroups Supplement.

Future Trends

A key element of the future of transportation in this region includes the ongoing operation of the Northern Community Shuttle program which connects RAA communities of Terrace, Smithers, the District of Stewart, Kitwanga, and the Nisga'a Village of Gingolx (Northern Development 2023a).

A \$195 million project aimed to improve road conditions in northwestern BC was recently announced (Bakker 2024). The project will be implemented by the Province of BC and Energy and Natural Resources Canada within Tahltan Territory and will create safer and more reliable roads for First Nations, local communities, and critical minerals development. The work will involve widening the shoulders and creating pullouts along Highway 37. Additionally, there will be improvements to increase Wi-Fi access along 800 kilometres of the route. Highway 37A, which provides access to the port in the District of Stewart, and Highway 51, connecting Telegraph Creek to Dease Lake and Highway 37, will also see enhancements.

21.4.3.6 Housing and Accommodation

This section provides a description of housing and accommodation within LAA and RAA communities.

Local Assessment Area

In the LAA communities, there is limited housing supply, including limited housing options for seniors and Elders,²⁹ overcrowding and decreased affordability.

Between 2016 and 2021 there was an increase in the number of dwellings recorded in Guhthe Tah 12, Dease Lake 9, Kitimat-Stikine A, and Kitimat-Stikine F and decreases in Telegraph Creek (6 and 6A), Iskut 6 and Dease Lake (unincorporated; Table 21.4-6, Statistics Canada 2017; 2023).³⁰ The 2018 wildfire impacted Tahltan communities (CBC 2018a, 2018b; TBC 2020), contributing to the net loss of housing between 2018 and 2021. Within reserves, dwellings are mainly Band owned (Statistics Canada 2023).

²⁹ Elders are respected individuals who play key roles in Indigenous communities (Hele 2021).

³⁰ Some changes in the number of private dwellings can be related to changes in population. The 2021 Census of Population does not provide an explanation regarding the change in the population.

Table 21.4-6: Private Dwellings in Local Assessment Area Communities, 2021

Communities / Electoral Area / Reserves / Census Subdivision	Total Number of Private Dwellings 2016	Total Number of Private Dwellings 2021	Change from 2016 to 2021 (%)	% of Private Dwellings Owned (%)	% of Private Dwellings Rented (%)	% of Private Dwellings Provided by the Local Government, First Nation, or Indian Band (%)	Average Number of Rooms per Dwelling
Telegraph Creek (6 and 6A)	37	24	-35.1%	0.0%	0.0%	100.0%	5.6
Guhthe Tah 12	64	72	12.5%	0.0%	0.0%	100.0%	5.6
Dease Lake 9	17	18	5.9%	0.0%	0.0%	100.0%	5.6
Iskut 6	124	101	-18.5%	25%	0.0%	70.0%	5.8
Dease Lake (unincorporated)	197	159	-19.3%	50.0%	56.3%	0.0%	5.5
Good Hope Lake	0	0	0.0%	ND	ND	ND	ND
Kitimat-Stikine A	15	51	240.0%	ND	ND	ND	ND
Kitimat-Stikine D	83	44	-47.0%	66.7%	33.3%	0.0%	5.2
Stikine Region	487	491	0.8%	82.2%	17.8%	0.0%	5.1
Kitimat-Stikine F	211	239	13.3%	47.1%	52.9%	0.0%	5.5
BC	2,063,417	2,211,694	7.2%	66.8%	32.8%	0.50%	5.8

Sources: Statistics Canada 2017, 2023

Notes:

BC = British Columbia

% = percent

Percentage distributions, which are calculated on rounded values, may not necessarily add up to 100%.

ND = no data available

For the LAA communities, the data indicate that the median cost for a dwelling is between \$155,000 to \$276,000 (Table 21.4-7), which is slightly lower than median costs for dwellings in the RAA³¹ (Table 21.4-8). The median monthly rental cost is \$513 to \$800 (Table 21.4-7)³², which is lower than median monthly rental costs in most of the RAA communities (Table 21.4-8). The Housing Needs Report developed for Dease Lake (unincorporated) documents that home ownership is relatively affordable in the region as compared to other regions in BC (RDKS 2022a). However, concerns were raised that this comparison did not accurately reflect the actual affordability of housing for residents of LAA communities because it did not reflect the higher incomes in other regions of BC (Technical Advisory Committee [TAC] 2023). For many households in Tahltan communities, a larger share of the income is spent toward housing costs compared to other regions of BC.

The average number of rooms per dwelling in the LAA communities ranges from 5.1 (Stikine Region Electoral Area) to 5.8 (Iskut 6). Overcrowding in homes is a problem in Tahltan communities (TAC 2023).

³¹ Data are available based on estimate provided by the owner(s) and as reported in the 2021 Census of Population.

³² Data are based on shelter expenses paid by households and as reported in the 2021 Census of Population, by rental type unspecified.

Lack of housing is documented as an issue on Iskut 6; as of 2005, there were “...approximately 35 families [...] on the waiting list for housing and there [was] some crowding with at least eight to ten homes having two families living together” (EAO 2005, 46).

Table 21.4-7: Household Affordability in Local Assessment Area Communities, 2021

Communities/Areas	% of Owner Households with a Mortgage	% of Owner Households Spending 30% or More of Its Income on Shelter Costs	% of Tenant Households Spending 30% or More of Its Income on Shelter Costs	Median Monthly Shelter Costs for Rented Dwellings (\$)	Median Value of Dwellings (\$)
Dease Lake (unincorporated)	57.1	ND	ND	ND	\$200,000
Kitimat-Stikine D	0.0	ND	ND	ND	\$155,000
Stikine Region	24.3	10.8	22.2	\$512	\$276,000
Kitimat-Stikine F	57.1	ND	ND	\$810	\$200,000
BC	57.5	19.3	37.8	\$1,370	\$785,000

Source: Statistics Canada (2023)

Notes:

BC = British Columbia

% = percent

Statistics are based on a 25% sample data. Data were not available for the following LAA communities: Telegraph Creek 6, Telegraph Creek 6A, Guhthe Tah 12, Dease Lake 9, Iskut 6, Good Hope Lake, and Kitimat-Stikine A.

ND = no data available.

Based on their age and the level of repairs needed, the quality of the houses in Telegraph Creek (6 and 6A) is the lowest among LAA communities (Statistics Canada [2023], Socio-economic Baseline Addendum [Appendix 21-4] details this information). Minimal housing standards used to construct homes in Tahltan communities was a concern raised by THREAT (TAC 2023). At the same time, a majority of respondents to the Survey (68%) reported being happy with the home in which they live.³³ Many respondents commented on needing more bedrooms or general space, with some comments reflecting a desire for space to undertake activities such as hide tanning and processing country foods. Comments were also made regarding the presence of mould, need for energy efficient upgrades, and desire for wood furnaces to transition from expensive electric heat. Many respondents reported looking for ways to own their own homes or build their own homes.

There are a limited number of homes to buy or rent within LAA communities. Housing was the most mentioned issue in the Survey and in Tahltan KIIs (Appendix 21-1, Regional Socio-economic Baseline Report). Survey respondents commented on the lack of housing and lack of appropriate housing, and housing was the second most important reason, after education, why Tahltan members leave or do not return to communities in Tahltan Territory. Respondents noted that while there are incentives, funding, open positions, and employment opportunities in these communities, there are no homes available (Appendix 21-2, Tahltan Socio-economic Baseline Report).

³³ Of the 300 respondents who completed the Tahltan Survey either partially or completely, 63% of respondents were living in Tahltan Territory (Appendix 21-1, Regional Socio-economic Baseline Report).

There are four short-term accommodations (e.g. inns and lodges) in Telegraph Creek, one in Tatogga, two in Dease Lake, and one in Bell II.

An insufficient quantity of housing has been an issue for Tahltan members since the 1980s (TBC 2016), and communities have been looking for additional lands on which to build housing, including for seniors and Elders (Housing Needs Report 2022). The federal government received proposals to expand reserves in the 1990s and the TBC selected what is now Indian Reserve 13 (near Dease Lake) to accommodate additional housing areas. As of 2019, final designs were being completed for Indian Reserve 13 following community consultation. A preliminary layout included Elders' housing, multi-family spaces, large single-family homes, small single-family homes, open spaces, and a village centre, and has been zoned for 180 lots (TBC 2015).

Regional Assessment Area

Housing in the RAA communities is characterized by slight overall growth in the number of dwellings in the largest RAA communities, with limited housing supply and limited housing options for seniors and Elders.

Between 2016 and 2021, Terrace and Smithers had a slight increase in the number of private dwellings at 6% and 0.9%, respectively (Table 21.4-8). The District of Stewart experienced the largest increase in the number of private dwellings at 15.4% whereas the Village of Hazelton experienced the largest decrease at 16.1% (Table 21.4-8).

Table 21.4-8: Private Dwellings in Regional Assessment Area Communities, 2021

Communities / Electoral Area / Reserves / Census Subdivision	Total Number of Private Dwellings 2016	Total Number of Private Dwellings 2021	Change from 2016 to 2021 (%)	% of Private Dwellings Owned (%)	% of Private Dwellings Rented (%)	% of Private Dwellings Provided by the Local Government, First Nation, or Indian Band (%)	Average Number of Rooms per Dwelling
Terrace	4,906	5,200	6.0%	70.1%	30.0%	0.0%	6.5
Smithers	2,389	2,411	0.9%	70.4%	29.4%	0.0%	6.3
District of Stewart	292	337	15.4%	81.6%	18.4%	0.0%	6.6
Village of Hazelton	149	125	-16.1%	58.3%	37.5%	0.0%	6.4
District of New Hazelton	296	305	3.0%	63.6%	36.4%	0.0%	5.8
Nisga'a Villages	677	642	-5.2%	54.4%	14.9%	30.70%	6.1
Kitimat-Stikine B	751	742	-1.2%	85.2%	14.8%	0.0%	6.4
Kitimat-Stikine E	1,818	1,808	-0.6%	77.8%	22.5%	0.0%	6.1
Bulkley-Nechako A	2,213	2,269	2.5%	86.0%	14.0%	0.0%	7.0
Kitimat-Stikine C (Part 1)	1,411	1,431	1.4%	88.5%	11.5%	0.0%	6.7
BC	2,063,417	2,211,694	7.2%	66.8%	32.8%	0.5%	5.8

Sources: Statistics Canada 2017, 2023

Notes:

BC = British Columbia

% = percent

Percentage distributions, which are calculated on rounded values, may not necessarily add up to 100%.

In the RAA, the median cost for dwellings ranges from \$164,000 in the District of Stewart, to \$420,000 in Terrace, and to \$500,000 in RDBN Electoral Area A. The median rental costs of rental housing or accommodations ranges from \$665 per month in the District of New Hazelton to \$1,000 per month in Terrace, Smithers, and the District of Stewart (Table 21.4-9; Appendix 21-4, Socio-economic Baseline Addendum Report). The “Regional District of Kitimat-Stikine Housing Needs Report” (RDKS 2020a) documents that home ownership is relatively affordable in the region as compared to other regions in BC, although housing affordability conditions are worsening as the population gets older, housing costs rise, competition for limited homes increases, and existing stock ages. There is a need for housing that is affordable and accessible for those on a fixed income. The report also documents an increasing need for at-home care options and small housing units that accommodate downsizing. The report indicates that Elders who can currently afford their homes are increasingly worried about their ability to maintain their property (RDKS 2020a).

Table 21.4-9: Household Affordability in Regional Assessment Area Communities, 2021

Communities/Areas	% of Owner Households with a Mortgage	% of Owner Households Spending 30% or more of its Income ¹ on Shelter Costs	% of Tenant Households Spending 30% or more of its Income ¹ on Shelter Costs	Median Monthly Rents (\$)	Median Value of Dwellings (\$)
Terrace, City (CY)	59.4	11.2	24.3	\$1,000	\$420,000
Smithers, Town (T)	55.0	7.3	24.3	\$1,000	\$400,000
Town of Stewart, District Municipality (DM)	37.5	12.8	0.0	\$1,000	\$164,000
Hazelton, Village (VL)	40.0	ND	ND	\$810	\$324,000
New Hazelton, District municipality (DM)	42.9	0.0	40.0	\$665	\$180,000
Kitimat-Stikine B	33.0	6.7	0.0	\$735	\$200,000
Kitimat-Stikine E	61.9	9.8	26.0	\$980	\$332,000
Bulkley-Nechako A	54.1	8.3	11.9	\$950	\$500,000
Kitimat-Stikine C (Part 1)	59.4	11.1	34.5	\$970	\$468,000
BC	57.5	19.3	37.8	\$1,370	\$785,000

Source: Statistics Canada (2023)

Notes:

BC = British Columbia; LAA = Local Assessment Area; ND = no data; RAA = Regional Assessment Area

¹ Before income tax

% = percent

Statistics are based on a 25% sample data. Data were not available for Nisga’a Villages.

ND = no data available.

Approximately 30% of private dwellings in Terrace and Smithers are rented. There are relatively fewer rentals in the District of Stewart at 18.4% and relatively more in the Village of Hazelton and District of New Hazelton at 37.5% and 36.4% respectively (Table 21.4-6).

The average number of rooms per dwelling varies from 5.8 (District of New Hazelton) to 7 (Bulkley-Nechako A Electoral Area).

Information about homes to buy or rent within the RAA communities includes the following: in Terrace, 271 properties (including 147 single-family homes) were sold in 2023 and 130 properties of all types were available for sale at the end of 2023 (BC Northern Real Estate Board 2024). In Smithers, 157 properties (including 70 single-family homes) were sold in 2023 with 57 properties of all types available for sale at the end of 2023 (BC Northern Real Estate Board 2024).

There is a general concern that low-income people have more difficulty finding affordable housing, especially given current high housing prices in Terrace, the District of Stewart, and the Village of Hazelton (Terrace Chamber of Commerce, pers. comm., 2024; District of Stewart, pers. comm., 2024; Village of Hazelton, pers. comm., 2024). Terrace and the District of Stewart both noted that the lack of availability of rentals is challenging for short-term workers who are employed in the area. The City of Terrace reported that it has had a low rental vacancy rate at less than 1% for the past decade (City of Terrace, pers. comm., 2024).

Short-term accommodation in the RAA communities includes 3 hotels and guesthouses in the District of Stewart, 12 hotels and guesthouses in Terrace, and 11 hotels and guesthouses in Smithers, with about 970 rooms total available for short-term accommodation in these communities.

Gender-based Analysis Plus Highlight

Some diverse subgroups (in particular groups that already have lower incomes on average, including Indigenous people, women, single parents, seniors and Elders [e.g., on a fixed income], and individuals with disabilities) struggle disproportionately with housing affordability as presented in the Appendix 20-3, Existing Conditions for Diverse Subgroups Supplement. In cases where mining projects have resulted in influxes of non-local workers (and their families, where relevant), increased housing costs and decreased availability of affordable housing have been observed (Asia Pacific Foundation for Climate and Health 2023). For some diverse subgroups decreased housing availability result in increased reliance on unsuitable housing, including crowded dwellings and dwellings needing major repairs, particularly affecting diverse subgroups who are already more likely to live in unsuitable housing, such as Indigenous people and gender-diverse people (Statistics Canada 2022; Nelson et al. 2023).

Future Trends

According to BC Housing, as of 2024, several housing projects have been initiated in the LAA and RAA communities (BC Housing 2021; 2024):

- 5 projects in Terrace with a total of 283 houses planned for low-income individuals, families, Indigenous families and Elders, seniors, and students;
- 2 projects in the Hazeltons with a total of 57 houses planned for low-income individuals, families, seniors, and people with disabilities; and
- 2 projects in Smithers with a total of 39 houses planned for low-income individuals and Indigenous families and Elders.

Changes in BC housing legislation may stimulate housing development in the LAA and RAA communities. Starting 1 July 2024, developers across BC will be permitted to build a minimum of three and up to 6 units on lots currently zoned for single-family homes and duplexes in municipalities with populations over 5,000. The legislation also legalizes secondary suites and laneway homes across the province and aims to streamline the zoning process (Terrace Standard 2023).

21.4.3.7 Emergency Response Services and Crime

Law Enforcement, Crime, and Safety

This subsection provides a description of law enforcement, crime, and safety within LAA and RAA communities.

Law Enforcement in the Local Assessment Area

There are two RCMP detachments in the LAA: in Dease Lake and Telegraph Creek (Table 21.4-10). The provincially funded Dease Lake Detachment provides a seven-person RCMP presence in the area and dealt with 645 calls in 2020. There is one RCMP Aboriginal Liaison personnel at the Dease Lake Detachment, and two Aboriginal Liaison personnel at the Telegraph Creek Detachment.

Table 21.4-10: Royal Canadian Mounted Police Detachments in the Local Assessment Area and Regional Assessment Area Communities

RCMP Detachment	Communities RCMP Detachments Are Working With	Services
LAA		
Dease Lake Detachment	Good Hope Lake, Iskut 6, Dease Lake 9, and Dease Lake (unincorporated)	<ul style="list-style-type: none"> • Criminal records check • Fingerprints • Report a crime • Vulnerable sector check
Telegraph Creek Detachment	Telegraph Creek (6 and 6A) and Guhthe Tah 12	<ul style="list-style-type: none"> • Criminal records check • Fingerprints • Report a crime • Vulnerable sector check
RAA		
Smithers Detachment	The RAA community: Smithers Other communities: Telkwa	<ul style="list-style-type: none"> • Chauffeur's permit • Criminal records check • Fingerprints • Online crime reporting • Report a crime • Vulnerable sector check
Terrace Detachment	The RAA community: Terrace Other communities: Thornhill	<ul style="list-style-type: none"> • Criminal records check • Fingerprints • Online crime reporting • Police certificate • Report a crime • Vulnerable sector check
Stewart Detachment	Highway 37 from KM75 marker to the KM309, and Highway 37a from the Alaska border to the junction with Highway 37	<ul style="list-style-type: none"> • Criminal records check • Fingerprints • Online crime reporting • Report a crime

RCMP Detachment	Communities RCMP Detachments Are Working With	Services
New Hazelton Detachment	The RAA communities: Kitwanga, District of Hazelton, and New Hazelton Other communities: South Hazelton and Two Mile	<ul style="list-style-type: none"> • Criminal records check • Fingerprints • Online crime reporting • Police certificate • Report a crime • Vulnerable sector check
Lisims-Nass Valley Detachment	The RAA communities: Gitlaxt'aamiks, Gitwinksihlkw, Laxgalts'ap, Gingolx Other communities: Nass Camp	<ul style="list-style-type: none"> • Criminal records check • Fingerprints • Report a crime • Vulnerable sector check

Source: RCMP (2023)

Notes:

LAA = Local Assessment Area; RAA = Regional Assessment Area; RCMP = Royal Canadian Mounted Police
 KM = kilometre marker; km = kilometre

There has been a 20-year lobby for an RCMP Detachment in Iskut due to the perceived increased presence of drug dealers, assaults, regular instances of impaired driving, and an erratic police presence, as was reported by the Iskut Band (Paul 2021). The lack of RCMP presence in Iskut is also said to put pressure on the two nurses at the local clinic as they manage drug and alcohol incidents without RCMP support when it may be needed (Paul 2021).

Survey respondents commented that the RCMP are spread too thinly and that they are required to cover a too large area³⁴.

Law Enforcement in the Regional Assessment Area

There are five RCMP detachments within the RAA (Table 21.4-10). Staffing information for the RCMP detachments is not consistently available (Appendix 21-1, Regional Socio-economic Baseline Report). Personnel shortages are common for LAA and RAA RCMP detachments, with the highest vacancy level in the RCMP detachments of Dease Lake/Telegraph Creek and Nisga'a Villages (Link 2022). A shortage of RCMP officers used to be a problem for the City of Terrace but the situation has improved in 2024 (Link 2024).

Crime and Safety in the Local and Regional Assessment Areas

From 2018 to 2021, the number of criminal code offences (excluding traffic)³⁵ increased in both the RDKS and RDBN (Figure 21.4-2 for the boundaries of the RDKS and RDBN). During this period, the number of criminal code offences increased by 3.5% in the RDKS, 46% in the RDBN, and 5% in BC as a whole (Table 21.4-11; Ministry of Public Safety and Solicitor General Policing and Security Branch 2022).

³⁴ Of the 300 respondents who completed the Tahltan Survey either partially or completely, 63% of respondents were living in Tahltan Territory (Appendix 21-1, Regional Socio-economic Baseline Addendum).

³⁵ Criminal Code offences (excluding traffic) include property, violent, and other crimes. Violent crimes include the offences of homicide, attempted murder, sexual and non-sexual assault, sexual offences against children, abduction, forcible confinement or kidnapping, firearms, robbery, criminal harassment, extortion, uttering threats, indecent or harassing communications, and other violent offences. Property crimes include the offences of breaking and entering, theft, motor vehicle theft, possession of stolen property, trafficking in stolen property, fraud, mischief, identity theft or fraud, arson, and altering/removing/destroying a vehicle identification number. Other crimes include Criminal Code offences not classified as either violent or property crimes, such as offences related to counterfeiting, offensive weapons, child pornography, disturbing the peace, the administration of justice, and other "other" offences.

Table 21.4-11: Criminal Code Offences¹ in the Regional District of Kitimat-Stikine, Regional District of Bulkley-Nechako, and British Columbia

Year	Indicator	RDKS	RDBN	BC
2018	Number of Criminal Code Offences	5,189	3,929	371,617
	Percentage of violent offences ² among all Criminal Code offences	21%	29%	16%
	Crime rates (number of offences per 1,000 people)	134	98	74
2021	Number of Criminal Code offences	5,371	5,728	390,360
	Percentage of violent offences among all Criminal Code offences	25%	27%	21%
	Crime rates (number of offences per 1,000 people)	134	141	75
	% Change (2018 to 2021) for number of Criminal Code offences	+3.5%	+46%	+5%

Source: Ministry of Public Safety and Solicitor General Policing and Security Branch 2022

Notes:

BC = British Columbia; RDBN = Regional District of Bulkley-Nechako; RDKS = Regional District of Kitimat-Stikine
 % = percent

¹ Criminal Code offences exclude traffic offences (British Columbia 2022a).

² Violent crimes include the offences of homicide, attempted murder, sexual and non-sexual assault, sexual offences against children, abduction, forcible confinement or kidnapping, firearms, robbery, criminal harassment, extortion, uttering threats, indecent or harassing communications, and other violent offences.

In 2021, the crime rate³⁶ in the RDKS was 1.8 times higher than the crime rate in BC, and the crime rate in RDBN was almost double the BC rate (Table 21.4-11). The crime rate in RDKS in 2021 was the same as in 2018, although, between these two dates, there was a 3.5% increase in crime rates in 2019. In the RDBN, there has been a steady increase in crime rates from 2018 to 2021, from 98 offences per thousand people in 2018, to 141 in 2021.

In the LAA, Survey respondents identified both rotational and/or shift work as having an influence on community safety and rates of assault and harassment, domestic violence, and sexual assault. A total of 38% of respondents thought that rotational and/or shift work had a negative effect on community safety, while 32% thought it had no effect. Roughly 30% thought rotational and/or shift work increased incidences of harassment and assault, and nearly 38% believed it increased rates of domestic violence. Key informants involved in interviews commented that communities in the LAA felt safe, were tight-knit, and were places where members take care of each other; this was reflected in some Survey responses.

Characterization of crime and safety in the RAA must consider the large geographic area that includes both urban areas and transportation corridors.

Within the RAA, Highway 16, known as “the Highway of Tears”, has become infamous for the high number of Indigenous women and girls who have gone missing or been found murdered along this highway. The potential for crime and violence associated with Highway 16 has instilled a sense of insecurity in the region and in relation to travel. There is an acknowledgement that gender-based violence is a public health issue (National Inquiry into Missing and Murdered Indigenous Women and Girls 2019). In 2023, three new cellular towers were installed along Highway 16 in areas where cell coverage was previously not available; this cellular coverage was a result of a partnership between the governments of Canada, BC and Bell Mobility

³⁶ Crime rate is the number of Criminal Code offences or crimes (excluding drugs and traffic) reported for every 1,000 persons.

(Rogers 2023). This cellular coverage is anticipated to increase safety in the region (Government of BC 2021d).

In 2019, areas along Highway 37 and communities in the LAA and RAA (in particular areas close to the Liard Hot Springs Provincial Park and Iskut community) were the focus of a weeks-long search for two killers (Williams Lake Tribute 2021). The remoteness of the area and limitations of connectivity were named as a reason for delayed police response and contributed to a sense of vulnerability for residents in the area. In response, in Iskut, a patrol was established to manage security in the community (Williams Lake Tribute 2021). The emergency highlighted long-standing public safety issues in BC's north (Williams Lake Tribute 2021).

The RAA has experienced increasing traffic from travellers destined to or from Alaska, including people travelling for hunting and as part of the mining industry. This increase in traffic is a safety concern for the residents and commuters (Appendix 21-2, Tahltan Socio-economic Baseline Report).

An "Infrastructure Needs Analysis Report" (2019) conducted by the Northwest BC Resource Benefit Alliance found that as of 2019 communities in northwestern BC were "not ready to address the added draw on local police services" that anticipated growth in temporary and permanent residents from resource and energy projects would bring to the region in the coming years (Appendix 21-2, Tahltan Socio-economic Baseline Report).

There is a complex relationship between Canadian policing systems and Indigenous people that spans more than a century. Historical police forces were responsible for enforcing colonial legislation (i.e., the *Indian Act* [RSC 1985, c I-5]) on- and off-reserve including forcible land dispossession, enforcement of the residential school system, restricting traditional cultural and governance practices and restricting access to land and resources (McCreary and Ceric n.d.). Cases of violence against Indigenous people by police officers were common in BC and throughout Canada in the 20th century (McCreary and Ceric n.d.). These early attitudes and behaviours toward Indigenous people created a policing system ingrained with racism and mutual distrust which is still evident today (BC First Nations Justice Council 2023). As a result, Indigenous people may avoid seeking assistance from police officers even when at great risk to themselves (BC First Nations Justice Council 2023).

Gender-based Analysis Plus Highlight

Some diverse subgroups (including Indigenous people, as mentioned above) experience the presence of law enforcement services in different ways, as well as have varying perceptions of their individual and community's safety, as presented in the Appendix 20-3, Existing Conditions for Diverse Subgroups Supplement. For example, experiences of violence are largely gendered in Canada: women are more likely to be sexually assaulted, while men are more likely to be physically assaulted. Perpetrators of the most serious incidents of violence and harassment are more likely to be men (Cotter and Savage 2018; Transparency International Canada 2020).

Fire Protection

This subsection provides a description of fire protection services and infrastructure within LAA and RAA communities. Information about the influence of identify factors in relation to fire protection access is not available in public sources.

Local Assessment Area

The Project is located within the Northwest Fire Centre (Figure 21.4-4). The Northwest Fire Centre, based in Smithers, is responsible for an area of approximately 24 million hectares (ha; including the LAA). It coordinates wildfire responses and is responsible for fire base in Dease Lake.

The Northwest Fire Centre is part of the BC Wildfire Service, which has specialized knowledge, skills, and resources dedicated to understanding, preventing, and combating wildfires. EMCR is also involved in wildfire management and provides emergency management strategies for a range of emergencies, including wildfires, floods, and landslides. EMCR is responsible for providing support to impacted communities throughout all phases of emergency management (Government of BC 2024b).

In Dease Lake, there is a volunteer fire department that is equipped with two fire trucks and fire gear. This fire department services the area in and around Dease Lake and the LAA. Emergency support services are run through the fire chief in Dease Lake. There are no fire protection services in Iskut and Telegraph Creek.

In October 2022, fire protection services were suspended in Dease Lake due to insufficient capacity to respond to incidents in the Dease Lake Fire Protection Area (RDKS 2022b). The fire chief in the RDKS indicated that at least 15 positions needed to be filled and trained to relaunch operations in compliance with provincial requirements. Dease Lake was left with a single firefighter after the majority of volunteers suddenly left the community (Bramadat-Willcock 2022).

In 2018, a wildfire in Telegraph Creek damaged 13,000 km². Management of the wildfire was affected by inadequate resourcing (CBC 2018a). Additionally, in 2018 in Telegraph Creek, 21 homes were destroyed by wildfire, and a 102-day evacuation order was issued (CBC 2018b).

Regional Assessment Area

As noted above, the Northwest Fire Centre coordinates wildfire response and is responsible for fire bases in Terrace, the Hazeltons, Village of Burns Lake, Village of Telkwa, and District of Houston. The Northwest Fire Centre has two crew types: initial attack crews and unit-crews (Government of BC n.d.b). Their 11 initial attack crews are quick-responses teams of three to four people capable of controlling approximately 94% of all new wildfires. Their four unit-crews, the Burns Lake Unit Crew, Telkwa Rangers, Hazelton Rainmakers, and the Terrace Firebirds, provide sustained attack operations such as installing hose and pump lines, burn operations, and removing fuel using chainsaws (Government of BC 2022).



Skeena Resources Ltd.
 Date: 05-Mar-2025
 Figure: 21.4-4
 Author: curtis.morrison
 Filename: ESK-16-033



Eskay Creek Revitalization
Figure 21.4-4:
British Columbia Fire Centres
 Skeena Mining Division - NTS 104B09
 British Columbia, Canada

Scale: 1:7,500,000
 Coord. System: NAD 1983 UTM Zone 9N
 0 100 200
 Kilometres



The following fire departments are present within the RAA (Appendix 21-4, Socio-economic Baseline Addendum Report):

- **Terrace** has a fire department that provides fire prevention, fire suppression, rescue, pre-hospital care, and hazards mitigation (City of Terrace n.d.).
- **Smithers** (where the Northwest Fire Centre Office is located) provides fire protection services as well as first responder services, aircraft fire rescue, highway rescue, public education, and training. The department is equipped with fire fighting vehicles and equipment (Smithers 2013).
- The **District of Stewart's** Volunteer Fire Department is reported to be well equipped. The volunteers receive compensation for their participation in training and fire control (IDM Mining Ltd. 2017).
- The **Nisga'a Village of Laxgalts'ap** has a certified first responder team that responds to all calls throughout the Nass Valley. There is a fire hall, first responder trucks, and jaws of life (Laxgaltsap 2021). The Nisga'a Villages of Gitwinksihlkw and Gitlaxt'aamiks also have volunteer fire departments (Gitlaxtaamiks 2021; ERM Rescan 2014b).
- The **District of New Hazelton** has a volunteer fire department responsible for responding to emergencies in the District of New Hazelton (and beyond the RAA in Villages of South Hazelton and Two Mile, and rural properties east of the District of New Hazelton [n.d.]).
- **Kitwanga** receives fire protection services from the Kitwanga Volunteer Fire Department.

The spring and summer of 2023 was the most destructive year on record for BC in terms of wildfires. Almost 25,000 square kilometres (km²) were burned, through 2,217 wildfires, surpassing the previous 2018 record of 13,540 km² (CBC 2023a). The nearest wildfire to the RAA communities in 2023 was the Powers Creek wildfire, south from Smithers, and covering an area of 22 ha. In response to this wildfire, the RDBN issued an evacuation order for 51 properties south of Smithers (CBC 2023b).

Ambulance Services / Emergency Transportation

This subsection provides a description of ambulance or emergency transportation services within LAA and RAA communities.

Ambulance Services and Emergency Transportation in the Local Assessment Area

Communities within the LAA are within Northwest BCEHS District. The Northwest BCEHS District has one ambulance station in an LAA community, located in Stikine Health Centre in Dease Lake. BC Ambulance Services³⁷ for the Tahltan communities of Dease Lake, Iskut, and Telegraph Creek are provided by this ambulance station.

Highway 37A and Highway 37, from Cranberry Junction to Bell II, including the camps at Bob Quinn Lake and Eskay Creek, are serviced by BC Ambulance Services based located in the District of Stewart.

Residents of Dease Lake, Iskut, and Telegraph Creek face long wait times for transport to medical care in case of emergencies, and rely on medical evacuation services to transport them to hospitals (CBC 2019). Medical evacuation planes or helicopters have to land at the Stikine Regional Airport, which has several

³⁷ The BC Ambulance Service provides public ambulance services in British Columbia under the authority of BC Emergency Health Services.

limitations that affect an availability of evacuation services. As mentioned in Section 21.4.3.5, Local and Regional Transportation Infrastructure, these limitations include involvement of part-time volunteers for airport operations, an absence of de-icer onsite in case of freezing rain, and an absence of a certification for nighttime landing (CBC 2019).

Ambulance Services and Emergency Transportation in the Regional Assessment Area

Communities within the RAA are within the Nechako BCEHS District and Northwest BCEHS District. Combined, the Nechako and Northwest BCEHS Districts have five ambulance stations located in the District of Stewart, Terrace, Smithers, the Hazeltons, and Kitwanga.

There are BC Ambulance Services in the RAA communities, and they are typically responsible for emergency response to the surrounding areas. BC Ambulance Services has bases in Smithers (serving the area of District of Houston to Hazeltons), Terrace, and the District of Stewart (servicing Highway 37A and Highway 37, from Cranberry Junction to Bell II).

For Smithers, the BC Ambulance Service runs three ambulances, one of them run by full-time staff 24/7, and the other manned by full-time staff during the daytime, and casual employees during nighttime. During high call volumes, a third ambulance is used, particularly when neighbouring communities including Terrace, the Hazeltons, and Kitwanga require assistance (BCEHS—Smithers, pers. comm., 1 April 2024).

