

Placer Miners Survey Report, 2023



Prepared by Yukon Bureau of Statistics for Klondike Placer Miners' Association and Department of Energy, Mines and Resources, Government of Yukon



Introduction

The 2023 Placer Miners Survey was administered by Yukon Bureau of Statistics (YBS) on behalf of the Klondike Placer Miners' Association (KPMA) and the Department of Energy, Mines and Resources (EMR), Government of Yukon. The survey was designed to collect information from placer mining operations for the estimation of placer mines' contributions to the economy and labour market of Dawson City and Yukon in 2020 through 2022.

Methodology

The survey was a census of all placer mining operations that had active water licences anytime in 2020, 2021 and 2022 issued by the Yukon Water Board (YWB) in and around Dawson City¹.

YBS sent out email invitations on April 26, 2023, to all 159 placer mines that had active water licences in and around Dawson City. The initial invitation was followed by email reminders and phone calls. The survey was closed on June 30, 2023.

Excluding duplicates, operations with invalid contact information, and out of scope operations, a total of 109 operations were eligible for the survey. Out of the 109 eligible operations, 79 completed the survey with a response rate of 72.7% and a refusal rate of 2.8%. After weighting and adjusting for the non-response, this report represented the total targeted population (109 eligible operations) and *not* just those 79 who completed surveys.

Individual responses were validated against a set of criteria to identify and correct response errors. Missing values were imputed using identical information from a relevant survey² or an administrative database^{3,4,5}. In cases where relevant information was not available in a survey or an administrative database, missing values were imputed using a nearest-neighbour approach. The mean value imputation procedure was used to impute missing values as a last resort. Finally, the estimates were derived after adjusting for non-responses, and were validated against available official data sources^{6,7}.

Results

The survey questions were organized in three sections. Section A asked placer miners a few demographic questions and about their family involvement in placer mining. Section B was about the length of placer mining operations, water licence use, and employment in 2020 through 2022. Section C asked placer miners about **selected** expenditures, opinions on factors influencing their operational viability, gross revenues, and sponsorships and donations in 2020 through 2022.

Summary tables of the survey results are provided in Appendix A, and the survey questionnaire is annexed at Appendix B. The key findings of the survey results are outlined below.

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¹ The geographical area "in and around Dawson City" had no clear boundary and was not comparable to either the Dawson Mining District or the Dawson planning region. According to the YWB, this was based on applicants' self-reported closest community when they applied for water licences.

² Yukon Business Survey, 2021, Yukon Bureau of Statistics

³ Business Register, 2021, Statistics Canada

⁴ Yukon fuel tax data, 2020-2022, Department of Finance, Government of Yukon

⁵ KPMA membership donation records, Klondike Placer Miners' Association, Yukon

⁶ Yukon Exploration and Geology Overview, 2020-2022, Yukon Geological Survey

⁷ Supply and Use Tables, 2020, Statistics Canada

Section A: Demographics

Ownership

About half (46.8%) of all placer mining operations were sole proprietorships, while others (49.4%) were partnerships or shareholder arrangements.

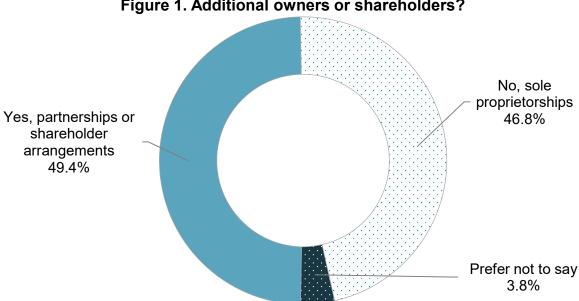


Figure 1. Additional owners or shareholders?

Nearly two-thirds (63.3%) of all placer mining operations did not include women in the ownership or shareholder group (Figure 2).

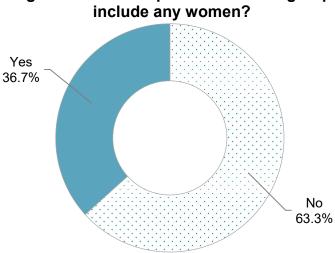


Figure 2. Ownership or shareholder group

Residence of owner(s) when not in operating location(s)

When not in the placer mining operation(s), most placer mine owners primarily resided in the Dawson region (40.5%), followed by other provinces or territories in Canada (33.0%), other communities in Yukon (10.1%), and the United States of America (6.3%). Among other provinces or territories in Canada, 20.3% placer mine owners lived in British Columbia and 11.4% lived in Alberta (Figure 3).

Dawson region 40.5 Other community in Yukon 10.1 Alberta 11.4 British Columbia 20.3 Ontario 1.3 United states of America 6.3 Other 8.9 Prefer not to say 1.3 10 20 40 50 30 **Percent**

Figure 3. Residence of owner(s) when not in operating location(s)

Owner(s) and their family history in placer mining

More than half (54.4%) of the placer miners were *first generation miners*, while about a third (31.6%) of them were *second-generation miners* (i.e., parents are/were miners), and about one in six (17.7%) were *third-generation miners* (i.e., grandparents are/were miners) (Figure 4).

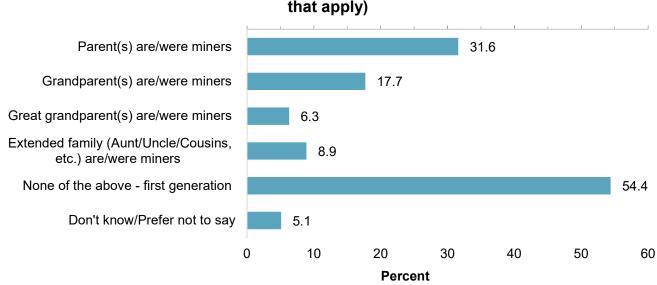


Figure 4. Owner(s) and their family history in placer mining (Check all that apply)

Family-run operations

Nearly three-quarters (70.9%) of the placer miners reported working with family or employing family members, while about a quarter (24.1%) of them reported having no family members in their operations (Figure 5).

No, there are no family members in my operation, 24.1

Don't know / Prefer not to say, 5.1

Yes, I work with my family or employ family members annually, 70.9

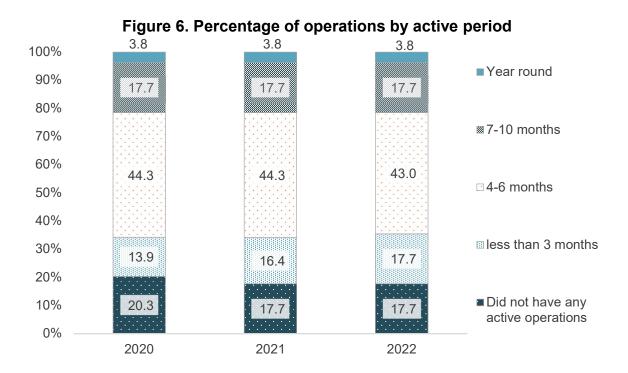
Figure 5. Is this operation family run?

