



**HELICAT**  
CANADA

# ELEVATING ADVENTURE

A THREE YEAR UPDATE ON THE ECONOMIC IMPACT OF HELICOPTER AND SNOWCAT SKIING IN BRITISH COLUMBIA

PHOTO: SKEENA HELISKIING



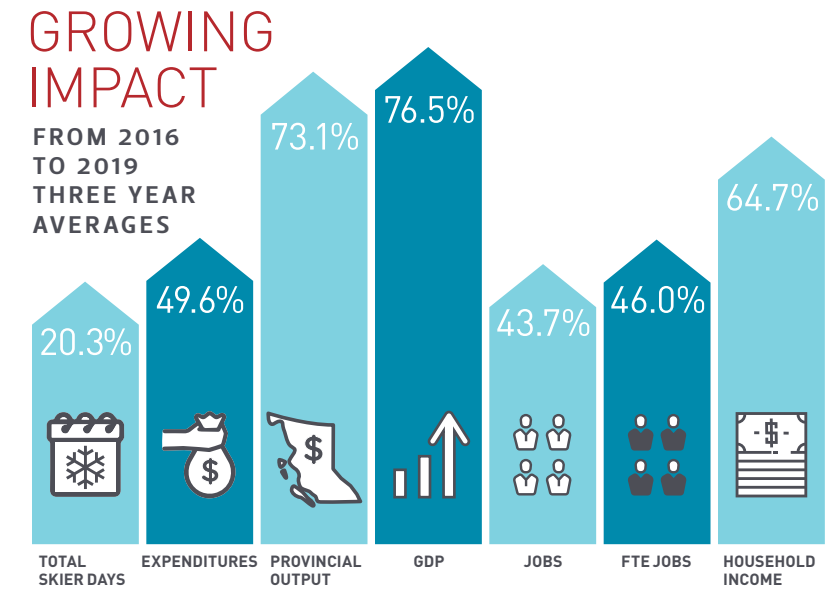
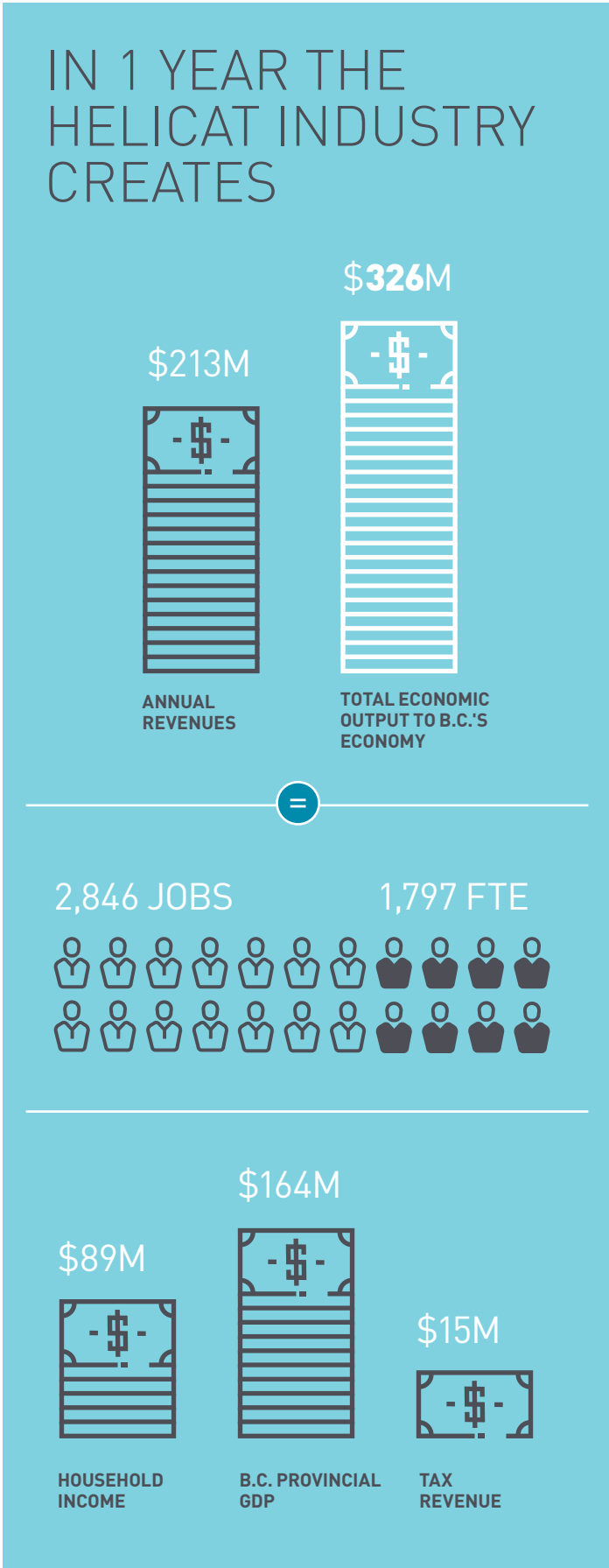


SELKIRK TANGIERS HELI SKIING – NATALIE HARRIS

# HELICAT

CANADA

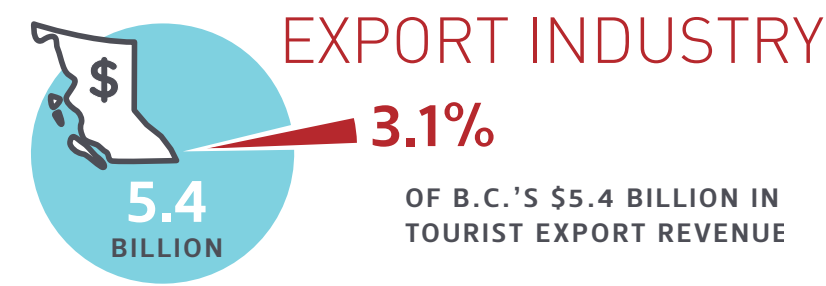
A HIGHLY PRINCIPLED SECTOR, THE HELICAT INDUSTRY IS FOCUSED ON DOING OUR PART TO INCREASE THE QUALITY OF LIFE AND FINANCIAL WELL-BEING OF THE PROVINCE OF BRITISH COLUMBIA.



**RURAL BC IMPACT:** HELICAT OPERATORS PROVIDE ECONOMIC STABILITY TO **REMOTE AND RURAL REGIONS** THROUGHOUT B.C. CREATING OFF SEASON JOB OPPORTUNITIES, LOCAL EXPENDITURES, AND AN INFLUX OF IMPORTANT EXPORT REVENUES IN WINTER.



THE HELICAT INDUSTRY IS NOT ONLY GROWING ITS SKIER NUMBERS, BUT ALSO ITS REVENUE PER SKIER DAY, EXPENDITURES PER SKIER DAY, AND AS A RESULT, OVERALL ECONOMIC IMPACT PER SKIER DAY → \$\$





# Executive Summary

PHOTO: SKEENA HELISKIING

The British Columbia helicopter and snowcat skiing (helicat) industry continues to occupy a unique and valuable place at the forefront of B.C.'s iconic reputation in adventure tourism. Adventurers are drawn to the rugged mountains and ideal snow conditions, but also the range and quality of services that the helicat industry provides.

**Recognized globally as the preferred destination for skiers and snowboarders, B.C. helicat skiing truly is a world-class industry.**

In addition to delivering an incredible tourism product, the helicat sector provides significant and growing economic benefits to B.C.'s provincial economy.

With 91.6% of the helicat industry's annual guests travelling to B.C. from other provinces and countries, the majority of the revenue generated is new to the B.C. provincial economy. In a representative year, the resulting \$213 million in revenue

from the helicat industry adds \$326 million to provincial output; generates over \$164 million in GDP; supports over 2,846 total jobs, equating to 1,797 full-time equivalent (FTE) jobs; supplies \$89 million in family income; and produces \$15 million in tax revenues. This impact is distributed throughout local communities and the province as the revenue, jobs, and expenditures stimulate further economic activity.