Ambulance service to the Nisga'a Villages is provided by the NVHA, with cooperation from BCEHS, the four village governments, the FNHA, and the NLG. The paramedic/ambulance station is in Laxgalts'ap, roughly at the centre of the Nass Valley (Link 2021a).

For the Hazeltons, as well as for Kitwanga, BC Ambulance Services are run from the Wrinch Memorial Hospital in the Village of Hazelton. The ambulance stationed in Kitwanga has had staffing issues and employees from Terrace or the Hazeltons attend this station to compensate for staff shortages (Link 2021b).

In recent years, northern BC has experienced a shortage of ambulances and paramedics (as of April 2023), that was relevant for Terrace, Smithers, and Kitwanga and has affected ambulance waiting times. Increases in staffing levels, salaries, and benefits have had an impact on recruitment and are easing labour shortages (Elias 2023). However, emergency services continue to face staffing challenges and emergency diversions, where patients are redirected to a larger hospital due to under-capacity.

Gender-based Analysis Plus Highlight

Some diverse subgroups in the LAA or RAA have varying experiences with emergency services, particularly in terms of service availability and reliability, as described in the Appendix 20-3, Existing Conditions for Diverse Subgroups Supplement. For example, participants in the 2023 GBA Plus Workshop (TEEM 2023) noted the shortage of emergency services in rural communities overall and particular barriers for Tahltan members living in remote communities, noting that the BC EHS ambulance station in Dease Lake has very limited capacity to respond to emergencies. Participants also noted that many Tahltan members do not have driver's licences and rely on carpooling, limiting their ability to supplement emergency transportation. This lack of transportation and long distance from services, are likely to affect all rural and remote communities, and may be particularly challenging for those groups identified to rely on others for transportation (e.g. youth, disabled individuals, and seniors/Elders).

Future Trends

Future developments include initiatives funded by the Community Emergency Preparedness Fund (CEPF). CEPF, launched in 2017, is a fund administered through the Union of British Columbia Municipalities that supports First Nations and local governments to better prepare for disasters and reduce risks from hazards in a changing climate. As of April 2024, emergency operations centre funding has been approved for Terrace and Iskut (Ministry of Emergency Management and Climate Readiness 2024).

21.4.3.8 Community Recreational Infrastructure and Services

This section provides a description of community recreational infrastructure and services available within LAA and RAA communities. For Tahltan Nation community members, recreational activities may often occur on the land through the engagement of traditional activities and ceremony. A discussion of changes to land-based areas available for hunting, trapping, and fishing as well as ceremonial sites is provided in Chapter 26, Current and Future Use of Land and Resources for Traditional Purposes Effects Assessment, and Chapter 22, Non-traditional Land and Resource Use Effects Assessment.

Local Assessment Area

Recreational and sports infrastructure in the Tahltan communities within the LAA include the Dease Lake Recreation Centre Society Arena in Dease Lake, the Chief Louis Arena in Iskut, and a recreation centre in Telegraph Creek. Ongoing maintenance of the indoor arenas and provision of equipment comes from external funding sources, including financial contributions from industry- and community-led fundraising. These facilities have hosted industry-community hockey games and regional youth hockey camps and provide public skating areas.

The Peoples' Haven in Dease Lake is a community gathering space that facilitates cultural and language programs and is utilized as a community learning and meeting space, amongst other programs.

Regional Assessment Area

Recreational and sports facilities in communities of the RAA include indoor and outdoor facilities, such as community halls; arenas and ice rinks; pools, parks, and playgrounds; sports fields; and trails and walkways. Details about the recreational facilities in the RAA communities are provided in the Socio-economic Baseline Addendum Report (Appendix 21-4). Other outdoor activities or land-based activities occurring beyond the RAA communities, such as use of provincial parks or boating on rivers, are discussed in Chapter 22, Non-Traditional Land and Resource Use Effects Assessment.

Gender-based Analysis Plus Highlight

Identity factors, such as ability, gender, sexuality, and Indigeneity influence the experience and level of social or community services, including community recreation services. In 2023, the BC Parks Commitment to Inclusion was released, which outlined guiding principles to ensure that “everyone feels welcome in provincial parks”, accompanied by a three-year \$3.6 million budget to upgrade facilities such as washrooms, parking lots, and trails in parks near urban centres. Initiatives include shifting to gender-neutral facilities where feasible and supporting partnerships and programs for adaptive recreation equipment, among others (Ministry of Environment and Climate Change Strategy 2023). To date, no information is available about recreation facilities and services that support people with different identity factors in the LAA and RAA communities.

Future Trends

There is one new planned community recreation project in the LAA and RAA communities, located in the District of Stewart (Government of BC 2023e). The project will build an accessible community hall in the District of Stewart (Stewart Community Hall) to accommodate larger community events. The project is in the pre-construction stage (Government of BC 2023e).

21.4.3.9 General Future Trends for Infrastructure and Services

The existing conditions within the LAA and RAA will be influenced in part by gradual population growth across all LAA and RAA communities. With rising temperatures and changing precipitation patterns across BC and beyond through climate change, extreme weather conditions including wildfires, drought, and flooding are expected to affect parts of the province every year. These events will have implications for various infrastructure and service providers, putting the safety and wellness of communities at risk. Government investment in strategic areas of community needs, such as health care and housing, has potential to result in important changes for distinct populations; however, they will not influence the overall trajectory of communities.

21.4.4 Tahltan Knowledge-weaving Highlight: Ancient, Past and Existing Conditions and Barriers to Tahltan Relating to Infrastructure and Services

The Tahltan view of stewardship is set out in Section 4.1.1, Laws and Stewardship Principles, as arising from a relationship to the land described called Keyeh: “an interconnected whole made up of the relationships between humans, animals, spirits, mountains, waters, and weather systems.” This reciprocal relationship is with the entirety of the land and to all the living things within it.

In alignment with Keyeh, Chapter 4, Tahltan Application Information, presents information compiled by the Tahltan Central Government to provide an interconnected and holistic description of all Tahltan Values. While not assessed as a Tahltan Value, Chapter 4 includes a holistic discussion that takes into consideration Infrastructure and Services, broadly encompassing the Tahltan AOIs (defined in section 4.5.1 of the Hybrid AIR [EAO 2023a]). In contrast, the preceding section (Section 21.4.3, Characterization of Existing Conditions) presented technical information compiled by Skeena Resources pertaining specifically to the Infrastructure and Services VC, organized within the spatial boundaries defined in section 10.3.1 of the Hybrid AIR (EAO 2023a). (Both sets of boundaries are described in Section 21.3.1, Spatial Boundaries, of this chapter.)

The following section provides highlights relevant to Infrastructure and Services drawn from the holistic description presented in Chapter 4, Tahltan Application Information, which covers the larger spatial scales contemplated by the Tahltan AOIs, and in some cases longer timeframes than those considered in the preceding sections (across the Tahltan Continuum, as described in Section 4.1.1, Laws and Stewardship Principles). This section was developed collaboratively by Tahltan Central Government and Skeena Resources.

As noted in Section 4.4.1, Rationales and Perspectives:

The economy practiced by our Tahltan ancestors was based on sharing or reciprocity, as reflected in the words of an elder:

'If we take care of the land, the land will take care of us.'

Over thousands of years, Tahltan guarded their position in a coast-interior trade network which stretched from the Pacific coast to the boreal forests east of the Rocky Mountains. Tahltan were living traditionally in the region following the harvesting, gathering, and social seasonal patterns with the movement of wildlife, availability of plant communities, and the salmon and fish cycles influencing traditional ways. Tahltan were also mining, primarily obsidian, and trading with Indigenous neighbours. The landscapes were intact and only affected from natural disturbances and events. When prospectors and fur-traders arrived in the nineteenth century from the outside world, they brought with them a different kind of economy, based on extraction. Today, mining is the predominant form of economic activity in Tahltan Territory, and Tahltans have also come to rely on the industry for employment as compared to more traditional economy of reciprocity.

Challenges to Tahltan communities, including some pertaining to Infrastructure and Services, have come with this shift in economic mode, combined with growing pressures caused by industrial development. As noted in Section 21.4.3.1, Population Demographics and Trends, and in Appendix 21-2, Tahltan Socio-economic Baseline Report, the population in Tahltan communities is declining in number. TCG notes in Section 4.3, Tahltan Socio-Cultural Assessments, that the decline in community infrastructure and housing, along with decreased availability or poor quality of medical, mental health, and emergency services, are all factors for those leaving the Tahltan Territory. The population is also aging, creating additional pressures on local services and infrastructure. Increased road traffic linked with development is noted to be contributing to deteriorating road conditions.

21.5 Potential Effects and Mitigation

21.5.1 Identification of Potential Interactions

As described in Chapter 1, Project Overview, the Project is proposing to restart mining at the past producing Eskay Creek Mine. The Project comprises construction of new infrastructure, as well as modification and use of existing infrastructure, to enable an open pit gold-silver mine with an estimated total annual production of 3.0 million tonnes in Years 1 to 5, and up to 3.7 million tonnes in Years 6 to 9.

Aspects of the Project relevant to the Infrastructure and Services VC are:

- Project employment and population in-migration associated with the workforce;
- Use of roads for supplies, personnel, and concentrate delivery; and
- Project waste management, water management, and electricity supply.

A complete list and description of Project activities and components is found in Chapter 1, Project Overview. For this assessment, the focus is on those Project activities and components that are relevant to the Infrastructure and Services VC.

Table 21.5-1 provides a scoping matrix of Project activities and their potential to interact with the Infrastructure and Services VC. Activities are presented by Project phase; however, activities can overlap between phases.

Within this matrix, the potential for interaction (positive or negative) is assigned a symbol as follows:

- **Empty circle (○):** an interaction between Project activities and the VC is not expected;
- **Half-filled circle (◐):** an interaction between Project activities and the VC is possible; and
- **Filled circle (●):** an interaction between Project activities and the VC is likely.

This scoping matrix considers any embedded controls (i.e., physical or procedural controls that are planned as part of the Project design). An example of an embedded control is an accommodation of employees at site during work shifts and fly-in and fly-out transportation scheme. Cells in Table 21.5-1 that are coded as *not expected to result in an interaction between the Project and VC or topic of the VC in this chapter* (empty circle) are scoped out of further assessment in this assessment chapter. Interactions considered possible or likely are carried forward to the next step in the assessment. Table 21.5-1 presents potential interactions between the Project and the Infrastructure and Services VC.

Table 21.5-1: Potential Interactions between Project Activities and the Infrastructure and Services Valued Component

Project Activities and Phase	Potential for Interaction with the Infrastructure and Services VC ¹
Construction (2 Years)	
Vehicle transportation of personnel, equipment, materials, and other goods to and from offsite (highways) to mine site along the Eskay Creek MAR	●
Operation of Eskay Creek MAR KM2 security gate and construction and operation of KM52.2 mine security gate	○
Transportation of personnel, equipment, materials, and other goods on Project mine site roads (new mine roads and existing roads)	◐
Construction and use of mine site road infrastructure (new mine roads), including roadside diversion channels (non-contact water), collection channels (contact water), culverts, and open bottom crossings	○
Charter flights to and from Bob Quinn Lake Aerodrome for emergencies and visitors	●
Land clearing and site preparation	○
Pre-stripping and blasting (North Pit)—removal of topsoil and overburden, and initial access to ore	○
Stockpiling topsoil and other material suitable for reclamation or construction uses	○
General earthworks, site levelling, foundations, buried services	○
Supply of concrete from existing offsite concrete batch plant	○
Construction of Process Plant and ancillary infrastructure (e.g., mine dry, administration, warehousing, laboratory, medical facility)	○
Construction of crushing facilities, and overland conveyor	○
Construction of tailings discharge and supernatant reclaim pipelines, and adjustments to the reclaim barge setup	○

Project Activities and Phase	Potential for Interaction with the Infrastructure and Services VC ¹
Construction of water management systems, including ponds, sumps, channels, pipelines and pumps	○
Construction of onsite electrical distribution system	○
Supply of electrical power from the regional system via an existing 69 kV Transmission Line to the Eskay Creek Substation	●
Construction, commissioning, and operation of MWTP	○
Installation of surface water intakes for the Process Plant and/or potable use	○
Construction and operation of potable water and sewage treatment facilities, including onsite and offsite sewage sludge disposal	●
Construction of fuel storage (diesel, gasoline, and propane) facilities	○
Construction and operation of incinerators and burn pit	○
Construction of explosives storage facilities, and handling and storage of explosives	○
TMSF dam development (Stage 1: construct three northern starter embankments for TMSF North Dam, construct TMSF Stage 1 spillway)	○
Development of MRSA and ROM Pad	○
Construction of waste management facilities (storage of hazardous and non-hazardous wastes and materials prior to shipping offsite)	○
Use of existing onsite camps (Eskay Creek MAR KM58, KM59 and Rig camps) prior to decommissioning during Operations	●
Construction activities for Camp to expand camp facilities near TMSF	○
Operation of Camp facilities	●
Transportation of hazardous and non-hazardous wastes and materials for offsite disposal ²	●
Use of onsite laydown areas	○
Use of Eskay Creek MAR KM2 laydown area	○
Storage of waste rock (MRSA) and ore (ROM Pad) encountered during stripping of North Pit	○
Designate helipad location(s) for emergencies	○
Operation of helipad, including for emergencies	●
Procurement of employment and labour, services, goods, and use of infrastructure in the region	●
Operations (13 Years)	
Vehicle transportation of personnel, equipment, materials, and other goods to and from offsite (highways) to mine site along the Eskay Creek MAR	●
Operation of Eskay Creek MAR KM2 security gate and the KM52.2 mine security gate	○
Transportation of personnel, equipment, materials, and other goods on Project mine site roads (new mine roads and existing roads)	●
Maintenance of mine site road infrastructure (new mine roads and existing roads)	○
Charter flights to and from Bob Quinn Lake Aerodrome for emergencies and visitors	●

Project Activities and Phase	Potential for Interaction with the Infrastructure and Services VC ¹
Concentrate transportation from Process Plant to port facilities in the District of Stewart	●
Handling and storage of concentrate at port facilities in the District of Stewart, up to and including the point at which the loading of concentrate onto a vessel is complete	○
Land clearing and site preparation	○
Stripping of topsoil and overburden in the South Pit and North Pit	○
Stockpiling topsoil and other material suitable for reclamation or construction uses	○
Mining the North Pit and South Pit, including drilling, blasting, and excavation activities	○
Backfilling South Pit with NPAG waste rock	○
TMSF spillway construction and dam development (Stage 2: embankment raise of North Dam and, South Dam; Stage 3, 4, 5, and 6: subsequent embankment raises of North Dam and South Dam)	○
Use of MRSA and ROM Pad areas, including onsite transportation of waste rock and ore by haul truck	○
Operation of water management systems including ponds, sumps, channels, pipelines, and pumps	○
Transportation of ore to crusher, and from crusher to Process Plant by conveyor	○
Transportation of PAG waste rock to TMSF by haul truck	○
Storage of waste rock, tailings, and contact water in TMSF	○
Handling and storage of explosives and detonators	○
Operation of mine infrastructure facilities, crusher, overland conveyor	○
Operation of ancillary infrastructure (e.g., Camp facilities, mine dry, administration, warehousing, laboratory, and medical facility)	●
Mineral processing at Process Plant	○
Mill capacity expansion of Process Plant in Year 5 for throughput increase in Year 6 through Year 13	○
Conveyance of tailings and contact water from Process Plant and sumps to TMSF via pipeline	○
Operation of supernatant reclaim pipelines and adjustments to the reclaim barge setup	○
Supply of electrical power from the regional system via an existing 69 kV Transmission Line to the onsite distribution system	●
Water treatment and discharge	○
Passive flooding of North Pit	○
Operation of potable water and sewage treatment facilities, including onsite and offsite sewage sludge disposal	●
Operation of surface water intakes for Process Plant and/or potable use	○
Operation of maintenance and fuel storage facilities (e.g., diesel, gasoline, and propane)	○
Operation of incinerators and burn pits	○
Operation of waste management facilities (storage of hazardous and non-hazardous wastes and materials prior to shipping offsite)	○

Project Activities and Phase	Potential for Interaction with the Infrastructure and Services VC ¹
Transportation of hazardous and non-hazardous wastes and materials for offsite disposal ²	●
Use of onsite laydown areas	○
Use of Eskay Creek MAR KM2 laydown area	○
Progressive reclamation of disturbed areas where possible, including backfilling South Pit with NPAG waste rock	○
Stockpiling topsoil and other material suitable for reclamation or construction uses	○
Operation of helipad, including for emergencies	●
Procurement of employment and labour, services, goods, and use of infrastructure in the region	●
Reclamation and Closure (3 Years)	
Vehicle transportation of personnel, equipment, materials, and other goods to and from offsite (highways) to mine site along the Eskay Creek MAR	●
Operation of Eskay Creek MAR KM2 security gate and the KM52.2 mine security gate	○
Transportation of personnel, equipment, materials, and other goods on Project mine site roads (new mine roads and existing roads)	●
Use of mine site road infrastructure (new mine roads and existing roads)	○
Charter flights to and from Bob Quinn Lake Aerodrome for emergencies and visitors	●
Dismantling and removal of processing and mine support facilities	○
Dismantling and removal of ancillary infrastructure (e.g., Camp facilities, mine dry, administration, warehousing, laboratory, medical facility, and first aid)	○
Removal and disposal of hazardous wastes and materials	●
Recontouring landforms	○
Sampling and remediating contaminated soils	○
Cover placement in reclaimed areas, including soil and revegetation (e.g., seeding and planting native plant species)	○
Decommissioning and reclamation of mine site roads (including culverts), pipelines, and onsite electrical distribution system, if no longer required	○
Removal of security gatehouses (at Eskay Creek MAR KM52.2) if no longer required	○
Utilization of topsoil and overburden piles to recontour and scarify disturbed areas, as appropriate	○
Placement of vegetative cover over the MRSA	○
Closure activities associated with TMSF (e.g., remove reclaim barge, pipelines, recontouring of waste rock, dry cover system of non-potentially acid generating waste rock)	○
Reclamation monitoring	○
Decommissioning of water management systems no longer required, such as diversion channels, and water collection sumps, channels, ponds, and pipelines to reestablish natural flow paths where practicable	○

Project Activities and Phase	Potential for Interaction with the Infrastructure and Services VC ¹
Water treatment (and maintenance of water management structures) to achieve stable long-term drainage and water quality objectives	○
Dismantling and removal of potable water and sewage treatment facilities	○
Decommissioning of surface water intakes	○
Dismantling and removal of maintenance and fuel storage facilities (e.g., diesel, gasoline, and propane)	○
Dismantling and removal of incinerators, reclamation of burn pit	○
Removal of mining equipment	○
Operation of helipad, including for emergencies	◐
Procurement of employment and labour, services, goods, and use of infrastructure in the region	●
Post-closure	
Maintaining site access as required	○
Environmental monitoring	○
Water treatment (and water management structures) to achieve stable long-term drainage and water quality objectives, until no longer required	○
Dismantling and removal of water treatment plant, if no longer required	○
Engineering inspections of TMSF embankments and spillway, and MRSA	○
Implementation of follow-up measures, maintenance, and repairs as required	○
Operation of helipad, including for emergencies	◐
Procurement of employment and labour, services, goods, and use of infrastructure in the region	◐

○ = interaction not expected.

◐ = possible interaction.

● = likely interaction.

Notes:

Eskay Creek MAR = Eskay Creek Mine Access Road; LAA = Local Assessment Area; MRSA = Mine Rock Storage Area; MWTP = Mine Water Treatment Plant; NPAG = non-potentially acid generating; RAA = Regional Assessment Area; ROM = Run of Mine; TMSF = Tom MacKay Storage Facility; VC = Valued Component

KM = kilometre marker; kV = kilovolt

¹ In this table, interactions are considered between Project activities and the Infrastructure and Services VC as a whole. The potential for effects emerging from these interactions are presented through more granular Infrastructure and Services VC "topics" in Table 21.5-2.

² Transportation of hazardous and non-hazardous wastes and materials for offsite disposal during Construction and Operations is not expected to affect transportation infrastructure. However, the disposal of wastes and materials offsite may affect waste management facilities in the LAA and RAA.

Gender-based Analysis Plus Highlight

Whether there is a possible or likely interaction with an aspect of Infrastructure and Services relating to the population as a whole, or only to a specific diverse subgroup, that interaction is carried forward and evaluated in more detail in the next step in the assessment.

21.5.2 Identification of Potential Effects and Their Mitigation

The Project's interactions with and potential positive and negative effects on the Infrastructure and Services VC were raised during engagement with Indigenous Nations, government agencies, local governments, the public, and interested stakeholders. Additionally, as described in Chapter 10, Valued Component Effects Assessment Methods, scientific literature, experience in the region and Canada, and technical expertise/professional judgment suggest that the Project has the potential to affect infrastructure and services in the LAA and RAA.

Positive effects of the Project on infrastructure and services in and for LAA and RAA communities are anticipated as a result of tax revenues from the Project and workers' spending resulting from Project-related income. Workers' spending will, in turn, lead to additional tax revenues. Economic effects including tax revenues are presented in Chapter 24, Employment and Economy Effects Assessment.

Potential effects on the Infrastructure and Services VC from Project activities are described below. The description of effects assumes that all Project activities and components will occur within the designed scope of the Project. Any potential effects due to spills, equipment malfunctions, emergencies, or accidents are assessed in Chapter 29, Malfunctions and Accidents.

To further focus the assessment, Table 21.5-2 identifies and ranks the potential for each Project activity to result in an effect on the Infrastructure and Services VC, as follows:

- **Empty circle (○):** no potential for an effect is anticipated.
- **Blue (●):** negligible to minor potential for an adverse effect is anticipated; implementation of best practices and standard mitigation and management measures are considered sufficient; this potential effect is well understood and well regulated, and may be managed under another government process; no additional monitoring is required. These potential effects, and the mitigation measures to address them, will be briefly discussed, but will not be carried forward in the assessment.
- **Yellow (●):** there is moderate potential for an adverse effect requiring unique active management/monitoring/mitigation; this potential effect warrants further consideration and will be carried forward in the assessment.
- **Red (●):** there is high potential for an adverse effect; this potential effect warrants further consideration and will be carried forward in the assessment.
- **Plus (+):** there is potential for a positive effect; this potential effect will be carried forward in the assessment.

Supporting rationale for assigned rankings is provided in the discussion of potential effects below.

Table 21.5-2: Ranking Potential for Effects on the Infrastructure and Services Valued Component

Project Activity	Potential Effects					
	Pressure on Health Care Services and Facilities	Pressure on Education and Daycare Services	Pressure on Transportation Infrastructure	Pressure on Availability and Affordability of Housing	Pressure on Emergency and Law Enforcement Services	Pressure on Utilities
Construction (2 Years)						
Vehicle transportation of personnel, equipment, materials, and other goods to and from offsite (highways) to mine site along the Eskay Creek MAR	●	○	●	○	●	○
Transportation of personnel, equipment, materials, and other goods on Project mine site roads (new mine roads and existing roads)	●	○	○	○	●	○
Charter flights to and from Bob Quinn Lake Aerodrome for emergencies and visitors	●	○	●	○	●	○
Supply of electrical power from the regional system via an existing 69 kV Transmission Line to the Eskay Creek Substation	○	○	○	○	○	●
Construction and operation of potable water and sewage treatment facilities, including onsite and offsite sewage sludge disposal	○	○	○	○	○	○
Use of existing onsite camps (Eskay Creek MAR KM58, KM59 and Rig camps) prior to decommissioning during Operations	●	○	○	●	●	○
Operation of Camp facilities	●	○	○	●	●	○
Transportation of hazardous and non-hazardous wastes and materials for offsite disposal ¹	●	○	●	○	●	●
Operation of helipad, including for emergencies	○	○	○	○	●	○
Procurement of employment and labour, services, goods, and use of infrastructure in the region	●	○	●	●	●	○

Project Activity	Potential Effects					
	Pressure on Health Care Services and Facilities	Pressure on Education and Daycare Services	Pressure on Transportation Infrastructure	Pressure on Availability and Affordability of Housing	Pressure on Emergency and Law Enforcement Services	Pressure on Utilities
Operations (13 Years)						
Vehicle transportation of personnel, equipment, materials, and other goods to and from offsite (highways) to mine site along the Eskay Creek MAR	●	○	●	○	●	○
Transportation of personnel, equipment, materials, and other goods on Project mine site roads (new mine roads and existing roads)	●	○	○	○	●	○
Charter flights to and from Bob Quinn Lake Aerodrome for emergencies and visitors	●	○	●	○	●	○
Concentrate transportation from Process Plant to port facilities in the District of Stewart	●	○	●	●	●	○
Operation of ancillary infrastructure (e.g., Camp facilities, mine dry, administration, warehousing, laboratory, and medical facility)	●	○	○	●	●	○
Supply of electrical power from the regional system via an existing 69 kV Transmission Line to the Eskay Creek Substation	○	○	○	○	○	●
Operation of potable water and sewage treatment facilities, including onsite and offsite sewage sludge disposal	○	○	○	○	○	●
Transportation of hazardous and non-hazardous wastes and materials for offsite disposal ¹	●	○	●	○	●	●
Operation of helipad, including for emergencies	○	○	○	○	●	○
Procurement of employment and labour, services, goods, and use of infrastructure in the region	●	●	●	●	●	○
Reclamation and Closure (3 Years)						
Vehicle transportation of personnel, equipment, materials, and other goods to and from offsite (highways) to mine site along the Eskay Creek MAR	●	○	●	○	●	○

Project Activity	Potential Effects					
	Pressure on Health Care Services and Facilities	Pressure on Education and Daycare Services	Pressure on Transportation Infrastructure	Pressure on Availability and Affordability of Housing	Pressure on Emergency and Law Enforcement Services	Pressure on Utilities
Transportation of personnel, equipment, materials, and other goods on Project mine site roads (new mine roads and existing roads)	●	○	○	○	●	○
Charter flights to and from Bob Quinn Lake Aerodrome for emergencies and visitors	●	○	●	○	●	○
Removal and disposal of hazardous wastes and materials	○	○	○	○	○	●
Operation of helipad, including for emergencies	○	○	○	○	●	○
Procurement of employment and labour, services, goods, and use of infrastructure in the region	●	○	●	●	●	○
Post-closure						
Operation of helipad, including for emergencies	○	○	○	○	●	○
Procurement of employment and labour, services, goods, and use of infrastructure in the region	●	○	●	○	●	○

Notes:

Eskay Creek MAR = Eskay Creek Mine Access Road; TMSF = Tom MacKay Storage Facility

KM = kilometre marker; kV = kilovolt

○ = No potential for an effect anticipated; no further consideration is warranted in the assessment

● = Negligible to minor potential for an adverse effect; implementation of best practices, standard mitigation and management measures; no monitoring required; no further consideration is warranted in the assessment

● = Moderate potential for an adverse effect; may require unique active management, mitigation, and/or monitoring; warrants further consideration in the assessment

● = High potential for an adverse effect; warrants further consideration in the assessment

+ Potential for positive effect; warrants further consideration in the assessment

¹ Transportation of hazardous and non-hazardous wastes and materials for offsite disposal during Construction and Operations is not expected to affect transportation infrastructure. However, the disposal of wastes and materials offsite may affect waste management facilities in the LAA and RAA.

Gender-based Analysis Plus Highlight

For human-focused VCs, the matrix approach presented in Table 21.5-3 is used to highlight effects where there is greater potential for diverse subgroups distinguished by a specific identity factor to be affected by the Project. The process for identifying these subgroups and the potential pathways for effects relevant to the human-focused VCs are described in Appendix 20-3, Diverse Subgroups Existing Conditions Supplement. In Table 21.5-3, the effects that are anticipated to be evenly distributed are distinguished from effects anticipated to be disproportionate. Effects anticipated to have an even distribution on the whole population are not carried further through the GBA Plus analysis but are considered for the entire population as part of the main effects assessment. For effects that are expected to be disproportionate, the effect pathway (i.e., the reasoning or known mechanism by which an effect may be more acutely felt by a diverse subgroup) is also described, and the effect is carried forward for GBA Plus consideration in the next step of the assessment.

Diverse subgroups may be disproportionately and/or differentially affected by changes to pressure on health care services and facilities in the following ways:

- Diverse subgroups facing existing barriers to healthcare access, such as rural populations and Indigenous people, may be disproportionately affected by the Project if in-migration results in pressure to access health care services.
- Diverse subgroups who use health care services at higher rates and frequencies than the general population, (e.g. seniors/Elders, disabled and/or chronically ill individuals, and individuals with existing mental health challenges and/or addictions), may be disproportionately affected if there is reduced availability or pressure on available services.

Diverse subgroups may be disproportionately and/or differentially affected by changes to pressure on educational and daycare services in the following ways:

- Pressure on daycare services resulting in fewer daycare spaces is likely to disproportionately affect women, as caregivers are generally women.
- Pressure on daycare services may also limit opportunities for parents or caregivers to pursue employment.
- Family structure (e.g., single parents, lone caregivers, extended families) can define the various daycare options available to families, which in turn influence the experiences of these families when additional pressure on daycare occurs.

Diverse subgroups may be disproportionately and/or differentially affected by pressure on availability and affordability of housing and accommodations in the following ways:

- Diverse subgroups including Indigenous people, low-income individuals, and gender-diverse populations who already struggle to secure affordable and/or suitable housing, may be disproportionately affected by pressure on availability and affordability of housing from the Project. This is due to lack of capacity and/or budgets of the subgroups, making it more challenging to adapt to a more expensive and/or smaller housing market.
- Rural and remote populations would likely be disproportionately affected by increased demand for short-term accommodations in larger population centres, as access to short-term accommodations at market prices and convenient dates can be important factors in ability to access services (such as health services).

Table 21.5-3: Ranking Potential for Infrastructure and Services Valued Component Effects on Diverse Subgroups

	Distribution of Effect ¹					
	Pressure on Health Care Services and Facilities	Pressure on Educational and Daycare Services	Pressure on Transportation Infrastructure	Pressure on Availability and Affordability of Housing	Pressure on Emergency and Law Enforcement Services	Pressure on Utilities
Gender	Even	Disproportionate	Even	Disproportionate	Disproportionate	Even
Indigeneity	Disproportionate	Disproportionate	Even	Disproportionate	Disproportionate	Even
Age	Disproportionate	Even	Even	Even	Even	Even
Ability	Disproportionate	Even	Even	Even	Even	Even
Geography	Disproportionate	Even	Even	Disproportionate	Disproportionate	Even
Family Structure	Disproportionate	Disproportionate	Even	Even	Even	Even
Income and Employment	Disproportionate	Even	Even	Disproportionate	Even	Even
Education and Skills	Even	Even	Even	Even	Even	Even

Note:

¹ **Even** = Effects may be experienced by any subgroup; **Disproportionate** = Effects could be experienced only by certain subgroups, or the effect could be more acute for certain subgroups.

Any potential change in pressure on law enforcement services that result in changes in availability of these services would likely be disproportionately experienced by rural and remote populations, given existing challenges accessing these services. These effects may be disproportionately experienced by women and Indigenous people, who, in general, have higher demand for law enforcement services as compared to other populations.

No disproportionate effects are predicted for change in pressure on transportation infrastructure, as well as for the potential effect of pressure on utilities (waste management facilities), as no available data suggests differential use of roads or utilities by diverse subgroups.

As defined in Chapter 10, Valued Component Effects Assessment Methods, where potential effects are marked with blue circles (i.e., negligible to minor potential for adverse effect expected), they are presented in the remainder of this chapter and the relevant mitigation measures are presented in Section 21.5.3, Mitigation Measures and Effectiveness. After the presentation of effects with negligible to minor potential and their mitigations, they are not considered further in the assessment. Where entire columns are coded either with blue circles or empty circles (indicating *no potential effect anticipated or negligible to minor potential for adverse effects*), the potential effect is scoped out of further assessment in this chapter.

The following interactions are not expected to result in effects and have been scoped out of further assessment for the Infrastructure and Services VC:

- Interactions between community recreation facilities and parks and Project-related population in-migration during Operations is not expected to result in demand for or pressure on existing services. Most in-migration is expected in Terrace and Smithers, which offer a wider range of recreational facilities and parks compared to smaller LAA and RAA communities (population change assumptions are detailed in the “Population Change Associated with the Project” box in Section 21.5.2.1, Pressure on Health Care Services and Facilities). No issues were raised regarding the availability of these facilities in Terrace or Smithers. Therefore, no Project-related effects on the availability and capacity of community recreational facilities and parks are expected.
- Project-related marine shipping from the port facilities in the District of Stewart are not anticipated to result in changes to port infrastructure or availability as the port facilities were expanded a decade ago and the approval considered berthing and loading up to 180 vessels per year (Stewart Bulk Terminals Ltd. 2002).
- Project effects with utility services in LAA and RAA communities, including water supply, sewage, and communications are not expected as these services will be supplied independently at the Project site, with no connection or reliance on municipal or district-level infrastructure.
- Electricity supply for the Project is not anticipated to result in a change in service availability. The electricity for the Project will be provided through the existing transmission line, by a connection at the Volcano Creek substation. The Eskay Creek Substation will be located onsite, and a new transmission line will connect the Volcano Creek Substation to the Eskay Creek Substation. Power requirements for the Project will not affect the municipal or district-level electricity supply. No concerns were raised by communities or businesses regarding pressure of the Project on electricity supply.
- Effects resulting from interactions with social services focused on mental health, women’s support, housing/shelter, training and employment, multiculturalism, and literacy, are not expected from the

Project. It is anticipated that employees and contractors requiring social services will be supported in their home communities or through their employee assistance programs, such as Skeena Resources' support provided through the Employee and Family Assistance Program (Skeena Resources 2021).

