THE ECONOMIC IMPACT OF SNOWMOBILING IN ONTARIO

GO SNOWMOBILING ONTARIO!™

AN ASSESSMENT OF THE 2018-19 SNOWMOBILE SEASON

PREPARED BY: HARRY CUMMINGS & ASSOCIATES

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About the Authors

Harry Cummings and Associates (HCA) is a planning and evaluation firm based in Guelph, Ontario with a sister office in Kamloops, British Columbia. Since its inception in 1997, HCA has conducted over 200 projects across Canada and internationally. HCA has extensive experience working with municipal and regional planning bodies across Canada, providing services and expertise related to strategic planning, economic impact assessment, community economic development, and policy issues.

Dr. Harry Cummings is the founder and Director of HCA, a Registered Professional Planner, a Credentialed Evaluator and the past President of the Canadian Evaluation Society (CES). He is an internationally respected expert in economic development and results-based management, program evaluation, regional and community economic analysis and regional development planning. As the Director of HCA, Dr. Cummings has managed up to 35 staff as part of integrated projects. He has managed large projects ($40 million over 10 years) and small projects ($2,000 over 1.5 months).

Dr. Cummings was a professor at the University of Guelph for over 30 years where he taught graduate-level courses in research methods, regional economics and program evaluation in the School of Environmental Design and Rural Development. He was jointly appointed to the Agricultural Economics and Rural Planning and Development departments. As a Professor at the University of Guelph, he supervised Ph.D. and Master's candidates in the planning, design, implementation, analysis, and development of strategies for regional and local economies in Canada and internationally. He has also designed and led numerous training workshops on topics such as healthy communities, program evaluation, survey design, and social return on investment.

To complete this project, HCA has assembled an experienced and dynamic project team, which collectively has over 50 years of professional research experience. Team consultants have degrees in planning and geography and have extensive experience in economic impact assessment, market research, land use planning, and stakeholder consultation. The project team members include: Dr. Cummings (PhD), Christine Zwart Cooper (MSc), and Ruth Lokram (MSc).

Acknowledgements

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We express our appreciation to the OFSC for their knowledge and experience of snowmobiling in Ontario, as well as their ongoing responses to questions, big and small, related to the study.

We would also like to acknowledge the financial contribution provided by the International Snowmobile Manufacturers Association toward the completion of this report.

HCA has enjoyed working on this study, and we appreciate the opportunity to work with the OFSC and the snowmobile community. We look forward to future partnerships.

Executive Summary

The Ontario Federation of Snowmobile Clubs (OFSC) has retained Harry Cummings and Associates (HCA) to assess the economic impact of snowmobiling in Ontario during the 2018-2019 snowmobiling season. This study is an update to one conducted by HCA in 2014. The OFSC is a volunteer-led, not-for-profit association that provides a wide range of quality programs and services to its member organizations. The OFSC manages a provincial network of snowmobiling trails that connects Ontario communities and provides responsible riding experiences that are safe, enjoyable, and environmentally sustainable.

This study will be the fifth of its kind in Ontario, with the first economic impact study dating back to 1989. Studies from 1989 to 2014 found that snowmobiling expenditures have steadily risen over the last 2-3 decades from $241 million to $853 million in direct expenditures.

Given the consistent value that snowmobiling brings to the Ontario economy, as well as the changes in the economic, social, and environmental landscape that can occur over a five-year period, the OFSC requested an update to the 2014 economic impact assessment. Using the same research methods as those used in 2014, HCA surveyed snowmobilers and completed interviews with OFSC governors and snowmobilers to determine the habits of snowmobilers and annual expenditures related to snowmobiling across the province. With this data, HCA was able to calculate the economic impact of snowmobiling using the Ontario Ministry of Tourism, Culture and Sport's Tourism Regional Economic Impact Model (TREIM). TREIM produces estimates of the direct, indirect and induced impacts of tourism-related activities on Gross Domestic Product (GDP), labour income and employment, as well as estimates of the direct and total impacts of tourism-related activities on federal, provincial and municipal tax revenues.

Survey results indicated that many snowmobilers were less active in snowmobiling during the 2013-2014 season compared to other seasons. This is likely due to poor weather conditions in many areas of Southwestern Ontario. The 2018-2019 Ontario snowmobile season had $842,870,778 in expenditures by snowmobilers riding in the province. Total provincial expenditures are down from those reported in the 2014 study. This can most likely be attributed to a decrease in trip activity as the average number of day trips have decreased by over 50%. Had the frequency of trips remained the same, as those reported in 2014, the overall economic impact could be as much as doubled.

Snowmobiling expenditures from 2018-2019 contributed to $403.9 million in direct GDP and a total of $665.7 million in direct, indirect, and induced GDP impacts. Additionally, direct employment from the season's snowmobiling expenditures totaled an estimated 6,436 full-time equivalent jobs and $216 million in taxes across three levels of government: $92 million in federal taxes, $114 million in provincial taxes, and $10 million in municipal taxes.

In terms of total economic activity generated by the snowmobile industry, the assessment finds that $842.8 million in expenditures reported by survey respondents would generate an estimated $1.6 billion in economic activity in the province in 2018-2019.[1] Despite the poor weather conditions in southwestern Ontario this year, the overall economic impact has remained consistent over the last five years, with a total economic impact of between $1.6 and $1.7 billion annually. Furthermore, the two most recent studies provide benchmarks by which we can measure the economic impact of snowmobiling during years with particularly good weather conditions (2013-2014) and years with unusually poor weather conditions (2018-2019). With the understanding, the economic impact of snowmobiling has the potential to generate between $1.6 and $3.3 billion in total economic activity in any given season dependent on factors such as weather.

[1] Based on a multiplier of 2.0

Ontario Federation of Snowmobile Clubs

The Ontario Federation of Snowmobile Clubs (OFSC) is a volunteer-led, not-for-profit association, which, through strong leadership, provides a wide range of quality programs and services to and on behalf of its member organizations. The provincial network of organized snowmobile trails connects Ontario communities, providing responsible riding experiences that are safe, enjoyable and environmentally sustainable.

This organization is guided by the following mission and vision statements:

> *"Our Mission is to provide leadership to member organizations in our commitment to enable exceptional snowmobile trails and rider experiences throughout the province."*
>
> *"Our Vision is that snowmobiling is recognized and celebrated as Ontario's premier winter recreation and tourism experience."*

More than 190 community-based OFSC member snowmobile clubs are organised into 16 operational districts which together operate more than 30,000 km of signed and groomed trails. Last year there were over 105,000 registered permits issued to snowmobilers and their families for use in Ontario.

The OFSC's Board, comprised of the Executive and District Governors, meets throughout the year to set policy, undertake long-term planning, and oversee the provincial operations and budget on behalf of the clubs. As the coordinating body for organized snowmobiling in Ontario, the OFSC provides advice and guidance to member clubs on a broad range of topics to ensure provincial objectives are met. Proceeds from the sale of the trail permits required to enter OFSC trails provide primary funding for both the trail operations of local snowmobile clubs and their provincial organization.

Studying the Economic Impact of Snowmobiling

A Review of Economic Impact Studies Completed in Ontario and Comparable Jurisdictions

Snowmobiling is one of the great winter past-times in North America and a favourite activity among Canadians, in particular. Since 1990, there have been four major studies examining the economic impact of snowmobiling in Ontario. These studies found that expenditures from the snowmobiling industry have been rising steadily over the last 30 years, with estimated expenditures from the snowmobiling industry increasing from $241 million in 1988-1989 to $853 million in 2013-2014.

The impact of snowmobiling is best measured by three different areas of impact: *direct, indirect,* and *induced impacts* on the local economy. *Direct impacts* measure the actual expenditures of snowmobilers; *indirect impacts* refer to the economic value contributed by suppliers to tourism, restaurants, and other service providers that sell to snowmobilers in Ontario; and *induced* impacts examine the expenditures of the employees and firms supported by the snowmobile industry itself. Using these measures, the 2014 study estimated that the $853 million spent by snowmobilers in expenditures directly contributed to an increase of $369 million in provincial GDP.

Overview of Previous Study Findings

This section provides a brief overview of the four major studies examining the economic impact of snowmobiling in the province, how they measured relevant snowmobiling expenditures, and the impact that snowmobiling has on the Ontario economy.

1990: Dr. Paul Eagles et al. – The first major economic impact assessment of the snowmobiling industry in Ontario was completed by Dr. Paul Eagles and his research team in 1990 during a significant growth period in the popularity of snowmobiling as a winter sport. This study examined data collected from a survey sent to 1,000 OFSC permit holders. The survey had a response rate of 43% (431 completed questionnaires) and included non-resident snowmobilers who had purchased permits for Ontario trails (Eagles, et. al., 1990). The survey respondents were comprised mostly of married men who owned an average of 1.8 sleds and had been participating in snowmobiling for 10 years or more.

The study measured the expenditures made on fixed and variable expenses they made or were planning on making in Ontario during the season. Fixed expenses were defined as those which are generally incurred once over a season, including: clothing and accessories, trailers, and insurance. Variable costs were defined as expenses incurred while on a snowmobile outing, including lodging, food, gas for the snowmobile and tow vehicle, as well as repairs.

The study found that OFSC members spent $241 million over the 1988-1989 season, with just over two million reportedly spent in Ontario on fixed and variable items. The fixed largest expense for snowmobilers was the purchase and up-keep of a snowmobile, while the largest variable expense was found to be fuel costs (Eagles, et. al., 1990).

1998: Winter Gold – The second major economic impact study on snowmobiling in Ontario was conducted in 1998 when OFSC and the Northern Ontario Heritage fund sponsored the preparation of "Winter Gold: The Report on the Economic Sustainability and Development in Ontario." Like the previous report, this study focused on the fixed and variable expenditures of snowmobilers. However, unlike the first report, this study used the Tourism Economic Assessment Model (TEAM) to measure the direct, indirect, and induced economic impacts of snowmobiling activities in the province. The reach of this study was also significantly greater than the first, with the survey sent to OFSC permit holders from Ontario (n=3,000), the United States (n=500), and adjacent provinces (n=185) (Ecologistics Limited, 1998).

This study found that snowmobilers spent around $585 million in 1998. The majority of spending was on fixed expenditures (around $399 million), and 70% of fixed costs were spent directly on snowmobiles. Respondents reported spending $186 million on variable expenditures, such as: food and beverages, fuel, oil and repairs, and overnight expenditures. Approximately 25% of the variable expenditures went to fuel and oil and another 25% was spent on food and beverages while snowmobiling.

The study also reviewed a number of issues facing the snowmobiling industry in Ontario at the time, but ultimately concluded that organized snowmobiling had evolved beyond a localized recreational pursuit to an important industry in the province (Ecologistics Limited, 1998).

2005: Paula Neice & Associates – In 2005, Paula Neice and Associates conducted the third major economic impact assessment of the snowmobiling industry. Using the TEAM model, this study combined results from data collected from OFSC permit holders, insurance records, and data from the Ministry of Transportation to project the impact of snowmobiling activities on the Ontario economy. In the 2004-2005 season, survey results snowed that the average OFSC member household owned 1-2 snowmobiles and that more than half of survey respondents lived in rural communities, with 25% of respondents having been involved in snowmobiling for more than 25 years (Paula Neice and Associates, 2005).

Financial results found that snowmobiling in Ontario generated over one billion dollars in economic activity throughout the province, with direct expenditures totalling $637 million in the 2004-2005 season. The TEAM model was then used to calculate that the 2004-2005 snowmobiling season had generated $17 million from the sale of 103,867 full- and short-term snowmobile permits. Additionally, snowmobiling in Ontario supported $274.8 million in total tax revenue among the three levels of government. Direct employment from snowmobile expenditures resulted in 4,817 equivalent full-year jobs, primarily in the service industry, including jobs in restaurants and accommodation. Accounting for indirect and induced impacts, snowmobile-related expenditures in the province supported a total of 8,746 equivalent full-year jobs. This overall economic impact is based on a combined $664 million in snowmobile-related expenditures by Ontario residents and the Ontario Federation of Snowmobile Clubs (Paula Neice and Associates, 2005).

2014: Harry Cummings & Associates – The most recent economic impact assessment was conducted five years ago by Harry Cummings and Associates. For this study, HCA sent a web survey to 60,000 OFSC permit holders – of which 4,588 surveys were completed – and conducted phone interviews with eight OFSC District Coordinators. Study results showed that snowmobilers spent over $853 million in during the 2013-2014 season. Many of the respondents reported that they were more active in the 2013-2014 season than in previous years. Furthermore, it was estimated that the $853 million in expenditures contributed to an increase of $369.4 million in direct GDP and a total of $731.3 million in provincial GDP, including direct, indirect, and induced GDP impacts.

This study also measured the impact of snowmobiling on job creation and estimated that the snowmobiling industry contributed to 11,307 jobs generated through both direct and induced employment in 2013-2014. Direct employment from the season's snowmobile expenditures was measured at 7,292 full-year equivalent jobs. The snowmobiling industry also generated $332.8 million in tax revenue across three levels of government (federal, provincial, and municipal).[2]

[2] With the federal government receiving $185.5 million in taxes, followed by the provincial government with $145.0 million, and municipal governments receiving $2.3 million in tax dollars across the province.

The study concluded that the total economic activity generated by the $853 million in expenditures could generate as much as $1.7 billion in economic activity in the 2013-2014 season. (Estimates were calculated using a multiplier of 2.0 as suggested by the Ministry of Tourism, Culture and Sport).

Economic Impact of Snowmobiling in Comparable Jurisdictions

In addition to the Ontario studies, there have been many studies over the past few decades on the impact of snowmobiling in comparable jurisdictions across Canada and the USA. This section will highlight a few relevant studies conducted in Alberta (2011); Quebec (2012); Montana (2014); Idaho (2017); and Utah (2017), and country-wide data from the United States (2019). Like Ontario, these studies have demonstrated the value of snowmobiling to the respective provincial or state governments.

Snowmobiling in Alberta & Quebec – In 2011, Econometric Research Ltd. developed an input-output model to calculate the economic impact of snowmobiling in Alberta. Unlike the Ontario studies, no direct survey of snowmobilers was done in favour of using available secondary data. The study estimated that the total expenditures on snowmobiling and related activities in Alberta in 2009 exceeded $366.5 million. The total impact on the economy using all multipliers was $810 million. Expenditure estimates included capital expenditures by snowmobilers and snowmobile clubs/associations (valued at $111.7 million) and tourism expenditures ($254.7 million). Not included in expenditure estimates was the money raised and spent by snowmobiling clubs/associations (i.e. permit sales). Based on these findings, the study concluded that more than 6,574 Albertans owe their full-time jobs to the recurrent capital and operational expenditures from the snowmobiling industry. Snowmobiling activities in 2009 alone contributed to an estimated $213.9 million in wages and salaries. The study found that the economic impact of snowmobiling is greatest in rural regions of the province where the sport is more prevalent. In these areas, snowmobiling has developed into a major new source of income and employment for many rural communities. The authors concluded that the economic impact of snowmobiling stimulates the economy through job creation and additional expenditures on good and services – providing significant income tax revenues to the provincial, municipal, and federal governments (Econometric Research Limited, 2011).

Like Ontario, Quebec also has a high population of avid snowmobilers. A 2012 study conducted by Zins Beauchesne et Associés reported that the Federation des Club de Motoneigistes du Quebec (FCMQ) had 80,000 members and more than 32,000km of trails throughout the province. Quebec is the most comparable jurisdiction to Ontario given the nature of the climate, location and political environment, as well as similar club qualities. From the 2011 season, it was found that the snowmobile industry of Quebec generated economic benefits estimated at $2 billion (Zins, 2012). The Quebec study reviewed the economic returns related to the following variables:

- Spending made by snowmobilers on trips or vacations ($939.8 million)
- Manufacturing snowmobiles and groomers in Quebec ($749.7 million)
- Sales of new snowmobiles in Quebec ($47 million)
- Benefits related to the maintenance of trails ($164 million)
- Sales of groomers in Quebec ($138 million)

Across all variables, this study found an increased benefit from snowmobiling activities to the province. It is important to note that Quebec has a manufacturing industry for snowmobiles and groomers, while Ontario does not. For the Quebec study, no economic impact model was used. The authors of the study state that the value of the snowmobile industry in Quebec is based on the quality of the snow and the 32,000km of trails (Zins, 2012).

