

Economic Impact Study of On-road Motorcycles and Off-highway Vehicle Recreation in Canada



Prepared for Moto Canada, the Canadian Quad Council and the Motorcyclists Confederation of Canada
Final Report - October 2023



Table of Contents

Executive Summary.....	ix
1. Introduction.....	1
Background and Purpose.....	1
Scope.....	2
Approach.....	2
Structure of the Report	2
Report Limitations	3
Data Sources.....	3
2. Overview of On-road Motorcycles and Off-highway Vehicles in Canada	4
Sales and Service	5
Tourism and Use.....	5
Profile of On-road Motorcycle and OHV Users in Canada.....	5
Value Chain	14
3. Economic Impact Analysis	16
Economic Impact Methodology	16
Categories of Economic Impacts Created	17
Economic Impacts from the Sale of Vehicles, Parts, and Accessories	18
Total Economic Impacts.....	19
Economic Impacts by Province and Vehicle Category	21
Economic Impacts of Tourism Spending	23
Total Economic Impacts.....	28
Economic Impacts by Province and Vehicle Category	30
Economic Impacts of Spending on Miscellaneous Items Associated with Operating Vehicles	33
Total Economic Impacts.....	34
Economic Impacts by Province and Vehicle Category	35
Economic Impacts of Tour Businesses and Riding Schools.....	39
Economic Impacts by Province.....	40

4. Conclusion.....	41
Total Economic Impacts.....	41
Distribution of Economic Impacts by Province.....	43
Distribution of Economic Impacts by Vehicle Category	44
Comparison to Other Industries	45
5. Appendices	47
Appendix A: Economic Impact Methodology.....	47
Appendix B: Detailed Economic Impacts	48
Economic Impacts of Tourism	59
Economic Impacts of Other Spending	70
Economic Impacts of Tour Business and Riding Operators	80
Total Economic Impacts by Province	82
Appendix C: About MNP.....	85



Figures

- Figure 1: Retail Sales of On-Road Motorcycles and OHVs (Number of Units Sold) – 2013 to 2022..... 4
- Figure 2: Distribution of Survey Respondents Across Canada (n=7,063) 6
- Figure 3: Gender Distribution of Survey Respondents (n=7,063)..... 6
- Figure 4: Income Distribution of Survey Respondents (n=7,063)..... 7
- Figure 5: Age Distribution of Survey Respondents (n=7,063) 8
- Figure 6: Educational Attainment (n=7,063) 8
- Figure 7: Number of Survey Respondents Reporting Ownership, by Type of Vehicle (n=7,063)..... 9
- Figure 8: Income Distribution of On-road Motorcycles Users (n=823) 10
- Figure 9: Age Distribution of On-road Motorcycle Users (n=876)..... 11
- Figure 10: Income Distribution of Users of Only Competitive or Adventure Motorcycles..... 11
- Figure 11: Age Distribution of Only Competitive or Adventure Motorcycles..... 12
- Figure 12: Income Distribution Off-road Motorcycles Users (n=750) 12
- Figure 13: Age Distribution of Off-road Motorcycles Users (n=782) 13
- Figure 14: Income Distribution of Users of ATVs and Side-by-Sides (N=4,606) 13
- Figure 15: Age Distribution of Users of ATVs and Side-by-Sides (n=4,874)..... 14
- Figure 16: Value Chain of On-road Motorcycle and OHVs in Canada..... 15
- Figure 17: Comparison with New Home Construction – Equivalent Number of Housing Starts by Province..... 46
- Figure 18: Number of On-road Motorcycles by Province (2022) 49
- Figure 19: Number of Off-road Motorcycles, ATVs and Side-by-Sides by Province (2022)..... 49
- Figure 20: Number of Day Trips Taken Outside the Local Region on On-road Motorcycles by Province of Trip Destination (2022) 50
- Figure 21: Number of Day Trips Taken Outside the Local Region on Off-road Motorcycles, ATVs and Side-by-Sides by Province of Trip Destination (2022) 50
- Figure 22: Number of Multi-Day Trips Taken on On-road Motorcycles by Province of Trip Destination (2022)..... 51
- Figure 23: Number of Day Trips Taken Outside the Local Region on Off-road Motorcycles, ATVs and Side-by-Sides by Province of Trip Destination (2022) 51
- Figure 24: Total Tourism Spending on On-road Motorcycle Trips by Province (2022)..... 52
- Figure 25: Total Tourism Spending on Off-road Motorcycle, ATV and Side-by-Side Trips by Province (2022) 52
- Figure 26: Economic Impacts of On-road Motorcycle and Parts and Accessories Sales (Output) (2022) 53

Figure 27: Economic Impacts of On-road Motorcycle and Parts and Accessories Sales (GDP) (2022)	53
Figure 28: Economic Impacts of On-road Motorcycle and Parts and Accessories Sales (Taxes) (2022)	54
Figure 29: Economic Impacts of On-road Motorcycle and Parts and Accessories Sales (Employment) (2022)	54
Figure 30: Economic Impacts of Off-road Motorcycles, Parts and Accessories Sales (Output) (2022)	55
Figure 31: Economic Impacts of Off-road Motorcycles, Parts and Accessories Sales (GDP) (2022)	55
Figure 32: Economic Impacts of Off-road Motorcycles, Parts and Accessories Sales (Taxes) (2022)	56
Figure 33: Economic Impacts of Off-road Motorcycles, Parts and Accessories Sales (Employment) - 2022.	56
Figure 34: Economic Impacts of ATVs and Side-by-Sides, Parts and Accessories Sales (Output) - 2022.....	57
Figure 35: Economic Impacts of ATVs and Side-by-Sides, Parts and Accessories Sales (GDP) - 2022	57
Figure 36: Economic Impacts of ATVs and Side-by-Sides, Parts and Accessories Sales (Taxes) - 2022.....	58
Figure 37: Economic Impacts of ATVs and Side-by-Sides, Parts and Accessories Sales (Employment) - 2022	58
Figure 38: Economic Impacts of Tourism Spending on On-road Motorcycle Trips (Output) - 2022	59
Figure 39: Economic Impacts of Tourism Spending on On-road Motorcycle Trips (GDP) - 2022.....	59
Figure 40: Economic Impacts of Tourism Spending on On-road Motorcycle Trips (Taxes) - 2022.....	60
Figure 41: Economic Impacts of Tourism Spending on On-road Motorcycle Trips (Employment) - 2022	61
Figure 42: Economic Impacts of Tourism Spending on Off-road Motorcycle Trips (Output) - 2022.....	62
Figure 43: Economic Impacts of Tourism Spending on Off-road Motorcycle Trips (GDP) - 2022	63
Figure 44: Economic Impacts of Tourism Spending on Off-road Motorcycle Trips (Taxes) - 2022	64
Figure 45: Economic Impacts of Tourism Spending on Off-road Motorcycle Trips (Employment) - 2022.....	64
Figure 46: Economic Impacts of Tourism Spending on ATV and Side-by-Side Trips (Output) - 2022	66
Figure 47: Economic Impacts of Tourism Spending on ATV and Side-by-Side Trips (GDP) - 2022	67
Figure 48: Economic Impacts of Tourism Spending on ATV and Side-by-Side Trips (Taxes) - 2022	68
Figure 49: Economic Impacts of Tourism Spending on ATV and Side-by-Side Trips (Employment) - 2022.	69
Figure 50: Economic Impacts of Other Spending on On-road Motorcycles (Output) - 2022	70
Figure 51: Economic Impacts of Other Spending on On-road Motorcycles (GDP) - 2022.....	70
Figure 52: Economic Impacts of Other Spending on On-road Motorcycles (Taxes) - 2022	71
Figure 53: Economic Impacts of Other Spending on On-road Motorcycles (Employment) - 2022	71
Figure 54: Economic Impacts of Other Spending on Off-road Motorcycles (Output) - 2022	72
Figure 55: Economic Impacts of Other Spending on Off-road Motorcycles (GDP) - 2022.....	73
Figure 56: Economic Impacts of Other Spending on Off-road Motorcycles (Taxes) - 2022	74
Figure 57: Economic Impacts of Other Spending on Off-road Motorcycles (Employment) - 2022	75
Figure 58: Economic Impacts of Other Spending on ATVs and Side-by-Sides (Output) - 2022	76

Figure 59: Economic Impacts of Other Spending on ATVs and Side-by-Sides (GDP) - 2022..... 77

Figure 60: Economic Impacts of Other Spending on ATVs and Side-by-Sides (Taxes) - 2022..... 78

Figure 61: Economic Impacts of Other Spending on ATVs and Side-by-Sides (Employment) - 2022..... 79

Figure 62: Economic Impacts of Tour Operators and Riding Schools by Province (Output) - 2022 80

Figure 63: Economic Impacts of Tour Operators and Riding Schools by Province (GDP) - 2022..... 80

Figure 64: Economic Impacts of Tour Operators and Riding Schools by Province (Taxes) - 2022..... 81

Figure 65: Economic Impacts of Tour Operators and Riding Schools by Province (Employment) - 2022..... 81

Figure 66: Total Economic Impacts by Province (Output) - 2022 82

Figure 67: Total Economic Impacts by Province (GDP) - 2022 82

Figure 68: Total Economic Impacts by Province (Taxes) - 2022 83

Figure 69: Total Economic Impacts by Province (Employment) - 2022 84

Tables

Table A: Total Estimated Economic Impacts of the Recreational Use of On-road Motorcycles and OHVs in Canada, by Category of Economy Impact (2022).....	x
Table B: Estimated Provincial Economic Impacts in Canada.....	xi
Table C: Total Estimated Economic Impacts by Vehicle Types.....	xii
Table 1: Number of Vehicles Owned (2022)	5
Table 2: Retail Sales of Vehicles, Parts, and Accessories, by Province and Vehicle Category (2022).....	18
Table 3: Total Estimated Economic Impacts from the Sale of Vehicles, Parts, and Accessories through Dealerships, by Vehicle Category (2022).....	20
Table 4: On-road Motorcycles - Estimated Total Direct, Indirect and Induced Economic Impacts from the Sale of Vehicles, Parts, and Accessories (2022) by Province	21
Table 5: Off-road Motorcycles – Estimated Total Direct, Indirect and Induced Economic Impacts from the Sale of Vehicles, Parts, and Accessories (2022) by Province	22
Table 6: ATVs and Side-by-Sides – Estimated Total Direct, Indirect and Induced Economic Impacts from the Sale of Vehicles, Parts, and Accessories (2022) by Province.....	23
Table 7: Estimates of the Number of Day and Multi-Day Trips Taken in 2022, by Vehicle Category	24
Table 8: Average Expense Per Day Trip, by Province Destination and Vehicle Category (2022).....	25
Table 9: Average Expense Per Multi-Day Trip, by Province Destination and Vehicle Category (2022).....	26
Table 10: Summary of Total Tourism Spending (2022)	27
Table 11: Total Estimated Economic Impacts of Tourism Spending, by Vehicle Category (2022)	29
Table 12: On-road Motorcycles – Estimated Total Direct, Indirect and Induced Economic Impacts of Tourism Spending (2022).....	30
Table 13: Off-road Motorcycles – Estimates Total Direct, Indirect and Induced Economic Impacts of Tourism Spending (2022).....	31
Table 14: ATVs and Side-by-Sides – Estimated Total Direct, Indirect and Induced Economic Impacts of Tourism Spending (2022).....	32
Table 15: Average and Total Spending on Miscellaneous Items Associated with Operating On-Road and Off-Road Motorcycles and ATVs and Side-by-Sides (2022)	33
Table 16: Total Estimated Economic Impacts of Spending on Miscellaneous Items Associated with Operating Vehicles, by Vehicle Category (2022)	35
Table 17: On-road Motorcycles – Estimated Total Direct, Indirect and Induced Economic Impacts of Spending on Miscellaneous Items Associated with Operating Vehicles, by Vehicle Category (2022).....	36
Table 18: Off-road Motorcycles – Estimated Total Direct, Indirect and Induced Economic Impacts of Spending on Miscellaneous Items Associated with Operating Vehicles, by Vehicle Category (2022).....	37
Table 19: ATVs and Side-by-Sides – Estimated Total Direct, Indirect and Induced Economic Impacts of Spending	

on Miscellaneous Items Associated Associated with Operating Vehicles, by Vehicle Category (2022)	38
Table 20: Number of Tour Businesses and Riding Schools and their Revenues, by Province (2022)	39
Table 21: Total Estimated Economic Impacts of Tour Operators and Riding Schools (2022).....	40
Table 22: Economic Impacts of Tour Operators and Riding Schools by Province – 2022.....	40
Table 23: Total Estimated Economic Impacts (2022).....	42
Table 24: Total Estimated Economic Impacts by Province (2022)	43
Table 25: Total Economic Impacts by Vehicle (2022).....	45
Table 26: Average Expense per Day Trip (2022).....	48
Table 27: Average Expense per Multi-Day Trip (2022)	48

Executive Summary

On-road motorcycles and off-highway vehicles (OHVs) are used for both commercial and recreational purposes. These vehicles generate economic activity through their sale, repair and maintenance, as well as through their use. Recreational use contributes to tourism and OHV trails draw users to rural areas.

The Canadian Quad Council (“CQC”), the Motorcyclists Confederation of Canada (“MCC”) and Moto Canada commissioned MNP LLP (“MNP”) to undertake a study of the economic contributions that the recreational use of on-road motorcycles and OHVs make to the Canadian economy both provincially and nationally.

Economic Impacts of On-road Motorcycle and Off-highway Vehicle Recreation in Canada

Expenditures associated with the recreational use of on-road motorcycles and OHVs generate economic impacts through direct expenditures on goods and services, the generation of employment, and the generation of tax revenues for local, provincial, and federal governments. These impacts arise from:

- **The sale of vehicles, parts, and accessories through dealerships.** This includes expenditures on the purchase of new and used vehicles and parts and accessories from dealerships, as well as repair and maintenance services. It does not include the private sale of used vehicles.
- **User expenditures on miscellaneous items associated with the operating vehicles.** These include expenditures on insurance, licensing, annual membership passes for clubs, and events and training courses.
- **User expenditures related to tourism.** This includes expenditures on fuel, accommodation, travel expenses, food and meals, and retail items when using the vehicles for recreation purposes.
- **Activities of tour operating businesses and riding schools.** These are the operations of businesses that provide guided tours, rentals and riding schools.

Table A shows the total estimated economic impacts of the recreational use of on-road motorcycles and OHVs in Canada, by type of economic impact. In 2022 the recreational use of these vehicles generated:

- \$8.3 billion in direct economic output and \$17.3 billion in total economic output.
- \$3.9 billion in direct GDP and \$9.0 billion in total GDP.
- 51,968 FTEs in direct employment and 88,375 FTEs in total employment.
- \$1.9 billion in direct revenue of all three levels of government and \$3.2 billion in total government revenue.

Table A: Total Estimated Economic Impacts of the Recreational Use of On-road Motorcycles and OHVs in Canada, by Category of Economy Impact (2022)

Category	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
<i>Sale of Vehicles, Parts and Accessories through Dealerships</i>						
Direct	\$556.8	\$364.1	4,118	\$29.5	\$26.2	\$5.8
Indirect and Induced	\$572.1	\$325.9	2,377	\$35.5	\$44.4	\$14.0
Total	\$1,128.9	\$690.0	6,495	\$65.0	\$70.6	\$19.8
<i>Tourism Spending</i>						
Direct	\$3,573.1	\$1,652.8	23,180	\$597.1	\$662.8	\$87.5
Indirect and Induced	\$3,738.0	\$1,973.4	13,700	\$193.7	\$227.5	\$75.3
Total	\$7,311.1	\$3,626.2	36,880	\$790.8	\$890.3	\$162.8
<i>Spending on Licensing, Registration and Miscellaneous Items</i>						
Direct	\$3,995.5	\$1,830.8	22,400	\$146.2	\$207.2	\$119.9
Indirect and Induced	\$4,488.9	\$2,653.3	19,550	\$266.9	\$310.2	\$85.5
Total	\$8,484.4	\$4,484.1	41,950	\$413.1	\$517.4	\$205.4
<i>Tour Businesses and Riding Schools</i>						
Direct	\$176.0	\$90.0	2,270	\$8.5	\$8.0	\$1.0
Indirect and Induced	\$183.8	\$105.4	780	\$11.2	\$13.2	\$3.8
Total	\$359.8	\$195.4	3,050	\$19.7	\$21.2	\$4.8
Total						
Direct	\$8,301.4	\$3,937.7	51,968	\$781.3	\$904.2	\$214.2
Indirect and Induced	\$8,982.8	\$5,058.0	36,407	\$507.3	\$595.3	\$178.6
Total	\$17,284.2	\$8,995.7	88,375	\$1,288.6	\$1,499.5	\$392.8

Provincial Distribution of Economic Impacts

Table B shows the estimated total economic impacts of spending in each of the 10 provinces.

Table B: Estimated Provincial Economic Impacts in Canada (2022)

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$2,513.3	\$1,332.4	12,510	\$443.1
Alberta	\$2,884.1	\$1,494.2	13,860	\$394.7
Saskatchewan	\$866.2	\$462.8	4,991	\$162.8
Manitoba	\$791.0	\$419.4	4,304	\$170.9
Ontario	\$4,083.9	\$2,065.6	18,870	\$665.4
Quebec	\$4,241.7	\$2,208.1	23,270	\$802.9
New Brunswick	\$679.7	\$351.9	3,852	\$174.2
Nova Scotia	\$658.6	\$339.6	3,510	\$172.0
Prince Edward Island	\$83.4	\$44.1	556	\$55.3
Newfoundland	\$482.3	\$277.6	2,652	\$139.6
Total	\$17,284.2	\$8,995.7	88,375	\$3,180.9

Economic Impacts by Vehicle Type

Table C shows the estimated total impacts by vehicle type.

Table C: Estimated Total Economic Impacts by Vehicle Type (2022)

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
<i>On-road Motorcycles</i>				
Sale of Vehicles, Parts, and Accessories through Dealerships	\$411.4	\$251.2	2,344	\$56.1
Tourism Spending	\$3,106.2	\$1,540.8	16,630	\$609.5
Spending on Miscellaneous Items Associated with Operating Vehicles	\$3,458.8	\$1,824.7	16,310	\$459.6
Total	\$6,976.4	\$3,616.7	35,284	\$1,125.2
<i>Off-road Motorcycles</i>				
Sale of Vehicles, Parts, and Accessories through Dealerships	\$86.6	\$53.4	503	\$11.7
Tourism Spending	\$964.4	\$480.2	4,700	\$473.4
Spending on Miscellaneous Items Associated with Operating Vehicles	\$1,067.7	\$563.2	5,370	\$139.6
Total	\$2,118.7	\$1,096.8	10,573	\$624.7
<i>ATVs and Side-by-Sides</i>				
Sale of Vehicles, Parts, and Accessories through Dealerships	\$630.9	\$385.4	3,648	\$87.6
Tourism Spending	\$3,240.5	\$1,605.2	15,550	\$761.0
Spending on Miscellaneous Items Associated with Operating Vehicles	\$3,957.9	\$2,096.2	\$0,270	\$536.8
Tour Operators and Riding Schools by Province	\$359.8	\$195.4	3,050	\$45.7
Total	\$8,189.1	\$4,282.2	42,518	\$1,431.1
Total Economic Impacts	\$17,1284.2	\$8,995.7	88,375	\$3,180.9

1. Introduction

Background and Purpose

On-road motorcycles are vehicles designed to be driven on public roads and highways. Off-highway vehicles (OHVs) encompass a variety of vehicles such as off-road motorcycles (including dirt bikes and adventure motorcycles), all-terrain vehicles (ATVs), side-by-sides, and utility terrain vehicles (UTVs). These vehicles are purpose-built to navigate unpaved or rugged terrains, off-road trails, and parks, as well as wilderness and public lands.

On-road motorcycles and OHVs are used for both commercial and recreational purposes. These vehicles generate economic activity through their sale, use, repair and maintenance. Recreational use contributes to tourism and OHV trails draw users to rural areas.

The Canadian Quad Council (“CQC”), the Motorcyclists Confederation of Canada (“MCC”) and Moto Canada commissioned MNP LLP (“MNP”) to undertake a study of the economic contributions that the recreational use of on-road motorcycles and OHVs make to the Canadian economy both provincially and nationally.

About CQC, MCC, and Moto Canada

- **The Canadian Quad Council (“CQC”)** is a national coordinating body and service delivery organization that enhances the capabilities of member federations within Canada and represents Canadian all-terrain rider interests nationally and around the world.
- **The Motorcyclists Confederation of Canada (“MCC”)** is a national not-for-profit advocacy organization representing on-road motorcycling interests in Canada with the purpose of advancing public policy and traffic safety to enhancing the riding experience.
- **Moto Canada¹** Moto Canada was established in September 2023 from the merger of the Motorcycle and Moped Industry Council (MMIC), the Canadian Off Highway Vehicle Distributors Council (Moto Canada) and Power Sport Services (PSS). Moto Canada provides a strong and unified voice to governments of all levels regarding rules and regulations for powersport vehicles, representing the best brands in the world, and provides riders with information on safety, routes, licenses, equipment and other pertinent information.

¹ References in this study to Moto Canada which precede September 2023 refer back to the organizations of COHV, MMIC and/or PSS as appropriate

Scope

The scope of the study was limited to the recreational use of on-road motorcycles and OHVs in the ten provinces and encompassed:

- Developing a demographic profile of users.
- Estimating the economic impacts arising from the purchase and recreational use of on-road motorcycles and OHVs in each province and nationally.

Data were not available to allow an assessment of the recreational use of on-road motorcycles and OHVs in the territories.

Industrial use of the vehicles was not included.

Approach

In preparing this report, MNP carried out the following activities:

- Gathered data from the Moto Canada on sales of vehicles and their use.
- Gathered data from publicly available sources on tourism spending, specific to each province.
- Conducted a survey targeting users of on-road motorcycles and OHVs, and owners or managers of businesses involved in the supply of powersport vehicles or equipment, and owners or managers of businesses providing rentals, tours and riding schools.
- Conducted analysis of the survey to develop a profile of users.
- Developed an economic impact model based multipliers published by Statistics Canada to estimate the economic impacts associated with on-road motorcycles and OHVs.
- Developed a report of the findings of the research and analysis.

For a detailed description of MNP's methodology and assumptions, please see Appendix A.

Structure of the Report

The remaining sections of this report are organized as follows:

- Section 2 provides an overview of on-road motorcycle and OHV recreation activities in Canada.
- Section 3 provides a description of the economic impact methodology and provides aggregate results of the estimated economic impacts.
- Section 4 summarizes the findings of the study.
- The appendices include a summary of the methodology used to estimate the economic impacts along with relevant assumptions.

Report Limitations

This report is provided for information purposes and is intended for general guidance only. It should not be regarded as comprehensive or a substitute for personalized business or investment advice. We have relied upon the completeness, accuracy, and fair presentation of all information and data obtained from Moto Canada, survey respondents and public sources believed to be reliable.

Additionally, the findings and opinions expressed in the presentation constitute judgments as of the date of the presentation and are subject to change without notice. MNP is under no obligation to advise of any change brought to its attention which would alter those findings or opinions.

Data Sources

Data used for the study were obtained from a combination of primary, secondary and administrative sources. Primary data sources were:

- An online survey of on-road motorcycle and OHV users.
- An online survey of businesses selling on-road motorcycles and OHVs, tour operators and riding schools.

The information gathered through primary sources was supplemented with data from Statistics Canada on business counts and employment by industry, as well as information from audited financial statements provided by the Moto Canada.

2. Overview of On-road Motorcycles and Off-highway Vehicles in Canada

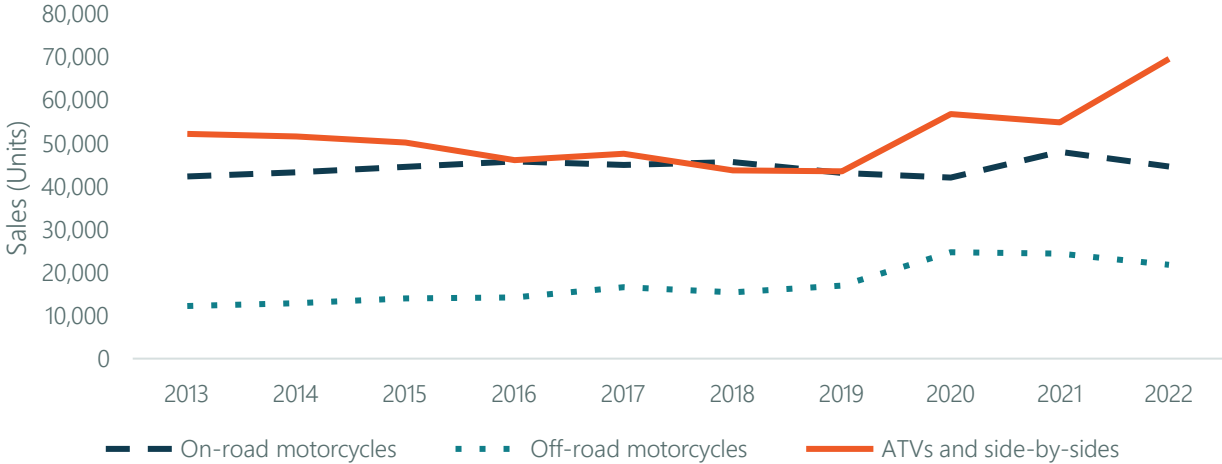
On-road motorcycles and OHV recreation activities are popular activities across Canada. On-road motorcycles are commonly used for transportation, leisure rides, touring, and competitive racing. With a variety of vehicles available, including standard motorcycles, sport, cruiser and touring motorcycles, riders can choose a model that suits their preferences and riding style. The country's well-maintained road network and scenic routes provide ample opportunities for riders to explore and enjoy. For off-highway vehicle enthusiasts, there are abundant opportunities for riding on rugged terrains. OHVs come in various types, including off-road motorcycles (such as motocross, dirt and adventure motorcycles), all-terrain vehicles (ATVs), and side-by-sides.

On-road motorcycling in Canada typically takes place from spring to fall. In the southern regions, users begin in April or May and continue until September or October, while in northern areas, the season is shorter, usually from June to September. OHV riding follows similar seasonal patterns, but due to their all-terrain capabilities, it is not uncommon to see off-highway riders active during winter months as well.

In addition to being used for recreation, OHVs are used in industries such as agriculture, forestry, mining, search and rescue, and energy to access to areas without roads. On-road motorcycles are used for commuting and by law enforcement, couriers and delivery services.

As shown in *Figure 1* annual sales of on-road motorcycles were relatively stable at between 42,000 and 45,000 units between 2013 and 2019. In 2021 sales increased to 48,000 before returning to 2019 levels in 2022. Prior to 2019 the sale of ATVs and side-by-sides were trending down, while off-road motorcycle sales were increasing. In 2020, the sale of both off-road motorcycles and ATVs and side-by-sides increased and has remained above 2019 levels through 2022.

Figure 1: Retail Sales of On-Road Motorcycles and OHVs (Number of Units Sold) – 2013 to 2022



Source: Moto Canada

In 2022 there were approximately 852,300 on-road motorcycles and 1.35 million OHVs in use in Canada (*Table 1*). This includes vehicles used for both recreational and commercial purposes.

Table 1: Number of Vehicles Owned (2022)

	On-road Motorcycles	Off-road Motorcycles	ATVs and Side-by-Sides	Total
Number of Vehicles	852,300	283,400	1,071,800	2,207,500

Sales and Service

On-road motorcycles, OHVs and accessories such as helmets, clothing, safety gear and trailers are typically sold through powersport vehicle dealers. In addition to on-road motorcycles, OHVs and accessories, powersport vehicle dealers often sell snowmobiles, and personal watercraft. In 2022 there were more than 1,500 powersport dealers in Canada.²

Helmets, safety gear and clothing are also sold by general outdoor retailers.

Repair and maintenance services for on-road motorcycles and OHVs is provided by powersport dealers and specialty repair shops.

Tourism and Use

Recreational use of on-road motorcycles and OHVs is often associated with tourism. Riders will take day trips to visit regional attractions or trails in proximity to their residence and longer trips may be taken to other regions of the province or country. This use contributes to expenditures on food and beverage service, accommodation, retail and fuel in the regions where the vehicles are used. In the case of OHVs much of this expenditure is in rural areas where the majority of riding opportunities exist.

Rental and guiding operators also offer OHV rentals and tours to visitors in popular recreation destinations.

Profile of On-road Motorcycle and OHV Users in Canada

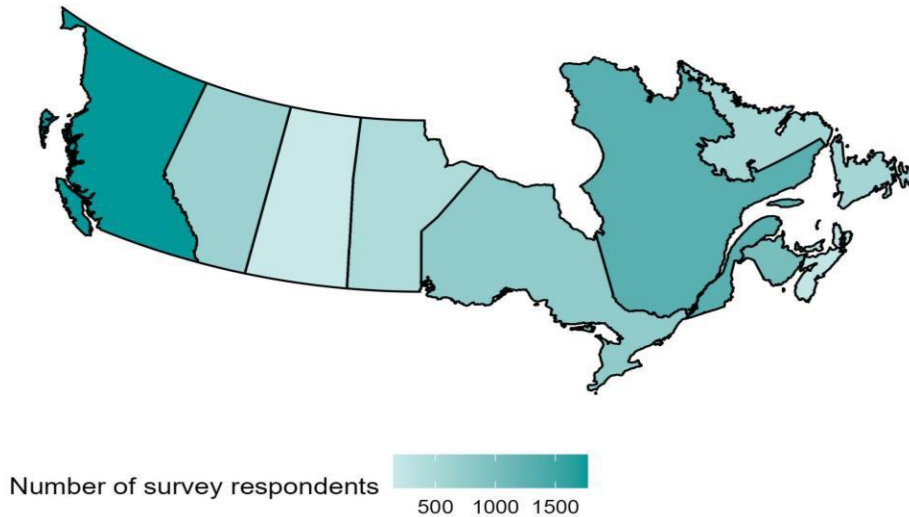
Information on the demographics and riding habits of on-road motorcycles and OHVs users was gathered through an online survey (the "User Survey"). The survey was conducted from February 17, 2023 to April 18, 2023. The survey generated responses from 7,063 users.

² Statistics Canada. Table 33-10-0661-01 Canadian Business Counts, with employees, December 2022

About the Survey Respondents

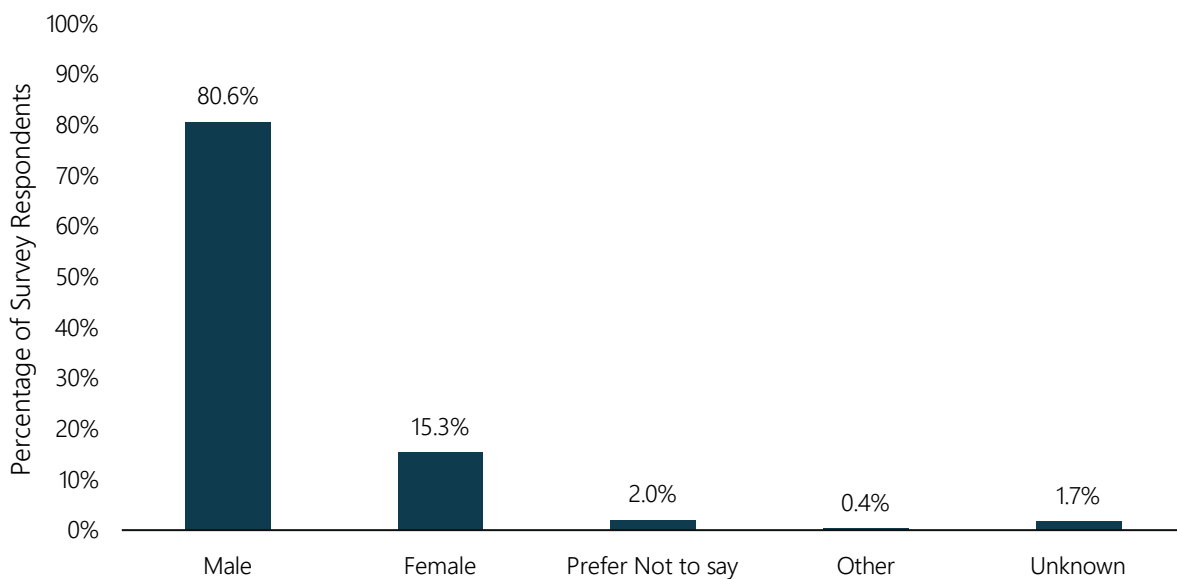
Figure 2 shows the distribution of survey respondents by province. The majority of respondents came from British Columbia (25.1 percent), followed by Quebec (18.3 percent), New Brunswick (14.4 percent), Ontario (10.6 percent), Alberta (8.7 percent), Newfoundland and Labrador (7.4 percent), and Manitoba (6.1 percent). Prince Edward Island, Nova Scotia, and Saskatchewan each accounted for less than five percent of survey respondents.

Figure 2: Distribution of Survey Respondents Across Canada (n=7,063)



As shown in *Figure 3* approximately 80 percent of survey respondents were men.

Figure 3: Gender Distribution of Survey Respondents (n=7,063)



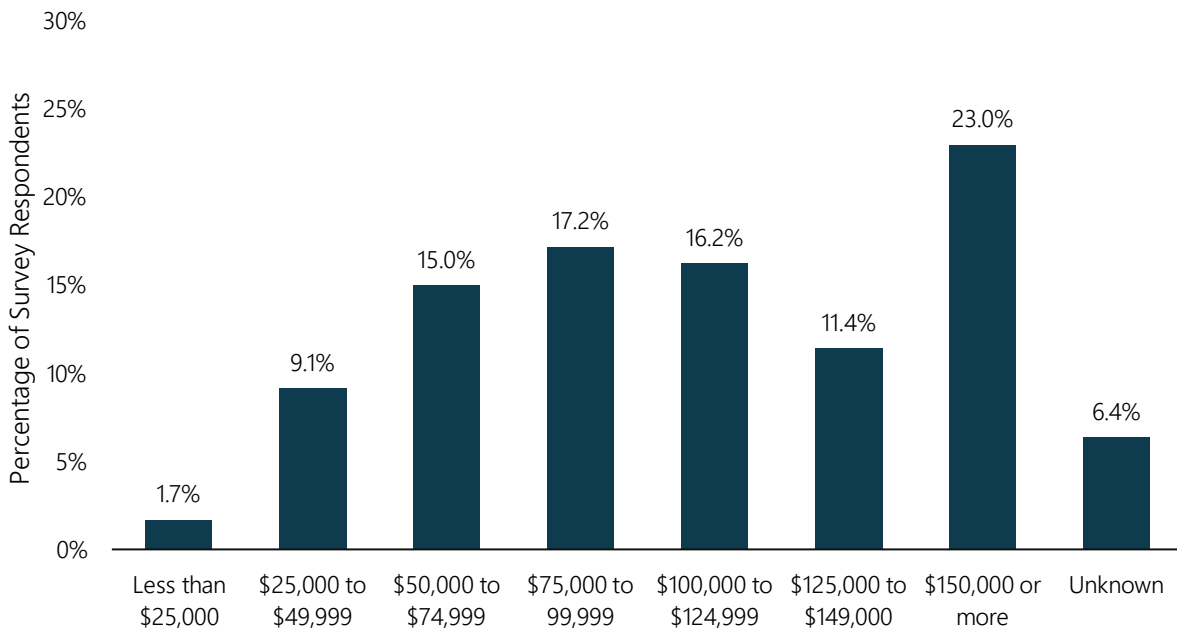
How the survey respondents identify.