Section B: Operation/Mine information

Active periods of operation

In all three years, nearly half (44.3% both in 2020 and 2021, and 43.0% in 2022) of the placer mines operated for 4 to 6 months of a year, while about one in six (17.7% in all three years) operated for 7 to 10 months. About one in six (16.4% in 2021, and 17.7% in 2022) of the placer mines operated for less than 3 months, except in 2020 (13.9%, or one in seven). A small percentage (3.8%) of mines operated year-round in all three years (Figure 6).

It is worth noting that about one in five (20.3%) operations in 2020, and one in six (17.7%) in both 2021 and 2022 did not have any active operations (Figure 6).



Active water licenses

In all three years, nearly half (48.1% in 2020, 46.8% in 2021, and 45.6% in 2022) of the placer miners had one active water licence, over a quarter (27.8% 2020, 29.1% 2021, and 27.8% in 2022) had two active water licences, and about one in nine (11.4% in all three years) of them had three active water licences. The proportion of miners with four or more active water licenses increased slightly from about one in nine (11.3%) in 2020 and 2021 to about one in eight (12.6%) in 2022 (Figure 7).

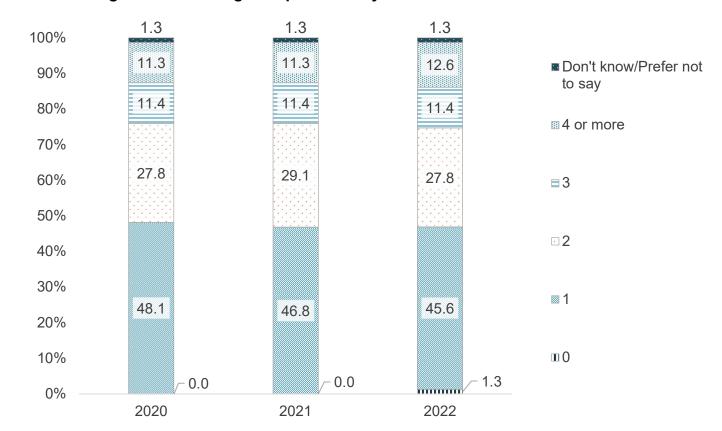


Figure 7. Percentage of operations by number of active water licenses

Number of employees

The number of employees in all placer mines, including non-operating ones, totalled 363 in 2020. The total number of employees increased slightly year-over-year to 371 in 2021 and 374 in 2022. Nearly one-third (30.0% in 2020, 32.1% in 2021, and 30.7% in 2022) of the employees were female, and about one in six (16.5% in 2020, 15.1% in 2021, and 18.2% in 2022) worked year-round. Among non-operating placer mines, only one reported having a year-around male employee in all three years.

It is worth noting that in the question about the number of employees, the survey did not specifically ask to exclude owners. Hence, the possibility of counting owners in the total number of employees by the respondents cannot be ruled out.

Section C: Expenditure

FEWBST expenditures

Respondents were asked to provide annual cost estimates for the following six categories:

- 1. Fuel (including oil, lubricants, etc.)
- 2. Equipment parts/service
- 3. Welding/fabricating
- 4. **B**ookkeeping / financial services
- 5. **S**urvey / mine planning (for example, drones, and overhead imagery)
- 6. Temporary lodging / staff accommodations

This report only focused on the above six categories, abbreviated as FEWBST expenditures. Other expenditures such as wages and loans were not included.

The FEWBST expenditures incurred by all placer mines, including non-operating ones, was \$33.4 million in 2020. The FEWBST expenditures increased by 18.2% to reach \$39.4 million in 2021, and further increased by 17.9% to reach \$46.5 million in 2022. The FEWBST expenditures incurred by active operations followed the same trend (\$33.3 million in 2020, \$39.4 million in 2021, and \$46.4 million in 2022) (Figure 8).

⁸ Percentages were calculated from non-rounded numbers.

The FEWBST expenditures incurred by non-operating mines was the highest in 2020 at \$88,800, decreased to \$71,300 in 2021, and was \$70,900 in 2022 (Figure 8).

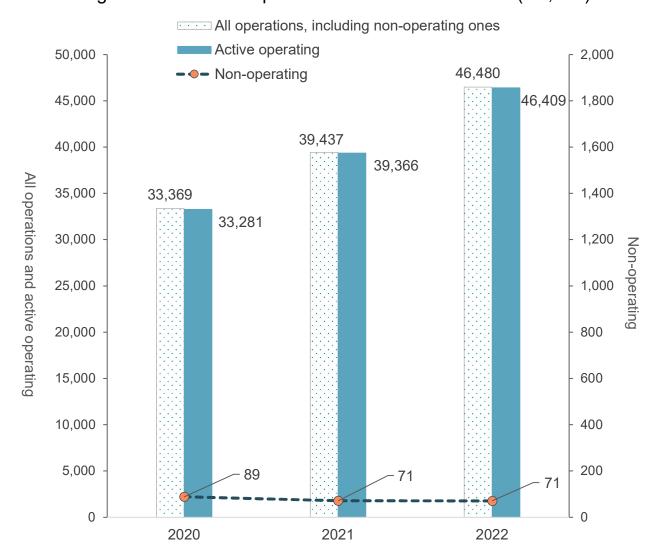


Figure 8. FEWBST expenditures in thousand dollars (x 1,000)

Expenditure by category

Of the FEWBST expenditures, during the three years, operating placer mines reported spending —

- from about one half to about two-thirds (52.1% in 2020, 57.8% in 2021, and 64.3% in 2022) on fuels (include oil, lubricants, etc.);
- from about a quarter to about one-third (32.4% in 2020, 32.2% in 2021, and 26.9% in 2022) on equipment parts and services; and
- a relatively small proportion (8.8% in 2020, 4.4% in 2021, and 3.6% in 2022) on welding and fabrication services.

Non-operating placer mines did not report any expenditures on fuels, equipment parts/services, and welding/fabrication services.

For non-operating placer mines, the highest proportion of FEWBST expenditures was on survey and mine planning (e.g., drones, overhead imagery, etc.) (65.8% in 2020, 69.1% in 2021, and 69.5% in 2022), followed by bookkeeping or financial services (29.5% in 2020, 22.9% in 2021, and 22.4% in 2022).

Expenditure by category by location

Operating placer mines reported spending most of the FEWBST expenditures in Dawson City in all three years (79.6% in 2020, 80.9% in 2021 and 82.7% in 2022). For the three large expenditure categories, they reported the following shares of spending in Dawson City:

 almost all (98.8% in 2020, 98.6% in both 2021 and 2022) of the expenditure on fuels (including oil, lubricants, etc.);

- about half (50.6% in 2020, 51.3% in 2021, and 45.8% in 2022) of the expenditure on equipment parts and services; and
- about three-quarters (72.8% in 2020, 73.8% in 2021, and 82.1% in 2022) of the expenditure on welding and fabrication services.