Snowmobiling in the United States (late 1990s) – The economic impacts of snowmobiling have been widely studied throughout the states since the late 1990s. Studies conducted in Maine, Michigan, and

Minnesota between 1996 – 1998 found that snowmobiling activities generated anywhere between $160-400 million USD in direct and indirect expenditures (Reiling, et. al., 1996; Schneider, et. al., 2005; and Stynes, et. al., 1998).

One of the earliest studies conducted in the United States found that snowmobilers in Maine and New Hampshire generated over $225 million USD in direct ($152 million USD) and indirect/induced ($73 million USD) economic impacts during the 1995-1996 season. This study also provided a description of the socio-demographic characteristics of snowmobilers in Maine who, like in Ontario studies, were found to be predominately male. Snowmobiles, both new and used, accounted for nearly 50% of all expenditures between 1995 and 1996. Trailers and other accessories, insurance, trip expenses and repair and maintenance were also included in the study of expenditures (Reiling, et. al., 1996).

In the following year, 1996-1997, a comprehensive study of snowmobilers in Michigan found that over 100,000 households with permit holders spent $160 million USD on trips and $400 million USD on equipment-related expenses. Furthermore, this study found that snowmobiling was a large tourism attraction for Michigan, with snowmobiling trip spending accounting for approximately 2% of all tourism trip spending in the state. The study also found that 37% of total spending for overnight or day trips of more than 100 miles ($132 million USD) were from out-of-state snowmobilers (Stynes, et. al., 1998). Like many jurisdictions, registrations had declined since the 1980s, but it was found that the economic impacts of the sport in 1996-1997 were still significant. In Michigan, since the 1970's, a significant snowmobile industry has developed including snowmobile dealers, resorts, snowmobile clubs, and a statewide system of trails and facilities, similar to Ontario (Stynes, et. al., 1998).

Another study conducted in Minnesota in 1996 found the economic impacts contributed $300 million toward Minnesota's gross state product and approximately 5,900 jobs. Including non-resident expenditures, snowmobiling expenditures totaled $199.6 million, of which 92 percent came from resident expenditures. The study included a survey of registered Minnesota snowmobilers, as well as snowmobile manufactures and retailers. Approximately 43% or $78.6 million of the total residential expenditures were spent in the destination area within the state. The remainder of the expenditures ($105.6 million) were spent at home and en route to the destination. When residents and non-residents snowmobile throughout the state, significant direct, indirect and induced impacts flow into the local areas visited (Schneider, et. al., 2005).

Snowmobiling in the United States (2010s) – Since the studies conducted at the end of the 20th century, several newer studies measuring the economic impact of snowmobiling have been conducted in the U.S. In 2014, the Montana State Parks department commissioned a study to examine snowmobiling activity during the 2013-2014 season. This study came after Yellowstone National Park officially began limiting snowmobile access to 318 commercially lead sleds per day. The author noted that non-resident snowmobilers typically spent more on their trips (due to food and overnight accommodations) than resident snowmobilers ($147/day and $56/day respectively). In addition, Yellowstone pass data shows that only 2% of passes sold during the 2013-2014 season were purchased by resident snowmobilers. This study found that there were nearly 57,000 registered snowmobilers in the Montana area. The author estimated that resident snowmobilers spent approximately $96 million during the 2013-2014 season and that non-resident snowmobilers contributed another $14 million in spending. The largest concern reported by snowmobilers who participated in this study was access to snowmobiling areas (Sylvester, 2014).

Shortly after the Montana study was completed, a similar study was conducted in Idaho during that 2016-2017 season. This study found that snowmobilers spent $197.5 million on expenditures. The largest expenses included sleds and equipment ($57 million), food and beverages ($44 million) and retail ($31

million). Snowmobiling is a popular pastime in Idaho, which had 35,564 registered snowmobiles in 2016-2017. As with the previous case study however, the authors noted that snowmobiling activity is concentrated in specific regions[3] – namely populated counties that had favourable terrain and winter conditions. The authors estimated that snowmobilers took around 190,675 trips during that season and looked at the direct, indirect, and induced effects of snowmobiling on the greater economy. They conclude that the $197.5 million spent that year contributed to the generation of 4,062 full-time equivalent jobs and an increase in labour income of $108.2 million. In addition, they estimate an increase in the output of locally produced goods and services in Idaho of $157.3 million.

Another study of the 2016-2017 snowmobiling season conducted in Utah found that snowmobiling contributed $88.4 million to Utah's economy. The study found that there were 22,803 sleds registered to 11,350 households throughout the state and that, when adjusted for population growth, the number of snowmobilers remained steady over the last 20 years. Snowmobile owner profiles show that the average age of the snowmobiler was 54, however the age of registered individuals ranged from 18 to 83. Snowmobilers were also shown to spend an average of $6,086 on snowmobiling activities per year. Looking at direct, indirect, and induced affects of snowmobiling, the study found that the industry supported 1,378 full-time/full-time equivalent jobs in 2017 and contributed $88.4 million to Utah's economy. That being said, the economic impacts of snowmobiling were found to be concentrated in a few counties, namely: Salt Lake, Summit, Utah, Wasatch, and Weber counties. The study also acknowledged that the economic impacts of snowmobiling were limited to a few sectors, primarily the motor vehicle and parts sector and the gasoline and retail sectors (Smith & Lamborn, 2017).

Finally, the American Council of Snowmobile Associations (ACSA) recently released a 2019 report entitled *Facts and Myths About Snowmobiling and Winter Trails.* This report states that there are over 137,000 miles of groomed trails across the country. These trails are open to the general public and as such are used for a variety of winter activities such as: cross-country skiing, backcountry skiing, snowshoeing, dog sledding, winter hiking, fat tire bicycling, and in some areas, ATV riding. Unsurprisingly, snowmobiling is most common in the northern regions of the United States, with the report siting the following states popular snowmobiling destinations: Idaho, Iowa, Michigan, Minnesota, Montana, Oregon, Pennsylvania, South Dakota, Utah, Washington, and Wyoming. There are an estimated 1.2 million registered snowmobilers in the US and the average snowmobiler rides up to 1,250 miles per season. Similar to Ontario, the average age of the American snowmobiler is 45 and 75% of all snowmobilers are male. The ACSA also sites snowmobiling as an important facet of the economy, stating that it is a catalyst for many rural communities across the country. In the US, snowmobiling generates over $26 Billion in annual spending across the country and is responsible for an estimated 100,000 fulltime jobs (ACSA, 2019).

[3] Ada, Bannock, Bonneville, Canyon, Kootenai, Twin Falls, and Valley.

Study Approach

Ontario's Tourism Regional Economic Impact Model (TREIM)

The Ontario Ministry of Tourism, Culture & Sport supports the TREIM[4] process to determine the economic impact of visitors' and businesses' spending in the tourism sector on the local and provincial economies. TREIM produces estimates of the direct, indirect and induced impacts of tourism-related activities on Gross Domestic Product (GDP), labour income and employment, as well as estimates of the direct and total impacts of tourism-related activities on federal, provincial and municipal tax revenues. TREIM is a multi-region input-output model that covers 16 travel regions; 49 counties, districts and regional municipalities; 43 census metropolitan areas (CMA) and census agglomerations (CA); and the entire province of Ontario. TRIEM has been used to estimate the impact of the Toronto International Film Festival, as well as the Trent-Severn Waterway National Historic Site of Canada (The Centre for Spatial Economics, 2008; TCI Management Consultants, 2010). TREIM was developed for the Province by the Conference Board of Canada using their national input-output models.

TREIM considers four types of new expenditure in an economy:

- **Visitor Spending –**used to estimate the economic impact of tourism spending in a specific region and/or for a specific event;
- **Operational Expenses –** used to estimate the economic impact of operating an ongoing business, such as an attraction, retail business, hotel or restaurant;
- **Investment Expenditures –** for estimating the economic impact of investing in or building a tourism facility, such as an attraction, retail business, hotel or restaurant; and
- **Convention Centre Activity** – for estimating the economic impact of a convention, which includes the spending of delegates and exhibitors, as well as production costs.

This study uses the Visitor Spending category only, which takes into consideration the expenditures of visitors, tourists and/or clients who are either drawn into the area where they otherwise would not have visited or are already in the area but who extend their stay for some period of time as a result of snowmobiling in Ontario. This study does not include provincial funding provided to improve and maintain trails but rather looks at the total expenditures of snowmobilers during single-day and multi-day trips and tours.

Throughout the study, there are comparisons to previous studies of the economic impact of snowmobiling in Ontario. These studies used the TEAM model for the assessment. The TEAM model is a national model run by the Conference Board of Canada. The TREIM and TEAM models are similar; both are input-output models that have been created for the tourism sector. TREIM was developed for the province of Ontario with the assistance of the Conference Board and uses the same methodology.

Survey of Ontario Snowmobilers

In consultation with the OFSC, HCA developed and implemented an online survey to collect data on snowmobiling habits and expenditures in the 2018-2019 season. HCA used a web survey development cloud-based program, Survey Monkey, and an updated version of the survey that was developed for the 2013-2014 study. As the same survey tool was used, the survey was not pre-tested prior to its release. The survey was sent out by OFSC to approximately 88,000 individuals using an email database that included those who purchased an OFSC permit for 2018-2019, as well as previous permit holders going back five years. The survey was also shared through OFSC's social media platforms where it reached of

[4] For more information on TREIM please visit: http://www.mtc.gov.on.ca/en/research/treim/treim.shtml

15,000 individuals. A total of 10,464 individuals completed the survey on behalf of their household and the surveys had a completion rate of 62%. The survey was open for three weeks between March 21 – April 11, 2019 to mirror the dates of the 2014 survey.

For the survey instrument, please refer to the Appendices.

Key Informant Interviews

In consultation with OFSC, HCA developed guides and facilitated key informant interviews with District Presidents. An invitation was sent to all 16 District Presidents by OFSC, and HCA followed-up with recipients by email or phone. When a District President was unable to participate in a phone interview, HCA asked them to recommend another avid snowmobiler from their district who they could contact. In total, 14 interviews were conducted (12 District President interviews and 2 OFSC member interviews) over the telephone, lasting approximately 15 minutes each.

For the key informant interview guide, please refer to the Appendices.

Findings

Household Characteristics

Snowmobiling is a predominantly male dominated activity. Nearly 90% of all survey respondents were male. However, many of the survey respondents reported sledding with a partner who was most often female, as well as with their children. Most of the interview respondents were male as well (11 of 13), and nearly all respondents reported sledding with a partner or other family members. Many of the interview respondents talked about snowmobiling as a family activity, with 11 of the 13 interviewees saying that they sled with their family member(s) (i.e. spouse, kids, or grandkids).

Table 1: Gender of Survey Respondents

Gender	#	%
Male	6,552	89.4%
Female	727	9.9%
Didn't Specify [a]	53	0.7%
Total	**7,332**	**100.0%**

[a] *Participants who responded "me" or "myself" along with the gender of other family members. Does not include blank responses.*

Household size of survey respondents ranged from 2-4 most frequently, with an average family size of 2.8. The most common household size was 2, followed by 4, and a small number of respondents reported families of 9 or more (however, it is difficult to say whether this was in reference to immediate family or extended family). Just under 75% of all survey respondents reported sledding with another family member, with two active snowmobiles per household being the most common (35.7%), followed by single-sled households (27.2%) and three (17.1%) and four (13.8%) sleds per family, respectively.

Table 2: Household Size of Survey Respondents

Household Size	#	%	Cumulative %
1	424	6.7%	6.7%
2	2,868	45.6%	52.4%
3	1,136	18.1%	70.5%
4	1,339	21.3%	91.8%
5	380	6.0%	97.8%
6	101	1.6%	99.4%
7	24	0.4%	99.8%
8	6	0.1%	99.9%
9 or more	5	0.1%	100.0%
Total	**6,283**	**100.0%**	

Just over 85% of the survey respondents were married or in a common law relationship at the time of the survey. Another 8% reported that they were single, and 4% were divorced or separated. Nearly all of the interview respondents (10 of 13) were married and most had between 1-3 children, either living at home or away at University, who snowmobiled with them as well.

Table 3: Marital Status of Survey Respondents

Marital Status	#	%
Married/Common law	5,528	85.4%
Single	526	8.1%
Divorced/Separated	262	4.0%
Widowed	63	1.0%
Prefer not to answer	96	1.5%
Total	**6,475**	**100.0%**

The average age of the survey respondents was 50.3 years, and over half of the survey respondents were 50 years or older. In addition to the survey members themselves, other household members ranged from 1-93 years of age. The average age of all household members was 28.8 years. Interestingly, while the average age of the survey respondent is nearly identical to the average respondent age in the 2014 study (49.6 years old), the average age of all household members has significantly decreased since 2014 from 40.6 to 28.8. In the previous study, many of the interview respondents commented that snowmobiling is an aging sport, with only one interviewee noting that it's becoming more of a family-oriented activity. In contrast, several respondents during interviews in 2019 commented that snowmobiling is a family-oriented activity (4 of 13). These statements are validated by the data that show a younger average age of household members in 2019. Only one interview respondent in 2019 commented on challenges pertaining to the age of snowmobilers, pointing out that the average age of OFSC volunteers is 50 and voicing concern about the longevity of the organisation if they are unable to attract younger volunteers.

Table 4: Age of Survey Respondents

	Survey Respondents			All Household Members		
Age Category	#	%	Cumulative %	#	%	Cumulative %
0-19	249	3.0%	3.0%	675	3.7%	3.7%
20-24	177	2.1%	5.1%	418	2.3%	6.0%
25-29	286	3.4%	8.5%	595	3.3%	9.2%
30-34	360	4.3%	12.8%	676	3.7%	12.9%
35-39	497	5.9%	18.8%	1027	5.6%	18.5%
40-44	709	8.5%	27.2%	1612	8.8%	27.3%
45-49	1,056	12.6%	39.8%	2469	13.5%	40.8%
50-54	1,464	17.5%	57.3%	3219	17.6%	58.4%
55-59	1,494	17.9%	75.2%	2917	15.9%	74.4%
60-64	1,178	14.1%	89.3%	2125	11.6%	86.0%
65-69	521	6.2%	95.5%	925	5.1%	91.1%
70-74	253	3.0%	98.5%	423	2.3%	93.4%
75-79	102	1.2%	99.7%	156	0.9%	94.2%
80+	21	0.3%	100.0%	1056	5.8%	100.0%
Total	**8,367**	**100.0%**		**18,293**	**100.0%**	
Average Age	50.3			28.8		

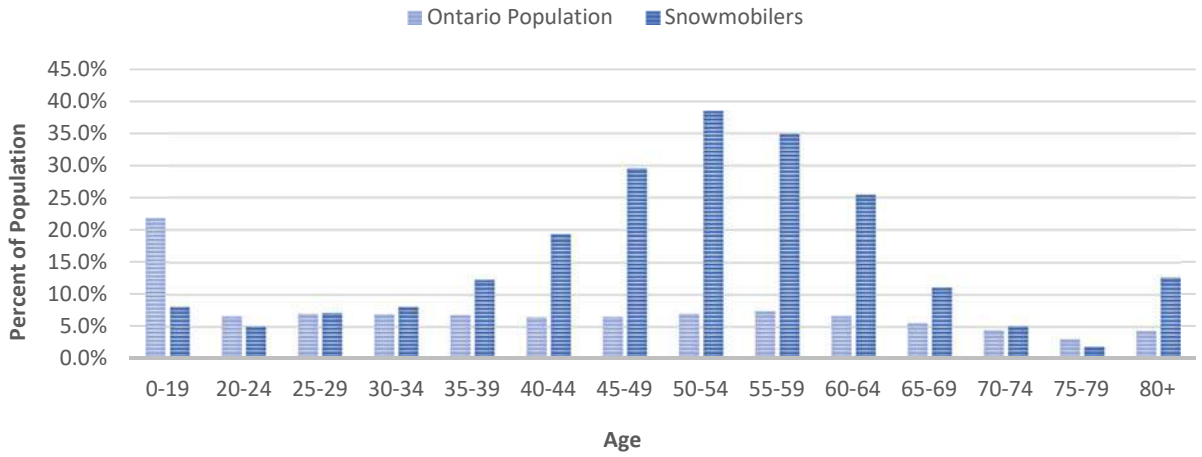

Figure 1: Age Comparison, Survey Respondents and Ontario Population[5]

Survey respondents were asked to specify the highest level of education completed to date. College, CEGEP, or other non-university certificate or diploma was the highest level of education reported most frequently by survey respondents (32.2%), followed by an apprenticeship or trades certificate or diploma (22.4%) and a high school degree (20.2%). These results are similar to those in the 2014 study, which also found that snowmobiling was less popular among University graduates, as only 15.3% of survey respondents in 2018 (and 16.6% in 2014) had completed a bachelor's degree or higher.