- 7.4 percent identified themselves as belonging to a visible minority
- 6.9 percent identified as indigenous
- 16.5 percent identified as "other."

6.1 percent of survey respondents reported being veterans

Figure 4 shows the income distribution of survey respondents. Users of on-road motorcycles and OHVs tend to have relatively high-income levels. Approximately 68 percent of survey respondents reported having an annual household income of \$75,000 or more and approximately 23 percent reported annual household income over \$150,000 or more. In 2021, the median household income in Canada was \$78,200.³

Figure 4: Income Distribution of Survey Respondents (n=7,063)



³ Statistics Canada. Table 11-10-0190-01 Market income, government transfers, total income, income tax and after-tax income by economic family type. 2021 median household income is pre-tax and incomes market income and government transfers.

Figure 5 shows the age distribution of survey respondents. Approximately 64 percent of survey respondents were over 45 years of age.

Figure 5: Age Distribution of Survey Respondents (n=7,063)

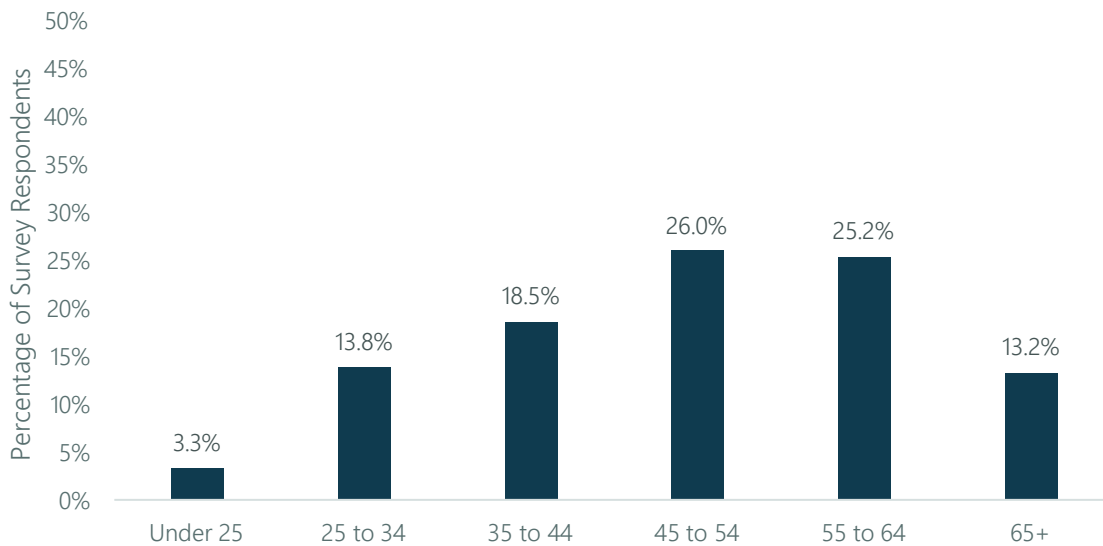
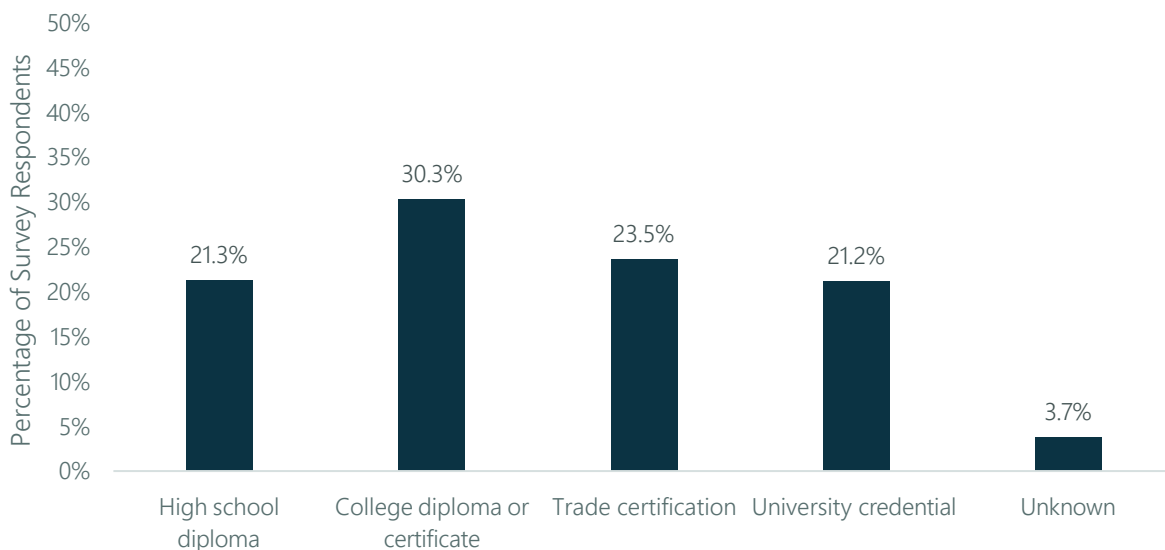


Figure 6 shows the educational attainment of survey respondents. College diploma or certificate was the most commonly reported credential (40.3 percent), followed by trade certification (23.5 percent), high school diploma (21.3 percent), and university credential (21.2 percent).

Figure 6: Educational Attainment (n=7,063)

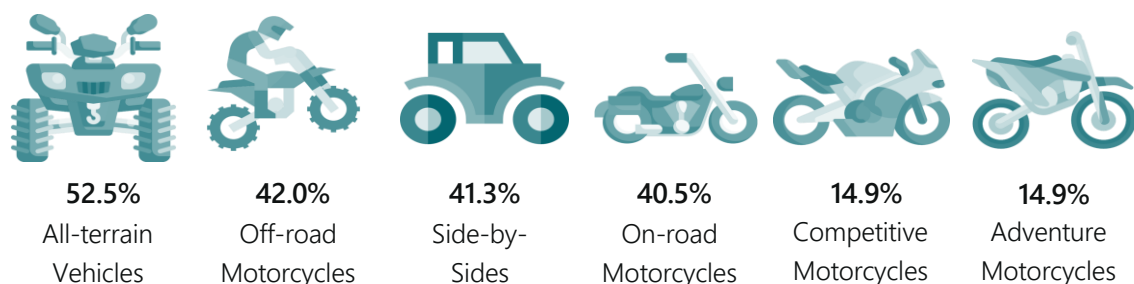


Types of Vehicles – Definitions

- **On-road motorcycles:** known as a street motorcycle or road bike, specifically designed and intended for use on roads and highways. These vehicles are commonly used for daily commuting, recreational riding, and touring. There are various subcategories within on-road motorcycles such as sport, cruiser and touring motorcycles.
- **Competitive motorcycles:** these vehicles are optimized for competitive racing in various motorsport disciplines, in both on-road and off-road applications. These motorcycles are built with performance, speed, agility, and handling as top priorities. Examples of competitive motorcycles include superbikes, motocross, and enduro motorcycles.
- **Adventure motorcycles:** these motorcycles incorporate cutting-edge technologies, innovative features, and advanced engineering such as high-performance engines, electronic systems, lightweight materials, and aerodynamics and bodywork. These vehicles are present in both on-road and off-road applications.
- **Off-road motorcycles:** also known as dirt bikes or trail bikes, these motorcycles are designed and built for riding on unpaved surfaces and rugged terrains.
- **All-terrain vehicles (ATVs):** motorized vehicles designed for off-road use and are capable of traversing various types of terrain. They are commonly referred to as quads, four-wheelers, or off-road vehicles.
- **Side-by-Sides:** these vehicles are also known as utility task vehicles (UTVs) or recreational off-highway vehicles (ROVs), and are off-road vehicles designed for multiple passengers. They are similar to ATVs but feature side-by-side seating configuration, seating two or more occupants.

Figure 7 shows the number of survey respondents that stated owning and operating each type of vehicle. Among the survey respondents, ATVs was the most often reported vehicle to own and operate, with 52.5 percent, followed by off-road motorcycles (42 percent), and closely followed by side-by-sides (41.3 percent), and on-road motorcycles (40.5 percent). Competitive motorcycles and adventure motorcycles had the lowest ownership among the respondents, each reported at 14.9 percent.

Figure 7: Number of Survey Respondents Reporting Ownership, by Type of Vehicle (n=7,063)



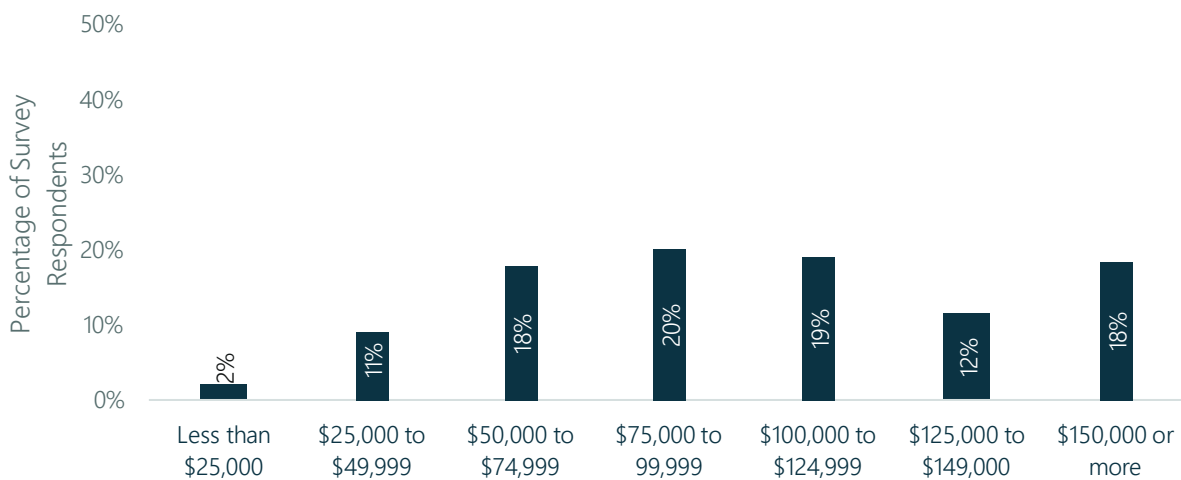
Ownership patterns

- Approximately 37 percent of respondents reported owning only ATVs and side-by-sides.
- Approximately 33 percent of respondents reported owning both OHVs and motorcycles.
- Approximately 30 percent of respondents reported only owning motorcycles.

On-road Motorcycles

Figure 8 shows the income distribution of survey respondents that reported use of on-road motorcycles. Approximately 70 percent of these users reported an annual household income of over \$75,000.

Figure 8: Income Distribution of On-road Motorcycles Users (n=823)



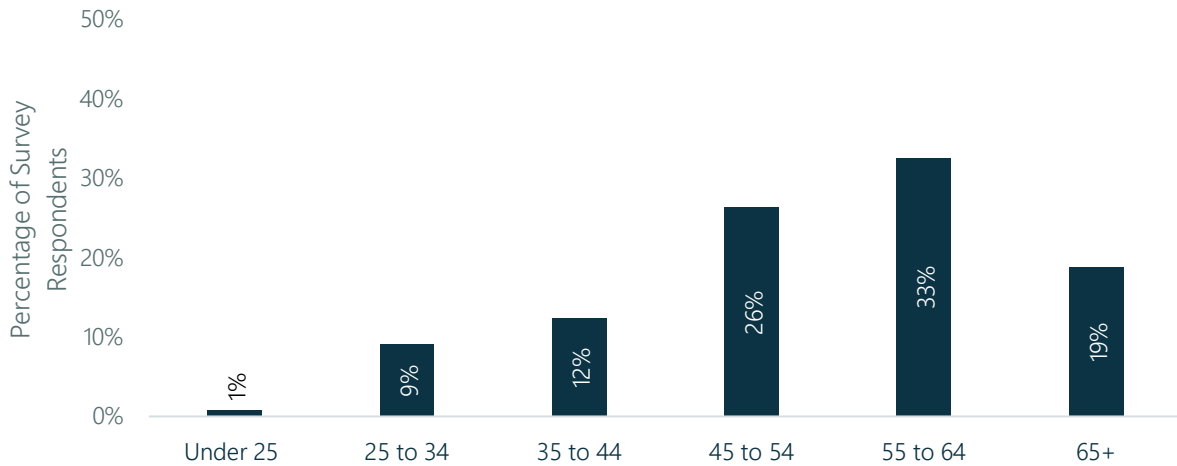
Source: User Survey.

More about motorcycles: 16.3 percent of survey respondents reported owning more than one kind of motorcycle, 5.1 percent reported exclusively owning an on-road motorcycle and 3.0 percent reported exclusively owning an adventure motorcycle.

Most on-road motorcycle users also reported using other motorcycles or OHVs.

Figure 9 shows the age distribution of survey respondents that reported using on-road motorcycles. Almost 80 percent of users are 45 years of age or older.

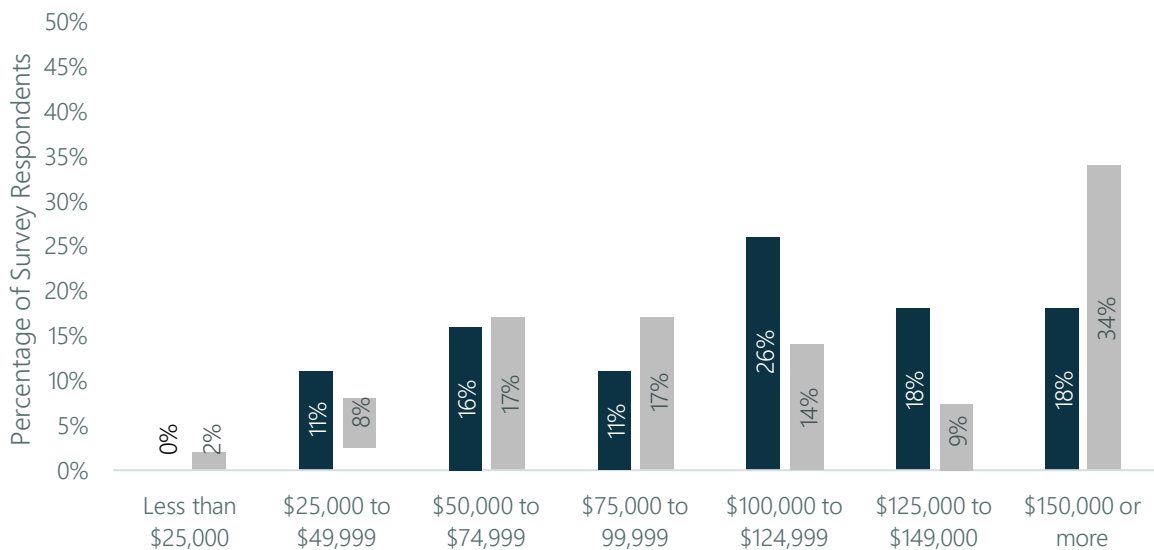
Figure 9: Age Distribution of On-road Motorcycle Users (n=876)



Source: User Survey.

Figure 10 shows the income distribution of survey respondents that only ride either competitive motorcycles or adventure motorcycles. Approximately 62 percent of respondents that only ride competitive motorcycles have reported an annual household income of \$100,000 or more. For adventure motorcycle only riders, approximately 57 percent of respondents reported an annual household income of \$100,000 or more.

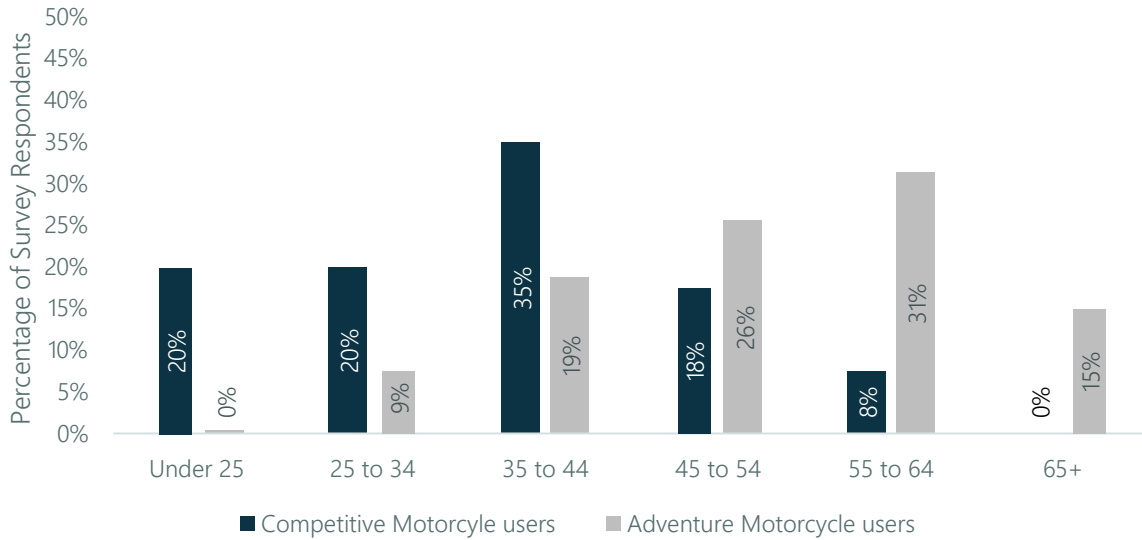
Figure 10: Income Distribution of Users of Only Competitive or Adventure Motorcycles



Source: User Survey. Notes: Sample size for competitive motorcycles is 38 respondents. Sample size for adventure motorcycles is 196 respondents.

Figure 11 shows the age distribution of survey respondents that only ride competitive or adventure motorcycles. Respondents that only ride competitive motorcycles were relatively younger than those that ride adventure motorcycles or on-road motorcycles.

Figure 11: Age Distribution of Only Competitive or Adventure Motorcycles

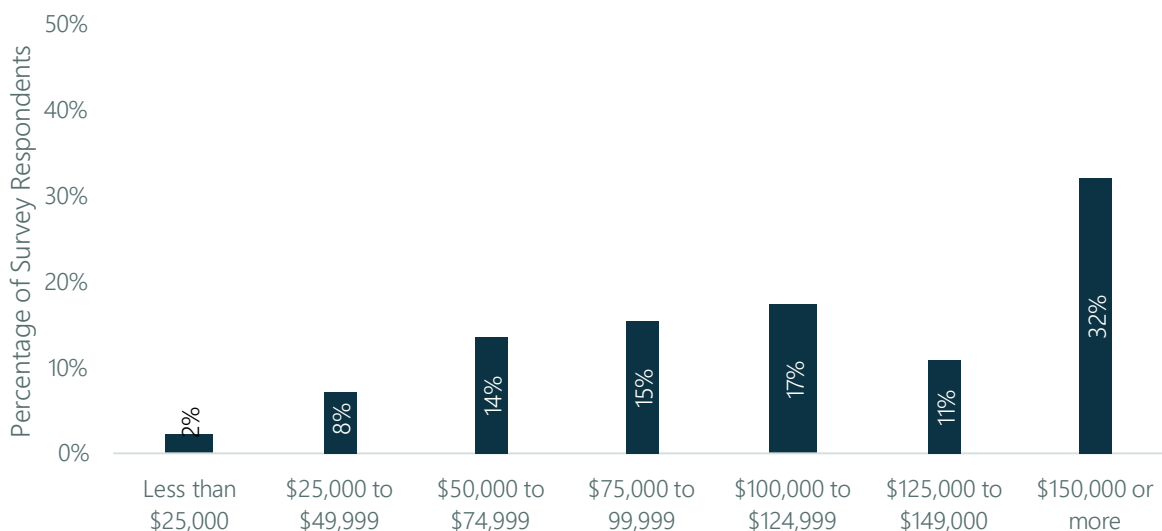


Source: User Survey. Notes: Sample size for competitive motorcycles is 40 respondents. Sample size for adventure motorcycles is 207 respondents.

Off-road Motorcycles

Figure 12 shows the income distribution of survey respondents that ride off-road motorcycles. Approximately 60 percent of respondents reported having an annual household income of \$100,000 or more.

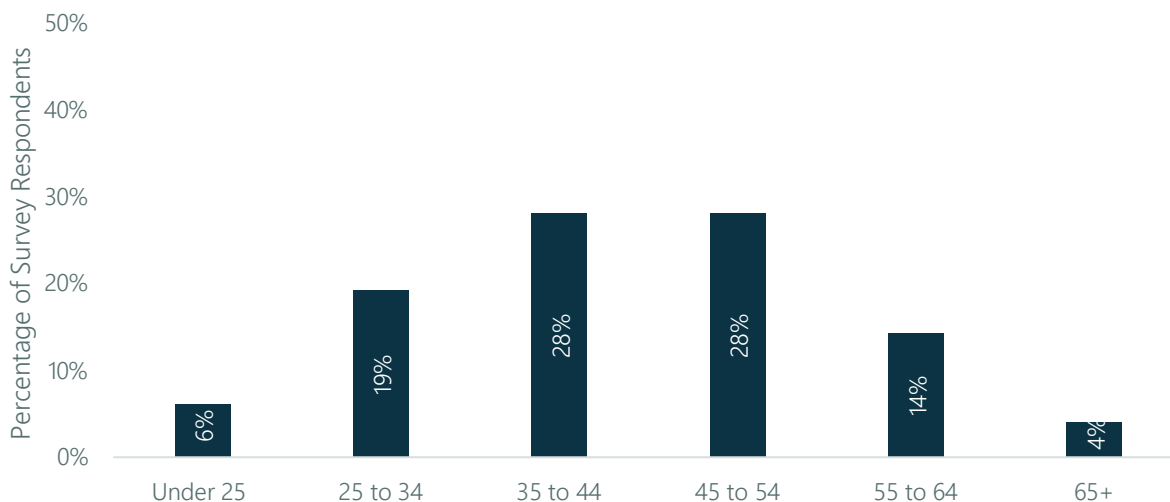
Figure 12: Income Distribution Off-road Motorcycles Users (n=750)



Source: User Survey

Figure 13 shows the age distribution of survey respondents that have reported using off-road motorcycles. Approximately 80 percent of users were under 55.

Figure 13: Age Distribution of Off-road Motorcycles Users (n=782)

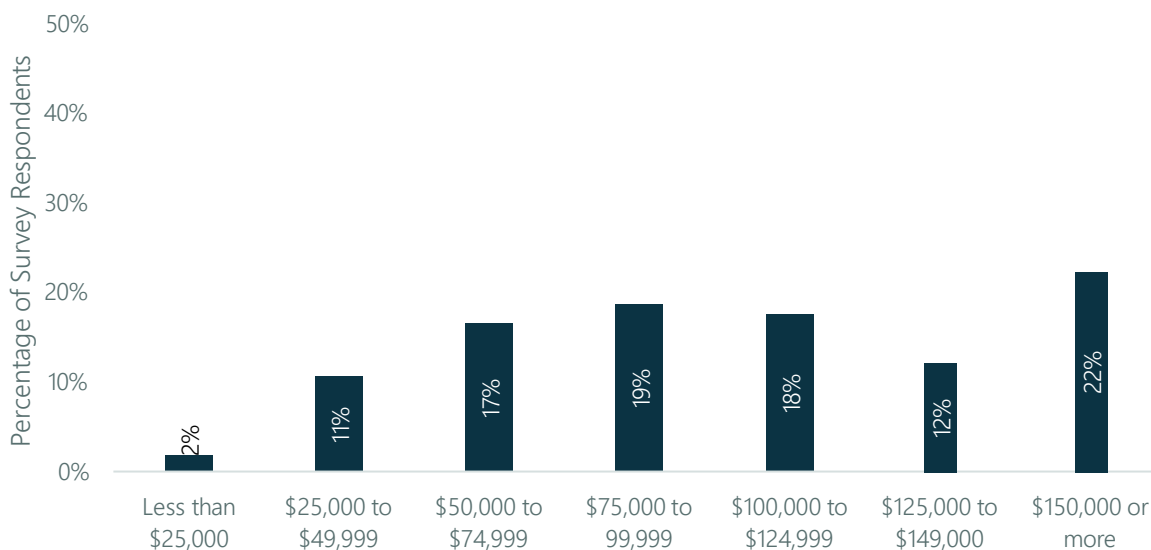


Source: User Survey

ATVs and Side-by-Sides

Figure 13 shows the income distribution of survey respondents that reported using ATVs and side-by-sides. Approximately 70 percent of respondents have an annual household income of \$75,000 or more.

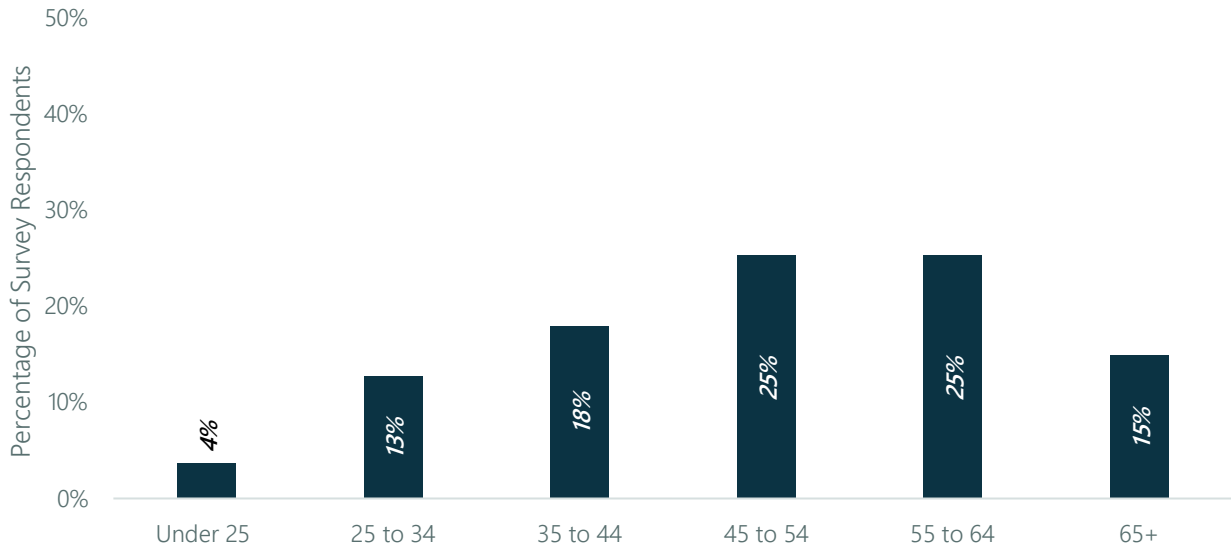
Figure 14: Income Distribution of Users of ATVs and Side-by-Sides (N=4,606)



Source: User Survey.

Figure 15 shows the age distribution of survey respondents that use ATVs and side-by-sides. Approximately 65 percent of users were 45 years of age or older.

Figure 15: Age Distribution of Users of ATVs and Side-by-Sides (n=4,874)



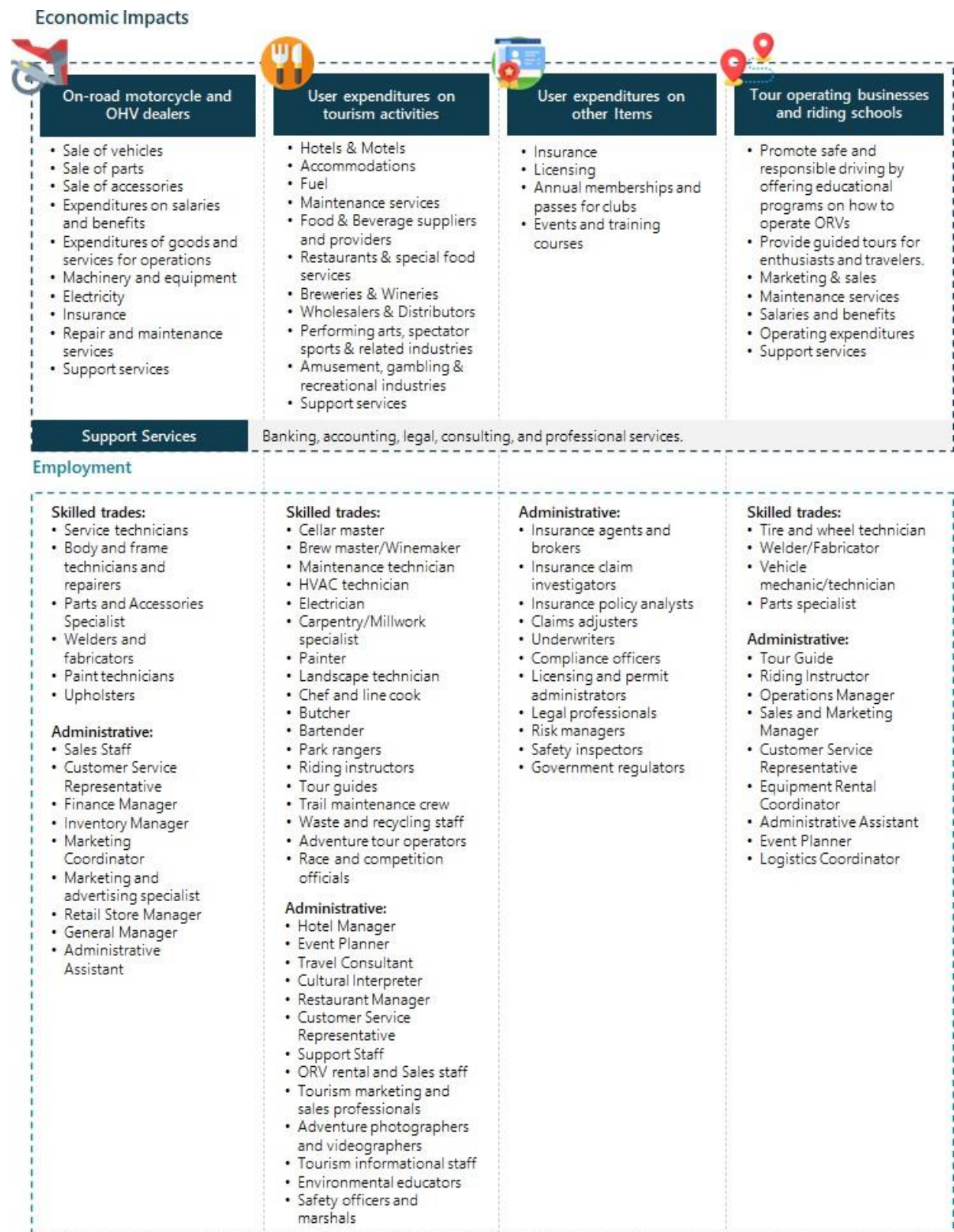
Source: User Survey.

Value Chain

Figure 16 illustrates the linkages between stakeholders' activities and operations, and other industry sectors. It identifies inputs provided by suppliers, partners, and external service providers, which are used by the stakeholders in their activities and operations. The businesses and organizations involved in the OHV industry support employment in a wide range of occupations, including trades and administrative roles.

The on-road motorcycle and OHV industry is supported by external services such as transportation and professional services.

Figure 16: Value Chain of On-road Motorcycle and OHVs in Canada



3. Economic Impact Analysis

Economic Impact Methodology

In general, economic impacts are viewed as being restricted to quantitative, well-established measures of economic activity. The most commonly used of these measures are output, GDP, employment, and government revenue:

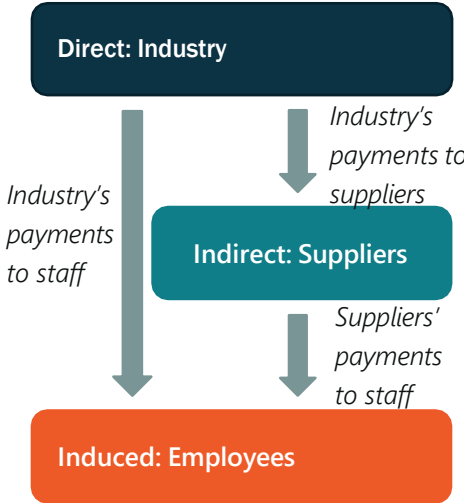
- **Output** is the total gross value of goods and services produced by a given company or industry measured by the price paid to the producer. This is the broadest measure of economic activity.
- **Gross Domestic Product (GDP)**, or value added, refers to the additional value of a good or service over the cost of inputs used to produce it from the previous stage of production. Thus, GDP is equal to the unduplicated value of the goods and services produced.
- **Employment** is the number of jobs created. Employment is measured in terms of full-time equivalents (FTEs). One FTE is equivalent to one person working full-time for one year or one person-year of employment.
- **Government Revenues** are the total amount of revenues generated for different levels of government. Revenues arise from personal income taxes, indirect taxes less subsidies, corporate income taxes, taxes on products and royalties. Please note that because tax revenues can frequently change due to modifications in tax policy, the government revenues in this report are estimates only and subject to change. They should be viewed as approximate in nature.

Output and GDP, An Example

An OHV enthusiast stops for lunch at a restaurant and purchases a hamburger for \$15. To make the hamburger, the restaurant had to purchase the ingredients for the hamburger for \$10. The output associated with the hamburger is \$15 and the GDP is \$5.

Economic impacts may be estimated at the direct, indirect, and induced levels:

- **Direct impacts** are due to changes that occur in "front-end" businesses that would initially receive expenditures and operating revenue as a direct consequence of the operations and activities of an industry, organization, or project.
- **Indirect impacts** arise from changes in activity for suppliers of the "front-end" businesses.
- **Induced impacts** arise from shifts in spending on goods and services as a consequence of changes to the payroll of the directly and indirectly affected businesses.