Potential effects marked with yellow circles in the matrix (Table 21.5-2) are described below (none were marked with red or a plus sign), followed by mitigation measures to avoidance, minimize, restore, or offset those adverse effects. Adverse potential effects are carried forward into Section 21.5.3, Mitigation Measures and Effectiveness, where the effectiveness of the mitigation measures is evaluated.

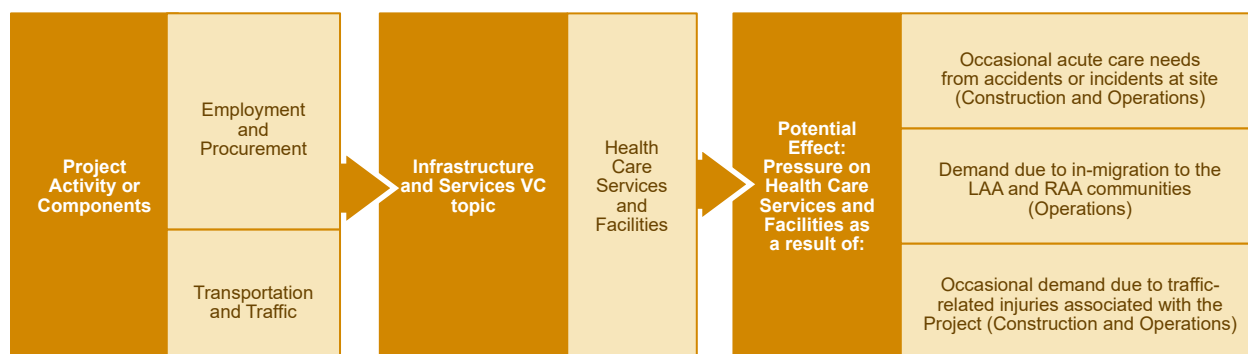
21.5.2.1 Pressure on Health Care Services and Facilities

The Project has the potential to put pressure on health care services and facilities due to:

- Occasional acute care needs from accidents or incidents at site or while employees or contractors are in transit and from accidents or incidents that cannot be managed by the onsite health and safety providers (during Construction and Operations);
- Demand for services due to the in-migration of employees and their families moving to Terrace, Smithers, Tahltan communities, Nisga'a Villages, and the District of Stewart (Operations); and
- Occasional demand for services due to traffic-related injuries associated with the Project (Construction and Operations).

Pressure on health care services and facilities due to the Project may result in reduced availability of health care services for current community members in the LAA and RAA communities, mainly during Construction and Operations. The reduced availability of services could have a disproportionate impact on diverse subgroups, in particular rural populations, Indigenous people, and individuals with mental health challenges and addictions (Appendix 20-3, Diverse Subgroups Existing Conditions Supplement, and the GBA Plus highlight below).

Figure 21.5-1 provides a visual of the pathway of effect to illustrate Project activities and the receptor of health care services and facilities.



Notes:

LAA = Local Assessment Area; RAA = Regional Assessment Area; VC = Valued Component

Figure 21.5-1: Potential Effect for Health Care Services and Facilities

Pressure on health care services and facilities is not expected in association with routine (non-emergency) medical assistance to Project employees. Skeena Resources employees and their dependents are covered by an insurance and health care benefits package. Skeena Resources' employees also participate in health care benefits, including a medical plan (includes semi-private hospital), extended health care, and vision care. Contractor employees will be covered by health plans provided by their employers. This assessment assumes that employees and contractors alike will have medical plans and coverage similar to the Skeena Resources' health plan.

Occasional Acute Care Needs

Pressure on health care services and facilities may occur as a result of the Project due to occasional acute-care needs from accidents or incidents at site, or while employees or contractors are in transit, in cases where acute care needs cannot be managed by the Project's health and safety providers. Occasional health care needs are anticipated during Construction and Operations considering the size of the workforce and type of activities performed by employees and contractors. During Reclamation and Closure and Post-closure, pressure on health services due to the occasional acute-care needs is not anticipated, as the workforce will be small.

The Project site is (and will continue to be) sufficiently set up to provide medical treatment for occasional and minor injuries. Onsite medical staff will consist of one Advanced Care Paramedic (ACP) and one Registered Nurse (RN), as well as occupational first aid attendants. In addition to the ACP/RN, an on-call BC-licensed Physician will be available 24/7; this will facilitate the provision of higher levels of assessment and treatment plans including both prescription and non-prescription medications. Patients may be sent offsite to facilities within RAA communities for further treatment or assessment; this is anticipated to be occasional.

Onsite medical staff and facilities are also equipped to respond to non-occupational health needs. The medical facility will be equipped with, among other things, diagnostic equipment which will include rapid strep testing, urinalysis, pregnancy tests, electrocardiogram (ECG) monitors, blood analyzer, and peak-flow meters. This diagnostic equipment will assist the onsite medical staff to treat patients in the most self-sufficient way possible. There will be a supply of first-line prescription antibiotic, gastro-intestinal, cardiac, respiratory, and dermatologic medications available onsite to be dispensed by an RN or ACP under physician orders to manage a wide array of common ailments that would traditionally prompt either a visit to a family physician or the local emergency department. Only medical cases that require advanced diagnostic capabilities and treatment beyond what can be provided onsite will be referred offsite, for example, laboratory or radiologic work-up; prolonged observation or hospital admission; embedded foreign body removal from the eye and complex laceration repair; and fracture management. Employees and contractors are expected to use their home services for follow-up, where required. As such, during the Construction and Operations phases, the Project may result in potential pressure on health care facilities and services.

The Project assumes that a workforce of about 300 people may result in 1 offsite medical visit per month. This would translate to less than 3 offsite visits per month during Construction and less than 2 offsite visits per month during Operations.³⁸ This demand for services can be accommodated by the RAA health care facilities. For related industry context, Newcrest's Red Chris Mine (located 18 km southeast of Iskut and 110 km north-

³⁸ Average Project employment will be 759 employees per year during Construction and 536 employees per year during Operations (Chapter 24, Employment and Economy Effects Assessment).

northeast of the Project) provides onsite medical services. These onsite medical services include a full-time advanced care paramedic and a registered nurse working steady days and on-call for night shifts (Newcrest Red Chris Mining Ltd. 2022). The Red Chris Mine is planning an expansion of the accommodation camp and has submitted an Application for Certificate Amendment (November 2023). In response to concerns from Northern Health regarding the expansion putting pressure on health services, Newcrest projected that the average total number of cases sent offsite for medical support would increase by less than 1 case per month in association with the expansion activities. For context, the expansion of the Red Chris Mine accommodations camp will increase from an occupancy of 920 to 1,200 persons. Northern Health has indicated that in the case of some industrial projects/workforces, proportionally, between 80% and 95% of health care needs are nonoccupational (Northern Health, pers. comm., 2024). It is also noted that in Elkford, BC, in 2024, health clinics indicated that a workforce accommodation in the community had not resulted in pressure on health care services or infrastructure because of shift-work duration, as well as the demographic of the workforce (District of Elkford 2024).

Demand Due to Project-related In-migration

Demand on health care services and facilities may occur due to employees and their families moving to Terrace, Smithers, Tahltan communities, Nisga'a Villages, and the District of Stewart.

Due to the short nature of Construction and the focus of the work being conducted by contractors, the assessment assumes that people are unlikely to move to LAA or RAA communities for this phase (population change assumptions are detailed in the "Population Change Associated with the Project" box below). As such, demand for health services and facilities is not anticipated in association with an in-migration of employees or their families during Construction.

During the Operations phase, Project-related employment will lead to some people migrating to LAA and RAA communities, primarily in Terrace and Smithers (details in the "Population Change Associated with the Project" box below), and possibly to Tahltan communities, Nisga'a Villages, and the District of Stewart. Employees and their families that move to LAA and RAA communities will require regular health care. The in-migration of people to the LAA and RAA communities and the associated demand for health infrastructure and services may result in pressure on health care facilities and services. Pressure on these services may also have an impact on residents of the LAA and RAA communities, as their access may be affected or limited.

During Reclamation and Closure and Post-closure, when compared to the Operations phase, there may be a decline in demand for health services and facilities if Project employees and their families move away from the LAA and RAA communities (details in the "Population Change Associated with the Project" box). The scale of out-migration will depend on various factors, including the number of people with families that move to the area during Operations, population growth overall, and other employment opportunities that result in families remaining in the region. A reduction in population from the outflow of employees and their families during the Reclamation and Closure and Post-closure phases will not have a negative effect on the healthcare services and facilities of LAA and RAA communities.

Occasional Demand due to Traffic-Related Injuries

During Construction and Operations, Project-related traffic within the LAA and RAA may result in accidents, with potential for injuries that require medical care at health care facilities in the LAA and RAA communities, depending on the location of the accident. These occasional travel-related accidents associated with Project vehicle movements may put pressure on health care facilities in the LAA and RAA communities. The extent of this demand is expected to be negligible to minor, as the predicted increase in Project-related traffic is slight, likely resulting in few Project-related traffic accidents (Tahltan – Allnorth 2024). Any potential effects due to spills, equipment malfunctions, emergencies or accidents are assessed in Chapter 29, Malfunctions and Accidents.

Conclusion

The Project has moderate potential to result in pressure on the already constrained health care system, and therefore this potential effect is carried forward for further assessment.

Gender-based Analysis Plus Highlight

Rural populations, Indigenous people, individuals with low incomes, and individuals with mental health challenges and addictions may be disproportionately affected by changes in demand for health care services and facilities (Table 21.5-3 and Appendix 20-3, Diverse Subgroups Existing Conditions Supplement).

Limited transportation options and long distances from services, typical for LAA and RAA communities, may be particularly challenging for these groups, including those who rely on others for transportation (e.g., youth, disabled individuals, and seniors/Elders). Pressure on health care services and facilities and reduced access to services may lead to a disproportionately large burden for people who lack reliable and affordable options for transportation. Burdens include potential financial costs (for accommodation and travel), time commitment, impacts on employment or family-care obligations. In some cases, if residents cannot access services locally, travel to another community may not be feasible.

Indigenous people residing in rural and remote Indigenous communities of the LAA and RAA may experience a disproportionately large impact if local availability of or access to health and social services is affected by the Project.

Individuals with pre-existing mental health or addictions challenges may be inclined to not seek out care if access to health care services and facilities is reduced, and this might result in them being more vulnerable to their health conditions.

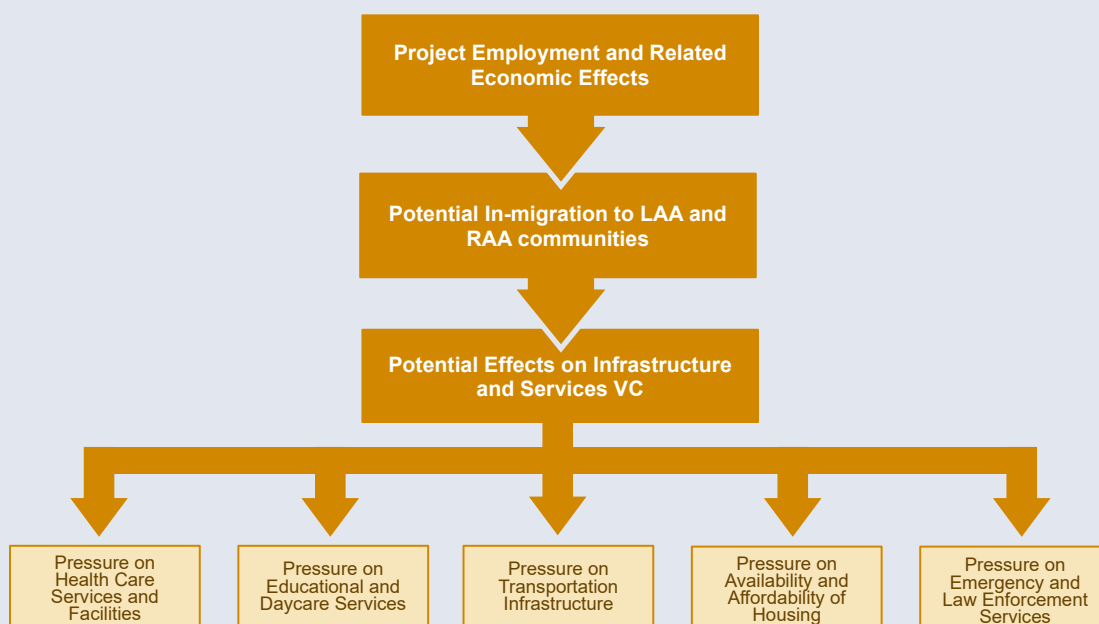
Population Change Associated with the Project

Direct employment at the Project, as well as indirect and induced employment and other economic opportunities associated with the Project, may attract people to the LAA and RAA communities. This migration of employees and their families to LAA and RAA communities may, in turn, result in effects on the Infrastructure and Services VC (Figure 21.5-2).

In-migration associated with the Project is a pathway for effects on the Infrastructure and Services VC. As such, this assessment has outlined assumptions regarding the level of potential in-migration as well as the communities anticipated to experience this change in population.

The following information is presented to outline the information used to inform the extent of in-migration.

Table 21.5-4 identifies the number of employees required for different stages of the Project and includes a projection of where the workforce will be derived, considering Tahltan communities, the RDKS, BC, and the rest of Canada. This information was calculated as part of the economic model for the Project and presented in Appendix 24-1, Economic Benefits Modelling Results.



Notes:

LAA = Local Assessment Area; RAA = Regional Assessment Area; VC = Valued Component

Figure 21.5-2: Project-related In-migration as a Pathway for Effects on the Infrastructure and Services Valued Component

Table 21.5-4: Project Direct, Indirect, and Induced Employment and Workforce Procurement

	Construction		Operations		Reclamation and Closure	
	Number of Employees ¹	%	Number of Employees ¹	%	Number of Employees ¹	%
Total Direct Employment	907	100%	536	100%	43	100%
Tahltan	100	11%	74	14%	4	9%
Communities within the Rest of RDKS	187	21%	158	30%	7	16%
Communities within BC (excluding RDKS and Tahltan communities)	409	45%	227	42%	20	47%
Rest of Canada	213	23%	76	14%	12	28%
Total Indirect and Induced Employment	2,085	100%	1,358	100%	192	100%
Tahltan	60	3%	51	4%	15	8%
Communities within the Rest of RDKS	208	10%	152	11%	23	12%
Communities Within BC (excluding RDKS and Tahltan communities)	882	42%	594	44%	79	41%
Rest of Canada	936	45%	561	41%	75	39%

Source: Appendix 24-1, Economic Benefits Modelling Results

Notes:

BC = British Columbia; RDKS = Regional District of Kitimat-Stikine

% = percent

¹ Average number of employees per year

Estimated Population Change—Construction Phase

The Construction phase is estimated to be 2 years, and will result in total direct 1,814 person-years (PY) of employment and total indirect and induced 4,170 PY of employment. Table 21.5-4 describes distribution of where employees will come from, by geography and average number of employees (not PY).

Skeena Resources' employees will primarily be on a rotational schedule of 2 weeks in, 2 weeks out. Additional worker rotation schedules will be considered through development of the Project and discussions with Engaged Indigenous Nations. To access the Project site, employees will first fly to Terrace (YXT).

Employees will then be bused or transported by van, from Terrace to the Eskay Creek Camp facilities. Additionally, employees residing in the communities of Telegraph Creek, Iskut, Dease Lake and Smithers may be transported by van or truck to the Project site. Employees will be accommodated in a camp at the Project site while on rotation.

No substantive population change is expected in LAA or RAA communities due to the Project during the Construction phase. Construction-related activities will be largely conducted by contractors who are not expected to relocate to the Assessment Areas for a single project. Contractors involved during Construction are usually highly specialized and employed by the companies that operate across multiple

sites. Certain tasks will be specialized and short-term (e.g., 2 to 3 months), although some skills will be required for the 2 years of Construction.

A limited number of Construction-phase employees may continue to have employment during the Operations phase. The potential for longer-term employment may motivate employees to consider moving to LAA or RAA communities; the potential for such population changes, is presented below.

Estimated Population Change—Operations Phase

The Operations phase is expected to be 13 years and will result in total direct 6,428 PY of employment and total indirect and induced 16,300 PY of employment. Table 21.5-4 describes where employees will come from.

During the Operations phase, Skeena Resources will accommodate employees at a camp, and the same rotation schedule and flight logistics will be continued throughout Construction and Operations.

There is not sufficient information to indicate with high certainty the number of direct employees (and their families) who will choose to relocate to LAA or RAA communities during the Operations phase. Many factors may influence this decision, including economic, cultural, and social circumstances, as well as the availability and costs of infrastructure and services such as housing, education, and health services. Notwithstanding, for the purpose of this assessment and leveraging available information from other mines in the region and professional judgment, it is expected that up to 50% of the direct employees hired from outside of RDKS will choose to relocate to LAA or RAA communities; this is equivalent to 150 employees (and potentially their families) during the Operations phase. The numbers provided are conservative to account for highest potential rate of in-migration; however, it is anticipated that in-migration will not happen all at once, and will be dispersed across several communities.

The following assumptions were made to support the Operations-phase in-migration estimate, as well as provide an understanding of the potential geographic distribution of Project-related in-migration:

- All employees that relocate will move with their families. Each of the 150 people who relocate will have a family of 2.9 people.³⁹ This will result in up to 435 people moving to the LAA or RAA communities, drawn to the area because of the Project.
- In the case a family relocates to an LAA or RAA community, only one family member will be employed at the Project.
- Most employees who relocate will choose Terrace or Smithers, due to their proximity to the Project combined with the availability of housing options, health care, and social services and facilities.
- Some Tahltan Nation members may decide to move back to their communities when they obtain employment at the Project (TCG 2019; Newcrest Red Chris Mining Ltd. 2022; Transport Canada et al. 2007; Skeena Resources TCG 2024); however, this is expected to be a relatively small number of individuals.⁴⁰ Considerations for Tahltan employees moving back to Tahltan communities include existing housing constraints as well as over crowding. Additionally, considerations around accessing

³⁹ The average family size in Canada is 2.9 persons (Statistics Canada 2023).

⁴⁰ This assumption is based on feedback received from some Tahltan members, but it is understood that Tahltan communities are characterized by a shortage of certain services, which may limit opportunities for Tahltan members to return.

services and education may be deterrents for Tahltan members to move to communities if health, education, or other family needs are factored into their original decision to leave. The assessment assumes that Tahltan members moving back will probably stay with family in existing residences given the shortage of housing.

- Some Nisga’a Citizens may also move back to their communities when they obtain employment at the Project (e.g., WCGT 2014; Rescan 2012a). Some Nisga’a Citizens have expressed concerns regarding the pressure on existing housing stock because of population changes in the case of Project-related in-migration. However, Chapter 5, Nisga’a Nation, notes that it is improbable that there will be noticeable population shifts in the Nisga’a Villages because of Nisga’a Citizens moving back in pursuit of economic prospects linked to the Project.
- A small number of drivers employed with the Project may choose to live in the District of Stewart, as they will be transporting concentrate from the Project site to the ports in the District of Stewart.

This assessment assumes that half of migrating employees will move to Terrace and another half to Smithers (i.e., 75 families or 218 people in Terrace and 75 families or 218 people in Smithers). Some employees may choose to move to the Tahltan communities, Nisga’a Villages, or the District of Stewart, but these numbers are expected to be minimal and it is challenging to estimate the number of individuals and size of families involved.

In 2021, the populations of Smithers and Terrace were 5,729 and 13,189, respectively. By 2030, the populations are projected to increase by 7.0% and 18.9%, respectively, resulting in the estimated populations of 6,129 and 15,685 (Table 21.5-5). In-migration that has been estimated in association with the Project will increase community populations by up to 3.8% for Smithers by 2030, and up to 1.7% for Terrace by 2030 (Table 21.5-5).

Table 21.5-5: Population Projections

Community	Population 2016 (Number of People)	Population 2021 (Number of People)	Projected Population 2030 (Number of People)	Predicted Population Change 2021-2030 without the Project (%)	Projected Population 2030 with the Project (Number of People)	Predicted Population Change 2021-2030 with the Project (%)
Terrace	12,174	13,189	15,685	18.9%	15,903	20.6%
Smithers	5,641	5,729	6,129	7.0%	6,347	10.8%
BC	4,861,269	5,226,665	6,264,063	19.8%	N/A	N/A

Source: BC Stats (2024)

Notes:

BC = British Columbia; N/A = not applicable

Population statistics are as of 1 July and are adjusted for census net under coverage (a statistical adjustment process that helps prevent underestimation of true population counts).

Estimated Population Change—Reclamation and Closure and Post-closure

The Reclamation and Closure phase is expected to be 3 years and will result in total direct 130 PY of employment and total indirect and induced employment of 577 PY. Table 21.5-4 describes the distribution of employees by geography.

During the Post-closure phase,⁴¹ eight people will be employed.

At the end of the Operations phase, out-migration of employees may take place, although it is not possible to predict the exact level of population change. For this assessment, it is assumed that those employees who relocate to Terrace and Smithers to work at the Project will relocate at the end of Operations, resulting in a decrease in the population by up to 430 people across both communities (about 215 people from each community).

No in-migration of people to LAA or RAA communities is expected during Reclamation and Closure or Post-closure due to the Project.

Conclusion

The Project has been designed to limit potential Project-related in-migration. The use of a camp and fly-in and fly-out schedule are the main embedded controls aimed at minimizing potential in-migration. Notwithstanding, Project-related in-migration of employees and their families to LAA and RAA communities may result in effects on the Infrastructure and Services VC. As such, mitigation measures are proposed to reduce potential effects of in-migration to the Infrastructure and Services VC. These measures are described in Section 21.5.3, Mitigation Measures and Effectiveness and include:

- Continuing to implement the “Recruitment and Selection Policy” (Skeena Resources 2021).
- Prioritizing local procurement and contracting from LAA and RAA businesses, wherever possible, including involving Indigenous-owned businesses, and encouraging major contractors do to the same.
- Leveraging existing recruitment initiatives and partner with training and post-graduate programs in LAA and RAA communities to notify them of recruitment efforts and employment opportunities and encouraging major contractors do to the same.

21.5.2.2 Pressure on Utilities

The Project will be self-sufficient in water supply, wastewater disposal, and communications, and will not be connected to or use any associated municipal utilities or infrastructure. As such, there are no interactions with these utilities by the Project. The Project will be connected to the existing power grid at the Volcano Creek Substation, and there is sufficient electricity for the Project, communities, and businesses in northwestern BC. Therefore, no Project-related effect is expected for power supply utilities.

Project Waste Management

Waste from the Project may put pressure on offsite waste disposal facilities, which could reduce available landfill space for residential and business waste disposal; this pressure is anticipated to occur during the Construction, Operations, Reclamation and Closure, and Post-closure phases. Figure 21.5-3 provides a visual depiction of this effect pathway.

⁴¹ Timeframe will be in accordance with permit conditions; therefore, person-years of employment cannot be calculated.



Note:

VC = Valued Component

Figure 21.5-3: Potential Effect for Utilities (Waste Management)

There is an existing network of landfills in northern BC operated by the RDKS that will receive and dispose of non-hazardous waste from the Project that cannot otherwise be recycled or reused. The Project may rely on multiple landfills in the RDKS including the Meziadin landfill located north of Terrace and the Forceman Ridge Waste Management Facility located south of Kitwanga, as well as other landfills in BC.

The Meziadin landfill, which is managed by the RDKS, has experienced an increase of waste from industrial projects, which is reducing available space; it is also shortening the operational lifespan of the landfill. RDKS has raised a capacity concern regarding this waste facility (RDKS Solid Waste Management, pers. comm., 2024).

Offsite disposal of Project-related waste during all phases will lead to pressure on local landfills and recycling centres. After the dismantling of facilities, during the Reclamation and Closure and Post-closure phases, the Project will have minimal requirements for offsite waste management.

The Integrated Waste Management Plan to be developed for the Project (as outlined in Appendix A-1, Summary of Management Plans and Mitigation Measures) will:

- Identify various waste streams generated from the Project;
- Include commitments to waste segregation and diversion of recyclable and reusable materials;
- Include plans for managing waste for the project lifespan, and at the Project work camp; and
- Identify the disposal locations for waste types generated.

Conclusion

In consideration of the minor to negligible potential for pressure on waste management facilities due the Project after the implementation of the Integrated Waste Management Plan, this potential adverse effect is not carried forward in this assessment.

Gender-based Analysis Plus Highlight

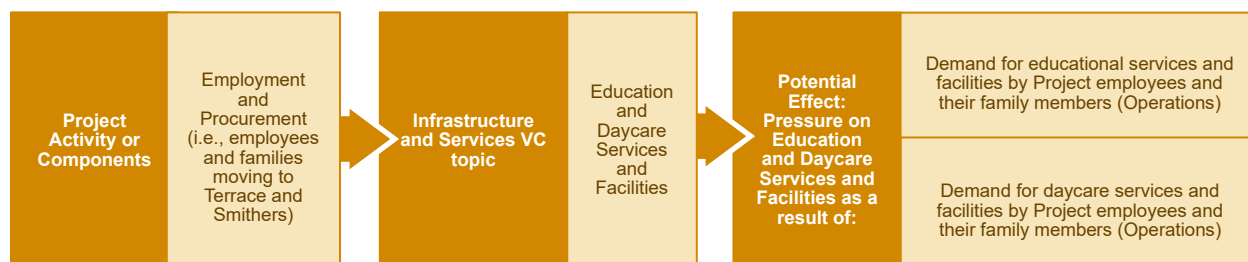
No diverse subgroups are anticipated to be disproportionately affected by changes in demand for utilities (waste management; Table 21.5-3).

21.5.2.3 Pressure on Education and Daycare Services

The Project has the potential to put pressure on education and daycare services due to:

- Project-related in-migration leading to additional demand for educational services and facilities (Operations); and
- Project-related in-migration leading to additional demand for daycare services and facilities (Operations).

Pressure on education and daycare services as a result of population in-migration is expected in Terrace and Smithers, although some changes may take place in Tahltan communities, Nisga'a Villages, and the District of Stewart during the Operations phase. This Project-related pressure on education and daycare services and facilities may reduce the availability of these services and facilities for current community members. The reduced availability of services could have a disproportionate impact on diverse subgroups (Appendix 20-3, Diverse Subgroups Existing Conditions Supplement). Figure 21.5-4 provides a visual depiction of this effect pathway.



Note:

VC = Valued Component

Figure 21.5-4: Potential Effect for Education and Daycare Services and Facilities

Pressure on Education and Daycare Services due to In-migration

As a result of in-migration to LAA and RAA communities (described in the box "Population Change Associated with the Project" under Section 21.5.2.1, Pressure on Health Care Services and Facilities), there is a potential for pressure on education and daycare services; this pressure may include reduced availability of spaces at facilities, as well as challenges associated with staffing of education and daycare facilities and services.

It is not expected that the Construction phase of the Project will have an effect on education and daycare services as impactful in-migration to communities is not expected (see the box "Population Change Associated with the Project" under Section 21.5.2.1, Pressure on Health Care Services and Facilities).

Daycare: as described in the box "Population Change Associated with the Project" under the Section 21.5.2.1, Pressure on Health Care Services and Facilities, during Operations, a proportion of employees and their families are expected to move to Terrace, Smithers, Tahltan communities, Nisga'a Villages, and the District of Stewart. Any in-migration to Tahltan communities, Nisga'a Villages, and the District of Stewart is expected to be minimal and not result in a noticeable demand for daycare facilities. Overall, the potential pressure on daycare services related to the Project is expected to be negligible to minor, considering that not all relocating employees will have families requiring daycare. Additionally, the overall contribution of the Project to population change will be small (i.e., up to 4% in Smithers).

Education: there is potential for pressure on school services associated with demand from the families of Project employees that move to Terrace, Smithers, Tahltan communities, Nisga'a Villages, and the District of Stewart. While schools may have spaces for additional students, there are existing staffing challenges at LAA and RAA schools. However, as noted above, not all employees that relocate will also be accompanied by family members of school age, and the overall contribution of the Project to put pressure on teaching staff is expected to be negligible. And, as mentioned above, the overall contribution of the Project to population change will be small.

At the Reclamation and Closure and Post-closure phases, with the expected movement of Project employees and their families away from LAA and RAA communities, there will be a decline in demand for education and daycare facilities, as compared to the Operations phase. The scale of the decline in demand will depend on various factors, including the number of people with families that move to the area, population growth overall, and other employment opportunities that result in families remaining in the region.

Conclusion

In consideration of the negligible to minor potential for effects on daycare and education services and facilities, this potential effect is not carried forward in this assessment.

Gender-based Analysis Plus Highlight

Pressure on daycare services resulting in fewer daycare spaces is likely to disproportionately affect women, as caregivers are generally women.

Pressure on daycare services may limit the opportunity for parents or care givers to pursue employment, and can, in turn, lead to reduced finances, increased financial stress, increase the burden of time to find daycare, and impact on family-care obligations. There may also be implications to mental health due to the pressure of balancing resources and daycare needs.

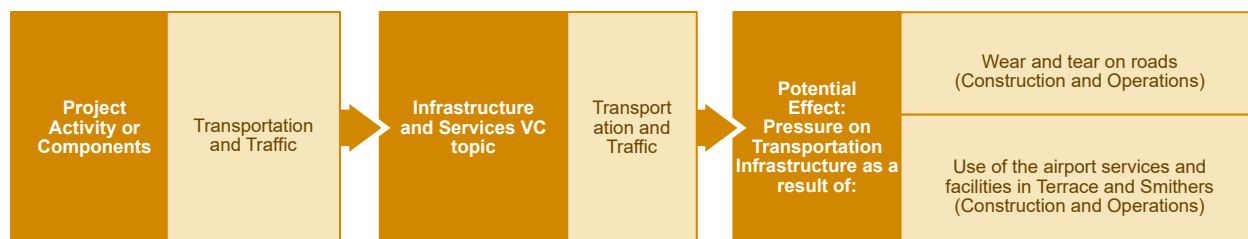
Family structure (e.g., single parents, lone caregivers, and extended families) can define the various daycare options available to families, which in turn influence the experiences of these families when additional pressure on daycare occurs. As such, individuals with less familial and/or community support available to them (e.g., single parents and lone caregivers) are likely to be less able to adapt to additional pressure on daycare services.

Pressures on daycare services may be particularly felt in reserve communities, which may have more limited daycare availability (Table 21.5-3 and Appendix 20-3, Diverse Subgroups Existing Conditions Supplement).

21.5.2.4 Pressure on Transportation Infrastructure

The Project has the potential to affect road infrastructure due to the transportation of personnel, equipment, materials, and other goods to and from the Project site. This may result in wear and tear on roads during Construction and Operations. No adverse effect to the capacity of the Highways 37 and 37A is expected because of Project-related transportation.

The Project has the potential to put pressure on transportation infrastructure due to the use of airport services and facilities (see subsection Air Transportation Infrastructure below). Figure 21.5-5 provides a visual of this pathway of effect.



Note:
 VC = Valued Component

Figure 21.5-5: Potential Effect for Transportation Infrastructure

In response to previously proposed projects in the RAA, the Engaged Indigenous Nations identified concerns that project-related traffic on Highway 37 could present safety and accessibility issues. Road safety and accessibility are of interest to communities, as well as to harvesters who rely on the road networks to access harvesting areas. Harvesters also are often in the proximity of roads and have interests to maintain road safety (e.g., AltaGas Renewable Energy Inc. 2011a; AltaGas Renewable Energy Inc. 2011b; Rescan 2012b; Seabridge Gold Inc. 2013a, 2013b). In relation to the current Project, the Tahltan Nation has inquired about managing increased traffic on Highway 37 as well as about road conditions and maintenance (Skeena Resources 2024). The Nisga’a Nation has raised concerns regarding potential effects of Project-related traffic, such as potential wildlife interactions and safety considerations on Highways 37 and 37A (Chapter 5, Nisga’a Nation). For the purpose of this assessment, road or highway-safety-related concerns of the Project have been assessed in Section 21.5.2.7, Pressure on Emergency and Law Enforcement Services.

Road Infrastructure

The Project will use roads to move supplies, personnel, and concentrate between the Project mine site and locations within the RAA.

Wear and Tear on Roads

Highway 37 and 37A are suitable for a wide range of vehicle types, including trucks. Highway 37 and 37A may undergo wear and tear because of the Project-related transportation. During the peak year for concentrate haulage in Operations, 25 trucks in both directions are expected on a daily basis. During all phases of the Project, transportation of personnel for the two-week rotations is anticipated to occur on one day a week and will involve bussing or transporting employees by van from transportation hub communities (e.g. Terrace) to the Project. Highway maintenance is the responsibility of MOTI. Additionally, a \$195 million project aimed to improve road conditions in northwestern BC was recently announced (Bakker 2024). This project will involve improvements to Highways 37 and 37A (Section 21.4.3.5, Local and Regional Transportation Infrastructure, details this information).

The Project is not anticipated to result in wear and tear to road infrastructure that would require any change in approach to or level of road maintenance.