Table 5: Highest Education Level Attained by Survey Respondents

Education Level	#	%	Cumulative %
Less than high school	182	3.0%	3.0%
High school	1,244	20.2%	23.2%
Apprenticeship or trades certificate or diploma	1,377	22.4%	45.6%
College, CEGEP or other non-university certificate or diploma	1,982	32.2%	77.8%
University certificate, diploma or degree at bachelor level or above	429	7.0%	84.7%
Bachelor's degree	534	8.7%	93.4%
University certificate, diploma or degree above bachelor level	405	6.6%	100.0%
Total	6,153	100.0%	

In comparison to provincial education rates, there is a significantly greater proportion of snowmobilers who have completed an apprenticeship or trades program, as seen below in Figure 2. Snowmobilers were also more likely to have completed a college, CEGEP, or other non-university certificate or diploma but less likely than the general population to have a bachelor's degree or higher. Fewer snowmobilers put down their highest level of education as 'high school or less' than the general population.

[5] Statistics Canada. Table 17-10-0005-01 Population estimates on July 1st, by age and sex

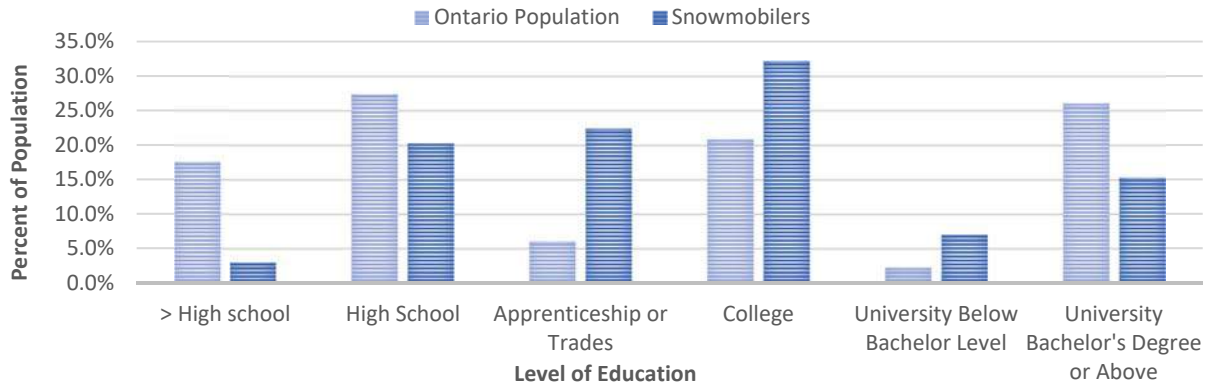

Figure 2: Education Level Comparison, Survey Respondents and Ontario Population[6]

Over 90% of survey respondents reported a household income of over 50,000 a year, and over 60% of snowmobilers had an annual household income of over $100,000 (see Figure 3). Compared to the general population, there is a greater proportion of snowmobilers in the five income categories above $80,000. However, income distribution across households is more even for the province than it is with snowmobilers. The fact that household income is higher among snowmobilers than it is for the general population is not surprising, as snowmobiling is generally considered to be an expensive sport. Comments from both interview and survey respondents suggest that the up-front cost of snowmobiling (i.e. purchasing a snowmobile) makes it a difficult activity for people to get into.

Table 6: Average Household Income of Survey Respondents

Household Income	#	%	Cumulative %
Under $5,000	12	0.2%	0.2%
$5,000 to $9,999	10	0.2%	0.4%
$10,000 to $14,999	16	0.3%	0.7%
$15,000 to $19,999	18	0.3%	1.1%
$20,000 to $24,999	34	0.6%	1.7%
$25,000 to $29,999	49	0.9%	2.6%
$30,000 to $34,999	58	1.1%	3.7%
$35,000 to $39,999	55	1.0%	4.8%
$40,000 to $44,999	96	1.8%	6.6%
$45,000 to $49,999	116	2.2%	8.8%
$50,000 to $59,999	296	5.6%	14.5%
$60,000 to $69,999	262	5.0%	19.4%
$70,000 to $79,999	303	5.8%	25.2%
$80,000 to $89,999	365	6.9%	32.2%
$90,000 to $99,999	399	7.6%	39.7%
$100,000 to $124,999	887	16.9%	56.6%
$125,000 to $149,999	690	13.1%	69.7%
$150,000 to $199,999	780	14.8%	84.6%
$200,000 and over	810	15.4%	100.0%
Total	5,256	100.0%	

[6] Statistics Canada. Education Highlight Tables, 2016 Census.

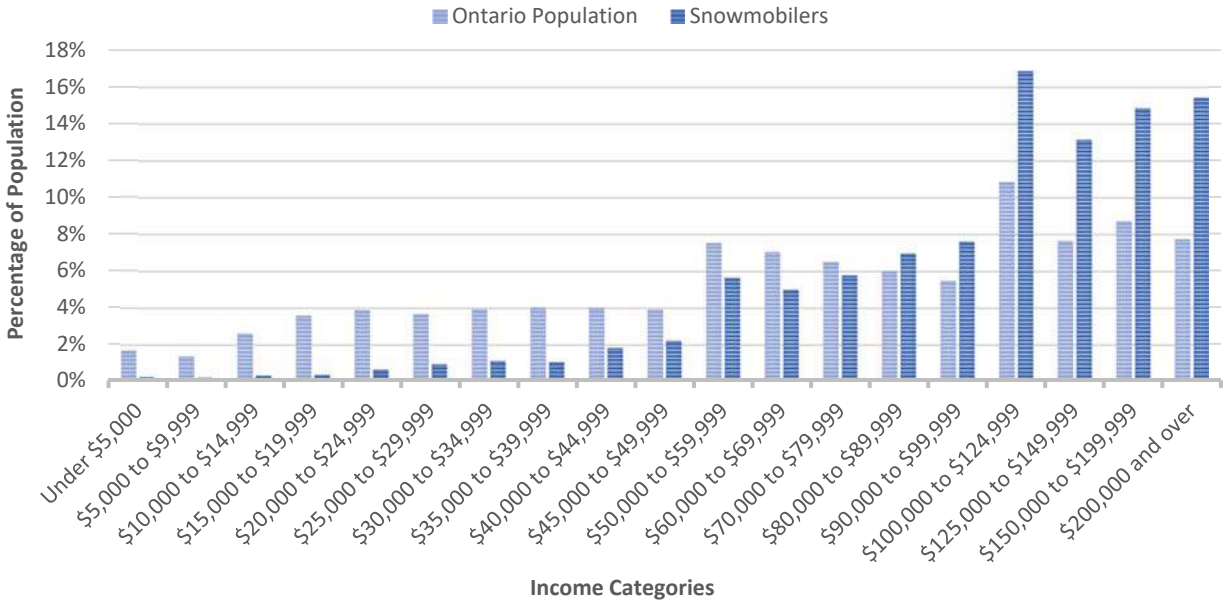

Figure 3: Household Income Comparison, Survey Respondents and Ontario Population[7]

Participation in Snowmobiling

Weather conditions during the 2018-2019 season varied greatly across snowmobiling districts. Most notably the northern districts (11-17) had a particularly long snowmobiling season, with around 17 weeks of good sledding conditions. By contrast, districts 4 and 5 (2 of the largest districts by population) experienced more rain/freezing rain than snow, and as a result, the trails were only open between 1-4 weeks in those districts. These conditions were confirmed by interview respondents and OFSC staff. Likely related, around a third of snowmobilers reported sledding less than in most seasons. The percentage of snowmobilers who reported snowmobiling less and/or not at all has gone up significantly since the 2014 study in which 7.4% of survey respondents reported sledding less and only 0.4% said 'not at all.'

That being said, snowmobiling conditions were reported to be a lot better this year than in recent previous years for many of the northern snowmobiling districts, with a couple survey respondents noting that this season was one of the best they've ever had. Approximately one third of survey respondents reported that this year they were able to sled 'more than most seasons', and another third reported sledding 'about the same as most seasons.'

Table 7: Participating in Snowmobiling during the 2018-2019 Season

Comparison to Previous Seasons	#	%
More than most seasons	3,261	31.3%
About the same as most seasons	3,249	31.1%
Less than most seasons	2,992	28.7%
2018-2019 was my first snowmobile season	252	2.4%
Not at all	678	6.5%
Total	**10,432**	**100.0%**

[7] Statistics Canada. 2017. *Ontario [Province] and Canada [Country]* (table). *Census Profile*. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017.

A total of 8,684 survey respondents reported going on at least one day trip during the 2018-2019 snowmobiling season. Nearly 23% of survey respondents reported going on day trips 2-3 times a week, and another 18% reported going once a week. Due to the substantial variance between districts in the total number of snowmobiling weeks, a weighted average was used to estimate an average of 8.4 sledding weeks across the whole province. Using this estimate for the 2018-2019 season, the average snowmobiler went on 11 day trips this season.

Table 8: Frequency of Day Trips Reported by Survey Respondents

Day Trips	#	%
6-7 per week	112	1.2%
4-5 per week	379	4.0%
2-3 per week	2,171	22.8%
Once per week	1,781	18.7%
Three times per month	1283	13.5%
Twice per month	1118	11.8%
Once a month	745	7.8%
Less than once a month	1095	11.5%
Never	819	8.6%
Total	**9,503**	**100.0%**
Average: 11 1 day trips in 2018-2019 [a]		

[a] *Calculated based on the number of people who reported going on one or more day trips*

In total, 4,995 snowmobilers reported going on one or more overnight trips in 2018-2019. Survey respondents most frequently sited going on one overnight trip (19%) followed by two overnight trips (12.6%) of 1-3 nights away from home. On average, survey respondents went on 1.4 overnight trips this season.

Table 9: Frequency of Overnight Trips Reported by Survey Respondents

Trips (1-3 Nights)	#	%
1	1773	19.1%
2	1172	12.6%
3	852	9.2%
4	481	5.2%
5	282	3.0%
6	168	1.8%
7	59	0.6%
8	68	0.7%
9	19	0.2%
10 or more	124	1.3%
Never	4309	46.3%
Total	**9307**	**100.0%**
Average: 1.4 1-3-night trips in 2018-2019 [a]		

[a] *Calculated based on the number of people who reported going on one or more over night trips*

Tours refer to overnight trips of more than three nights away from home. Just over 32% of survey respondents (3,002 individuals) reported that they went on at least one tour in 2018-2019. Nearly 18% of respondents said that they went on one tour this season, and just over 7% of respondents said they went on two tours. Of the 10,464 survey respondents 6,181 never went on a snowmobiling tour during the 2018-2019 season.

Table 10: Frequency of Tours Reported by Survey Respondents

Tours	#	%
1	1638	17.8%
2	671	7.3%
3	313	3.4%
4	166	1.8%
5	86	0.9%
6	30	0.3%
7	32	0.3%
8	17	0.2%
9	7	0.1%
10 or more	42	0.5%
Never	6181	67.3%
Total	**9183**	**100.0%**
Average: 0.7 tours in 2018-2019 [a]		

[a] *Calculated based on the number of people who reported going on one or more tours*

There were survey respondents from each of the 16 OFSC Districts and an additional 90 respondents with a primary residence outside of Ontario. District 5 (London, Kitchener, Brantford) had the greatest representation, with 16.7% of the survey respondents, followed by District 1 (Ottawa, Kingston) and District 4 (GTA).

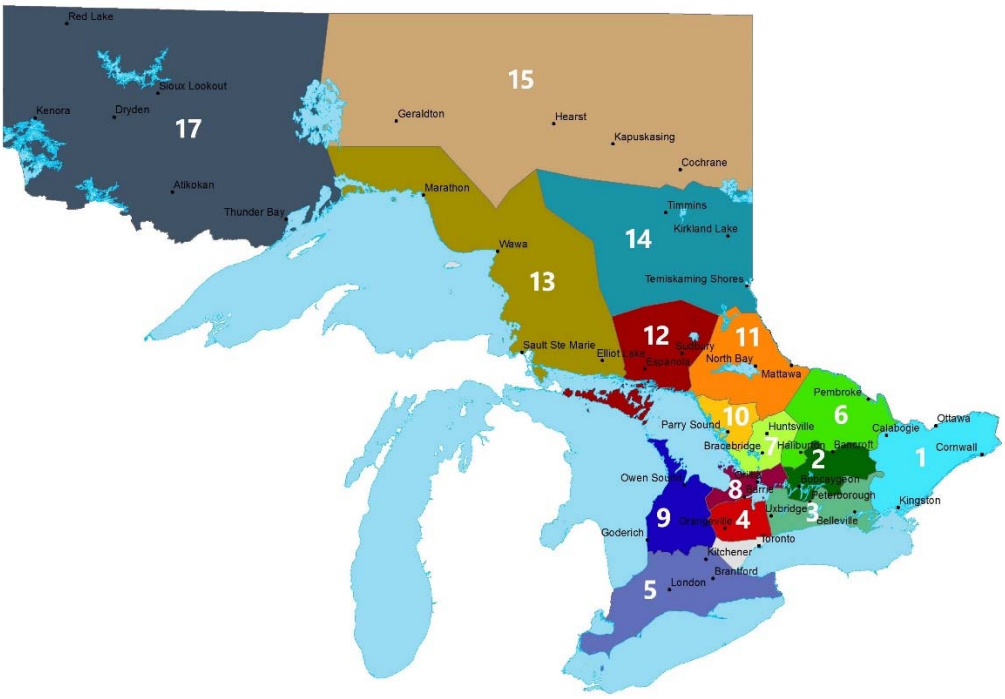

Figure 4: Map of OFSC Districts

In addition to their home residence, survey respondents were asked to identify if they had a secondary/vacation residence to which they typically snowmobile. District 5 (London, Kitchener, Brantford) was the most common district for vacation homes among survey respondents, followed by Districts 4 (GTA) and 3 (Peterborough, Uxbridge and Belleville), respectively. The Districts with a higher prevalence of vacation homes are likely to be destinations for overnight trips and tours.

Table 11: Place of Residence of Survey Respondents

District	Primary Residence		Secondary (Vacation) Residence	
	#	%	#	%
1	764	12.5%	240	8.8%
2	256	4.2%	108	4.0%
3	623	10.2%	366	13.5%
4	657	10.7%	407	15.0%
5	1019	16.7%	490	18.1%
6	297	4.9%	95	3.5%
7	253	4.1%	109	4.0%
8	524	8.6%	214	7.9%
9	511	8.4%	152	5.6%
10	102	1.7%	40	1.5%
11	246	4.0%	91	3.4%
12	365	6.0%	163	6.0%
13	131	2.1%	52	1.9%
14	125	2.0%	43	1.6%
15	67	1.1%	24	0.9%
17	88	1.4%	39	1.4%
Outside Ontario	90	1.5%	81	3.0%
Total	6,118	100.0%	2,714	100.0%

Survey respondents were also asked to identify the district where they most commonly ride during a typical season. District 6 (Haliburton, Pembroke) was the most commonly reported district for survey respondents (11.5%), followed by District 11 (North Bay, Mattawa) and District 7 (Huntsville, Bracebridge) at 10.4% of survey respondents each. An additional 46 respondents (0.7%) said that they primarily ride outside of the province (i.e. Quebec or the US) (see Table 12).

In addition to the most common riding destination, survey respondents were asked to identify the areas where they ride second and third most often. When looking at the districts where respondents ride most frequently, second most frequently, and third most frequently, District 6 (Haliburton, Pembroke) was most commonly sited as a riding destination at 11.8% of all reported destinations. District 7 (Huntsville, Bracebridge) was a close second at 11.2% of all reported destinations, followed by District 11 (North Bay, Mattawa) as the third most reported destination at 10.8% of survey respondents (see Table 13).