To estimate the economic impacts generated by on-road motorcycles and OHVs, MNP employed an input-output methodology using national, provincial, and territorial economic multipliers published by Statistics Canada. Input-output modeling is a widely-used and widely-accepted approach, making it recognizable by many different stakeholders and audiences. The structure of the approach also facilitates easy comparisons between reported results for different industries and organizations.

A detailed description of our methodology and assumptions are provided in *Appendix A*:

Categories of Economic Impacts Created

The purchase and use of on-road motorcycles and OHVs generate economic activity in following ways:

- **The sale of vehicles, parts, and accessories through dealerships.** This includes expenditures on the purchase of new and used vehicles and parts and accessories from dealerships, as well as repair and maintenance services. It does not include the private sale of used vehicles.
- **User expenditures on miscellaneous items associated with the operating vehicles.** These include expenditures on insurance, licensing, annual membership passes for clubs, and events and training courses.
- **User expenditures related to tourism.** This includes expenditures on fuel, accommodation, travel expenses, food and meals, and retail items when using the vehicles for recreation purposes.
- **Activities of tour operating businesses and riding schools.** These are the operations of businesses that provide guided tours, rentals and riding schools.

Economic Impacts from the Sale of Vehicles, Parts, and Accessories

The sale of on-road motorcycles and OHVs generates economic impacts through expenditures on goods and services, the employment of staff, and the generation of tax revenues for different levels of government. To estimate the economic impacts of the sale of these vehicles we used information on retail sales provided by Moto Canada and historical data on the relationship between vehicle sales and the revenue from accessories from Moto Canada annual reports.

In 2022, the total sales of on-road motorcycles and OHVs, along with parts and accessories, in Canada, was estimated to be approximately \$2.5 billion (**Table 2**). Vehicle sales accounted for approximately \$2 billion, while parts and accessories contributed around \$458 million.⁴ Ontario and Quebec account for approximately 62 percent of on-road motorcycle sales, 48 percent of off-road motorcycle sales, and 53 percent of sales of ATVs and side-by-sides. British Columbia is the next largest market, followed closely by Alberta. Each of the other provinces account for approximately two percent of on-road motorcycle sales and between one (Prince Edward Island) and six (New Brunswick) percent of OHV sales.

Table 2: Retail Sales of Vehicles, Parts, and Accessories, by Province and Vehicle Category (2022)

	On-road Motorcycle (\$ millions)	Off-road Motorcycle (\$ millions)	ATVs and Side-by-Sides (\$ millions)	Total (\$ millions)
British Columbia	\$142.0	\$37.9	\$124.2	\$304.1
Alberta	\$115.8	\$34.5	\$133.2	\$283.5
Saskatchewan	\$14.7	\$9.1	\$66.8	\$90.6
Manitoba	\$21.9	\$5.2	\$65.1	\$92.2
Ontario	\$220.5	\$47.8	\$396.9	\$665.2
Quebec	\$329.7	\$43.6	\$330.8	\$704.1
New Brunswick	\$19.5	\$4.5	\$96.9	\$120.9
Nova Scotia	\$16.7	\$5.1	\$69.9	\$91.7
Prince Edward Island	\$2.5	\$0.7	\$9.1	\$12.3
Newfoundland	\$8.5	\$2.6	\$81.8	\$92.9
Total	\$891.8	\$191.0	\$1,374.7	\$2,457.5

Source: Canadian Quad Council, Motorcyclists Confederation of Canada and Moto Canada.

⁴ Parts and accessories sold at dealers were estimated to be approximately 25% of the value of vehicle sales. This was based on the sales of parts and accessories as a percentage of vehicle sales for on-road motorcycle dealers provided by Moto Canada and an adjustment to account for the parts and accessories sold by after-market dealers and outdoor stores.

Total Economic Impacts Total Economic Impacts from the Sales of Vehicles, Parts and Accessories

Table 3 shows the total estimated economic impacts from the sale of vehicles, parts, and accessories by vehicle category. The total estimated economic impacts include:

- \$556.8 million in direct economic output and \$1.13 billion in total economic output.
- \$364.1 million in direct GDP and \$690 million in total GDP.
- 4,118 FTEs in direct employment and 6,495 FTEs in total employment.
- \$61.5 million in direct revenue of all three levels of government and \$155.4 million in total government revenue.

The total estimated economic impacts attributed to **on-road motorcycles** include:

- \$202.4 million in direct economic output and \$411.4 million in total economic output.
- \$132.4 million in direct GDP and \$251.2 million in total GDP.
- 1,474 FTEs in direct employment and 2,344 FTEs in total employment.
- \$22.9 million in direct revenue of all three levels of government and \$56.1 million in total government revenue.

The total estimated economic impacts attributed to **off-road motorcycles** include:

- \$43.8 million in direct economic output and \$86.6 million in total economic output.
- \$28.8 million in direct GDP and \$53.4 million in total GDP.
- 324 FTEs in direct employment and 503 FTEs in total employment.
- \$4.70 million in direct revenue of all three levels of government and \$11.7 million in total government revenue.

The total estimated economic impacts attributed to **ATVs and side-by-sides** include:

- \$310.6 million in direct economic output and \$630.9 million in total economic output.
- \$202.9 million in direct GDP and \$385.4 million in total GDP.
- 2,320 FTEs in direct employment and 3,648 FTEs in total employment.
- \$33.9 million in direct revenue of all three levels of government and \$87.6 million in total government revenue.

FTEs and Seasonality

FTEs are based on full-year, full-time employment. The majority of sales of on-road motorcycles and OHVs take place from Spring through Fall. Sales continue in the winter months at a lesser rate. Consequently, a person who works full-year full-time at a dealership and spends eight months working with on-road motorcycles and OHVs and four months working with other products would be counted as 0.67 FTEs of employment attributable to on-road motorcycles and OHVs and 0.33 FTEs of employment attributable to snowmobiles. This means that the number of jobs at dealers is higher than the number of FTEs reported in this study.

Table 3: Total Estimated Economic Impacts from the Sale of Vehicles, Parts, and Accessories by Vehicle Category (2022)

Category	Output (\$ millions) ⁵	GDP (\$ millions)	Employment (FTEs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
<i>On-road Motorcycles</i>						
Direct	\$202.4	\$132.4	1,474	\$10.3	\$10.2	\$2.4
Indirect and Induced	\$209.0	\$118.8	870	\$12.2	\$15.7	\$5.3
Total	\$411.4	\$251.2	2,344	\$22.5	\$25.9	\$7.7
<i>Off-road Motorcycles</i>						
Direct	\$43.8	\$28.8	324	\$2.3	\$2.0	\$0.4
Indirect and Induced	\$42.8	\$24.6	179	\$2.7	\$3.2	\$1.1
Total	\$86.6	\$53.4	503	\$5.0	\$5.2	\$1.5
<i>ATVs and Side-by-Sides</i>						
Direct	\$310.6	\$202.9	2,320	\$16.9	\$14.0	\$3.0
Indirect and Induced	\$320.3	\$182.5	1,328	\$20.6	\$25.5	\$7.6
Total	\$630.9	\$385.4	3,648	\$37.5	\$39.5	\$10.6
<i>Total</i>						
Direct	\$556.8	\$364.1	4,118	\$29.5	\$26.2	\$5.8
Indirect and Induced	\$572.1	\$325.9	2,377	\$35.5	\$44.4	\$14.0
Total	\$1,128.9	\$690.0	6,495	\$65.0	\$70.6	\$19.8

⁵ Direct output for retailers is measured based on the retail margin (i.e., sales revenue less cost of goods sold).

Economic Impacts by Province and Vehicle Category

Tables 4 through 6 summarize the total economic impacts generated by the sale of on-road motorcycles, off-road motorcycles, ATVs and side-by-sides, parts, and accessories in each province.

As shown in **Table 4**, approximately 33 percent of the total economic impacts for on-road motorcycles are attributable to purchases in Quebec, followed by Ontario (26 percent), British Columbia (19 percent), and Alberta (12 percent).

Table 4: On-road Motorcycles - Estimated Total Direct, Indirect and Induced Economic Impacts from the Sale of Vehicles, Parts, and Accessories (2022) by Province

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$77.3	\$47.0	430	\$10.5
Alberta	\$53.0	\$32.8	300	\$6.1
Saskatchewan	\$6.0	\$3.8	31	\$0.8
Manitoba	\$9.8	\$6.1	60	\$1.5
Ontario	\$107.7	\$64.4	630	\$14.7
Quebec	\$135.9	\$83.9	760	\$19.5
New Brunswick	\$7.9	\$4.8	50	\$1.1
Nova Scotia	\$9.1	\$5.6	60	\$1.3
Prince Edward Island	\$1.0	\$0.6	6	\$0.1
Newfoundland	\$3.7	\$2.2	17	\$0.5
Total	\$411.4	\$251.2	2,344	\$56.1

Off-Road Motorcycles

As shown in **Table 5** approximately 27 percent of the total economic impacts for off-road motorcycles are attributable to purchases in Ontario, followed by Quebec (21 percent), British Columbia (20 percent), and Alberta (18 percent).

Table 5: Off-road Motorcycles – Estimated Total Direct, Indirect and Induced Economic Impacts from the Sale of Vehicles, Parts, and Accessories (2022) by Province

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$17.5	\$10.9	100	\$2.5
Alberta	\$15.8	\$9.8	90	\$1.9
Saskatchewan	\$3.7	\$2.4	20	\$0.4
Manitoba	\$2.3	\$1.5	14	\$0.4
Ontario	\$23.4	\$14.0	140	\$3.2
Quebec	\$18.0	\$11.1	100	\$2.5
New Brunswick	\$1.8	\$1.1	12	\$0.2
Nova Scotia	\$2.8	\$1.7	20	\$0.4
Prince Edward Island	\$0.2	\$0.2	2	\$0.04
Newfoundland	\$1.1	\$0.7	5	\$0.2
Total	\$86.6	\$53.4	503	\$11.74

As shown in **Table 6** approximately 31 percent of the total economic impacts for ATVs and side-by-sides are attributable to purchases in Ontario, followed by Quebec (22 percent), British Columbia (11 percent), and Alberta (9 percent).

Table 6: ATVs and Side-by-Sides – Estimated Total Direct, Indirect and Induced Economic Impacts from the Sale of Vehicles, Parts, and Accessories (2022) by Province

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$67.6	\$41.2	380	\$9.2
Alberta	\$61.0	\$37.8	330	\$8.0
Saskatchewan	\$27.1	\$17.3	150	\$3.7
Manitoba	\$28.9	\$17.9	180	\$4.2
Ontario	\$193.9	\$116.0	1,140	\$26.4
Quebec	\$136.3	\$84.3	780	\$19.7
New Brunswick	\$39.5	\$23.8	250	\$5.3
Nova Scotia	\$38.1	\$23.4	250	\$5.6
Prince Edward Island	\$3.7	\$2.2	18	\$0.7
Newfoundland	\$34.8	\$21.5	170	\$4.8
Total	\$630.9	\$385.4	3,648	\$87.6

Economic Impacts of Tourism Spending

On-road motorcycle and OHV tourism creates economic impacts through expenditures on goods and services such as fuel, accommodation, restaurants, and the purchase of retail goods while on trips. In assessing the economic impacts of tourism from on-road motorcycles, off-road motorcycles, and ATVs and side-by-sides, it is important to recognize that spending by local residents in a region will have a different impact than spending by visitors to a region. Expenditure by visitors creates incremental economic activity while expenditure by local residents would likely have occurred in the region regardless of whether it was spent on an on-road motorcycle or an OHV trip. Thus, expenditure by local residents is considered to be a re-allocation of expenditure rather than an incremental expenditure.

For the purposes of this study trips taken within 50 km of a user’s residence were classified as local and the associated spending was considered to be a re-allocation of expenditure. Trips taken further than 50 km from a user’s residence, multi-day trips within a province and all trips out-of-province were classified

as tourism and the associated spending was considered to be incremental expenditure.

To assess the tourism impacts, we estimated the number of single-day and multi-day trips taken using on-road motorcycles, off-road motorcycles, and ATVs and side-by-sides in 2022. These estimates were derived from the total number of vehicles owned in 2022 and the average number of trips per vehicle reported by respondents to the user survey. The estimates were reviewed with representatives from the CQC, MMC, and Moto Canada and adjustments were made based on the feedback obtained. These adjustments resulted in a reduction in the total number of trips.⁶

Table 7 shows estimates of the number of day and multi-day trips taken in 2022, categorized by vehicle type. On average, individuals took 3-to-4 day trips with an off-road motorcycle or an ATV and side-by-side, and 4-to-5 day trips with an on-road motorcycle. In 2022, we estimated that approximately 9.3 million day trips were taken, with 44 percent involving an ATV and side-by-side, 44 percent involving an on-road motorcycle, and 12 percent involving an off-road motorcycle. The total estimated number of day trips taken beyond 50 km of the user’s residence or outside the user’s province of residence was around 6.2 million (67 percent).

With respect to multi-day trips, on average there were 1-to-2 trips per vehicle in 2022 (Table 8). Based on this we estimated that approximately 2.8 million multi-day trips were taken, with 46 percent involving an ATV and side-by-side, 42 percent involving an on-road motorcycle, and 12 percent involving an off-road motorcycle.

Table 7: Estimates of the Number of Day and Multi-Day Trips Taken in 2022, by Vehicle Category

	On-road Motorcycle	Off-road Motorcycles	ATVs and Side-by-Sides	Total
Day Trips				
Average Number of Day Trips per Vehicle	4 to 5	3 to 4	3 to 4	4 to 5
Total Number of Day Trips	4,127,800	1,085,400	4,104,900	9,318,100
Number of Day Trips more than 50 km from the user’s residence or outside of the province of residence	2,852,800	692,900	2,660,300	6,206,000
Multi - Day Trips				
Average Number of Multi-Day Trips per Vehicle	1 to 2	1 to 2	1 to 2	1 to 2
Number of Multi-Day Trips	1,183,900	341,000	1,267,400	2,792,300

Source: User Survey.

⁶ The resulting estimates were compared with estimates from other sources and found to be consistent. The estimates should be viewed as providing an estimate of the order of magnitude of the impact of tourism due to on-road motorcycles and OHVs.

Table 8 shows the average estimated expenditures on a day trip in each province, by vehicle category (on-road motorcycle, off-road motorcycle, or ATVs and side-by-sides). Expenditures for on-road motorcycles were lower than for OHVs due in part to the cost of transporting OHVs to the trailhead. Expenditures by vehicle category were:

- **On-road motorcycles:** the average daily expenditure across provinces was approximately \$131. Users in Alberta had the highest expenditures (\$164) while users in Newfoundland and Labrador had the lowest (\$112).
- **Off-road motorcycles:** the average daily expenditure across provinces is approximately \$197. Users in Ontario and Alberta had the highest expenditures (~\$242) while users in Newfoundland and Labrador had the lowest (\$165).
- **ATVs and side-by-sides:** the average daily expenditure across provinces is approximately \$203. Users in Ontario had the highest expenditures (\$249) while users in Newfoundland and Labrador had the lowest (\$171).

Table 8: Average Expense Per Day Trip, by Province Destination and Vehicle Category (2022)

	On-road Motorcycle	Off-road Motorcycle	ATVs and Side-by-Sides
British Columbia	\$119	\$175	\$184
Alberta	\$164	\$241	\$247
Saskatchewan	\$149	\$225	\$231
Manitoba	\$122	\$190	\$196
Ontario	\$155	\$242	\$249
Quebec	\$118	\$176	\$181
New Brunswick	\$120	\$174	\$179
Nova Scotia	\$131	\$197	\$203
Prince Edward Island	\$123	\$182	\$188
Newfoundland and Labrador	\$112	\$165	\$171

Source: User Survey. Note: For a detailed breakdown of expenditure and provincial breakdowns, see Appendix B.

Table 9 shows the average estimated expenditures for a multi-day trip in each province, by vehicle category. Expenditures by vehicle category were:

- **On-road motorcycles:** the average multi-day trip expenditure across provinces is approximately \$1,196. Users in Saskatchewan had the highest expenditures (\$1,544) while users in New Brunswick had the lowest (\$931).
- **Off-road motorcycles:** the average multi-day trip expenditure across provinces is approximately \$1,262. Users in Alberta had the highest expenditures (\$1,620) while users in New Brunswick had the lowest (\$944).
- **ATVs and side-by-sides:** the average multi-day trip expenditure across provinces is approximately \$1,139. Users in Alberta had the highest expense (\$1,547) while users in New Brunswick had the lowest (\$905).

Table 9: Average Expense Per Multi-Day Trip, by Province Destination and Vehicle Category (2022)

	On-road Motorcycle	Off-road Motorcycle	ATVs and Side-by-Sides
British Columbia	\$1,301	\$1,383	\$1,300
Alberta	\$1,531	\$1,620	\$1,547
Saskatchewan	\$1,544	\$1,484	\$1,430
Manitoba	\$1,152	\$1,186	\$1,137
Ontario	\$1,142	\$1,124	\$1,086
Quebec	\$1,048	\$1,047	\$998
New Brunswick	\$931	\$944	\$905
Nova Scotia	\$1,093	\$1,107	\$1,064
Prince Edward Island	\$1,008	\$1,073	\$1,028
Newfoundland and Labrador	\$1,007	\$1,024	\$987

Source: User Survey. Note: For a detailed breakdown of expenditure by province, see Appendix B.

Table 10 summarizes the estimated total tourism spending from day trips and multi-day trips in 2022. The total spending on day trips was estimated to be approximately \$1.1 billion and the total spending on multi-day trips was estimated to be \$3.3 billion.

Table 10: Summary of Total Tourism Spending (2022)

	Method	On-road Motorcycle	Off-road Motorcycle	ATVs and Side-by-Sides	Total
Tourism Spending on Day Trips					
Number of Day Trips more than 50 km from the user's residence or outside of the province of residence	A	2,852,800	692,900	2,660,300	6,206,000
Average Spending Per Day Trip	B	\$132.8	\$198.9	\$203.7	\$170.6
Total Tourism Spending on Day Trips (\$ millions)	A x B	\$378.8	\$137.8	\$542.0	\$1,058.6
Tourism Spending on Multi-Day Trips					
Number of Multi Day Trips	A	1,183,900	341,000	1,267,400	2,792,300
Average Spending Per Multi-Day Trip	B	\$1,195.9	\$1,261.6	\$1,138.6	\$1,177.9
Total Tourism Spending on Multi-Day Trips (\$ millions)	A x B	\$1,415.8	\$430.2	\$1,443.1	\$3,289.1
Total Spending (\$ millions)					
Total Tourism Spending (\$ millions)		\$1,794.6	\$568.0	\$1,794.6	\$4,347.8

Total Economic Impacts from Tourism Spending

Table 11 shows the total estimated economic impacts from tourism spending, by vehicle category.

The total estimated economic impacts include:

- \$3.6 billion in direct economic output and \$7.3 billion in total economic output.
- \$1.7 billion in direct GDP and \$3.6 billion in total GDP.
- 23,180 FTEs in direct employment and 36,880 FTEs in total employment.
- \$1.3 billion in direct revenue of all three levels of government and \$1.8 billion in total government revenue.

The total estimated economic impacts attributed to **on-road motorcycles** include:

- \$1.5 billion in direct economic output and \$ 3.1 billion in total economic output.
- \$703.5 million in direct GDP and \$1.5 billion in total GDP.
- 10,750 FTEs in direct employment and 16,630 FTEs in total employment.
- \$398 million in direct revenue of all three levels of government and \$609.5 million in total government revenue.

The total estimated economic impacts attributed to **off-road motorcycles** include:

- \$472.8 million in direct economic output and \$964.4 million in total economic output.
- \$219.0 million in direct GDP and \$480.2 million in total GDP.
- 2,900 FTEs in direct employment and 4,700 FTEs in total employment.
- \$406.8 million in direct revenue of all three levels of government and \$473.4 million in total government revenue.

The total estimated economic impacts attributed to **ATVs and side-by-sides** include:

- \$1.6 billion in direct economic output and \$3.2 billion in total economic output.
- \$730.3 million in direct GDP and \$1.6 billion in total GDP.
- 9,530 FTEs in direct employment and 15,550 FTEs in total employment.
- \$542.6 million in direct revenue of all three levels of government and \$761 million in total government revenue.

Table 11: Total Estimated Economic Impacts of Tourism Spending, by Vehicle Category (2022)

Category	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
<i>On-road Motorcycles</i>						
Direct	\$1,508.3	\$703.5	10,750	\$171.4	\$196.3	\$30.3
Indirect and Induced	\$1,597.9	\$837.3	5,880	\$81.9	\$96.9	\$32.7
Total	\$3,106.2	\$1,540.8	16,630	\$253.3	\$293.2	\$63.0
<i>Off-road Motorcycles</i>						
Direct	\$472.8	\$219.0	2,900	\$191.4	\$190.5	\$24.9
Indirect and Induced	\$491.6	\$261.2	1,800	\$27.1	\$30.1	\$9.4
Total	\$964.4	\$480.2	4,700	\$218.5	\$220.6	\$34.3
<i>ATVs and Side-by-Sides</i>						
Direct	\$1,592.0	\$730.3	9,530	\$234.3	\$276.0	\$32.3
Indirect and Induced	\$1,648.5	\$874.9	6,020	\$84.7	\$100.5	\$33.2
Total	\$3,240.5	\$1,605.2	15,550	\$319.0	\$376.5	\$65.5
<i>Total</i>						
Direct	\$3,573.1	\$1,652.8	23,180	\$597.1	\$662.8	\$87.5
Indirect and Induced	\$3,738.0	\$1,973.4	13,700	\$193.7	\$227.5	\$75.3
Total	\$7,311.1	\$3,626.2	36,880	\$790.8	\$890.3	\$162.8

Economic Impacts of Tourism Spending by Province and Vehicle Category

Tables 12 through 14 summarize the direct, indirect, and induced economic impacts generated by spending on tourism in each province, for on-road motorcycles, off-road motorcycles, and ATVs and side-by-sides.

As shown in **Table 12** approximately 25 percent of the total economic impacts of tourism for on-road motorcycles are attributable to spending in Quebec, followed by Ontario (21 percent), British Columbia (17 percent), and Alberta (16 percent).

Table 12: On-road Motorcycles – Estimated Total Direct, Indirect and Induced Economic Impacts of Tourism Spending (2022)

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial and Municipal Taxes (\$ millions)
British Columbia	\$525.9	\$272.9	2,810	\$103.8
Alberta	\$527.7	\$268.7	2,580	\$51.5
Saskatchewan	\$159.0	\$85.4	960	\$19.3
Manitoba	\$133.9	\$68.5	750	\$29.8
Ontario	\$702.2	\$322.7	3,260	\$156.4
Quebec	\$788.6	\$388.2	4,630	\$183.4
New Brunswick	\$110.9	\$54.1	710	\$26.8
Nova Scotia	\$96.3	\$46.7	550	\$23.1
Prince Edward Island	\$22.3	\$11.3	150	\$5.4
Newfoundland	\$39.4	\$22.3	230	\$10.0
Total	\$3,106.2	\$1,540.8	16,630	\$609.5

As shown in **Table 13** approximately 28 percent of the total economic impacts of tourism for off-road motorcycles are attributable spending in British Columbia, followed by Alberta (23 percent), Quebec (21 percent), and Ontario (15 percent).

Table 13: Off-road Motorcycles – Estimates Total Direct, Indirect and Induced Economic Impacts of Tourism Spending (2022)

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$272.3	\$141.4	1,340	\$72.6
Alberta	\$217.4	\$110.2	980	\$63.7
Saskatchewan	\$21.9	\$12.0	130	\$42.6
Manitoba	\$24.8	\$13.2	120	\$42.7
Ontario	\$164.1	\$73.7	680	\$20.7
Quebec	\$208.6	\$102.0	1,130	\$65.6
New Brunswick	\$34.1	\$16.4	200	\$43.7
Nova Scotia	\$9.7	\$4.7	50	\$40.8
Prince Edward Island	\$2.6	\$1.3	20	\$40.1
Newfoundland	\$8.9	\$5.3	50	\$40.9
Total	\$964.4	\$480.2	4,700	\$473.4

As shown in **Table 14** approximately 24 percent of the total economic impacts of tourism for ATVs and side-by-sides are attributable to spending in Quebec, followed by Alberta (18 percent), Ontario (17 percent), and British Columbia (13 percent).

Table 14: ATVs and Side-by-Sides – Estimated Total Direct, Indirect and Induced Economic Impacts of Tourism Spending (2022)

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$422.6	\$220.5	1,980	\$90.3
Alberta	\$594.9	\$302.0	2,610	\$93.2
Saskatchewan	\$102.7	\$57.0	560	\$24.4
Manitoba	\$131.7	\$71.2	650	\$32.1
Ontario	\$592.1	\$263.9	2,340	\$143.8
Quebec	\$789.8	\$385.7	4,160	\$218.2
New Brunswick	\$229.5	\$110.5	1,310	\$59.9
Nova Scotia	\$250.3	\$121.0	1,280	\$63.7
Prince Edward Island	\$12.7	\$6.1	70	\$3.3
Newfoundland	\$114.2	\$67.3	590	\$32.1
Total	\$3,240.5	\$1,605.2	15,550	\$761.0

Economic Impacts of Spending on Miscellaneous Items Associated with Operating Vehicles

On-road motorcycles are required to be registered through the provincial body responsible for motor vehicles and have insurance. OHVs are required to be registered in most provinces and have insurance.⁷ In addition to licensing, registration and insurance, users may purchase club memberships, participate in events (e.g., rallies, trail rides, competitions) and attend training and workshops.

Using data on expenditures from the user survey we estimated that on-road motorcycle and OHV users collectively spent approximately \$4.0 billion on licensing fees, insurance, registration, and miscellaneous items associated with these vehicles in 2022. **Table 15** shows the estimated average and total spending on licensing fees, insurance, registration, and miscellaneous items associated with using on-road motorcycles and OHVs in 2022. Insurance and registration costs accounted for approximately 38 percent to 43 percent of the total average vehicle expenditure across all vehicle categories. Licensing fees comprised around 16 percent to 20 percent of the total spending across all vehicle categories. For on-road motorcycles average expenditure was \$1,904, for off-road motorcycles average expenditure was \$1,765, and for ATVs and side-by-sides average expenditure was \$1,747.

Table 15: Average and Total Spending on Miscellaneous Items Associated with Operating On-Road and Off-Road Motorcycles and ATVs and Side-by-Sides (2022)

	On-road Motorcycle	Off-road Motorcycle	ATVs and Side-by-Sides
Average Spending per Vehicle			
Licensing Fees	\$377	\$298	\$284
Insurance and Registration	\$812	\$670	\$670
Annual Passes or Memberships for Clubs	\$230	\$251	\$250
Events such as cross-country races, trials, and organized trail rides	\$232	\$284	\$282
Training, courses or workshops	\$253	\$262	\$261
Total Spending Per Vehicle	\$1,904	\$1,765	\$1,747
Total Spending (\$ millions)	\$1,622.4	\$500.2	\$1,872.9

Source: User Survey.

⁷ Registration and insurance is required in all provinces when an OHV is being operated on public ("Crown") land. For operation exclusively on private land registration and insurance requirements vary. In British Columbia, Alberta and Saskatchewan registration is not required when the vehicle is used exclusively on private land, while in other provinces exclusions may be granted when the vehicle is only used on the owner's property.

Total Economic Impacts

Table 16 shows the total estimated economic impacts on spending on miscellaneous items associated with operating vehicles, by vehicle category. The total estimated economic impacts include:

- \$4.0 billion in direct economic output and \$8.5 billion in total economic output.
- \$1.8 billion in direct GDP and \$4.5 billion in total GDP.
- 22,400 FTEs in direct employment and 41,950 FTEs in total employment.
- \$473.3 million in direct revenue of all three levels of government and \$1.1 billion in total government revenue.

The total estimated economic impacts attributed to **on-road motorcycles** include:

- \$1.6 billion in direct economic output and \$3.5 billion in total economic output.
- \$735.3 million in direct GDP and \$1.8 billion in total GDP.
- 8,310 FTEs in direct employment and 16,310 FTEs in total employment.
- \$192.4 million in direct revenue of all three levels of government and \$459.6 million in total government revenue.

The total estimated economic impacts attributed to **off-road motorcycles** include:

- \$500.2 million in direct economic output and \$1.1 billion in total economic output.
- \$228.1 million in direct GDP and \$563.2 million in total GDP.
- 2,900 FTEs in direct employment and 5,370 FTEs in total employment.
- \$57.5 million in direct revenue of all three levels of government and \$139.6 million in total government revenue.

The total estimated economic impacts attributed to **ATVs and side-by-sides** include:

- \$1.9 billion in direct economic output and \$4.0 billion in total economic output.
- \$867.4 million in direct GDP and \$2.1 billion in total GDP.
- 11,190 FTEs in direct employment and 20,270 FTEs in total employment.
- \$223.4 million in direct revenue of all three levels of government and \$536.8 million in total government revenue.

Table 16: Total Estimated Economic Impacts of Spending on Miscellaneous Items Associated with Operating Vehicles, by Vehicle Category (2022)

Category	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
<i>On-road Motorcycles</i>						
Direct	\$1,622.4	\$735.3	8,310	\$55.6	\$83.7	\$53.1
Indirect and Induced	\$1,836.4	\$1,089.4	8,000	\$105.5	\$125.5	\$36.2
Total	\$3,458.8	\$1,824.7	16,310	\$161.1	\$209.2	\$89.3
<i>Off-road Motorcycles</i>						
Direct	\$500.2	\$228.1	2,900	\$17.8	\$25.3	\$14.4
Indirect and Induced	\$567.5	\$335.1	2,470	\$32.7	\$38.2	\$11.1
Total	\$1,067.7	\$563.2	5,370	\$50.5	\$63.5	\$25.5
<i>ATVs and Side-by-Sides</i>						
Direct	\$1,872.9	\$867.4	11,190	\$72.8	\$98.2	\$52.4
Indirect and Induced	\$2,085.0	\$1,228.8	9,080	\$128.7	\$146.5	\$38.2
Total	\$3,957.9	\$2,096.2	20,270	\$201.5	\$244.7	\$90.6
<i>Total</i>						
Direct	\$3,995.5	\$1,830.8	22,400	\$146.2	\$207.2	\$119.9
Indirect and Induced	\$4,488.9	\$2,653.3	19,550	\$266.9	\$310.2	\$85.5
Total	\$8,484.4	\$4,484.1	41,950	\$413.1	\$517.4	\$205.4

Economic Impacts by Province and Vehicle Category

Tables 17 through 19 summarize the direct, indirect, and induced economic impacts generated by spending on miscellaneous items associated with on-road motorcycles and OHVs in each province.

As shown in **Table 17** approximately 27 percent of the total economic impacts for on-road motorcycles is attributable to spending in Ontario, followed by Quebec (25 percent), Alberta (16 percent), and British Columbia (16 percent).

Table 17: On-road Motorcycles – Estimated Total Direct, Indirect and Induced Economic Impacts of Spending on Miscellaneous Items Associated with Operating Vehicles, by Vehicle Category (2022)

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$556.8	\$293.1	2,420	\$76.6
Alberta	\$575.4	\$297.8	2,760	\$69.0
Saskatchewan	\$114.7	\$59.8	620	\$14.9
Manitoba	\$126.7	\$66.1	650	\$16.7
Ontario	\$929.3	\$488.7	4,140	\$120.9
Quebec	\$879.7	\$466.9	4,320	\$118.3
New Brunswick	\$91.3	\$50.4	440	\$13.2
Nova Scotia	\$97.0	\$52.5	490	\$14.5
Prince Edward Island	\$8.8	\$4.8	50	\$1.4
Newfoundland	\$79.1	\$44.6	420	\$14.1
Total	\$3,458.8	\$1,824.7	16,310	\$459.6

As shown in **Table 18** approximately 25 percent of the total economic impacts for off-road motorcycles are attributable to spending in Ontario, followed by Quebec (23 percent), Alberta (19 percent), and British Columbia (18 percent).

Table 18: Off-road Motorcycles – Estimated Total Direct, Indirect and Induced Economic Impacts of Spending on Miscellaneous Items Associated with Operating Vehicles, by Vehicle Category (2022)

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$192.3	\$101.8	890	\$26.3
Alberta	\$208.7	\$108.1	1,020	\$24.8
Saskatchewan	\$63.2	\$32.9	350	\$8.2
Manitoba	\$38.9	\$20.4	210	\$5.1
Ontario	\$277.5	\$146.0	1,280	\$35.6
Quebec	\$245.7	\$131.1	1,410	\$33.1
New Brunswick	\$19.7	\$10.8	100	\$2.8
Nova Scotia	\$5.4	\$2.9	20	\$0.8
Prince Edward Island	\$3.1	\$1.7	20	\$0.4
Newfoundland	\$13.2	\$7.5	70	\$2.4
Total	\$1,067.7	\$563.2	5,370	\$139.5

As shown in **Table 19** approximately 26 percent of the total economic impacts for ATVs and side-by-sides are attributable to spending in Ontario, followed by Quebec (25 percent), Alberta (14 percent), and British Columbia (8 percent).

Table 19: ATVs and Side-by-Sides – Estimated Total Direct, Indirect and Induced Economic Impacts of Spending on Miscellaneous Items Associated with Operating Vehicles, by Vehicle Category (2022)

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$317.7	\$168.2	1,460	\$43.4
Alberta	\$594.3	\$307.8	2,910	\$72.3
Saskatchewan	\$332.9	\$173.7	1,890	\$44.2
Manitoba	\$218.6	\$114.3	1,160	\$28.6
Ontario	\$1,029.5	\$541.5	4,750	\$135.4
Quebec	\$993.7	\$530.2	5,680	\$136.6
New Brunswick	\$137.2	\$75.7	670	\$20.1
Nova Scotia	\$143.7	\$77.7	730	\$21.1
Prince Edward Island	\$15.2	\$8.3	90	\$2.3
Newfoundland	\$175.1	\$98.8	930	\$32.8
Total	\$3,957.9	\$2,096.2	20,270	\$536.8

Economic Impacts of Tour Businesses and Riding Schools

In many resort areas OHV tours are available and there are riding schools that offer skills training and safety courses. As with powersport dealers many tour businesses offer OHV tours in summer and snowmobile tours in winter. To estimate the economic impacts of OHV tour operators and riding schools we used data from the survey of businesses. A total of 195 businesses were identified through the survey, which collectively reported approximately \$176 million in revenues from OHVs in 2022. **Table 20** shows the distribution of businesses and revenues by province.