Non-operating placer mines did not report any cost for the above three categories.

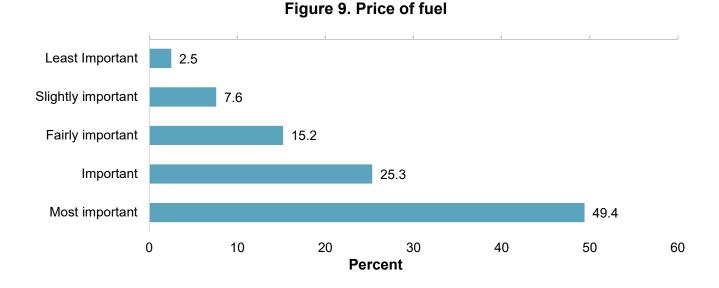
For survey and mine planning, operating placer mines spent almost all of the expenditure in Dawson City (96.0% in 2020, 85.0% in 2021, and 96.1% in 2022), while non-operating ones spent around half of the expenditure in Dawson City (47.6% in 2020, and 57.6% in both 2021 and 2022).

For temporary lodging / staff accommodations, operating placer mines spent about four-fifths of the expenditure in Dawson City (79.1% in 2020, 88.4% in 2021, and 80.9% in 2022), while non-operating ones spent about one-third of the expenditure in Dawson City (31.0% in 2020, and 35.1% both in 2021 and 2022).

For bookkeeping and financial services, all placer mines spent about two-fifths of the expenditure in Dawson City (43.0% in 2020, 40.1% in 2021, and 40.9% in 2022), and from about one-fifth to about one-third of the expenditure outside of the territory (23.5% in 2020, 20.9% in 2021, and 33.0% in 2022). The same spending pattern was observed for operating placer mines in all three years.

Operational viability consideration

When asked about the importance of selected factors for operational viability, about three-quarters of the respondents identified *price of fuel* (74.7%) (Figure 9), *regulatory environments* (76.0%) (Figure 11), and about eight in ten (83.5%) respondents identified *price of gold* (Figure 10) as *important or most important*.



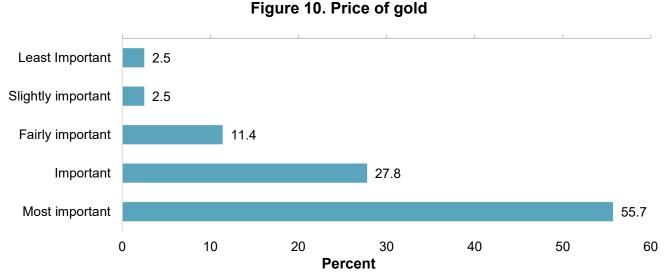


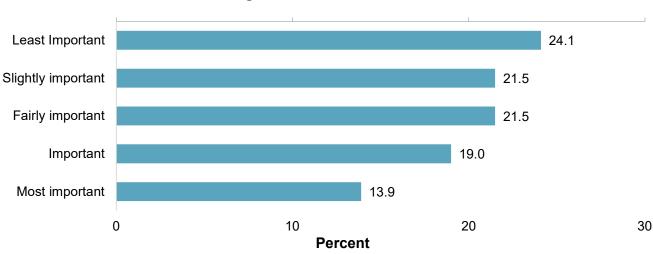
Figure 40 Dries of real

Least Important 5.1 Slightly important 3.8 Fairly important 15.2 Important 12.7 Most important 63.3 0 10 20 30 40 50 60 70 **Percent**

Figure 11. Regulatory environments

By comparison, about one-third (32.9%) of the respondents identified weather or climate (Figure 12) and about one-quarter (22.8%) of the respondents identified labour shortage (Figure 13) as important or most important.

Figure 12. Weather/Climate



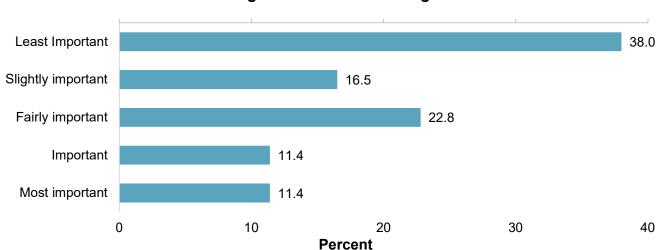


Figure 13. Labour shortage

Gross revenue

The total gross revenue of all placer mines, including non-operating ones, was \$160.1 million in 2020, the highest of all three years. It decreased by 7.6% in 2021 (\$148.0 million), the lowest of all three

years, and then increased by 4.7% to \$154.9 million in 2022⁹ (Figure 14). The total gross revenue of operating placer mines followed the same trend (\$159.0 million in 2020, \$147.2 million in 2021, and \$154.2 million in 2022). For non-operating placer mines, however, the gross revenue decreased every year (\$1.1 million in 2020, \$0.8 million in 2021, and \$0.7 million in 2022).

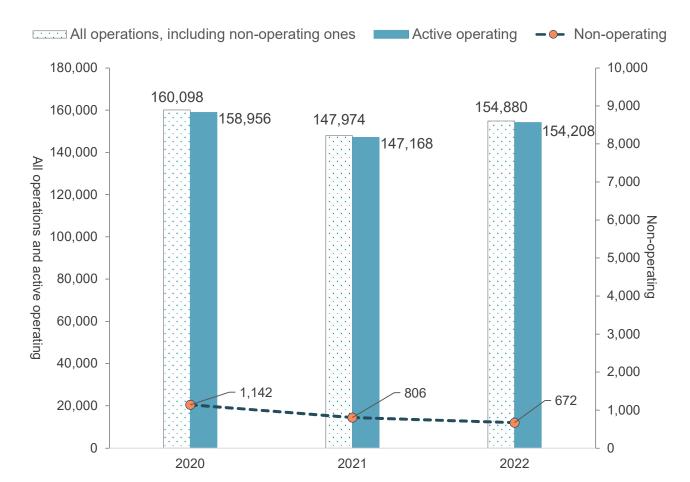


Figure 14. Total gross revenue in thousand dollars (x 1,000)

Sponsorships or donations

In all three years, the most popular sponsorship or donation was KPMA membership or events (35.4% of all operations in both 2020 and 2022, and 39.2% in 2021), followed by sponsorships or donations to charities or events in Dawson City (17.7% of all operations in 2020, and 19.0% in both 2021 and 2022) (Figure 15).

About two in five operations (38.0% in 2020, 36.7% in 2021, and 41.8% in 2022) reported no sponsorship or donation in all three years (Figure 15).

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⁹ Percentages were calculated from non-rounded numbers.