Table 12: The District Where Survey Respondents Most Commonly Ride

Districts	Primarily Ride	%
1	602	9.7%
2	512	8.2%
3	222	3.6%
4	111	1.8%
5	236	3.8%
6	712	11.5%
7	645	10.4%
8	472	7.6%
9	512	8.2%
10	338	5.4%
11	646	10.4%
12	413	6.7%
13	212	3.4%
14	227	3.7%
15	199	3.2%
17	102	1.6%
Outside Ontario	46	0.7%
Total	**6,207**	**100.0%**

Table 13: Districts Where Survey Respondents Most Commonly Ride

Districts	Primarily Ride	2nd Most Likely to Ride	3rd Most Likely to Ride	Total	%
1	602	374	271	1247	8.4%
2	512	432	348	1292	8.7%
3	222	179	142	543	3.6%
4	111	88	71	270	1.8%
5	236	178	148	562	3.8%
6	712	579	463	1754	11.8%
7	645	557	472	1674	11.2%
8	472	395	328	1195	8.0%
9	512	356	284	1152	7.7%
10	338	291	241	870	5.8%
11	646	527	443	1616	10.8%
12	413	294	224	931	6.2%
13	212	130	107	449	3.0%
14	227	171	140	538	3.6%
15	199	158	140	497	3.3%
17	102	46	39	187	1.3%
Outside Ontario	46	45	36	127	0.9%
Total	**6,207**	**4,800**	**3,897**	**14,904**	**100.0%**

Snowmobiles

Survey respondents were asked to provide information on the year in which they purchased their snowmobile, new or used, as well as the model year[8] and type of permit purchased for each sled this season. Many survey respondents had purchased snowmobiles recently, with approximately a quarter of respondents (24.2%) reporting that they had purchased a snowmobile within the last year (16.4% in 2018 and 7.8% in 2019). Another 44.3% of respondents reported purchasing their sled within the last three years (i.e. since 2015), with the remaining 31.5% reporting that they had purchased their snowmobiles in 2010 or earlier.

Table 14: Year of Purchase, Snowmobile, as Reported by Survey Respondents

Year Purchased	#	%
2019	1,080	7.8%
2018	2,267	16.4%
2017	1,783	12.9%
2016	1,491	10.8%
2015*	2,854	20.6%
2010-2014	2,806	20.3%
2005-2009	948	6.9%
2004 or earlier	593	4.3%
Total	13,822	100.0%

Nearly half of survey respondents reported owning snowmobiles that were manufactured within the last five years (45%). Just over 15% of reported snowmobiles were manufactured within the last year (2018 or 2019 model), with another 30% of snowmobiles manufactured between 2015-2017.

Table 15: Model Year, Snowmobile, as Reported by Survey Respondents

Model Year	#	%
2019	890	6.1%
2018	1,360	9.3%
2017	1,203	8.3%
2016	1,289	8.8%
2015*	1,924	13.2%
2010-2014	3,172	21.8%
2005-2009	2,353	16.1%
2004 or earlier	2,384	16.4%
Total	14,575	100.0%

The Province of Ontario requires a valid trail permit on every machine that is active on Ontario trails, and as such, there are various types of permits available to riders for their machines, as listed below. In total,

[8] Due to an error in the first run of the survey (which limited survey responses to between 1900-2015) data for the Purchase and Model year may be slightly skewed towards 2015. Approximately 25% of the data for year of purchase (3,443 datapoints) and 13% of data for model year (1,852 datapoints) come from the survey before the error was found, fixed, and the updated survey was sent out. Where possible (from examining end of survey comments) the year of purchase and the model year was updated during the data cleaning process. In total, 96 comments were identified where the survey respondent indicated that one or more of the dates was not correct for one or more of their sleds. All but 12 comments provided the correct information and in those cases the data was updated to reflect the correct year of purchase/model year.

respondents reported purchasing 13,624 trail permits for their snowmobiles. Survey respondents as a whole reported 640 machines without a permit of any kind. A seasonal permit was the most common permit type reported, with 85.6% of reported snowmobiles attached to a seasonal permit. The province offers season permits though OFSC for discounted prices depending on time of purchase (i.e. early bird pricing), and 69.7% of permits were purchased at $190. Another 5% of snowmobiles had the Classic Permit, and 2% had a "Try Our Trails" Permit. In addition, 3% of snowmobiles were attached to a "multi-day" or "special event" permit.

Table 16: Permit Type for snowmobiles owned as reported by Survey Respondents

OFSC Permit Type	#	%
$0 Try Our Trails Permit	294	2.1%
$150 Classic Permit	707	5.0%
$190 Seasonal Permit	9,943	69.7%
$220 Seasonal Permit	1,377	9.7%
$270 Seasonal Permit	884	6.2%
$35 Multi-Day Permit	412	2.9%
$35 Special Event Permit	7	0.1%
No Permit	640	4.5%
Total	14,264	100.0%

Annual Spending

Those who participate in snowmobiling are subject to spending on a variety of items on an annual basis, including insurance and trail permits, occasionally the purchase of a snowmobile, repairs and maintenance and smaller ticket items, such as clothing.

For the purpose of this assessment, only the snowmobiles purchased in 2018-2019 were reviewed. A total of 2,700 households indicated they purchased one or more snowmobiles, new or used, in 2018-2019. The average amount spent on the purchase of one or more snowmobiles in 2018-2019 was $10,723.

Table 17: Cost of Snowmobile Purchases in 2018-2019 Reported by Survey Respondents

Cost of Snowmobile(s) Purchased in 2018-2019	#	%
$1-1,000	36	1.3%
$1,001-2,000	114	4.2%
$2,001-3,000	127	4.7%
$3,001-4,000	106	3.9%
$4,001-5,000	115	4.3%
$5,001-7,500	219	8.1%
$7,501-10,000	367	13.6%
$10,001-15,000	808	29.9%
$15,001-20,000	742	27.5%
$20,001-25,000	63	2.3%
$25,001-30,000	1	0.0%
More than $30,000	2	0.1%

# of Households that Purchased at Least One Snowmobile in 2018-2019: **2,700**
Average Amount Spent on Purchase in 2018-2019: **$10,723.05**

Survey respondents were asked to report on their annual insurance costs for their snowmobiles. A total of 6,612 individuals reported that they purchased insurance for one or more snowmobiles in the 2018-2019 season. For survey respondents, the average household reported spending $565.35 on insurance annually.

Table 18: Annual Insurance Cost per Household

Insurance Cost	#	%
$1-100	182	2.8%
$101-200	657	9.9%
$201-300	917	13.9%
$301-400	957	14.5%
$401-500	932	14.1%
$501-750	1,436	21.7%
$751-1,000	811	12.3%
$1,001-1,500	577	8.7%
$1,501-2,000	107	1.6%
More than $2,000	36	0.5%
Total	**6,612**	**100.0%**
Average	$565.35	

The annual repairs and maintenance, as well as emergency repairs while on a trip were examined to get a better understanding of the costs associated with regular maintenance per household. Households spent, on average, $730.28 repairing and maintaining their snowmobile(s) in 2018-2019.

Table 19: Repairs and Maintenance Spending, as Reported by Survey Respondents

Repairs and Maintenance Costs	#	%
$1-100	505	9.5%
$101-200	843	15.9%
$201-300	688	13.0%
$301-400	451	8.5%
$401-500	760	14.4%
$501-750	405	7.7%
$751-1,000	710	13.4%
$1,001-1,250	134	2.5%
$1,251-1,500	267	5.0%
$1,501-1,750	33	0.6%
$1,751-2,000	215	4.1%
More than $2000	281	5.3%
Total	**5,292**	**100.0%**
Average	$730.28	

Survey respondents were asked to report how much they spent on snowmobile-related clothing for the 2018-2019 season. This clothing could include items such as coats, insulated pants, gloves and boots. A total of 4,023 respondents reported purchasing new clothing during the 2018-2019 snowmobiling season. Amounts spent on clothing varied greatly across households, with some spending under $100 (14.7%) while others spent several thousand. On average, snowmobiling households spent $600 on clothing in 2018-2019.

Table 20: Amount Spent on Clothing Annually, Reported by Survey Respondents

Amount Spent on Clothing	#	%
$1-100	590	14.7%
$101-200	717	17.8%
$201-300	501	12.5%
$301-400	277	6.9%
$401-500	517	12.9%
$501-750	340	8.5%
$751-1,000	547	13.6%
$1,001-1,250	123	3.1%
$1,251-1,500	152	3.8%
$1,501-1,750	15	0.4%
$1,751-2,000	147	3.7%
More than $2000	97	2.4%
Total	4,023	100.0%
Average	$600.42	

Day Trip Spending

Spending on food and beverage and fuel/oil for day trips was examined to get a sense of how much money households spend on short trips. As stated previously, 8,684 survey respondents indicated that they went on at least one day trip during the 2018-2019 snowmobiling season. Under the assumption that there were 8 weeks[9] in the 2018-2019 season, it is estimated that the average snowmobiler went on 11 day-trips this season.

Food and beverage expenditures were split into two categories: restaurant spending and store purchases (e.g. grocery stories, convenient stores). Snowmobilers typically ate at restaurants during day trips as opposed to purchasing food and beverages at a store. Several interview respondents noted that snowmobilers often travel light (with one saying that all he brings on trips is a credit card) and that day trips will often have a restaurant as a final destination. In total, 5,151 survey respondents reported on their restaurant purchases and 2,680 respondents reported on store purchases.

Households most commonly spend between $1 and $50 on food and beverages, whether at a store or a restaurant, during a snowmobiling day trip; however, 31% of households said that they spend up to $100 at a restaurant during a day trip and 16% of survey respondents said that they spend over $100 at

[9] Based on a weighted average of total weeks in each district across the province.

restaurants per day trip. On average, households spent $83.54 at a restaurant and $39.55 at a store for food and beverages per trip.

Table 21: Spending on Food and Beverage, Day Trips, as Reported by Survey Respondents

Amount Spent on Food and Beverage	Restaurant #	Restaurant %	Store #	Store %
$1-50	2,711	52.6%	2,246	83.8%
$51-100	1609	31.2%	313	11.7%
$101-150	349	6.8%	42	1.6%
$151-200	189	3.7%	42	1.6%
$201-250	67	1.3%	16	0.6%
$251-500	194	3.8%	19	0.7%
$501 and over	32	0.6%	2	0.1%
Total	**5,151**	**100.0%**	**2,680**	**100.0%**
Average Spent (Daily)	$83.54		$39.55	

The cost of fuel and oil for day trips is another major expense. In total, 5,742 survey respondents reported on their fuel expense for day trips and 3,329 survey respondents reported fuel expenses for a towing vehicle used for a day trip. On average, households spent $76.51 per day trip on fuel and oil for snowmobiles and $93.57 for a towing vehicle.

Table 22: Spending on Fuel/Oil, Day Trips, as Reported by Survey Respondents

Amount Spent Fuel/Oil	# Snowmobile	% Snowmobile	# Towing	% Towing
$1-50	2,994	52.1%	1376	41.3%
$51-100	1,837	32.0%	1235	37.1%
$101-150	439.00	7.6%	268	8.1%
$151-200	233.00	4.1%	232	7.0%
$201-250	86.00	1.5%	61	1.8%
$251-300	54.00	0.9%	65	2.0%
$301 and over	99.00	1.7%	92	2.8%
Total	**5,742**	**100.0%**	**3,329**	**100.0%**
Average	$76.51		$93.57	

Overnight Trip Spending

Spending on accommodation, food and beverage, and fuel/oil for overnight trips of one to three nights away were examined to get a sense of how much money households spend on overnight trips. A total of 4,995 survey respondents indicated they went on at least one overnight trip of one to three nights away from home during the 2018-2019 season. On average, survey respondents went on 2-3 overnight trips this season.

As with the day trip analysis, food and beverage purchases at restaurants and stores (e.g. grocery, convivence stores) were examined for overnight trips. On average, households spent $188.56 at restaurants and $66.82 in stores on overnight trips of between 2-3 nights away from home. Approximately 37% of households spent $100 or less in restaurants during overnight trips and 89% of households spent $100 or less on food and beverage purchases in stores. In total, 21% of respondents reported spending between $150-$200 at restaurants during overnight trips and just over 25% of survey respondents reported spending between $50-$100 in food and beverage purchases in stores during an overnight trip. A small proportion of survey respondents reported spending over $500 in food and beverage purchases during overnight trips.

Table 23: Spending on Food and Beverage, Overnight Trips, as Reported by Survey Respondents

Amount Spent on Food and Beverage	Restaurant #	Restaurant %	Store #	Store %
$1-50	315	10.6%	1,261	63.6%
$51-100	776	26.2%	503	25.4%
$101-150	526	17.8%	98	4.9%
$151-200	621	21.0%	70	3.5%
$201-250	150	5.1%	12	0.6%
$251-500	499	16.9%	33	1.7%
$501 and over	74	2.5%	5	0.3%
Total	**2,961**	**100.0%**	**1,982**	**100.0%**
Average Spent (Per Trip)	$188.56		$66.82	

The fuel and oil costs for snowmobiles are an obvious and necessary expense for snowmobiling. In total, 3,035 survey respondents reported on their fuel/oil spending for their sled and 2,422 reported on their fuel/oil spending for a towing vehicle. Most survey respondents reported spending between $50 and $200 on fuel for overnight trips, both for their snowmobiles and fuel for towing vehicle. For overnight trips, the average household spent $187.90 on fuel for their snowmobile and $179.26 on fuel for a towing vehicle.

Table 24: Spending on Fuel/Oil, Overnight Trips, as Reported by Survey Respondents

Amount Spent Fuel/Oil	# Snowmobiles	% Snowmobiles	# Towing	% Towing
$1-50	278	9.2%	191	7.9%
$51-100	828	27.3%	743	30.7%
$101-150	594	19.6%	436	18.0%
$151-200	573	18.9%	523	21.6%
$201-250	180	5.9%	119	4.9%
$251-300	244	8.0%	176	7.3%
$301-350	55	1.8%	40	1.7%
$351-400	121	4.0%	97	4.0%
$401-450	16	0.5%	7	0.3%
$451-500	64	2.1%	47	1.9%
More than $500	82	2.7%	43	1.8%
Total	**3,035**	**100.0%**	**2,422**	**100.0%**
Average	$187.90		$179.26	

When participating in overnight trips of one to three nights away from home, snowmobilers have options for accommodations, including private cottages or vacation homes, hotels or motels, lodges, or bed and breakfasts. Of the 4,995 survey respondents who indicated going on at least one overnight trip, 2,678 reported on accommodation expenses. Approximately 37% of respondents reported on spending between $100 and $200 on overnight accommodations with another 21% reporting that they spend between $200 and $300. Exactly 15% said that they spend $100 or less, while 7.3% said that they spend over $500 on accommodations for an overnight trip of 1-3 nights away from home.

Table 25: Accommodation Spending, Overnight Trips, as Reported by Survey Respondents

Amount Spent on Accommodation	#	%
$1-50	62	2.3%
$51-100	340	12.7%
$101-200	993	37.1%
$201-300	571	21.3%
$301-400	282	10.5%
$401-500	234	8.7%
More than $500	196	7.3%
Total	**2,678**	**100.0%**
Average	$273.24	

Tour Spending

Spending on accommodation, food and beverage, fuel/oil, repairs and any rental fees for tours of more than three nights away were examined to get a sense of how much money households spend on these extended trips. A total of 3,002 survey respondents indicated they went on at least one tour during the 2018-2019 season.

On average, survey respondents went on less than 1 tour during the 2018-2019 season. The amount spent on food and beverage in restaurants on tours ranged from between $1 to more than $1,000. Of the snowmobilers who reported going on at least one tour, respondents most often reported going on 1-2 tours a year. On average, survey respondents reported spending $318.57 on food and beverages from a restaurant and $114.50 on food and beverages at stores while on a tour.

Table 26: Food and Beverage Spending, Tours, as Reported by Survey Respondents

Amount Spent on Food and Beverage	Restaurant #	Restaurant %	Store #	Store %
$1-50	55	4.1%	309	31.8%
$51-100	158	11.8%	357	36.7%
$101-150	150	11.2%	92	9.5%
$151-200	221	16.6%	133	13.7%
$201-250	132	9.9%	25	2.6%
$251-500	479	35.9%	52	5.3%
$501 and over	139	10.4%	4	0.4%
Total	**1,334**	**100.0%**	**972**	**100.0%**
Average Spent	$318.57		$114.50	

There were 1,372 survey respondents who reported on their fuel/oil expenses for their snowmobile and 1,168 who reported on their fuel/oil expenses for a towing vehicle. On average, survey respondents spent $321.13 on fuel or oil for their snowmobile while on a tour of four or more nights away from home and $242.27 on fuel or oil for their towing vehicle.

