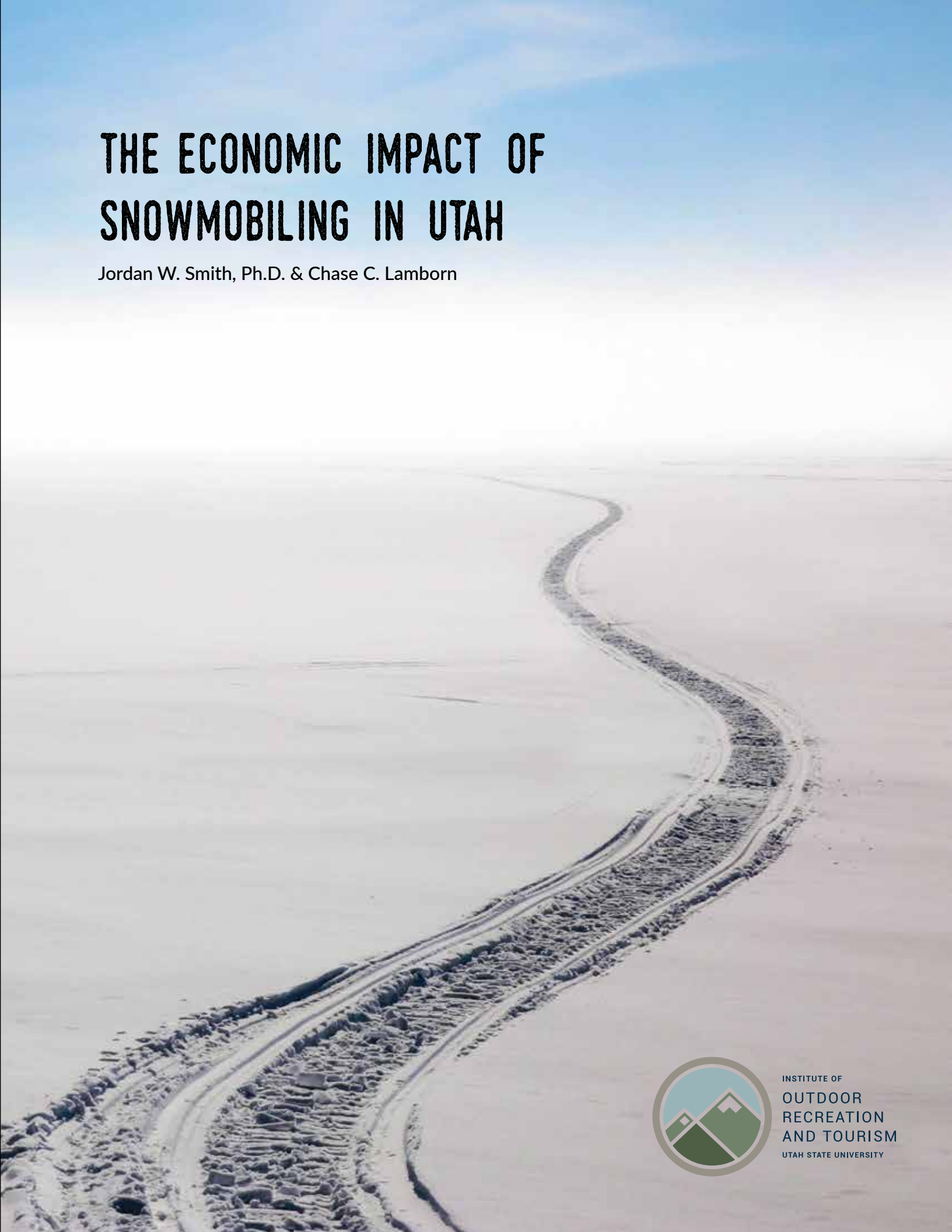
THE ECONOMIC IMPACT OF SNOWMOBILING IN UTAH

Jordan W. Smith, Ph.D. & Chase C. Lamborn



INSTITUTE OF
OUTDOOR
RECREATION
AND TOURISM
UTAH STATE UNIVERSITY

THE ECONOMIC IMPACT OF SNOWMOBILING IN UTAH

An analysis on the value of snowmobiling to Utah's economy,
the sociodemographic composition of participants, and more.