41.8 ■2020 □2021 ■2022 39.2 38.0 36.7 35.4 35.4 11.4 10.1 10.1 8.9 8.9 8.9 7.6 7.6 6.3 6.3 6.3 6.3 a. No sponsorship b. Dawson City c. Dawson City d. Yukon charity e. Yukon event f. KPMA and donations charity (e.g., event (e.g., organization (e.g., (e.g., Native membership or Diamond Tooth Dawson City Hockey Rendezvous events Gerties) Music Festival, Festival, Softball Tournament) Percy DeWolfe) Yukon)

Figure 15. Percent of operation provided sponsorship or donations to the following. Check all that apply

Placer mining operations that reported sponsorships or donations spent the most on KPMA membership or events in all three years, with 2021 being the highest (\$120,000 in total) and 2020 being the lowest (\$110,700 in total). Non-operating mines only spent on KPMA membership or events (\$700 in all three years).

Excluding spending on KPMA membership or events, placer mining operations' total spending on sponsorships or donations ranged from a low of \$12,900 in 2021 to Yukon events (e.g., Native Hockey Tournament) to a high of \$36,600 in 2022 to Yukon charity organizations (e.g., Rendezvous Festival, Softball Yukon) in all three years.

Appendix A: Data tables¹⁰

Section A: Demographics

Additional owners or shareholders?

	Frequency	Percent
Yes, partnerships or shareholder		
arrangements	54	49.4
No, sole proprietorships	51	46.8
Prefer not to say	4	3.8
Total	109	100.0

Ownership or shareholder group include any women?

	Frequency	Percent
No	69	63.3
Yes	40	36.7
Total	109	100.0

Residence of owner(s) when not in operating location(s)

	Frequency	Percent
Dawson region	44	40.5
Other community in Yukon	11	10.1
Alberta	12	11.4
British Columbia	22	20.3
Ontario	1	1.3
United states of America	7	6.3
Other	10	8.9
Prefer not to say	1	1.3
Total	109	100.0

Owner(s) and their family history in placer mining (Check all that apply)

	Percent of all operations
Parent(s) are/were miners	31.6
Grandparent(s) are/were miners	17.7
Great grandparent(s) are/were miners	6.3
Extended family (Aunt/Uncle/Cousins, etc.) are/were miners	8.9
None of the above - first generation	54.4
Don't know/Prefer not to say	5.1

Is this operation family run?

	Percent
Yes, I work with my family or employ family members annually	70.9
No, there are no family members in my operation	24.1
Don't know/Prefer not to say	5.1
Total	100.0

Section B: Operation/Mine information

Percentage of operations by active period

	2020	2021	2022
Did not have any active operations	20.3	17.7	17.7
1- 2 weeks	3.8	6.3	7.6
3-4 weeks	3.8	2.5	3.8
1-3 months	6.3	7.6	6.3
4-6 months	44.3	44.3	43.0
7-10 months	17.7	17.7	17.7

¹⁰ Numbers may not sum up to 100 due to rounding.

Year round	3.8	3.8	3.8
Total	100.0	100.0	100.0
Percentage of operations by number o	f active water license	s	
	2020	2021	2022
0	0.0	0.0	1.3
1	48.1	46.8	45.6
2	27.8	29.1	27.8
3	11.4	11.4	11.4
4 or more	11.3	11.3	12.6
Don't know/Prefer not to say	1.3	1.3	1.3
Total	100.0	100.0	100.0

Total number of employees by operating status, gender, and type in 2020

	Total # of employees	Total # of female employees	Total # of year-round employees	
All operations, including non-operating ones	363	109	60	
Active operating	362	109	59	
Non-operating	1	0	1	

Total number of employees by operating status, gender, and type in 2021

	Total # of employees	Total # of female employees	Total # of year-round employees	
All operations, including non-operating ones	371	119	56	
Active operating	370	119	55	
Non-operating	1	0	1	

Total number of employees by operating status, gender, and type in 2022

	Total # of employees	Total # of female employees	Total # of year-round employees
All operations, including non-operating ones	374	115	68
Active operating	373	115	67
Non-operating	1	0	1

Section C: Expenditure

FEWBST expenditures in thousand dollars (x 1,000)

•	2020	2021	2022
	Total expenditure	e in thousand dol	lars (x 1,000)
All operations, including non-operating ones	33,369.4	39,437.2	46,479.6
Active operating	33,280.5	39,365.9	46,408.7
Non-operating	88.8	71.3	70.9

Total fuel (include oil, lubricants etc.) cost in thousand dollars (x 1,000)

	2020	2021	2022
	Total cost in t	housand dollars	s (x 1,000)
All operations, including non-operating ones	17,329.5	22,754.2	29,835.2
Active operating	17,329.5	22,754.2	29,835.2
Non-operating	-	-	-

Share of fuel (include oil, lubricants etc.) cost in the total cost for the six categories

	2020	2021	2022
		percent	
All operations, including non-operating ones	51.9	57.1	64.2
Active operating	52.1	57.8	64.3
Non-operating	0.0	0.0	0.0

Total equipment parts/service	cost in thousand dollars (x 1,000)
	2020

	2020	2021	2022	
	Total cost in t	housand dollars	ars (x 1,000)	
All operations, including non-operating ones	10,769.1	12,661.0	12,506.4	
Active operating	10,769.1	12,661.0	12,506.4	
Non-operating	-	-	-	

Share of equipment parts/service cost in the total cost for the six categories

	2020	2021	2022
		percent	
All operations, including non-operating ones	32.3	32.1	26.9
Active operating	32.4	32.2	26.9
Non-operating	0.0	0.0	0.0

Total welding/fabrication cost in thousand dollars (x 1,000)

	2020	2021	2022
	Total cost in the	nousand dollars	(x 1,000)
All operations, including non-operating ones	2,932.9	1,733.1	1,659.1
Active operating	2,932.9	1,733.1	1,659.1
Non-operating	-	-	-

Share of welding/fabrication cost in the total cost for the six categories

	2020	2021	2022
		percent	
All operations, including non-operating ones	8.8	4.4	3.6
Active operating	8.8	4.4	3.6
Non-operating	0.0	0.0	0.0

Total bookkeeping / financial services cost in thousand dollars (x 1,000)

	2020	2021	2022
	Total cost in t	housand dollars	s (x 1,000)
All operations, including non-operating ones	593.7	603.0	697.2
Active operating	567.5	586.7	681.3
Non-operating	26.2	16.3	15.9

Share of bookkeeping / financial services cost in the total cost for the six categories

	2020	2021	2022
		percent	
All operations, including non-operating ones	1.8	1.5	1.5
Active operating	1.7	1.5	1.5
Non-operating	29.5	22.9	22.4

Total survey / mine planning (e.g., drones, overhead imagery) cost in thousand dollars (x 1,000)

	2020	2021	2022
	Total cost in the	nousand dollars	(x 1,000)
All operations, including non-operating ones	1,263.5	1,119.5	1,381.3
Active operating	1,205.1	1,070.2	1,332.0
Non-operating	58.4	49.3	49.3

Share of survey / mine planning (e.g., drones, overhead imagery) cost in the total cost for the six categories

_	2020	2021	2022
		percent	
All operations, including non-operating ones	3.8	2.8	3.0
Active operating	3.6	2.7	2.9
Non-operating	65.8	69.1	69.5