This report is based on the results of an industry-wide survey. Helicat industry participation in this survey represents 87.6% of helicopter and 63.3% of snowcat operations as a percentage of total industry skier days. The results of this study demonstrate the helicat industry's average annual economic impact between 2016 and 2018. Comparisons of the current economic impact with a similar study analyzing the 2013 to 2015 period indicate steady growth in both skier visits and associated revenue per skier visit. On average, skier days are increasing by 5%, and revenues and expenditures are increasing by 11%, annually.

This thriving economic activity is especially valuable as it is concentrated in rural areas and communities where alternative economic opportunities are limited. While industry performance varies slightly with annual snow conditions, helicat skiing is a key

generator of revenue in these regions during the winter season. Despite being a relatively small industry on a provincial scale, helicat firms rank among the leading employers and economic engines in these remote centres. Their workforce is skilled, the positions are well-paid, and this industry is generally free from cyclical disturbances seen in many natural resource sectors.

For close to 50 years, the helicopter and snowcat skiing industry has prioritized sustainable growth, environmental management, safety standards, and operating best practice. This focus includes an emphasis on the financial health and yields of the sector. The B.C. land base is finite and the helicat industry's growth potential has limits. Because of this, the sector is increasingly centred around the sustainable management of our businesses; the protection and renewal of the natural environments in which we operate; our social and financial contribution to local communities; and fostering healthy relationships with First Nations.

This report is a snapshot of our contribution.

**A highly principled sector, the helicat industry is focused on doing our part to increase the quality of life and financial well-being of the province of British Columbia.**



PHOTO: MICA HELISKIING



# Introduction

This report provides a comprehensive overview of the British Columbia (B.C.) helicopter and snowcat ski (helicat) industry’s important economic impact. Helicopter and snowcat skiing have long been key stakeholders in the iconic B.C. backcountry, providing recreation activities, creating jobs, and drawing tourists from out-of-province and overseas to communities within and across the province. While facing changes and challenges, this industry has seen new visitors, returning skiers, and steady success since its inception half a century ago.

In 2016, HeliCat Canada commissioned a study to illustrate the widespread benefits of helicopter and snowcat skiing in B.C. The 2016 report showcased the economic impact of the helicat sector on the B.C. economy between 2013 and 2015, and it captured the industry’s social contributions to rural communities across B.C.. As economic impact measurements had not been completed since 2003, this work set new baselines upon which to measure the continued growth and development of the helicat industry.<sup>1</sup>

The 2019 HeliCat Canada Economic Impact update provides current industry data collected from operations across the 2016, 2017 and 2018 seasons and uses a framework similar to the 2016 report, which allows for comparisons and highlights improvement in key areas. A full description of the methods, data collection, and analysis process, as well as a glossary of key terms, can be found at the end of this report. Looking forward, HeliCat Canada plans to continue to track the industry’s impact and improvement to showcase the value helicopter and snowcat ski tourism brings to British Columbia.

## TOURISM IN BRITISH COLUMBIA

B.C.’s tourism industry has seen steady development over the last decade. Tourism generated \$18 billion in revenue in 2017, up 16.4% since 2014. Over the same time period, employment in tourism-related jobs grew by 4.4% to 133,100 jobs, while wages and salaries increased 9.3% to \$4.7 billion<sup>2,3</sup>. Adventure tourism visitor spending alone reached \$2 billion in 2016<sup>4</sup>. A large tourism

economy is a benefit to all areas of the province, including rural regions.

Beyond steady economic development, the Tourism Industry Association of B.C.’s vision is for tourism to be recognized as one of British Columbia’s leading and sustainable industries<sup>5</sup>. Tourism in B.C. involves Indigenous peoples and promotes their culture, caters to an international and domestic market, and extracts sustainable revenue derived from the conservation of our natural resources. The helicat sector is an important piece of British Columbia’s tourism portfolio and it aligns strongly with this vision.

**THE BRITISH COLUMBIA HELICOPTER AND SNOWCAT SKIING INDUSTRY**

Mirroring trends in B.C. tourism, the helicat industry has seen continued growth in terms of its clientele, jobs, and revenues over the past three years. With a unique combination of perfect snow, wild terrain and accessibility, British Columbia’s 41 helicopter and snowcat skiing operations together form a truly world-class industry offering an exceptional tourism product. Made up of diverse businesses ranging from small operations to multinational, publicly traded corporations, each organization is driven by the passion of hard working, mountain loving people who are dedicated to providing once-in-a-lifetime skiing experiences across B.C.’s rural, mountain regions.

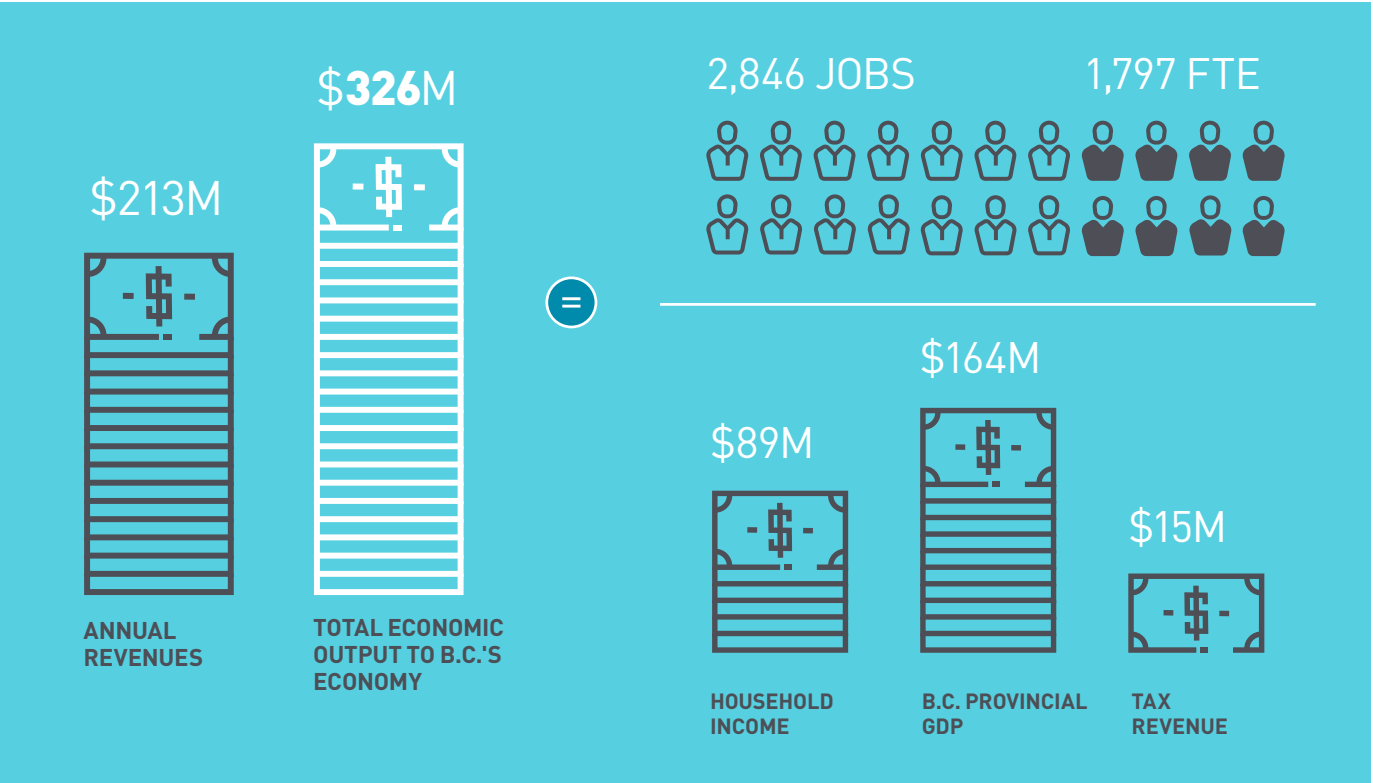
Operating on public lands, the industry relies heavily on the natural environment and climate to provide guests the incredible experiences they seek. As such, sustainability has been a growing focus within HeliCat Canada, and operators across the industry have been making strides to improve their environmental, social, and economic impacts. Based primarily in remote mountain areas, the success of helicat operations contributes to smaller regional economies, bringing important income, revenue, and resources to rural communities that may not otherwise have such opportunities for stable development outside of natural resource extraction industries.