Congestion

Project-related transportation is not expected to result in constraint to access for road users (i.e. congestion). Project-related transportation of employees will be managed and minimized by busing or transporting people by van from Terrace, and potentially from Telegraph Creek, Iskut, Dease Lake, and Smithers. Terrace and Smithers can absorb this level of increased road use, as they experience traffic changes, for example, during summer tourism seasons. To add to this, Highway 37's capacity is classified as LOS "A", indicating availability of capacity before it reaches the lower LOS "B" classification (Tahltan – Allnorth 2024). Similarly, the transportation of construction or operations supplies to the Project site and concentrate hauling to port facilities in the District of Stewart are not expected to result in congestion. For example, during the peak year for concentrate haulage in Operations, 25 trucks in both directions are expected on a daily basis. The expected time interval between trucks is approximately 2.8 hours on average and 1.9 hours at peak. These Project-related trucks on the highway are not expected to result in a noticeable change for highway users.

Overall, during Construction, Project-related traffic on Highway 37 is anticipated to be 4% above baseline conditions, and during Operations, Project-related traffic on Highway 37 is anticipated to be 8% higher than baseline. Considering that Highway 37 has been rated LOS "A"; analysis of the existing traffic and additional Project-related traffic suggests that this additional traffic will be within the highway's current capacity, including summer peak season (Tahltan – Allnorth 2024).

During Operations, Project-related in-migration, mainly in Terrace and Smithers, may result in increased road usage, but the level of use is expected to be minimal, considering that employees will be on 2-week rotations. As was mentioned above, the addition of Project-related traffic is well within the capacity of Highway 37.

During the Reclamation and Closure and Post-closure phases, some equipment will be transported offsite. Personnel will access the site periodically for ongoing environmental monitoring and site management. Project-related traffic will decrease substantially compared to Construction and Operations.

Skeena Resources will obtain a Highway Use Permit and undertake the permit-associated traffic impact assessment. This will support the avoidance of effects where Highway 37 meets the Eskay Creek MAR.

Potential Project effects on traffic safety are assessed in Section 21.5.2.7, Pressure on Emergency and Law Enforcement Services.

Conclusion

In consideration of the minor potential for Project-related pressure on road infrastructure, this potential effect is not carried forward in this assessment.

Air Transportation Infrastructure

The Project is expected to require airport services and facilities in Terrace and Smithers, during all phases of the Project.

The airports of Terrace (YXT) and airport of Smithers (YYD) are two main airports in the RAA. No issues or concerns were raised with the availability of airport services by residents of the LAA or RAA communities (based on publicly available sources). With several fly-in and fly-out projects and mines already in the area (e.g., Brucejack, Red Chris), airport infrastructure and services of these two communities are experienced with, and frequently used for, flights for mining projects.

Conclusion

Based on current context and capacity, a negligible potential for Project effects on air transportation infrastructure is anticipated. Therefore, this potential effect is not carried forward in this assessment.

Gender-based Analysis Plus Highlight

No diverse subgroups are anticipated to be disproportionately affected by pressure on transportation infrastructure (Table 21.5-3).

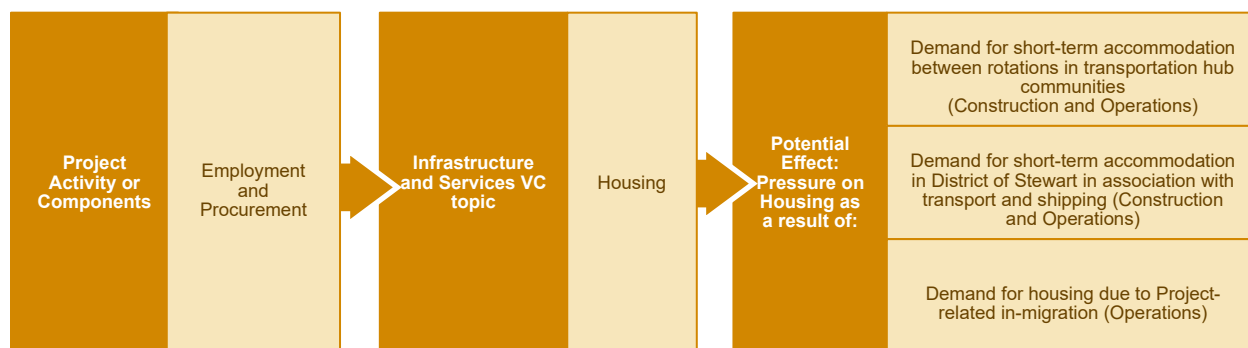
21.5.2.5 Pressure on Availability and Affordability of Housing and Accommodations

The Project has the potential to put pressure on the availability and affordability of housing and accommodations in the LAA and RAA communities due to:

- Project employees (and their families) moving to Terrace, Smithers, Tahltan communities, Nisga'a Villages, and the District of Stewart to leverage employment opportunities (Operations);
- Contractors and employees requiring short-term accommodation between rotations in transportation hub communities (e.g., Terrace and Smithers; Construction and Operations); and
- Contractors and drivers requiring short-term accommodation in association with transport and shipping to and from the District of Stewart (Construction and Operations).

Reduced housing availability and affordability could have a negative effect for residents of the LAA and RAA communities, including increasing competition for limited housing/rental stock and reduced flexibility for accessing short-term accommodations. The change in housing availability and affordability may disproportionately affect groups that already have lower incomes on average, including Indigenous people, women, single parents, seniors and Elders (e.g., on a fixed income), and individuals with disabilities (Appendix 20-3, Diverse Subgroups Existing Conditions Supplement, and the GBA Plus highlight below).

Figure 21.5-6 provides a visual of the pathway of effect between Project activities and housing.



Note:
 VC = Valued Component

Figure 21.5-6: Potential Effect for Housing and Accommodations

During Construction, Operations, and Reclamation and Closure, the Project will primarily accommodate employees and contractors at site, while on rotation. The Project site has existing camp facilities from the historical mine site and from additional facilities installed in 2020 (Chapter 1, Project Overview).

Increase in Demand for Housing and Accommodation due to Project-related In-migration

No in-migration is anticipated during Construction; therefore, no pressure on housing and accommodation is expected during this phase.

Project-related in-migration of employees and their families during the Operations phase may put pressure on the limited housing available in the LAA and RAA communities. As described in the box “Population Change Associated with the Project” under the Section 21.5.2.1, Pressure on Health Care Services and Facilities, up to 150 employees, with their families, may relocate to Smithers, Terrace, Tahltan communities, Nisga’a Villages, and the District of Stewart; the majority of in-migration is anticipated in Smithers and Terrace. This Project-related in-migration may result in demand for dwellings.

At the Reclamation and Closure and Post-closure phases, with the movement of Project employees and their families away from the RAA communities, there will be a decline in demand for housing and accommodation when compared to the Operations phase. The scale of the decline in demand will depend on various factors, including the number of people with families that move to the area, population growth overall, and other employment opportunities that result in families remaining in the region. A reduction in population from the outflow of employees and their families will not be a negative effect to LAA or RAA communities.

Increase in Demand for Short-term Accommodation

During all Project phases, employees may make use of short-term accommodations in the transportation hub communities (mainly in Terrace). Pressure on short-term accommodations may occur in the case of weather incidents or changes to travel logistics. No Project-related effects on the availability of camping facilities are expected because workers are not being housed in recreational campgrounds in the LAA and RAA.

During Operations, drivers of vehicles carrying ore concentrate will require short-term accommodation in District of Stewart at the end of their shift. However, it is not expected that there will be an increase in demand for short-term accommodation due to the Project in the District of Stewart. The contractor employing these drivers has established staff housing in the District of Stewart, which is already being used by drivers working for both the Brucejack and Red Chris mines.

For context around the variability of use of short-term accommodations, publicly available information has been referenced from the Brucejack Mine (which employed 1,520 employees at the end of 2021; Pretium Resources Inc. 2022).⁴² This information indicates that 276 person-nights of accommodation in Terrace and 55 person-nights in Smithers were booked for Brucejack Mine employees in 2021 because of cancelled or delayed flights, meetings, medical reasons, or rotation requirements (Pretium Resources Inc. 2022). Using a conservative approach, based on this information, the Project assumes that a workforce of about 1,500 people may result in 330 person-nights of accommodation per year. For the Project, this will translate in about 170 person-nights of accommodation annually during Construction and about 120 person-nights of accommodation annually during Operations. Therefore, demand for short-term accommodation associated

⁴² Brucejack Mine is an underground gold and silver mine located 65 km north of district of Stewart and 25 km southeast of the Project. This is a fly-in and fly-out mine, with a workcamp located onsite.

with the Project during Construction and Operations is estimated to be well within the capacity of short-term accommodations in Smithers and Terrace, which are noted to have 12 and 11 hotels and guesthouses respectively (Section 21.4.3.6, Housing and Accommodations). Project-related demand for short-term accommodation is anticipated to account for less than 0.01% of all accommodations in Smithers and Terrace on average during the year.

Based on available information about short-term accommodation availability and previous experience with mines and tourism fluctuations, a negligible effect on short-term accommodation is expected due to the Project.

Conclusion

Potential Project-related demand for short-term accommodations will be within the existing capacity of short-term accommodations in Smithers and Terrace. A negligible potential for Project adverse effects is expected. Therefore, it is not carried forward in the assessment. However, due to Project-related in-migration, a moderate potential for Project effects on the availability and affordability of housing during Operations is anticipated. Therefore, this potential effect is carried forward in the assessment.

Gender-based Analysis Plus Highlight

Rural populations/people without reliable transportation, Indigenous people, low-income households, and gender-diverse populations may be disproportionately affected by change in demand for housing and accommodations (Table 21.5.3, and Appendix 20-3, Diverse Subgroups Existing Conditions Supplement).

In consideration of limited housing availability in RAA communities, and limitations to housing availability and deteriorating conditions of homes in some LAA communities, new entries to housing markets in these communities in association with Project employment may put pressure on diverse subpopulations. The pressure may be experienced differently by Indigenous people, low-income households, and gender-diverse populations, who may be more likely to be priced out of the rental or private home market. Additionally, decreased housing availability could result in increased reliance on unsuitable housing, including crowded dwellings and dwellings needing major repairs. Indigenous people and gender-diverse populations are both substantially more likely than the general population to already live in unsuitable housing (Statistics Canada 2022; Nelson et al. 2023).

Increase in demand for short-term accommodations may put pressure on rural populations who may rely on short-term accommodations to access health appointments in Terrace and Smithers.

21.5.2.6 Pressure on Emergency and Law Enforcement Services

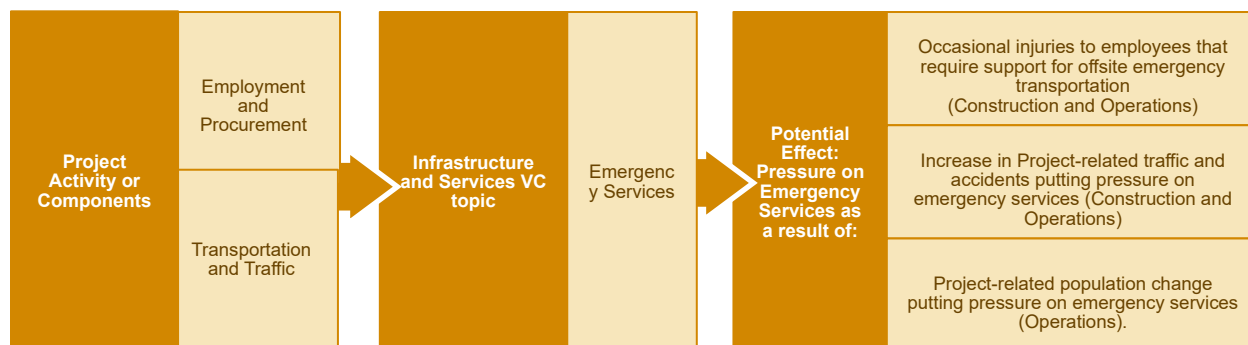
Emergency Services (Ambulance and Fire Fighting Services)

The Project has the potential to put pressure on ambulance and fire fighting services due to:

- Occasional injuries to employees that require support for offsite emergency transportation (Construction and Operations);
- Increase in Project-related traffic and accidents putting pressure on emergency services (Construction and Operations); and
- Project-related population change in Terrace, Smithers, Tahltan communities, Nisga'a Villages, and the District of Stewart, putting pressure on emergency services (Operations).

Pressure on emergency services due to the Project may result in reduced availability of emergency services for the residents of the LAA and RAA communities during Construction and Operations.

Figure 21.5-7 illustrates the pathway of effect of Project activities on emergency services.



Note:
 VC = Valued Component

Figure 21.5-7: Potential Effect for Emergency Services

Occasional Injuries to Employees that Require Offsite Emergency Transportation

During all phases of the Project, accidents may occur that require employees to be transported by BCEHS or helicopter for care at local hospitals; the mode of transportation may depend on the severity of an injury. The “Mine Emergency Response Plan” (MERP; Skeena Resources 2022) outlines details for emergency action plans, including planned agreements with the other operations in the area for reciprocal assistance.

Emergency service providers in the RAA communities have experience serving mines in the LAA and RAA, as well as experience of adapting to changes in hospital capacity for patient admission. Emergency service providers did not raise concerns about mines in the area putting pressure on them (Paramedics Director, BCEHS—Smithers, pers. comm., 1 April 2024). However, the BCEHS have expressed that there is a lack of awareness of what worksite first aid and treatment services are available for Project workers. They have also expressed benefitting from knowing accessibility options for Project workers in case of an emergency (Paramedics Director, BCEHS—Smithers, pers. comm., 1 April 2024).

More information and analysis on accidents is provided in Chapter 29, Malfunctions and Accidents.

Project-related Traffic Accidents Putting Pressure on Emergency Services

In response to previously proposed projects in the RAA, the Engaged Indigenous Nations identified road safety concerns for Highway 37 (AltaGas Renewable Energy Inc. 2011a; Rescan 2012b; Seabridge Gold Inc. 2013a). Concerns around potential effects of the current Project-related traffic were raised by the Tahltan Nation (Skeena Resources 2024, Skeena Resources, pers. comm., March 2024), and the Nisga’a Nation (Chapter 5, Nisga’a Nation).

MOTI expressed a concern regarding potential effects of the Project on traffic safety, specifically at the intersection of the Eskay Creek MAR with Highway 37 (MOTI Bulkley/Stikine District, pers. comm., 16 April 2024). Skeena Resources will obtain a Highway Use Permit and undertake the permit-associated traffic impact assessment relevant to this intersection.

During all phases of the Project, traffic accidents may occur that will require assistance from the external emergency service providers, including firefighters. Predicted collision rates are calculated to increase by 1.4% during the Operations phase of the Project (Tahltan – Allnorth 2024). Therefore, traffic accidents are expected to be occasional and, although they will increase demand for emergency services, but this demand will be within the capacity of emergency services. More information and analysis on traffic accidents is provided in Chapter 29, Malfunctions and Accidents.

Project-related Pressure on Emergency Services due to In-migration

During Operations, Project-related population change may lead to some additional pressure on emergency services. Employees and their families who relocate to the LAA and RAA communities may contribute to an increase in public health and safety-related incidents (e.g., occasional emergencies at home). However, it is not expected that there will be a change in demand for emergency services due to the small population increase associated with the Project.

Conclusion

There may be occasional use of emergency services to address Project-related accidents or incidents; however, in consideration of limited anticipated instances, the potential for effect of the Project on emergency services during all phases is anticipated to be negligible to minor. Therefore, this effect is not carried forward in this assessment.

Gender-based Analysis Plus Highlight

No diverse subgroups are anticipated to be disproportionately affected by changes to emergency services (Table 21.5-3).

Law Enforcement Services

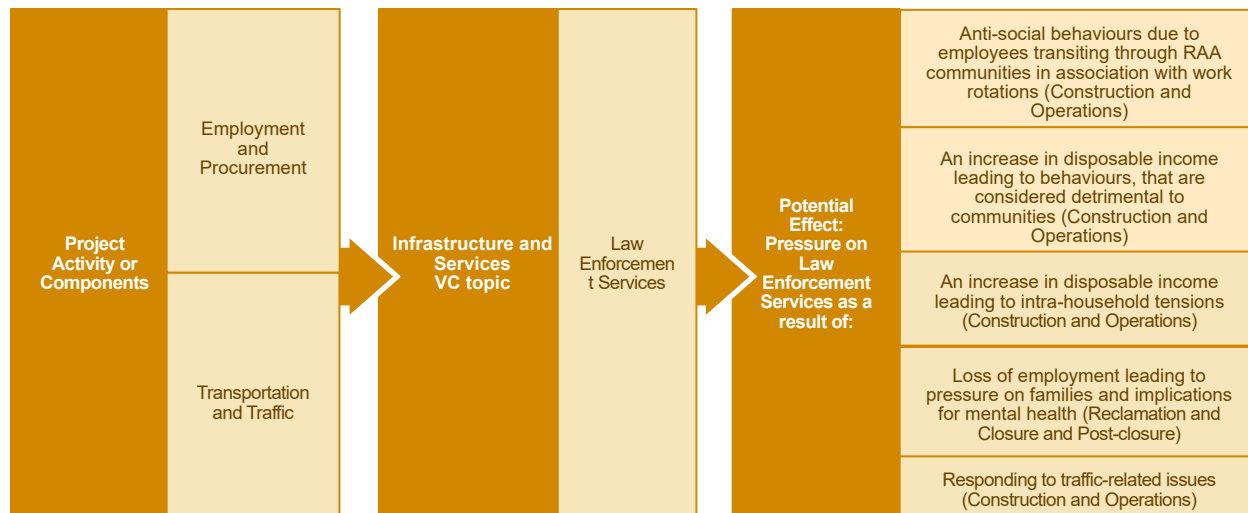
There is potential for the Project to result in pressure on law enforcement services in LAA and RAA communities as a result of:

- Antisocial behaviours from:
 - Employees transiting through RAA communities in association with work rotations (Construction and Operations);
 - Employees with disposable income spending money on activities or behaviours that are considered detrimental to communities (Construction and Operations);
 - Employees with disposable income experiencing intra-household tensions associated with financial equity or inequity (Construction and Operations);
 - Loss of employment and related changes in income during the Reclamation and Closure and Post-closure phases leading to financial or other pressures on families, and with potential implications to mental health (Reclamation and Closure and Post-closure); and
- Responding to traffic-related safety associated with Project-related vehicle movements (Construction and Operations).

Pressure on law enforcement services may reduce the availability of these services for current community members (Construction and Operations). The change in law enforcement services may disproportionately

affect groups that already have limited access to law enforcement services, Indigenous people, and women (Appendix 20-3, Diverse Subgroups Existing Conditions Supplement).

Figure 21.5-8 illustrates the pathway of effect of Project activities on law enforcement services.



Note:

VC = Valued Component, RAA = Regional Assessment Area

Figure 21.5-8: Potential Effect for Law Enforcement Services

Antisocial Behaviours

As outlined in Section 21.4.3.7, Emergency Response Services and Crime, in the LAA, Survey respondents identified rotational and shift work as having an influence on community safety and rates of assault and harassment, domestic violence, and sexual assault.

During the Construction and Operations phases, there may be pressure on RCMP law enforcement services to manage community safety in relation to individuals who may behave in ways that are detrimental to families or communities. In addition to positive effects, an increase in disposable income of Project employees in the LAA and RAA communities may allow individuals to spend money on activities or behaviours that are considered detrimental to communities, such as substance abuse, which can be associated with abusive behaviours (Firelight Group 2017; Aalhus et al 2018). An increase in disposable income for Project employees who reside in LAA and RAA communities may lead to gendered intra-household tensions associated with financial equity or inequity (Diverse Subgroups Existing Conditions Supplement [Appendix 20-3]); this tension may in some cases result in fighting or abuse and require interventions by law enforcement service providers. These behaviours may occur in the communities that are employment hubs for the Project, such as Terrace and Smithers.

On occasion, employees transiting through RAA communities in association with work rotations may have an overnight or extended time in a community (e.g., stay overnight in a hotel in a transportation hub due to a missed flight). During this time, some employees may engage in antisocial behaviours such as alcohol

and drug use, crimes involving sexual harassment and assault, and engage with prostitution / sex work (The Firelight Group [Firelight] 2021).⁴³

Policing of these behaviours may put pressure on the RCMP or other service providers who are engaged when accidents or incidents need management (e.g., nurses in Iskut). While there are capacity constraints for law enforcement in several LAA and RAA communities, Project contribution to the pressure on law enforcement services will be minimal and unlikely to contribute even to the seasonal peak.

At the Reclamation and Closure and Post-closure phases, with changes in income levels, there is potential that individual spending choices might change, and in some cases antisocial behaviours may also change. Loss of employment may result in financial or other pressures on families and have implications for mental health, both of which may result in antisocial behaviours requiring law enforcement services. Such cases are expected to be occasional and not beyond the capacity for law enforcement services.

Responding to Traffic-related Safety Associated with Project-related Transportation

During the Construction and Operations phases, occasional Project-related traffic may increase the rate of road accidents, requiring the involvement of law enforcement services. However, predicted collision rates are expected to increase slightly (by 1.4%; Tahltan – Allnorth 2024). Therefore, any increase in demand for law enforcement services due to Project-related traffic is expected to be negligible.

More information and analysis on traffic accidents is provided in Chapter 29, Malfunctions and Accidents.

Conclusion

In consideration of the minimal potential for changes, the potential for adverse effects from the Project on law enforcement services during all phases is anticipated to be negligible to minor. Therefore, this potential effect is not carried forward in this assessment.

Gender-based Analysis Plus Highlight

Rural populations, Indigenous people, and women may be disproportionately affected by pressure on law enforcement services (Table 21.5.3, and Appendix 20-3, Diverse Subgroups Existing Conditions Supplement).

Women and Indigenous people in general have higher demand for law enforcement services. As for Indigenous people, higher demand for law enforcement services is largely due to the legacies of colonization, displacement, intergenerational trauma, systemic racism, and the structure of Canadian workplace hierarchies in industries dominated by men (Campbell 2007; Nightingale et al. 2017). At the same time, Indigenous people have experienced strained relationships with law enforcement and the justice system, which may influence their reliance on or trust for support from law enforcement services (Firelight 2017).

Pressure on law enforcement services in rural populations, where resources are absent or limited, may disproportionately affect residents, especially women and Indigenous people.

⁴³ Demographic shifts associated with non-locals moving to communities (e.g., in pursuit of employment) have generally been linked to the mining industry's effects on a community's safety and well-being, including increased rates of crime, alcohol and substance misuse, gender-based violence, social tensions, and human trafficking (Owen et al. 2018; Aalhus et al. 2018; Firelight 2021; IFC 2009).

21.5.3 Mitigation Measures and Effectiveness

The potential for the following Project effects is considered moderate, and are carried forward for further assessment (Table 21.5-2):

- Pressure on health care services and facilities during Construction and Operations (Section 21.5.2.1, Pressure on Health Care Services and Facilities); and
- Pressure on availability and affordability of housing during Operations (Section 21.5.2.5, Pressure on Availability and Affordability of Housing).

The potential for the following four Project effects is considered to be negligible to minor, therefore they are not carried forward for further assessment (Table 21.5-2):

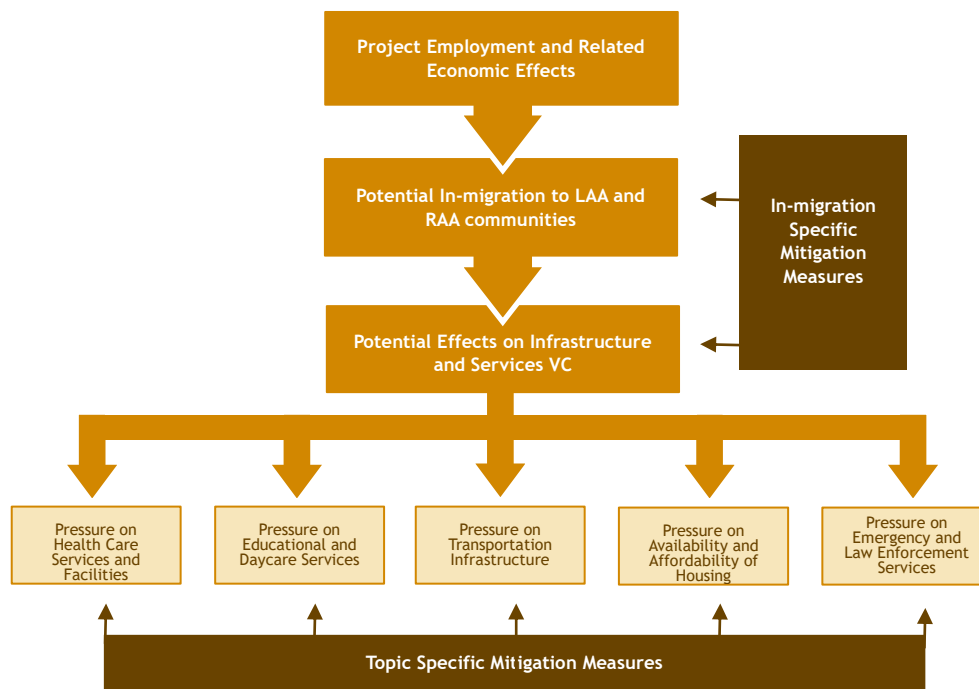
- Pressure on utilities during Construction, Operations, Reclamation and Closure and Post-closure (Section 21.5.2.2, Pressure on Utilities);
- Pressure on education and daycare services during Operations (Section 21.5.2.3, Pressure on Education and Daycare Services and Facilities);
- Pressure on transportation infrastructure during Construction and Operations (Section 21.5.2.4, Pressure on Transportation Infrastructure); and
- Pressure on emergency and law enforcement services during Construction and Operations (Section 21.5.2.6, Pressure on Emergency and Law Enforcement Services).

For most of the population, the potential for the Project to put pressure on education and daycare and emergency services are considered to be minor to negligible; however, for diverse subgroups, including Indigenous people, women, and rural communities, the effects are anticipated to be experienced disproportionately. Measures to mitigate potential effects are presented in the following sections.

All mitigation measures are applied in order of preference according to the mitigation hierarchy, as follows: avoidance, minimization, restoration, and offset. Descriptions of each type of measure are provided in Chapter 10, Valued Components Effects Assessment Methods. “Existing” mitigation measures include measures currently applied and implemented at the existing Eskay Creek Mine site and those proposed for the Eskay Creek Technical Sample Project.

The effectiveness of mitigation measures is also considered to determine if the Project will result in any residual effects (Table 21.5-6). If the implementation of mitigation measures is expected to eliminate a potential effect (i.e., the measures are classified as highly effective), then no residual effect is identified, and the potential effect is not considered further in this assessment. If the proposed implementation controls and mitigation measure(s) are not anticipated to be sufficient to eliminate an effect (i.e., the measures’ effectiveness is classified as low or moderate), or if the effectiveness of the measures is unknown, a residual effect is identified and carried forward to Section 21.6, where the residual effect is characterized.

In-migration associated with employment by the Project is the main pathway of effects on the Infrastructure and Services VC (see the box “Population Change Associated with the Project”, Section 21.5.2.1, Pressure on Health Care Services and Facilities) and thus management of this pathway is considered relevant to and important for controlling the identified potential effects (Figure 21.5-9). Therefore, all the in-migration related mitigations are applicable to the potential effects of the Project on the Infrastructure and Services VC. In-migration management measures are described in Table 21.5-6.



Note:

LAA = Local Assessment Area; RAA = Regional Assessment Area; VC = Valued Component

Figure 21.5-9: Infrastructure and Services Valued Component Effects and Relevant Mitigation Measures

Mitigation measures are described in the following way:

- Table 21.5-6 provides a summary of all mitigation measures grouped by potential effects; and
- Sections 21.5.3.1 to 21.5.3.6 describe each mitigation measure individually, grouped by potential effect, including effectiveness of mitigation measures.

Table 21.5-6: Proposed Infrastructure and Services Valued Component Mitigation Measures and Their Effectiveness

Potential Effect	Mitigation Measure	Measure Type	Existing ¹ or New Mitigation	Effectiveness ²	Residual Effect to Infrastructure and Services VC?
Pressure on health care services and facilities	Measures to minimize Project-related in-migration: Implement a recruitment and selection policy.	Minimization	Existing	High	Yes
	Measures to minimize Project-related in-migration: Prioritize procurement and contracting from businesses within the Local and Regional Assessment areas, including involvement of Indigenous-owned businesses, and encourage major contractors do to the same.	Minimization	Existing	High	
	Measures to minimize Project-related in-migration: Leverage existing recruitment initiatives and partner with training and post-graduate programs in Local and Regional Assessment area communities to notify them of recruitment efforts and employment opportunities and encourage major contractors do to the same.	Minimization	New	Moderate	
	Implement liaison and coordination with community emergency services.	Minimization	Existing	High	
	Develop an HMSP.	Minimization	New	High	
	Implement an incident and reporting and incident investigation procedure.	Minimization	Existing	High	
	Implement the employee assistance program and encourage major contractors to have an employee assistance program.	Minimization	Existing	High	
	Implement a drug and alcohol policy.	Minimization	Existing	High	
Implement a community feedback process including measures for residents of Local and Regional Assessment Area communities and employees to share input about potential effects of the Project.	Minimization	New	High		
Pressure on utilities (waste management)	Develop an Integrated Waste Management Plan, as required by the Regional District of Kitimat Stikine.	Avoidance	New	High	No
Pressure on education and daycare services and facilities	Measures to minimize Project-related in-migration: Implement a recruitment and selection policy.	Minimization	Existing	High	No
	Measures to minimize Project-related in-migration: Prioritize procurement and contracting from businesses within the Local and Regional Assessment areas, including involvement of Indigenous-owned businesses, and encourage major contractors do to the same.	Minimization	Existing	High	
	Measures to minimize Project-related in-migration: Leverage existing recruitment initiatives and partner with training and post-graduate programs in Local and Regional Assessment area communities to notify them of recruitment efforts and employment opportunities and encourage major contractors do to the same.	Minimization	New	Moderate	
	Implement a community feedback process including measures for residents of Local and Regional Assessment Area communities and employees to share input about potential effects of the Project.	Minimization	New	High	
Pressure on transportation infrastructure	Implement liaison and coordination with community emergency services.	Minimization	Existing	High	No
	Implement an incident and reporting and incident investigation procedure.	Minimization	Existing	High	
	Implement a community feedback process including measures for residents of Local and Regional Assessment Area communities and employees to share input about potential effects of the Project.	Minimization	New	High	
Pressure on availability and affordability of housing	Measures to minimize Project-related in-migration: Implement a recruitment and selection policy.	Minimization	Existing	High	Yes
	Measures to minimize Project-related in-migration: Prioritize procurement and contracting from businesses within the Local and Regional Assessment areas, including involvement of Indigenous-owned businesses, and encourage major contractors do to the same.	Minimization	Existing	High	
	Measures to minimize Project-related in-migration: Leverage existing recruitment initiatives and partner with training and post-graduate programs in Local and Regional Assessment area communities to notify them of recruitment efforts and employment opportunities and encourage major contractors do to the same.	Minimization	New	Moderate	
	Implement a community feedback process including measures for residents of Local and Regional Assessment Area communities and employees to share input about potential effects of the Project.	Minimization	New	High	

Potential Effect	Mitigation Measure	Measure Type	Existing ¹ or New Mitigation	Effectiveness ²	Residual Effect to Infrastructure and Services VC?
Pressure on emergency services and law enforcement services	Measures to minimize Project-related in-migration: Implement a recruitment and selection policy.	Minimization	Existing	High	No
	Measures to minimize Project-related in-migration: Prioritize procurement and contracting from businesses within the Local and Regional Assessment areas, including involvement of Indigenous-owned businesses, and encourage major contractors do to the same.	Minimization	Existing	High	
	Measures to minimize Project-related in-migration: Leverage existing recruitment initiatives and partner with training and post-graduate programs in Local and Regional Assessment area communities to notify them of recruitment efforts and employment opportunities and encourage major contractors do to the same.	Minimization	New	Moderate	
	Implement liaison and coordination with community emergency services.	Minimization	Existing	High	
	Implement a community feedback process including measures for residents of Local and Regional Assessment Area communities and employees to share input about potential effects of the Project.	Minimization	New	High	

Notes:

HMSA = Health and Medical Services Plan; LAA = local assessment area; MERP = Mine Emergency Response Plan; RAA = Regional Assessment Area; VC = Valued Component

¹ "Existing" mitigation measures include measures currently applied and implemented at the existing Eskay Creek Mine site and those proposed for the Eskay Creek Technical Sample Project.

² Effectiveness is characterized as:

Unknown = The mitigation measure has not been tried elsewhere in similar contexts and its effectiveness is unknown.

Low = After implementation of the mitigation measure, the effect is largely unchanged (i.e., there is anticipated to be little to no improvement in the condition of the VC).

Moderate = After implementation of the mitigation measure, the effect is moderately changed (i.e., there is anticipated to be a moderate improvement in the condition of the VC).

High = After implementation of the mitigation measure, the effect is greatly improved (i.e., there is anticipated to be a major improvement in the condition of the VC, or for the effect to be completely eliminated).

³ Skeena Resources has a MERP in association with exploration activities. Aspects of the MERP are required for future Project phases, in particular: submitting the latest version of MERP to the first responders in the LAA and RAA communities, sharing copies of the MERP with helicopter companies, sharing copies of the MERP with the Engaged Indigenous Nations and local communities.

⁴ "Existing" mitigation measures include measures currently applied and implemented at the existing Eskay Creek Mine site and those proposed for the Eskay Creek Technical Sample Project.