Total temporary lodging / staff accommodations cost in thousand dollars (x 1,000)

	2020	2021	2022
	Total cost in t	housand dollars	s (x 1,000)
All operations, including non-operating ones	480.7	566.3	400.3
Active operating	476.5	560.6	394.6
Non-operating	4.2	5.7	5.7

Share of temporary lodging / staff accommodations cost in the total cost for the six categories

	2020	2021	2022
		percent	
All operations, including non-operating ones	1.4	1.4	0.9
Active operating	1.4	1.4	0.9
Non-operating	4.7	8.0	8.0

FEWBST expenditures in thousand dollars (x 1,000) b	ov location
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<u> </u>		2020			2021		2022		
	Dawson		Outside of	Dawson		Outside of	Dawson		Outside of
_	City	Whitehorse	the territory	City	Whitehorse	the territory	City	Whitehorse	the territory
	Total cost in	thousand dolla	ars (x 1,000)	Total cost in	thousand dolla	ars (x 1,000)	Total cost in	thousand dolla	ars (x 1,000)
All operations, including non-operating ones	26,519.9	5,583.7	1,265.8	31,883.4	5,709.3	1,844.4	38,412.0	5,179.7	2,888.0
Active operating	26,481.9	5,534.8	1,263.9	31,848.5	5,676.4	1,840.9	38,374.6	5,150.9	2,883.1
Non-operating	38.0	48.9	2.0	34.9	33.0	3.5	37.3	28.8	4.9

Distribution of the FEWBST expenditures by location

		2020			2021		2022		
	Dawson	NA (1) (1)	Outside of	Dawson	VA (1 - 1 - 1	Outside of	Dawson	140 W	Outside of
	City	Whitehorse	the territory	City	Whitehorse	the territory	City	Whitehorse	the territory
		percent			percent			percent	
All operations, including non-operating ones	79.5	16.7	3.8	80.8	14.5	4.7	82.6	11.1	6.2
Active operating	79.6	16.6	3.8	80.9	14.4	4.7	82.7	11.1	6.2
Non-operating	42.8	55.1	2.3	48.9	46.3	4.9	52.6	40.6	6.9

Total fuel (include oil, lubricants etc.) cost in thousand dollars (x 1,000) by location

,		2020			2021		2022		
	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory
		in thousand dol	•	-	n thousand doll	,	-	n thousand doll	
All operations, including non-operating ones	17,116.6	212.9	-	22,431.2	223.2	99.8	29,406.9	428.3	-
Active operating	17,116.6	212.9	-	22,431.2	223.2	99.8	29,406.9	428.3	-
Non-operating	-	-	-	-	-	-	-	-	-

Distribution of fuel	(include oil.	lubricants etc.)	cost by	/ location

		2020		2021			2022		
	Dawson		Outside of	Dawson		Outside of	Dawson		Outside of
	City	Whitehorse	the territory	City	Whitehorse	the territory	City	Whitehorse	the territory
		percent			percent			percent	
All operations, including non-operating ones	98.8	1.2	-	98.6	1.0	0.4	98.6	1.4	-
Active operating	98.8	1.2	-	98.6	1.0	0.4	98.6	1.4	-
Non-operating	-	-	-	-	-	-	-	-	-

Total equipment parts/services cost in thousand dollars (x 1,000) by location

		2020		2021			2022		
	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory
	Total cost i	n thousand dol	lars (x 1,000)	Total cost in	n thousand doll	ars (x 1,000)	Total cost in	thousand doll	ars (x 1,000)
All operations, including non-operating ones	5,450.7	4,347.4	971.1	6,495.8	4,720.5	1,444.7	5,728.3	4,288.4	2,489.7
Active operating	5,450.7	4,347.4	971.1	6,495.8	4,720.5	1,444.7	5,728.3	4,288.4	2,489.7
Non-operating	-	-	-	-	-	-	-	-	-

Distribution of equipment parts/services cost by location

		2020			2021			2022	
	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory
		percent			percent			percent	
All operations, including non-operating ones	50.6	40.4	9.0	51.3	37.3	11.4	45.8	34.3	19.9
Active operating	50.6	40.4	9.0	51.3	37.3	11.4	45.8	34.3	19.9
Non-operating	-	-	-	-	-	-	-	-	-

Total welding/fabrication cost in thousand dollars (x 1,000) by location

		2020		2021			2022		
	Dawson		Outside of	Dawson		Outside of	Dawson		Outside of
	City	Whitehorse	the territory	City	Whitehorse	the territory	City	Whitehorse	the territory
	Total cost	in thousand dol	llars (x 1,000)	Total cost in	n thousand dol	lars (x 1,000)	Total cost ir	n thousand doll	ars (x 1,000)
All operations, including non-operating ones	2,134.8	685.5	112.6	1,279.3	292.3	161.5	1,361.5	146.6	151.0
Active operating	2,134.8	685.5	112.6	1,279.3	292.3	161.5	1,361.5	146.6	151.0
Non-operating	-	-	-	-	-	-	-	-	-

Distribution of welding/fabrication cost by location

		2020		2021			2022		
	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory
		percent			percent			percent	
All operations, including non-operating ones	72.8	23.4	3.8	73.8	16.9	9.3	82.1	8.8	9.1
Active operating	72.8	23.4	3.8	73.8	16.9	9.3	82.1	8.8	9.1
Non-operating	-	-	-	-	-	-	-	-	-

Total bookkeeping / financial services cost in thousand dollars (x 1,000) by location

. •		2020		2021			2022		
	Dawson	140 to 1	Outside of	Dawson	VA (1. 1.	Outside of	Dawson	VA // -	Outside of
	City	Whitehorse	the territory	City	Whitehorse	the territory	City	Whitehorse	the territory
	Total cost	in thousand dol	llars (x 1,000)	Total cost in	n thousand doll	ars (x 1,000)	Total cost in	thousand doll	ars (x 1,000)
All operations, including non-operating ones	255.5	198.6	139.6	241.9	235.0	126.1	284.9	182.4	230.0
Active operating	246.6	183.2	137.7	237.4	226.7	122.6	278.0	178.2	225.1
Non-operating	8.9	15.4	2.0	4.5	8.4	3.5	6.9	4.2	4.9

Distribution of bookkeeping / financial services cost by location

		2020			2021			2022		
	Dawson	1471 ic 1	Outside of	Dawson	VA/I * (Outside of	Dawson	NA	Outside of	
	City	Whitehorse	the territory	City	Whitehorse	the territory	City	Whitehorse	the territory	
		percent			percent			percent		
All operations, including non-operating ones	43.0	33.5	23.5	40.1	39.0	20.9	40.9	26.2	33.0	
Active operating	43.5	32.3	24.3	40.5	38.6	20.9	40.8	26.2	33.0	
Non-operating	34.0	58.8	7.6	27.6	51.5	21.5	43.4	26.4	30.8	