Table 20: Number of Tour Businesses and Riding Schools and their Revenues, by Province (2022)

	Number of Businesses	Revenues in 2022 (\$ millions)
British Columbia	50	\$31.2
Alberta	22	\$17.0
Saskatchewan	14	\$17.2
Manitoba	23	\$36.6
Ontario	35	\$31.7
Quebec	19	\$22.1
New Brunswick	11	\$3.9
Nova Scotia	5	\$2.9
Prince Edward Island	7	\$7.0
Newfoundland and Labrador	9	\$6.4
Total	195	\$176.0

Source: Survey of Businesses.

Table 21 shows the total estimated economic impacts of tour operators and riding schools. The total estimated economic impacts include:

- \$176.0 million in direct economic output and \$359.8 million in total economic output.
- \$90.0 million in direct GDP and \$195.4 million in total GDP.
- 2,270 FTEs in direct employment and 3,050 FTEs in total employment.
- \$17.5 million in direct revenue of all three levels of government and \$45.7 million in total government revenue.

Table 21: Total Estimated Economic Impacts of Tour Operators and Riding Schools (2022)

Category	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
Direct	\$176.0	\$90.0	2,270	\$8.5	\$8.0	\$1.0
Indirect and Induced	\$183.8	\$105.4	780	\$11.2	\$13.2	\$3.8
Total	\$359.8	\$195.4	3,050	\$19.7	\$21.2	\$4.8

Economic Impacts by Province

Table 22 summarizes the direct, indirect, and induced economic impacts generated by spending on tour businesses and riding schools located in each province.

As shown in table 23 approximately 20 percent of the total economic impacts resulted from spending in Manitoba, followed by British Columbia (19 percent), Ontario (18 percent), Quebec (12 percent), and Saskatchewan (9 percent).

Table 22: Economic Impacts of Tour Operators and Riding Schools by Province – 2022

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$63.3	\$35.4	700	\$7.9
Alberta	\$35.9	\$19.2	280	\$4.2
Saskatchewan	\$35.0	\$18.5	280	\$4.3
Manitoba	\$75.4	\$40.2	510	\$9.8
Ontario	\$64.2	\$34.7	510	\$8.3
Quebec	\$45.4	\$24.7	300	\$5.9
New Brunswick	\$7.8	\$4.3	110	\$1.0
Nova Scotia	\$6.2	\$3.4	60	\$0.8
Prince Edward Island	\$13.8	\$7.6	130	\$1.7
Newfoundland	\$12.8	\$7.4	170	\$1.8
Total	\$359.8	\$195.4	3,050	\$45.7

4. Conclusion

Total Economic Impacts

Table 23 shows the total estimated economic impacts of on-road motorcycles, off-road motorcycles, and ATVs and side-by-sides in Canada, by type of economic impact. In 2022 the recreational use of these vehicles generated:

- \$8.3 billion in direct economic output and \$17.3 billion in total economic output.
- \$3.9 billion in direct GDP and \$9.0 billion in total GDP.
- 51,968 FTEs in direct employment and 88,375 FTEs in total employment.
- \$1.9 billion in direct revenue of all three levels of government and \$3.2 billion in total government revenue.

Table 23: Total Estimated Economic Impacts (2022)

Category	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
<i>Sale of Vehicles, Parts, and Accessories</i>						
Direct	\$556.8	\$364.1	4,118	\$29.5	\$26.2	\$5.8
Indirect and Induced	\$572.1	\$325.9	2,377	\$35.5	\$44.4	\$14.0
Total	\$1,128.9	\$690.0	6,495	\$65.0	\$70.6	\$19.8
<i>Tourism Spending</i>						
Direct	\$3,573.1	\$1,652.8	23,180	\$597.1	\$662.8	\$87.5
Indirect and Induced	\$3,738.0	\$1,973.4	13,700	\$193.7	\$227.5	\$75.3
Total	\$7,311.1	\$3,626.2	36,880	\$790.8	\$890.3	\$162.8
<i>Miscellaneous Spending on Items Associated with Operating Vehicles</i>						
Direct	\$3,995.5	\$1,830.8	22,400	\$146.2	\$207.2	\$119.9
Indirect and Induced	\$4,488.9	\$2,653.3	19,550	\$266.9	\$310.2	\$85.5
Total	\$8,484.4	\$4,484.1	41,950	\$413.1	\$517.4	\$205.4
<i>Tour Businesses and Riding Schools</i>						
Direct	\$176.0	\$90.0	2,270	\$8.5	\$8.0	\$1.0
Indirect and Induced	\$183.8	\$105.4	780	\$11.2	\$13.2	\$3.8
Total	\$359.8	\$195.4	3,050	\$19.7	\$21.2	\$4.8
Total						
Direct	\$8,301.4	\$3,937.7	\$51,968.0	\$781.3	\$904.2	\$214.2
Indirect and Induced	\$8,982.8	\$5,058.0	\$36,407.0	\$507.3	\$595.3	\$178.6
Total	\$17,284.2	\$8,995.7	\$88,375.0	\$1,288.6	\$1,499.5	\$392.8

Distribution of Economic Impacts by Province

Table 24 summarizes the total direct, indirect, and induced economic impacts generated by the sale and recreational use of on-road motorcycles and OHVs in each province.

As shown in Table 24, approximately 25 percent of the total economic impacts resulted from spending in Quebec, followed by Ontario (23 percent), Alberta (16 percent), and British Columbia (15 percent).

Table 24: Total Estimated Economic Impacts by Province (2022)

	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal, Provincial, and Municipal Taxes (\$ millions)
British Columbia	\$2,513.3	\$1,332.4	12,510	\$443.1
Alberta	\$2,884.1	\$1,494.2	13,860	\$394.7
Saskatchewan	\$866.2	\$462.8	4,991	\$162.8
Manitoba	\$791.0	\$419.4	4,304	\$170.9
Ontario	\$4,083.9	\$2,065.6	18,870	\$665.4
Quebec	\$4,241.7	\$2,208.1	23,270	\$802.9
New Brunswick	\$679.7	\$351.9	3,852	\$174.2
Nova Scotia	\$658.6	\$339.6	3,510	\$172.0
Prince Edward Island	\$83.4	\$44.1	556	\$55.3
Newfoundland	\$482.3	\$277.6	2,652	\$139.6
Total	\$17,284.2	\$8,995.7	88,375	\$3,180.9

Distribution of Economic Impacts by Vehicle Category

Table 25 shows the total estimated economic impacts by vehicle category. The total estimated economic impacts include:

- \$8.3 billion in direct economic output and \$17.3 billion in total economic output.
- \$3.9 billion in direct GDP and \$9.0 billion in total GDP.
- 51,968 FTEs in direct employment and 88,375 FTEs in total employment.
- \$1.9 billion in direct revenue of all three levels of government and \$3.2 billion in total government revenue.

The total estimated economic impacts attributed to **on-road motorcycles** include:

- \$3.3 billion in direct economic output and \$7.0 billion in total economic output.
- \$1.6 billion in direct GDP and \$3.6 billion in total GDP.
- 20,534 FTEs in direct employment and 35,284 FTEs in total employment.
- \$613.3 million in direct revenue of all three levels of government and \$1.1 billion in total government revenue.

The total estimated economic impacts attributed to **off-road motorcycles** include:

- \$1.0 billion in direct economic output and \$2.1 billion in total economic output.
- \$475.9 million in direct GDP and \$1.1 billion in total GDP.
- 6,124 FTEs in direct employment and 10,573 FTEs in total employment.
- \$469 million in direct revenue of all three levels of government and \$624.7 million in total government revenue.

The total estimated economic impacts attributed to **ATVs and side-by-sides** include:

- \$4.0 billion in direct economic output and \$8.2 billion in total economic output.
- \$1.9 billion in direct GDP and \$4.3 billion in total GDP.
- 25,310 FTEs in direct employment and 42,518 FTEs in total employment.
- \$817.4 million in direct revenue of all three levels of government and \$1.4 billion in total government revenue.

Table 25: Total Economic Impacts by Vehicle (2022)

Category	Output (\$ millions)	GDP (\$ millions)	Employment (FTEs)	Federal Tax (\$ millions)	Provincial Tax (\$ millions)	Municipal Tax (\$ millions)
<i>On-road Motorcycles</i>						
Direct	\$3,333.1	\$1,571.2	20,534	\$237.3	\$290.2	\$85.8
Indirect and Induced	\$3,643.3	\$2,045.5	14,750	\$199.6	\$238.1	\$74.2
Total	\$6,976.4	\$3,616.7	35,284	\$436.9	\$528.3	\$160.0
<i>Off-road Motorcycles</i>						
Direct	\$1,016.8	\$475.9	6,124	\$211.5	\$217.8	\$39.7
Indirect and Induced	\$1,101.9	\$620.9	4,449	\$62.5	\$71.5	\$21.6
Total	\$2,118.7	\$1,096.8	10,573	\$274.0	\$289.3	\$61.3
<i>ATVs and Side-by-Sides⁸</i>						
Direct	\$3,951.5	\$1,890.6	25,310	\$332.5	\$396.2	\$88.7
Indirect and Induced	\$4,237.6	\$2,391.6	17,208	\$245.2	\$285.7	\$82.8
Total	\$8,189.1	\$4,282.2	42,518	\$577.7	\$681.9	\$171.5
<i>Total</i>						
Direct	\$8,301.4	\$3,937.7	51,968	\$781.3	\$904.2	\$214.2
Indirect and Induced	\$8,982.8	\$5,058.0	36,407	\$507.3	\$595.3	\$178.6
Total	\$17,284.2	\$8,995.7	88,375	\$1,288.6	\$1,499.5	\$392.8

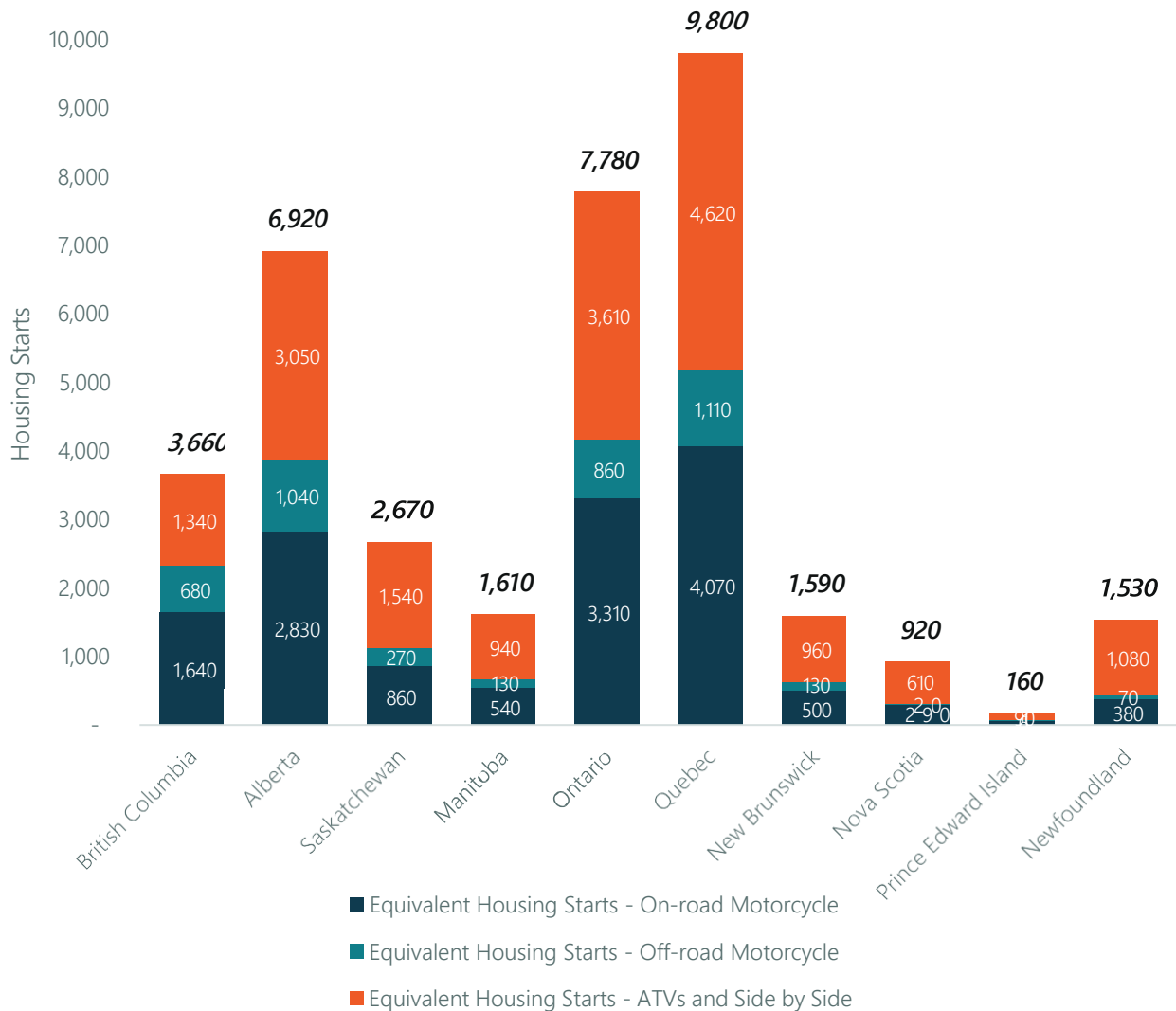
Comparison to Other Industries

To provide perspective on the size of the economic impacts it is useful to compare the impacts with those created by other industries. One such example is new home construction. The direct and indirect employment generated by on-road motorcycle and OHV recreation (74,340) is equivalent to the number of direct and indirect jobs created through the construction of approximately 36,600 new homes. This

⁸ Includes the impacts of tour businesses and riding schools.

equates to approximately 14 percent of new housing starts in Canada in 2022.⁹ *Figure 17* shows the number of housing starts that would generate economic impacts equivalent to on-road motorcycle and OHV recreation in each province.

Figure 17: Comparison with New Home Construction – Equivalent Number of Housing Starts by Province

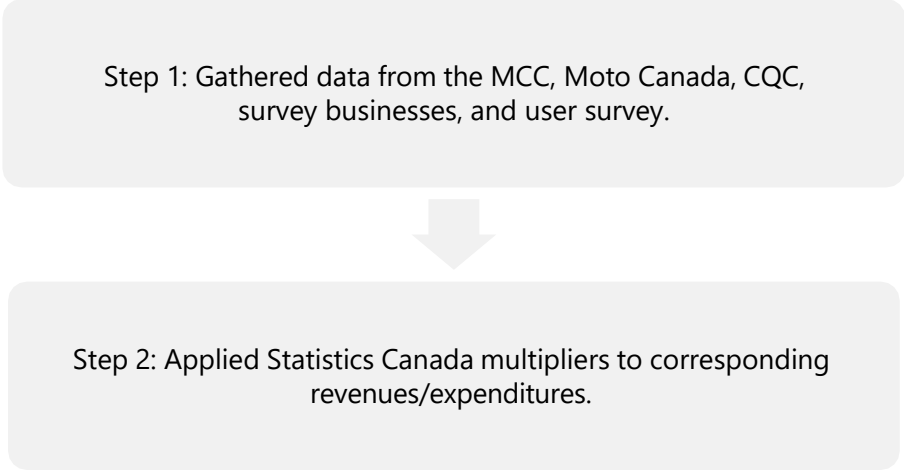


⁹ Canadian Home Builders Association. Economic Impacts of the Housing Industry. Retrieved from <https://www.chba.ca/impacts>. June 26, 2023.

5. Appendices

Appendix A: Economic Impact Methodology

MNP’s approach to economic impact modelling is based on published Statistics Canada multipliers and input-output modelling. A step-by-step overview of our approach to estimating the economic impacts is provided below.



Step 1: Gathered data from the CQC, MCC, Moto Canada, survey of businesses, and user survey.

Collected data from Moto Canada on retails sales of vehicles, parts and accessories. Also, collected data on revenues of tour businesses and riding schools from the survey of businesses. Collected data on tourism spending, average number of trips taken and other spending by OHV users on was collected through the user survey.

Step 2: Applied Statistics Canada multipliers to corresponding revenues/expenditures.

Statistics Canada’s provincial input-output multipliers were then used to estimate the economic impacts. Each revenue/expense was assigned an industry classification based on the North American Industry Classification System (NAICS). To estimate the economic impacts the relevant multipliers were applied to the direct output by province. For retail expenditures (e.g., purchases of vehicles, parts and accessories) direct output is measured by the retail margin (i.e. total sales revenues less cost of goods sold).

For the economic impacts of tourism and other spending the multipliers were applied to expenditures net of relevant front-end sales taxes (GST, PST, HST and other duties) for each type of expense category. For economic impacts of tour businesses and riding schools the multipliers were applied to revenues generated by these businesses.

Statistics Canada’s input-output multipliers produced estimates of direct, indirect and induced impacts of

output, GDP and taxes.

Appendix B: Detailed Economic Impacts

Table 26: Average Expense per Day Trip (2022)

	On-road Motorcycle	Off-road Motorcycle	ATVs and Side-by-Sides
Number of People per Vehicle	1 to 2	1 to 2	1 to 2
Fuel Expenses per Vehicle	\$68	\$59	\$70
Expenses to Transport OHV to and from Trail	Not applicable	\$74	\$75
Food and Drinks	\$65	\$66	\$59
Total Expense per Vehicle	\$133	\$199	\$204
Total Spending on Day Trips	\$378.8 million	\$137.8 million	\$542.0 million

Source: User Survey.

Table 27: Average Expense per Multi-Day Trip (2022)

	On-road Motorcycle	Off-road Motorcycle	ATVs and Side-by-Sides
Number of People per Vehicle	1 to 2	1 to 2	1 to 2
Riding Days	3 to 4	2 to 3	2 to 3
Number of Nights per Trip	2 to 3	1 to 2	1 to 2
Fuel Expenses per Vehicle per Day	\$70	\$60	\$70
Expenses to Transport OHV to and from Trail	Not applicable	\$177	\$177
Accommodation per Day per Vehicle	\$120	\$104	\$97
Supplies per Day per Vehicle	\$8	\$37	\$28
Food per Day per Vehicle	\$102	\$102	\$94
Retail per Day per Vehicle	\$61	\$60	\$56
Total Expense per Vehicle per Trip	\$1,196	\$1,262	\$1,139
Total Spending	\$1,415.8 million	\$430.2 million	\$1,443.1 million

Source: User Survey.

Figure 18: Number of On-road Motorcycles by Province (2022)

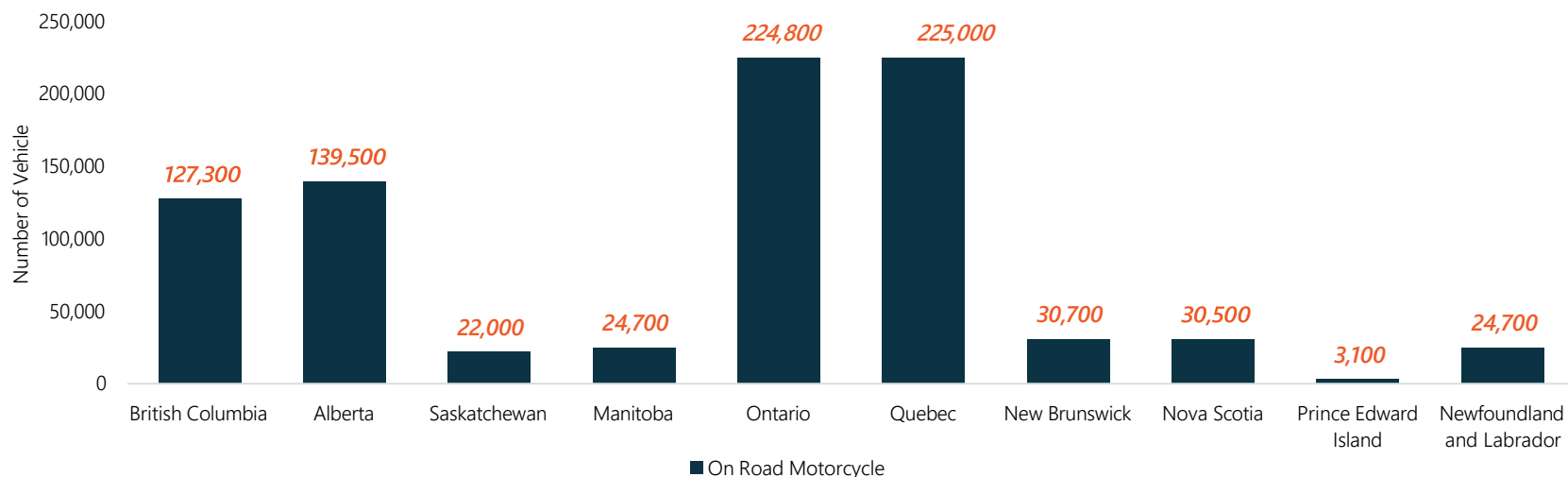


Figure 19: Number of Off-road Motorcycles, ATVs and Side-by-Sides by Province (2022)

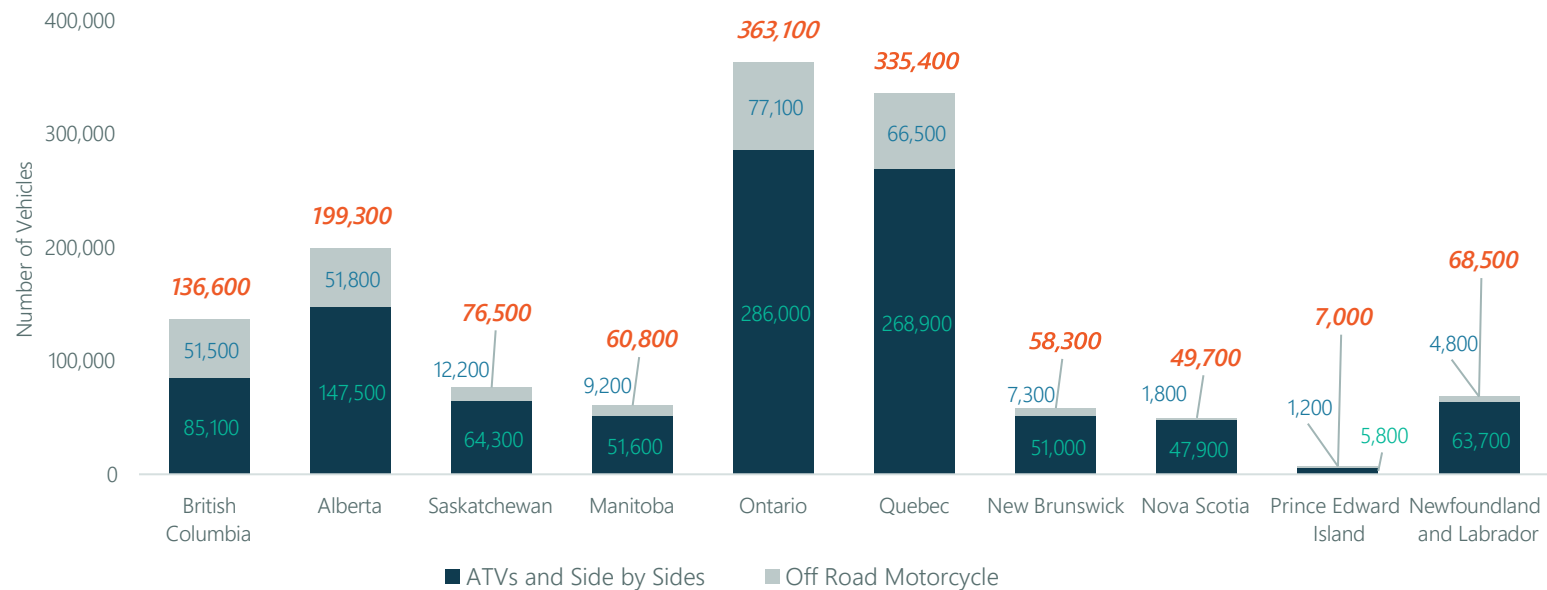


Figure 20: Number of Day Trips Taken Outside the Local Region on On-road Motorcycles by Province of Trip Destination (2022)

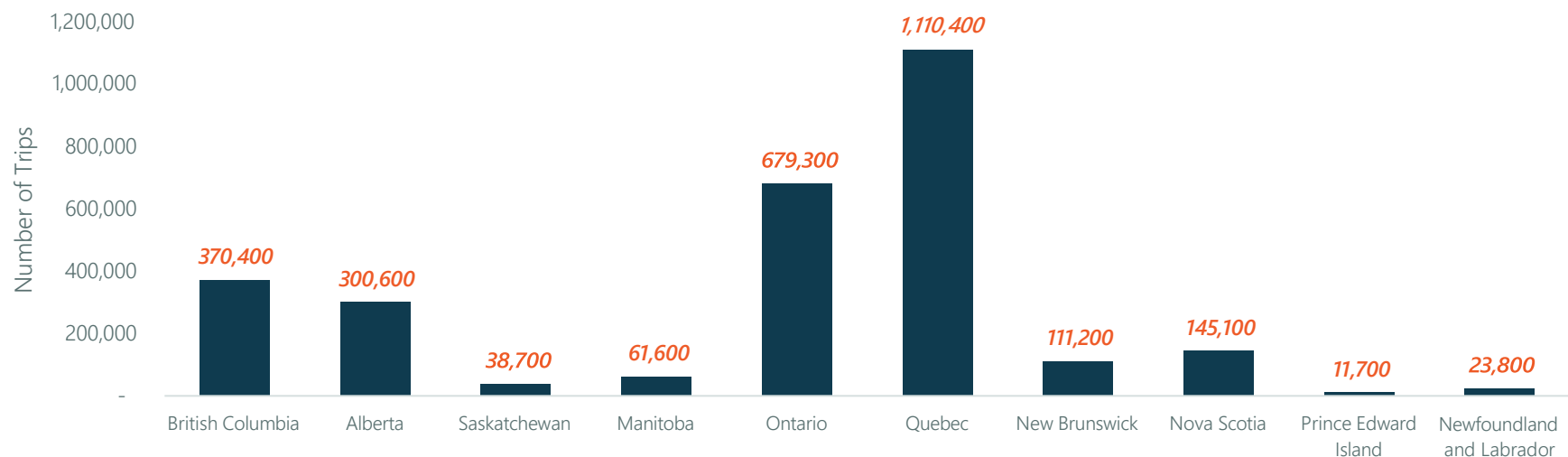


Figure 21: Number of Day Trips Taken Outside the Local Region on Off-road Motorcycles, ATVs and Side-by-Sides by Province of Trip Destination (2022)

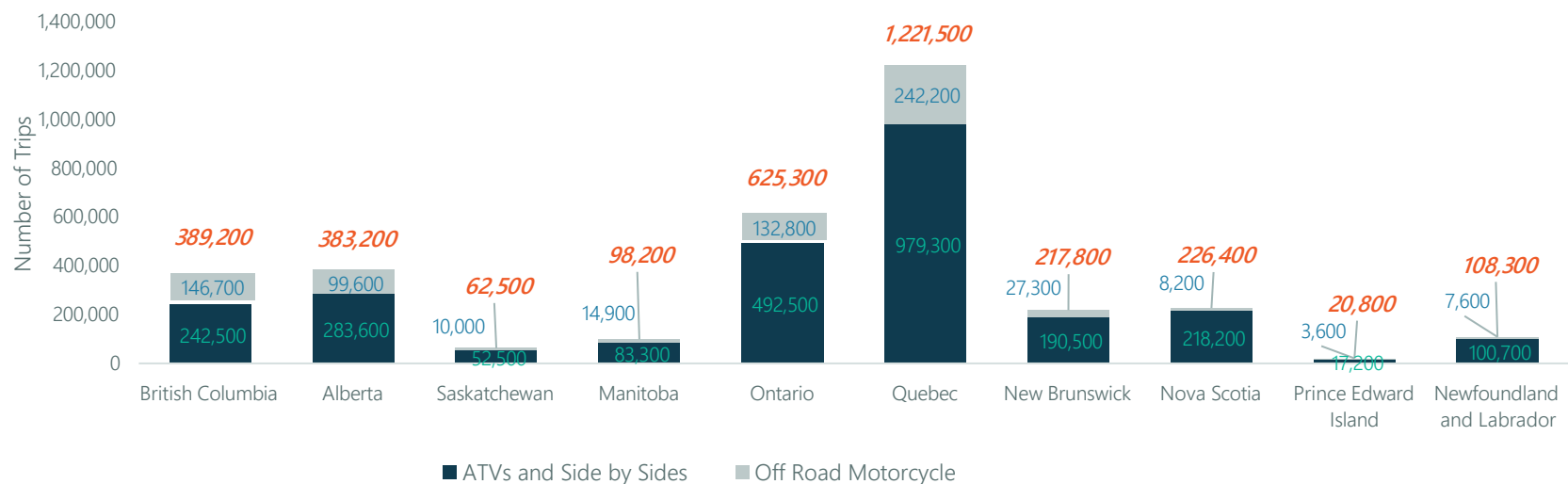


Figure 22: Number of Multi-Day Trips Taken on On-road Motorcycles by Province of Trip Destination (2022)

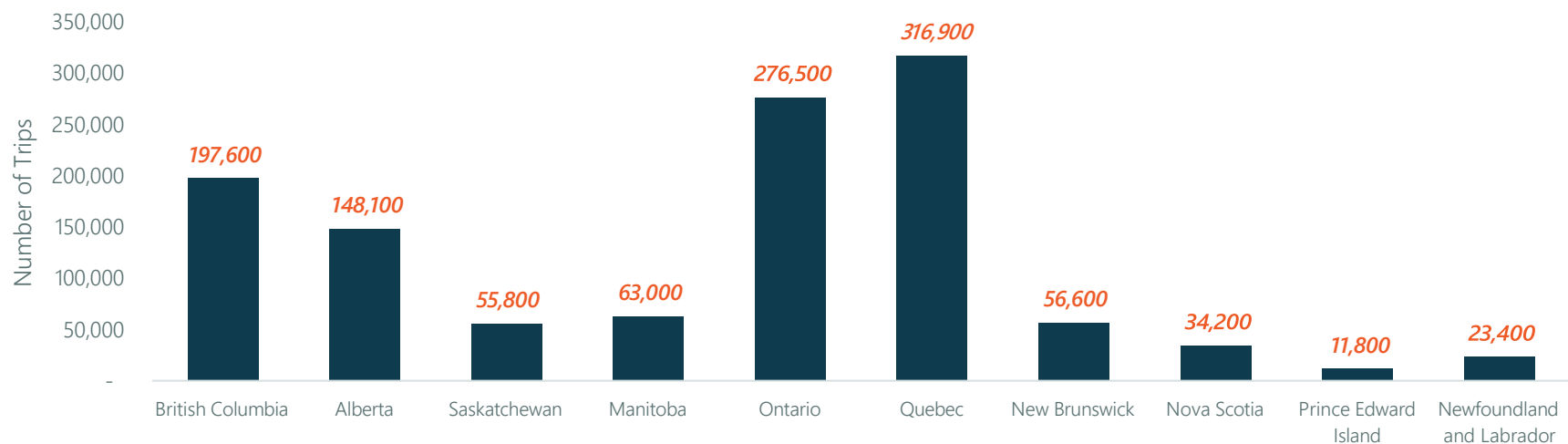


Figure 23: Number of Day Trips Taken Outside the Local Region on Off-road Motorcycles, ATVs and Side-by-Sides by Province of Trip Destination (2022)

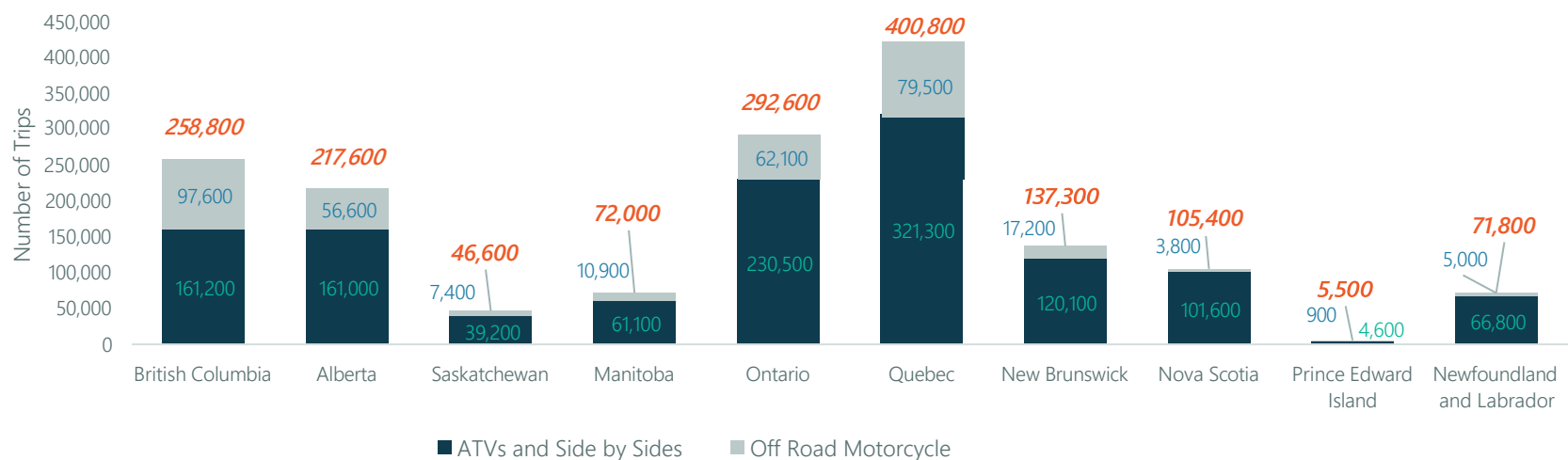


Figure 24: Total Tourism Spending on On-road Motorcycle Trips by Province (2022)