1 Norrie, K. & Murphy, M. (2016). Elevating Adventure: A social and economic impact assessment of helicopter and snowcat skiing in British Columbia. Web. January 20, 2019. < [https://drive.google.com/file/d/0B\\_2rsFOgCq8VdkRBdXBISDRnX2M/view](https://drive.google.com/file/d/0B_2rsFOgCq8VdkRBdXBISDRnX2M/view) >

2 Province of British Columbia. (2019). Welcoming Visitors – Benefiting Locals – Working Together: A strategic framework for tourism in British Columbia 2019–2021. Web. March 15, 2019. < [https://www2.gov.bc.ca/assets/gov/tourism-and-immigration/tourism-industry-resources/our-tourism-strategy/welcoming\\_visitors\\_benefiting\\_locals\\_working\\_together\\_-\\_final.pdf?mc\\_cid=1a21b14d66&mc\\_eid=5c86dca4c1](https://www2.gov.bc.ca/assets/gov/tourism-and-immigration/tourism-industry-resources/our-tourism-strategy/welcoming_visitors_benefiting_locals_working_together_-_final.pdf?mc_cid=1a21b14d66&mc_eid=5c86dca4c1) >

# Helicat Industry Economic Impact

IN 1 YEAR THE HELICAT INDUSTRY CREATES:



The direct economic effects accrue mainly as helicat firms purchase goods and services, hire workers, and generate profit. These initial expenditures cycle through local communities, creating a substantial ripple effect that spreads to the rest of the B.C. economy. Thus, the entire province has an important stake in helicat activities, regardless of residents’ level of interaction with the industry itself.

This report uses a strong sample of helicopter and snowcat skiing operations to depict the industry-wide demographic profile and

economic impact. The information provided demonstrates clearly that the helicat sector is a significant contributor to the British Columbia economy.

Previous reports show that helicopter skiing firms are structurally different from snowcat skiing firms from both a revenue and an expense perspective, thus, where relevant, helicopter and snowcat skiing are analyzed separately. Detailed analyses of the helicat sector’s demographic profile and widespread economic impact are presented in the following sections.

3 Destination British Columbia. (2018). Value of Tourism 2016; Trends from 2006–2016. Web. January 20, 2019. < [https://www.destinationbc.ca/content/uploads/2019/01/Value-of-Tourism\\_2016\\_FINAL.pdf](https://www.destinationbc.ca/content/uploads/2019/01/Value-of-Tourism_2016_FINAL.pdf) >

4 Province of British Columbia. (2019)

5 Tourism Industry Association of B.C.. About TIAB.C.. Web. January 20, 2019. < <http://www.tiabc.ca/about-tiabc/> >



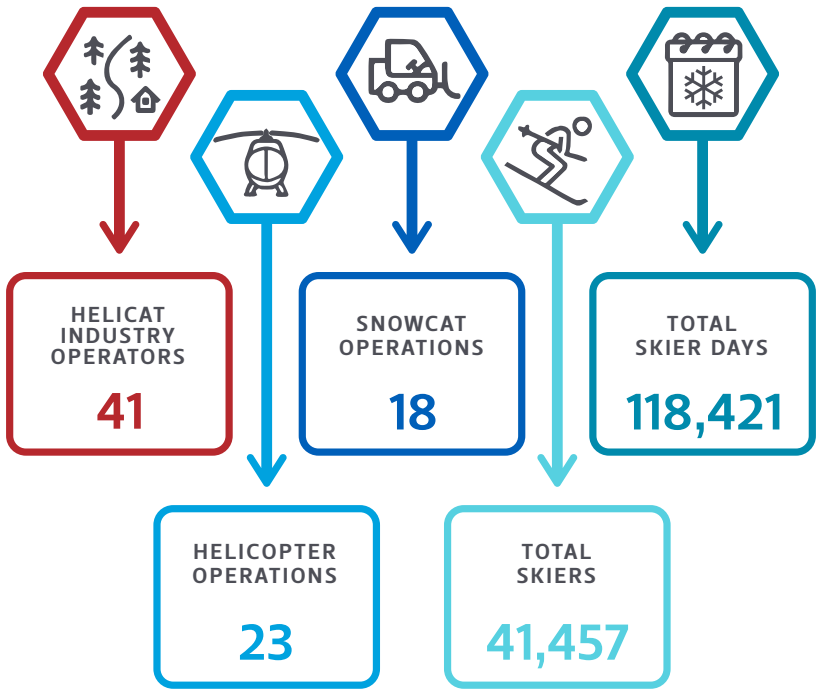
# Industry Profile

There are currently 41 helicopter and snowcat skiing operators across the province. All helicat operating locations are based in or close to small communities with an average population of 4,325 and a maximum population of 11,486<sup>6</sup>.

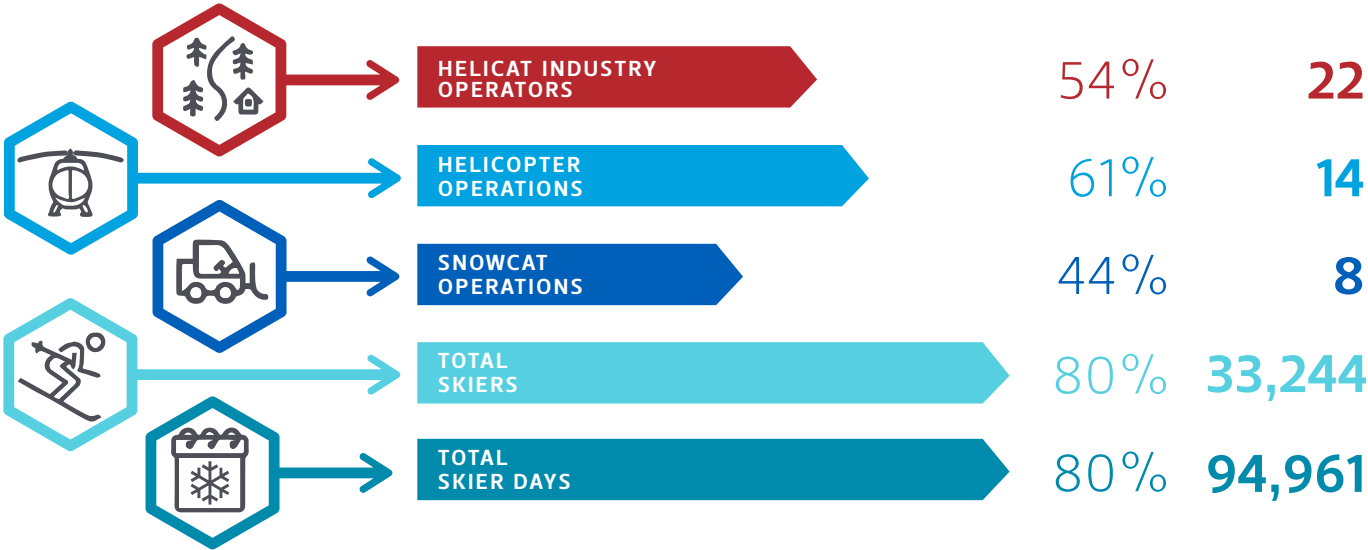
## OPERATIONS

Between 2016–2018, an average of 41,457 skiers per year took part in 118,421 days of skiing. This is a 26% increase in skier participation and a 20% growth in skier days over the previous three-year average.