Total survey / mine planning (e.g., drones, overhead imagery) cost in thousand dollars (x 1,000) by location

		2020			2021			2022	
	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory
	Total cost	in thousand dol	llars (x 1,000)	Total cost i	n thousand doll	ars (x 1,000)	Total cost ir	thousand doll	ars (x 1,000)
All operations, including non-operating ones	1,184.2	62.1	17.1	937.6	178.9	3.0	1,309.0	69.6	2.7
Active operating	1,156.4	31.5	17.1	909.2	158.0	3.0	1,280.6	48.7	2.7
Non-operating	27.8	30.6	-	28.4	20.9	-	28.4	20.9	-

Distribution of survey / mine planning (e.g., drones, overhead imagery) cost by location

		2020			2021			2022	
	Dawson		Outside of	Dawson		Outside of	Dawson		Outside of
	City	Whitehorse	the territory	City	Whitehorse	the territory	City	Whitehorse	the territory
		percent			percent			percent	
All operations, including non-operating ones	93.7	4.9	1.4	83.8	16.0	0.3	94.8	5.0	0.2
Active operating	96.0	2.6	1.4	85.0	14.8	0.3	96.1	3.7	0.2
Non-operating	47.6	52.4	-	57.6	42.4	-	57.6	42.4	-

Total temporary lodging / staff accommodations cost in thousand dollars (x 1,000) by location

		2020			2021			2022	
	Dawson		Outside of	Dawson		Outside of	Dawson		Outside of
	City	Whitehorse	the territory	City	Whitehorse	the territory	City	Whitehorse	the territory
	Total cost	in thousand do	llars (x 1,000)	Total cost i	n thousand doll	ars (x 1,000)	Total cost in	n thousand doll	ars (x 1,000)
All operations, including non-operating ones	378.1	77.2	25.4	497.6	59.4	9.3	321.4	64.4	14.6
Active operating	376.8	74.3	25.4	495.6	55.7	9.3	319.3	60.7	14.6
Non-operating	1.3	2.9	-	2.0	3.7	-	2.0	3.7	-

Distribution of temporary lodging / staff accommodations cost by location

		2020			2021			2022	
	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory	Dawson City	Whitehorse	Outside of the territory
		percent			percent			percent	
All operations, including non-operating ones	78.7	16.1	5.3	87.9	10.5	1.6	80.3	16.1	3.6
Active operating	79.1	15.6	5.3	88.4	9.9	1.7	80.9	15.4	3.7
Non-operating	31.0	69.0	-	35.1	64.9	-	35.1	64.9	-

Importance of selected factors in operational viability (response to the survey question: Thinking of operational viability, please indicates how important each consideration is for this operation.)

Price of fuel

	Percent
Least Important	2.5
Slightly important	7.6
Fairly important	15.2
Important	25.3
Most important	49.4
Total	100

Price of gold

	Percent
Least Important	2.5
Slightly important	2.5
Fairly important	11.4
Important	27.8
Most important	55.7
Total	100

Regulatory environments

	Percent
Least Important	5.1
Slightly important	3.8
Fairly important	15.2
Important	12.7
Most important	63.3
Total	100

Weather/Climate

	Percent
Least Important	24.1
Slightly important	21.5
Fairly important	21.5
Important	19.0
Most important	13.9
Total	100

Labour shortage

J	Percent
L a a at luan autant	38.0
Least Important	30.0
Slightly important	16.5
Fairly important	22.8
Important	11.4
Most important	11.4
Total	100

Total gross revenue in thousand dollars (x 1,000)

	2020	2021	2022		
	Total gross revenue in thousand dollars (x 1,000				
All operations, including non-operating					
ones	160,098.2	147,974.0	154,879.5		
Active operating	158,955.8	147,167.7	154,207.6		
Non-operating	1,142.3	806.3	671.9		

Percentage of operations provided sponsorship or donations (response option: Check all that apply)

_	2020	2021	2022
a. No sponsorship and donations	38.0	36.7	41.8
b. Dawson City charity (e.g., Diamond Tooth Gerties)	6.3	10.1	10.1
c. Dawson City event (e.g., Dawson City Music Festival, Percy DeWolfe)	11.4	8.9	8.9
d. Yukon charity organization (e.g., Rendezvous Festival, Softball Yukon)	8.9	6.3	7.6
e. Yukon event (e.g., Native Hockey Tournament)	7.6	6.3	6.3
f. KPMA membership or events	35.4	39.2	35.4

Total sponsorship or donations provided to Dawson City charity (e.g., Diamond Tooth Gerties) in thousand dollars (x 1,000)

	2020	2021	2022
	Total donation	s in thousand dolla	rs (x 1,000)
All operations	17.6	21.1	20.5
Active operating	17.6	21.1	20.5
Non-operating	-	-	-

Total sponsorship or donations provided to Dawson City event (e.g., Dawson City Music Festival, Percy DeWolfe) in thousand dollars (x 1,000)

	2020	2021	2022
	Total donations	s in thousand dollars	s (x 1,000)
All operations	29.8	19.0	31.2
Active operating	29.8	19.0	31.2
Non-operating	-	-	-

Total sponsorship or donations provided to Yukon charity organization (e.g., Rendezvous Festival, Softball Yukon) in thousand dollars (x 1,000)

·	2020	2021	2022
	Total donation	s in thousand dolla	rs (x 1,000)
All operations	35.9	19.0	36.6
Active operating	35.9	19.0	36.6
Non-operating	-	-	-

Total sponsorship or donations provided to Yukon event (e.g., Native Hockey Tournament) in thousand dollars (x 1,000)

	2020	2021	2022
	Total donations	in thousand dollars	(x 1,000)
All operations	20.9	12.9	14.2
Active operating	20.9	12.9	14.2
Non-operating	-	-	-

Total sponsorship or donations provided to KPMA membership or events in thousand dollars (x 1,000)

	2020	2021	2022
	Total donation	s in thousand dollars	s (x 1,000)
All operations	110.7	120.0	119.4
Active operating	110.0	119.3	118.7
Non-operating	0.7	0.7	0.7

FORM:



Appendix B: Survey questionnaire

2023 Yukon Placer Miners Survey

Yukon Bureau of Statistics (YBS) is conducting the 2023 Placer Miner Survey on behalf of the Klondike Placer Miners' Association (KPMA) and the Department of Energy, Mines and Resources (EMR). The survey aims to gather information on the contribution of placer mining operations to the economy and the labour market of Dawson City and Yukon. The survey will specifically ask questions on the 2020-2022 mining seasons when the tourism industry was significantly affected by the COVID-19 Pandemic.

The survey is being conducted under the authority of the *Statistics Act*, which ensures that the information you provide will be kept strictly confidential and will not be shared with anyone. Individual responses will be combined and analyzed for reporting purposes.

Participation in this survey is voluntary, but your response is very important to understand the contributions of placer mining. The survey will take about 10-15 minutes to complete.