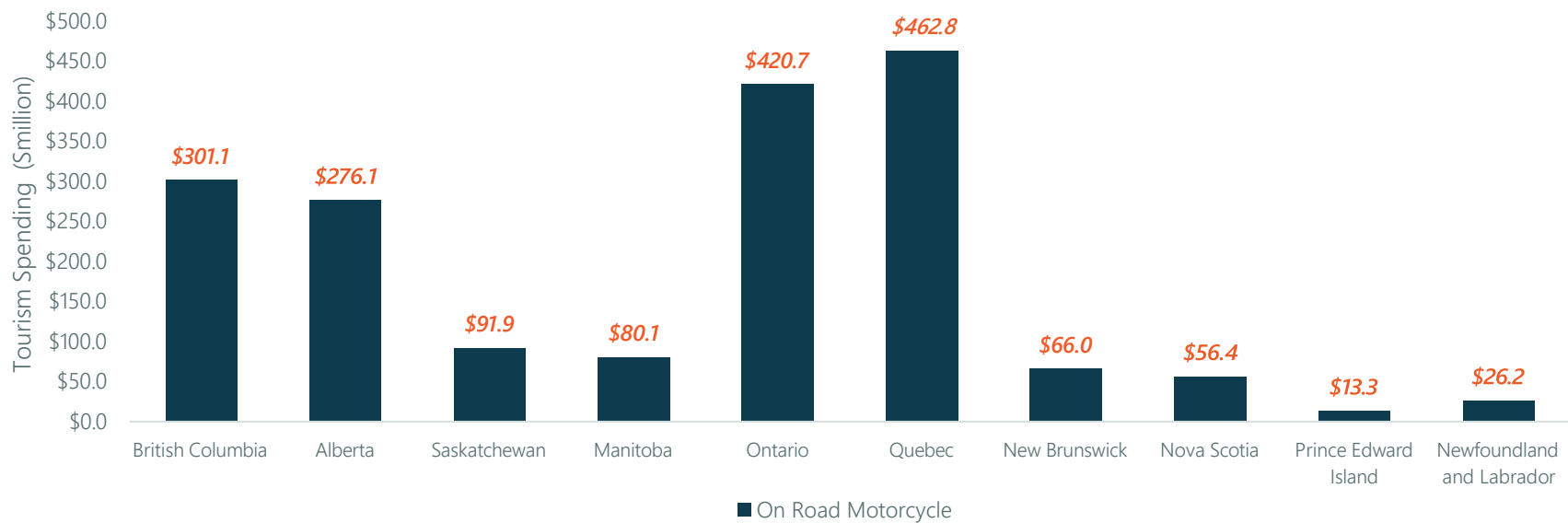
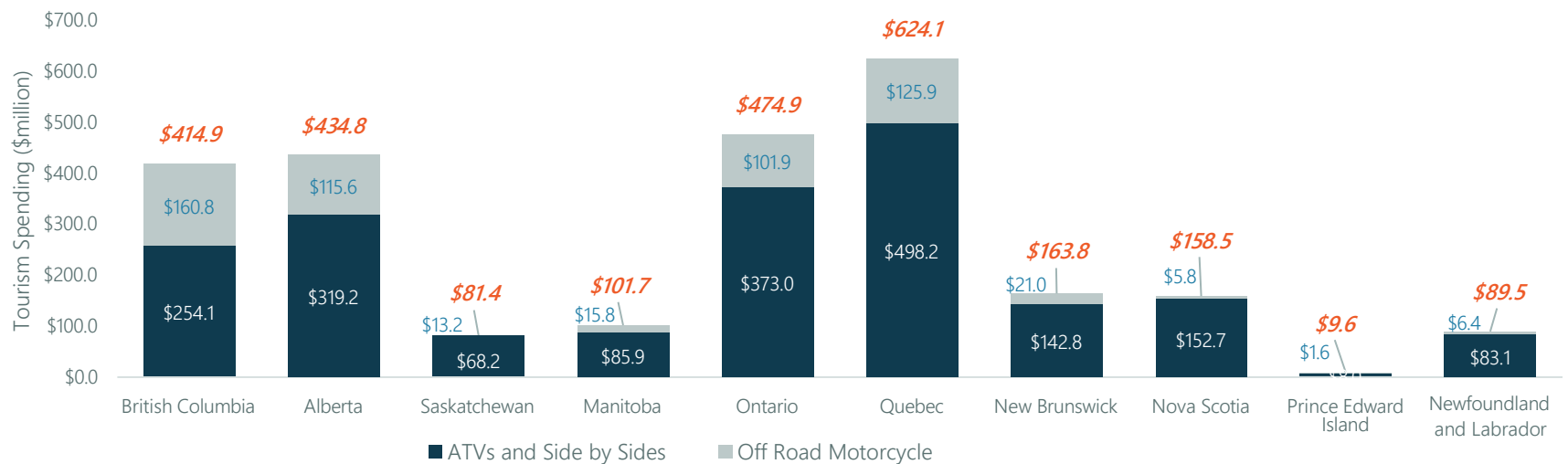


Figure 25: Total Tourism Spending on Off-road Motorcycle, ATV and Side-by-Side Trips by Province (2022)



On-road Motorcycle

Figure 26: Economic Impacts of On-road Motorcycle and Parts and Accessories Sales (Output) (2022)

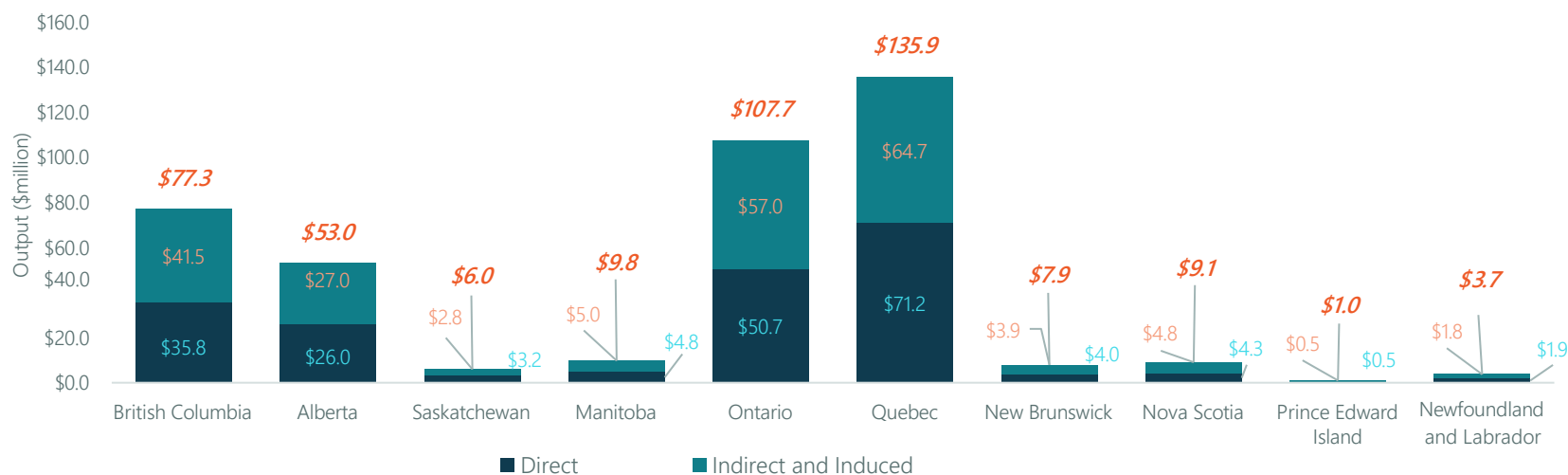


Figure 27: Economic Impacts of On-road Motorcycle and Parts and Accessories Sales (GDP) (2022)

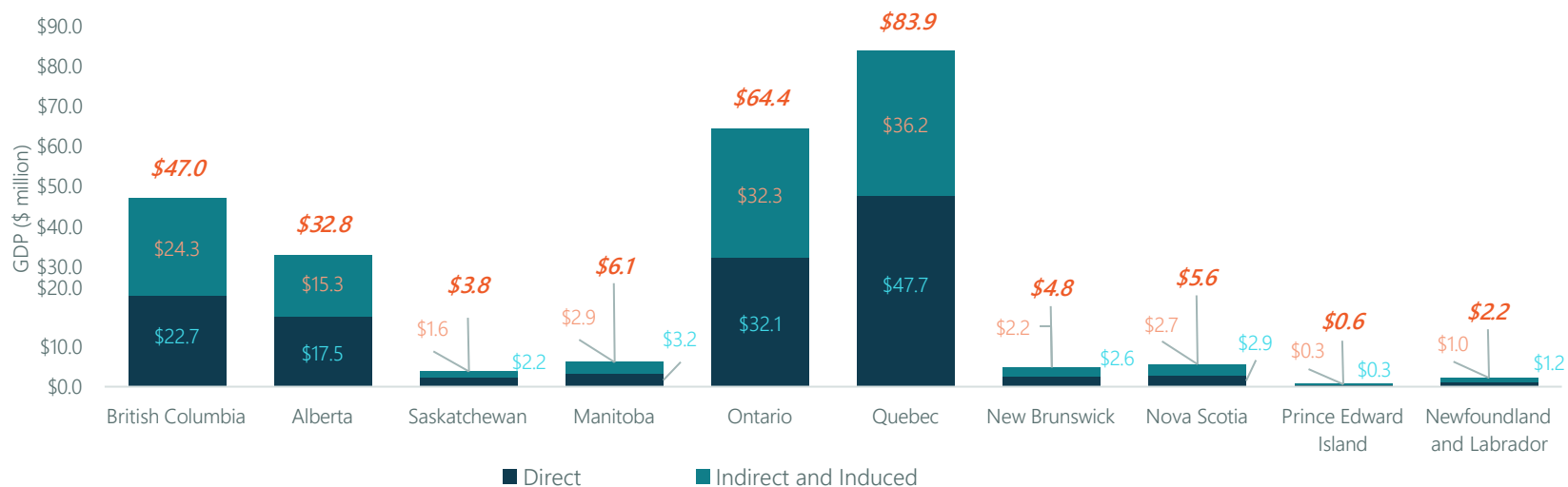


Figure 28: Economic Impacts of On-road Motorcycle and Parts and Accessories Sales (Taxes) (2022)

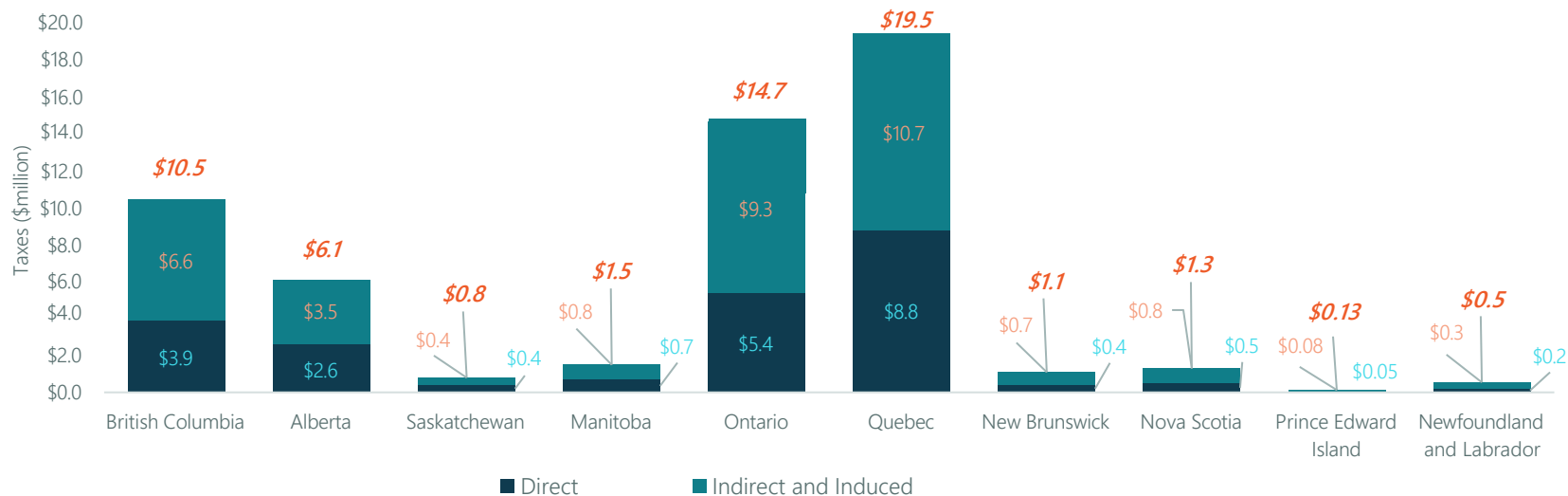
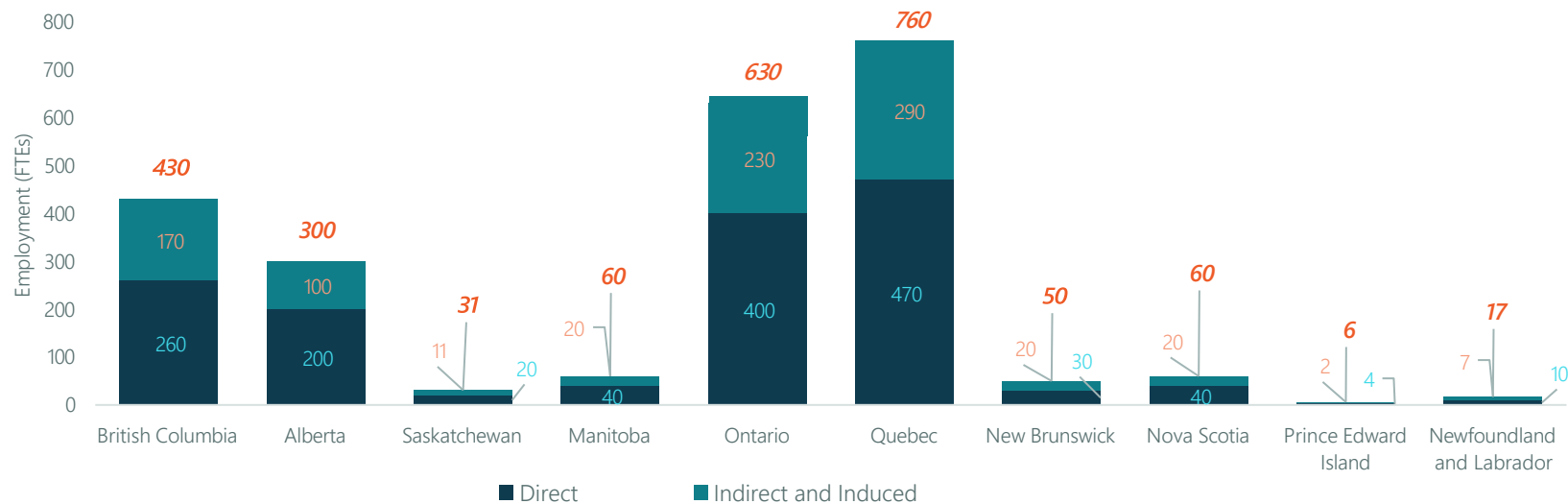


Figure 29: Economic Impacts of On-road Motorcycle and Parts and Accessories Sales (Employment) (2022)



Off-road Motorcycle

Figure 30: Economic Impacts of Off-road Motorcycles, Parts and Accessories Sales (Output) (2022)

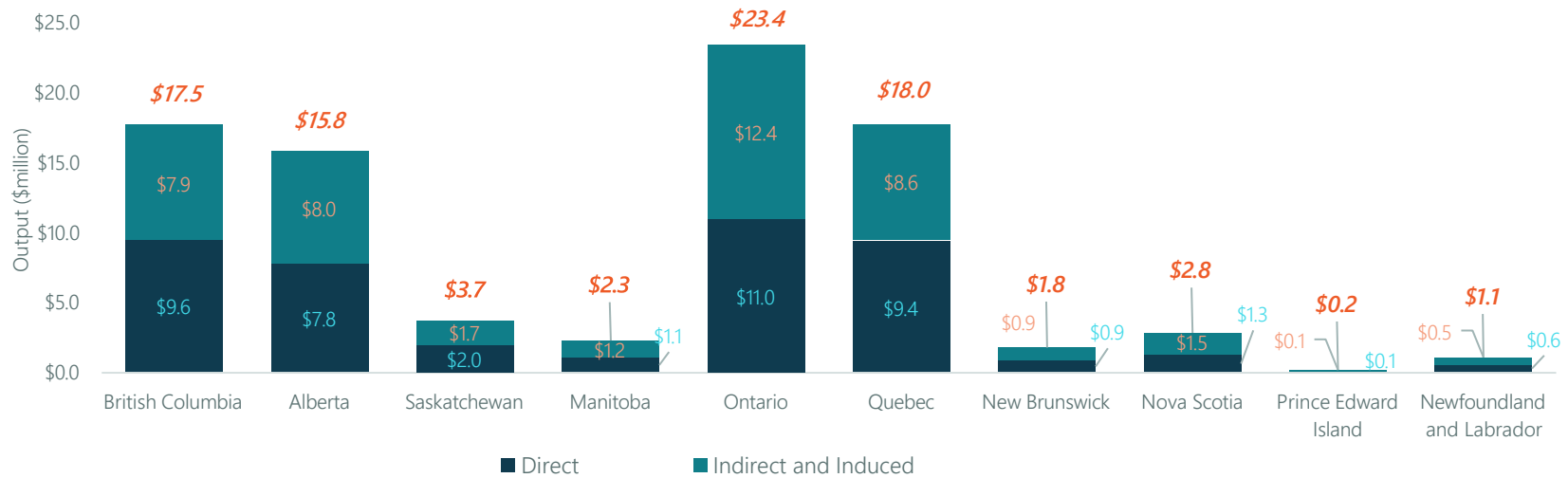


Figure 31: Economic Impacts of Off-road Motorcycles, Parts and Accessories Sales (GDP) (2022)

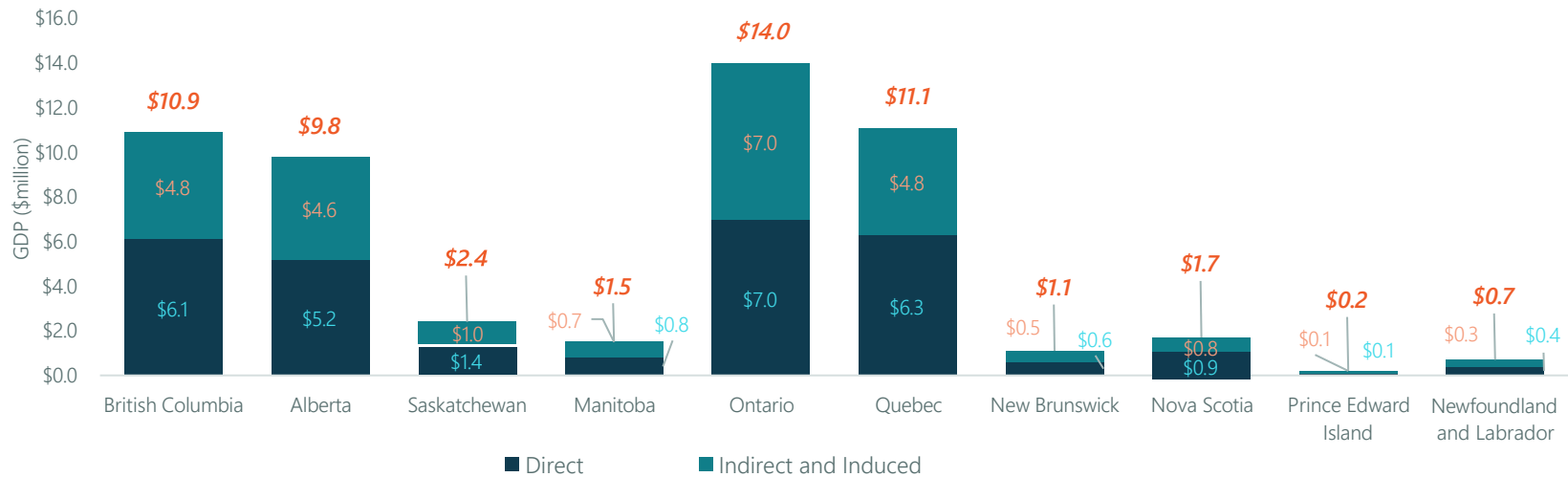


Figure 32: Economic Impacts of Off-road Motorcycles, Parts and Accessories Sales (Taxes) (2022)

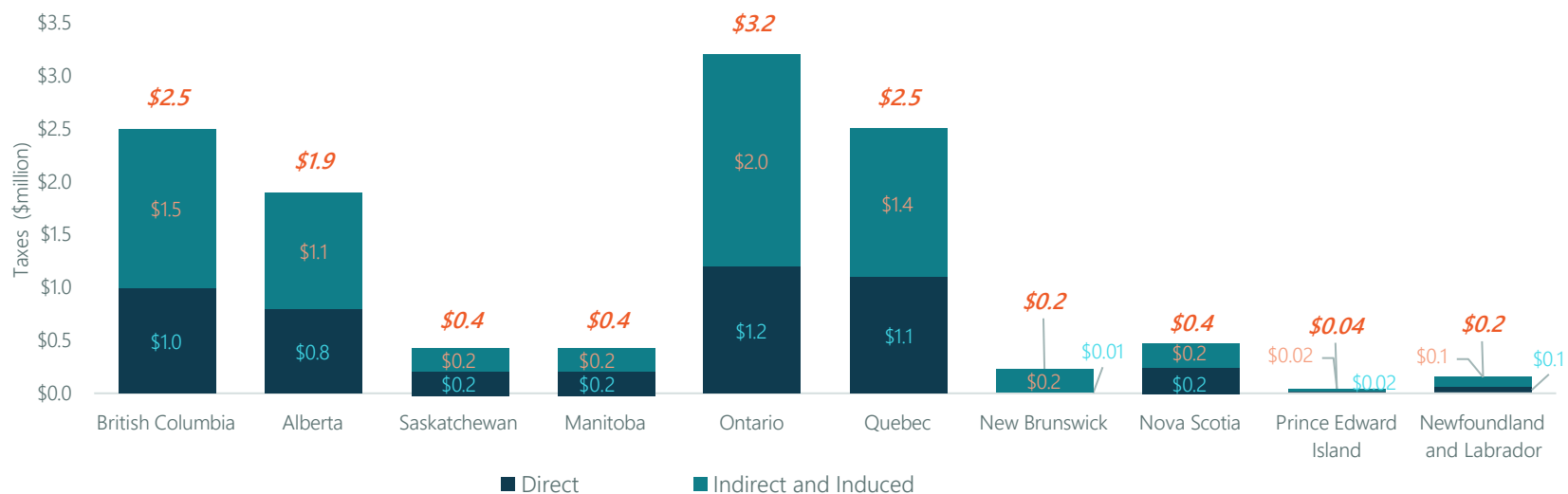
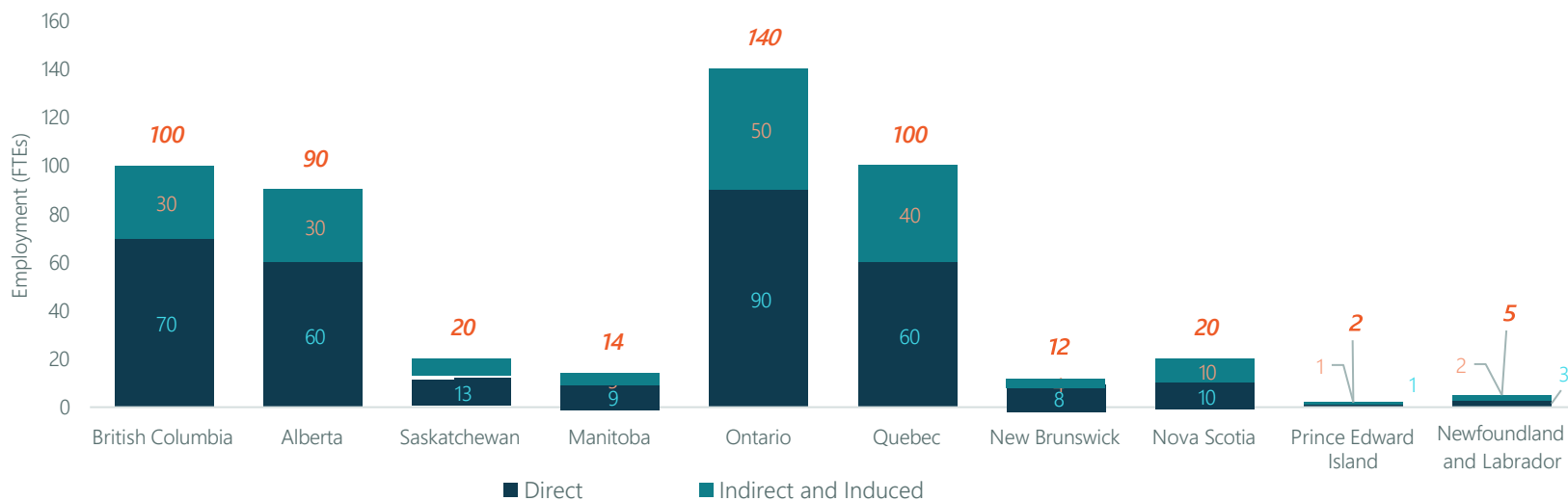


Figure 33: Economic Impacts of Off-road Motorcycles, Parts and Accessories Sales (Employment) - 2022



ATVs and Side-by-Sides

Figure 34: Economic Impacts of ATVs and Side-by-Sides, Parts and Accessories Sales (Output) - 2022

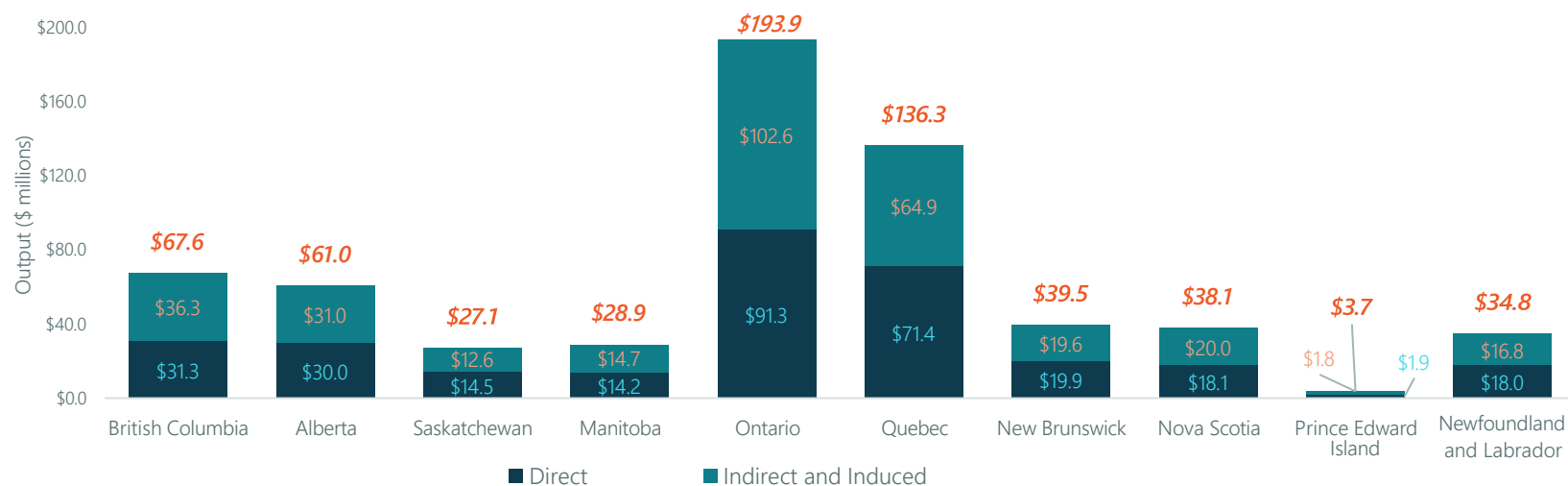


Figure 35: Economic Impacts of ATVs and Side-by-Sides, Parts and Accessories Sales (GDP) - 2022

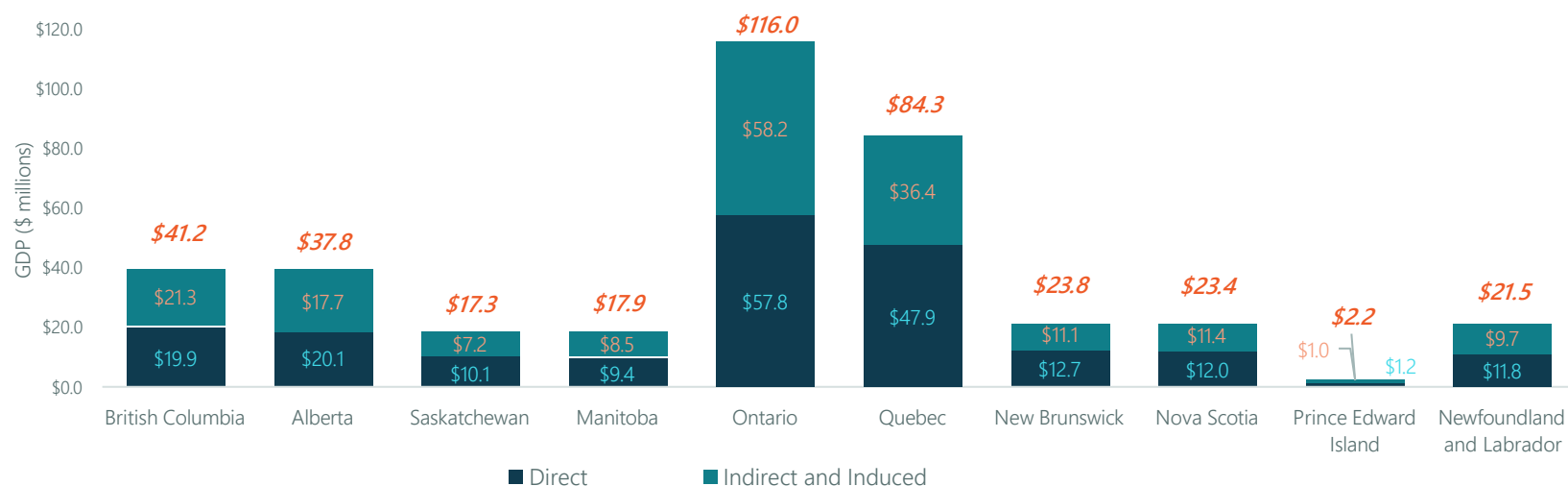


Figure 36: Economic Impacts of ATVs and Side-by-Sides, Parts and Accessories Sales (Taxes) - 2022

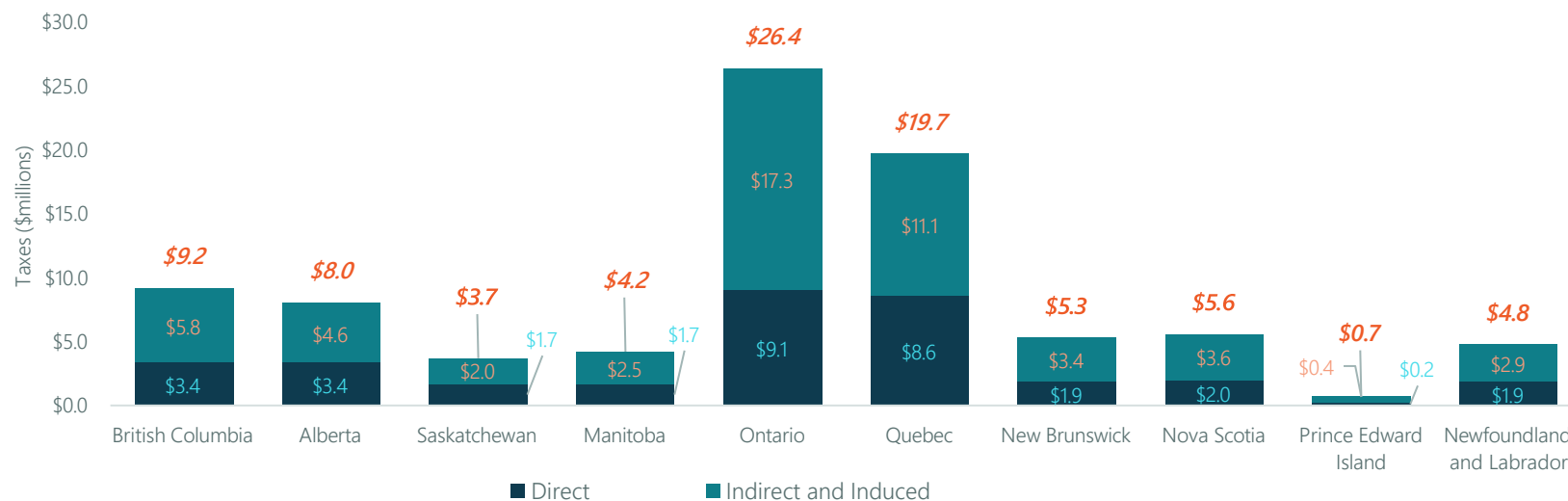
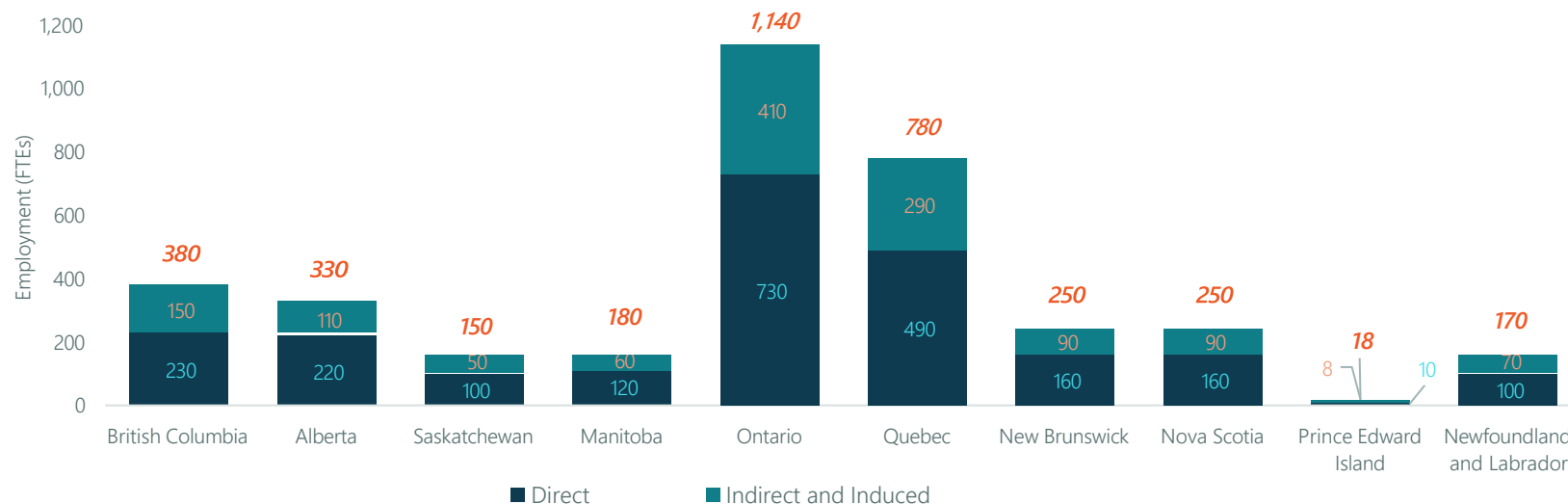