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PREPARED FOR

Utah
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Association

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Cutler's Performance Center

Bear Lake Funtime

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EXECUTIVE SUMMARY

Deep powder and vast amounts of publicly accessible land offer Utahns and non-residents alike unparalleled winter recreation opportunities. For many winter recreationists, snowmobiling offers the ability to escape from the city, socialize with friends and family, and enjoy the outdoors. In addition to the psychological and social benefits of snowmobiling, the activity contributes substantially to the state's economy. However, the magnitude of that contribution has been unknown until now. The last economic impact study of snowmobiling on Utah's economy was conducted in 2001. That study revealed snowmobiling accounted for 358 jobs and $8.5 million ($11.9 million in 2017 dollars) in labor income. Additionally, snowmobiling accounted for $22.0 million in local industry sales ($30.7 million in 2017 dollars) and $12.4 million in value added (the aggregate total of labor income, interest, rent, and profit; $17.3 million in 2017) to the state's economy.

This study details the economic impact of snowmobiling on Utah's economy in 2017. The analysis is based upon data collected through a mail survey administered to a representative sample of households with a snowmobile registered for use within the state.

Our results indicate that snowmobiling now accounts for 1,378 Utah jobs and $59.9 million in labor income. Our findings also reveal snowmobiling accounts for $138.2 million in local industry sales and $88.4 million in value added to the state's economy. The impact of snowmobiling on Utah's economy is substantial. Last year alone, over $13 million in state and local tax revenues were generated by the activity. We suggest local business owners and snowmobile user groups utilize these findings to advocate for continued or improved protection and management of Utah's high-quality snowmobile destinations.

In addition to detailing the economic impact snowmobiling has on Utah's economy, our analysis revealed several other important findings:

THE NUMBER OF REGISTERED SNOWMOBILE OWNERS HAS REMAINED STEADY OVER THE PAST TWO DECADES

As of February 2017 there were just over 11,000 unique households owning a snowmobile registered for use within the state. In 1998, the number of unique individuals owning a snowmobile for use in the state was over 13,000. We would expect a substantially higher number of registered owners and snowmobiles given the population of the state as a whole has increased by 77% over the same time period. The number of registered snowmobile owners within the state has not been keeping pace with population growth, suggesting either snowmobiling is declining in popularity or that as aging snowmobilers quit the activity, they are not being replaced by younger riders.

THE ECONOMIC IMPACTS OF SNOWMOBILING ARE CONCENTRATED IN A FEW COUNTIES

The economic impacts of snowmobiling in Utah are concentrated in relatively few counties, primarily those with the largest concentrations of snowmobile owners and those with the most heavily visited destinations. Salt Lake, Summit, Utah, Wasatch, and Weber counties collectively benefit substantially more than the rest of the state as a whole. Nearly 67% of the jobs created by snowmobiling within the state (918 jobs) are within these five counties. These counties also account for over 70% of the labor income, value, and output generated by snowmobiling within the state (Labor Income – 71.5%, $42.8 million; Value – 71.4%, $63.1 million; Output – 70.1%, $98.9 million). These findings are not surprising given both that Utah's population is highly concentrated along the Wasatch Front, and that there are relatively few heavily visited snowmobile destinations throughout the state.

WHILE THE ECONOMIC IMPACTS OF SNOWMOBILING ARE SUBSTANTIAL, RELATIVELY FEW SECTORS BENEFIT

While snowmobiling has a substantial impact on Utah's economy, those impacts occur within only a few economic sectors. Nearly half (43%) of the jobs created and 55% of the labor income generated by snowmobiling fall within the Retail – Motor vehicle and parts sales sector. Another 8% of created jobs, and 5% of the labor income, generated by the activity accrue in the Retail – Gasoline stores sector. These two sectors capture most of the value generated by snowmobiling, with the Retail – Motor vehicle and parts sales sector accounting for nearly 50% of the total value generated and the Retail – Gasoline stores sector accounting for another 4%. Additionally, over 40% of local sales related to snowmobiling are within the Retail – Motor vehicle and parts sector. This finding is consistent with other economic impact studies of snowmobiling in the western US and should not overshadow the substantial role snowmobiling plays in the state's economy.

INTRODUCTION

It has been nearly two decades since the last study examining the economic impact of snowmobiling in Utah. The most recent work was published in An Economic and Social Assessment of Snowmobiling in Utah by McCoy and her colleagues in 2001. Our analysis sheds new light on the value of snowmobiling to both Utah as a whole, and individual counties throughout the state. In addition to exploring the economic impact of snowmobiling in Utah, this report documents the trip taking behaviors of Utah's snowmobilers, their sociodemographic composition, and some other basic information about participation in the activity (e.g., whether or not they have taken a snowmobile education course).

METHODOLOGY

Previous Analysis

To the extent possible, all methods used in our analysis replicate those used by McCoy and her colleagues in their 2001 study.[1] Methodological details for the 2001 study are presented in the study report itself. More detailed methodologies specific to the economic impact analysis are presented by Fujisaki.[2] Any differences between the methodology in the 2001 study and this study are detailed below.