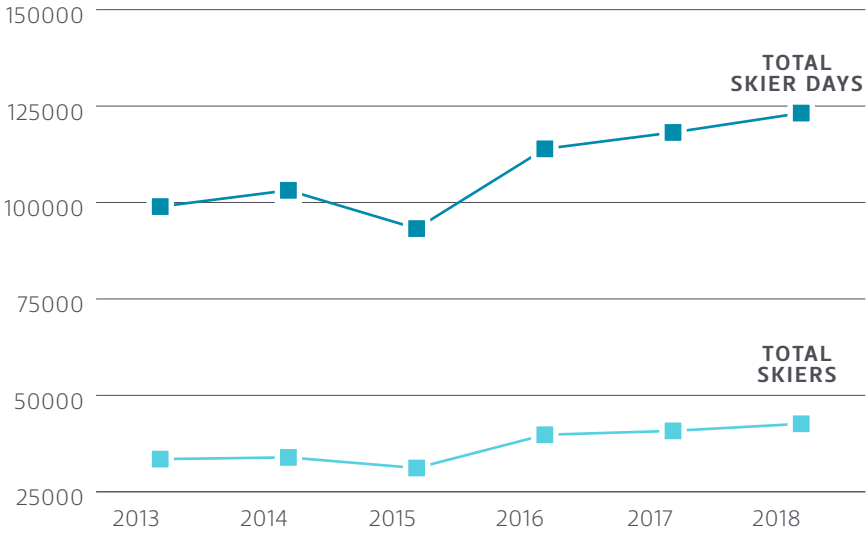
THE HELICAT INDUSTRY BY THE NUMBERS



THE HELICAT INDUSTRY ECONOMIC SURVEY PARTICIPATION



SKIER GROWTH



Ski packages vary between operations, business strategy, and location. The most common packages offered by 86% of operations are between two–five days, while 59% of operations cater to guests wanting to ski more than five days and 32% offer single day skiing packages.

Most multi-day ski packages include:

- guiding
- ski & snowboard equipment rentals,
- food and beverage, and
- accommodation.

A growing number of ski packages include the use of an avalanche airbag, as well as guest transportation within British Columbia.

Single day helicat ski packages frequently have reduced services. Additions such as accommodations, food or transportation can often be included for an additional charge.

In addition to standard packages, guests can also purchase the following while visiting the operation:

- merchandise
- alcoholic beverages
- massages
- photographs or video of their ski day
- additional skiing

While many operations shut down during the summer season and do not operate summer visitor programs, almost half of the helicat businesses offer summer accommodation, food and beverage services, merchandise sales, or non-heli access hiking or biking activities; 14% of operations offer helicopter-access hiking, biking, mountaineering and via ferrata.

## REVENUE SOURCES

91% of helicat industry revenue comes directly from helicopter and snowcat skiing packages. Outside of ski packages, half of the operations derive additional revenue from offering extra services to guests. Of this, 6% is from accommodation and food and beverage sales outside of regular skiing packages, 2% is from summer visitors, and 1% is from other services, such as massages, or ski photography.

## GUEST PROFILE

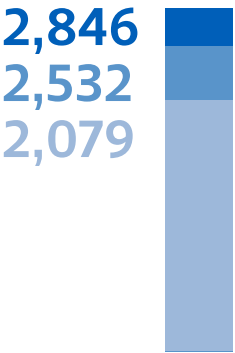
Helicat skiing attracts international visitors to the province. 77.6% of all guests originate from outside of Canada. Of the remaining skiers, 14.0% are from other provinces in Canada and 8.4% are British Columbia residents. The top six countries from which helicat guests originate are, in order, the USA, Germany, the United Kingdom, Switzerland, Australia, and Norway.

While helicat skiing is most often the primary focus of visitors' trips, operators report that 50.7% of their guests extend their stay beyond the length of their ski package by an average of 3.4 days to explore British Columbia and to participate in other tourism activities around the province.

6 2016 StatsCan Census population data



TOTAL EMPLOYEES



■ Induced ■ Indirect ■ Direct

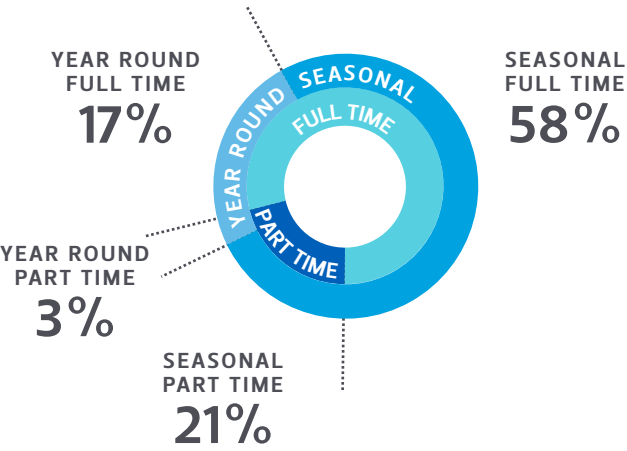
EMPLOYMENT AND STAFF

The helicat industry is directly responsible for the creation of 2,079 jobs within B.C.

TOTAL EMPLOYEES

The helicat sector has a complex mix of employee types. Due to the nature of helicat operations, 79% of helicat jobs are seasonal, of which 73% are full-time and 27% are part-time. Ski guides are the most common seasonal full-time staff, while lodge employees and bus drivers are other examples. These staff work full-time during the season but have other pursuits in the off-season. Seasonal, part-time employees include food and beverage staff, massage therapists, and some ski guides.

NATURE OF HELICAT EMPLOYMENT



NATURE OF HELICAT EMPLOYMENT

Of the 2,079 positions, 21% are year-round, of which 85% are full-time and 15% part-time jobs. Full-time year-round positions primarily include workers employed as executives, administration, marketing, and lodge maintenance, while part-time year-round staff consist mainly of head ski guides, hospitality staff, accountants, and IT personnel.

Overall, 81% of helicat staff have a post-secondary education in the following categories:

- 33% have guiding certifications,
- 30% hold a university degree,
- 20% hold a college diploma, and
- 16% have an apprenticeship.

To support their staff, 64% of helicat operators offer a tuition fee subsidy for education courses and 36% offer paid time off for course participation.

SELKIRK TANGIERS HELI SKIING – ANDREW DANYLUK



Despite helicopter and snowcat skiing being viewed as a “trip of a lifetime”, 52% of helicat guests are return clientele. Many operators see groups of friends who have returned to ski together every winter for over a decade!