Figure 37: Economic Impacts of ATVs and Side-by-Sides, Parts and Accessories Sales (Employment) - 2022



Economic Impacts of Tourism

On-road Motorcycle

Figure 38: Economic Impacts of Tourism Spending on On-road Motorcycle Trips (Output) - 2022

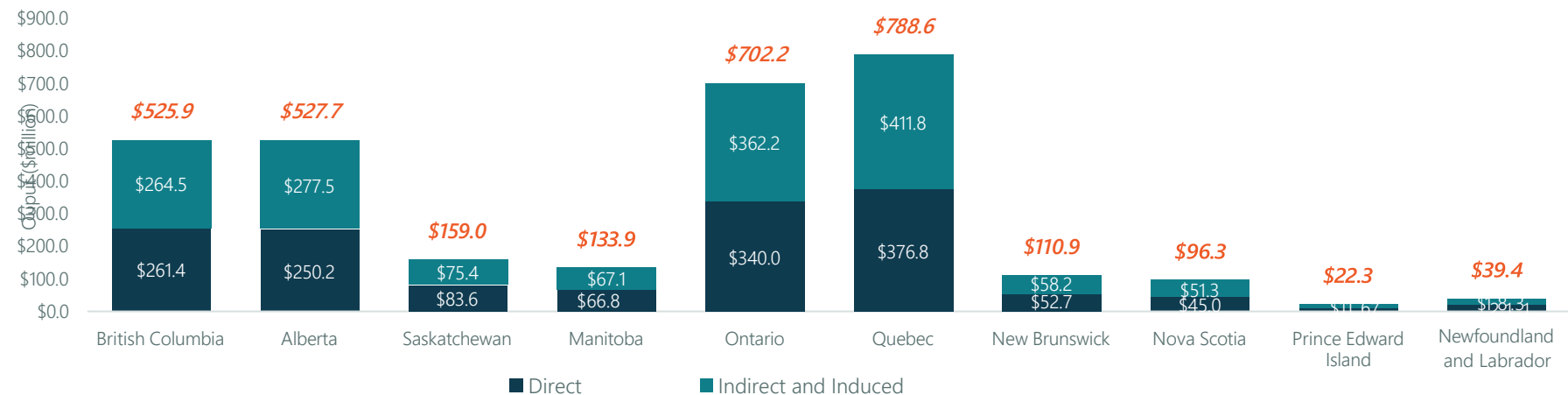


Figure 39: Economic Impacts of Tourism Spending on On-road Motorcycle Trips (GDP) - 2022

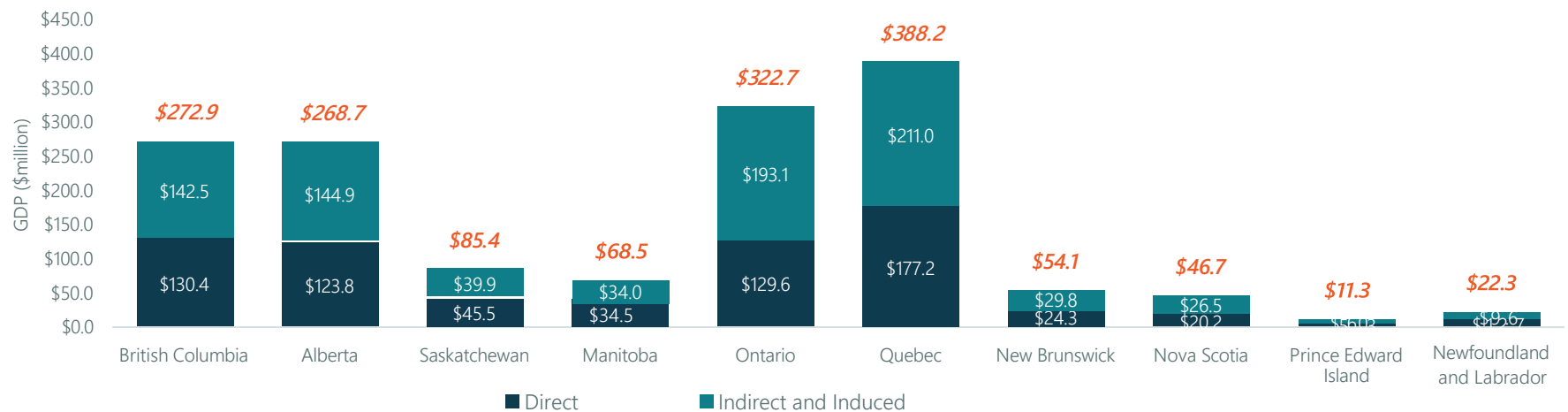


Figure 40: Economic Impacts of Tourism Spending on On-road Motorcycle Trips (Taxes) - 2022

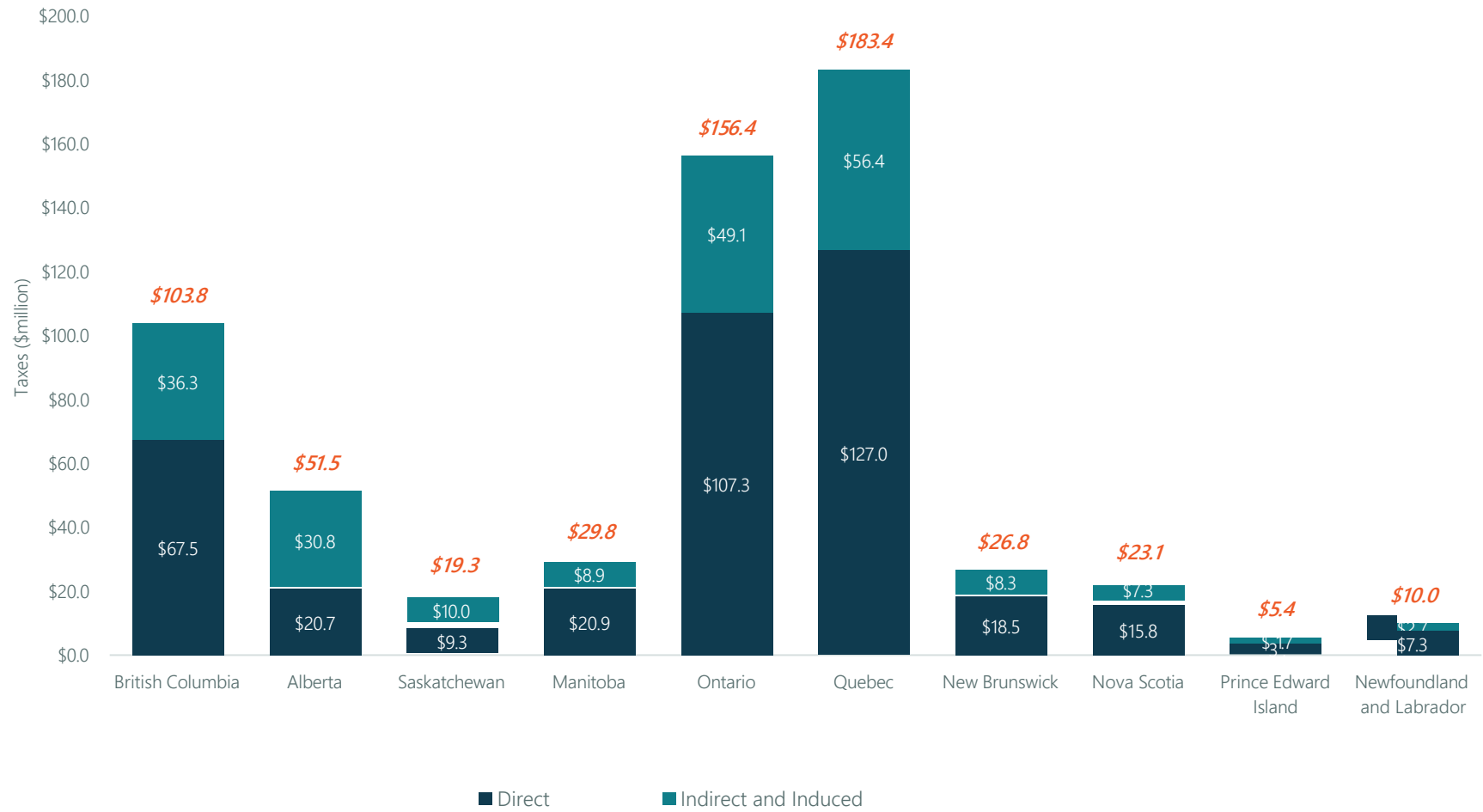
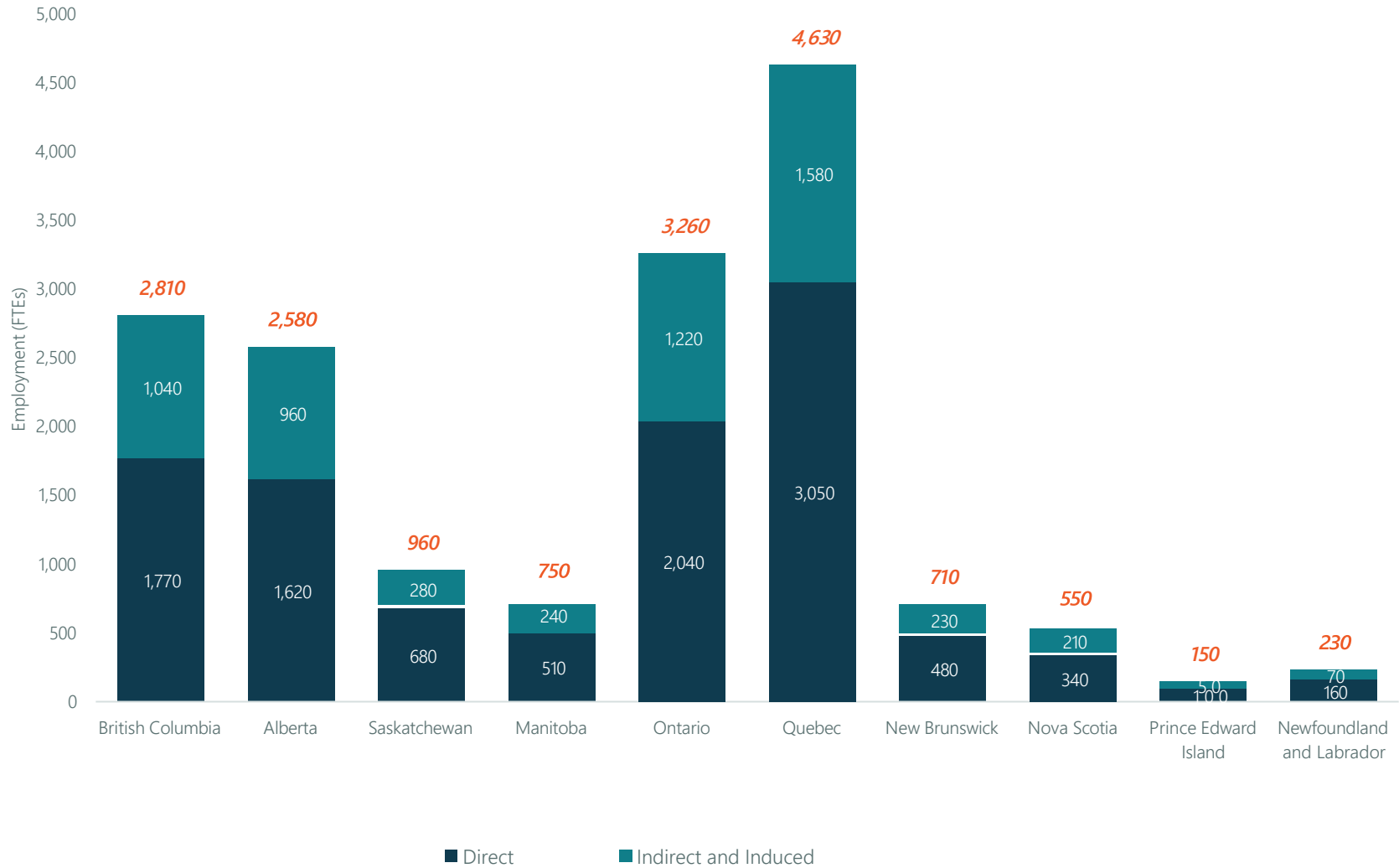


Figure 41: Economic Impacts of Tourism Spending on On-road Motorcycle Trips (Employment) - 2022



Off-road Motorcycle

Figure 42: Economic Impacts of Tourism Spending on Off-road Motorcycle Trips (Output) - 2022

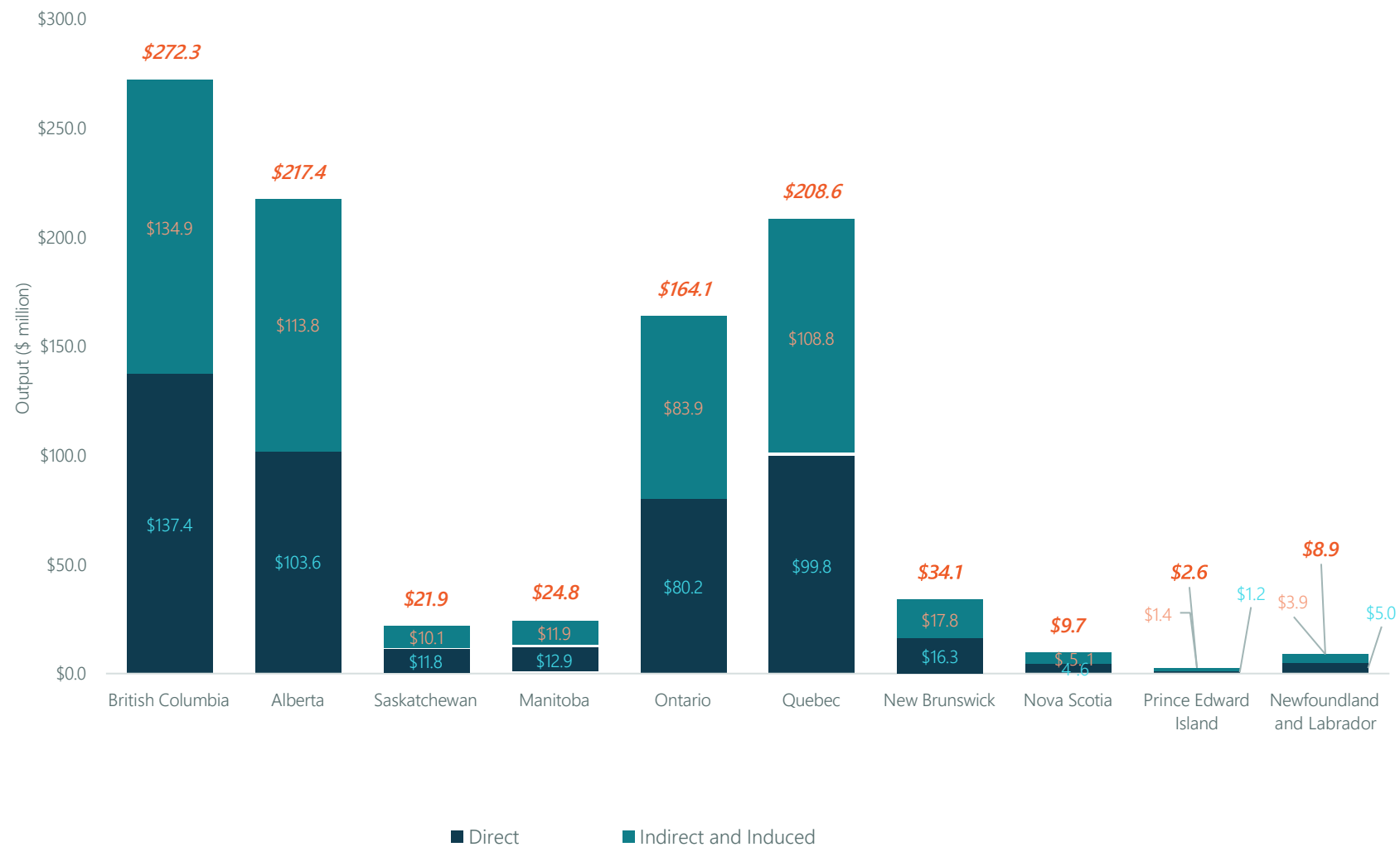


Figure 43: Economic Impacts of Tourism Spending on Off-road Motorcycle Trips (GDP) - 2022

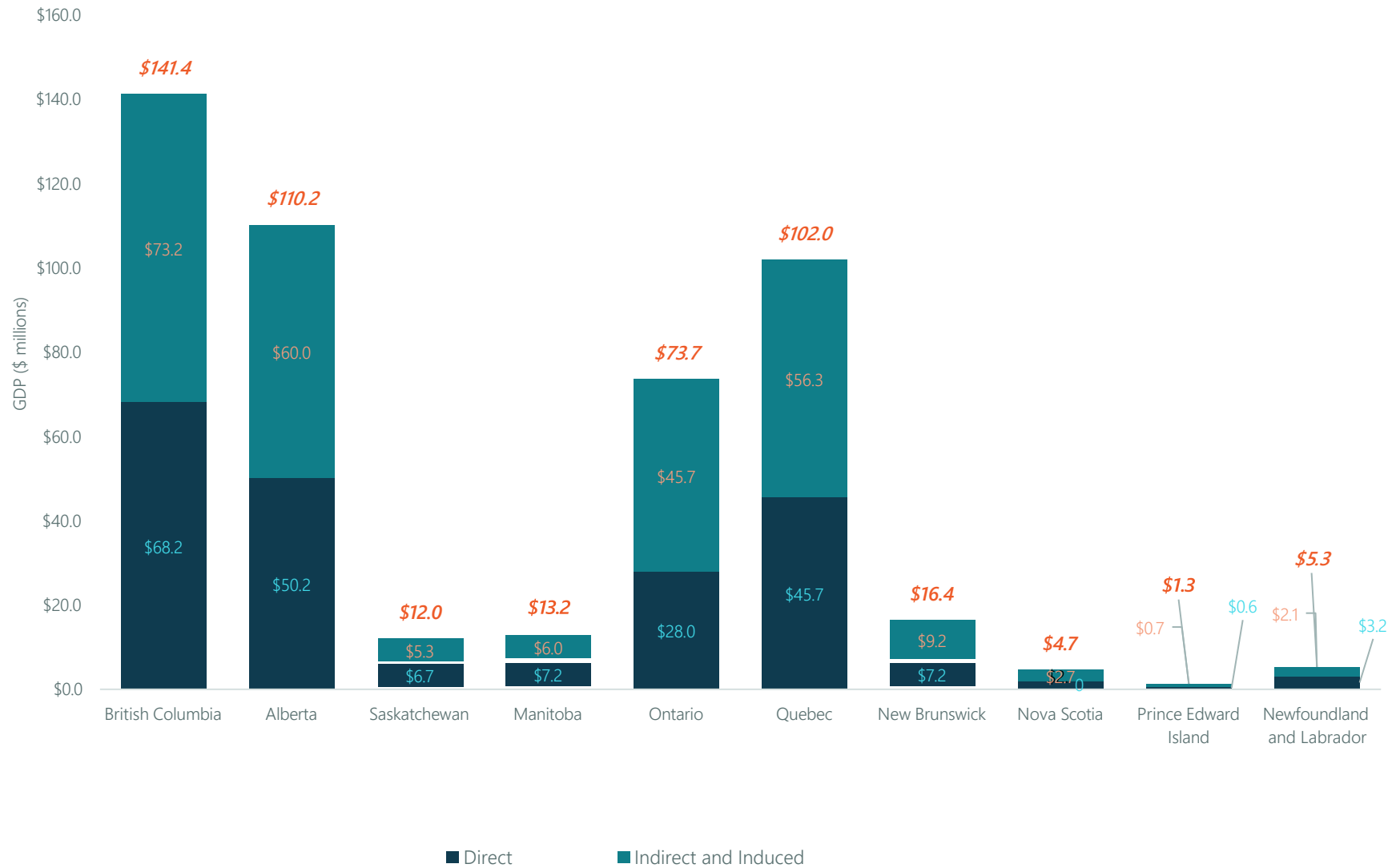
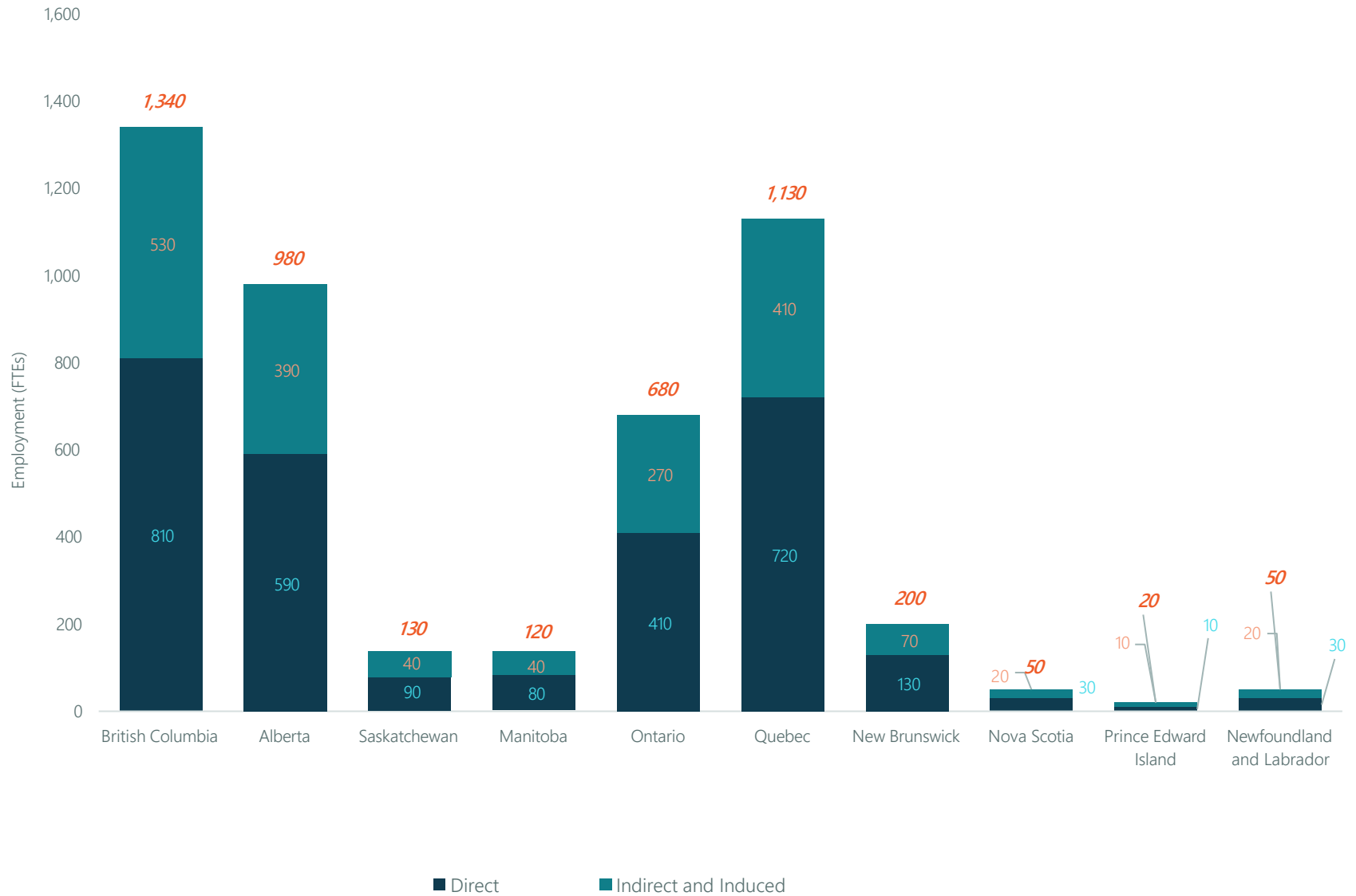


Figure 44: Economic Impacts of Tourism Spending on Off-road Motorcycle Trips (Taxes) - 2022



Figure 45: Economic Impacts of Tourism Spending on Off-road Motorcycle Trips (Employment) - 2022



ATVs and Side-by-Sides

Figure 46: Economic Impacts of Tourism Spending on ATV and Side-by-Side Trips (Output) - 2022

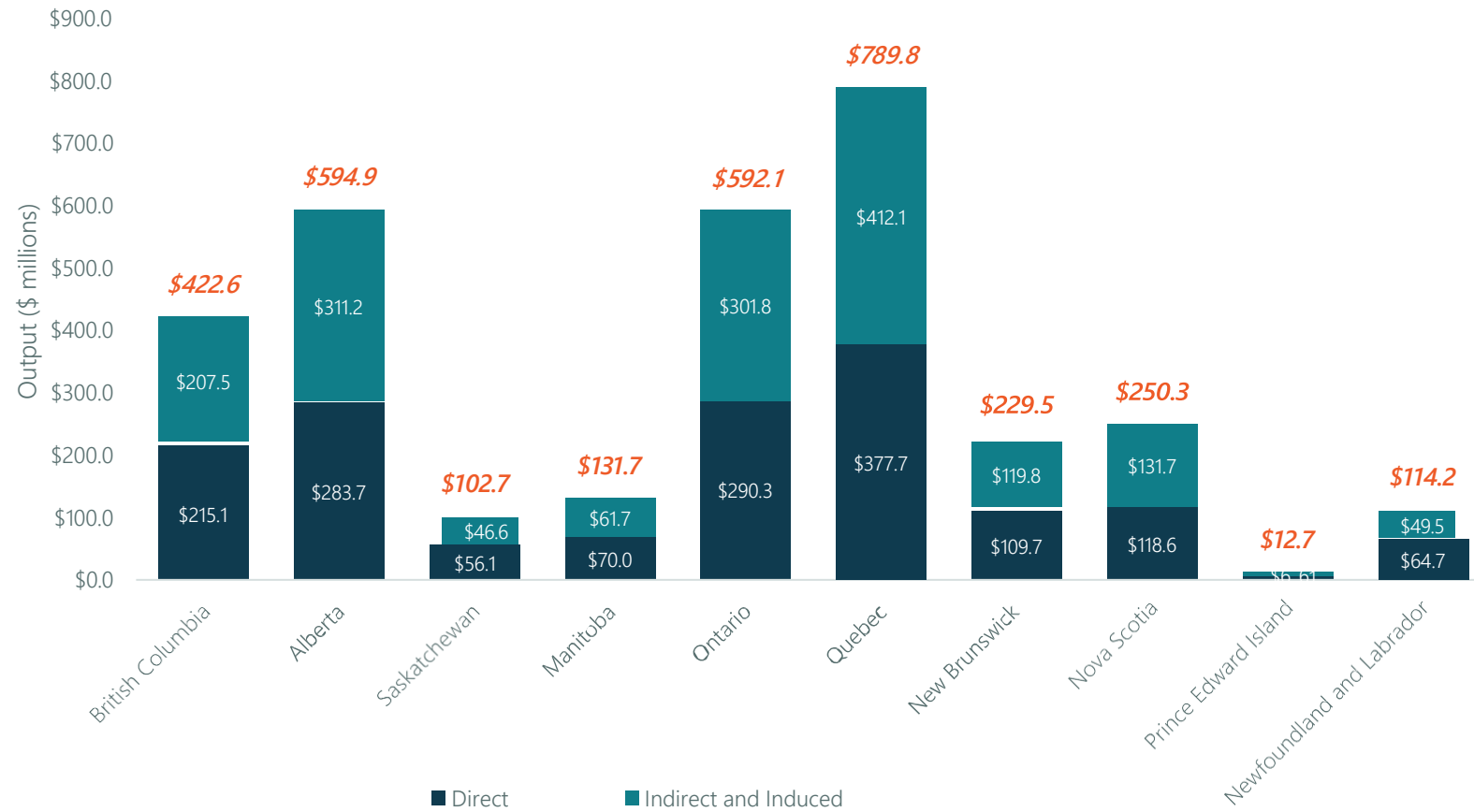


Figure 47: Economic Impacts of Tourism Spending on ATV and Side-by-Side Trips (GDP) - 2022

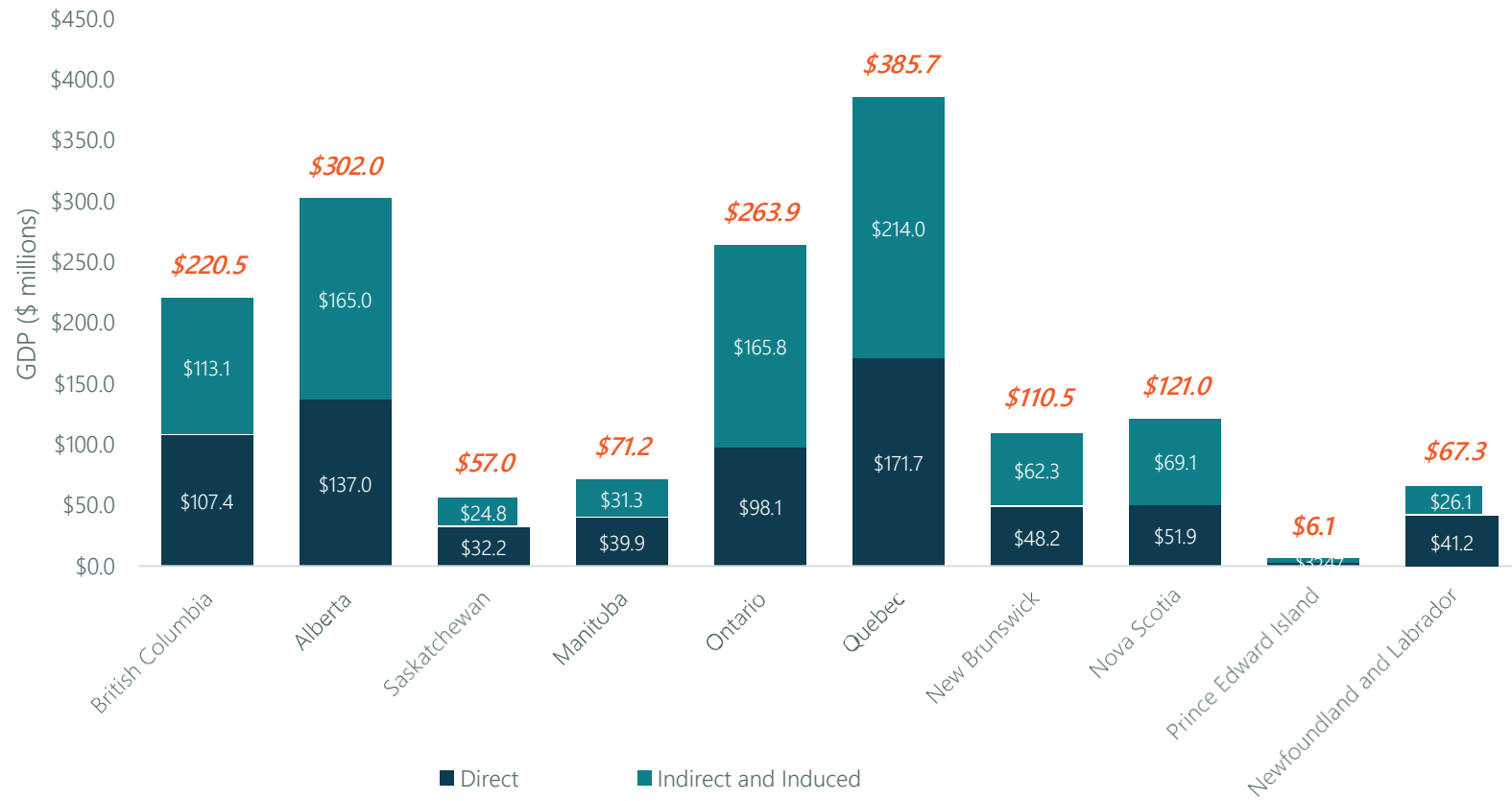


Figure 48: Economic Impacts of Tourism Spending on ATV and Side-by-Side Trips (Taxes) - 2022