Study Population and Sample Selection

The State of Utah requires all snowmobiles operated within the state be titled and registered with the Utah Department of Motor Vehicles. We obtained the list of all snowmobiles registered for use within the state as of February 28, 2017. This list provides the most cost effective way to assess snowmobiling activity in the state. (Alternative approaches would require the use of on-site surveys administered to snowmobilers at sampled trailheads and other known snowmobiling destinations throughout the state.) As of that date, 22,803 snowmobiles were registered to owners living at 11,350 unique addresses. The average number of registered machines per snowmobiling household is just over two (2.01). The list of registered snowmobiles did not include owner names, precluding us from determining the average number of registered machines per snowmobile owner. Because the list of registered snowmobiles included only owner addresses, and not their names, our unit of analysis is snowmobiling households.

The study population is households with at least one snowmobile registered for use within Utah. Table 1 shows, by county, the number of registered snowmobiles, the number of households with registered snowmobiles, and the average number of snowmobiles per household. In an attempt to obtain a representative sample of snowmobiling households from each county, we pulled a proportional number of households from each county in the list. A total of 1,500 households were selected to take part in this study.

Data Collection

Data were collected through a mail and online survey administered immediately following the 2017 winter snowmobiling season. Following the Dillman Tailored Design Method[3] of survey administration, we sent each sampled household a packet including a survey instrument, a pre-paid return envelope, and a postcard. These packets were mailed the last week of April 2017. If the survey instrument was not returned completed, we sent a second packet approximately 5 weeks after the initial mailing. A third packet was sent another 5 weeks later if we had still not received a completed survey instrument. The final survey packets were mailed the first week of July 2017.

Each survey instrument was labeled with a unique code linked to the address where the packet was being sent; this helped ensure we did not send an instrument to a household that had already completed the survey. The postcard included in the packet provided instructions for completing the survey online if the respondent preferred not to complete and mail back the paper version of the survey instrument. The postcard was also labeled with the identical address-specific code that was included on the survey instrument. If an individual chose to respond online, they were required to enter the unique code before accessing the survey. This allowed us to ensure we did not send an instrument

Table 1. Number of Snowmobiles, and Households with Snowmobiles, Registered for Use Within Utah By County

County	Number of Registered Machines	Number of Households with Registered Machines	Average Number of Registered Machines per Household
Beaver	37	21	1.76
Box Elder	855	479	1.78
Cache	1,616	885	1.83
Carbon	188	103	1.83
Daggett	21	9	2.33
Davis	2,747	1,400	1.96
Duchesne	343	173	1.98
Emery	115	50	2.30
Garfield	35	15	2.33
Grand	53	32	1.66
Iron	314	143	2.20
Juab	161	69	2.33
Kane	74	29	2.55
Millard	98	44	2.23
Morgan	452	192	2.35
Piute	5	3	1.67
Rich	134	34	3.94
Salt Lake	4,958	2,576	1.92
San Juan	40	17	2.35
Sanpete	578	246	2.35
Sevier	272	114	2.39
Summit	1,182	537	2.20
Tooele	387	189	2.05
Uintah	465	230	2.02
Utah	3,667	1,775	2.07
Wasatch	1,024	432	2.37
Washington	271	124	2.19
Wayne	35	3	11.67
Weber	2,429	1,306	1.86
Out of State	247	120	2.06
TOTAL	**22,803**	**11,350**	**2.01**

to a household that had already completed the survey, and to ensure we did not receive duplicate information from individuals who may have provided responses via both the mail-back and online option (none did).

Because some individuals had moved or died between the time they registered their snowmobile with the state and the time we mailed the first packet, some packets were undeliverable. If a packet was returned as undeliverable, we randomly selected another household from the same county as the originally intended recipient. This ensured the final sample was proportional to the total number of households within each county with at least one snowmobile registered with the state. Of the 1,500 households initially sampled, 34 never received the survey packet—either because they had moved or died between the time they registered their snowmobile and when we mailed the first packet.

We provided potential respondents with a sufficient amount of time to respond, closing the survey on September 30, 2017 (~2 months after potential respondents received the third packet). A total of 164

surveys were returned by mail and another 47 were submitted online for a total of 211 responses (14% response rate). Of those, 13 were incomplete (all online) and 3 were duplicate responses submitted by the same household (2 mail and 1 online). After removing these 16 incomplete or duplicate responses, the final dataset was comprised of 195 complete responses (13% response rate). Based on this response and a total population size of 11,350 households, all findings and estimates contain a confidence interval of +/– 7% (assuming a 95% confidence level).