Table 27: Fuel/Oil Spending, Tours, as Reported by Survey Respondents

Amount Spent Fuel/Oil	# Snowmobiles	% Snowmobiles	# Towing	% Towing
$1-50	41	3.0%	46	3.9%
$51-100	139	10.1%	187	16.0%
$101-150	156	11.4%	199	17.0%
$151-200	210	15.3%	266	22.8%
$201-250	128	9.3%	90	7.7%
$251-300	214	15.6%	170	14.6%
$301-350	60	4.4%	37	3.2%
$351-400	134	9.8%	74	6.3%
$401-450	29	2.1%	8	0.7%
$451-500	113	8.2%	41	3.5%
More than $500	148	10.8%	50	4.3%
Total	1,372	100.0%	1,168	100.0%
Average	$321.13		$242.27	

As with the overnight trips, snowmobilers have various accommodation options while on tours of more than three nights away from home, including private cottages, vacation homes, hotels or motels, lodges, or bed and breakfasts. Snowmobilers most often reported spending between $200 to $400 on accommodations for tours. The average household spends $543.83 on accommodations per tour.

Table 28: Accommodation Spending, Tours, as Reported by Survey Respondents

Amount Spent on Accommodation	#	%
$1-100	50	3.9%
$101-200	140	11.0%
$201-300	213	16.7%
$301-400	205	16.1%
$401-500	196	15.3%
$501-600	124	9.7%
$601-700	76	6.0%
$701-800	86	6.7%
$801-900	29	2.3%
$901-1000	68	5.3%
More than $1000	90	7.0%
Total	1,277	100.0%
Average	$543.83	

Summary of Findings

Household characteristics of the survey population show that most snowmobilers are male, however many reported sledding with a female partner and/or their children. Evidence from the key informant interviews suggests that snowmobiling is becoming more of a family-oriented sport, an idea supported by the demographics of accompanying household members. Household size typically ranged from between 2-4 members, and approximately 85% of survey respondents were married or in a common-law relationship. On average, snowmobile respondents were 50 years old, which is consistent with the findings from the 2013-2014 report. The average age of all household members, however, has gone down in the last five years from 40 years to 29 years. In comparison to provincial statistics, there is a greater percentage of snowmobilers between the ages of 40-70 than people in the general population. Snowmobilers were more likely to have completed a college or apprenticeship program than the general population, and the average household income of snowmobilers was higher than provincial averages, with over 60% of snowmobilers bringing in an annual household income of over $100,000.

Weather conditions varied greatly across districts during the 2018-2019 snowmobiling season, and as a result, the total number of sledding weeks varied from between 17 weeks (in the Northern districts) to just 1 week in District 5, with a weighted average of 8.4 weeks across the province. As a result, the number of survey respondents who reported that they snowmobiled 'less than most years' increased from 7.4% in 2013-2014 to 28.7% in 2018-2019. In total, 8,684 survey respondents indicated going on at least one day trip in 2018-2019. Under the assumption that there were 8.4 weeks this season, the average snowmobiler went on 11 day-trips in 2018-2019 (down from 24 day-trips in 2013-2014). Another 4,995 snowmobilers reported going on at least one overnight trip of one to three nights away from home, with the average survey respondent going on 1.4 overnight trips this season. Finally, 3,002 survey respondents indicated that they went on a least one tour of four or more nights away from home this season. While the average snowmobiler, across all survey respondents, went on less than 1 tour this year (0.7), snowmobilers who reported going on tours went on between 1 and 2 this season.

Survey results show a concentration of snowmobilers with homes in District 5 (London, Kitchener, Brantford area), District 1 (Ottawa and Kingston), and District 4 (the GTA). Vacation homes were also popular in Districts 4 & 5 and in District 3 (Peterborough, Uxbridge and Belleville). Normally, districts with a higher prevalence of vacation homes are likely to be destinations or areas where accommodation is sought for overnight trips and tours. However, Districts 4 & 5 both had poor weather conditions for snowmobiling this year. It was found that Districts 6 and 7 were the most popular areas to snowmobile this season, followed by District 11.

The average age of the snowmobiles owned by survey respondents varied greatly, with nearly 25% of respondents indicating that they purchased their snowmobile within the last year (2018-2019). Another 44% of snowmobilers reported purchasing their sled between 2015-2017, and 31% said that they had purchased their snowmobile in 2010 or earlier. Just over 15% of respondents reported owning a 2018 or 2019 model, and nearly half of survey respondents reported that their snowmobile was manufactured within the last five years.

Other annual expenses include insurance and permits. The average household spent $565.35 on insurance in 2018-2019. The Province of Ontario requires a trail permit on every machine that is active on the OFSC trails, and there are various types of Ontario snowmobile trail permits available to riders for their machines as listed below. In total, there were 13,624 snowmobiles reported as having a trail permit. Survey respondents reported 640 machines without a permit of any kind.

The cost of purchasing a snowmobile was also examined. A total of 2,700 households indicated they purchased one or more snowmobiles, new or used, in 2018-2019. The average amount spent on the purchase of one or more snowmobiles in 2018-2019 was $10,723.

Regarding food and beverage expenses for snowmobiling trips, this study found that, on average, households spent more on food and beverages at restaurants than in stores on any kind of trip (day trip, overnight, or tour). For day trips, households most commonly spent between $0-50 on food and beverages and spent an average of $83.54 at restaurants and $39.55 in stores. For overnight trips, respondents spent an average of $188.56 at restaurants and $66.82 in stores. Lastly, survey respondents reported spending $318.57 on food and beverages at restaurants and $114.50 on food and beverages in stores while on a tour.

The cost of fuel and oil is also a major expense for snowmobilers. Households spent an average of $76.51 per day trip on fuel and oil for snowmobiles and $93.57 for a towing vehicle. For overnight trips, the cost of fuel/oil was understandably higher, with respondents reporting that they spent an average of $187.90 on fuel for their snowmobile and $179.26 on fuel for a towing vehicle. For tours of four or more nights away from home, survey respondents, on average, spent $321.13 on fuel or oil for their snowmobile and $242.27 on fuel or oil for their towing vehicle.

Finally, snowmobilers reported on their accommodation costs when going on a snowmobiling overnight trip or tour. On trips or tours, snowmobilers have various options for accommodations, such as private cottages, vacation homes, hotels, motels, lodges, and bed and breakfasts. A total of 2,678 snowmobilers reported on accommodation expenses for overnight trips and 1,227 reported on accommodation expenses for tours. On average, households spent $273.24 on accommodations for trips of 1-3 nights away from home and $543.83 on accommodations per tour.

Economic Impact of Snowmobiling

The survey results were used to generate estimates of spending by snowmobilers on day trips, overnight trips and tours. For each of these types of trips, estimates of spending on fuel/oil, food and beverage, accommodations, repairs, clothing, souvenirs and other items were calculated. In addition, respondents were asked to estimate household expenditures on snowmobiling during a typical year. For more details on the survey, please refer to the Appendices.

Assumptions

During the process of collecting the necessary snowmobile-related input data and conducting the economic impact analysis, several assumptions and qualifications were made that affected the overall results.

- The survey was sent to a list of contacts provided by the OFSC. This list includes those who purchased at least one permit over the last five years. As such, some survey respondents may no longer be active in snowmobiling. To mitigate this risk, survey respondents who indicated that they 'never' went on a snowmobiling trip during the 2018-2019 season were filtered out when calculating the financial totals.
- The OFSC sold approximately 105,000 permits for Ontario trails in 2018-2019.
- It is estimated that 43,000 snowmobiles were used without a trail permit.
- The Insurance Bureau of Canada confirmed that 148,000 snow vehicles were insured in 2018-2019. This is an increase from 141,600 snow vehicles insured in 2013-2014.
- In consultation with the OFSC, the 2018-2019 season was conservatively defined as 2 months or 8 weeks long (based on a weighted average across all 16 districts). This is a significant decrease in season length from 2013-2014, which had a season of 14 weeks. Regions in south-central Ontario (Districts 4 & 5) were hit particularly hard with poor weather conditions, with some areas having as little as 1 week of open trails throughout the whole season. As a result, the average number of snowmobiling days is down from 24 days in 2013-2014 to 11 days in 2018-2019, which in turn affected the estimated economic impact on the province.
- No economic impacts were attributed to the purchase of snowmobiles beyond those purchased in 2018 or 2019.
- In consultation with the Ministry of Tourism, the expenditures outlined in Table 29 below were attributed to the various Visitor Spending categories of the TRIEM model.

In addition to the approximately 105,000 permits issued to individual sleds in 2018-2019, an estimated 43,000 snowmobiles were used without permits for a total of 148,000 sleds in Ontario in 2018-2019. Under the conservative assumption that unpermitted riders would sled 50% less than those who had purchased permits, the total number of active snowmobiles in 2018-2019 would then be 126,500. The survey showed an average of 1.8 sleds per household. From this, it was estimated that, for Ontario, 70,278 households were involved in snowmobiling in the 2018-2019 season. See the equation used below:

$$\text{Total \# of snowmobiling households} = \frac{Total\ \#\ of\ permits + (total\ \#\ of\ unpermitted\ sleds\ \div 2)}{\#\ of\ sleds\ per\ household}$$

Based on the estimated number of active snowmobiling households, total expenditure data from a sample of the survey was then multiplied by a factor in order to get provincial estimates. A total of 10,464 individuals participated in the 2018-2019 survey with a completion rate of 63%. In reviewing the data set, it was determined that a sample of 5,740 households, who provided full and complete expenditure data,

would be used to calculate provincial estimates. A multiplication factor of 12.24 was calculated by dividing the total number of snowmobiling households in the province (70,278) by the number of survey households from the 2018-2019 survey (5,740). See the below equation:

$$\text{Multiplication Factor} = \frac{Total\ \#\ of\ snowmobiling\ households}{\#\ of\ survey\ households}$$

The sample of 5,740 households that provided expenditure data on the survey was then multiplied by a factor of 12.24 to get provincial estimates (see below).

$$\text{Total provincial expendutires} = total\ survey\ expenditures\ \times 12.24$$

In addition, Districts 6 and 7 were reviewed, as it was estimated from the survey that 11.8% of trips took place in District 6 and 11.2% of trips took place in District 7. The survey produced an estimate of average expenditure by household. Some adjustments to results were made based on reasonable assumptions about expenditures per day and per category. During the data cleaning process, it appeared that many of the survey respondents had provided annual totals rather than trip totals, and so descriptive statistics were analyzed to estimate reasonable trip maximums in order to determine trip vs. annual totals.

Economic Impact Using TREIM

The $842,870,778 in expenditures[10] by snowmobilers in Ontario were allocated to the TREIM input-output model[11] in the following manner, as shown in Table 29.

Table 29: Inputs of Expenditures by Snowmobilers in Ontario by TREIM model category, 2018-2019

Visitor Spending	Expenditure(s)
Travel Service	$31,230,421
Private Transportation - Rental	$2,069,416
Private Transportation - Operation	$578,020,988
Accommodation	$36,165,013
Food and Beverage - At Stores	$18,087,953
Food and Beverage - At Restaurants	$74,853,989
Recreation and Entertainment	$7,421,626
Retail - Clothing	$43,500,458
Retail - Other	$51,520,914
Total	$842,870,778

Using the above spending, the TREIM model produces estimates of impact on direct, indirect and induced GDP and employment, as well as total taxes. These results can be found in Table 30. The impact of snowmobiling in Ontario was calculated as the following:

- GDP: $665,704,327
- Employment: 6,436 jobs[12]
- Taxes: $216,439,151

GDP refers to the value of goods and services produced by labour and capital located within the province. This GDP is measured at market prices. Tourism GDP refers to the GDP generated in those businesses that directly produce or provide goods and services for travelers. Employment refers to number of jobs, including full-time, part-time, and seasonal employment, as well as self-employment.

Direct impact refers to the impact generated in businesses or sectors that produce or provide goods and services directly to snowmobilers (accommodations, restaurants, recreation, etc.) Indirect impact refers to the impact resulting from the expansion of demand from businesses or sectors that directly produce or provide goods and services to those active in snowmobiling in the province, other businesses or sectors. Finally, induced impact refers to the impact associated with the re-spending of labour income and/or profits earned in the industries that serve snowmobilers directly and indirectly.

[10] As a footnote to this year's study, we note that the number and frequency of trips has decreased dramatically. Since 2014 the average number of day trips have declined by over 50%. This is largely due to the lack of snow this year in many areas of southwestern Ontario. If the frequency of trips had stayed the same as the levels found in 2014, one could reasonably expect impact to be twice as large as that recorded in 2019.

[11] Available at: http://www.mtc.gov.on.ca/en/research/treim/treim.shtml

[12] It is important to note that although annual expenditures are only down slightly from the 2014 study, many of the higher expenditure categories, such as fuel costs, do not translate into increased job creation and therefore despite similar overall impact figures, job creation impact is down by 40% since 2014.

Table 30: Total Visitor Spending, GDP, Employment and Total Taxes

		2018-2019
Gross Domestic Product (GDP)		
Direct	$	403,976,647
Indirect	$	119,099,008
Induced	$	142,628,672
Total	$	665,704,327
Employment (jobs)		
Direct		4,325
Indirect		1,022
Induced		1,089
Total		6,436
Total Taxes		
Federal	$	92,110,448
Provincial	$	114,205,815
Municipal	$	10,122,888
Total	$	216,439,151

As shown in Table 31 (below), snowmobiling in Ontario directly impacts a variety of industries. The direct GDP impact was found to be $**403,976,647.00**. The top four industries impacted by snowmobiling in Ontario by direct GDP in 2018-2019 were:

1. Retail Trade: $78,827,805.00
2. Other Services:[13] $42,343,291.00
3. Manufacturing: $27,658,465.00
4. Food and Beverage Services: $$27,374,185.00

[13] As per the industry categories used by TREIM, 'other services' refers to establishments engaged in repairing, or performing general or routine maintenance, on motor vehicles, machinery, equipment and other products to ensure that they work efficiently. For this study, this category includes all snowmobile repair and maintenance.

Table 31: Economic Impacts of Snowmobiling by Industry

Industry [a]	Impact on Ontario 2018-2019	
	Direct GDP	Total GDP
Crop and Animal Production	$263,904.00	$2,302,320.00
Forestry, Fishing and Hunting	$7,556.00	$355,705.00
Mining and Oil and Gas Extraction	$0.00	$3,724,714.00
Utilities	$0.00	$6,665,761.00
Construction	$0.00	$15,843,250.00
Manufacturing	$27,658,465.00	$45,505,476.00
Wholesale Trade	$18,976,786.00	$34,147,011.00
Retail Trade	$78,827,805.00	$95,694,081.00
Other Transportation and Warehousing	$511,097.00	$9,279,041.00
Ground Passenger Transportation (excl. Rail)	$1,063.00	$1,658,585.00
Information and Cultural Industries	$154,281.00	$11,056,805.00
Other Finance, Insurance, Real Estate and Renting and Leasing	$110.00	$60,777,680.00
Car Renting and Leasing	$1,203,662.00	$2,312,341.00
Owner Occupied Housing	$0.00	$21,427,401.00
Professional, Scientific and Technical Services	$0.00	$20,981,704.00
Other Administrative and Other Support Services	$0.00	$11,662,111.00
Travel Agencies	$17,931,677.00	$18,768,478.00
Education Services	$825,520.00	$5,283,053.00
Health Care and Social Assistance	$171,408.00	$5,330,560.00
Arts, Entertainment and Recreation	$3,672,118.00	$5,913,683.00
Accommodation Services	$18,536,406.00	$19,189,731.00
Food & Beverage Services	$27,374,185.00	$32,363,548.00
Other Services (Except Public Administration)[b]	$42,343,291.00	$47,500,813.00
Operating, Office, Cafeteria, and Laboratory Supplies	$0.00	$0.00
Travel & Entertainment, Advertising & Promotion	$0.00	$0.00
Transportation Margins	$0.00	$0.00
Non-Profit Institutions Serving Households	$1,637,470.00	$3,237,813.00
Government Sector	$477,580.00	$5,069,849.00
Net Indirect Taxes on Production	$163,402,264.00	$179,652,815.00
Total	**$403,976,647.00**	**$665,704,327.00**

[a] The industry follows Statistics Canada's North America Industry Classification System (NAICS) Input-Output small aggregation industry classification. For more information visit Statistics Canada NAICS 2017.

[b] Establishments (not classified to any other sector) primarily engaged in repairing, or performing general or routine maintenance, on motor vehicles, machinery, equipment and other products.