Measures that contribute to the mitigation of multiple potential effects are described in the Table 21.5-7 before Sections 21.5.3.1 to 21.5.3.6. Table 21.5-7 includes a description of effectiveness of these measures.

Sections 21.5.3.1 to 21.5.3.6 below provide descriptions of mitigation measures for each of the identified potential effects. Some mitigation measures manage more than one potential effect. Table 21.5-7 provides descriptions of measures that contribute to the mitigation of multiple potential effects.

Table 21.5-7: Mitigation Measures that Contribute to the Mitigation of Multiple Potential Effects

Measures that Contribute to the Mitigation of Multiple Potential Effects of the Project	Description
Measures to Minimize Project-related In-migration	
Implement a recruitment and selection policy	<p>Skeena Resources will continue implementation of the “Recruitment and Selection Policy” (Skeena Resources 2021). According to the Policy requirements, Skeena Resources will employ Indigenous people from the LAA and RAA communities in as many roles as possible wherever feasible. The Policy outlines measures to (2021, 49):</p> <ul style="list-style-type: none"> • Circulate notices of all potential job opportunities with the Company and minimum qualifications and experience required to the local Indigenous Nations Employment and Contracts Director or their designated representative as soon as reasonably possible and on an ongoing basis. • Interview, on a priority basis, applicants who are members of local Indigenous Nations that the Company considers, acting reasonably, to meet the minimum job qualifications and experience, or who with reasonable on-the-job training could meet such qualifications. • Hire, on a priority basis, those Indigenous Nation Member applicants who meet the minimum job qualifications and experience and other posted job requirements, or, subject to the availability of on-the-job training opportunities, could with reasonable on-the-job training meet such qualifications and requirements. • Use commercially reasonable efforts to refrain from hiring any person as an employee of the Company unless and until the foregoing provisions in this section are complied with. • Communicate with the local Indigenous Nation Members Employment and Contracts Director to enable such persons to ensure that prospective Indigenous Nation Members are contacted and aware of interview schedules, pre-access testing, and training opportunities. • The effectiveness of this measure in relation to in-migration is considered as high as it will prioritize employment and upskilling opportunities to Indigenous Nation members including those from LAA and RAA communities, thereby potentially reducing the need to recruit people from outside the RAA who may in-migrate to the region.
Prioritize procurement and contracting from businesses within the Local and Regional Assessment areas, including involvement of Indigenous-owned businesses, and encourage major contractors do to the same.	<p>Skeena Resources will continue to prioritize employment and procurement from LAA and RAA businesses, including involvement of Indigenous-owned businesses, and will encourage major contractors do to the same.</p> <p>Skeena Resources will continue to prioritize procurement of goods and services first from Tahltan businesses, then other local/regional businesses, whenever possible, providing that pricing is competitive and technical requirements are met.</p> <p>The effectiveness of this measure in relation to in-migration is considered as high as it will facilitate local procurement, thereby stimulating employment among LAA and RAA residents, particularly during the phases of Construction and Operations where the Project’s employment needs will be the greatest. This will result in smaller rates of potential in-migration.</p>

Measures that Contribute to the Mitigation of Multiple Potential Effects of the Project	Description
<p>Leverage existing recruitment initiatives and partner with training and post-graduate programs in Local and Regional Assessment area communities to notify them of recruitment efforts and employment opportunities and encourage major contractors do to the same.</p>	<p>Skeena Resources will leverage existing recruitment initiatives in the LAA and RAA, where feasible. This will be done through targeted and tailored recruitment and communications with organizations or initiatives that connect to talent and experience such as: Tahltan-Industry Working Group, Tahltan Socio-Cultural Working Group initiatives, Tahltan Works, and the On Track job board for Tahltan members, and Nisga'a Employment, Skills & Training (NEST) for Nisga'a Citizens. In this way, there is an opportunity for the Project to leverage the talent of the workforce in the LAA and RAA communities prior to recruiting from beyond the RAA. This focused effort to recruit locally has potential to reduce in-migration.</p> <p>Skeena Resources will partner with training and post-graduate programs regarding recruitment and employment opportunities, in order that students or recent graduates in the LAA or RAA communities can get connected to work without having to relocate.</p> <p>The effectiveness of this measure in relation to in-migration is considered as moderate. Although this measure will facilitate employment opportunities to people already residing in LAA or RAA communities, there is uncertainty regarding the number of students or recent graduates with relevant training or experience, or interest in remaining in the region. Notwithstanding, this measure has potential to reduce recruitment from beyond the region. This will reduce potential in-migration.</p>
<p>Mitigation Measures that Contribute to the Mitigation of Multiple Potential Effects of the Project on Infrastructure and Services Topics</p>	
<p>Implement liaison and coordination with community emergency services.</p>	<p>Skeena Resources' "Health and Safety Management System" (2020) includes the following elements and standards applicable to the Infrastructure and Services VC, and particularly potential effects of the Project on health care services and facilities:</p> <ul style="list-style-type: none"> • Training, Competency and Hazard Awareness: ensures that all Skeena Resources employees are competent to conduct their assigned work in a safe manner and that they are aware of safety, health, and environmental impacts that may result from or arise from their work. • Emergency Preparedness and Crisis Management: ensures that all Skeena Resources' business sites, offices and facilities have proper procedures and resources to effectively respond to reasonably foreseeable emergency situations associated with their operations. In addition, to ensure that the company and its personnel is prepared to quickly respond to, and effectively resolve sudden events. This includes Liaison and coordination with community emergency services. • Subcontractor and Suppliers Policy: ensures that all Subcontractors and suppliers to Skeena Resources are aware of the Company's expectations and requirements with respect to Health and Safety and to ensure that they conform to Skeena Resources' requirements. • Company Rules and Code of Conduct: lays out a set of rules and code of conduct that employees must follow when working on Skeena Resources' sites, to ensure site safety, and fair treatment of all employees. • Vehicle Driving Policy and Standard: ensures the safety of those individuals who drive company vehicles, including contractors. • First Aid Procedure: defines that each new project must determine the first aid procedure that is custom to the job site and the specific job tasks, including transportation to the hospital.

Measures that Contribute to the Mitigation of Multiple Potential Effects of the Project	Description
	<ul style="list-style-type: none"> • Updates about the “Health and Safety Management System” (2020) will be shared with relevant LAA and RAA health authorities, Northern Health, and relevant LAA and RAA emergency services. This aims to improve awareness of protocols taken by Skeena prior to any interactions with LAA and RAA services, and in doing so, reduce potential pressure on health care services and facilities. Any input or guidance received from health services provided will be considered by Skeena Resources. <p>The MERP (2022) includes an incident command for medical emergencies during daylight hours and during nighttime hours or when weather conditions prevent helicopter access. It also outlines procedures for emergency air and ground transport decisions and an Emergency Preparedness Inspection Checklist. Additional rules and protocols relevant to the Infrastructure and Services VC include protocols for fire response, wildlife encounters, and aviation emergency. The MERP has potential to reduce the Project’s effect on pressure on health care services and facilities.</p> <p>Skeena Resources will update first responders in the LAA and RAA communities with the revisions to the MERP (2022). The list of first responders includes:</p> <ul style="list-style-type: none"> • RCMP in Smithers, Terrace, and District of Stewart. • BCEHS in Smithers, Terrace, and District of Stewart. <p>Skeena Resources will share copies of the site’s MERP with all helicopter companies that have active contracts with Skeena Resources.</p> <p>The MERP (2022) will be shared with the TCG, the TSKLH, and local communities (at least those LAA/RAA communities that can be potentially affected by changes in Infrastructure and Services VC, including Terrace, Smithers, Tahltan communities, Nisga’a Villages, and the District of Stewart).</p> <p>As was mentioned above, providing updates on the MERP (2022) aims to improve awareness of protocols taken by Skeena and therefore reduce potential pressure on emergency response services.</p> <p>Skeena Resources will seek to develop emergency response agreements with the other projects and operations in the area for reciprocal assistance and emergency aid purposes during Operations (e.g., Brucejack, KSM, Forrest Kerr Hydroelectric, Galore). In this way, the Project can minimize demands for emergency response services.</p> <p>The effectiveness of this measure is considered as high as implementation of the health and safety management system reduces the potential for the Project to put pressure on health care services and facilities and emergency services and facilities.</p>
<p>Implement an incident and reporting and incident investigation procedure</p>	<p>The “Incident Reporting and Incident Investigation Procedure” (2022) provides instructions for the identification, investigation and reporting of incidents at the Eskay Creek Mine, and ensure internal and regulatory reporting timeframes are met. This procedure applies to all employees and contractors working for and on behalf of Skeena Resources at any of the companies’ locations.</p> <p>The “Incident Reporting and Incident Investigation Procedure” (2022) will be used to track traffic accidents or incidents and conduct a post-event analysis of the incident to identify areas for improvement. The Procedure will be also applicable to track the number of health-related transports to LAA/RAA facilities and conduct a post-event analysis of the incident as well.</p> <p>The effectiveness of this measure is considered as high because post-event analysis will help in identifying underlying causes of accidents or incidents to prevent recurrence and minimize potential Project effects on health care services and facilities, as well as on emergency and law enforcement services.</p>

Measures that Contribute to the Mitigation of Multiple Potential Effects of the Project	Description
<p>Implement a community feedback process including measures for residents of Local and Regional Assessment Area communities and employees to share input about potential effects of the Project.</p>	<p>Skeena Resources will establish a community feedback process for Engaged Indigenous Nations, stakeholders and the public, as well as employees and contractors, to submit comments or concerns about the Project. This process will include: a feedback form within the dedicated Project website, a telephone line, as well as opportunities to submit comments at drop boxes at the Project site (e.g., at the Project office or at work camp).</p> <p>For the Tahltan Nation this may include engagement with Tahltan Community Liaison Committee (Section 27.6.3.1, Community Effects Monitoring and Management Plan).</p> <p>The feedback process will be promoted to local government, Engaged Indigenous Nations, the public, and employees/contractors. The feedback process will describe:</p> <ul style="list-style-type: none"> • How community feedback will be received and categorized for the Project; • How Skeena Resources will respond to concerns in a timely and transparent manner; and • How Skeena will run any investigation, when needed, to understand concerns raised about the Project. <p>Skeena Resources will develop measures to promote the feedback process to diverse subgroups, to build trust and confidence in the process.</p> <p>The effectiveness of this measure to address potential effects of the Project on the Infrastructure and Services VC topics is considered high. A feedback process is considered standard good practice for mining projects and operations. There may be potential for trends to be identified regarding emerging issues, and in this manner, proactive responses or new mitigations prepared to address effects of the Project on infrastructure and services</p>

Notes:

BC = British Columbia; BCEHS = BC Emergency Health Services; HMSP = Health and Medical Service Plan; KSM = Kerr-Sulphurets-Mitchell; LAA = Local Assessment Area; MERP = Mine Emergency Response Plan; RAA = Regional Assessment Area; RCMP = Royal Canadian Mounted Police; TBC = Tahltan Band Council; TCG = Tahltan Central Government; TSKLH = Tsetsaut Skii km Lax Ha; VC = Valued Component

Gender-based Analysis Plus Highlight

For the Infrastructure and Services VC, mitigation measures proposed in Table 21.5-6 will also work to manage any disproportionate potential effects through minimizing adverse effects on diverse subgroups identified in the preceding step. As such, no additional mitigation measures are proposed for GBA Plus considerations.

21.5.3.1 Mitigation for Pressure on Health Care Services and Facilities

The Project is anticipated to result in moderate potential to put pressure on the already constrained health care system, largely due to potential in-migration to communities such as Terrace and Smithers. Measures that are anticipated to reduce potential pressure on health care services and facilities are described below.

Mitigations for multiple potential effects, including the potential effect on health care services and facilities, are described in Table 21.5-7 and include:

- Mitigation of potential Project-related in-migration;
- Liaison and coordination with community emergency services;
- An incident and reporting and incident investigation procedure; and
- A community feedback process.

Additional measures that would mitigate the potential pressure on health care services and facilities, include:

- Skeena Resources will develop a Health and Medical Service Plan (HMSP) to outline the onsite medical services and programs to be delivered for the Project workforce and describe the measures to coordinate health service delivery with Northern Health. The HMSP will include:
 - Details of onsite medical clinic infrastructure and staffing.
 - Communication protocols to be used between the Project and local health service providers for topics such as patient care and transfer, data collection and reporting.
 - A Communicable Disease Prevention Plan to address infectious diseases such as respiratory and norovirus infections. The communicable disease prevention measures will follow both Northern Health and WorkSafeBC guidelines for the prevention of infectious diseases (Northern Health 2023a; WorkSafeBC 2021).
 - Policies and programs to promote mental health and wellness in the labour camp consistent with Northern Health recommendations (Northern Health 2015; 2017; and 2018).

The effectiveness of this measure is considered high because the HMSP will contain known, tested, public health measures that have a track record of working.

- Skeena Resources will continue to implement the employee assistance program and encourage major contractors to have an employee assistance program. Skeena Resources will maintain a comprehensive insurance and health care benefits package for full-time salaried and full-time permanent hourly employees and their dependents. Full-time salaried or permanent hourly Project employees are required to participate.

The effectiveness of this measure is considered as high, as employee assistance program promotes occupational health, helps prevent injuries, supports mental wellness of employees, and overall contributes to maintaining a healthier workforce, thereby reducing potential pressure on LAA and RAA health care services and facilities.

- Skeena Resources will Implement a drug and alcohol policy. The “Drug and Alcohol Policy” (2023) establishes Skeena Resources’ expectations for appropriate behaviour, outlines possible consequences for non-compliance, assists in the company’s obligation to provide a safe and healthy workplace, provides guidance for workers and supervisors, ensures that employees who require medication that may impair their performance are reasonably accommodated, and ensures that employees who are dealing with drug or alcohol addiction are provided with appropriate support.

- The effectiveness of this measure is considered as high, as the “Drug and Alcohol Policy” (2023) helps maintain a safe work environment, thereby reducing potential pressure on health care services and facilities.

After the implementation of these mitigation measures, residual effects on health care services and facilities are expected. Therefore, this effect is carried forward to the residual and cumulative effect assessment.

21.5.3.2 Mitigation for Pressure on Utilities

There is a negligible to minor potential for the Project to adversely affect waste management facilities. Skeena Resources will develop an Integrated Waste Management Plan, as required by the Regional District of Kitimat Stikine (RDKS Solid Waste Management, pers. comm., 2024).

Skeena Resources will notify the RDKS regarding waste management measures, particularly in advance of any peak waste facility needs.

The effectiveness of this measure is considered high because it helps prevent pressure on individual landfills in the region by considering the waste management processes of the RDKS and also by considering waste management demands of other businesses in the region.

After the implementation of the Integrated Waste Management Plan, no residual effect on utilities is expected. Therefore, this effect is not carried forward to the residual and cumulative effect assessment.

21.5.3.3 Mitigation for Pressure on Education and Daycare Services and Facilities

The Project is anticipated to result in a negligible to minor potential to put pressure on education and daycare services and facilities, largely due to in-migration to communities such as Terrace and Smithers. Notwithstanding, mitigation measures that are anticipated to further reduce potential contributions of the Project to pressure on education and daycare services and facilities are described below. These measures are expected to contribute to the mitigation of multiple effects, including potential pressure on education and daycare services, and are detailed in Table 21.5-7. They include:

- Mitigation of potential Project-related in-migration; and
- A community feedback process.

After the implementation of these mitigation measures, no residual effect on education and daycare services and facilities is expected. Therefore, this effect is not carried forward to the residual and cumulative effect assessment.

21.5.3.4 Mitigation for Pressure on Transportation Infrastructure

The Project is anticipated to result in a minor potential to put pressure on road transportation infrastructure. Notwithstanding, mitigation measures that are anticipated to contribute to the reducing of this potential effect are described below. These measures are expected to contribute to the mitigation of multiple effects, including potential pressure on transportation infrastructure, and are detailed in Table 21.5-7. They include:

- Liaison and coordination with community emergency services;

- An incident and reporting and incident investigation procedure; and
- A community feedback process.

After the implementation of these mitigation measures, no residual effect on transportation infrastructure is expected. Therefore, this effect is not carried forward to the residual and cumulative effect assessment.

21.5.3.5 Mitigation for Pressure on Availability and Affordability of Housing

The Project's potential to put pressure on the availability and affordability of housing due to Project-related in-migration during Operations is expected to be moderate. Mitigation measures that are anticipated to reduce the potential pressure on availability and affordability of housing are described below. These measures are expected to contribute to the mitigation of multiple effects, including potential pressure on availability and affordability of housing, and are detailed in Table 21.5-7. They include:

- Mitigation of potential Project-related in-migration; and
- A community feedback process.

After the implementation of these mitigation measures, a residual effect on the availability and affordability of housing is expected. Therefore, this effect is carried forward to the residual and cumulative effect assessment.

21.5.3.6 Mitigation for Pressure on Emergency and Law Enforcement Services

The Project is anticipated to result in minor to negligible potential to put pressure on emergency and law enforcement services. Notwithstanding, mitigation measures that are anticipated to further reduce Project pressure on emergency and law enforcement services are described below. These measures are expected to contribute to the mitigation of multiple effects including potential pressure on emergency and law enforcement services, and detailed in Table 21.5-7. They include:

- Mitigation of potential Project-related in-migration;
- Liaison and coordination with community emergency services;
- An incident and reporting and incident investigation procedure; and
- A community feedback process.

After the implementation of these mitigation measures, no residual effect on emergency and law enforcement services is expected. Therefore, this effect is not carried forward to the residual and cumulative effect assessment.

21.6 Characterization of Residual Effects

As described in Section 21.5.3, Mitigation Measures and Effectiveness, two adverse residual effects on the Infrastructure and Services VC are expected after the implementation of mitigation measures: pressure on health care services and facilities during the Operations phase and pressure on availability and affordability of housing during the Operations phase. This section provides an assessment and characterization of the predicted residual effects, and the confidence relating to the assessment conclusion.

Infrastructure and Services VC residual effects are characterized using a set of descriptors defined in Section 10.6, Characterization of Residual Effects, and narrative descriptions and justifications for the characterizations are provided in the sections below.

21.6.1 Pressure on Health Care Services and Facilities

The Project is expected to have a residual effect of pressure on health care services and facilities during Operations. The **magnitude** of this residual effect is rated as **moderate**, recognizing that while health care services are at capacity in Terrace and Smithers and, overall, in the “51 Northwest” HSDA (Section 21.4.3.2, Health Care and Social Services and Facilities), the Project’s potential to put pressure on health care services and facilities will be largely mitigated with embedded controls and proposed measures. The **geographic extent** of the effect is **regional / Indigenous people**. The geographic extent recognizes that the effect will be experienced largely in the health care services in Terrace and Smithers. Depending on the level of potential in-migration, the effect may also be experienced in Tahltan communities, Nisga’a Villages, and the District of Stewart. Additionally, other RAA communities and Indigenous people that rely on Terrace and Smithers as major service hubs in the Northwest HSDA and adjacent HSDA may be affected. The effect is expected during Operations, when the majority of in-migration is anticipated, so the effect **duration** is **medium-term**. The **frequency** is considered to be **continuous**, as there will be different but constant pressures on health care services and infrastructure from Project employees and their families that move to the region. The **reversibility** of the effect is **reversible long-term**, as the effect of the Project will be reversed, when the majority of employees leave the region during the Reclamation and Closure and Post-closure phases. The Infrastructure and Services VC topic of health care services is assessed to have a **low resiliency**.

There are issues with the capacity of health care services in all potentially affected communities. However, health care services in Terrace and Smithers have systems to address the needs of their existing populations combined with occasional care that may occur, for example from other mine projects and operations in the region, as well as in relation to tourism fluctuations. As such, these larger urban centres may be more resilient to change than smaller LAA and RAA communities, which are less equipped to cope with in-migration-related health service needs. The **social context** is assessed as being **neutral**, as it has some sensitive aspects (e.g., rotational specialists, different levels of hospital care/service in different communities, providing care to local and remote communities), although the health care offerings are also aligned with other areas in BC. The **importance** of health care services is **high**, as access to and capacity of health care services are key concerns of Indigenous Nations and community members, the public, local government, and government agencies. The **probability** of the effect is **medium**, which takes into consideration the experience of other mines in the region (e.g., Brucejack Mine) and KIIs (Terrace Chamber of Commerce, pers. comm., 2024; Stewart Health Clinic, Northern Health, pers. comm., 2024) which shows that Project-related in-migration and general operations of a mine, can result in pressure for health care services and facilities.

Table 21.6-1: Characterization of Residual Effects for Pressure on Health Care Services and Facilities

Residual Effect	Characterization Criteria				
	Magnitude	Geographic Extent	Duration	Frequency	Probability
Pressure on health care services and facilities	Moderate	Regional / Indigenous people	Medium-Term	Continuous	Medium
	Reversibility	Resiliency	Context	Importance	
	Reversible long-term	Low	Neutral	High	

Gender-based Analysis Plus Highlight

Pressure on the already constrained health care services system occurring as a result of the Project has potential to result in disproportionate effects for diverse subgroups, such as rural populations/people without reliable transportation, Indigenous people, and individuals with mental health challenges and addictions.

The **magnitude** of the residual effect on health care is rated as **high**, in recognition that diverse subgroups may already have barriers to access a system that is not available or constrained in their communities, or in the communities where centralized health services are offered (e.g., Terrace; Table 21.6-2). Pressure on these services during Operations due to the Project could result in disproportionate effects to diverse subgroups who are displaced due to capacity constraints. The **geographic extent** of the effect is **regional / Indigenous people**. The geographic extent recognizes that the effect will be experienced by diverse populations within the RAA and LAA. The effect is expected during Operations when the majority of in-migration is anticipated; the **duration of the effect** is **medium-term**, and the **frequency** is considered to be **continuous**, as there will be different but constant pressures on health care services and infrastructure from the Project employees and their families that move to the region. The **reversibility** of the effect is **reversible long-term**, as the effect of the Project will be reversed when the majority of employees leave the region during the Reclamation and Closure and Post-closure phases.

Existing constraints to health care services and infrastructure occur for rural populations/people without reliable transportation, Indigenous people, and individuals with mental health challenges and addictions. This was confirmed by the participants of the GBA Plus Workshop, as well as publicly available data (Appendix 20-3, Diverse Subgroups Existing Conditions Supplement). Additional pressure could result in reduced resiliency of the systems that support a range of people of the mentioned identity factors. As such, the Infrastructure and Services VC topic of health care services and facilities is assessed to have a **low resiliency in the GBA Plus context**.

The **social context** is assessed as being **high in the GBA Plus context**, as it has sensitive offerings for diverse populations (e.g., mental health and substance use services, maternal care). The **importance** of health care services is **high**, as access to and capacity of health care services are key concerns of Indigenous Nations, women, and other diverse populations. The **probability** of the effect is **medium**, which takes into consideration the experience of other mines in the region and KILs (Terrace Chamber of Commerce, pers. comm., 2024; Stewart Health Clinic, Northern Health, pers. comm., 2024).

Table 21.6-2: Characterization of Residual Effects for Pressure on Health Care Services and Facilities in Consideration of Gender-based Analysis Plus

Residual Effect	Characterization Criteria				
	Magnitude	Geographic Extent	Duration	Frequency	Probability
Pressure on health care services and facilities – for Indigenous people, remote/rural populations, individuals with existing mental health challenges and/or addictions	<i>High</i>	Regional / Indigenous people	Medium-Term	Continuous	Medium
	Reversibility	Resiliency	Context	Importance	
	Reversible long-term	Low	<i>High</i>	High	

Note:

Any characterizations in this table that are different than those presented in Table 21.6-1 are noted in italics.

21.6.2 Pressure on Availability and Affordability of Housing

The Project will have a residual effect from pressure on housing during the Operations phase. As shown in Table 21.6-3, the **magnitude** of the residual effect is rated as **moderate**, recognizing that while there is a shortage of housing options and/or high rent costs in Terrace, Smithers, Tahltan communities, Nisga’a Villages, and the District of Stewart (Section 21.4.3.6, Housing and Accommodation) and additional pressure on housing availability and affordability during Operations could result in additional exceedances of capacity, the Project’s potential to put pressure on housing will be mitigated with embedded controls and proposed measures. The **geographic extent** of the effect is **community**. The geographic extent recognizes that the effect will be experienced largely in Terrace and Smithers, where population in-migration will take place. The effect is expected during Operations when the majority of in-migration is anticipated, so the effect **duration** is **medium-term**, and the **frequency** is considered to be **continuous**, as there will be constant pressures on housing from the Project employees and their families that move to the region. The **reversibility** of the effect is **reversible long-term**, as the effect of the Project will be reversed when the majority of employees leave the region during the Reclamation and Closure and Post-closure phases. The Infrastructure and Services VC topic of housing is assessed to have a **low resiliency**.

There are issues with the availability and affordability of housing in all potentially affected communities. Terrace and Smithers regularly experience population in-migration such as during summer tourism months and/or in relation to new operations in the region (e.g., Brucejack Mine which began operations in 2017). However, overall resiliency is low considering constraints in the housing market. The **social context** is assessed as being **low**, as the housing situation is similar to other areas in BC with high property prices and limited availability. The **importance** of housing is **high**, as availability of housing is key concern of Engaged Indigenous Nations and community members, the public, local government, and government agencies. The **probability** of the effect is **medium**, which takes into consideration the experience of other mines in the region (e.g., the Survey; Terrace Chamber of Commerce, pers. comm., 2024; District of Stewart, pers. comm., 2024; Village of Hazelton, pers. comm., 2024; City of Terrace, pers. comm., 2024), which shows that Project-related in-migration and general operations of a mine can result in pressure on housing.

Table 21.6-3: Characterization of Residual Effects for Pressure on Availability and Affordability of Housing

Residual Effect	Characterization Criteria				
	Magnitude	Geographic Extent	Duration	Frequency	Probability
Pressure on availability and affordability of housing	Moderate	Community	Medium-term	Continuous	Medium
	Reversibility	Resiliency	Context	Importance	
	Reversible long-term	Low	Low	High	

Gender-based Analysis Plus Highlight

Rural populations without reliable transportation, Indigenous people, low-income households (including seniors and Elders) and gender-diverse populations may be disproportionately affected by change in demand for housing (Appendix 20-3, Diverse Subgroups Existing Conditions Supplement).

Population in-migration associated with employment at the Project may put pressure on housing, and this, in turn, can impact low-income subgroups, as they may be priced out of the rental or private home market. Additionally, decreased housing availability could result in increased reliance on unsuitable housing, which is noted as a particular risk for Indigenous people.

The **magnitude** of the residual effect for housing affordability and availability is rated as **high**, in recognition that housing is already at capacity in Terrace, Smithers, Tahltan communities, Nisga'a Villages, and the District of Stewart (Table 21.6-4). There is no guideline or threshold value for housing; however, the context of housing being a limited-to-no capacity is recognized as a concern throughout BC (Section 21.4.3.6, Housing and Accommodation). The **geographic extent** of the effect is **community**, as the disproportionate effect is expected to be mainly experienced by diverse subgroups in Terrace and Smithers where population in-migration may take place. The effect is expected during Operations when the majority of in-migration is anticipated, so the effect **duration** is **medium-term**, and the **frequency** is considered to be **continuous**, as there will be constant pressures on housing from the Project employees and their families that move to the region. The **reversibility** of the effect is **reversible long-term**, as the effect of the Project will be reversed when the majority of employees leave the region during the Reclamation and Closure and Post-closure phases, and in consideration of government-led investments and projects in the region related to housing.

There are existing issues with housing availability both in Terrace and Smithers. Key informants raised concerns about potential effects of increasing housing costs for low-income groups (Terrace Chamber of Commerce, pers. comm., 2024; District of Stewart, pers. comm., 2024; Village of Hazelton, pers. comm., 2024). As such, the Infrastructure and Services VC topic of housing is assessed to have a **low resiliency in the GBA Plus context**. The **social context** is assessed as being **high in the GBA Plus context**, it has sensitive offerings that may disproportionately affect diverse populations (including limited availability of affordable housing). The **importance** of housing is **high**, as availability of housing is a key concern of Indigenous Nations and community members, the public, local government, and government agencies (Terrace Chamber of Commerce, pers. comm., 2024; District of Stewart, pers. comm., 2024; Village of Hazelton, pers. comm., 2024).

The **probability** of the effect is **medium**, which takes into consideration the experience of other mines in the region (e.g., the Survey; Terrace Chamber of Commerce, pers. comm., 2024; District of Stewart, pers. comm., 2024; Village of Hazelton, pers. comm., 2024; City of Terrace, pers. comm., 2024) which shows that Project-related in-migration and general operations of a mine can result in pressure for housing.

Table 21.6-4: Characterization of Residual Effects for Pressure on Availability and Affordability of Housing in Consideration of Gender-based Analysis Plus

Residual Effect	Characterization Criteria				
	Magnitude	Geographic Extent	Duration	Frequency	Probability
Pressure on availability and affordability of housing—for Indigenous people, low-income individuals, gender-diverse populations, and rural and remote populations	<i>High</i>	Community	Medium-Term	Continuous	Medium
	Reversibility	Resiliency	Context	Importance	
	Reversible long-term	Low	<i>High</i>	High	

Note:

Any characterizations in this table that are different than those presented in Table 21.6-3 are noted in italics.

21.6.3 Summary of the Assessment of the Residual Effects

Characterization of the Infrastructure and Services VC’s residual effects are provided in Tables 21.6-1 and 21.6-3. The characterization criteria used for the effect descriptions are described in Section 10.6, Characterization of Residual Effects.

Confidence in the assessment is also evaluated. Confidence, which can also be understood as the degree of scientific certainty, is a measure of how well residual effects are understood. Confidence includes a consideration of the acceptability of the data inputs and analytical methods used to predict and assess Project effects. It depends on the certainty of the predicted outcome, and it allows the decision-maker to evaluate risk associated with the Project. Confidence levels are defined as:

- **Low (less than 50% confidence):** The cause-effect relationship(s) between the Project and its interaction with the environment is poorly understood and/or data for the Area of the Project or scientific analyses are incomplete, leading to a high degree of uncertainty;
- **Medium (50% to 80% confidence):** The cause-effect relationship(s) between the Project and its interaction with the environment is not fully understood, and/or data for the Area of the Project or scientific analyses are incomplete, leading to a moderate degree of uncertainty; or
- **High (greater than 80% confidence):** The cause-effect relationship(s) between the Project and its interaction with the environment is well understood, and/or data for the Area of the Project or scientific analyses are complete, leading to a low degree of uncertainty.

A summary of the residual effects assessment for Infrastructure and Services VCs is presented in Table 21.6-5. These are the residual effects predicted to occur after the implementation of the mitigation and management measures outlined in Section 21.5, Potential Effects and Mitigation. In alignment with EAO guidance, residual effects are carried forward into the cumulative effects assessment (Section 21.7, Cumulative Effects Assessment), regardless of their characterization.

Table 21.6-5: Summary of Residual Effects on Infrastructure and Services Valued Component

Project Phase	Residual Effect	Residual Effect Characterization	Confidence and Risk
Operations	Pressure on health care services and facilities	Magnitude: Moderate Geographical Extent: Regional / Indigenous People Duration: Medium-term Frequency: Continuous Reversibility: Reversible Long-term Resiliency: Low Context: Neutral Importance: High	Confidence: Medium Probability: Medium Consequence: Moderate Risk: Medium
Operations	Pressure on affordability and availability of housing	Magnitude: Moderate Geographical Extent: Community Duration: Medium-term Frequency: Continuous Reversibility: Reversible Long-term Resiliency: Low Context: Low Importance: High	Confidence: Medium Probability: Medium Consequence: Moderate Risk: Medium

The cause-and-effect relationship between the Project and its interactions with the health care services and facilities and housing are understood, but the extent that the Project results in in-migration cannot be predicted with confidence as it is contingent on many variables that may shift throughout the Operations phase, and based on the context and experiences of employees and contractors. This leads to a medium degree of uncertainty.

Gender-based Analysis Plus Highlight

A summary of the residual effects assessment for the Infrastructure and Services VC in consideration of GBA Plus is presented in Table 21.6-6.

The cause-and-effect relationship between the Project and its interactions with the health care services and facilities and housing in consideration of GBA Plus is understood, but, as mentioned above, the degree of in-migration cannot be predicted with confidence. This leads to a medium degree of confidence.

As noted in Table 21.6-6, high risks have been identified for pressure on health care services and facilities for Indigenous people, remote/rural populations, and individuals with existing mental health challenges and/or addictions during Operations, and pressure on availability and affordability of housing for Indigenous people, low-income individuals, gender-diverse populations, and rural and remote populations during Operations. The high risks are based on the high magnitude rating informed in part by the low resilience to change.

Table 21.6-6: Summary of Residual Effects on Infrastructure and Services Valued Component in Consideration of Gender-based Analysis Plus

Project Phase	Residual Effect	Residual Effect Characterization	Confidence and Risk
Operations	Pressure on health care services and facilities—for Indigenous people, remote/rural populations, individuals with existing mental health challenges and/or addictions	Magnitude: High Geographical Extent: Regional / Indigenous People Duration: Medium-term Frequency: Continuous Reversibility: Reversible Long-term Resiliency: Low Context: <i>High</i> Importance: High	Confidence: Medium Probability: Medium Consequence: <i>Major</i> Risk: <i>High</i>
Operations	Pressure on availability and affordability of housing—for Indigenous people, low-income individuals, gender-diverse populations, and rural and remote populations	Magnitude: High Geographical Extent: Community Duration: Medium-term Frequency: Continuous Reversibility: Reversible Long-term Resiliency: Low Context: <i>High</i> Importance: High	Confidence: Medium Probability: Medium Consequence: <i>Major</i> Risk: <i>High</i>

Note:

Any characterizations in this table that are different than those presented in Table 21.6-5 are noted in italics.