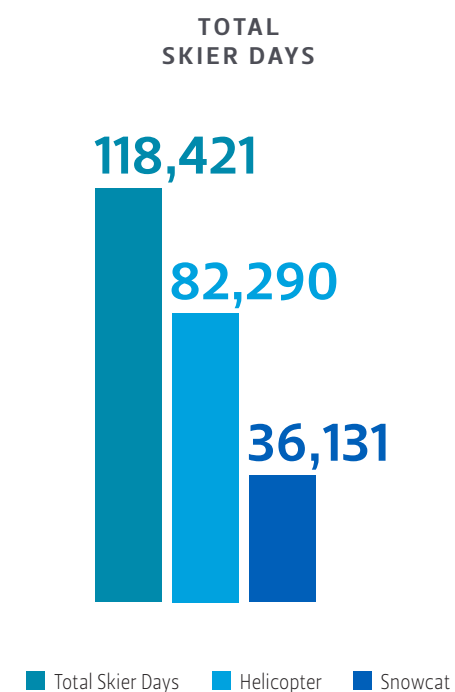


# A Flourishing HeliCat Industry

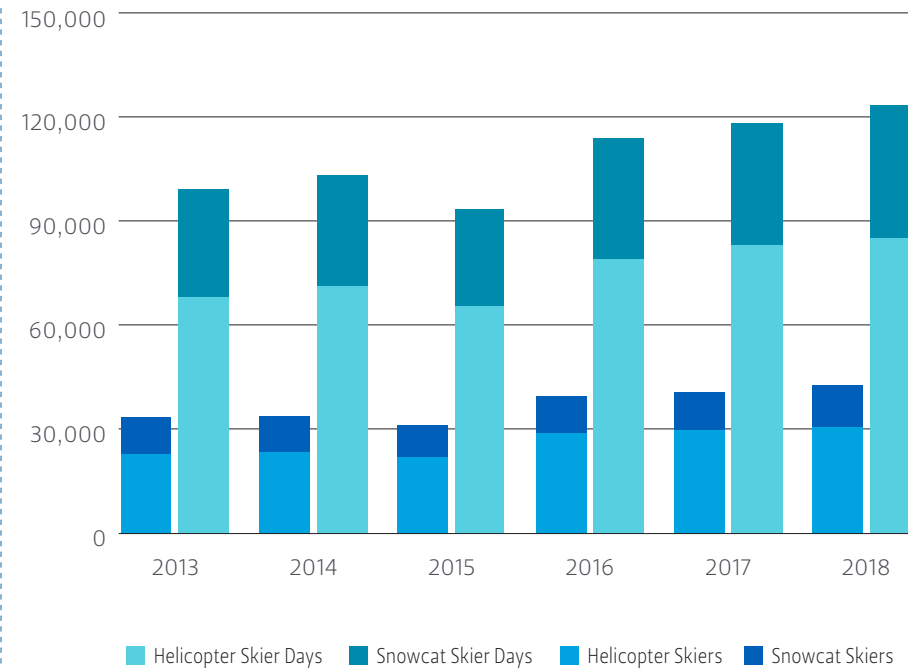
Using the 2016 helicat industry socio-economic impact report as a baseline, the 2019 report provides not only the helicat industry's current economic value but demonstrates how the industry has developed and changed in the past three years. The following comparison metrics are based on averages across the 2016–2018 seasons to allow contrast with the previous 2013–2015 three-year period and minimize the influencing effects of anomalies such as a low snow year, which was the case in 2015.

## SKIER DAYS

The B.C. helicat industry has had strong seasons in the past few years. Total growth in annual helicat skier days between 2013 and 2018 was 24%, increasing on average by 5%, year over year.



## WHOLE INDUSTRY SKIERS AND SKIER DAYS



## WHOLE INDUSTRY SKIERS AND SKIER DAYS

Since the 2016 report, average annual helicopter skier days have increased by 21%, while snowcat skier days have increased by 20%. Beyond skier days, helicat operators have increased their clientele numbers, seeing the average annual number of skiers rise from 32,876 to 41,457 in the same time period.

Helicopter ski firms receive an average of 29,822 skiers each season with each visit lasting 2.76 days on average. The corresponding figures for snowcat operations are 11,246 skiers staying for an average of 3.21 days per visit.

## REVENUES

As of 2018, the helicat industry represents 1.4% of B.C.'s \$18 billion<sup>7</sup> total tourism revenue.

Averaging an annual gross revenue of \$213.3 million over the past three years, B.C. helicopter and snowcat skiing has seen a 41.6% increase in revenue from the previous 2013–2015 average and an average annual revenue growth of 11% over the past 6 years.

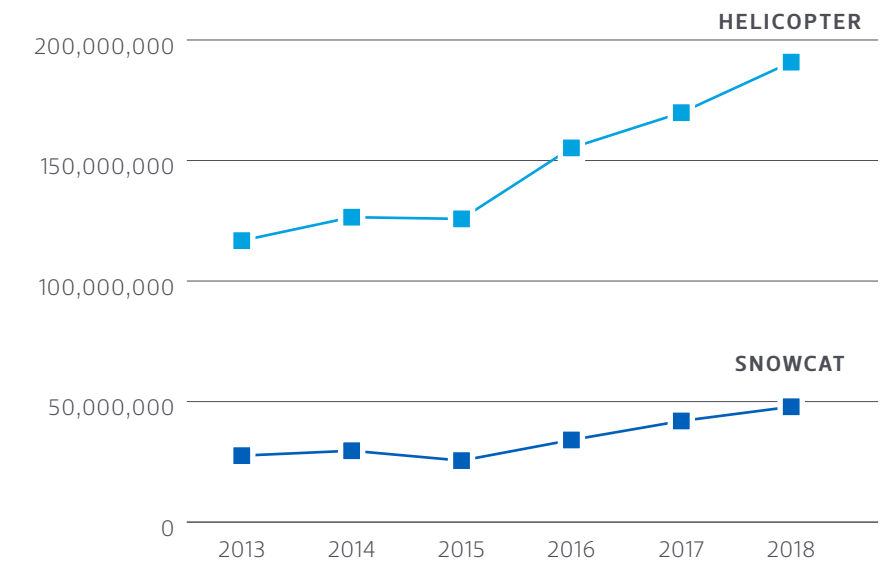
## ANNUAL REVENUE

Helicopter operations accounted for \$172.0 million while snowcat operations reported \$41.3 million of total revenue.

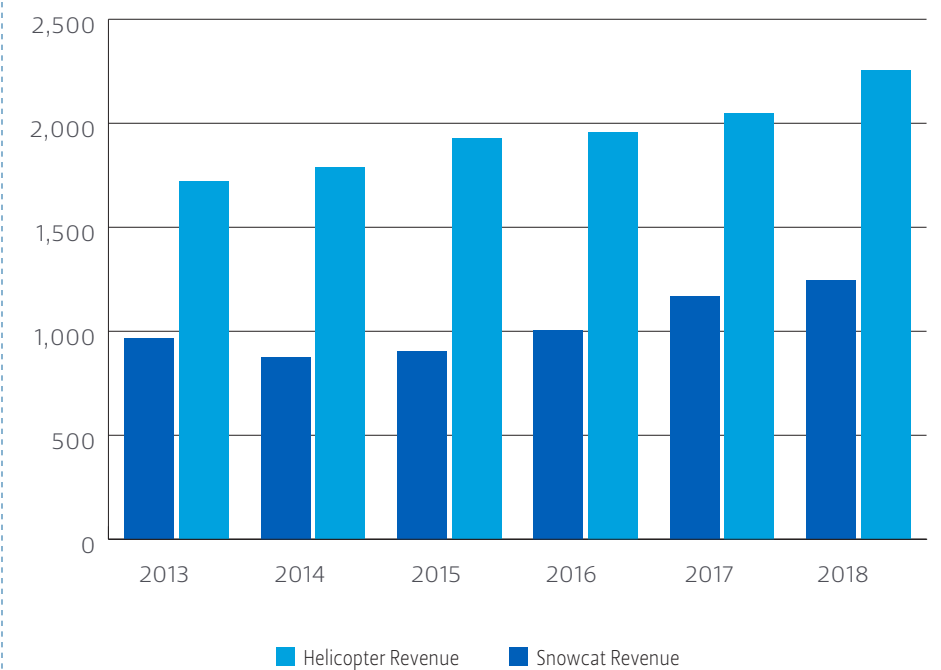
## MORE REVENUE PER SKIER DAY

Over the 2016–2018 period, helicopter skiing firms' average revenue per skier day was \$2,087. Snowcat skiing firms' average revenue per skier day was \$1,140.

## ANNUAL REVENUE



## ANNUAL REVENUE PER SKIER DAY



<sup>7</sup> Province of British Columbia. (2019)



# Important Impacts on the B.C. Economy

Due to the multiplier effects of tourism expenditures within B.C., every dollar of helicat expenditures results in an increase of \$1.70 to the B.C. economy. This results in the helicat industry producing \$325.6 million in overall outputs within British Columbia. This includes the sum value of all goods and services, including intermediate and induced purchases made because of helicat industry expenditures.

The current economic impact in terms of the output of the helicat sector has surged by 73.1% since the previous reporting period, which represents an average annualized growth rate of 14.6%.

## GROWING ECONOMIC IMPACT



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Over 90% of helicat industry revenue comes from out of province guests, while total expenditures in B.C. constitute \$191.8 million of \$213.3 million in total revenue, contributing over \$164.0 million to the B.C. provincial gross domestic product (GDP). But the helicat industry's economic value to British Columbia is much larger than just the direct economic impact of revenues and expenditures made within the province. The sector provides employment to over 2,800 people, which is equivalent to nearly 1,800 FTE positions and which creates \$88.6 million in household income and \$14.6 million in tax revenues.