Case Study – District 6

District 6 (Pembroke area) was reviewed separately from the province as a whole, as a case study, as it was ranked as the most commonly visited district by survey respondents. Based on the estimation that 11.8% of trips took place in District 6 this year, a total of $99,458,752 in expenditures were allocated to the TREIM input-output model using the closest Ontario Tourism Region. Table 32 (below) shows the expenditure breakdown for District 6.

Table 32: Inputs of Expenditures by Snowmobilers in District 6 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$3,685,190
Private Transportation - Rental	$244,191
Private Transportation- Operation	$68,206,477
Accommodation	$4,267,472
Food and Beverage- At Stores	$2,134,379
Food and Beverage- At Restaurants	$8,832,771
Recreation and Entertainment	$875,752
Retail- Clothing	$5,133,054
Retail- Other	$6,079,468
Total	**$99,458,752**

Using the above spending, the TREIM model produces estimates of impact on direct, indirect and induced GDP and employment, as well as total taxes. These results can be found in Table 33. The impact of snowmobiling in District 6 was calculated as the following:

- GDP: $63,355,620
- Employment: 776 jobs
- Taxes: $28,537,990

Table 33: Total Visitor Spending, GDP, Employment and Total Taxes, District 6

	2018-2019
Gross Domestic Product (GDP)	
Direct	$45,775,490
Indirect	$7,054,140
Induced	$10,525,990
Total	$63,355,620
Employment (Jobs)	
Direct	637
Indirect	67
Induced	71
Total	776
Total Taxes	
Federal	$11,829,536
Provincial	$14,309,664
Municipal	$2,398,791
Total	$28,537,990

Case Study – District 7

District 7 (Huntsville area) was also reviewed separately from the province as a whole as a case study, as it was ranked as the second most commonly visited District by survey respondents. Based on the estimation that 11.4% of trips took place in District 7 this year, a total of $94,410,527 in expenditures were allocated to the TREIM input-output model using the closest Ontario Tourism Region. Table 34 (below) shows the expenditure breakdown for District 7.

Table 34: Inputs of Expenditures by Snowmobilers in District 7 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$3,497,807
Private Transportation - Rental	$231,775
Private Transportation - Operation	$64,738,351
Accommodation	$4,050,482
Food and Beverage - At Stores	$2,025,851
Food and Beverage - At Restaurants	$8,383,647
Recreation and Entertainment	$831,222
Retail - Clothing	$4,872,051
Retail - Other	$5,770,342
Total	**$94,401,527**

Using the above spending, the TREIM model produces estimates of impact on direct, indirect and induced GDP and employment, as well as total taxes. These results can be found in Table 35. The impact of snowmobiling in District 7 was calculated as the following:

- GDP: $57,509,073
- Employment: 709 jobs
- Taxes: $26,452,916

Table 35: Total Visitor Spending, GDP, Employment and Total Taxes, District 7

	2018-2019
Gross Domestic Product (GDP)	
Direct	$42,948,008
Indirect	$5,798,589
Induced	$8,762,476
Total	$57,509,073
Employment (Jobs)	
Direct	602
Indirect	53
Induced	54
Total	709
Total Taxes	
Federal	$10,845,461
Provincial	$13,307,412
Municipal	$2,300,044
Total	$26,452,916

Estimated Economic Impact for Low, Medium, and High Frequency Seasons

When referencing the 2014 report as a baseline for this study it is important to note that consultations with OFSC staff and key informant interview data tell us that the 2013-2014 season had particularly good weather conditions throughout the province for snowmobiling. In contrast, the 2018-2019 season saw unusually poor weather conditions for snowmobiling in southwestern Ontario. Taking these two very different seasons into consideration, it is reasonable to construct a high, medium and low estimate of the economic impact of snowmobiling in Ontario. We consider 2013-2014 to be high, 2018-2019 low and half-way between as medium. The high, medium and low estimates correspond to a sensitivity analysis of the impact under different conditions.

Examining the average frequency of trips from the last two reports, we see that the frequency of day trips more than doubles in a high frequency season (2013-2014 data) when compared to a low frequency season (2018-2019 data). Using the average between those two seasons, we find that a medium frequency season would estimate that the average snowmobiler would go on 17.5 day trips, 2 overnight trips, and just under 1 tour every year.

Table 36: Frequency of Day Trips, Overnight Trips, and Tours in a Typical Season – Estimated Average

	2013-2014 Season (high frequency averages)	2018-2019 Season (low frequency Averages)	Estimated Season (medium frequency averages)
Day Trips	24	11	17.5
Overnight Trips	2.6	1.4	2
Tours	0.7	0.7	0.7

Using these high and low frequency benchmarks we can calculate a factor to use in constructing an impact projection with 2018-19 being given a factor of 1.0 for low. A medium impact is given a factor of 1.5 and a high impact year 2.0. Using these factors, the following tables have been constructed to provide a range of economic impacts based on frequency of snowmobiling trips.

Estimated Economic Impact for a high frequency season:

The $842,870,778 in expenditures by snowmobilers in Ontario from the 2018-2019 study was multiplied by a factor of 2.0. to estimate expenditure data for a high frequency season. The $1,685,000,000 in expenditures was then allocated to the TREIM input-output model.[14]

Table 37: Total Visitor Spending, GDP, Employment and Total Taxes, Estimated High Frequency Impact

	High Frequency Estimate
Estimated Total Visitors' Spending	$1,685,000,000
Gross Domestic Product (GDP)	
Direct	$844,977,578
Indirect	$297,185,626
Induced	$348,348,584
Total	$1,490,511,788
Employment (Jobs)	
Direct	11,244
Indirect	2,658
Induced	2,664
Total	16,566
Total Taxes	
Federal	$258,905,485
Provincial	$281,052,801
Municipal	$63,724,002
Total	$603,682,287

Using the above spending, the TREIM model produces estimates of impact on direct, indirect and induced GDP and employment, as well as total taxes. The impact of snowmobiling in Ontario was calculated as the following:

- GDP: $$1,490,511,788
- Employment: 16,566 jobs
- Taxes: $603,682,287

In addition to these estimates for GDP, employment, and total taxes, an average multiplier of 2.0. can be applied to the expenditure data in order to estimate the total economic impact on the province. Therefore, a total of $1,685,000,000 in expenditures would be expected to generate $3,370,000,000 in economic activity across the province in a high frequency year.

[14] Available at: http://www.mtc.gov.on.ca/en/research/treim/treim.shtml

Estimated Economic Impact for a medium frequency season:

In order to estimate the economic impact for a medium frequency season, the $842,870,778 in expenditures was multiplied by a factor of 1.5. to estimate expenditure data. This resulted in an estimated $1,264,000,000 in expenditures, which was then allocated to the TREIM input-output model.

Table 38: Total Visitor Spending, GDP, Employment and Total Taxes, Estimated Medium Frequency Impact

	Medium Frequency Estimate
Estimated Total Visitors' Spending	$1,264,000,000
Gross Domestic Product (GDP)	
Direct	$633,858,551
Indirect	$222,933,312
Induced	$261,313,122
Total	$1,118,104,985
Employment (Jobs)	
Direct	8,435
Indirect	1,994
Induced	1,998
Total	12,427
Total Taxes	
Federal	$194,217,527
Provincial	$210,831,300
Municipal	$47,802,456
Total	$452,851,283

Using the above spending, the TREIM model produces estimates of impact on direct, indirect and induced GDP and employment, as well as total taxes. The impact of snowmobiling in Ontario was calculated as the following:

- GDP: $1,118,104,985
- Employment: 12,427 jobs
- Taxes: $452,851,283

In addition to these estimates for GDP, employment, and total taxes, an average multiplier of 2.0. can be applied to the expenditure data in order to estimate the total economic impact on the province. Therefore, a total of $1,264,000,000 in expenditures would be expected to generate $2,528,000,000 in economic activity across the province in a medium frequency year.

Economic Impact for a low frequency season (2018-2019):

As 2018-2019 represents a benchmark for a low-frequency season, a multiplication factor of 1.0. would result in no change in the expenditure data. As seen previously in the report, the $842,870,778 in expenditures by snowmobilers in Ontario was allocated to the TREIM input-output model, providing the following estimates of impact on GDP, employment, and taxes:

Table 39: Total Visitor Spending, GDP, Employment and Total Taxes, low frequency impact

	Low Frequency (2018-2019)
Total Visitors' Spending	$842,870,778
Gross Domestic Product (GDP)	
Direct	$403,976,647
Indirect	$119,099,008
Induced	$142,628,672
Total	$665,704,327
Employment (jobs)	
Direct	4,325
Indirect	1,022
Induced	1,089
Total	6,436
Total Taxes	
Federal	$92,110,448
Provincial	$114,205,815
Municipal	$10,122,888
Total	$216,439,151

Using the above spending, the impact of snowmobiling in Ontario was calculated as the following:

- GDP: $665,704,327
- Employment: 6,436 jobs
- Taxes: $216,439,151

As with the previous two sections, an average multiplier of 2.0. can be applied to the expenditure data in order to estimate the total economic impact on the province. A total of $842,870,778 in expenditures would be expected to generate $1,685,741,556 in economic activity across the province in a low frequency year.

Summary of Impact Assessment

During the 2018-2019 snowmobiling season, snowmobilers made $842,870,778 worth of expenditures riding in the province. According to the TREIM output tables, direct employment from the season's snowmobiling expenditures resulted in employment totaling an estimated 6,436 full-time equivalent jobs and $216 million in taxes across three levels of government: $92 million in federal taxes, $114 million in provincial taxes, and $10 million in municipal taxes.

Not all industries have been affected equally. Retail Trade, Other Services (e.g. motor vehicle maintenance and repairs), Manufacturing, and Food and Beverage Services benefitted the most from snowmobiling activity in Ontario this season, while other industries, such as Utilities or Professional, Scientific and Technical Services did not see any direct impact on GDP. It is also important to note that many of the higher expenditure categories, such as fuel costs, do not translate into increased job creation which may explain why job creation is down by 40% since 2014.

Some areas of the province are also likely to see more direct benefit from snowmobiling activity than others. According to survey responses, Districts 6 & 7 were the most commonly visited districts in 2018-2019. The direct expenditures related to snowmobiling in District 6 and District 7 totaled $99,458,752 and $94,401,527, respectively. Direct employment from the season's snowmobile expenditures totaled 637 and 602 full-time equivalent jobs in District 6 and District 7 respectively. Snowmobiling activity in these districts supported more than $28 million (in District 6) and $26 million (in District 7) among the three levels of government across the province for these two districts alone.

Table 40: Economic Impact of Snowmobiling in Districts 6 and 7

	District 6	District 7
Expenditures	$99,458,752	$94,401,527
Direct GDP	$45,775,490	$42,948,008
Direct Employment	637	602
Total Taxes	$28,537,990	$26,452,916

Regarding the total economic impact of snowmobiling in Ontario, the TREIM model only provides estimated GDP for their travel regions. However, a total of $842,870,778 in expenditures would generate $1,685,741,556 in economic activity across the province.[15]

A comparison to previous study years (2013-2014, 2004-2005, and 1996-1997) was also completed (see table 37). It should be noted that a different assessment model was used for the first two seasons. In general, there was a slight decrease in direct expenditures, direct GDP, direct employment and total taxes since 2014. This decrease in overall economic impact can likely be attributed to poor weather conditions in the southern districts this year, which resulted in an overall decrease in frequency of trips among snowmobilers (a decline by over 50% since 2014). If the frequency of trips had stayed at the levels reported in 2014, one could reasonably expect impact to be twice as large as that recorded in 2019.

Table 41: Economic Impact of Snowmobiling Study Comparisons

	2018-2019	2013-2014	2004-2005[a]	1996-1997
Direct Expenditures	$842,870,778	$853,263,840	$637,218,785	$586 million
Direct GDP	$665,704,327	$369,416,786	----	$322,604,014
Direct Employment	6,436 jobs	7,292 jobs	4,817 jobs	----
Total Taxes	$216,439,151	$332,781,171	$274,865,668	----
Total Economic Activity	1.6 Billion	1.7 Billion	$1.2 Billion	

[a] Paula Neice and Associates. (2005); [b] Ecologistics Limited. (1998).

[15] Based on an average multiplier of 2.0.

Economic Impact by District

The tables below provide the economic impact of snowmobiling in by district Ontario during the 2018-2019 season. These assessments were done using the expenditure data provided by survey respondents. Visitor spending for each district was calculated by dividing total spending in the province by the proportion of snowmobiling activity in the district according to the survey (see Table 13). District spending by category was then inputted into the TREIM model and the model estimated impacts.

The TREIM model allows assessments to be completed at the Ministry's Travel Region Level. Districts were aligned as best as possible to travel regions, as shown in Figure 5.

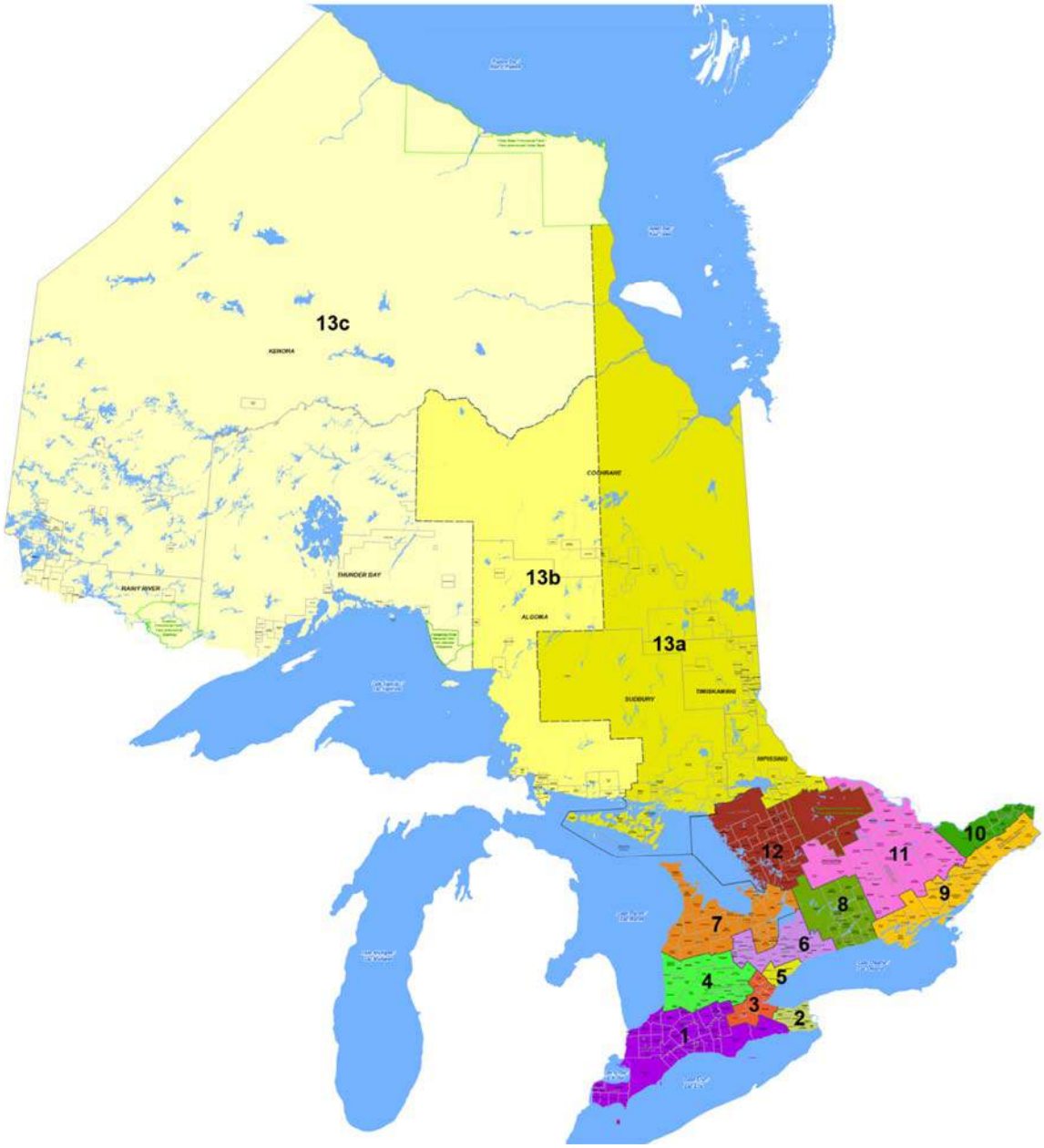

Figure 5: Ontario Ministry of Tourism, Culture, and Sport Regional Map

District 1

Table 42: Inputs of Expenditures by Snowmobilers in District 1 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$2,623,355.38
Private Transportation - Rental	$173,831.00
Private Transportation - Operation	$48,553,763.00
Accommodation	$3,037,861.00
Food and Beverage - At Stores	$1,519,388.12
Food and Beverage - At Restaurants	$6,287,735.10
Recreation and Entertainment	$623,416.59
Retail - Clothing	$3,654,038.49
Retail - Other	$4,327,756.78
Total	**$70,801,145**