21.7 Cumulative Effects Assessment

The potential for cumulative effects arises when the residual effects of a Project overlap and interact with those of other historic, existing, or reasonably foreseeable future projects or activities. The cumulative effects assessment (CEA) considers the potential environmental, economic, health, social, and heritage cumulative effects of the Project according to the requirements of the EAO (as described in the Hybrid AIR). Detailed methodology for this CEA is provided in Section 10.7, Cumulative Effects Assessment, in Chapter 10, Valued Component Effects Assessment Methods.

21.7.1 Assessment Boundaries

The CEA considers the spatial and temporal extent of Project-related predicted changes and residual effects on VCs, combined with the anticipated residual effects from other projects and activities, to assist with analyzing the potential for a cumulative effect to occur.

21.7.1.1 Spatial Boundaries

The provincial “Effects Assessment Policy” (EAO 2020, 27) states that, “The spatial boundary for cumulative effects assessment for a VC should encompass the area within which the residual effects of the project are

likely to interact cumulatively with the effects of other past, present and reasonably foreseeable future projects and activities on that same VC.”

The spatial boundary for the CEA of Infrastructure and Services VC is the Human Health RAA in consideration that there are communities such as Prince Rupert, District of Kitimat, District of Houston, and Village of Burns Lake that rely on health infrastructure and services in Smithers and Terrace (both within the Infrastructure and Services RAA; Figure 21.7-1). Therefore, a change in availability of health care and social services and facilities due to the Project and other past, present, and reasonably foreseeable future projects could have implications for Prince Rupert, District of Kitimat, District of Houston, and Village of Burns Lake. For this assessment, the spatial boundary will be referred to as the Infrastructure and Services CEA Area (CEAA).

21.7.1.2 Temporal Boundaries

The CEA temporal boundaries consider the past and reasonably foreseeable future projects and activities that are known or are reasonably foreseeable and the degree to which the environmental effects of these projects and activities overlap those predicted from the Project. For the Infrastructure and Services VC, the defined timelines extend far enough that the cumulative effects would no longer be measurable or would be considered negligible.

The Infrastructure and Services VC cumulative assessment considers four Project phases:

- Construction phase: 2 years;
- Operations phase: 13 years;
- Reclamation and Closure phase: 3 years; and
- Post-closure phase: timeframe will be in accordance with permit conditions.

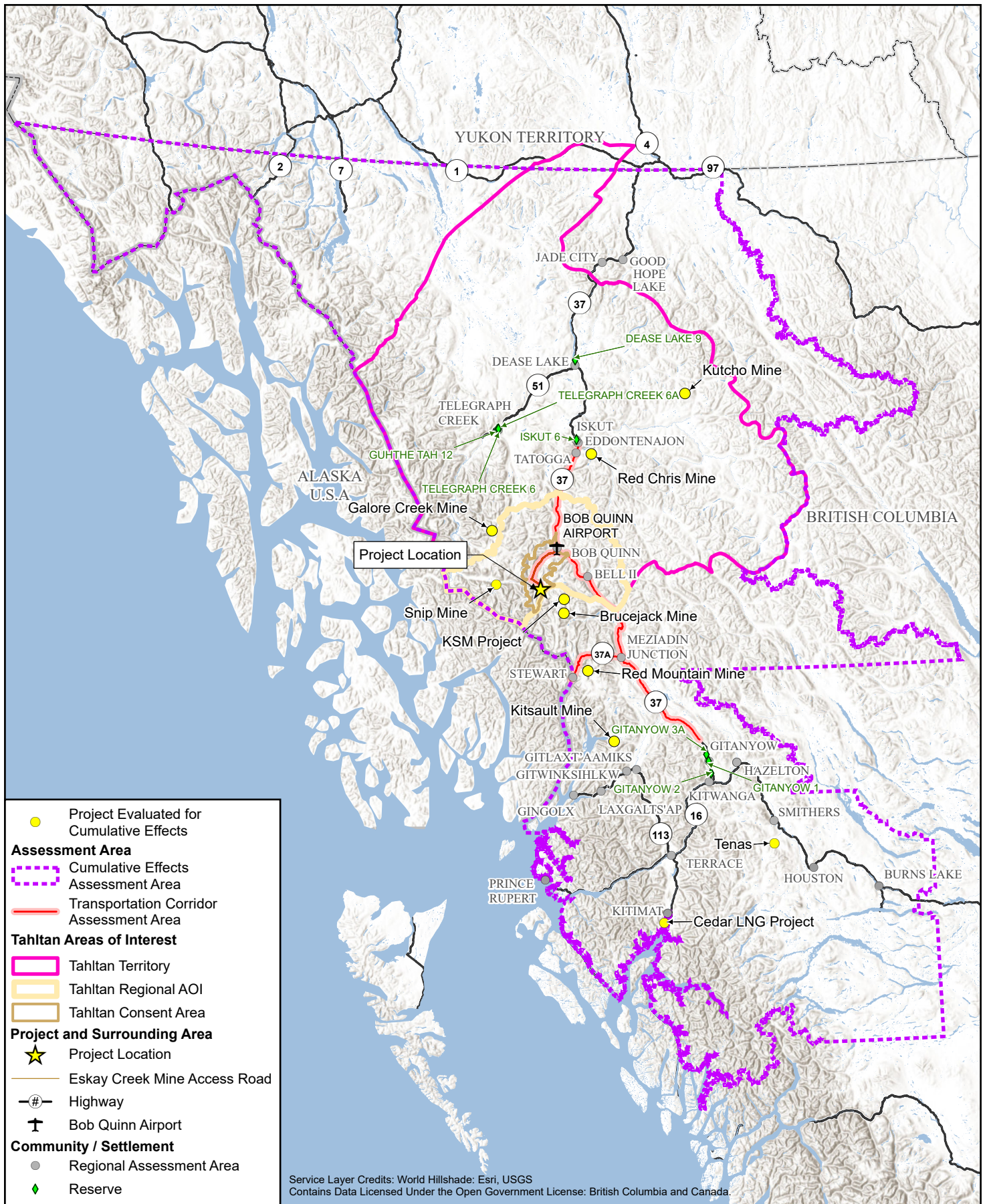
Upon closure of the Project, it is anticipated that a much smaller workforce will be required, and as such, Project-related employees would depart the RAA communities for other employment opportunities, no longer putting pressure on health care and social services and on housing, including alongside the pressure presented by other past, present, and reasonably foreseeable future projects.

21.7.2 Potential Cumulative Effects and Mitigation

In this section, projects and activities (described and mapped in Section 10.7, Cumulative Effects Assessment in Chapter 10, Valued Component Effects Assessment Methods) with the potential to cause a cumulative effect with the Project are identified and discussed. Additional mitigation measures to minimize cumulative effects are also identified and discussed, where applicable.

21.7.2.1 Identification of Potential Cumulative Interactions

A matrix approach in Table 21.7-1 is used to screen and rank the potential for cumulative interactions between the residual effects of the Project and those of other past, present, and reasonably foreseeable future projects and activities. Cumulative interactions identified are described and supporting rationale for the assigned interaction rankings is provided below. Concerns related to cumulative effects that were raised by Engaged Indigenous Nations, government agencies, local governments, the public, and other stakeholders are summarized.



Within the interactions matrix, the potential for interaction is assigned a symbol as follows:

- **Empty circle (○):** a cumulative interaction between the Project’s residual effects and those of other projects and activities is not expected;
- **Half-filled circle (◐):** a cumulative interaction between the Project’s residual effects and those of other projects and activities is possible; and
- **Filled circle (●):** a cumulative interaction between the Project’s residual effects and those of other projects and activities is likely or certain.

Cells coded as *not expected* (empty circle) are considered to have no potential for a cumulative interaction and are scoped out of further assessment in this chapter. Cumulative interactions considered possible or likely are described below and carried forward to the next step in the assessment.

Table 21.7-1: Potential Interactions between the Residual Effects of the Project on Infrastructure and Services Valued Component Topics and the Residual Effects of Other Projects

Projects	Potential Interaction with Infrastructure and Services VC Topics	
	Health Care Services and Facilities	Housing Availability and Affordability
Past Projects		
Eskay Creek Mine (historical)	○	○
Kitsault Mine ¹	○	○
Snip Mine ¹	○	○
Tulsequah Chief Mine	○	○
Present Projects		
Brucejack Mine	◐	◐
Coastal GasLink Pipeline	○	○
Forrest Kerr Hydroelectric	○	○
LNG Canada Export Terminal	◐	○
Long Lake Hydroelectric	○	○
McLymont Creek Hydroelectric	○	○
Northwest Transmission Line	○	○
Pacific Trail Pipeline	○	○
Premier Gold Mine	◐	◐
Red Chris Mine	◐	◐
Rio Tinto BC Works	○	○
Silvertip Mine Project	○	○
Volcano Creek Hydroelectric	○	○

Projects	Potential Interaction with Infrastructure and Services VC Topics	
	Health Care Services and Facilities	Housing Availability and Affordability
Reasonably Foreseeable Future		
Cedar LNG Project	◐	○
Eskay Creek Mine (Eskay Creek Technical Sample Project)	●	●
Galore Creek Mine	◐	◐
Goldwedge Mine	◐	◐
Kitsault Mine ¹	◐	◐
Ksi Lisims LNG	◐	◐
KSM Mine	◐	◐
Kutcho Mine	◐	◐
New Polaris Gold Mine	○	○
Red Chris Underground Mine	◐	◐
Red Mountain Project	◐	◐
Ridley Island Export Logistics Project	○	○
Silvertip Silver/Lead/Zinc Mine	○	○
Sik-E-Dakh Sewage Collection and Treatment Facility	○	○
Snip Mine ¹	◐	◐
Tenas	◐	◐
Vopak Pacific Canada (now Ridley Island Energy Export Facility)	○	○

Notes:

KSM = Kerr-Sulphurets-Mitchell; LNG = liquefied natural gas; VC = Valued Component

¹ Projects with both a historical operation and a proposed future operation

○ = cumulative interaction not expected

◐ = possible cumulative interaction

● = likely cumulative interaction

Gender-based Analysis Plus Highlight

As with the Project-specific assessment, interactions with all human-focused VCs were scoped inclusively for this stage of the CEA. Whether there is a possible or likely interaction with a VC relating to the population as a whole or a specific, distinct subgroup, that interaction was carried forward to the next step in the assessment.

Pressure on Health Care Services and Facilities

Residual effects from past, present, and reasonably foreseeable future projects and activities have a similar pathway of effect on the Infrastructure and Services VC as the Project (Section 21.5.2.2, Effect Pathways), namely the in-migration of contractors and employees, as well as the families of employees, that move to Infrastructure and Services CEAA may result in a cumulative increased demand for health care services and facilities.

Past projects are not anticipated to interact cumulatively with the Project as there is no workforce associated with their operations. As such, there is no demand for infrastructure and services, and specifically health care services and facilities, from these projects.

There are four existing projects or operations that have the potential to interact cumulatively with the Project in relation to pressure on health care services and facilities. The operating projects/operations are described below:

- **Brucejack Mine**, owned by Newcrest, an underground gold and silver mine located 65 km north of District of Stewart and 25 km southeast of the Project. This is a fly-in and fly-out mine, with a workcamp located onsite, including medical services. As of the end of 2021, workforce at the mine was 1,520 employees (Pretium Resources Inc. 2022).
- **Red Chris Mine**, a joint venture between Newcrest and Imperial Metals, is an underground gold and copper mine located about 18 km southeast of Iskut and 110 km north-northeast of the Project. This is a fly-in and fly-out mine, with a workcamp located onsite. Workers are flown to Dease Lake Airport or Iskut airstrip or bused into the site from nearby communities (AMEC 2004). The mine workforce was 803 direct employees as of 2023 (Newcrest 2023).
- **Premier Gold Mine**, owned by Ascot Resources, is a gold mine located 25 km north from the District of Stewart, on Nisga'a Nation Lands and 80 km southeast of the Project. At the start of 2024, the workforce at the mine was about 200 employees, and 60 jobs were open (Wilson 2024). This is a fly-in and fly-out mine, with a workcamp located onsite. (Ascot Resources Ltd. 2024).
- **LNG⁴⁴ Canada Export Terminal** is a natural gas liquefaction facility and marine terminal for the export of LNG. The LNG Canada Export Terminal is located within the District of Kitimat (about 310 km southeast from the Project). At the end of November 2022, 6,033 workers were employed at the Kitimat project site of which 660 were local area workers (LNG Canada 2023). During the Construction phase, employment was anticipated to be from 4,500 to 7,500 workers. During operation of the first phase, employment was estimated to include 200 to 300 LNG Canada staff and 150 to 250 contractor staff. At full build-out, the Project will employ approximately 250 to 450 LNG Canada staff and 200 to 350 contractor staff. LNG Canada is anticipating starting commercial operations by the middle of 2025 (LNG Canada Export Terminal 2014). To limit the impact of a large influx of people on the District of Kitimat community, LNG Canada built a workforce accommodation centre, which can house up to 4,500 people. (LNG Canada n.d.)

Additionally, 12 reasonably foreseeable future projects and activities have potential to interact cumulatively with the Project as it relates to a change in demand for health care services and facilities (Table 21.7-1).

⁴⁴ LNG stands for liquefied natural gas.

The potential cumulative effect of pressure on health care services and facilities can be attributed to:

- Demand for health care services and facilities due to the population in-migration associated with the listed projects; and
- Demand for health care services and facilities due to employees of the listed projects who may occasionally require offsite health care services.

Increased demand for health care services and facilities may lead to a reduction of health care available for local populations, including diverse subgroups that might experience disproportionate effects.

Existing operations and reasonably foreseeable future projects are anticipated to contribute to a cumulative effect on health care services and infrastructure as a result of their employee and contract base. For the existing and reasonably foreseeable future mine projects with fly-in and fly-out operations (e.g., Brucejack, KSM, and Galore), there is potential for employees and their families to relocate to the Infrastructure and Services VC CEAA to be closer for work rotations. The in-migration of employees and their families has potential to put cumulative pressure on health infrastructure and services in Terrace and Smithers, as well as health care facilities of Tahltan communities, Nisga'a Villages, and the District of Stewart. Currently, health care services are at capacity, and as such, additional demand from new residents of these communities will have a negative cumulative effect. Additionally, accidents or incidents at the existing operations or reasonably foreseeable future projects may require occasional support from health care services and infrastructure, and on a cumulative basis, these occasional demands may put pressure on the existing capacity.

It should be mentioned that health care services and facilities rely on government funding allocations, which are in turn determined by regional need. It is expected that the government will adjust funding accordingly if demand increases due to new projects and the additional tax revenue generated.

There are data limitations associated with understanding of the potential for and characterization of a cumulative effect on health care services and facilities. Relevant information was not available in the public sources, nor was it provided during KIIs organized to gather these data. This included:

- Information on the workforces required for reasonably foreseeable future projects;
- Information about the extent of in-migration to communities in the CEA spatial boundary that would require health care services;
- Information from health care services providers around current or future plans for staffing growth, or services and infrastructure expansion;
- Information from health care services providers around approaches to triage services in the case of cumulative needs by industries/operations;
- Information about telehealth or remote health services that may be deployed for communities to reduce the need to travel to health centres in the CEA spatial boundary; and
- Implications of continued pressure on infrastructure and services that are already at capacity (e.g., staffing retention, quality of service, and ability to upgrade infrastructure).

Concerns related to cumulative effects to health care services and facilities raised by Engaged Indigenous Nations, government agencies, local governments, the public, and other stakeholders are summarized below:

- Northern Health noted that projects in the region could contribute to a cumulative impact on health care infrastructure, especially with a demand from out-of-region workers (TAC 2023).
- In Terrace, there are waitlists for family physicians and there is a perception that major projects can exacerbate the issue of accessing limited health professionals (Terrace Chamber of Commerce, pers. comm., 2024).
- In District of Stewart, drop-in patients at the Stewart Health Clinic are often workers from mining, logging, or highway operations. Residents who require ongoing services may travel outside of District of Stewart to receive primary care and avoid disruptions to service due to drop-in patients (Stewart Health Clinic, Northern Health, pers. comm., 2024).

Gender-based Analysis Plus Highlight

Rural populations/people without reliable transportation, Indigenous people, and individuals with mental health challenges and addictions may be disproportionately affected by cumulative changes in demand for health care services and facilities.

Pressure on health care services and facilities and a reduced access to services may lead to a disproportionately large burden for people who lack reliable and affordable options for transportation, as well as Indigenous people who are residing in rural and remote communities. Individuals with pre-existing mental health or addictions challenges may be more vulnerable if access to health care services and facilities is reduced. The burden of effects may be more acute considering multiple projects in the Infrastructure and Services VC CEAA.

Additional pressure on health care services and facilities from present and reasonably foreseeable future projects and activities may lead to additional burden on these diverse subgroups.

Pressure on Housing Affordability and Availability

There is potential for Project employees and their families that move into the Infrastructure and Services VC CEAA, combined with employees and contractors of other projects, to cumulatively put pressure on housing availability and affordability.

Past projects are not anticipated to interact cumulatively with the Project as there is no associated workforce requiring housing.

There are three operational mines (i.e., Brucejack Mine, Red Chris Mine, and Premier Gold Mine) with potential to interact cumulatively in relation to pressure on housing. Table 21.7-1 identifies 11 reasonably foreseeable future projects and activities with potential to interact cumulatively with the Project as it relates to a change in demand for housing in the LAA and RAA communities.

Potential cumulative adverse effects include:

- Project-related population changes increasing demand for housing in Terrace, Smithers, as well as Tahltan communities, Nisga'a Villages, and the District of Stewart during Operations; and
- Increases in demand may reduce the availability of housing and accommodation for current LAA and RAA community members during Operations.

Existing operations and reasonably foreseeable future projects are anticipated to contribute to a cumulative effect on housing as a result of their employees and contractors. For existing and reasonably foreseeable future mine projects with fly-in and fly-out operations (e.g., Brucejack, KSM, and Galore), there is potential for employees and their families to relocate to the Infrastructure and Services VC CEAA to be closer for work rotations. The in-migration of employees and their families has potential to put cumulative pressure on housing in Terrace and Smithers, as most of the workers will choose these communities as they have a range of services, in addition to Terrace being the main transportation hub for the Project. Cumulative pressure on housing in Tahltan communities and Nisga'a Villages may occur because of Tahltan members and Nisga'a Citizens moving back to their communities after obtaining employment at the listed projects. Currently, housing in all potentially affected communities is characterized as having few housing options and high rents, as well as low housing growth rates. As such, demand by employees and contractors of capital infrastructure projects could have a negative cumulative effect on housing availability and affordability.

The magnitude of the effects will depend on the number of employees who decide to relocate to Terrace, Smithers, Tahltan communities, Nisga'a Villages, and the District of Stewart, and the ability of local governments and communities to respond to the increased demand for housing, including affordable housing.

It is anticipated that the cumulative effect could commence around Project Operations. For Terrace, housing for workers of industrial projects is an emerging issue that is expected to put additional stress on an already limited rental stock. There is an existing concern that rental prices will be driven up by subsidies provided for employees of various projects in the area so that they can live outside their home communities, affect affordability and availability of housing (RDKS 2020a).

There are data limitations associated with understanding the potential for and characterization of a cumulative effect on housing availability and affordability. Relevant information was not available in the public sources, nor was it provided during KIIs organized to gather these data. This includes:

- Information on the size of workforces required for reasonably foreseeable future projects;
- Information about the extent of in-migration to communities in the CEAA that would require housing; and
- Information about future housing expansion projects in Terrace, Smithers, Tahltan communities, Nisga'a Villages, and the District of Stewart.

Concerns related to housing raised by Engaged Indigenous Nations, government agencies, local governments, the public, and other stakeholders are summarized below:

- Housing was the most commonly mentioned issue in the Survey and by Tahltan KIIs (Appendix 21-2, Tahltan Socio-economic Baseline Report). Survey respondents commented on the lack of housing as a reason that Tahltan members leave or do not return to communities in Tahltan Territory.

- Housing challenges were identified by municipal representatives including from Terrace, particularly in relation to the difficulty for low-income people to find a place to live (Terrace Chamber of Commerce, pers. comm., 2024; District of Stewart, pers. comm., 2024; Village of Hazelton, pers. comm., 2024).
- Representatives of Terrace and District of Stewart noted that the lack of rental options is a challenge for short-term workers who are employed in the area (City of Terrace, pers. comm., 2024).

Gender-based Analysis Plus Highlight

Indigenous people, low-income households, and gender-diverse populations may be disproportionately affected by a cumulative effect of pressure on housing availability and affordability.

Increases in housing costs may disproportionately affect low-income groups. Decreased housing availability could result in increased reliance on unsuitable housing, including crowded dwellings and dwellings needing major repairs. Indigenous and gender-diverse populations are both substantially more likely than the general population to already live in unsuitable housing, particularly on-reserve (Statistics Canada 2022; Nelson et al. 2023).

21.7.2.2 Mitigation Measures and Effectiveness

No new mitigations are proposed to address the potential cumulative effects of the Project. Mitigations of Project residual effects, presented in Section 21.5.3, Mitigation Measures and Effectiveness, are considered applicable to the cumulative context.

Both residual effects (pressure on health care services and facilities and pressure on availability and affordability of housing) are carried forward in the residual cumulative effects characterization, in Section 21.7.3, Residual Cumulative Effects Characterization.

Gender-based Analysis Plus Highlight

No new mitigations are proposed from those presented in Section 21.5.3, Mitigation Measures and Effectiveness for residual effects mitigations.

21.7.3 Cumulative Residual Effects Characterization

This section provides an assessment and characterization of these predicted residual cumulative effects, and ultimately the confidence relating to the assessment conclusions. Residual cumulative effects for the Infrastructure and Services VC are characterized using the descriptors defined in Section 10.6, Characterization of Residual Effects, in Chapter 10, Valued Component Effects Assessment Methodology. Narrative descriptions and justifications for the characterizations are provided in the sections below.

21.7.3.1 *Pressure on Health Care Services and Facilities*

Four existing projects and 12 reasonably foreseeable future projects located within the CEAA, have a potential to result in cumulative pressure on health care services and facilities, including but not limited to services offered by health care services and facilities in Terrace, Smithers, Tahltan communities, Nisga'a Villages, and the District of Stewart.

A residual cumulative adverse effect of pressure on health care services and facilities is anticipated. The **magnitude** of the residual effect is rated as **high**, in recognition that health care services are already at capacity in the 51 Northwest HSDA and 52 Northern Interior HSDA of the CEAA. Additional pressure on infrastructure and services due to the population in-migration and operations of several projects could result in exceedances of capacity. The **geographic extent** of the effect is **regional / Indigenous people**. The geographic extent recognizes that the effect will be experienced largely in the health care services and facilities of the 51 Northwest HSDA and 52 Northern Interior HSDA of the CEAA, as LAA and RAA communities and Indigenous people rely on the major services provided by Terrace and Smithers, which serve as health care services hubs in the region. The effect is expected during the Project's Operations when the majority of in-migration is anticipated, and in consideration of the reasonably foreseeable future projects, the effect **duration** is **medium-term**, and the **frequency** is considered to be **continuous**, as there will be different but constant pressures on health care services and facilities from project employees and their families that move to the region. The **reversibility** of the effect is **reversible long-term**, as the effect of the Project will be reversed when the majority of employees leave the region during the Project's Reclamation and Closure and Post-closure phases. The Infrastructure and Services VC topic of health care services is assessed to have a **low resiliency**.

There are issues with the capacity of health care services in identified potentially affected communities which are expected to be exacerbated through cumulative demand associated with multiple projects. Although the health care needs arising from each individual project are negligible or minor, their cumulative effect exacerbates existing issues. The **social context** is assessed as being **neutral**, as it has some sensitive aspects (e.g., rotational specialists, different levels of hospital care/service in different communities, providing care to local and remote communities), although the health care offerings are also aligned with other areas in BC. The **importance** of health care services and facilities is **high**, as access to and capacity of health care services are key concerns of Engaged Indigenous Nations and community members, the public, local government, and government agencies. The **probability** of the effect is **medium**, which takes into consideration the experience of other mines in the region (e.g., Brucejack Mine) and KILs (Terrace Chamber of Commerce, pers. comm., 2024; Stewart Health Clinic, Northern Health, pers. comm., 2024) which show that project-related in-migration and general operations of a mine can result in pressure for health care services and facilities.

A summary for the characterization of residual cumulative effects for the Infrastructure and Services VC is provided in Table 21.7-2. The characterization criteria used for the effect descriptions are described in Section 10.6, Characterization of Residual Effects, in Chapter 10, Valued Component Effects Assessment Methodology.

Table 21.7-2: Characterization of Residual Cumulative Effects

Cumulative Residual Effect	Characterization Criteria				
	Magnitude	Geographic Extent	Duration	Frequency	Probability
Pressure on health care services and facilities	High	Regional / Indigenous people	Medium-Term	Continuous	Medium
	Reversibility	Resiliency	Context	Importance	
	Reversible long-term	Low	Neutral	High	

Gender-based Analysis Plus Highlight

Pressure on the already constrained health care services system and exacerbated from the cumulative effects of present and reasonably foreseeable future projects and activities has potential to result in disproportionate effects for diverse subgroups, such as (but not limited to) rural populations/people without reliable transportation, Indigenous people, and individuals with mental health challenges and addictions. The Project is anticipated to have a residual cumulative effect on health care services and facilities (Table 21.7-3). The **magnitude** of the residual effect is rated as **high**, in recognition that diverse subgroups may already have barriers to access a system that is constrained, and diverse subgroups may continue to have challenges accessing services considering population in-migration from the Project and other projects in the CEAA (Section 21.4.3.2). The **geographic extent** of the effect is **regional / Indigenous people**. The geographic extent recognizes that the effect will be experienced by diverse populations within the CEAA. The effect is expected during Operations when the majority of in-migration is anticipated, and in consideration of reasonably foreseeable future projects, the **duration of the effect** is **medium-term**, and the **frequency** is considered to be **continuous**, as there will be different but constant pressures on health care services and facilities from project employees and their families that move to the region. The **reversibility** of the effect is **reversible long-term**, as the effect of the Project will be reversed when the majority of employees leave the region during the Reclamation and Closure and Post-closure phases.

Issues with health care services are particularly acute for rural populations/people without reliable transportation, Indigenous people, and individuals with mental health challenges and addictions (Appendix 20-3, Diverse Subgroups Existing Conditions Supplement). Health care services is assessed to have a **low resiliency in the GBA Plus context**.

The **social context** is assessed as being **high in consideration of GBA Plus**, as it has sensitive offerings for diverse populations (e.g., mental health and substance use services, and community-developed and community-based justice program). The **importance** of health care services is **high**, as access to and capacity of health care services are key concerns of Engaged Indigenous Nations and diverse subgroups. The **probability** of the effect is **medium**, which takes into consideration the experience of other mines and KILs (Terrace Chamber of Commerce, pers. comm., 2024; Stewart Health Clinic, Northern Health, pers. comm., 2024).

Table 21.7-3: Characterization of Residual Cumulative Effects on Pressure on Health Care Services and Facilities in Consideration of Gender-based Plus Analysis

Cumulative Residual Effect	Characterization Criteria				
	Magnitude	Geographic Extent	Duration	Frequency	Probability
Pressure on health care services and facilities – for Indigenous people, remote/rural populations, individuals with existing mental health challenges and/or addictions	High	Regional / Indigenous people	Medium-Term	Continuous	Medium
	Reversibility	Resiliency	Context	Importance	
	Reversible long-term	Low	<i>High</i>	High	

Note:

Any characterizations in this table that are different than those presented in Table 21.7-2 are noted in italics.

21.7.3.2 Pressure on Availability and Affordability of Housing

Three existing projects and 11 reasonably foreseeable future projects within the CEAA have a potential to result in cumulative pressure on the availability and affordability of housing, mainly in Terrace and Smithers, but also in Tahltan communities, Nisga’a Villages, and the District of Stewart. The **magnitude** of the residual effect is rated as **high**, in recognition that housing is already at capacity in Terrace, Smithers, Tahltan communities, Nisga’a Villages, and the District of Stewart. While there is no guideline or threshold value for housing services, it is documented that housing is at capacity in Terrace, Smithers, Tahltan communities, Nisga’a Villages and District of Stewart (Section 21.4.3.6, Housing and Accommodation). Additional pressure on housing during Operations could result in additional exceedances of capacity. The **geographic extent** of the effect is **community**. The geographic extent recognizes that the effect will be experienced largely in Terrace and Smithers, where major population in-migration will take place. The effect is expected during Operations when the majority of in-migration is anticipated, so the effect **duration** is **medium-term**, and the **frequency** is considered to be **continuous**, as there will be constant pressures on housing from the Project employees and their families that move to the region. The **reversibility** of the effect is **reversible long-term**, as the effect of the Project will be reversed when the majority of employees leave the region during the Reclamation and Closure and Post-closure phases. The Infrastructure and Services VC topic of housing is assessed to have a **low resiliency**.

There are housing availability and affordability constraints for current residents of the LAA and RAA communities which are expected to be under more pressure in the case of cumulative projects requiring short and long-term accommodations. The **social context** is assessed as being **low**, as the housing situation is similar to other areas in BC with high property prices and limited availability. The **importance** of housing is **high**, as availability of housing is a key concern of Engaged Indigenous Nations and community members, the public, local governments, and government agencies. The **probability** of the effect is **medium**, which takes into consideration the experience of other mines in the region that shows that project-related in-migration and general operations of a mine, can result in pressure for housing (e.g., the Survey; Terrace Chamber of Commerce, pers. comm., 2024; District of Stewart, pers. comm., 2024; Village of Hazelton, pers. comm., 2024; City of Terrace, pers. comm., 2024).

A summary for the characterization of residual cumulative effects for the Infrastructure and Services VC is provided in Table 21.7-4. The characterization criteria used for the effect descriptions are described in Section 10.6, Characterization of Residual Effects, in Chapter 10, Valued Component Effects Assessment Methodology.

Table 21.7-4: Characterization of Residual Cumulative Effects

Cumulative Residual Effect	Characterization Criteria				
	Magnitude	Geographic Extent	Duration	Frequency	Probability
Pressure on availability and affordability of housing	High	Community	Medium-Term	Continuous	Medium
	Reversibility	Resiliency	Context	Importance	
	Reversible long-term	Low	Low	High	

Gender-based Analysis Plus Highlight

Indigenous people, low-income households and gender-diverse population may be disproportionately affected by change in demand for housing resulting from a cumulative effect of the Project combined with present and reasonably foreseeable future projects and activities. A residual cumulative effect on housing availability and affordability is anticipated (Table 21.7-5).

The **magnitude** of the residual effect is rated as **high**, in recognition that housing is already at capacity in communities that are hubs for hiring and procurement for projects in the CEAA, as well as other LAA and RAA communities. The **geographic extent** of the effect is **community**, as the disproportionate effect will be largely experienced by diverse subgroups in Terrace and Smithers, where population in-migration may take place. The effect is expected during Operations when the majority of in-migration is anticipated, and in consideration of the reasonably foreseeable future projects, the effect **duration** is **medium-term**, and the **frequency** is considered to be **continuous**, as there will be constant pressures on housing from the Project employees and their families that move to the region. The **reversibility** of the effect is **reversible long-term**, as the effect of the Project will be removed when the majority of employees leave the region during the Reclamation and Closure and Post-closure phases. Considering overall pressure on housing affordability and availability in the region, the Infrastructure and Services VC topic of housing is assessed to have **low resiliency in the GBA Plus context**.

The **social context** is assessed as being **high in the GBA Plus context**. The **importance** of housing is **high** considering the importance of housing for all people. The **probability** of the effect is **medium**, which takes into consideration the experience of other mines and KIs (Terrace Chamber of Commerce, pers. comm., 2024; District of Stewart, pers. comm., 2024; Village of Hazelton, pers. comm., 2024; City of Terrace, pers. comm., 2024).

Table 21.7-5: Characterization of Cumulative Residual Effects on Pressure on Availability and Affordability of Housing in Consideration of Gender-based Plus Analysis

Cumulative Residual Effect	Characterization Criteria				
	Magnitude	Geographic Extent	Duration	Frequency	Probability
Pressure on availability and affordability of housing – for Indigenous people, low-income individuals, gender-diverse populations, and rural and remote populations	High	Community	Medium-Term	Continuous	Medium
	Reversibility	Resiliency	Context	Importance	
	Reversible long-term	Low	<i>High</i>	High	

Note:

Any characterizations in this table that are different than those presented in Table 21.7-4 are noted in italics.

21.7.3.3 Summary of the Assessment of Residual Cumulative Effects

A summary for the characterization of residual cumulative effects for the Infrastructure and Services VC is provided in Table 21.7-6. The characterization criteria used for the effect descriptions are described in Section 10.6, Characterization of Residual Effects, in Chapter 10, Valued Component Effects Assessment Methodology.

As noted in Table 21.7-6, high risks have been identified for pressure on health care services and facilities during Operations, and pressure on availability and affordability of housing during Operations. The high risks are based on the high magnitude rating informed, in part, by the low resilience to change.