Helicat operations are linked with many other industries and services throughout B.C., which creates a multiplier effect, extending the economic impact of the helicat industry across the supply chain. Helicat operations directly encourage B.C. suppliers, such as food and wine producers, to increase production and therefore wages, salaries and profits, to meet skier demands. This has a cascading indirect economic impact on the entire provincial economy, as subsequent suppliers are encouraged to increase production to indirectly support the products and services demanded by helicat operations. Furthermore, helicat operations have induced economic impact, as helicat employee incomes are spent on consumer goods, services, and taxes around the province.

**This extended provincial economic impact and its benefit to local communities across B.C. is greatest when helicat industry guests bring in foreign capital, or export revenue, and the helicat industry, first-round and subsequent suppliers, and helicat employees purchase goods and services locally within the province.**



### OUTPUT TO THE B.C. ECONOMY

**\$325.6**  
**\$274.1**  
**\$187.6**  
IN MILLIONS



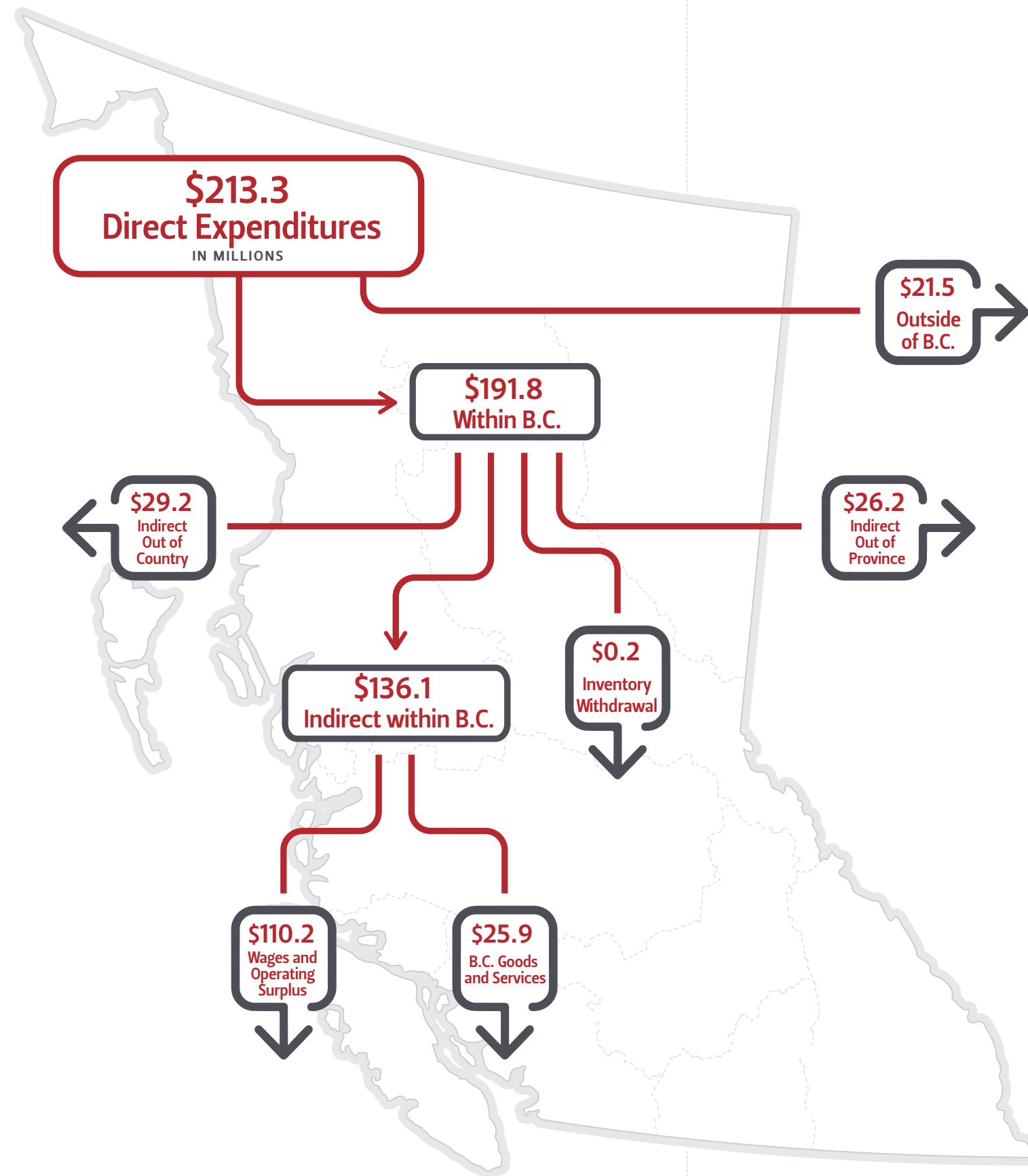
■ Induced ■ Indirect ■ Direct

### EXPENDITURES AND OUTPUTS

Average annual helicat industry expenditures equal \$213.3 million. These expenditures create a total output of \$325.6 million to the B.C. economy.

### OUTPUT TO THE B.C. ECONOMY

\$191.8 million in average annual expenditures stay within British Columbia (i.e. contracting directly with in-province services, suppliers, and workers). These expenditures directly contribute \$187.6 million to the overall output. Helicat's direct expenditures with first-round suppliers stimulate further economic outputs from subsequent producers and suppliers across their supply chains.



### ALLOCATION OF EXPENDITURES

Of the total expenditures, \$136.1 million consists of incremental spending on goods and services produced in B.C., such as wages and salaries, as well as profits, including \$25.9 million on goods and services produced by B.C. suppliers, such as B.C. wine ordered from a B.C. supplier. This spending causes first-round supplier industries within B.C. to increase their output by \$86.5 million, which is considered indirect output to the B.C. economy from the helicat industry.

\$110.2 million represents returns to labour and to profits. Spending from incomes generated by helicat industry operations and the supplier industries further produce an induced output of \$51.4 million.

The remaining expenditures are considered leakages from the B.C. economy, in which case economic benefits are spread throughout the Canadian and global economy.

Helicat firms reported a relatively small direct leakage of \$21.5 million spent on goods and services outside of British Columbia, however most of these expenditures are made within nearby provinces.

\$26.2 million in indirect expenditures is spent on orders placed with British Columbia suppliers whose products are produced in other Canadian provinces, such as Ontario wine ordered from a B.C. supplier, and \$29.2 million is spent through B.C. suppliers whose products are produced in other countries, such as skis manufactured in Europe and sold through a B.C. supplier. An estimated \$200,000 represents leakages from products withdrawn from inventories where production would be accounted for in a previous period.

### PRIMARY EXPENDITURE CATEGORIES







**BRINGING REVENUE INTO B.C. FROM ABROAD**

\$165.6 million of helicat revenue is generated from guests visiting from foreign countries.

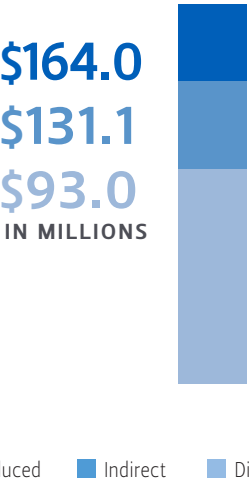
Tourism is Canada's largest service export and the helicat sector is a major provider of export tourism services, representing 3.1% of B.C.'s \$5.4 billion in tourist export revenues<sup>8</sup>. The only difference between helicat services and a typical export product is that consumers travel here to experience the product instead of having it shipped to their country.

**While international travellers only account for 30% of overall tourism in Canada, nearly 80% of helicat tourists are international guests.**

Helicat guests visiting B.C. from other provinces and countries are coming primarily for B.C.'s renowned helicopter and snowcat skiing. Thus, unlike other more domestically-oriented sectors, there is little, if any, displacement of other B.C. activities.

Any financial displacement that does occur in helicat activities happens in the guest's province or country of origin. This stands in contrast to many other economic impact studies where displacement is common and must be accounted for. Additionally, visiting guests often spend more on other locally produced goods and services during their trip.