Table 43: Total Visitor Spending, GDP, Employment and Total Taxes, District 1

	2018-2019
Gross Domestic Product (GDP)	
Direct	$34,035,549
Indirect	$6,647,278
Induced	$9,650,727
Total	$50,333,554
Employment (Jobs)	
Direct	514
Indirect	65
Induced	70
Total	649
Total Taxes	
Federal	$8,609,686
Provincial	$10,129,363
Municipal	$5,466,300
Total	$24,205,349

District 2

Table 44: Inputs of Expenditures by Snowmobilers in District 2 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$2,717,047
Private Transportation - Rental	$180,039
Private Transportation - Operation	$50,287,826
Accommodation	$3,146,356
Food and Beverage - At Stores	$1,573,652
Food and Beverage - At Restaurants	$6,512,297
Recreation and Entertainment	$645,681
Retail - Clothing	$3,784,540
Retail - Other	$4,482,320
Total	**$73,329,758**

Table 45: Total Visitor Spending, GDP, Employment and Total Taxes, District 2

	2018-2019
Gross Domestic Product (GDP)	
Direct	$33,816,316
Indirect	$5,287,501
Induced	$7,892,181
Total	$46,995,999
Employment (Jobs)	
Direct	470
Indirect	50
Induced	54
Total	574
Total Taxes	
Federal	$8,720,584
Provincial	$10,554,578
Municipal	$1,959,114
Total	$21,234,276

District 3

Table 46: Inputs of Expenditures by Snowmobilers in District 3 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$1,124,295
Private Transportation - Rental	$74,499
Private Transportation - Operation	$20,808,756
Accommodation	$1,301,941
Food and Beverage - At Stores	$651,166
Food and Beverage - At Restaurants	$2,694,744
Recreation and Entertainment	$267,179
Retail - Clothing	$1,566,016
Retail - Other	$1,854,753
Total	**$30,343,348**

Table 47: Total Visitor Spending, GDP, Employment and Total Taxes, District 3

	2018-2019
Gross Domestic Product (GDP)	
Direct	$14,635,364
Indirect	$2,948,572
Induced	$4,131,460
Total	$21,715,395
Employment (Jobs)	
Direct	199
Indirect	28
Induced	30
Total	257
Total Taxes	
Federal	$3,909,139
Provincial	$4,566,607
Municipal	$1,039,613
Total	$9,515,360

District 4

Table 48: Inputs of Expenditures by Snowmobilers in District 4 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$562,148
Private Transportation - Rental	$37,250
Private Transportation - Operation	$10,404,378
Accommodation	$650,970
Food and Beverage - At Stores	$325,583
Food and Beverage - At Restaurants	$1,347,372
Recreation and Entertainment	$133,589
Retail - Clothing	$783,008
Retail - Other	$927,376
Total	**$15,171,674**

Table 49: Total Visitor Spending, GDP, Employment and Total Taxes, District 4

	2018-2019
Gross Domestic Product (GDP)	
Direct	$7,045,151
Indirect	$1,196,329
Induced	$1,755,151
Total	$9,996,631
Employment (Jobs)	
Direct	98
Indirect	11
Induced	12
Total	121
Total Taxes	
Federal	$1,861,314
Provincial	$2,223,087
Municipal	$290,592
Total	$4,374,993

District 5

Table 50: Inputs of Expenditures by Snowmobilers in District 5 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$1,186,756
Private Transportation - Rental	$78,638
Private Transportation- Operation	$21,964,798
Accommodation	$1,374,271
Food and Beverage- At Stores	$687,342
Food and Beverage- At Restaurants	$2,844,452
Recreation and Entertainment	$282,022
Retail- Clothing	$1,653,017
Retail- Other	$1,957,795
Total	**$32,029,089**

Table 51: Total Visitor Spending, GDP, Employment and Total Taxes, District 5

	2018-2019
Gross Domestic Product (GDP)	
Direct	$15,209,913
Indirect	$3,064,885
Induced	$4,247,889
Total	$22,522,687
Employment (Jobs)	
Direct	209
Indirect	29
Induced	30
Total	268
Total Taxes	
Federal	$4,117,399
Provincial	$4,821,030
Municipal	$721,689
Total	$9,660,118

District 6

Table 52: Inputs of Expenditures by Snowmobilers in District 6 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$3,685,190
Private Transportation - Rental	$244,191
Private Transportation- Operation	$68,206,477
Accommodation	$4,267,472
Food and Beverage- At Stores	$2,134,379
Food and Beverage- At Restaurants	$8,832,771
Recreation and Entertainment	$875,752
Retail- Clothing	$5,133,054
Retail- Other	$6,079,468
Total	**$99,458,752**

Table 53: Total Visitor Spending, GDP, Employment and Total Taxes, District 5

	2018-2019
Gross Domestic Product (GDP)	
Direct	$45,775,490
Indirect	$7,054,140
Induced	$10,525,990
Total	$63,355,620
Employment (Jobs)	
Direct	637
Indirect	67
Induced	71
Total	776
Total Taxes	
Federal	$11,829,536
Provincial	$14,309,664
Municipal	$2,398,791
Total	$28,537,990

District 7

Table 54: Inputs of Expenditures by Snowmobilers in District 7 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$3,497,807
Private Transportation - Rental	$231,775
Private Transportation- Operation	$64,738,351
Accommodation	$4,050,482
Food and Beverage- At Stores	$2,025,851
Food and Beverage- At Restaurants	$8,383,647
Recreation and Entertainment	$831,222
Retail- Clothing	$4,872,051
Retail- Other	$5,770,342
Total	**$94,401,527**

Table 55: Total Visitor Spending, GDP, Employment and Total Taxes, District 7

	2018-2019
Gross Domestic Product (GDP)	
Direct	$42,948,008
Indirect	$5,798,589
Induced	$8,762,476
Total	$57,509,073
Employment (Jobs)	
Direct	602
Indirect	53
Induced	54
Total	709
Total Taxes	
Federal	$10,845,461
Provincial	$13,307,412
Municipal	$2,300,044
Total	$26,452,916

District 8

Table 56: Inputs of Expenditures by Snowmobilers in District 8 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$2,498,434
Private Transportation - Rental	$165,553
Private Transportation- Operation	$46,241,679
Accommodation	$2,893,201
Food and Beverage- At Stores	$1,447,036
Food and Beverage- At Restaurants	$5,988,319
Recreation and Entertainment	$593,730
Retail- Clothing	$3,480,037
Retail- Other	$4,121,673
Total	**$67,429,662**

Table 57: Total Visitor Spending, GDP, Employment and Total Taxes, District 8

	2018-2019
Gross Domestic Product (GDP)	
Direct	$31,311,784
Indirect	$5,317,016
Induced	$7,800,672
Total	$44,429,471
Employment (Jobs)	
Direct	434
Indirect	50
Induced	54
Total	539
Total Taxes	
Federal	$8,272,506
Provincial	$9,880,387
Municipal	$1,291,520
Total	$19,444,413

District 9

Table 58: Inputs of Expenditures by Snowmobilers in District 9 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$2,404,742
Private Transportation - Rental	$159,345
Private Transportation- Operation	$44,507,616
Accommodation	$2,784,706
Food and Beverage- At Stores	$1,392,772
Food and Beverage- At Restaurants	$5,763,757
Recreation and Entertainment	$571,465
Retail- Clothing	$3,349,535
Retail- Other	$3,967,110
Total	**$64,901,050**

Table 59: Total Visitor Spending, GDP, Employment and Total Taxes, District 9

	2018-2019
Gross Domestic Product (GDP)	
Direct	$32,545,954
Indirect	$11,446,682
Induced	$13,417,323
Total	$57,409,959
Employment (Jobs)	
Direct	433
Indirect	102
Induced	103
Total	638
Total Taxes	
Federal	$9,972,248
Provincial	$10,825,295
Municipal	$2,454,454
Total	$23,251,997

District 10

Table 60: Inputs of Expenditures by Snowmobilers in District 10 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$1,811,364
Private Transportation - Rental	$120,026
Private Transportation- Operation	$33,525,217
Accommodation	$2,097,571
Food and Beverage- At Stores	$1,049,101
Food and Beverage- At Restaurants	$4,341,531
Recreation and Entertainment	$430,454
Retail- Clothing	$2,523,027
Retail- Other	$2,988,213
Total	**$48,886,505**

Table 61: Total Visitor Spending, GDP, Employment and Total Taxes, District 10

	2018-2019
Gross Domestic Product (GDP)	
Direct	$22,240,933
Indirect	$3,002,840
Induced	$4,537,711
Total	$29,781,484
Employment (Jobs)	
Direct	312
Indirect	27
Induced	28
Total	367
Total Taxes	
Federal	$5,616,399
Provincial	$6,891,338
Municipal	$1,191,094
Total	$13,698,831

District 11

Table 62: Inputs of Expenditures by Snowmobilers in District 11 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$3,372,885
Private Transportation - Rental	$223,497
Private Transportation- Operation	$62,426,267
Accommodation	$3,905,822
Food and Beverage- At Stores	$1,953,499
Food and Beverage- At Restaurants	$8,084,231
Recreation and Entertainment	$801,536
Retail- Clothing	$4,698,049
Retail- Other	$5,564,259
Total	**$91,030,044**

Table 63: Total Visitor Spending, GDP, Employment and Total Taxes, District 11

	2018-2019
Gross Domestic Product (GDP)	
Direct	$40,871,109
Indirect	$5,813,375
Induced	$9,105,064
Total	$55,789,549
Employment (Jobs)	
Direct	$553
Indirect	$51
Induced	$61
Total	$665
Total Taxes	
Federal	$11,052,082
Provincial	$12,765,442
Municipal	$1,583,155
Total	$25,400,679

District 12

Table 64: Inputs of Expenditures by Snowmobilers in District 12 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$1,936,286
Private Transportation - Rental	$128,304
Private Transportation- Operation	$35,837,301
Accommodation	$2,242,231
Food and Beverage- At Stores	$1,121,453
Food and Beverage- At Restaurants	$4,640,947
Recreation and Entertainment	$460,141
Retail- Clothing	$2,697,028
Retail- Other	$3,194,297
Total	**$52,257,988**

Table 65: Total Visitor Spending, GDP, Employment and Total Taxes, District 12

	2018-2019
Gross Domestic Product (GDP)	
Direct	$23,463,044
Indirect	$3,337,308
Induced	$5,226,981
Total	$32,027,333
Employment (Jobs)	
Direct	318
Indirect	29
Induced	35
Total	382
Total Taxes	
Federal	$6,344,714
Provincial	$7,328,309
Municipal	$908,848
Total	$14,581,871

District 13

Table 66: Inputs of Expenditures by Snowmobilers in District 13 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$936,913
Private Transportation - Rental	$62,083
Private Transportation- Operation	$17,340,630
Accommodation	$1,084,950
Food and Beverage- At Stores	$542,639
Food and Beverage- At Restaurants	$2,245,620
Recreation and Entertainment	$222,649
Retail- Clothing	$1,305,014
Retail- Other	$1,545,627
Total	**$25,286,123**

Table 67: Total Visitor Spending, GDP, Employment and Total Taxes, District 13

	2018-2019
Gross Domestic Product (GDP)	
Direct	$11,741,501
Indirect	$1,732,015
Induced	$2,610,759
Total	$16,084,275
Employment (Jobs)	
Direct	175
Indirect	16
Induced	17
Total	209
Total Taxes	
Federal	$3,073,474
Provincial	$3,607,872
Municipal	$482,417
Total	$7,163,763

District 14

Table 68: Inputs of Expenditures by Snowmobilers in District 14 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$1,124,295
Private Transportation - Rental	$74,499
Private Transportation- Operation	$20,808,756
Accommodation	$1,301,941
Food and Beverage- At Stores	$651,166
Food and Beverage- At Restaurants	$2,694,744
Recreation and Entertainment	$267,179
Retail- Clothing	$1,566,016
Retail- Other	$1,854,753
Total	**$30,343,348**

Table 69: Total Visitor Spending, GDP, Employment and Total Taxes, District 14

	2018-2019
Gross Domestic Product (GDP)	
Direct	$13,623,703
Indirect	$1,937,792
Induced	$3,035,021
Total	$18,596,516
Employment (Jobs)	
Direct	184
Indirect	17
Induced	20
Total	222
Total Taxes	
Federal	$3,684,027
Provincial	$4,255,147
Municipal	$527,718
Total	$8,466,893

District 15

Table 70: Inputs of Expenditures by Snowmobilers in District 15 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$1,030,604
Private Transportation - Rental	$68,291
Private Transportation- Operation	$19,074,693
Accommodation	$1,193,445
Food and Beverage- At Stores	$596,902
Food and Beverage- At Restaurants	$2,470,182
Recreation and Entertainment	$244,914
Retail- Clothing	$1,435,515
Retail- Other	$1,700,190
Total	**$27,814,735**

Table 71: Total Visitor Spending, GDP, Employment and Total Taxes, District 15

	2018-2019
Gross Domestic Product (GDP)	
Direct	$12,488,394
Indirect	$1,776,309
Induced	$2,782,103
Total	$17,046,806
Employment (Jobs)	
Direct	169
Indirect	16
Induced	19
Total	203
Total Taxes	
Federal	$3,377,025
Provincial	$3,900,551
Municipal	$483,742
Total	$7,761,318

District 17

Table 72: Inputs of Expenditures by Snowmobilers in District 17 by TREIM model category

Visitor Spending	Expenditure(s)
Travel Service	$405,995
Private Transportation - Rental	$26,902
Private Transportation- Operation	$7,514,273
Accommodation	$470,145
Food and Beverage- At Stores	$235,143
Food and Beverage- At Restaurants	$973,102
Recreation and Entertainment	$96,481
Retail- Clothing	$565,506
Retail- Other	$669,772
Total	**$10,957,320**

Table 73: Total Visitor Spending, GDP, Employment and Total Taxes, District 17

	2018-2019
Gross Domestic Product (GDP)	
Direct	$4,902,417
Indirect	$724,736
Induced	$1,106,345
Total	$6,733,498
Employment (Jobs)	
Direct	66
Indirect	7
Induced	7
Total	81
Total Taxes	
Federal	$1,328,942
Provincial	$1,534,960
Municipal	$230,613
Total	$3,094,515

Appendices

Appendix A: References Cited

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Appendix B: Key Informant Interview Guide

Date: _____
OFSC District: _____

Thank you for taking time to speak with me today. As you may know the Ontario Federation of Snowmobile Clubs has hired Harry Cummings and Associates, as an independent consulting firm, to study the economic impact of snowmobiling in Ontario as an update to a study completed in 2014.

Your input is very important to us and we hope you will take some time to answer the questions. Your participation in this survey is completely voluntary and any information you share will remain confidential. If there are any questions that you do not wish to answer just let me know and we can skip that question.

Section 1: To begin, we would like to learn a bit about your own personal snowmobiling activity:

1. Did you snowmobile this year?
    a. Yes
    b. No **if no skip to section 3*

2. How long have you been snowmobiling? Who else in your household sleds with you?

3. What machines do you have (brand, series)? Do you tow and how do you do that (trailer, truck etc.)?

4. Where did you snowmobile this winter?

5. How often? About how many days were you snowmobiling this year?

6. How did this compare to other years? If your snowmobiling activity was significantly different this year compared to other years, what factors contributed to this change?