The confidence in the CEA is provided based on a consideration of the parameters described in Section 21.6.3, Summary of the Assessment of Residual Effects. For both effects, the cause-and-effect relationship between the Project and its interactions with health care services and facilities and housing are understood, but the degree of in-migration cannot be predicted with the greatest of confidence as it is contingent on many variables that may shift over time. For the purposes of the CEA, it has been assumed that all reasonably foreseeable future projects listed in Table 21.7-1 will occur, but it is currently unknown how many of them will be implemented and their timelines are not clearly understood. This means that the interaction between the Project and other reasonably foreseeable future projects and activities is uncertain. This leads to a medium degree of uncertainty.

Table 21.7-6: Summary of Residual Cumulative Effects on the Infrastructure and Services Valued Component

Project Phase	Residual Effect	Residual Effect Characterization	Confidence and Risk
Operations	Pressure on health care services and facilities	Magnitude: High Geographical Extent: Regional / Indigenous People Duration: Medium-term Frequency: Continuous Reversibility: Reversible Long-term Resiliency: Low Context: Neutral Importance: High	Confidence: Medium Probability: Medium Consequence: Major Risk: High
Operations	Pressure on availability and affordability of housing	Magnitude: High Geographical Extent: Community Duration: Medium-term Frequency: Continuous Reversibility: Reversible Long-term Resiliency: Low Context: Low Importance: High	Confidence: Medium Probability: Medium Consequence: Major Risk: High

Gender-based Analysis Plus Highlight

Residual cumulative effects and their characterization criteria and confidence evaluations are summarized in Table 21.7-7.

The confidence in the CEA is provided based on a consideration of the parameters described in Section 21.6, Summary of the Assessment of Residual Effects, as well as considerations outlined above. Based on these parameters and the conclusions presented in Table 21.7-6, a medium degree of uncertainty is evaluated for disproportionate effects on diverse subgroups. As noted in Table 21.7-7, high risks have been identified for pressure on health care services and facilities for Indigenous people, remote/rural populations, and individuals with existing mental health challenges and/or addictions during Operations, and pressure on availability and affordability of housing for Indigenous people, low-income individuals, gender-diverse populations, and rural and remote populations during Operations. The high risks are based on the high magnitude rating informed in part by the low resilience to change.

Table 21.7-7: Summary of Residual Cumulative Effects on Infrastructure and Services Valued Component in Consideration of Gender-based Plus Analysis

Project Phase	Residual Effect	Residual Effect Characterization	Confidence and Risk
Operations	Pressure on health care services and facilities – for Indigenous people, remote/rural populations, individuals with existing mental health challenges and/or addictions	Magnitude: High Geographical Extent: Regional / Indigenous People Duration: Medium-term Frequency: Continuous Reversibility: Reversible Long-term Resiliency: Low Context: <i>High</i> Importance: High	Confidence: Medium Probability: Medium Consequence: Major Risk: High
Operations	Pressure on availability and affordability of housing – for Indigenous people, low-income individuals, gender-diverse populations, and rural and remote populations	Magnitude: High Geographical Extent: Community Duration: Medium-term Frequency: Continuous Reversibility: Reversible Long-term Resiliency: Low Context: <i>High</i> Importance: High	Confidence: Medium Probability: Medium Consequence: Major Risk: High

Note:

Any characterizations in this table that are different than those presented in Table 21.7-6 are noted in italics.

21.8 Tahltan Sustainability Requirements and Tahltan Risk Assessment Factors for Understanding Potential Effects to Current and Future Generations

For the Eskay Creek Revitalization Project, the Declaration Act Consent Decision-Making Agreement for Eskay Creek Project (Schedules D and E) identifies the Tahltan Risk Assessment Factors and Sustainability Requirements that Tahltan are using to determine whether the Project is sustainable and not resulting in impacts to Tahltan Values and Tahltan people now and for future generations.

Throughout the environmental assessment process, Tahltan have provided guidance to aid in understanding Tahltan Knowledge and perspectives in several ways, including by providing the following priorities to be used as measuring tools when considering the current and future effects of the Project to Tahltan:

- Priority 1. Health of the land and water – maintaining the long-term health of the land (including all of its terrestrial and aquatic ecosystems) is a mandatory condition for any kind of land use in all areas within the Nation.**

- **Priority 2.** *Tahltan relationship and connections/Tahltan way of life – the land must be able to continue supporting Tahltan way of life while meeting the “health of the land” condition established under Priority 1. The Tahltan way of life includes maintaining connections with the land, being able to live off the land, sustaining harvesting and hunting patterns, engaging in cultural and spiritual practices (most of which are tied to the land), and earning a reliable living.*
- **Priority 3.** *Reclamation or restoration to support Tahltan way of life – land that has been degraded and polluted through industrial use must be healed, through reclamation, restoration, and ritual ceremony.*
- **Priority 4.** *Other uses will be considered, provided they meet all of the territory-wide and site-specific principles, objectives, and constraints under priorities 1, 2, and 3 (Technical Advisor, THREAT, pers. comm., 17 June 2024).*

The Tahltan Assessment is led by Tahltan Knowledge and informed by science. The Hybrid AIR (EAO 2023b) specifies the technical requirements needed to inform the Tahltan Assessment for key values such as water, wildlife, fish, quiet enjoyment of the land, and current and future uses for traditional land uses.

It is important to understand that knowledge streams can have relationships similar to tributaries entering a main stem (THREAT 2024), where there are still independent flows and flows where there is weaving of knowledge.

One way for western science practitioners to gain understanding is to see the Project components as barriers (THREAT 2024). Barriers are human activities and Project components that can restrict, limit, or permanently remove Tahltan Values or Tahltan way of life/connection to the values. Viewing the past (seven generations) to determine what barriers may or may not have been in place compared to today, and then viewing into the future will assist in seeing whether the proposed component will add to an existing barrier, remove the barrier, or stay as a barrier. A potential barrier could be created by the Project if populations increase in the region due to Project-related employment opportunities putting pressure on already constrained health care services and facilities, which serve LAA and RAA communities, including Tahltan communities. Additional pressure on health care services and facilities may lead to difficulty accessing necessary medical services due to capacity constraints and higher healthcare costs for members of the Tahltan Nation and Tahltan communities.

Viewing the past, current, and future barriers and Tahltan Values as identified in the Hybrid AIR (EAO 2023b), Section 4.7, Summary of Effects on Current and Future Generations, and Section 4.8, Summary of Eskay Creek’s Ability to Meet Tahltan Sustainability Requirements, summarize how this EAC Application must consider the Project’s effects in relation to Tahltan objectives regarding balanced and sustainable development in a fashion that respects the Declaration Act Agreement requirements, the above priorities and guidance, and key Tahltan policy and governance documents, including the “1910 Tahltan Declaration” (Tahltan Tribe 1910), the 1987 “Tahltan Resource Development Policy” (Tahltan Tribal Council 1987), and the 2003 Out of Respect symposium (Tahltan [First] Nation and IISD 2004), as well as the “Tahltan Impact Assessment Policy” (2022).

In addition to the above, the Tahltan Sustainability Requirements (EAO 2023b, 30–31) also specifically indicate avoiding significant impacts to Tahltan Values through residual or cumulative effects: by allowing Tahltan to maintain their way of life, and to continue conducting social, cultural, economic and environmental activities and practices, including those associated with meeting food security needs. The Requirements also note that projects should support future use by returning the land to a level of environmental health that supports Tahltan title, rights, and land use across the Tahltan Continuum; avoiding the need for ongoing treatment to restore and maintain land and water to near normal condition; and supporting or assisting the creation of social, cultural and environmental legacies. The Tahltan Sustainability Requirements thereby capture the Tahltan Continuum’s implicit concern with continuity in land use from today extending forward to future generations, such that they are equally able to use, steward, and enjoy their lands.

The Western science assessment concludes that the Project is anticipated to have residual effects of moderate scientific magnitude after mitigation on health care services and facilities and availability and affordability of housing. Effects on housing are expected at the community level, while those on health care are expected to be regional in extent. Duration of effects will be medium-term (6 to 25 years, or one generation or less), extending through Operations when Project-related in-migration will take place. While the increase in pressure on health care and housing will be continuous during these phases, it will be reversible long-term (more than one generation), as population associated with the Project disperses following closure.

The importance of residual effects to health care services and facilities and housing has been rated as high, partly in recognition of the particular challenges that health care and housing pressures pose for Tahltan. Current housing shortages render Tahltan communities highly sensitive to increased housing pressures (see Section 21.6.1, Pressure on Availability and Affordability of Housing). Issues around health care are reflected in the selection of Human Health as both a VC and a Tahltan Value for this Project (EAO 2023b; see also Chapter 4, Tahltan Application Information Requirements, and Chapter 20, Human Health Effects Assessment).

Cumulative residual effects for pressure on health care services and facilities and pressure on housing availability and affordability are also expected, and they are anticipated to be of high scientific magnitude, and medium-term in duration (26 to 50 years, or more than one generation). However, these cumulative residual effects again will be reversible long-term (more than one generation), as people brought to the region by the Project disperses, and/or realization of current initiatives in the region, like investments and projects related to health care and housing, help to relieve any ongoing pressures.

While the Project has potential to result in residual and cumulative effects on health care and housing for Tahltan, mitigation and management of these residual effects have been proposed to minimize these socio-economic effects. Measures include recruitment efforts aimed at the LAA and RAA to reduce the inflow of population, as well as the development and implementation of Project-specific health, safety, and medical emergency plans. To gain further understanding of the potential effects to Tahltan, information contained in this chapter and associated appendices have been shared with Tahltan prior to this EAC Application’s submission, and the Tahltan are providing their understandings in other sections of the EAC Application and in the Tahltan Risk Assessment Report.

While not specifically assessing this topic, Chapter 4, Tahltan Application Information, has identified the importance of infrastructure and services through the socio-cultural assessments, as it is tied to Tahltan health, community stability, and infrastructure/services with the economic benefits and the health of the land and water primarily through employment, social, cultural, and environmental legacies. As this chapter is finalized, additional effects and mitigations may be documented. Skeena Resources' view of the information is that this largely aligns with the conclusions of the VC effects assessment on the potential for Project-related residual effects and cumulative effects within the Project Footprint and Tahltan Consent Area AOs.

It is Skeena Resources' perspective that the Project supports Tahltan legacies as they relate to protection, management, and use of the natural environment, as it concentrates development activities in a previously developed and disturbed area. Additionally, while the Project has the potential to introduce adverse effects associated with health care and housing, these pressures can be reversible over several generations, and the Project also will have positive socio-economic effects that support Tahltan objectives as they relate to local growth of and opportunities for business and employment (see Chapter 24, Employment and Economy Effects Assessment). Furthermore, Tahltan environmental legacies will be supported through proposed reclamation and closure processes and post-closure measures designed to return the mine site to a healthier environmental condition specified in the Tahltan Sustainability Requirements. Ongoing measures or treatments to sustain it in this state are anticipated to be necessary; as such, the land should be returned to a self-sustaining natural condition suitable for use by future generations.

21.9 Follow-up Strategy

As described in Section 21.5, Potential Effects and Mitigation, in-migration is a key pathway of potential effects on the Infrastructure and Services VC. There is a level of uncertainty regarding the level of in-migration and locations where new residents may settle in the LAA and RAA to leverage employment opportunities, as moving to the region depends on personal and family contexts. A Socio-economic Monitoring Plan is proposed as a follow-up strategy, as described in Appendix A-1, Summary of Management Plans and Mitigation Measures. The Socio-economic Monitoring Plan will entail compiling and analyzing a set of indicators that allow Skeena Resources to understand population changes and their implication to infrastructure and services, and adaptively manage any effects that have not been anticipated or may be more adverse than anticipated, including in the case of disproportionate effects to subgroups.

The indicators incorporated into the Socio-economic Monitoring Plan will be shared with Engaged Indigenous Nations, regulators, relevant representatives of LAA and RAA communities and services providers. The data used to support this plan will focus on indicator availability, applicability of indicators for public reporting (e.g., in the case of health information), and relevance to monitoring effects.

Recognizing that indicators can lag behind impacts or experiences of communities, the Socio-economic Monitoring Plan will include, or reference, a feedback or grievance mechanism. Management and response to concerns will provide Skeena Resources with indications of potential effects or trends of impacts to infrastructure or services, allowing for adaptive management.

21.10 Conclusions

Infrastructure and Services is identified as a VC because the Project has the potential to put pressure on infrastructure and services in the LAA and RAA communities. This could, in turn, result in effects on Tahltan Values, including Human Health. Potential effects on these values have been identified through engagement with Engaged Indigenous Nations, government agencies, and other stakeholders, as well as through technical expertise / professional judgment.

Although the Project is in a relatively remote setting, as a result of the movement of people, equipment, and other goods, there is potential for interaction between the Project and important infrastructure and services for residents of LAA and RAA communities. Project employment and associated in-migration of employees and their families to the LAA and RAA communities (mainly to Terrace and Smithers, and possibly to Tahltan communities, Nisga'a Villages, and the District of Stewart) is the main pathway for predicted Infrastructure and Services VC effects.

The Project's potential to put pressure on utilities (i.e., waste management), education and daycare services, transportation infrastructure, and emergency and law enforcement services are anticipated to be negligible to minor.

The Project is anticipated to result in adverse residual effects (i.e., pressure) to health care infrastructure and services, and housing affordability and availability. These effects of the Project may be experienced disproportionately by diverse subgroups, including rural populations / people without reliable transportation, Indigenous people, individuals with mental health challenges and addictions, low-income households, and gender-diverse persons. These two adverse residual Project effects are also anticipated to contribute to cumulative effects in combination with other present and reasonably foreseeable future projects.

Skeena Resources' follow-up strategy, including the Socio-economic Monitoring Plan (outlined in Appendix A-1, Summary of Management Plans and Mitigation Measures), will leverage continued and close partnership with the Tahltan Nation and utilize engagement with other Engaged Indigenous Nations and stakeholders to monitor that effects are as predicted, and mitigations are effective.

21.11 References

Legislation and Regulations

Canada Health Act, RSC 1985, c C-6.

Community Care and Assisted Living Act, SBC 2002, c 75.

Declaration on the Rights of Indigenous Peoples Act, SBC 2019, c 44.

Drinking Water Protection Act, SBC 2001, c 9.

Emergency Health Services Act, RSBC 1996, c 182.

Employment Equity Act, SC 1995, c 44.

Environmental Assessment Act, SBC 2018, c 51.

Fire Services Act, RSBC 1996, c 144.

First Nations Jurisdiction over Education in British Columbia Act, SC 2006, c 10.

Hospital District Act, RSBC 1996, c 202.

Indian Act, RSC 1985, c I-5.

Local Government Act, RSBC 2015, c 1.

Nisga'a Emergency Program Act, 2004.

Nisga'a Final Agreement Act, SBC 1999, c 2.

Nisga'a Final Agreement Act, SC 2000, c 7.

Police Act, RSBC 1996, c 367.

Public Health Act, SBC 2008, c 28.

School Act, RSBC 1996, c 412.

Teachers Act, SBC 2011, c 19.

Transportation Act, SBC 2004, c 44.

Health Act Communicable Disease Regulation, BC Reg 4/83.

Other Sources

Aalhus, M., B. Oke, and F. Fumerton. 2018. *The social determinants of health impacts of resource extraction and development in rural and northern communities: A summary of impacts and promising practices for assessment and monitoring*.
https://www.northernhealth.ca/sites/northern_health/files/services/officehealth-resource-development/documents/impacts-promising-practices-assessment-monitoring.pdf (accessed May 2024).

- Albright, S.A. 1982. "An Ethnoarchaeological Study of Tahltan Subsistence and Settlement Patterns". MA thesis, Simon Fraser University. <https://summit.sfu.ca/item/6179> (accessed May 2024).
- AltaGas Renewable Energy Inc. 2011a. "Section 10.0, Summary of Proposed Construction and Operations Environmental Management Program". In *McLymont Creek Hydroelectric Project, Application for an Environmental Assessment Certificate / Environmental Impact Statement*. Prepared by Hemmera Envirochem Inc. Submitted to the Environmental Assessment Office. <https://projects.eao.gov.bc.ca/api/public/document/5887e08af64627133ae5b0b4/download/Part%20B%20Continued%20-%20Assessment%20of%20Potential%20Effects%2C%20Mitigation%20and%20Significance%20of%20Residual%20Effects%20-%20Sections%2010.0%20-%2011.3%20-%20Part%20C%20-%20First%20Nations%20Information%20Requirements%20-%20Sections%2012.0%20-21.0.pdf> (accessed May 2024).
- AltaGas Renewable Energy Inc. 2011b. "Section 6.0, Assessment of Potential Economic Effects"; "Section 7.0, Assessment of Potential Social Effects"; Section 8.0, Heritage Study Assessment"; and "Section 9.0 Assessment of Potential Health Effects". In *McLymont Creek Hydroelectric Project, Application for an Environmental Assessment Certificate / Environmental Impact Statement*. Prepared by Hemmera Envirochem Inc. Submitted to the Environmental Assessment Office. <https://projects.eao.gov.bc.ca/api/public/document/5887e08af64627133ae5b0b5/download/Part%20B%20Continued%20-%20Assessment%20of%20Potential%20Effects%2C%20Mitigation%20and%20Significance%20of%20Residual%20Effects%20-%20Sections%206.0%20-%209.7.pdf> (accessed May 2024).
- AMEC. 2004. *Application for an Environmental Assessment Certificate. Red Chris Porphyry Copper-Gold Mine Project*. October 2004
<https://projects.eao.gov.bc.ca/api/public/document/5886b2f6a4acd4014b81fe4c/download/Volume%201%20-%20Section%203%20-%20Project%20Description%20-%20Part%206.pdf>
(accessed May 2024).
- Ascot Resources Ltd. 2024. "Ascot Resources Provides Construction Update on Premier Gold Project." *Junior Mining Network*. 20 February 2024. <https://www.juniorminingnetwork.com/junior-miner-news/press-releases/667-tsx/aot/156136-ascot-provides-construction-update-on-the-premier-gold-project.html> (accessed April 2024)
- Asia Pacific Foundation for Climate and Health. 2023. *Mitigation and Enhancement Measures for Health, Social, & Economic Effects*.
- Bain, D. 2024. "Province announces funding for recruitment, retention and training initiatives for allied health and clinical support workers." *My Bulkley Lakes Now*. 1 May 2024. <https://www.mybulkleylakesnow.com/62392/province-announces-funding-for-recruitment-retention-and-training-initiatives-for-allied-health-and-clinical-support-workers/> (accessed May 2024).
- Bakker, M. 2024. "Major improvements to northwest highways announced". *The Northern View*. 15 July 2024. <https://www.thenorthernview.com/local-news/major-improvements-to-northwest-highways-announced-7441950> (accessed July 2024)

- Balcerzak, N. 2019. "Dead zone: RDKS asks province for signage on Hwy 37". *Terrace Standard*. 1 August 2019. <https://www.terracestandard.com/news/rdks-asks-province-for-signage-on-hwy-37-informing-drivers-of-no-cell-service-6040778> (accessed January 2024).
- BC Bus North. 2020. *Locations*. <https://bcbus.ca/bc-bus-locations/> (accessed October 2021).
- BC First Nations Justice Council (British Columbia First Nations Justice Council). 2023. *Law enforcement and the BC First Nations Justice Strategy*. <https://bcfnjc.com/law-enforcement-and-the-justice-strategy/> (accessed April 2024).
- BC First Nations Justice Council. 2024. *Ku'Ve'Gahn Program (Sub-Office) (KP)*. <https://bcfnjc.com/directory-services/listing/kuwegahn-program-sub-office-kp/> (accessed January 2024).
- BC Gov News. 2023. "New cellular connectivity on Highway 95 improves public safety." <https://news.gov.bc.ca/releases/2023CITZ0018-001091> (accessed May 2024).
- BC Housing. 2021. *2,400 new affordable rental homes on the way in B.C.* <https://news.bchousing.org/2400-new-affordable-rental-homes-on-the-way-in-bc/> (accessed May 2024).
- BC Housing. 2024. *Housing Projects Across BC*. <https://www.bchousing.org/projects-partners/Building-BC/homes-for-BC> (accessed June 2024).
- BC Hydro. 2014a. "New Transmission Line Ready to Power Northwest BC". *Media centre*. 25 July 2023. https://www.bchydro.com/news/press_centre/news_releases/2014/northwest-transmission-line-electrified.html (accessed August 2021).
- BC Hydro. 2014b. "BC Hydro Connects Remote Community of Iskut to Power Grid". *Media centre*. 19 December 2014. https://www.bchydro.com/news/press_centre/news_releases/2014/iskut-connected-to-grid.html#:~:text=VANCOUVER%20%E2%80%94%20The%20remote%2C%20northern%20community,on%20diesel%20generation%20for%20electricity (accessed October 2021).
- BC Hydro. 2024. *Transmission System*. Map. <https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/suppliers/transmission-system/maps/transplt-Default-001.pdf> (accessed January 2024).
- BC Northern Real Estate Board. 2024. "Northern BC Sees a Decline in Real Estate Sales in Final Quarter." *Business Examiner*. <https://businessexaminer.ca/peace-cariboo-skeena-articles/item/northern-bc-sees-a-decline-in-real-estate-sales-in-final-quarter-of-2023/> (accessed May 2024).
- BC Stats. 2024. *Population Estimates & Projections for British Columbia*. <https://bcstats.shinyapps.io/popApp/> (accessed April 2024).
- BCEHS (BC Emergency Health Services). 2024. *Governance & Structure*. <http://www.bcehs.ca/about/who-we-are/governance-structure#:~:text=BCEHS%20has%20three%20regional%20dispatch,Health%20Services%20%26%20Chief%20Ambulance%20Officer> (accessed October 2024).

- Big River Analytics Ltd. 2020. *City of Terrace Community Child Care Needs Assessment and Space Creation Action Plan*. Prepared for The City of Terrace.
https://www.terrace.ca/sites/default/files/docs/city-hall/2020-02-03_child_care_report_-_bra.pdf
(accessed May 2024).
- Bramadat-Willcock, M. 2022. "Remote northwest B.C. community left without a fire department due to volunteer shortage". *Terrace Standard*. <https://www.terracestandard.com/news/fire-protection-suspended-in-remote-northwest-b-c-community/> (accessed October 2023).
- Canadian Mental Health Association. 2024. "BC Budget 2024: Sustained investments in mental health and substance use care, with key opportunities for improvement". <https://bc.cmha.ca/news/bc-budget-2024-mhsu> (accessed May 2024).
- Canadian National Railway Company. n.d. *Maps & Network*. <https://www.cn.ca/en/our-services/maps-and-network> (accessed May 2024).
- Campbell, K.M. 2007. "What was it they lost? The impact of resource development on family violence in a northern Aboriginal community." *Journal of Ethnicity in Criminal Justice* 5 (1): 57–80.
- CBC (CBC News). 2018a. "Tahltan First Nation faces many more months away from home after wildfire devastation". *CBC News*. 28 September 2018. <https://www.cbc.ca/news/canada/british-columbia/tahltan-first-nation-wildfire-1.4842553> (accessed October 2023).
- CBC. 2018b. "Cleanup and rebuilding underway in Telegraph Creek, B.C., after destructive wildfires". *CBC News*. 27 November 2018. <https://www.cbc.ca/news/canada/north/telegraph-creek-wildfire-evacuation-ended-1.4921647> (accessed October 2023).
- CBC. 2019. "Residents of remote northern B.C. town sometimes wait days for medical evacuations". *CBC News*. 24 December 2019. <https://www.cbc.ca/news/canada/british-columbia/dease-lake-med-evac-1.5401773> (accessed October 2023).
- CBC. 2023a. "2023 is now officially the most expensive, most destructive wildfire season on record in B.C.". *CBC News*. 27 September 2023. <https://www.cbc.ca/news/canada/british-columbia/wildfire-danger-reducing-1.6980041> (accessed October 2023).
- CBC. 2023b. "Evacuation orders, alerts issued for properties south of Smithers, B.C., due to wildfire". *CBC News*. 8 July 2023. <https://www.cbc.ca/news/canada/british-columbia/evac-orders-alerts-powers-creek-fire-1.6901165> (accessed October 2023).
- CIRNAC (Crown-Indigenous Relations and Northern Affairs Canada). 2023. *Indigenous peoples and communities: Search by First Nation*. <https://fnp-ppn.aadnc-aandc.gc.ca/fnp/Main/Search/SearchFN.aspx?lang=eng> (accessed January 2024).
- City of Terrace. n.d. *About our City*. <https://www.terrace.ca/discover-terrace/about> (accessed July 2021).
- City of Terrace. 2023. *Child Care Programs and Services – School Age Program*. <https://www.terrace.ca/childcare> (accessed May 2024).

Cotter, A. and L. Savage. *Gender-based violence and unwanted sexual behaviour in Canada, 2018: Initial findings from the Survey of Safety in Public and Private Spaces*. 5 December 2019. Statistics Canada. <https://www150.statcan.gc.ca/n1/en/pub/85-002-x/2019001/article/00017-eng.pdf?st=DhAWQEgd> (accessed February 2024).

Declaration Act Consent Decision-Making Agreement for Eskay Creek Project. 2022. Between the Province of British Columbia and Tahltan Central Government. Conclusion date: 6 June 2022. https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/consulting-with-first-nations/agreements/declaration_act_consent_decision-making_agreement_for_eskay_creek_project.pdf (accessed February 2024).

District of Elkford. 2024. "Regular Council Meeting Agenda". 25 March 2024. <https://elkford.civicweb.net/filepro/documents/77149/> (accessed October 2024).

District of Stewart. 2023a. *Stewart News – April 2023 Newsletter*. https://districtofstewart.com/uploads/Newsletters/April_2023.pdf (accessed May 2024).

District of Stewart. 2023b. *Port of Stewart*. <https://districtofstewart.com/business-resources/port-of-stewart> (accessed October 2023).

District of Stewart. 2024. *Garbage and Recycling*. <https://districtofstewart.com/citizen-services/garbage-pick-up-recycling> (accessed January 2024).

Donovan, J. 2021. "Indigenous women keep vanishing on Canada's highway of tears". *Howstuffworks, Crime & Crime Prevention*. <https://people.howstuffworks.com/highway-of-tears-news.htm> (accessed April 2024).

Dze L K'ant Friendship Centre. 2023. *Dease Lake Pregnancy Outreach Program*. <http://www.dzelkant.com/dease-lake-pregnancy-outreach-program/> (accessed May 2024).

EAO (British Columbia's Environmental Assessment Office). 2005. *Red Chris Porphyry Copper-Gold Project Assessment Report*. Environmental Assessment Office. https://www.projects.eao.gov.bc.ca/api/document/5886b392a4acd4014b81fef6/fetch/Red%20Chris%20Porphyry%20Copper-Gold%20Mine%20Project%20Assessment%20Report%20-%20Jul%202022_05.pdf (accessed May 2024).

EAO. 2020. *Effects Assessment Policy*. April 2020. https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/2018-act/effects_assessment_policy_v1_-_april_2020.pdf (accessed May 2024).

EAO. 2023a. *Schedule B – Assessment Plan*. Prepared for the Eskay Creek Revitalization Project. Proposed by Skeena Resources Limited. Issued by Environmental Assessment Office. 18 April 2023. <https://projects.eao.gov.bc.ca/api/public/document/6440149a41dd3c0022018a56/download/Eskay%20Creek%20-%20Assessment%20Plan%20-%2020230418.pdf> (accessed June 2024).

EAO. 2023b. *Schedule C – Hybrid Application Information Requirements*. Prepared for the Eskay Creek Revitalization Project. Proposed by Skeena Resources Limited. Issued by Environmental Assessment Office. 18 April 2023.

- <https://projects.eao.gov.bc.ca/api/public/document/643f21619dbd4100223264b4/download/Eskay%20Creek%20-%20Hybrid%20AIR%20-%2020230418.pdf> (accessed June 2024).
- Elias, V. 2023. "Terrace Ambulance Station open house addresses paramedic shortage in northern B.C." *Terrace Standard*. 12 April 2023. <https://www.terracestandard.com/news/terrace-ambulance-station-open-house-addresses-paramedic-shortage-in-northern-b-c/> (accessed October 2023).
- EMCR (Ministry of Emergency Management and Climate Readiness). 2024. *2023/24 Annual Service Plan Report*. https://www.bcbudget.gov.bc.ca/Annual_Reports/2023_2024/pdf/ministry/emcr.pdf (accessed October 2024).
- ERM Rescan (ERM Rescan Environmental Services Ltd.) 2014a. "Appendix 25-B, Tsetsaut/Skii km Lax Ha Nation Traditional Knowledge and Traditional Use Report." *Brucejack Gold Mine Project Application for an Environmental Assessment Certificate / Environmental Impact Statement*. Prepared for Pretium Resources Inc. Submitted to the Environmental Assessment Office. <https://projects.eao.gov.bc.ca/api/public/document/5886900de036fb01057688de/download/Appendix%2025-B.%20Tsetsaut%20Skii%20km%20Lax%20Ha%20TK-TU%20Report.pdf> (accessed May 2024).
- ERM Rescan 2014b. "Chapter 27, Assessment of Nisga'a Nation Treaty Rights, Interests, and Information Requirements." *Brucejack Gold Mine Project Application for an Environmental Assessment Certificate / Environmental Impact Statement*. Prepared for Pretium Resources Inc. Submitted to the Environmental Assessment Office. <https://projects.eao.gov.bc.ca/api/public/document/58869009e036fb01057688b9/download/Chapter%2027.%20Nisgaa%20National%20Interests.pdf> (accessed May 2024).
- Explore North. n.d. *Airports in northern British Columbia*. <https://www.explorenorth.com/library/aviation/airports-bc.html> (accessed May 2024).
- Firelight Group. 2017. *Indigenous Communities and Industrial Camps: Promoting healthy communities in settings of industrial change*. https://quakerservice.ca/wp-content/uploads/2017/02/Firelight-work-camps-Feb-8-2017_FINAL.pdf (accessed May 2024).
- Firelight (The Firelight Group). 2021. *Indigenous Mental Wellness and Major Project Development Guidance for Impact Assessment Professionals and Indigenous Communities*. Impact Assessment Agency of Canada, Ottawa, ON.
- FNHA (First Nations Health Authority). 2024. *Northern Region*. <https://www.fnha.ca/about/regions/north> (accessed January 2024).
- Gitanyow Hereditary Chiefs. 2020. Gitanyow Ayookxw for Wilp Sustainability Assessment. https://www.gitanyowchiefs.com/wp-content/uploads/2023/08/2020-11-12_Wilp_Sustainability_Assessment_Process_pilot_phase.pdf (accessed September 2021).
- Gitlaxtaamiks, 2021. *Gitlaxtaamiks Community Profile*. <http://www.gitlaxtaamiks.com/wpcontent/uploads/2021/05/Community-Profile-2021.pdf> (accessed September 2021).

- Government of BC (Government of British Columbia). n.d.a *Certified Airports in B.C.*
<https://www2.gov.bc.ca/gov/content/transportation/passenger-travel/air-or-rail-travel/airports>
(accessed May 2024).
- Government of BC. n.d.b. *Wildfire crews.* <https://www2.gov.bc.ca/gov/content/safety/wildfire-status/wildfire-response/wildfire-personnel-and-response-tools/wildfire-crews> (accessed October 2023).
- Government of BC. 2017. *B.C. Guidelines for Industrial Camps Regulation.* Prepared by Health Protection Branch, Ministry of Health. https://www2.gov.bc.ca/assets/gov/health/keeping-bc-healthy-safe/industrial-camps/bc_guidelines_for_industrial_camps_regulation.pdf
(accessed October 2023).
- Government of BC. 2021a. “Children and Family Development. Northwestern B.C. families to benefit from new childcare spaces”. <https://news.gov.bc.ca/releases/2021CFD0036-000941>
(accessed August 2023).
- Government of BC. 2021b. *Highway 37 Driving Tips.*
<https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/traveller-information/routes-and-driving-conditions/highway-37-stewart-cassiar/driving-tips> (accessed October 2021).
- Government of BC. 2021c. *Highway 37 Points of Interest.*
<https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/traveller-information/routes-and-driving-conditions/highway-37-stewart-cassiar/points-of-interest> (accessed October 2021).
- Government of BC. 2021d. “Complete Cellular Connectivity Coming to ‘Highway of Tears’”. *BC Gov News.* 7 April 2023. <https://news.gov.bc.ca/releases/2021CITZ0025-000648> (accessed September 2021).
- Government of BC. 2022. *Wildlife Service.* <https://www2.gov.bc.ca/gov/content/safety/wildfire-status>
(accessed January 2024).
- Government of BC. 2023a. *Statistical Glossary.*
<https://www2.gov.bc.ca/gov/content/data/statistics/statistical-glossary#I-P> (accessed April 2024).
- Government of BC. 2023b. *Connecting Natural Gas Pipelines.*
<https://www2.gov.bc.ca/gov/content/industry/natural-gas-oil/lng/connecting-natural-gas-pipelines>
(accessed July 2024).
- Government of BC. 2023c. *Stronger BC Future Ready Action Plan.* <https://news.gov.bc.ca/files/Future-Ready-May2023.pdf> (accessed May 2024).
- Government of BC. 2023d. Connect to Innovate Program – Project status updates. <https://ised-isde.canada.ca/site/connect-to-innovate/en/connect-innovate-program-project-status-updates#dataset-filter> (accessed June 2024).
- Government of BC. 2023e. “More child care spaces, health-care supports for people in northern B.C.”.
<https://news.gov.bc.ca/releases/2023MUNI0052-001856> (accessed June 2024).
- Government of BC. 2024a. *Population Projections.*
<https://www2.gov.bc.ca/gov/content/data/statistics/people-population-community/population/population-projections> (accessed April 2024).