**CONTRIBUTION TO B.C. GDP**



**CONTRIBUTION TO B.C. GDP**

Overall, the helicat sector is responsible for adding \$164.0 million annually to the provincial GDP. The helicat sector directly generates \$93.0 million in GDP. This consists primarily of wages, salaries, and profits. Indirect spending produces a further increase in GDP of \$38.1 million, while incremental GDP from induced spending totals \$32.9 million.

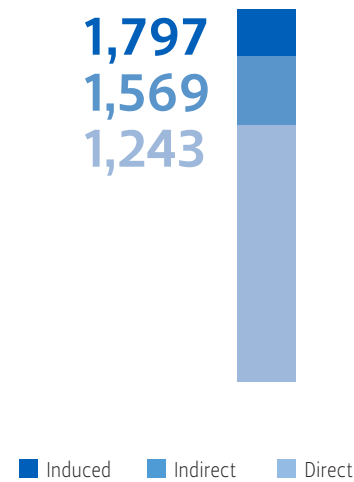
**JOB CREATION AND INCOME**

Every dollar of helicat industry revenue generates \$0.46 in employment incomes for British Columbians. As such, the helicat industry supports 2,846 employees, which equates to approximately 1,800 full-time equivalent (FTE) employment positions and \$88.6 million in household income.

<sup>8</sup> Destination British Columbia. (2018). 2017 Value of Tourism; A Snapshot of Tourism in BC. Web. March 26, 2019. <[https://www.destinationbc.ca/content/uploads/2019/02/Pages-from-2017-Value-of-Tourism\\_Snapshot\\_FINAL.pdf](https://www.destinationbc.ca/content/uploads/2019/02/Pages-from-2017-Value-of-Tourism_Snapshot_FINAL.pdf)>



FULL TIME  
EQUIVALENT JOB CREATION



FULL TIME EQUIVALENT  
JOB CREATION

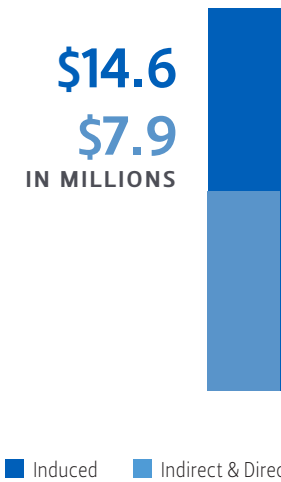
Helicat operations directly create 2,079 jobs, which equates to 1,243 in direct FTE employment positions. These jobs create an average of \$51.2 million per year in household income, which amounts to an average salary of \$24,615 per helicat employee, or an average salary of \$41,161 per helicat FTE employee.

For every million dollars of direct expenditure, the helicat industry supports 9.4 FTE jobs.

Helicat expenditures indirectly result in an additional 453 positions, or 326 FTE employees through first-round and

9 Province of British Columbia. (2019).

TAX  
REVENUES PRODUCED



subsequent-round supplier industries, and they induce 314 jobs or 228 FTE employees through sectors that provide consumer goods and services. The helicat industry further generates \$24.1 million in indirect household income across supplier industries and \$13.3 million in induced household income.

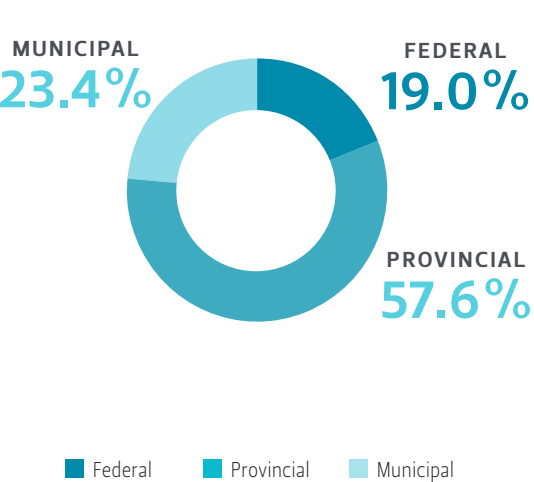
TAX REVENUES GENERATED FROM HELICAT

The helicat industry generates \$14.6 million in tax revenue across municipal, provincial and federal governments.

This number is derived from the input-output model using known taxation rates for the various types of taxes. Helicat tax revenues account for 1.2% of B.C.'s \$1.2 billion in tax revenues generated from tourism<sup>9</sup>.

Helicat operations directly and indirectly produce \$7.9 million in government taxes. The wages, salaries and profits generated by the induced effect from employee salaries produce a further \$6.7 million in tax revenues.

DISTRIBUTION OF  
TAX REVENUES



DISTRIBUTION OF TAX REVENUES

These tax revenues are distributed among all levels of governments, with the B.C. government receiving \$8.4 million, the largest share at 57.6%. Municipal governments receive \$3.4 million (23.4%) and the federal government receives \$2.8 million (19.0%).

BIG IMPACT IN SMALL RURAL ECONOMIES

The helicat sector makes an impressive contribution to the B.C. economy overall, but its real impact is on the communities in which the operations are located. By the very nature of the activity, helicat operations are located in remote, rural areas of the province. In many cases, economic opportunities in these locations are few, especially in winter.

Accurate input-output models do not exist at the sub-provincial level, however, so we cannot provide quantitative analyses of the localized economic impacts. Even if they did exist, the contributions of helicat firms in these communities extend well beyond simple economic factors.

Helicat is a thriving tourism sector attracting tourists to rural B.C. during Canada's tourism "off-season".

Where only 1% of Canada's tourist activities are winter-based and only 2% are nature-based<sup>10</sup>, helicopter and snowcat skiing represent an important nature-based, winter tourist attraction.



10 Province of British Columbia. (2019)



# Glossary and Methodology

Economic impact analysis is a methodology developed to determine the impact of a specific economic activity on a given economy – in this case, specifically the helicat sector’s impact on British Columbia’s provincial economy. This method understands that beyond simply demonstrating direct GDP, employment and tax revenues, each industry has complex linkages to the rest of the economy and, therefore, supports further indirect and induced economic activity. This methodology accounts for these complex interactions to establish the full economic impact of the helicat industry.

## DATA COLLECTION AND SAMPLE SIZE

The economic impact analysis is based on voluntary self-reported information, submitted by the helicat firms, through a survey on expenditures and labour. The survey followed the same structure as the previous economic impact survey to ensure continuity and to allow for comparable results over time. The survey was distributed to all 41 helicat operators in the province, including those who are not members of HeliCat Canada. After a period of six months, 22 firms (14 helicopter ski operators and 8 snowcat ski operators) responded with usable data. Overall, the 22 surveys returned represent 53.7% of all 41 helicat firms. Perhaps more importantly, the firms that responded represent 80.2% of industry skier days.

The response rate differed between sectors, however. Helicopter skiing firms responding to the survey accounted for 87.6% of skier days on average over the three-year period, while responding snowcat firms accounted for 63.3%. The results of the economic impact analysis assume that non-responding helicopter skiing firms do not differ structurally from responding ones, and likewise

for snowcat skiing firms. Where appropriate, economic impact and demographic analysis has been separated to account for the differences between helicopter and snowcat skiing operations. The percentage of responses are well above the suitable sample size necessary to extrapolate statistically significant results across the industry. As such, expenditure and demographic survey data submitted as inputs to Statistics Canada have been extrapolated to estimate industry-wide outputs in terms of economic impact and activity.

## INPUT-OUTPUT TABLES

This report uses the services of Statistics Canada to generate the economic impact through input-output tables derived from the British Columbia economy. Economic input-output models are designed using statistical information on the economy and the flow of goods and services through different industries. This information is developed using regionally based economic data as well as informed assumptions from the data about the flow of goods and services. By supplying specific inputs, the model calculates the resulting output in the economy using the impact types discussed below.

In this analysis, model inputs are the revenue, expenditure, and labour demographic data of the helicat industry. Revenue data and representative annual expenditures by specific category were submitted to Statistics Canada. The format chosen and the expenditure categories included were arrived at through consultation with Statistics Canada personnel. Statistics Canada then ran the data through an input-output model and prepared a report on the resulting economic impacts of the helicat sector.