Section A- Contact Information/Demographics

_	name in sample] Can you please confirm the primary point of contact for this eration?
Op.	Confirm, correct point of contact (First/Last Name)
	o Incorrect point of contact, update to:
	Don't know
	Prefer not to say
A1A. [if na	ame not in sample] Who is the primary point of contact for this operation? o (First/Last Name)
	O Don't know
	o Prefer not to say
A1.1.	Is the primary point of contact the owner of this operation? ○ Yes→Go to A1.3
	 No → Go to A1.2
	 No → Go to A1.2 Don't know→ Skip to A2
	 ○ Prefer not to say → Skip to A2
A1.2.	What is the name of the owner for this operation?
→ A1.2.	(First/Last Name)
	o Don't know
	o Prefer not to say
A1.3.	What is the owner's gender?
	o Man
	o Woman
	o Non-binary
	o Don't know
	Prefer not to say
	e there any additional owners or shareholders (can be co-owner or partner) for this eration?
Opt	○ Yes → Go to A2.1
	 No → Skip to A3
	 Don't know→ Skip to A3
	 ○ Prefer not to say → Skip to A3
A2.1.	Does the ownership or shareholder group include any women? If so, how many?
L. 72.11	 Yes,
	No, no owners or shareholders are women
	o Don't know
	o Prefer not to say
A3. Cai	n you please confirm the operating name for this operation?
Au. Jai	Confirm, correct name [Applicant/licensee]
	o Incorrect name, update to:
	Don't know

Prefer not to say



A4. [if email in sample] Can you confirm the email address for this operation?

- o [if no email in sample] please provide email address:
- No email address
- o Don't know
- Prefer not to say

A5. When not in the placer mining operation(s), where does the owner(s) primarily reside?

- Dawson region
- Other community in Yukon
 - i. Community:
 - 1. Whitehorse
 - 2. Beaver Creek
 - 3. Burwash Landing
 - 4. Carcross
 - 5. Carmacks
 - 6. Destruction Bay
 - 7. Faro
 - 8. Haines Junction
 - 9. Johnson's Crossing
 - 10. Mayo
 - 11. Mendenhall
 - 12. Old Crow
 - 13. Pelly Crossing
 - 14. Ross River
 - 15. Tagish
 - 16. Teslin
 - 17. Watson Lake
- Other province or territory in Canada
 - i. Province/ territory
 - 1. Alberta
 - 2. British Columbia
 - 3. Manitoba
 - 4. New Brunswick
 - Newfoundland and Labrador
 - 6. Northwest Territories
 - 7. Nova Scotia
 - 8. Nunavut
 - 9. Ontario
 - 10. Prince Edward Island
 - 11. Quebec
 - 12. Saskatchewan
- $\circ \quad \hbox{United States of America}$
- o Other:_
- o Prefer not to say

FORM:



A6. How would you describe the owner(s) and their history in placer mining? (Check all that apply)

_	D 1/	`		,	
	Parent(~ 1	ara	MACE	minore
	rateiii	. S	al E	WEIE	111111111111111111111111111111111111111

- ☐ Grandparent(s) are/were miners
- ☐ Great grandparent(s) are/were miners
- ☐ Extended family (Aunt/Uncle/Cousins, etc.) are/were miners
- None of the above first generation
- Don't know
- Prefer not to say

A7. Is this operation family run?

- o Yes, I work with my family or employ family members annually
- o No, there are no family members in my operation
- o Don't know
- Prefer not to say

Section B- Operation/Mine information

In this section we will ask you questions about your mining business and any active operations that were operational between 2020-2022.

Approximately how long was your operation active 2020/2021/2022?

B1. 2020	B2. 2021	B3. 2022
 Did not have any active operations 	 Did not have any active operations 	 Did not have any active operations
o 1-2 weeks	O 1-2 weeks	○ 1-2 weeks
O 3-4 weeks	O 3-4 weeks	O 3-4 weeks
O 1-3 months	O 1-3 months	O 1-3 months
O 4-6 months	O 4-6 months	O 4-6 months
o 7-10 months	O 7-10 months	o 7-10 months
Year round	Year round	Year round
O Don't know	O Don't know	O Don't know
 Prefer not to say 	 Prefer not to say 	 Prefer not to say

How many active water licenses did this operation have in 2020/2021/2022?

B4. 2020	B5. 2021	B6. 2022
0 0	0 0	0 0
0 1	0 1	0 1
0 2	0 2	0 2
0 3	0 3	0 3
0 4	0 4	0 4
0 5	0 5	0 5
0 6	0 6	0 6
 Don't know 	O Don't know	O Don't know
 Prefer not to say 	 Prefer not to say 	Prefer not to say

FORM:



B7. [Only display if B4/B5/B6=0] Why did this operation not have any active water licenses in the following years:

B7.1. [Show if B4=0] 2020?

- Did not have approved water license → [if B5 & B6 > 0 Skip to B9; if B5 & B6=0 Go to B7.2]
- Could not access the operation due to pandemic-related restrictions → [if B5 & B6 > 0 Skip to B9; if B5 & B6=0 Go to B7.2]
- Operation was not active in 2020 for other reason → [if B5 & B6 > 0 Skip to B9; if B5 & B6=0 Go to B7.2]
- O Don't know→ [if B5 &B6 >0 Skip to B9 if B5 & B6=0 Go to B7.2]
- Prefer not to say → [if B5 & B6>0 Skip to B9 if B5 & B6=0 Go to B7.2]

B7.2. [Show if B5=0] 2021?

- Did not have approved water license → [if B4 & B6 > 0 go to B8; if B4 & B6=0 Skip to C1]
- Could not access the operation due to pandemic-related restrictions → [if B4 & B6 > 0 go to B8; if B4 & B6=0 Skip to C1]
- Operation was not active in 2021 for other reasons → [if B4 & B6 > 0 go to B8; if B4 & B6=0 Skip to C1]
- Don't know→ [if B4 & B6 > 0 go to B8; if B4 & B6=0 Skip to C1]
- Prefer not to say → [if B4 & B6 > 0 go to B8; if B4 & B6=0 Skip to C1]

B7.3. [Show if B6=0] 2022?

- Did not have approved water license → [if B4 & B5 > 0 go to B8; if B4 & B5=0 Skip to C1]
- Could not access the operation due to pandemic-related restrictions → [if B4 & B5 > 0 go to B8; if B4 & B5=0 Skip to C1]
- Operation not active in 2022 for other reasons → [if B4 & B5 > 0 go to B8; if B4 & B5=0 Skip to C1]
- O Don't know→ [if B4 & B5 > 0 go to B8; if B4 & B5=0 Skip to C1]
- Prefer not to say → [if B4 & B5 > 0 go to B8; if B4 & B5=0 Skip to C1]

B8. [Do not show if B4=0] How many employees did this operation employ in total in 2020?

- No Employees → Skip to B9
- → Go to B8.1
- Don't' Know → Skip to B9
- Prefer not to say → Skip to B9

B8.1 How many of these employees were women?