- Government of BC. 2024b. *How We Work with the Ministry of Emergency Management and Climate Readiness*. Ministry of Emergency Management and Climate Readiness. <https://www2.gov.bc.ca/gov/content/safety/wildfire-status/partners/emcr.pdf> (accessed October 2024).
- Hele, K.S. 2021. *Indigenous Elders in Canada*. <https://www.thecanadianencyclopedia.ca/en/article/indigenous-elders-in-canada> (accessed May 2024).
- Highway of Tears. 2023a. *Highway of Tears Symposium*. 33 Recommendations. <https://highwayoftears.org/33-recommendations/> (accessed June 2024).
- Highway of Tears. 2023b. *Highway of Tears Governing Body*. <https://highwayoftears.org/about-us/> (accessed June 2024).
- Hot Shot Trucking. n.d. *Hot Shot Trucking*. <https://www.hotshottrucking.com/hot-shot-trucking> (accessed June 2024).
- IDM Mining Ltd. 2017. *Socio-Economic Baseline Report*. Red Mountain Underground Gold Project, Volume 8, Appendix 20-A – Socio-Economic Baseline. In *Environmental Assessment Application and Environmental Impact Statement*. <https://iaac-aeic.gc.ca/050/documents/p80093/121000E.pdf> (accessed October 2023).
- Laxgaltsap, 2021. *Laxgaltsap Community Firehall*. <https://www.laxgaltsap.ca/community/firehall> (accessed September 2021).
- Link, R. 2021a. “Ambulance service setting up shop in the Nass Valley— Terrace Standard”. *Terrace Standard*. 22, December 2021. <https://www.terracestandard.com/news/ambulance-service-setting-up-shop-in-the-nass-valley-6062079> (accessed May 2024).
- Link, R. 2021b. “Paramedic hired in Kitwanga, but three positions remain open”. *The Interior News*. 10 December 2021. <https://www.interior-news.com/news/paramedic-hired-at-kitwanga-but-three-positions-remain-open/> (accessed October 2023).
- Link, R. 2022. “Northwest B.C. RCMP struggle to cope with vacancies.” *The Interior News*. 22 December 2022. <https://www.interior-news.com/news/northwest-b-c-rcmp-struggle-to-cope-with-vacancies-6509552> (accessed May 2024).
- Link, R. 2024. RCMP officer shortage eases up. *Terrace Standard*. 7 April 2024. <https://rcmpheritage.ca/rcmp-history/social-movements/police-brutality-as-catalyst-for-indigenous-movements-the-story-of-the-native-brotherhood/> (accessed May 2024).
- LNG Canada. n.d. *What is LNG?* <https://www.lngcanada.ca/what-we-do/facility/> (accessed May 2024).
- LNG Canada. 2023. LNG Canada Development Inc. (“LNG Canada”) Export Terminal Project, Schedule B, Environmental Assessment Certificate #E15-01 - Condition #1b Compliance Report. <https://www.lngcanada.ca/wp-content/uploads/LNG-Canada-2022-EAO-Annual-ReportNEW-1.pdf> (accessed June 2024).

LNG Canada Export Terminal. 2014. *Environmental Assessment Certificate Application*.

https://projects.eao.gov.bc.ca/api/public/document/58869063e036fb0105768adc/download/Part%20A_02_Project%20Overview.pdf (accessed April 2024).

McCreary, T. and I. Ceric. n.d. *Police Brutality as Catalyst for Indigenous Movements: The Story of the Native Brotherhood*. <https://rcmpheritage.ca/rcmp-history/social-movements/police-brutality-as-catalyst-for-indigenous-movements-the-story-of-the-native-brotherhood/> (accessed April 2024).

McIlwraith, T.F. 2007. *“But We Are Still Native People”*. *Talking about Hunting and History in a Northern Athapaskan Village*. Albuquerque: University of New Mexico. <https://www-proquest-com.cyber.usask.ca/pqdtglobal/docview/304838823/fulltextPDF/C7914A507A7D4799PQ/1?accountid=14739&sourcetype=Dissertations%20&%20Theses> (accessed May 2024).

Ministry of Attorney General. 2021. *Tsetsaut Skii km Lax Ha: Review of Ethnographic and Historical Sources*. Confidential report prepared by the Legal Services Branch, NATRIL Research Unit, for Tsetsaut Skii km Lax Ha. 29 November 2021.

Ministry of Education. 2024. *School District: District Directory*. <https://studentsuccess.gov.bc.ca/all/school-districts> (accessed May 2024).

Ministry of Emergency Management and Climate Readiness. 2024. *Stronger local-disaster response will keep people safer*. <https://news.gov.bc.ca/releases/2024EMCR0019-000593> (accessed May 2024).

Ministry of Environment and Climate Change Strategy. 2023. “Province improves inclusion, accessibility in B.C. parks”. *BC Gov News*. 22 March 2023. <https://news.gov.bc.ca/releases/2023ENV0021-000369#:~:text=There%20are%20several%20categories%20of,campgrounds%20and%20recreation%20expansion%20projects> (accessed July 2024).

Ministry of Health. 2023. *Map of Health Service Delivery Area 51 Northwest*. https://www2.gov.bc.ca/assets/gov/data/geographic/land-use/administrative-boundaries/health-boundaries/51_northwest.pdf (accessed April 2023).

Ministry of Health. 2024. *New supports for allied health, clinical support workers will boost workforce*. <https://news.gov.bc.ca/releases/2024HLTH0054-000666> (accessed May 2024).

Ministry of Post-Secondary Education and Future Skills. 2024. *TradeUpBC builds, enhances tradespeoples’ skills*. <https://news.gov.bc.ca/releases/2024PSFS0019-000488> (accessed May 2024).

Ministry of Public Safety and Solicitor General Policing and Security Branch. 2022. *British Columbia Regional District Crime Trends, 2012 – 2021*. <https://www2.gov.bc.ca/assets/gov/law-crime-and-justice/criminal-justice/police/publications/statistics/bc-regional-district-crime-trends-2012-2021.pdf> (accessed October 2023).

MNBC (Métis Nation British Columbia). 2020. 2014-2020 Use-and-Occupancy Map Survey with Legacy Map Survey Data: Hodgepodge Map. <https://www.mnbc.ca/hodgepodge-map> (accessed May 2024).

- MNBC and OPHO (Métis Nation British Columbia and Office of the Provincial Health Officer). 2021. *Taanshi Kiiya? Miiyayow Métis Saantii Pi Miyooayaan Didaan BC / Métis Public Health Surveillance Program – Baseline Report, 2021*. https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/reports-publications/annual-reports/pho_metis_report_2021c_f3.pdf (accessed June 2024).
- MOTI (Ministry of Transportation and Infrastructure). 2023. *Traffic Data Program*. <https://prdoas6.pub-apps.th.gov.bc.ca/tsg/> (accessed February 2024).
- MOTI. 2020. *Traffic Management Manual for Work on Roadways (TMM)*. <https://www2.gov.bc.ca/assets/gov/driving-and-transportation/transportation-infrastructure/engineering-standards-and-guidelines/traffic-engineering-and-safety/traffic-engineering/traffic-management-and-traffic-control/2020-traffic-control-manual/2020-traffic-management-manual-for-work-on-roadways.pdf> (accessed October 2023).
- National Collaborating Centre for Determinants of Health. 2023. *Let's Talk: Language of Health Equity*. Antigonish, NS: St. Francis Xavier University.
- National Inquiry into Missing and Murdered Indigenous Women and Girls. 2019. *Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls* (accessed April 2024).
- NWAC (Native Women's Association of Canada). 2011. *Fact Sheet: Missing and Murdered Aboriginal Women and Girls in British Columbia*. <https://www.nwac.ca/assets-knowledge-centre/2010-FactSheet-British-Columbia-MMAWG.pdf> (accessed December 2023)
- Neegan Burnside. 2011. *National Assessment of First Nations Water and Wastewater Systems – British Columbia Regional Roll-up Report, FINAL*. Department of Indian Affairs and Northern Development.
- Nelson, A., J. Malenfant, K. Schwan, and M. Watchorn. 2023. *Housing Need & Homelessness Amongst Gender-Diverse People in Canada: A Preliminary Portrait*. Literature Review and Practice Scan. The Office of the Federal Housing Advocate, Canadian Human Rights Commission. <https://womenshomelessness.ca/research-release/> (accessed February 2024).
- Newcrest (Newcrest Mining Ltd). 2023. *2023 Sustainability Report*. https://www.newcrest.com/sites/default/files/2023-09/230921_Sustainability%20Report%202023_0.pdf (accessed May 2024).
- Newcrest Red Chris Mining Ltd. 2022. *Red Chris Mine Application for EAC Amendment Camp Expansion, Application for an Amendment to the Environmental Assessment Certificate #M05-02, Pursuant to Section 32 of the Environmental Assessment Act, S.B.C. 2018 c.51*. Prepared by SLR Consulting (Canada) Ltd. Submitted to the Environmental Assessment Office. 28 November 2022. <https://projects.eao.gov.bc.ca/api/public/document/6384f142038aa900225ccef9/download/Amendment%20Application%20-%20Red%20Chris%20Work%20Camp%20Expansion%202.pdf> (accessed July 2024).
- Nightingale, E., K. Czyzewski, F. Tester, and N. Aaruaq. 2017. "The effects of resource extraction on Inuit women and their families: evidence from Canada." *Gender & Development*. 25. 367-385. doi:10.1080/13552074.2017.1379778.

- Nisga'a Treaty (*Nisga'a Final Agreement*). 1999. Between the Nisga'a Nation, Canada, and British Columbia. Conclusion date: 27 April 1999.
https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/consulting-with-first-nations/agreements/nisga_final_agreement_pdf.pdf (accessed May 2024).
- NLG (Nisga'a Lisims Government). n.d. *Wilp Wilxo'oskwhl Nisga'a Institute*.
<https://www.nisgaanation.ca/wwni> (accessed June 2024).
- NLG. 2014. *Nisga'a Lisims Government. Gitlaxt'aamiks and Gitwinksihlkw volunteer fire departments attend FNESS Fire Expo and Competition*. <https://www.nisgaanation.ca/news/gitlaxtaamiks-and-gitwinksihlkw-volunteer-fire-departments-attend-fness-fire-expo-and> (accessed September 2021).
- Northern Development. 2023a. *Northern Passenger Transportation Service Fund Annual Report 2022/23*.
<https://www.northerndevelopment.bc.ca/wp-content/uploads/2023/08/Northern-BC-Inter-Community-Transportation-Study.pdf> (accessed May 2024).
- Northern Development. 2023b. *Northern Inter-community Transportation Study*.
<https://www.northerndevelopment.bc.ca/wp-content/uploads/2023/08/Northern-BC-Inter-Community-Transportation-Study.pdf> (accessed May 2024).
- Northern Health. 2015. *Health and Medical Services Plan Best Management Guide for Industrial Camps*. Prepared by the Office of Health and Resource Development.
https://www.northernhealth.ca/sites/northern_health/files/services/office-health-resource-development/documents/industrial-camps-BMG.pdf (accessed October 2023).
- Northern Health. 2017. *Northern Health Service Distribution Framework: Discussion Report*.
https://www.northernhealth.ca/sites/northern_health/files/services/office-health-resource-development/documents/nh-service-distribution-framework-discussion.pdf (accessed May 2024).
- Northern Health. 2018. *Health and Safety During the Opioid Overdose Emergency: Northern Health's Recommendations for Industrial Camps*. Prepared by the Office of Health and Resource Development. https://www.northernhealth.ca/sites/northern_health/files/services/office-health-resource-development/documents/overdose-prevention-camps.pdf (accessed April 2024).
- Northern Health. 2023a. *Best Practices for Industrial work Setting No. 2 – Communicable Disease Management Guide*. Prepared by the Office of Health and Resource Development.
https://www.northernhealth.ca/sites/northern_health/files/services/office-health-resource-development/documents/communicable-disease-best-practices-guide.pdf (accessed October 2023).
- Northern Health. 2023b. *Northern Health – the northern way of caring*. <https://www.northernhealth.ca/> (accessed October 2023).
- Northern Health. 2023c. *Types of Water Notices and Advisories*. https://www.healthspace.ca/Clients/NHA/NHA_Website.nsf/Water-List-Boil?OpenView&count=1000 (accessed January 2024).
- Northern Health. 2024a. *About Northern Health*. <https://n2canada.ca/member/northern-health-authority/> (accessed January 2024).

- Northern Health. 2024b. *Stikine Health Centre*. <https://www.northernhealth.ca/find-a-facility/medical-clinics/stikine-health-centre> (accessed January 2024).
- Northern Health Authority. 2022. *Emergency Response Roles and Responsibilities*. https://www.northernhealth.ca/sites/northern_health/files/services/office-health-resource-development/documents/emergency-response-roles-responsibilities-contacts.pdf (accessed May 2024).
- Northwest Aboriginal Health Improvement Committees. 2016. *First Nations Health Centers in the Northwest of British Columbia. A Discharge Planning Tool*. August 2016. <https://www.indigenoushealthnh.ca/sites/default/files/resources/documents/nw-ahics-fn-health-centres.pdf> (accessed October 2023).
- Northwest BC Resource Benefit Alliance. 2019. *Infrastructure Needs Analysis Report*. <https://www.nwresourcebenefits.ca/wp-content/uploads/2019/12/Infrastructure-Needs-Analysis-Report-for-Northwest-BC-Local-Governments-OCT-2019.pdf> (accessed May 2024).
- Northwest BC Resource Benefits Alliance. 2024. *Five-year, \$250 Million Agreement for Northwest Communities*. <https://www.nwresourcebenefits.ca/five-year-250-million-agreement-for-northwest-communities/> (accessed May 2024).
- Pacific Northwest Division of Family Practice. 2021. *Aboriginal Head Start Program*. <https://pacificnorthwest.fetchbc.ca/service.html?i=636> (accessed September 2021).
- Paul, B. 2021. "Trapped in Lawlessness: Iskut Band's 20-Year Fight for an RCMP Detachment Escalates." *Northern Sentinel*. 9 November 2021. <https://www.northernsentinel.com/news/trapped-in-lawlessness-iskut-bands-20-year-fight-for-an-rcmp-detachment-escalates/> (accessed November 2021).
- Pretium Resources Inc. 2014a. "Chapter 25, Assessment of Effects to Current Use of Lands and Resources for Traditional Purposes". In *Brucejack Gold Mine Project, Application for an Environmental Assessment Certificate / Environmental Impact Statement*. Prepared by Rescan Environmental Services Ltd. Submitted to the Environmental Assessment Office. <https://projects.eao.gov.bc.ca/api/public/document/58869009e036fb01057688bb/download/Chapter%2025.%20Current%20Aboriginal%20Use.pdf> (accessed May 2024).
- Pretium Resources Inc. 2014b. *Brucejack Gold Mine Project Application for an Environmental Assessment Certificate / Environmental Impact Statement Chapter 26 Assessment of Effects on Asserted or Established Aboriginal Rights and Interests*. <https://projects.eao.gov.bc.ca/api/public/document/58869009e036fb01057688ba/download/Chapter%2026.%20Aboriginal%20Rights%20and%20Interests.pdf> (accessed May 2024).
- Pretium Resources Inc. 2022. *Brucejack Gold Mine 2021 CEAA Annual Report*. https://www.newcrest.com/sites/default/files/2022-05/2021_Brucejack%20CEAA%20Annual%20Report_March%202022.pdf (accessed April 2024).
- Prime Minister of Canada. 2024. *More \$10-a-day child care spaces*. <https://www.pm.gc.ca/en/news/news-releases/2024/03/28/more-10-day-child-care-spaces-british-columbia> (accessed May 2024).

- Prince George Citizen. 2023. "Northern B.C. getting better highway cell coverage."
<https://www.princegeorgecitizen.com/local-news/northern-bc-getting-better-highway-cell-coverage-6736478> (accessed May 2024).
- Provincial Health Services Authority. 2024a. *BC Emergency Health Services*. <http://www.bcehs.ca/> (accessed January 2024).
- Provincial Health Services Authority. 2024b. *Health Emergency Management BC*. <http://www.phsa.ca/our-services/programs-services/health-emergency-management-bc> (accessed October 2024).
- RDBN (Regional District of Bulkley-Nechako). 2019. *The Regional District of Bulkley-Nechako provides 65 separate services to its taxpayers*. <https://www.rdbn.bc.ca/departments/administration/regional-district-services> (accessed October 2023).
- RDKS (Regional District of Kitimat-Stikine) n.d. *Hazeltons, Stewart and Highway 37 North Areas Solid Waste*. https://www.rdks.bc.ca/services/garbage_recycling_and_organics/hazeltons_stewart_and_highway_37 (accessed May 2024).
- RDKS. 2020a. *Greater Terrace. Housing Needs Report*. https://www.terrace.ca/sites/default/files/docs/business-development/planning-document/greater_terrace_housing_needs_report_2020.pdf (accessed August 2023).
- RDKS. 2020b. *Common Services*. <https://www.rdks.bc.ca/services> (accessed October 2023).
- RDKS. 2020c. *Government / North West Regional Hospital District*. https://www.rdks.bc.ca/government/north_west_regional_hospital_district (accessed October 2023).
- RDKS. 2022a. *The Regional District of Kitimat-Stikine Housing Needs Report. Electoral Area F – Dease Lake*. https://cdns5-hosted.civiclive.com/UserFiles/Servers/Server_12415106/File/Planning/Studies-Reports/RDKS%20EA%20F%20Final%20Report%20-%20VF.pdf (accessed August 2023).
- RDKS. 2022b. *Fire Protection Services Suspended in Dease Lake*. News Release. 20 October 2022. https://cdns5-hosted.civiclive.com/UserFiles/Servers/Server_12415106/File/Government/News%20Release/Newsrelease%20Letterhead%20Dease%20Lake.pdf (accessed August 2024).
- RDKS. 2023. *Regional District of Kitimat-Stikine Solid Waste Management. Virtual Tour*. <https://storymaps.arcgis.com/stories/3fbff945504447c78d1a492cbe64d44d> (accessed June 2024).
- Regional District Solid Waste Department. 2024. *Comments arising from the Technical Advisory Committee meeting on the Regional Socio-economic Baseline Report & Tahltan Socio-Economic Baseline Report*. 24 January 2024.
- Rescan (Rescan Environmental Services Ltd). 2009. "Appendix 10.11-1, Skii km Lax Ha Traditional Use and Knowledge Report". In *Northwest Transmission Line Project: Application for an Environmental Assessment Certificate*. July 2010. Prepared for British Columbia Transmission Corporation. Submitted to the Environmental Assessment Office.

[https://iaac-aeic.gc.ca/050/documents_staticpost/49262/89282/Chapter_33_Appendices/Appendix_33-B_Appendix_F/F14 - NTL SKLH TKTU report from EAO website July 2010.pdf](https://iaac-aeic.gc.ca/050/documents_staticpost/49262/89282/Chapter_33_Appendices/Appendix_33-B_Appendix_F/F14_-_NTL_SKLH_TKTU_report_from_EAO_website_July_2010.pdf) (accessed May 2024).

Rescan. 2012a. *Kitsault Mine Project: Nisga'a Economic, Social, and Cultural Impacts Assessment Report*. Prepared for Avanti Mining Inc.

<https://projects.eao.gov.bc.ca/api/document/5887e006f64627133ae5ae04/fetch/Assessment%20Report%20for%20the%20Kitsault%20Mine%20Project%20dated%20Mar%2013.pdf> (accessed June 2024).

Rescan. 2012b. "Appendix 3-N, First Nations Issues and Responses". In *KSM Project: Application for an Environmental Assessment Certificate / Environmental Impact Statement*. Prepared for Seabridge Gold Inc. Submitted to the Environmental Assessment Office.

<https://projects.eao.gov.bc.ca/api/public/document/5887de619b566a12e7f69d1a/download/Appendix%203N%20First%20Nations%20Issues%20and%20Responses.pdf> (accessed May 2024).

Rescan. 2013a. *Appendix 19-A Brucejack Gold Mine Project: Socio-economic Baseline Report*. Prepared for Pretium Resources Inc. Vancouver, BC.

<https://projects.eao.gov.bc.ca/api/public/document/5886900fe036fb01057688f2/download/Appendix%2019-A.%20Socio-Economic%20Baseline.pdf> (accessed June 2024).

Rescan. 2013b. *KSM Project: Application for an Environmental Assessment Certificate / Environmental Impact Statement Appendix 30-B Skii km Lax Ha Traditional Knowledge and Use Research Report*.

<https://projects.eao.gov.bc.ca/api/public/document/5887ddd69b566a12e7f69a6f/download/Appendix%2030B%20Skii%20km%20Lax%20Ha%20TK%20Report.pdf> (accessed May 2024).

School Enhancement Program. 2024. *Minor capital projects approved for 2024-25*.

https://news.gov.bc.ca/files/Minor_Capital_Projects_2024-25.pdf (accessed June 2024).

Seabridge Gold Inc. 2013a. "Chapter 30, First Nations Right and Interests." In *Application for an Environmental Assessment Certificate / Environmental Impact Statement for the KSM Project*. Prepared by Rescan Environmental Services Ltd. Submitted to the Environmental Assessment Office.

<https://projects.eao.gov.bc.ca/api/public/document/5887de689b566a12e7f69d3b/download/Chapter%2030.%20First%20Nations%20Interests.pdf> (accessed May 2024).

Seabridge Gold Ltd. 2013b. "Chapter 23, Land Use". In *Application for an Environmental Assessment Certificate / Environmental Impact Statement for the KSM Project*. Prepared by Rescan Environmental Services Ltd. Submitted to the Environmental Assessment Office. July 2013.

<https://projects.eao.gov.bc.ca/api/public/document/5887de709b566a12e7f69d4a/download/Chapter%2023.%20Land%20Use.pdf> (accessed May 2024).

Sheppard, J.R. 1983. *The History and Values of a Northern Athapaskan Indian Village*. Madison, WI:

University of Wisconsin-Madison. <https://www-proquest-com.cyber.usask.ca/pqdtglobal/docview/303280219/fulltextPDF/C81D61B527F14B67PQ/1?accountid=14739&sourcetype=Dissertations%20&%20Theses> (accessed May 2024).

Skeena Resources (Skeena Resources Limited). 2021. *Personnel Policy Manual*.

Skeena Resources. 2022. *Eskay Creek Mine Emergency Response Plan*.

Skeena Resources. 2024. *Eskay Creek Revitalization Indigenous Engagement and Collaboration Plan*.

Smithers. 2013. *Fire Department and Emergency Services*.

<http://www.smithers.ca/municipalhall/departments-services/fire-department-emergency-services>
(accessed September 2021).

Statistics Canada. 2017. *Census Profile, 2016 Census of Population*.

<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>
(accessed October 2023).

Statistics Canada. 2022. *Housing Conditions Among First Nations People, Métis and Inuit in Canada from the 2021 Census*.

<https://www12.statcan.gc.ca/census-recensement/2021/as-sa/98-200-X/2021007/98-200-X2021007-eng.cfm> (accessed January 2024).

Statistics Canada. 2023. *Census Profile, 2021 Census of Population*.

<https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>
(accessed October 2023).

Stewart Bulk Terminals Ltd. 2002. "Part 9, Miscellaneous Items". In *Comprehensive Study Report of a Proposed Wharf at Stewart Bulk Terminal, Stewart BC*. Prepared for the CEAA Process Responsible Authority. DFO. Smithers, BC. June 2002.

<https://projects.eao.gov.bc.ca/api/public/document/58870538eed3c0016f8570d6/download/Application%20parts%205%20-%202010.pdf> (accessed July 2024).

Pathways. n.d. *Stikine Health Center. Pathways Medical Care Directory*.

<https://pathwaysmedicalcare.ca/clinic/stikine-health-centre/> (accessed July 2024).

TAC (Technical Advisory Committee). 2023. *Comments arising from the Technical Advisory Committee meeting on Infrastructure and Services Existing Conditions*. 20 November 2023.

Tahltan – Allnorth. 2024. *Traffic Volume Study*. Prepared for Skeena Resources Limited by Tahltan – Allnorth: Vancouver, British Columbia.

Tahltan [First] Nation and IISD (International Institute for Sustainable Development). 2004. *Out of Respect, The Tahltan, Mining, and the Seven Questions to Sustainability*. Report of the Tahltan Mining Symposium. 4–6 April 2003.

https://www.iisd.org/system/files/publications/natres_out_of_respect.pdf (accessed May 2024).

Tahltan Health Services. 2014. *Tahltan Health Services & Programs*. <https://tahltn.ca/programs-services/tahltan-health-social-services-authority/> (accessed May 2024).

Tahltan Tribal Council. 1987. *Tahltan Tribal Council Resource Development Policy Statement, April 7, 1987*. <https://www.tndc.ca/pdfs/Tahltan%20Resource%20Development%20Policy.pdf> (accessed May 2024).

Tahltan Tribe. 1910. *1910 Declaration of the Tahltan Tribe*.

<https://www.tndc.ca/pdfs/Tahltan%20Declaration.pdf> (accessed May 2024).

- TBC (Tahltan Band Council). 2014. *Tahltan Health Services & Programs*. <https://tahtlan.ca/programs-services/tahtlan-health-social-services-authority/> (accessed September 2021).
- TBC. 2015. *Housing plan for the new Tahltan Village*. <https://tahtlan.ca/housing-plan-for-the-new-tahltan-village/> (accessed October 2021).
- TBC. 2016. *People*. <https://tahtlan.ca/nation/people/> (accessed September 2021).
- TBC. 2019. *2019 Winter Newsletter*. <https://tahtlan.ca/newsletter/winter-2019-newsletter/> (accessed October 2021).
- TBC. 2020. *Tahltan Band Council Comprehensive Community Plan*. https://tahtlan.ca/wp-content/uploads/2020/11/0444CCPV5_spreads-lr.pdf (accessed May 2024).
- TBC. 2022. *Spring Newsletter 2022*. https://tahtlan.ca/wp-content/uploads/2022/05/3534_TB_SpringNewsletter2022_v2_WEB.pdf (accessed April 2024).
- TCG (Tahltan Central Government). 2019. *Fall Newsletter—2019*. https://tahtlan.org/wp-content/uploads/2019/11/3330_TCG_FallNewsletter2019_Web.pdf (accessed July 2024).
- TCG. 2020. *Ibehi, Summer Newsletter—2020*. https://tahtlan.org/wp-content/uploads/2020/08/TCG_SummerNewsletter2020_lowres.pdf (accessed May 2024).
- TCG. 2021a. *Taltan, Tahltan Central Government 2021 Industry Review*. https://tahtlan.org/wp-content/uploads/2021/03/TCG_IndustryReview2021_Web.pdf (accessed October 2021).
- TCG. 2021b. *Spring Newsletter – 2021*. https://tahtlan.org/wp-content/uploads/2021/05/TCG_SpringNewsletter2021.pdf (accessed April 2024).
- TCG. 2022. *Tahltan Impact Assessment Policy*.
- TCG. 2023. *Education & Training Funding Programs*. <https://tahtlan.org/education-training-funding-programs/> (accessed October 2023).
- TCG. 2024. *Tāltān Dictionary*. <https://dictionary.tahtlan.org/> (accessed June 2024).
- TCG and Province of BC (Tahltan Central Government and Province of British Columbia). 2017. *Klappan Plan*. 10 February 2017, maps amended 16 February 2018. https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations/klappan_plan.pdf (accessed February 2025).
- Terrace Standard. 2020. *Stikine Airport Society seeks funding for decrepit Dease Lake Airport*. <https://www.terracestandard.com/news/stikine-airport-society-seeks-funding-for-decrepit-dease-lake-airport-6049969> (accessed June 2024).
- Terrace Standard. 2023. *New housing legislation promises to create 130,000 homes in B.C. in 10 years*. <https://www.terracestandard.com/news/new-housing-legislation-promises-to-create-130000-homes-in-bc-in-10-years-6830818> (accessed June 2024).

- THREAT (Tahltan Heritage Resources Environmental Assessment Team). 2024. "Tahltan Style Guide Workshop – Draft Understandings, Perspectives and Interpretation, April 12, 2024". Draft workshop materials provided in 2024 with technical guidance from THREAT and Lands and Regulatory Affairs Department, Tahltan Central Government. Unpublished document and in preparation.
- TNDC (Tahltan Nation Development Corporation). 2019. "TNDC to Provide Fibre Optic Communication to Iskut and Dease Lake in Northwest British Columbia." *TNDC News*. 3 July 2019. <https://www.tndc.ca/news/2019/tndc-to-provide-fibre-optic-communication-to-iskut-and-dease-lake-in-northwest-british-columbia> (accessed January 2024).
- TNDC. 2023. *About the Tahltan Nation*. <https://www.tndc.ca/about-tahltan-nation> (accessed August 2023).
- Town of Smithers. 2021. *Smithers Child Care Plan*. https://www.smithers.ca/sites/default/files/2022-03/Smithers_Child_Care_Plan_FINAL.pdf (accessed May 2024).
- Transparency International Canada. 2020. *Integrating Gender in Environmental Assessments: An Approach to Increase Transparency and Accountability in the Mining Sector*. Accountable Mining briefing note.
- Transport Canada, Fisheries and Oceans Canada, Natural Resources Canada, and Environment Canada. 2007. *Galore Creek Copper-Gold-Silver Project, Comprehensive Study Report, With Respect to the Requirements of a Comprehensive Study, Pursuant to the Canadian Environmental Assessment Act, S.C 1992, c. 37*. https://ceaa-acee.gc.ca/archives/evaluations/8858/documents_staticpost/pdfs/19108E.pdf (accessed July 2024).
- UNBC (University of Northern British Columbia). 2021. *Northwest Campus*. <https://www2.unbc.ca/northwest/communities-and-resources> (accessed August 2021).
- Vogel, L. 2015. "Broken Trust drives native health disparities". *Canadian Medical Association Journal* 187 (1) E9-E10.
- WAGE (Women and Gender Equality Canada). 2024. *What is Gender-based Analysis Plus*. <https://www.canada.ca/en/women-gender-equality/gender-based-analysis-plus/what-gender-based-analysis-plus.html> (accessed February 2025).
- WCGT (Westcoast Connector Gas Transmission Project). 2014. *Application for an Environmental Assessment Certificate: Part D Nisga'a Nation*. <https://projects.eao.gov.bc.ca/api/public/document/58868f85e036fb01057683c4/download/Assessment%20Report%20for%20the%20WCGT%20Project%20dated%20November%202014.pdf> (accessed June 2024).
- Williams Lake Tribune. 2021. *Killing spree still feeds unease in B.C.'s isolated north, one year later*. <https://www.wltribune.com/news/killing-sprees-still-feeds-unease-in-b-c-s-isolated-north-one-year-later/> (accessed October 2023).
- Wilson, C. 2024. "Northern mining companies hungry for skilled workers look to Myra Falls and Island". *Times Colonist*. 7 January 2024. <https://www.timescolonist.com/business/northern-mining-companies-hungry-for-skilled-workers-look-to-myra-falls-and-island-8067305> (accessed April 2024).

WorkSafeBC. 2021. *Controlling Exposure: Protecting Workers from Infectious Disease*.
<https://www.worksafebc.com/en/resources/health-safety/books-guides/controlling-exposureprotecting-workers-from-infectious-disease?lang=e> (accessed February 2025).

Personal Communications

Chief Administrative Officer, Village of Hazelton. Virtual call to TEEM dated 28 March 2024.

Deputy City Manager and Lands and Economic Development Manager, City of Terrace. Virtual call to TEEM dated 3 April 2024.

Director of Care, Bulkley Valley District Hospital, Northern Health. Virtual call to TEEM dated 2 April 2024.

Executive Director, Terrace Chamber of Commerce. Virtual call to TEEM dated 27 March 2024.

Health Service Administrator, Northwest Regional Office, Northern Health. Virtual call to TEEM dated 1 May 2024.

Manager, RDKS Solid Waste Management. Virtual call to TEEM dated 2 April 2024.

Manager, Stewart Health Clinic, Northern Health. Virtual call to TEEM dated 5 April 2024.

Manager, Terrace WorkBC Centre. Virtual call to TEEM dated 3 April 2024.

Mayor, District of Stewart. Virtual call to TEEM dated 2 April 2024.

MOTI Bulkley/Stikine District. E-mail to TEEM dated 16 April 2024.

Northern Health. 2024. Comment made during the Technical Advisory Committee Round 1 Comment Period for the *Application for an Environmental Assessment Certificate / Impact Statement for the Eskay Creek Revitalization Project* submitted to British Columbia's Environmental Assessment Office. Comment ID NH-016. 22 September 2024.

Paramedics Director, BCEHS (BC Emergency Health Services)—Smithers. Virtual call to TEEM dated 1 April 2024.

Regulatory Engagement Manager, Skeena Resources Limited. E-mail to Jambo Tracking dated 28 March 2024.

Skeena Resources and TCG (Skeena Resources Limited and Tahltan Central Government). 2024. Verbal comments made during an open house on Eskay Creek Revitalization Project progress. 21 March 2024. Whitehorse, Yukon.

Technical Advisor, THREAT. Edits submitted to Skeena Resources Limited dated 17 June 2024.