TABLE 1 – SURVEY RETURN BREAKDOWN

2016-2018			
% OF TOTAL SKIER DAYS	HELICOPTER	SNOWCAT	TOTAL
Average skier days from industry survey	72,087	22,874	94,961
Average skier days not surveyed	10,203	13,257	23,460
Average skier days from HeliCat Canada records	82,290	36,131	118,421
Percent of whole industry surveyed	87.6%	63.3%	80.2%
% OF TOTAL OPERATORS	HELICOPTER	SNOWCAT	TOTAL
# of operators participating	14	8	22
# of operators not participating	9	10	19
Total # of operators	23	18	41
Percent of whole industry participated	60.9%	44.4%	53.7%

TABLE 2 – EXTRAPOLATION FACTOR

2016-2018			
PER SURVEY RETURNS	HELICOPTER	SNOWCAT	TOTAL
Average annual revenue	\$150,666,282	\$26,185,345	\$176,851,626
Average annual skier days	72,087	22,874	94,961
Average revenue per skier day	\$2,087	\$ 1,140	\$ 1,862
PER NON-SURVEYED SKIER DAYS			
Average skier days not surveyed, from HeliCat Canada records	10,203	13,257	23,460
Average annual revenue estimated from non-surveyed skier days	\$21,293,341	\$15,109,966	\$36,403,307
Average annual revenue	\$150,666,282	\$26,185,345	\$176,851,626
Total extrapolated average industry revenue	\$171,959,623	\$41,295,311	\$213,254,933
Multiplier for extrapolation, weighted by revenue	1.14	1.58	1.21



INPUTS

In total, the survey identified 39 recurrent expenditure input categories, 13 non-recurrent expenditure input categories, and two categories of labour input.

EXPENDITURE INPUTS

This model distinguishes between two types of expenditures.

**Recurrent Expenditures** are outlays that firms make each year in the course of operations. Helicopter and snowcat leasing services, groceries, and ski guide wages are examples of recurrent expenditures.

**Non-Recurrent Expenditures** are outlays that firms make on an occasional basis. These expenditures are strategic purchases that last for a discrete period after which they stop or are replaced by another strategic purchase. Snowcat purchases, lodge construction, and major terrain enhancements are examples of non-recurrent expenditures.

For each expenditure category, firms were asked to estimate the percentage of the outlay that is made initially within B.C. This is a requirement of the methodology, because any expenditures made directly on products from other provinces or countries have no further impact on British Columbia’s economy. As an example, a helicat firm purchasing foreign-manufactured ski equipment from a B.C. distributor represents a provincial expenditure, although the eventual economic impact will be restricted to wholesale and retail margins. If the firm places the order directly with a foreign or out-of-province supplier, however, this represents a leakage from the B.C. economy.

LABOUR INPUTS

**Employment** is the number of additional jobs created as a result of expenditures made by the helicat industry.

To produce labour inputs, survey responders grouped employees according to the categories of year-round full-time; year-round part-time; seasonal full-time; and seasonal part-time. These categories were converted into an FTE figure by assigning the following weights to each category:

- Year round, full-time: 1.0
- Year round, part-time: 0.5
- Seasonal, full-time: 0.5
- Seasonal, part-time: 0.25



CHATTER CREEK – HAMISH BIRT

This weighting is based on expert knowledge of the industry and the typical employment contracts of the various types of employees. It is important to note that Statistics Canada uses the conventional definition of FTE (stated below) when calculating spread effects.

OUTPUTS

TYPES OF ECONOMIC IMPACT

The economic impact of the industry is greater than just simply the total expenditures made by the helicat industry in the province because of the linkages within the economy and the interaction of provincial business and employee spending. As a result, calculating total economic impact is complex.

Economic impact analyses are based on three different forces:

- **Direct impact** refers to purchases made by helicat operations within British Columbia;
- **Indirect impact** refers to the purchases made and employees hired by the suppliers of helicat businesses; and
- **Induced impact** refers to helicat employees spending their salary within the provincial economy.

MULTIPLIER EFFECTS AND LEAKAGES

Beyond direct impact, all expenditures made by helicat operators within B.C. are subject to a multiplier effect, whereby the economic impact is greater than the initial expenditure due to how these expenditures stimulate further purchases across the economy.



MUSTANG POWDER – MAYLIES LANG



Helicat operation expenditures within B.C. will encourage first-round suppliers to increase production to meet the incremental demand for their goods and services. Some of these products and services will be produced and/or purchased from subsequent-round suppliers based in B.C.. As noted above, the sum of first-round and subsequent-round supplier responses is known as the indirect impact of the helicat industry.

There is a further multiplier effect, as some portion of the incomes generated in the helicat industry are spent on consumer goods and services. If these products are produced locally, such as for housing or in restaurants, their expenditures represent income to local residents and there will be subsequent rounds of spending. This is the induced impact discussed above.

However, regardless of whether helicat expenditures are direct, indirect or induced, once products and services are produced or purchased in other countries, other provinces, or drawn out of inventory, the multiplier effect is limited to this purchase and has no further impact on the B.C. economy. These are considered leakages from the B.C. economy. The same points hold for wages, salaries and profits generated in the supplier industries. Furthermore, the Statistics Canada input-output model ignores any effects on government spending that the incremental taxation revenue might induce, so this is also considered leakage.

MEASURES OF ECONOMIC ACTIVITY

This economic impact analysis uses standard metrics that allow economic activity and impact to be measured, analyzed and compared across regions, nations, and industries. The following are key terms used throughout this report:

- **Output** is the total sum value of all goods and services, including intermediate purchases produced due to helicat industry expenditures. This measure double counts direct, indirect and induced levels of impact.
- **Gross Domestic Product (GDP)** is the additional value of the goods and services produced due to helicat industry expenditures. GDP is smaller than output, but is a preferable indicator of economic impact in that it avoids issues of double counting during each level of impact.
- **Employment** is the number of additional jobs created as a result of helicat industry expenditures, and is estimated as the number of jobs per \$1 million spent. Direct employment includes employees and contractors on helicat firms'

- payroll. Indirect employment is related to the suppliers' workforce, while induced employment refers to retail and other types of jobs supporting household expenditures.
- **Full Time Equivalent employment (FTE)** is defined by Statistics Canada as total hours worked divided by average annual hours worked in full-time jobs (more than 30 hours per week).
  - **Household income** is the value of wages and salaries paid to employees.
  - **Tax Revenue** is the value of tax generated through helicat industry expenditures.

CHALLENGES

The helicat industry is dependent on a number of external factors that influence year-to-year revenues and expenditures, therefore economic impact can vary slightly. For example, a good snow year will overstate the economic impact of the industry, while a poor year will understate it. Another case is when an operation completes major lodge construction or renovation in a given year, which will overstate economic impacts, while the opposite is true for years with relatively little activity. As such, analyzing a single year may not be representative of impact and development. To resolve these issues, data on recurrent expenditures was collected for the three most recent years (2016, 2017 and 2018) and on non-recurrent expenditures over the past five years (2014, 2015, 2016, 2017 and 2018). These expenditures were averaged across these periods to produce representative figures of annual outlays.

Operators responding to the current and previous survey may differ slightly, and operators may have slight variations in how expenses are categorized. Furthermore, the data for the current survey period was processed by Statistics Canada, while the previous report from 2016 used the services of BC Statistics. The models used by Statistics Canada and BC Statistics are generated from the same data, but there are still decisions that are made within each run as to the classification of the data. As such, there may be differences in the classification of the expenditure data between the two organizations and reporting years. Despite these challenges, the large sample sizes mean overall averages of industry impact are representative in both reports, even though the data may have some comparable variation.

This report aims to estimate the impact and development of the industry within the province of British Columbia. As such, the



input-output models focus solely on the B.C. provincial economic impact and total industrial output. Impact on local, Canadian, and global economies are not reported. Despite this, it can be inferred from the regional impact, the high national and international

visitor numbers, and the direct, indirect, and induced expenditures across Canada, that the B.C. helicat industry is an important tourism sector for the province.





**HELICAT**  
CANADA

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