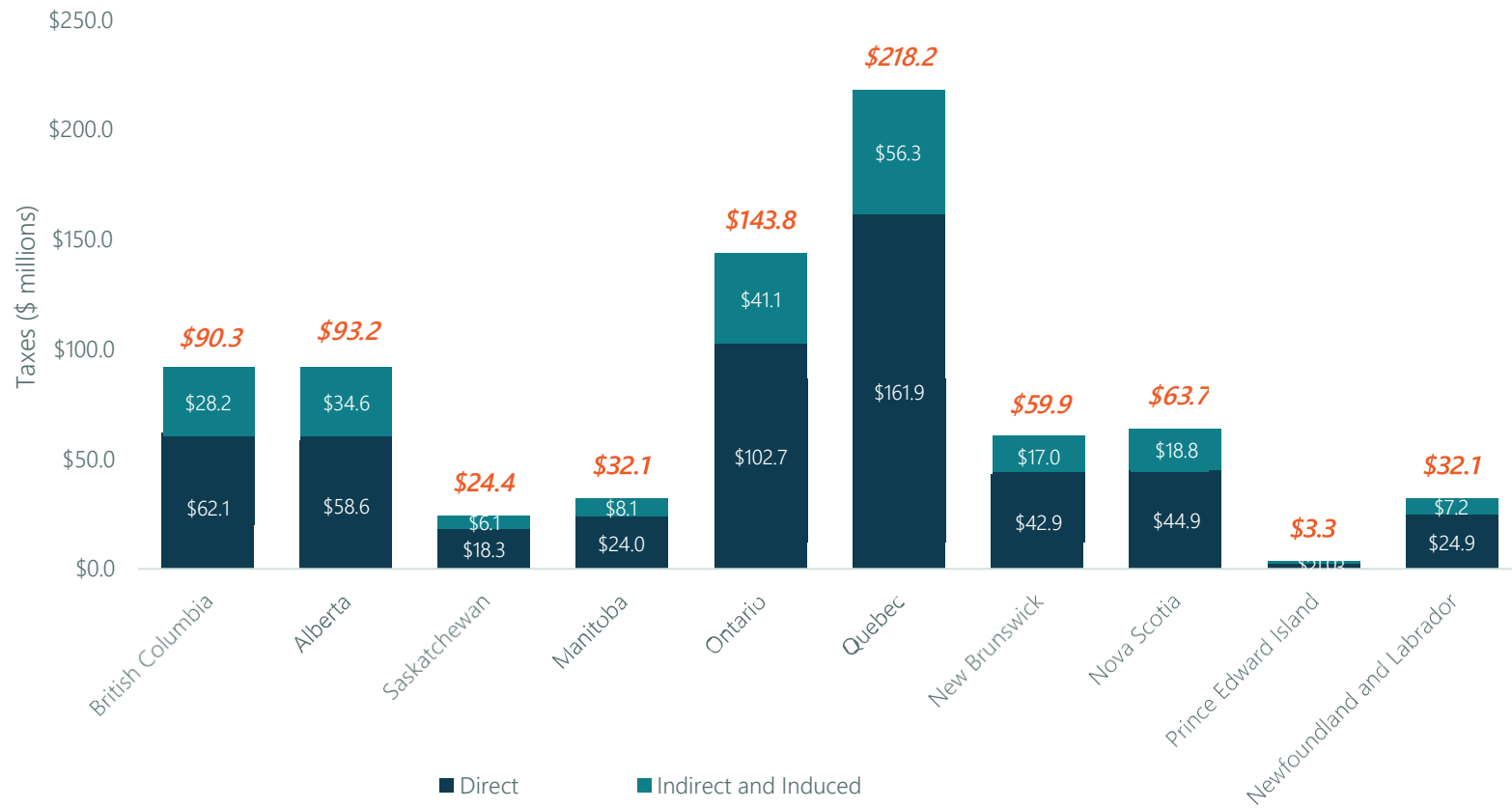
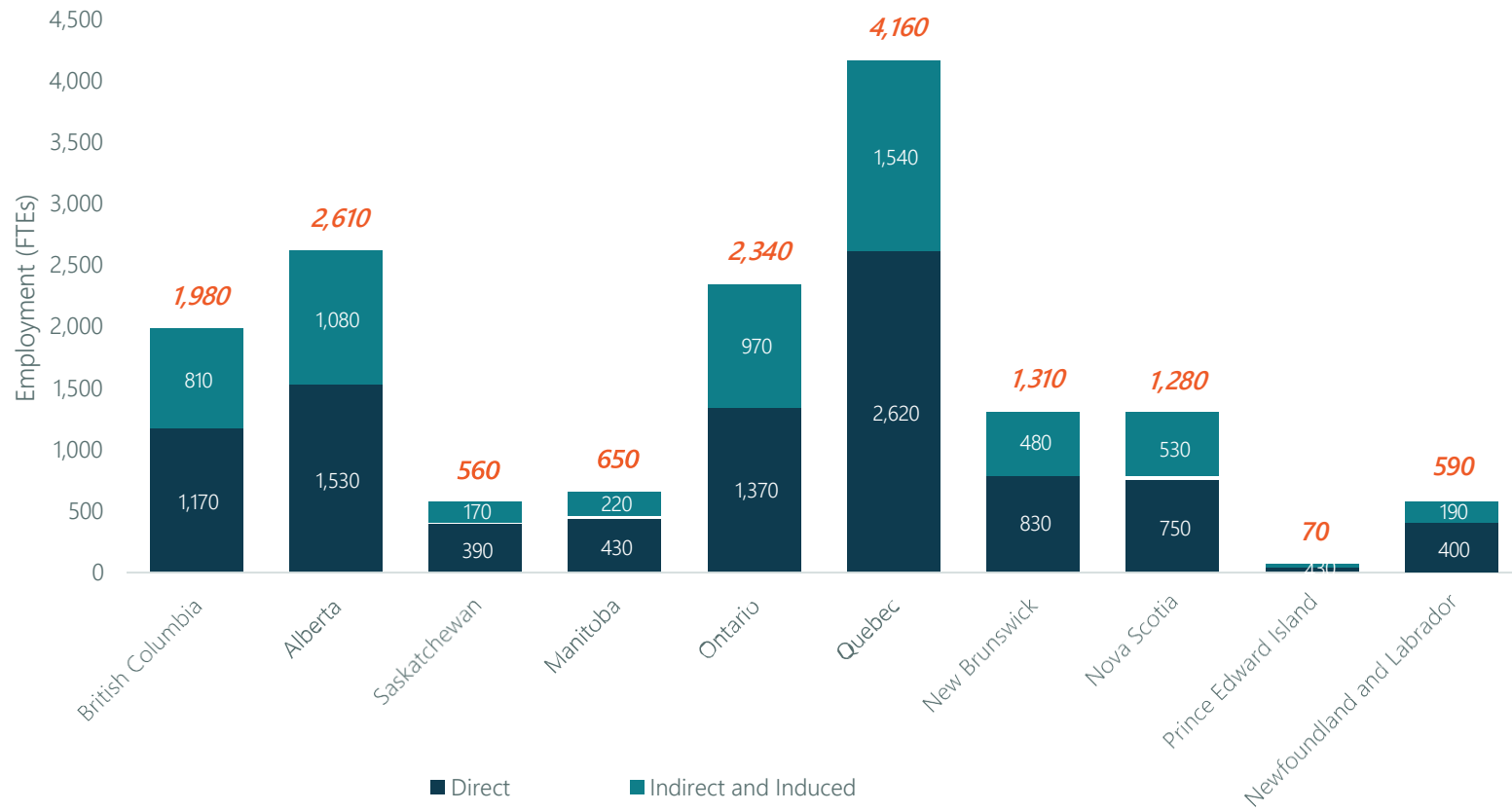


Figure 49: Economic Impacts of Tourism Spending on ATV and Side-by-Side Trips (Employment) - 2022



Economic Impacts of Other Spending

On-road Motorcycle

Figure 50: Economic Impacts of Other Spending on On-road Motorcycles (Output) - 2022

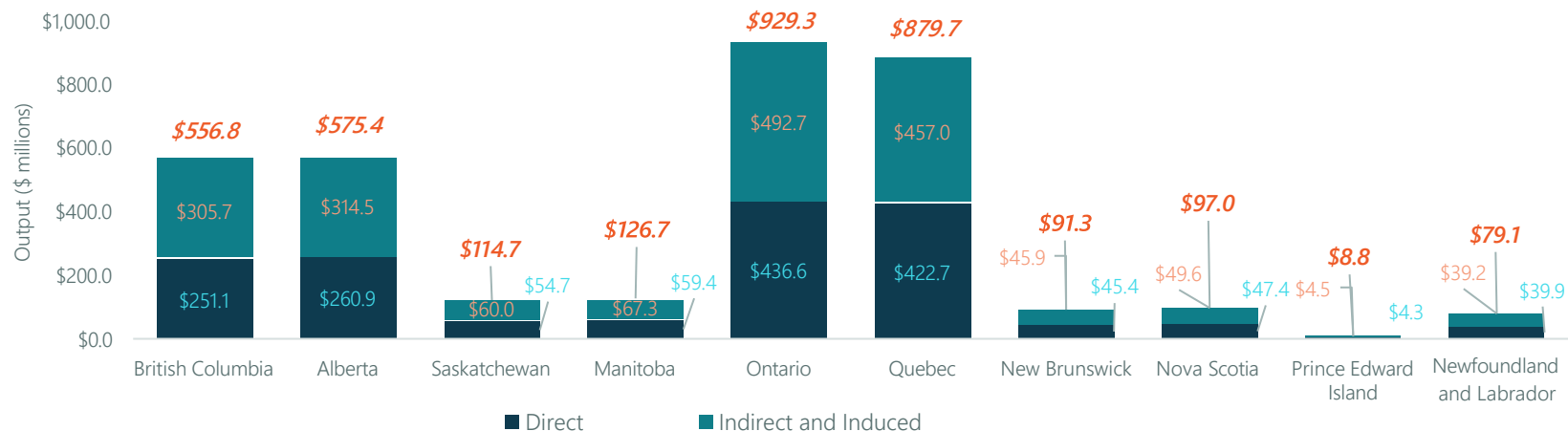


Figure 51: Economic Impacts of Other Spending on On-road Motorcycles (GDP) - 2022

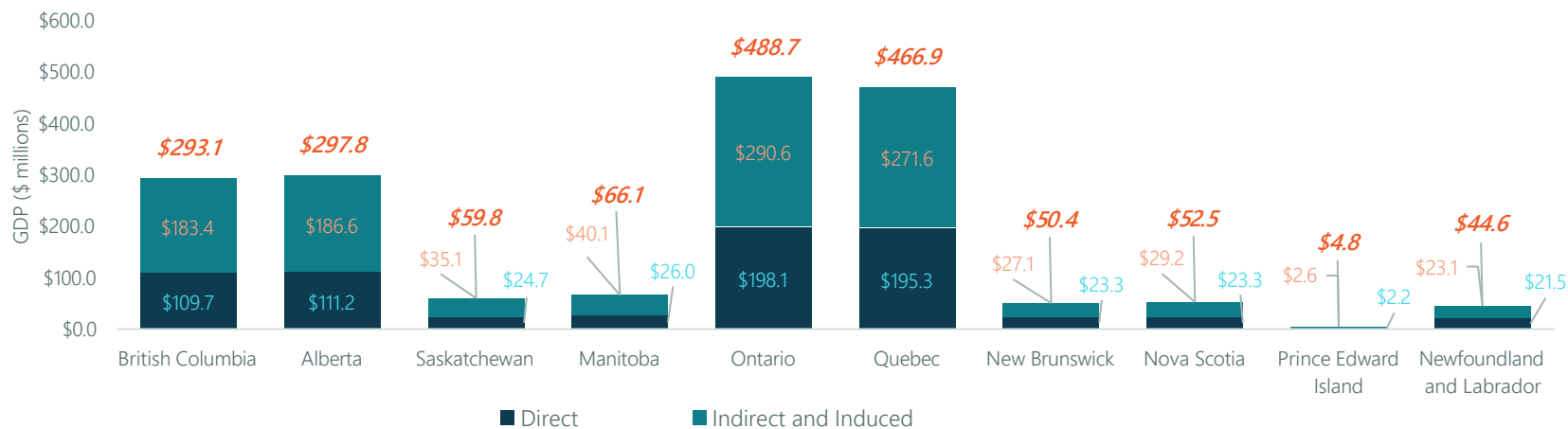


Figure 52: Economic Impacts of Other Spending on On-road Motorcycles (Taxes) - 2022

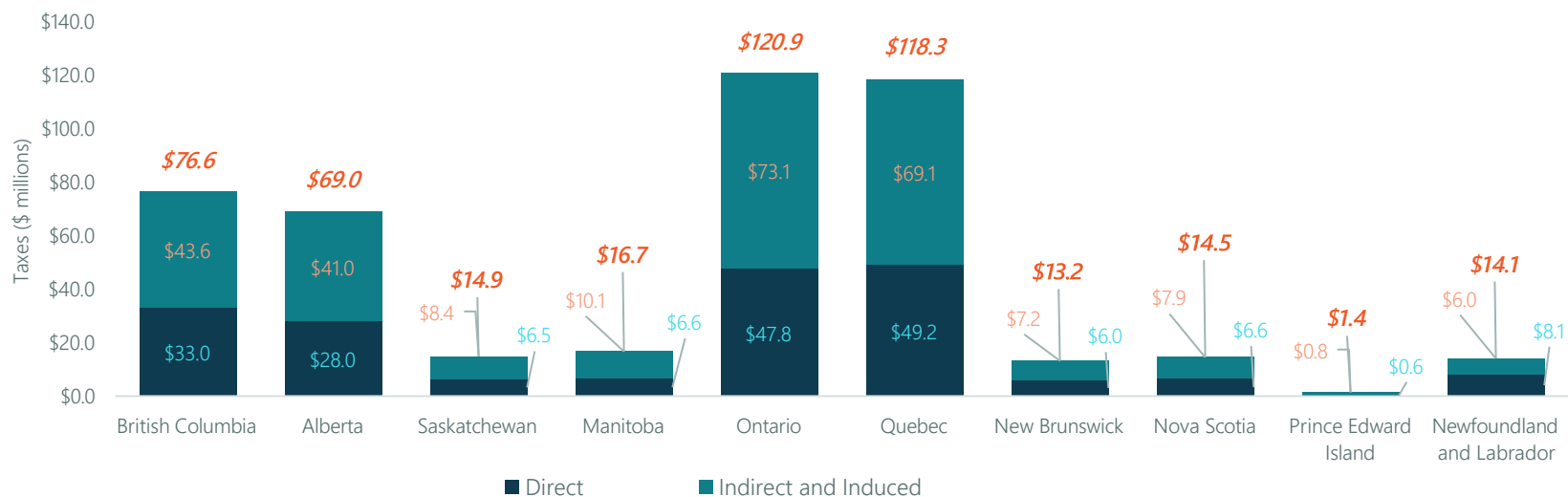
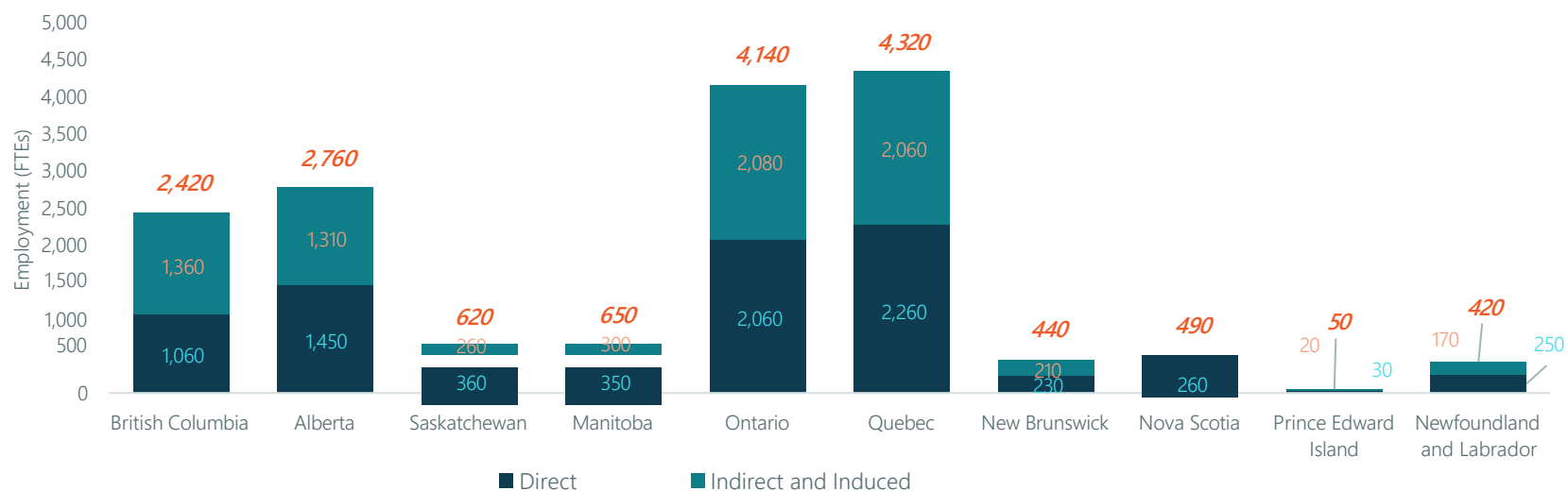


Figure 53: Economic Impacts of Other Spending on On-road Motorcycles (Employment) - 2022



Off-road Motorcycles

Figure 54: Economic Impacts of Other Spending on Off-road Motorcycles (Output) - 2022

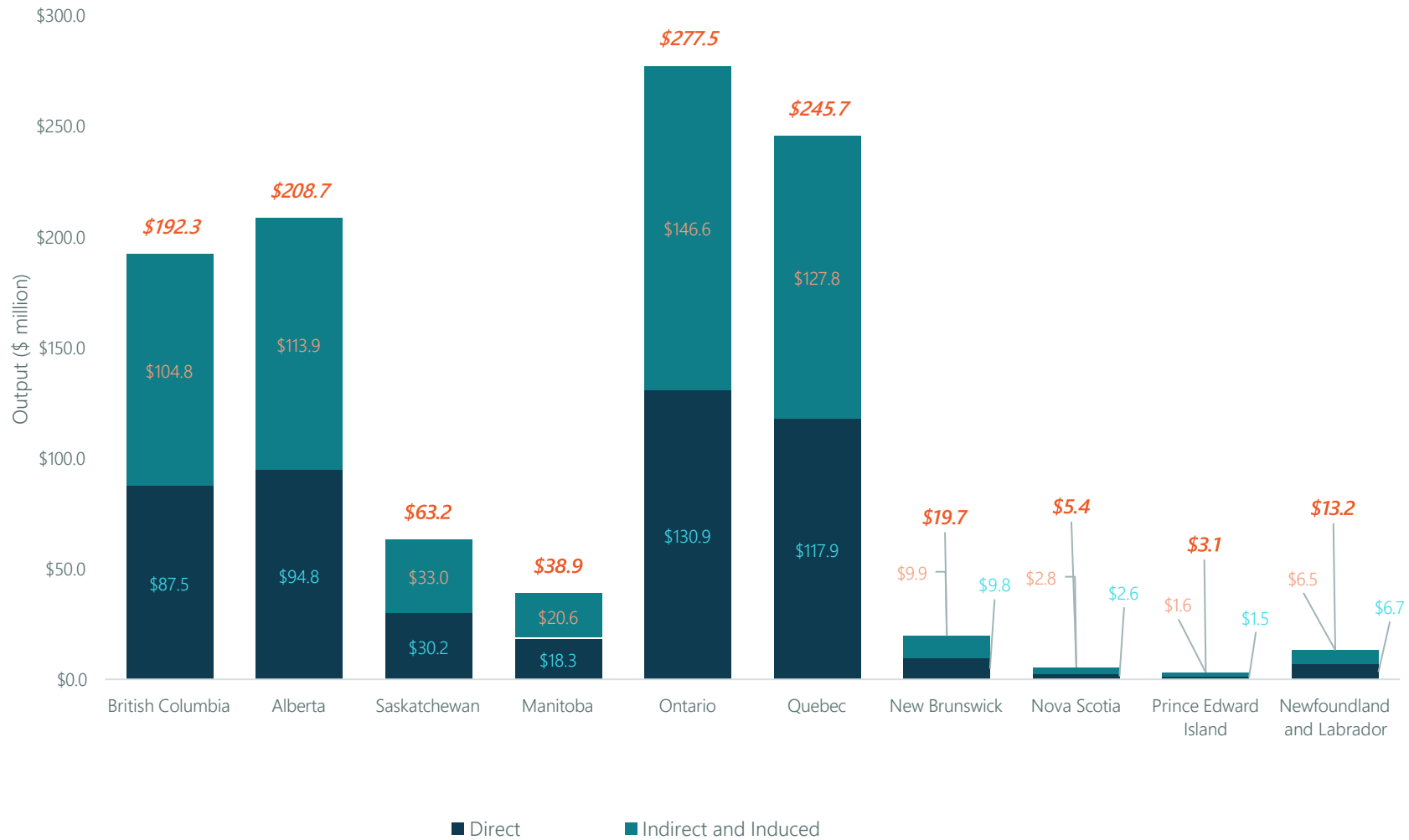


Figure 55: Economic Impacts of Other Spending on Off-road Motorcycles (GDP) - 2022

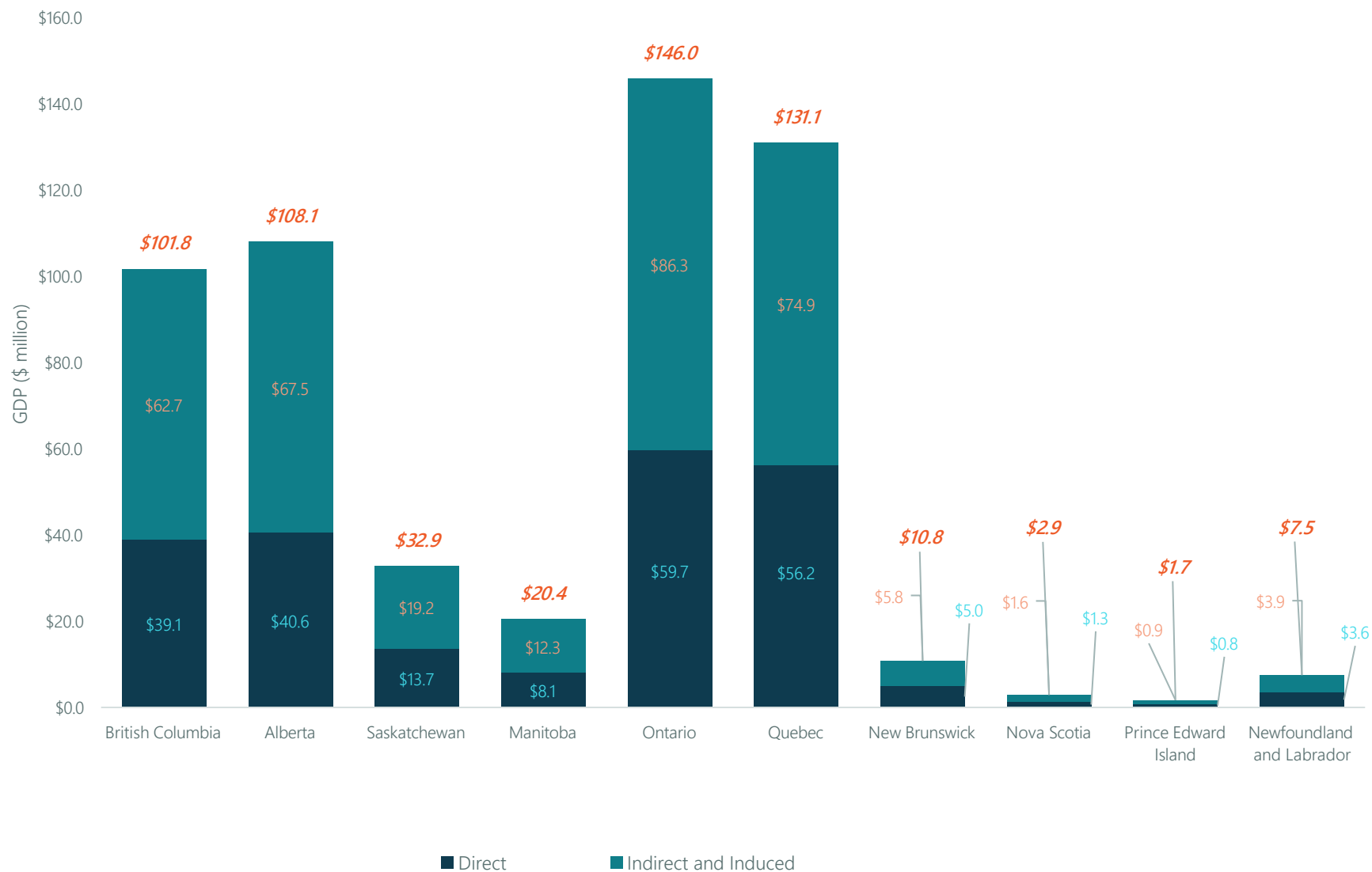


Figure 56: Economic Impacts of Other Spending on Off-road Motorcycles (Taxes) - 2022

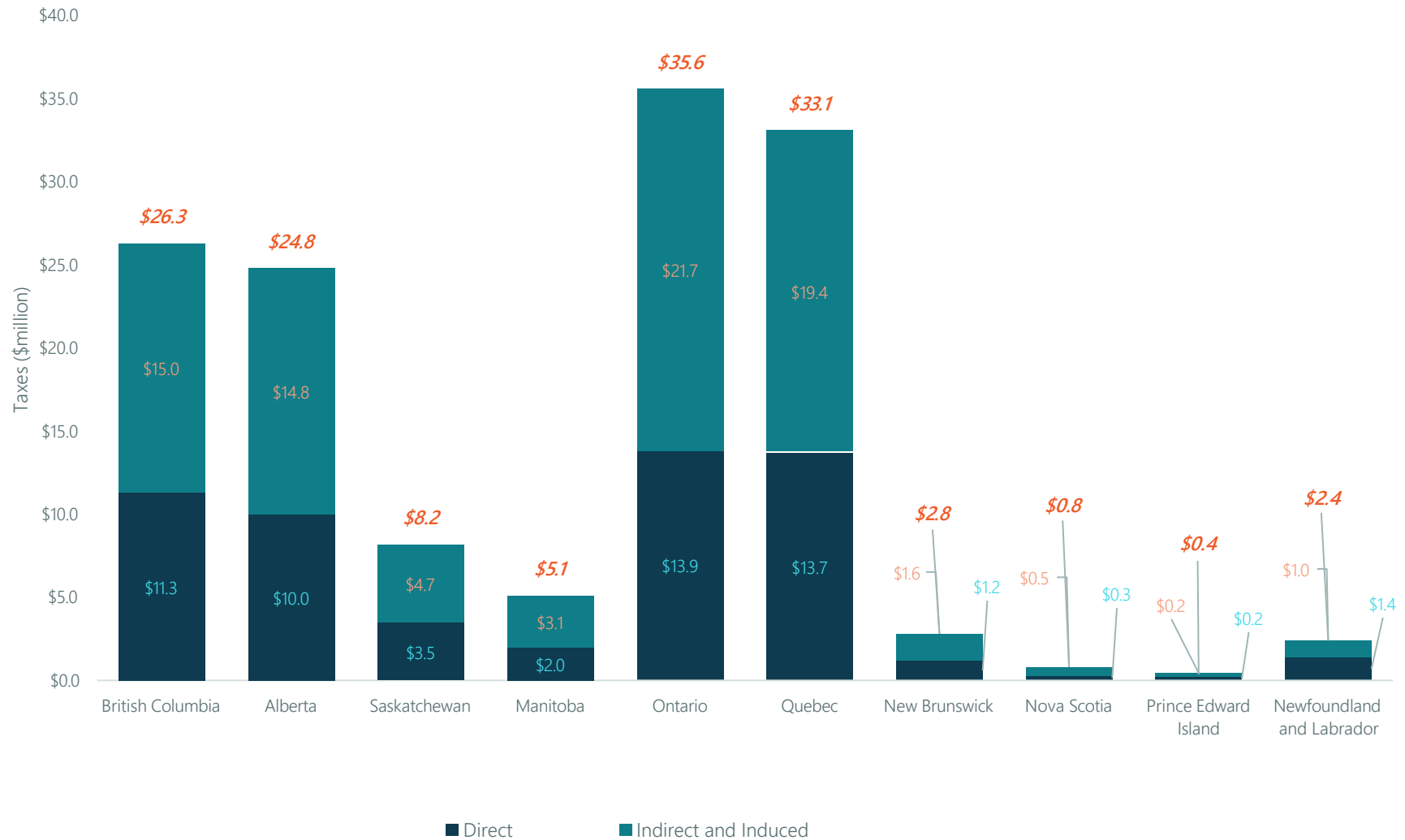
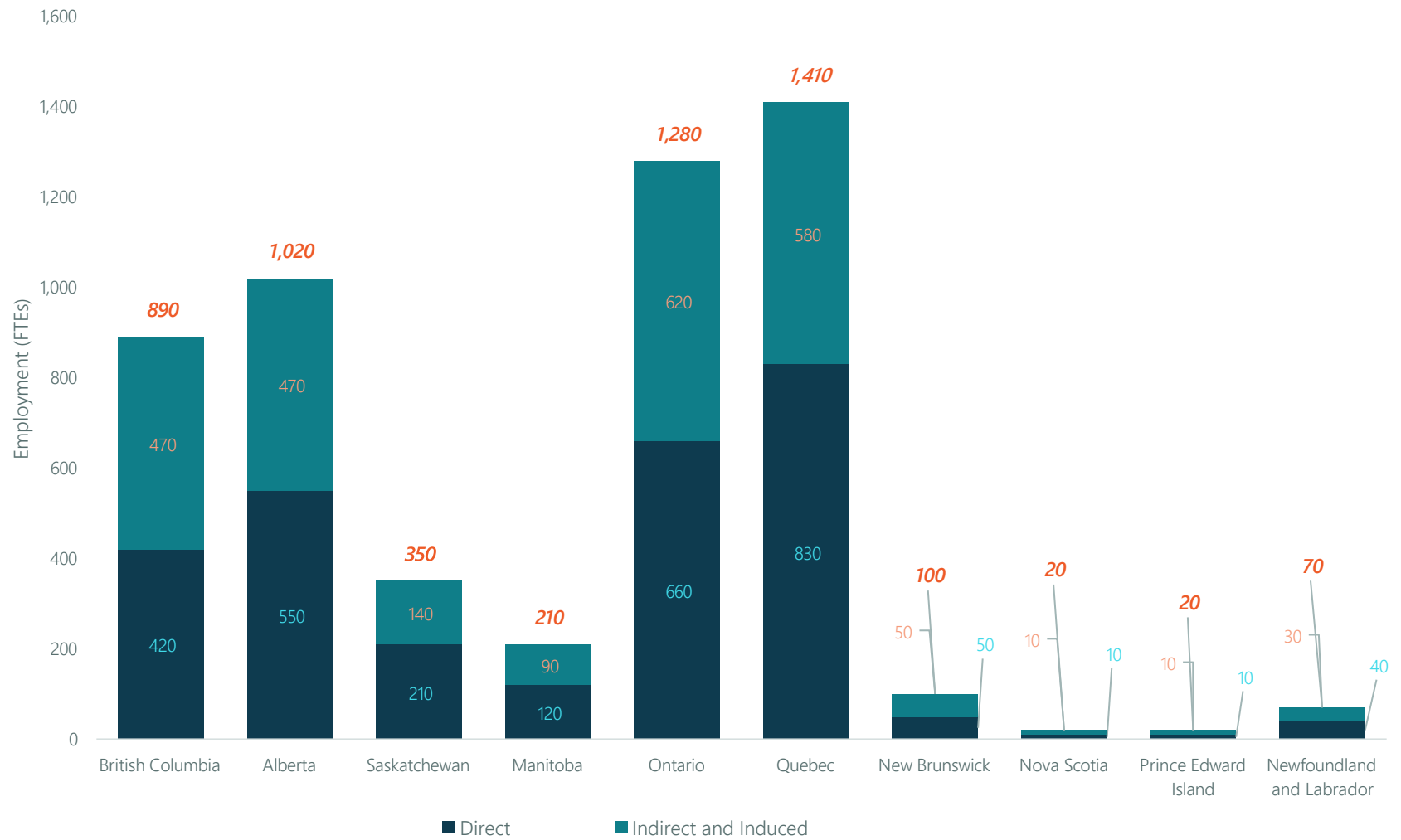


Figure 57: Economic Impacts of Other Spending on Off-road Motorcycles (Employment) - 2022



ATVs and Side-by-Sides

Figure 58: Economic Impacts of Other Spending on ATVs and Side-by-Sides (Output) - 2022

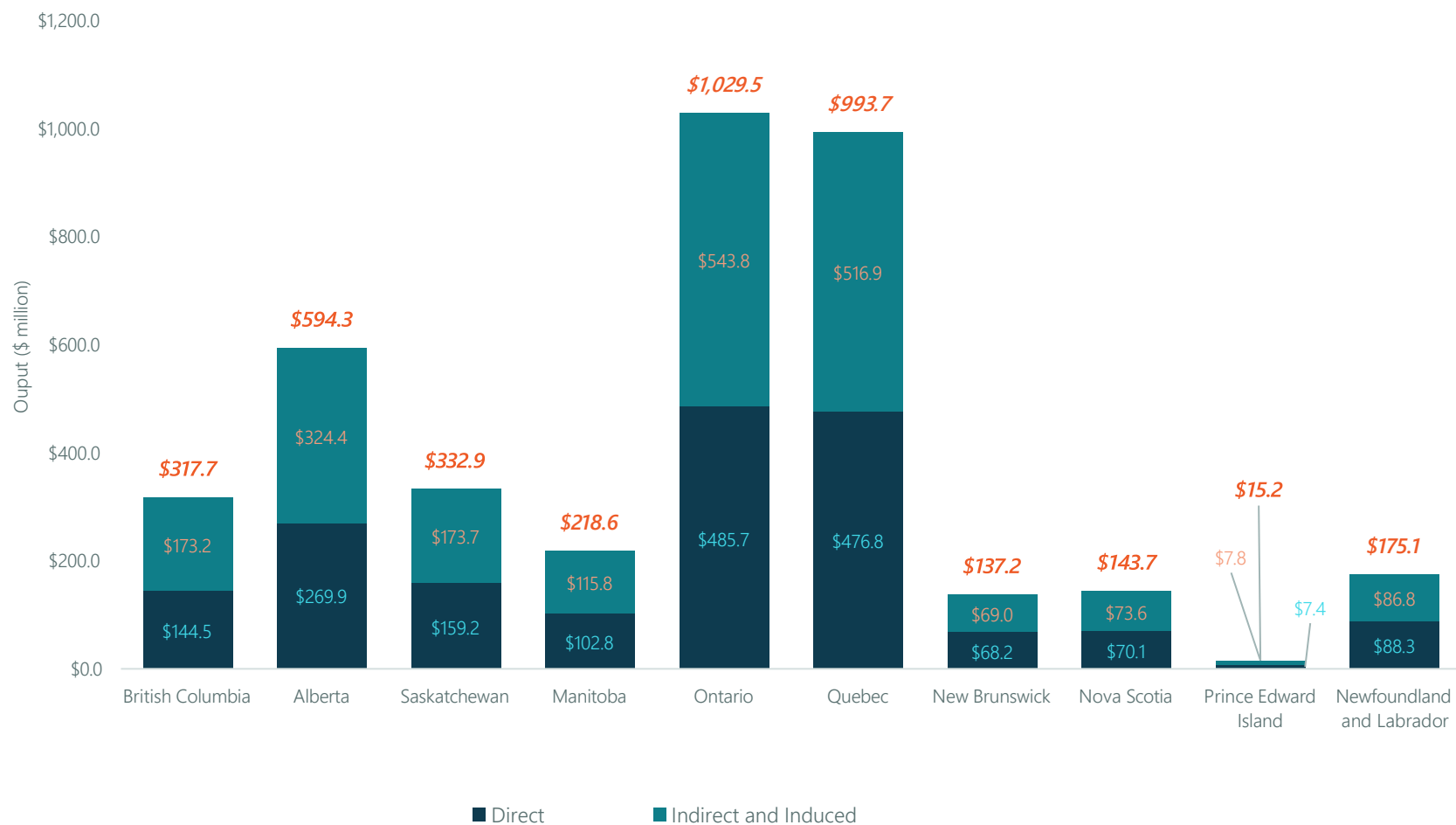


Figure 59: Economic Impacts of Other Spending on ATVs and Side-by-Sides (GDP) - 2022