- → Go to B8.2
- Don't know→
- Prefer not to say

B8.2 For all employees, how many were year-round?

O Don't know

FORM	:
0	Prefer not to say



FORM	1:	YUKO
0	Prefer not to say	
	[Do not show if B5=0 2021?] How many employees did this operation employ in
0	No Employees → Ski	p to B10
0	→ G	o to B9.1
0	Don't' Know→ Skip to	B10
0	Prefer not to say→ Sk	cip to B10
B9.1	How many of these ϵ	employees were women?
0	> Go to B9.	2
0	Don't know	
0	Prefer not to say	
B9.2	For all employees, h	ow many were year-round?
0		
0	Don't know	
	Prefer not to say	
	[Do not show if B6=0 2022?)] How many employees did this operations employ in
	No Employees → Ski	
0	→ G	o to B10.1
0	Don't' Know	
0	Prefer not to say	
B10.1 I	How many of these 6	employees were women?
0	→ Go to B10).2
0	Don't know	
	Prefer not to say	
B10.2 I	For all employees, h	ow many were year-round?

- Don't know
- Prefer not to say

Section C- Expenditure

What were the costs of the following supplies and services this operation utilized in 2020-2022? Of those, what percentage of supplies/services came from Dawson City and the surrounding region, and what percentage came from Whitehorse? Please provide an approximate figure for an expenditure item. You can round the figure to the nearest thousand dollars. (Check all that apply) If totals do not equal 100%, the rest is assumed to come from outside of the territory

Note: If you don't know, or prefer not to say, please input 888 into any of the appropriate fields

FORM:



C1. Expenditures for 2020 rounded to the nearest thousand dollars. (Note: if you cannot provide expenditures to the nearest thousand, round to the nearest five thousand dollars)

Expenditure	Approximate amount (\$)	% From Dawson City	% From Whitehorse
□ Fuel (include oil, lubricants etc.)	\$	%	%
□ Equipment parts/service	\$	%	%
□ Welding/fabricating	\$	%	%
□ Bookkeeping / financial services	\$	%	%
□ Survey / mine planning (e.g., drones, overhead imagery)	\$	%	%
☐ Temporary lodging / staff accommodations	\$	%	%

C2. Expenditures for 2021 rounded to the nearest thousand dollars. (Note: if you cannot provide expenditures to the nearest thousand, round to the nearest five thousand dollars)

Expenditure	Approximate amount (\$)	% From Dawson City	% From Whitehorse
□ Fuel (include oil, lubricants etc.)	\$	%	%
□ Equipment parts/service	\$	%	%
□ Welding/fabricating	\$	%	%
□ Bookkeeping / financial services	\$	%	%
□ Survey / mine planning (e.g., drones, overhead imagery)	\$	%	%
☐ Temporary lodging / staff accommodations	\$	%	%

FORM:



C3. Expenditures for 2022 rounded to the nearest thousand dollars. (Note: if you cannot provide expenditures to the nearest thousand, round to the nearest five thousand dollars)

Expenditure	Approximate amount (\$)	% From Dawson City	% From Whitehorse
□ Fuel (include oil, lubricants etc.)	\$	%	%
□ Equipment parts/service	\$	%	%
□ Welding/fabricating	\$	%	%
□ Bookkeeping / financial services	\$	%	%
 Survey / mine planning (e.g., drones, overhead imagery) 	\$	%	%
☐ Temporary lodging / staff accommodations	\$	%	%

C4. Thinking of operational viability, please check the box that indicates how important each consideration is for this operation, 1 being least important, 5 being most important:

C4.1 Price of fuel				
□ 1	□ 2	□ 3	4	□ 5
C4.2 Price of gold		_		
□ 1	□ 2	□ 3	4	□ 5
C4.3 Regulatory environm	ents	_		
□ 1	□ 2	□ 3	4	□ 5
C4.4 Weather/climate		_		
□ 1	□ 2	□ 3	□ 4	□ 5
C4.5 Labour shortage	_	_		
n 1	□ 2	□ 3	□ 4	□ 5

FORM:		
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For all reported Placer Mining operations, which of the following broad ranges C5. best describe gross revenues in 2020/2021/2022? ****Note: this information will be used to estimate the economic impact of Placer Mining, i.e.,

Placer Mining's contribution to the GDP of Yukon and Dawson City***

C5. 2020	C6. 2021	C7. 2022	
o Under \$50,000	o Under \$50,000	o Under \$50,000	
o \$50,000 to under	o \$50,000 to under	 \$50,000 to under 	
\$100,000	\$100,000	\$100,000	
o \$100,000 to under	o \$100,000 to under	 \$100,000 to under 	
\$250,000	\$250,000	\$250,000	
 \$250,000 to under 	o \$250,000 to under	 \$250,000 to under 	
\$500,000	\$500,000	\$500,000	
o \$500,000 to under	o \$500,000 to under	 \$500,000 to under 	
\$750,000	\$750,000	\$750,000	
o \$750,000 to under	o \$750,000 to under	 \$750,000 to under 	
\$1,000,000	\$1,000,000	\$1,000,000	
○ \$1,000,000 or more → Go	○ \$1,000,000 or more →	○ \$1,000,000 or more →	
to C5.1	Go to C6.1	Go to C7.1	
o Don't know	o Don't know	o Don't know	
 Prefer not to say 	 Prefer not to say 	 Prefer not to say 	
C5.1 Please provide an	C6.1 Please provide an	C7.1 Please provide an	
estimate to the nearest	estimate to the nearest	estimate to the nearest	
million:	million:	million:	



Has this operation provided any sponsorship or donations to any of the following? Check all that apply

Note: If you don't know, or prefer not to say, please input 888 into any of the appropriate fields

C	3. 2020	C8.1	C9. 2021	C9.1Approx. Amount	C10. 2022	C10.1Appro x. Amount
		Approx. Amount		Amount		X. Alliount
	Dawson City charity (e.g., Diamond Tooth Gerties)	\$	□ Dawson City charity	\$	□ Dawson City charity	S
	Dawson City event (e.g., Dawson City Music Festival, Percy DeWolfe)	□ \$	□ Dawson City event	□ \$ <u></u>	□ Dawson City event	□ \$
Fe Sc	Yukon charity organizati on g., endezvous estival, oftball ukon)	\$	□ Yukon Charity Organizati on	S	□ Yukon Charity Organizat ion	\$
	Yukon event (e.g., Native Hockey Tournam ent)	□ \$	□ Yukon Event	□ \$	□ Yukon Event	□ \$
	KPMA members hip or events	□ \$	□ KPMA members hip or events	□ \$	□ KPMA members hip or events	□ \$
	Don't	□ Don't	□ Don't	□ Don't	□ Don't	□ Don't
	know	know	know	know	know	know
	Prefer not to say	□ Prefer not to say	□ Prefer not to say	□ Prefer not to say	□ Prefer not to say	□ Prefer not to say

Thank you very much for your participation!