7. Do you have a cottage or particular destination away from home you visit each year for snowmobiling?

8. Any particular positive experiences this year?

9. Any particular negative experiences this year?

Section 2: The next few questions are about the snowmobiling related purchases you have made this year:

10. Where do you purchase your snowmobiling equipment (store, community)?

11. Where do you purchase your clothing (including boots, helmets, etc.)?

12. Typically where do you have maintenance done? Purchase parts?

13. Do you do overnight trips? If so, where do you stay? Do you eat in restaurants Or buy food and cook?

Section 3: We'd now to learn more about how you believe snowmobiling affects your community:

14. Which businesses do you believe benefits the most from snowmobiling in your community?
    a. *Accommodation and related?*
    b. *Dealers?*
    c. *Maintenance?*
    d. *Other retailers?*

15. How does the community as a whole benefit from snowmobiling related activities?

16. Are there any particular issues with snowmobiling we should be aware of?

17. Are there any particular trends in snowmobiling?

Section 4: Finally, can you provide some demographic information about yourself (this information will help us better understand the makeup of the OFSC district administrators).

18. In what year were you born? _____

19. What is the highest level of education you have completed?
    - □ Some high school
    - □ High School diploma or equivalent
    - □ Registered Apprenticeship or other trades certificate or diploma
    - □ College, CEGEP or other non-university certificate or diploma
    - □ University certificate or diploma below bachelor's level
    - □ Bachelor's degree
    - □ Post graduate degree above bachelor's level
    - □ Prefer not to say

20. Which of the following categories best describes your current employment status?
    - □ Employed full-time (35 hours or more per week)
    - □ Employed part-time (less than 35 hours per week)
    - □ Student
    - □ Retired
    - □ Homemaker
    - □ On leave (maternity, disability / health-related, etc.)
    - □ Not employed
    - □ Other, please specify _____

21. How many people, in total, live in your household, including yourself and other members of your family, or anyone else living in your household? _____

22. What is your annual household income from all sources before taxes?

    - □ Under $5,000
    - □ $5,000 to $9,999
    - □ $10,000 to $14,999
    - □ $15,000 to $19,999
    - □ $20,000 to $24,999
    - □ $25,000 to $29,999
    - □ $30,000 to $34,999
    - □ $35,000 to $39,999
    - □ $40,000 to $44,999
    - □ $45,000 to $49,999
    - □ $50,000 to $59,999
    - □ $60,000 to $69,999
    - □ $70,000 to $79,999
    - □ $80,000 to $89,999
    - □ $90,000 to $99,999
    - □ $100,000 to $124,999
    - □ $125,000 to $149,999
    - □ $150,000 to $199,999
    - □ $200,000 and over
    - □ Don't know/Prefer not to say

23. Do you have any final comments?

Thank you for participating in this interview!

Appendix C: Survey Tool

Revised Survey - Economic Impact of Snowmobiling in Ontario: 2018-2019

1. OFSC Permit Holder Survey

The Ontario Federation of Snowmobile Clubs (OFSC) has retained Harry Cummings and Associates, an independent consulting firm, to study the economic impact of snowmobiling in Ontario as an update to a study completed in 2014.

As part of this study, we are asking snowmobilers from Ontario to complete a short survey. The survey should take approximately 10-15 minutes to complete.

Your input is very important to us, and we hope you will take some time to answer the questions. Your information remains confidential. You may choose not to participate or not to answer a specific question.

If you have any questions regarding the survey please contact Harry Cummings and Associates at 519-823-1647 or email hca@hcaconsulting.ca. To confirm the validity of this survey, please contact Andrew Walasek at 705-739-7669 ext. 251 or email awalasek@ofsc.on.ca.

Thank you for your participation.

Revised Survey - Economic Impact of Snowmobiling in Ontario: 2018-2019

2. Snowmobiling in 2018-2019

1. During the 2018-2019 season, did you snowmobile...

- ☐ More than most seasons
- ○ About the same as most seasons
- ○ Less than most seasons
- ☐ 2018-2019 was my first snowmobile season
- ☐ Not at all

3. Household Activity

We would like to get an idea of how the members of your household participate in snowmobiling.

Please answer the following questions for yourself and each individual in your household.

Please be CONSISTENT in your answers for each individual (the responses for "Person 1" in Questions 2-6 refers to you, and "Person 2" should be the same individual in each question).

2. What is the gender of each ACTIVE snowmobiler in your household?

Person 1	
Person 2	
Person 3	
Person 4	
Person 5	
Person 6	
Person 7	
Person 8	

3. What is the age of each ACTIVE snowmobiler in your household?

Person 1	
Person 2	
Person 3	
Person 4	
Person 5	
Person 6	
Person 7	
Person 8	

4. On average, how many times did each person participate in a short trip (1 day or less) on a snowmobile during the 2018-2019 season?

	6-7 per week	4-5 per week	2-3 per week	Once per week	Three times per month	Twice per month	Once a month	Less than once a month	Never
Person 1	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 2	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 3	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 4	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 5	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 6	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 7	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 8	◯	◯	◯	◯	◯	◯	◯	◯	◯

5. On average, how many times did each person participate in a trip of 1-3 nights away from home on a snowmobile during the 2018-2019 season?

	10 or more	9	8	7	6	5	4	3	2	1	Never
Person 1	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 2	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 3	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 4	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 5	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 6	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 7	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
Person 8	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

6. On average, how many times did each person participate in a vacation/tour (more than 3 nights away from home) on a snowmobile during the 2018-2019 season?

	10 or more	9	8	7	6	5	4	3	2	1	Never
Person 1	○	○	○	○	○	○	○	○	○	○	○
Person 2	○	○	○	○	○	○	○	○	○	○	○
Person 3	○	○	○	○	○	○	○	○	○	○	○
Person 4	○	○	○	○	○	○	○	○	○	○	○
Person 5	○	○	○	○	○	○	○	○	○	○	○
Person 6	○	○	○	○	○	○	○	○	○	○	○
Person 7	○	○	○	○	○	○	○	○	○	○	○
Person 8	○	○	○	○	○	○	○	○	○	○	○

4. Snowmobile(s)

We would like to get an idea of the snowmobiles owned by members of your household.

Please answer the following questions for each of the snowmobiles owned by members of your household.

Please be CONSISTENT in your answers for each snowmobile (the responses for "Snowmobile 1" in Questions 7-10 refers to your most recently purchased snowmobile, and "Snowmobile 2" should refer to the same snowmobile in each question).

7. In what year was each snowmobile manufactured?

Snowmobile 1	
Snowmobile 2	
Snowmobile 3	
Snowmobile 4	
Snowmobile 5	
Snowmobile 6	
Snowmobile 7	
Snowmobile 8	

8. In what year was each snowmobile purchased?

Snowmobile 1	
Snowmobile 2	
Snowmobile 3	
Snowmobile 4	
Snowmobile 5	
Snowmobile 6	
Snowmobile 7	
Snowmobile 8	

9. How much did each snowmobile cost?

Your answer must be formatted as a whole number without the dollar sign (e.g. 3000)

Snowmobile 1	
Snowmobile 2	
Snowmobile 3	
Snowmobile 4	
Snowmobile 5	
Snowmobile 6	
Snowmobile 7	
Snowmobile 8	

10. What is the make of each snowmobile and what type of permit is associated with each snowmobile?

	Permit	Make
Snowmobile 1		
Snowmobile 2		
Snowmobile 3		
Snowmobile 4		
Snowmobile 5		
Snowmobile 6		
Snowmobile 7		
Snowmobile 8		

5. Annual Expenses

11. The following are some typical expenses that snowmobilers have in order to participate in the activity. Please indicate how much money your HOUSEHOLD has spent on any of the items below during the 2018-2019 season.

Please note - fuel/oil costs will be recorded in the following question. Please do not record fuel/oil costs in this question.

Your answer must be formatted as a whole number without the dollar sign (e.g. 102)

OFSC Trail Permit

Trail permit for another area (e.g. Quebec)

Snowmobile insurance

Repairs and service

Snowmobile clothing (coat, pants, gloves)

Safety equipment (helmet)

Snowmobile trailer

Towing vehicle (truck/SUV to pull snowmobile trailer)

Snowmobile Accessories (mechanical/cosmetic upgrades)

Other (please specify below)

12. Please specify "Other" as indicated in the previous question.

6. Trips and Tours

We would like to get an idea of the types of trips in which your household participates, including (A) day trips, (B) overnight trips of 1-3 nights away from home, and (C) overnight trips of more than 3 nights away from home.

For the following questions, please only consider trips or tours made in Ontario. Do NOT include trips made outside of Ontario.

13. This season (2018-2019), approximately how much did your HOUSEHOLD spend on each of the following categories during a typical snowmobiling outing of ONE DAY OR LESS?

Your answer must be formatted as a whole number without the dollar sign (e.g. 102)

Food and Beverage - Restaurant

Food and Beverage - Store

Fuel/Oil for Snowmobile

Fuel for Tow Vehicle

Service and Repairs

Souvenirs/Retail Purchases

Activity Fees and Entertainment

Snowmobile Rental

Other Goods or Services (please specify below)

14. Please describe the "Other Goods and Services" you indicated purchasing on a snowmobiling outing of one (1) day or less.

15. This season (2018-2019), approximately how much did your HOUSEHOLD spend in total on each of the following categories during a typical overnight snowmobiling outing of ONE TO THREE NIGHTS AWAY
FROM HOME?

Your answer must be formatted as a whole number without the dollar sign (e.g. 102)

Accommodation or Lodging

Food and Beverage - Restaurant

Food and Beverage - Store

Fuel/Oil for Snowmobile

Fuel for Tow Vehicle

Service and Repairs

Souvenirs/Retail Purchases

Activity Fees and Entertainment

Snowmobile Rental

Other Goods or Services (please specify below)

16. Please describe the "Other Goods and Services" you indicated purchasing on a typical overnight snowmobiling outing of one to three nights.

17. This season (2018-2019), approximately how much did your HOUSEHOLD spend in total on each of the following categories during a typical tour/vacation of MORE THAN THREE NIGHTS AWAY FROM HOME?

Your answer must be formatted as a whole number without the dollar sign (e.g. 102)

Accommodation or Lodging

Food and Beverage - Restaurant

Food and Beverage - Store

Fuel/Oil for Snowmobile

Fuel for Tow Vehicle

Service and Repairs

Souvenirs/Retail Purchases

Activity Fees and Entertainment

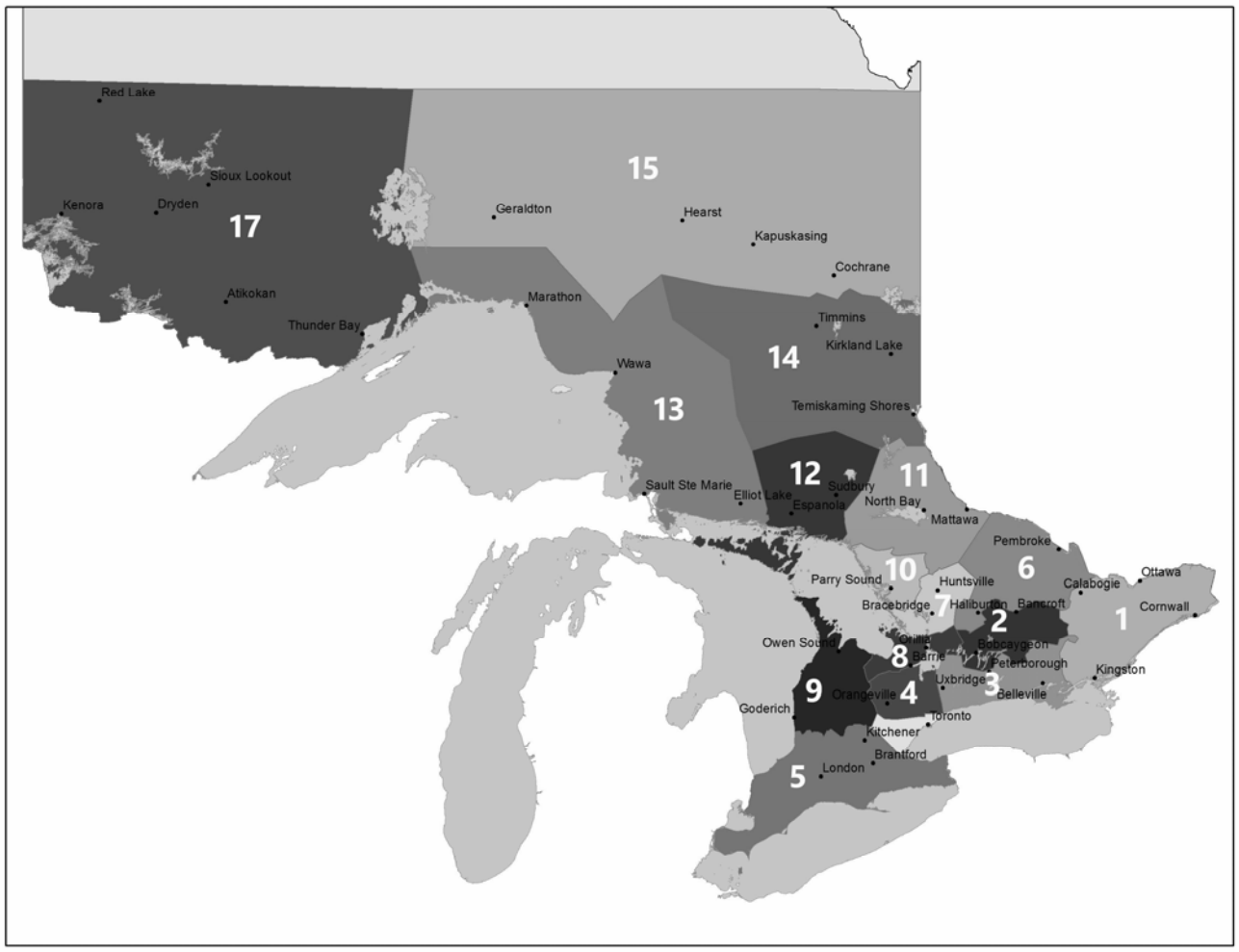
Snowmobile Rental

Other Goods or Services (please specify below)

18. Please describe the "Other Goods and Services" you indicated purchasing on a typical vacation/tour snowmobiling outing of more than three nights.

7. Snowmobiler Profile

For questions 19-21, please refer to the map of the OFSC Districts



19. Which OFSC District do you live in and which 3 OFSC Districts do you snowmobile in most often during a typical season?

	District
I live in this OFSC District	
I have a vacation residence in this OFSC District	
I snowmobile most often in this OFSC District	
I snowmobile second most often in this OFSC District	
I snowmobile third most often in this OFSC District	

20. Which snowmobile club do you currently belong to? (please choose from the drop down menu below)

Other (please specify)

21. In which OFSC District(s) did you purchase your OFSC 2018-2019 Permit(s). You may select more than one District if the permits were purchased in multiple Districts.

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 17

22. What is your current community of residence? (Note: If you live in a rural area, please respond with the closest town and/or urban area to you.)

8. Demographics

23. Including yourself, how many people live in your household?

Number of people:

24. Are you...

- [ ] Single
- [ ] Married/Common law
- [ ] Divorced/Separated
- [ ] Widowed
- [ ] Prefer not to answer
- [ ] Other (specify)

25. Gender

26. Into which of the following categories does your total household income before taxes fall?

- [ ] Under $5,000
- [ ] $5,000 to $9,999
- [ ] $10,000 to $14,999
- [ ] $15,000 to $19,999
- [ ] $20,000 to $24,999
- [ ] $25,000 to $29,999
- [ ] $30,000 to $34,999
- [ ] $35,000 to $39,999
- [ ] $40,000 to $44,999
- [ ] $45,000 to $49,999
- [ ] $50,000 to $59,999
- [ ] $60,000 to $69,999

- ○ $70,000 to $79,999
- ○ $80,000 to $89,999
- ☐ $90,000 to $99,999
- ☐ $100,000 to $124,999
- ○ $125,000 to $149,999
- ○ $150,000 to $199,999
- ☐ $200,000 and over
- ☐ Prefer not to answer

27. Please indicate your highest level of education completed.

- ○ Less than high school
- ○ High school
- ☐ Apprenticeship or trades certificate or diploma
- ☐ College, CEGEP or other non-university certificate or diploma
- ☐ University certificate, diploma or degree at bachelor level or above
- ○ Bachelor's degree
- ○ University certificate, diploma or degree above bachelor level
- ☐ Prefer not to answer

28. Are you or is anyone in your household employed by...?

- ☐ Ontario Federation of Snowmobile Clubs
- ☐ A snowmobile club or district
- ☐ A company or organization which manufactures, markets or sells snowmobiles or related products

Revised Survey - Economic Impact of Snowmobiling in Ontario: 2018-2019

9. Thank You

29. That is the end of the survey. If you have any additional comments, please let us know. Thank you.