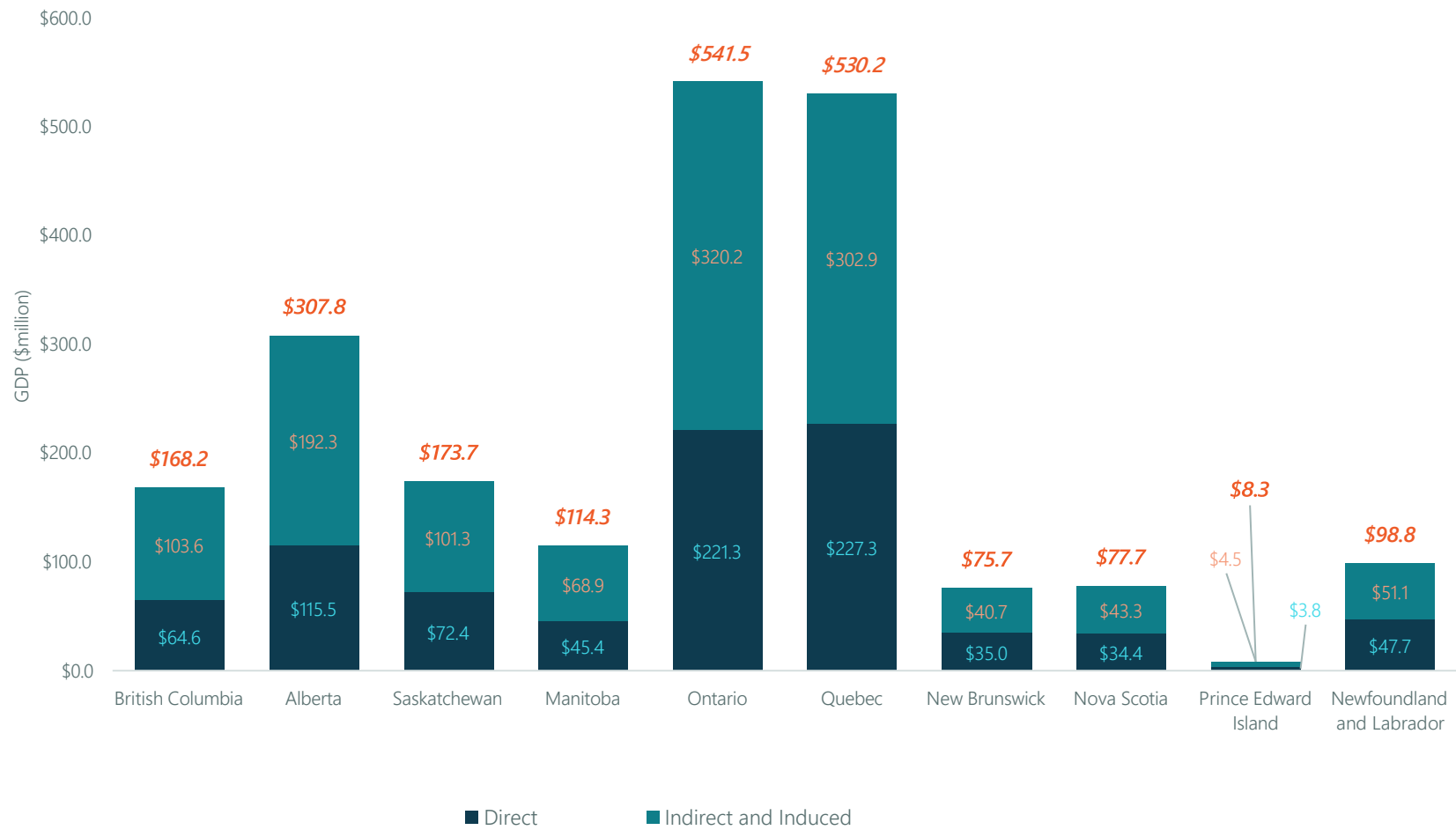


Figure 60: Economic Impacts of Other Spending on ATVs and Side-by-Sides (Taxes) - 2022

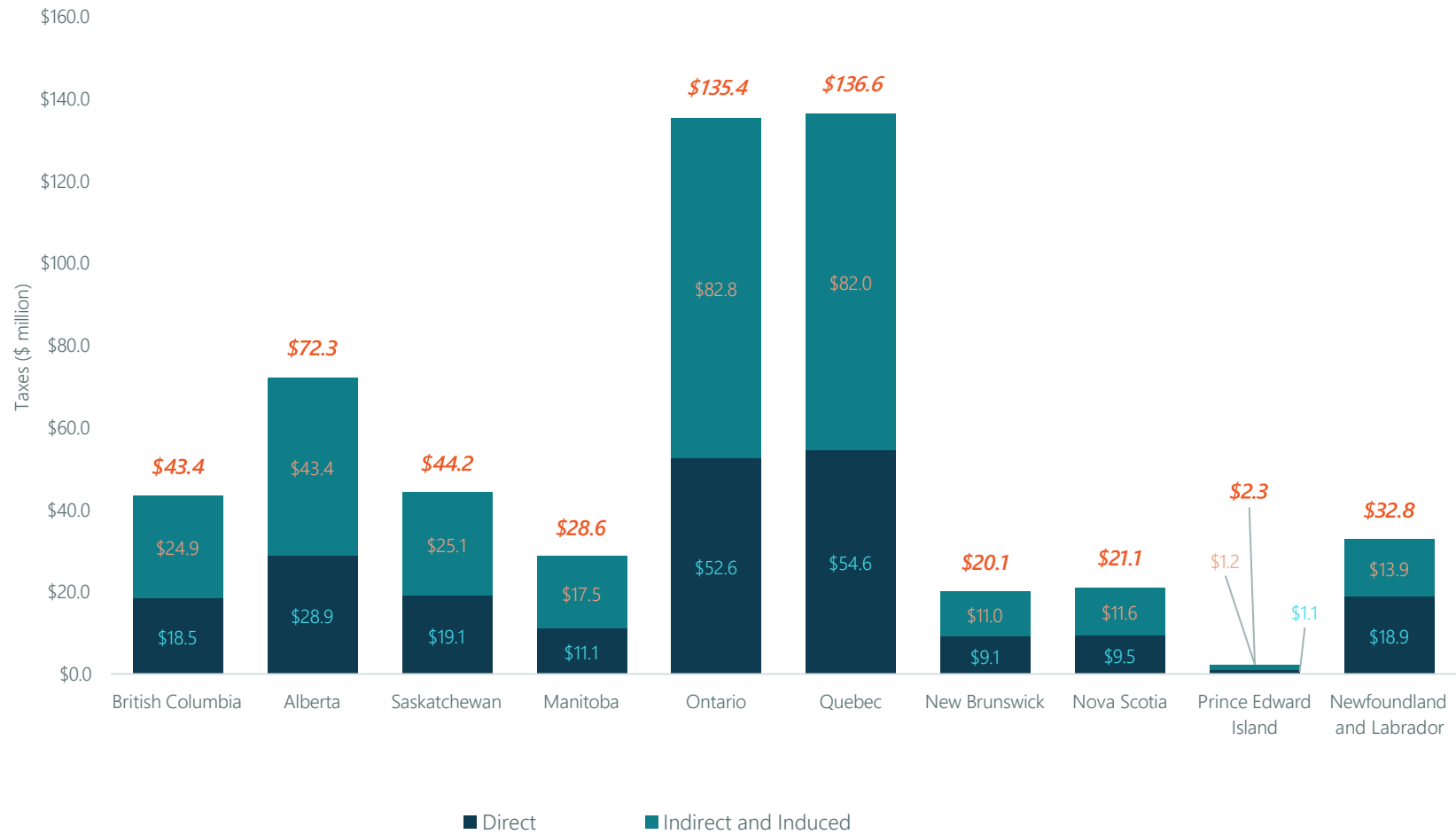
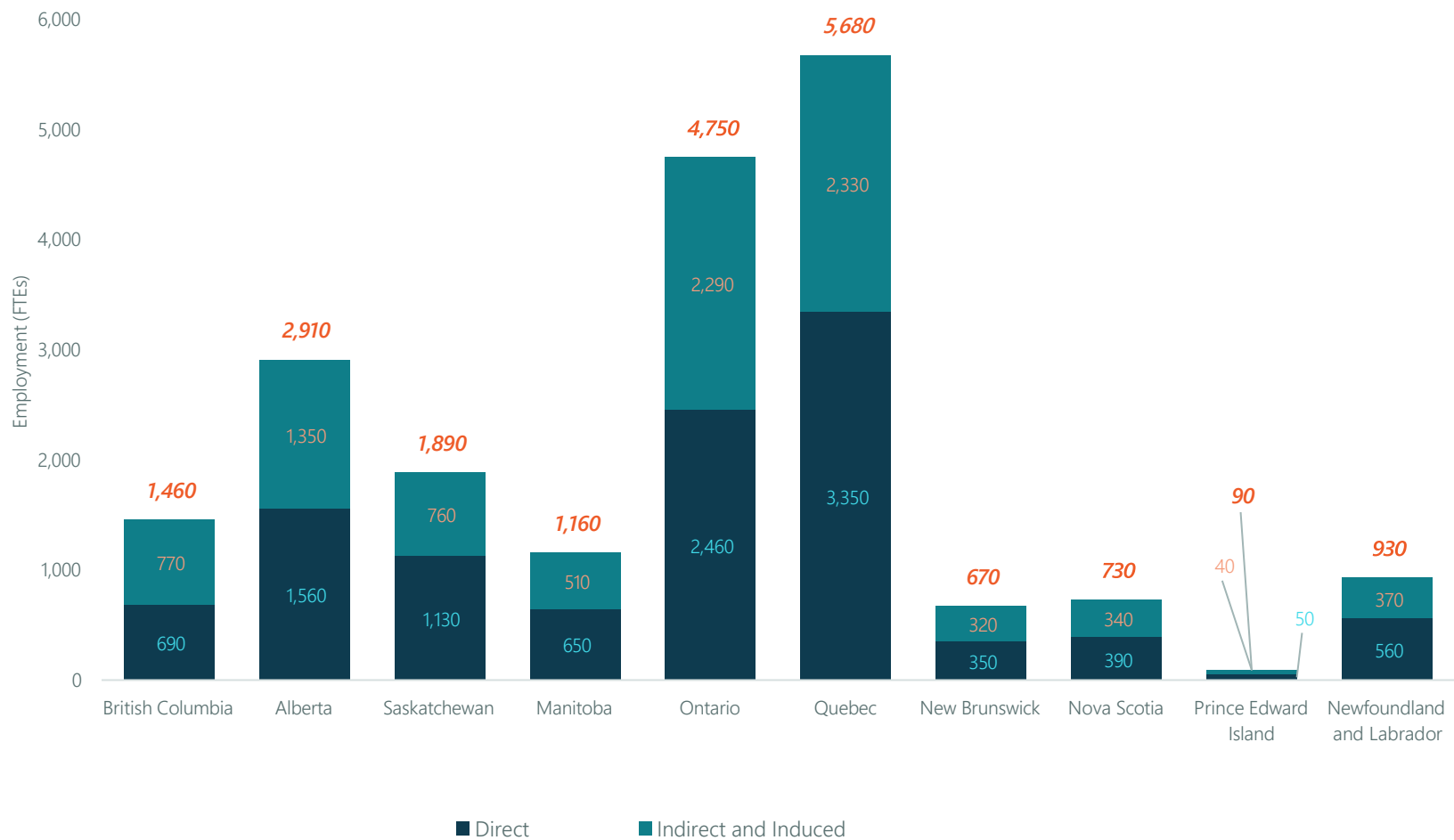


Figure 61: Economic Impacts of Other Spending on ATVs and Side-by-Sides (Employment) - 2022



Economic Impacts of Tour Business and Riding Operators

Figure 62: Economic Impacts of Tour Operators and Riding Schools by Province (Output) - 2022

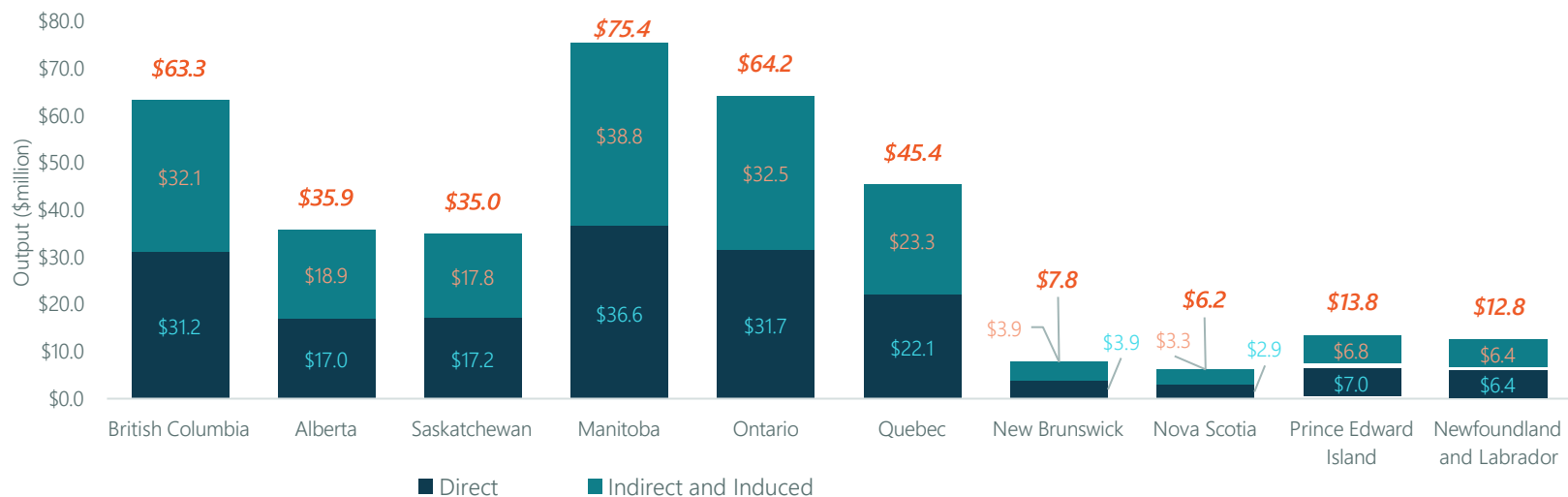


Figure 63: Economic Impacts of Tour Operators and Riding Schools by Province (GDP) - 2022

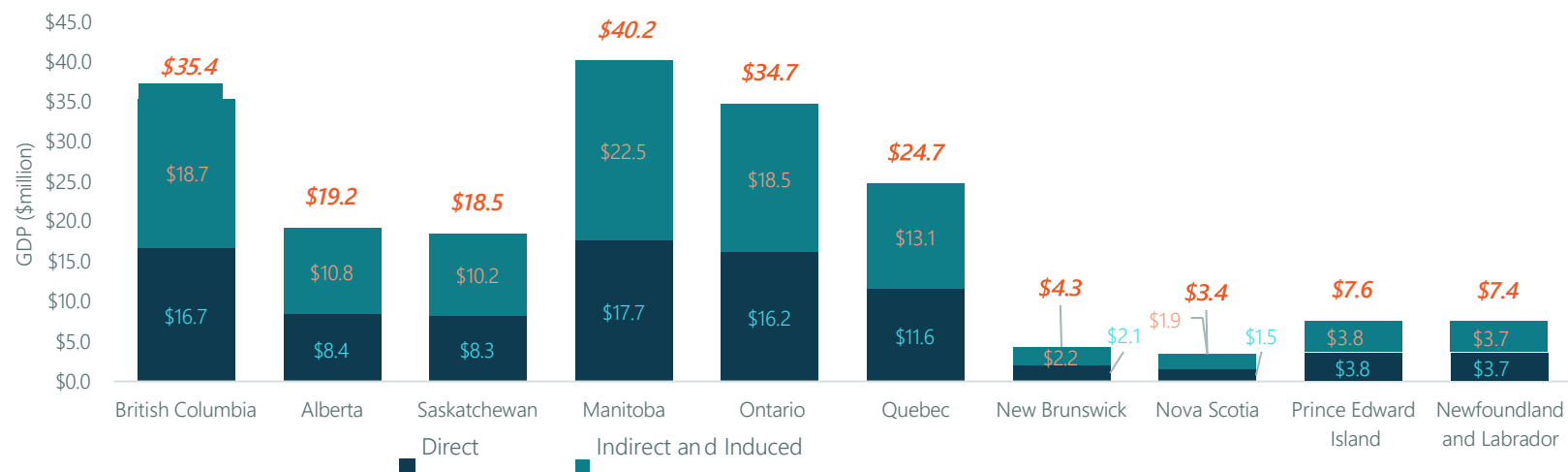


Figure 64: Economic Impacts of Tour Operators and Riding Schools by Province (Taxes) - 2022

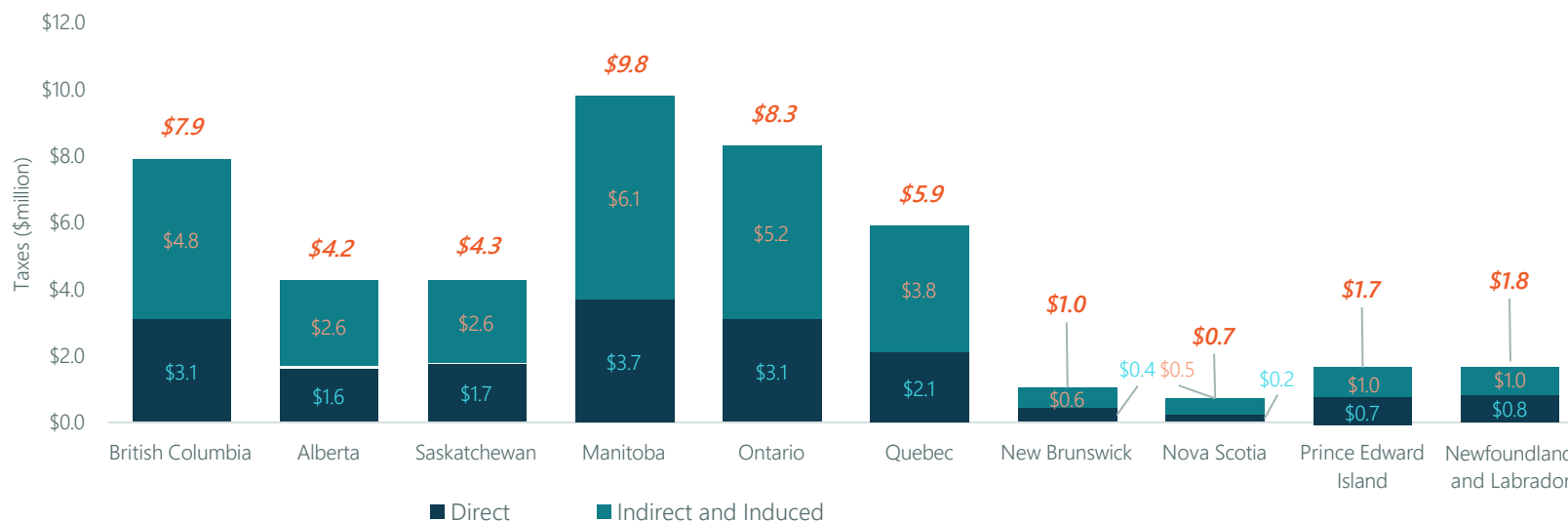
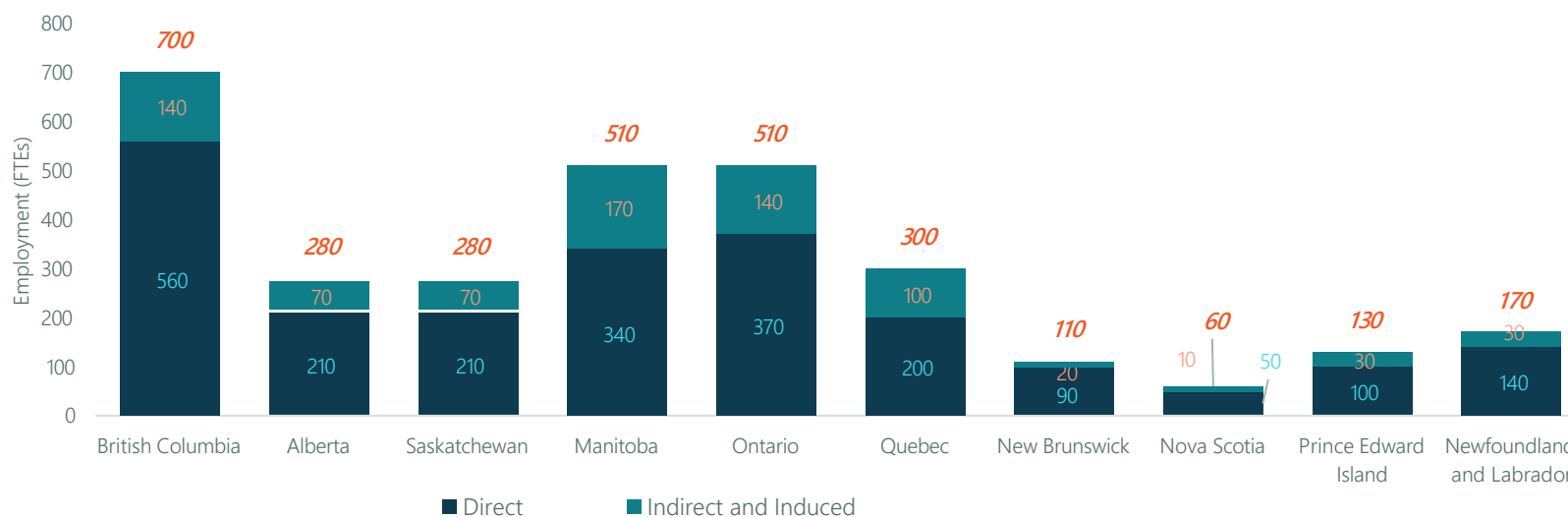


Figure 65: Economic Impacts of Tour Operators and Riding Schools by Province (Employment) - 2022



Total Economic Impacts by Province

Figure 66: Total Economic Impacts by Province (Output) - 2022

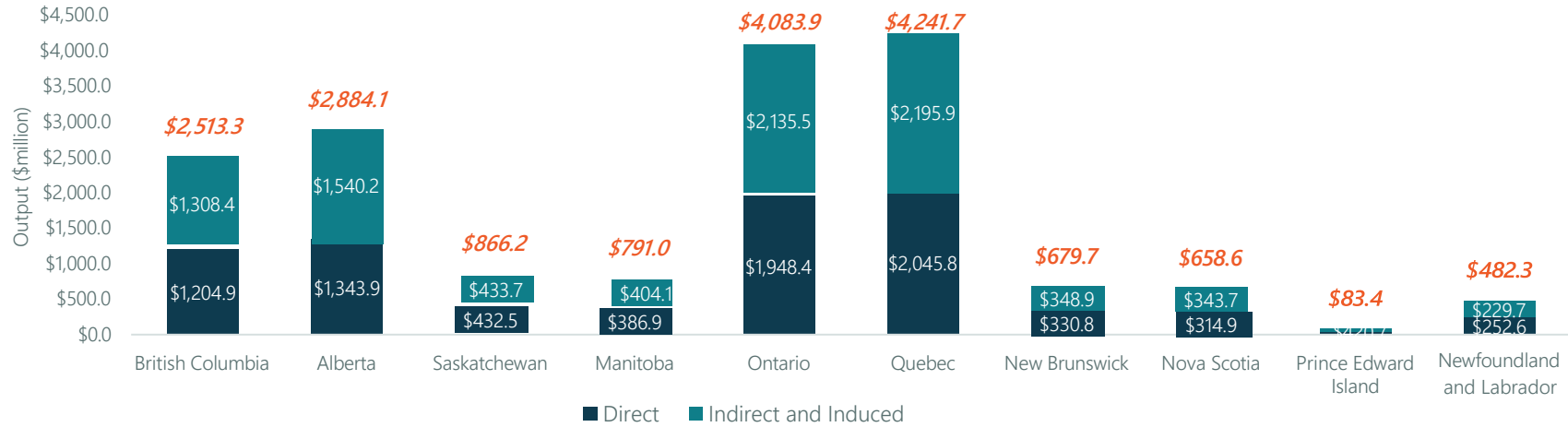


Figure 67: Total Economic Impacts by Province (GDP) - 2022

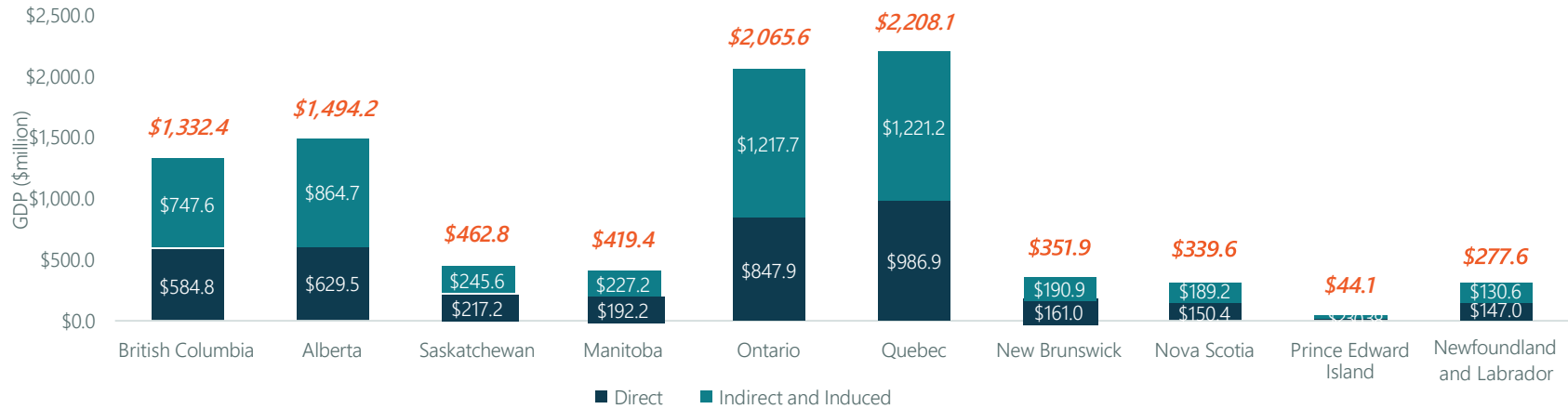


Figure 68: Total Economic Impacts by Province (Taxes) - 2022

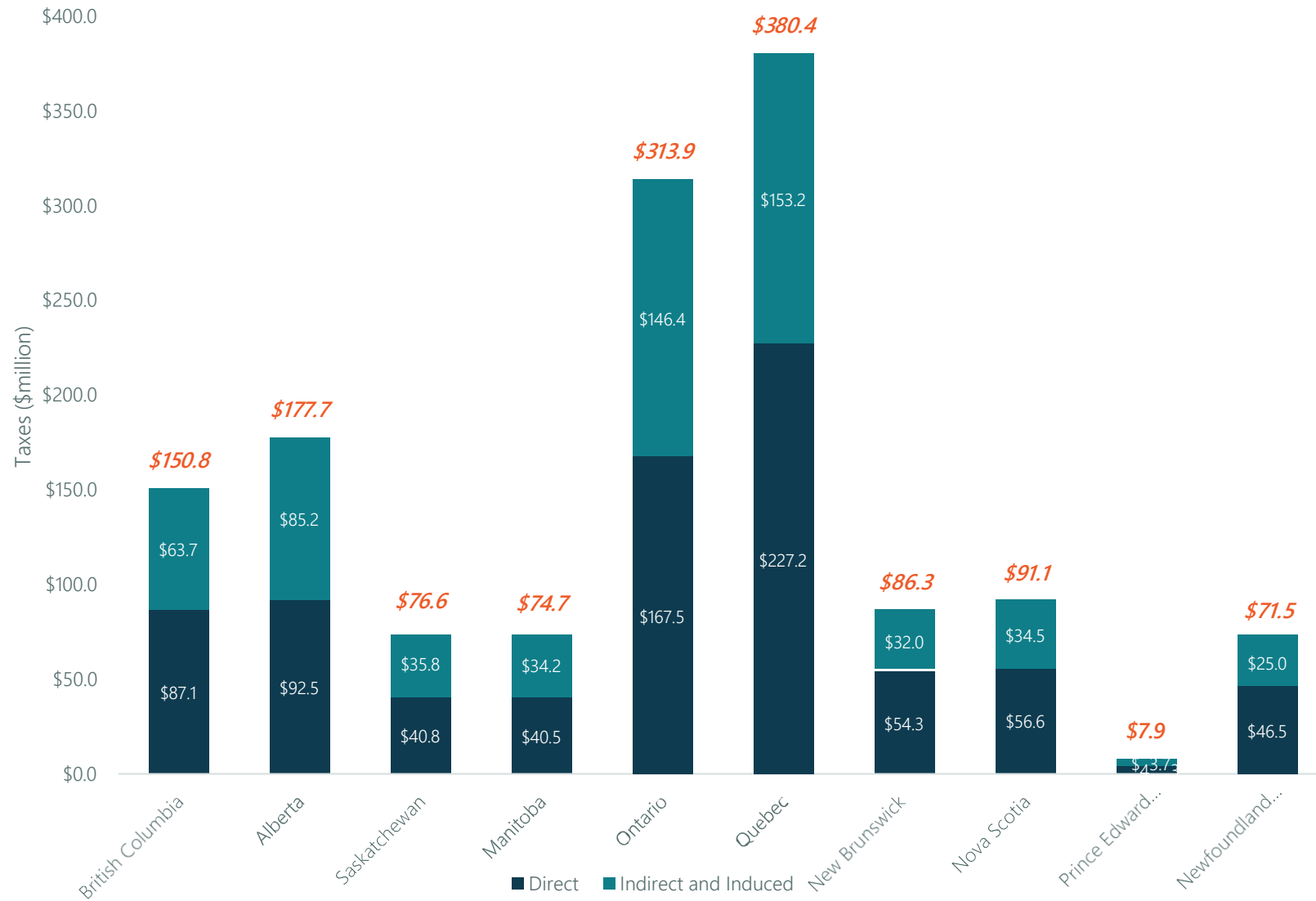
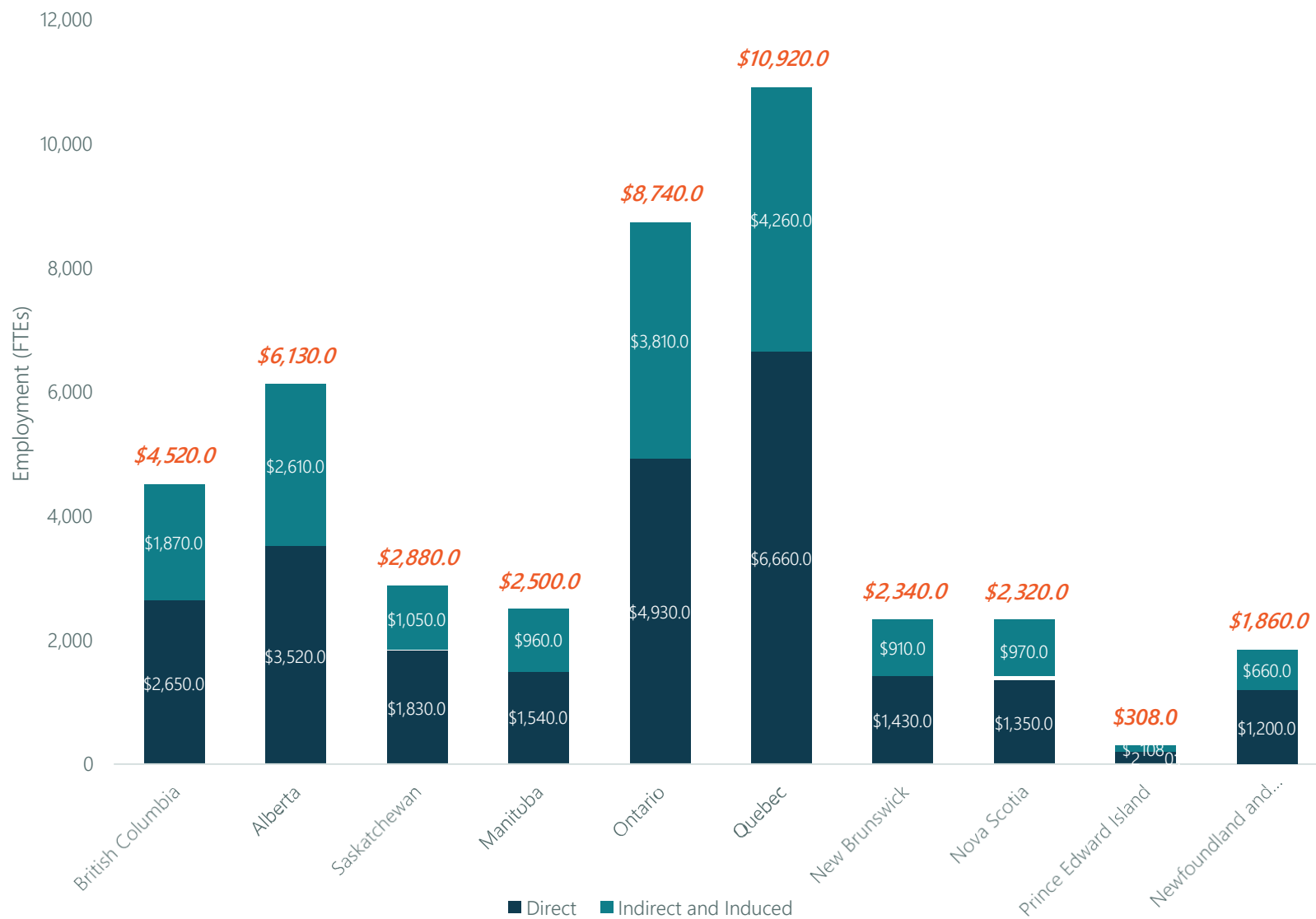


Figure 69: Total Economic Impacts by Province (Employment) - 2022



Appendix C: About MNP

For over 60 years, MNP has proudly served and responded to the needs of clients in the public, private and not-for-profit sectors. Today, MNP is the fifth largest Chartered Professional Accountancy and business consulting firm in Canada and is the only major accounting and business consulting firm with its head office located in Western Canada. MNP has more than 117 locations and over 7,100 team members across the country.

MNP Consulting Services

MNP Consulting provides a broad range of business and advisory services to clients including:

- Strategy Development and Planning
- Stakeholder Engagement
- Performance Measurement
- Economic Analysis
- Research
- Data and Analytics
- Business Plans and Feasibility Studies
- Performance Improvement
- Financial Analysis

About MNP's Economics and Research Practice

Economic and industry studies are carried out by MNP's Economics and Research practice. The Economics and Research practice consists of a team of professionals that has a successful track record of assisting clients with a wide variety of financial and economic impact studies. Our work has encompassed a wide range of programs, industries, company operations and policy initiatives, and has helped clients with decision-making, communication of economic and financial contributions, documentation of the value of initiatives and activities, and development of public policy.



Wherever business takes you

MNP.ca