Survey Instrument

The survey instruments delivered by mail and those accessed online were identical. The instrument contained three sections to complete: 1) detailed information about the household's most recent snowmobiling trip within Utah; 2) general information about the household's snowmobiling trips over the 2016-2017 snowmobiling season; and 3) sociodemographic and other basic information about the household. The survey was developed by the Institute of Outdoor Recreation and Tourism at Utah State University in consultation with both the Utah Snowmobile Association and the Utah Division of State Parks and Recreation. The survey is provided in Appendix 1.

RESULTS

Number of Snowmobiles Registered for Use in Utah

As of the end of February, 2017, there were 22,803 snowmobiles registered to 11,350 unique addresses. Surprisingly, the number of registered snowmobiles declined since the late 1990s. McCoy and her colleagues reported approximately 25,000 snowmobiles being registered in 1998 to 13,163 individuals.[1] It is difficult to say whether the total number of individuals who have registered a snowmobile in Utah has declined since 1998 given we only had the addresses to which individual snowmobiles were registered (names were not included in our list of registered snowmobiles). McCoy and her colleagues were able to determine unique individuals (several of whom may have lived in the same household). This is a minor methodological detail, and we would not expect a substantial portion of snowmobile owners to be living at the same address in the same household. The overriding trend is that the number of snowmobiles registered for use within the state and the number of snowmobilers has declined slightly over the past two decades. This is despite the population of the state growing by 77% over the same time period.[4]

Sociodemographic and Other Basic Characteristics of Snowmobilers in Utah

The sociodemographic and other basic characteristics of snowmobilers in Utah are detailed in Table 2.

Age. The average age of individuals who registered a snowmobile for use in Utah is 54, with individuals ranging in age from 18 to 83. This is significantly older than the average age of 43 reported by McCoy and her colleagues.[1] Knowing that the population of snowmobilers within Utah has declined slightly since the late 1990s, this finding suggests that as snowmobilers age out of the activity they are not being replaced by younger riders.

Household Size. The average size of households with at least one snowmobile registered for use within the state is 3.4, slightly smaller than the 4.0 household size reported by McCoy and her colleagues.[1]

Education. Snowmobilers in Utah are relatively well educated, with 51.7% reporting having obtained at least

Table 2. Characteristics of Utah's Registered Snowmobile Owners

	Mean	Std. Dev.	Percent
Sociodemographic Characteristics			
Age			
Age (years)	54.0	13.0	
Education			
Some high school			1.1
High school or equivalent			11.3
Some college, no degree			22.0
Associates degree			12.9
Bachelor's degree			34.4
Master's degree			10.2
Professional degree			2.2
Doctoral degree			5.9
Gender			
Male			97.33
Female			2.67
Ethnicity			
Hispanic			1.19
Non-Hispanic			95.83
Race			
White			98.34
American Indian or Alaska native			0.55
Other			1.1
Income			
Less than $10,000			0.6
$10,000 to $19,999			0.6
$20,000 to $29,999			0.6
$30,000 to $39,999			3.0
$40,000 to $49,999			4.9
$50,000 to $59,999			3.6
$60,000 to $69,999			6.1
$70,000 to $79,999			8.5
$80,000 to $89,999			4.9
$90,000 to $99,999			6.7
$100,000 to $149,999			35.2
$150,000 or more			25.5
Household Size			
Household size	3.4	1.5	
Ownership Characteristics			
Number of snowmobiles registered for use in Utah	2.8	1.8	
Percentage of households in which **no one** has taken a snowmobile education course			69.4
Percentage of households in which **no one** has taken an avalanche awareness course			57.2

a Bachelor's degree. Only 11.3% reported obtaining only a high school degree (or equivalent).

Gender. The dominant majority (97.3%) of individuals who have registered to snowmobile in Utah are men. This is consistent with previous studies of snowmobilers within the state.[1,5]

Race/Ethnicity. The majority of snowmobilers in Utah identify as White (98.3%) and as non-Hispanic (95.8%).

Income. Snowmobilers are relatively wealthy, compared to the general population of Utah. The median household income of our sample was between $100,000 and $149,000; more than 35% of respondents reported having household incomes within this range. By comparison, the median household income for the adult population of Utah residents as whole is $62,912.[4]

Snowmobile Education. The large majority of individuals who snowmobile in Utah have not taken a snowmobile education course. Nearly 70% of respondents indicated that no one within their household had ever taken a snowmobile education course. Less than 9% of respondents indicated that everyone in their household had taken a snowmobile education course.

Avalanche Education. Similar to snowmobile education courses, the majority of individuals who snowmobile in Utah have never taken an avalanche awareness course. Just over 57% of our respondents indicated no one in their household had ever taken an avalanche awareness course. A small proportion (12%) of respondents indicated that everyone in their household had taken an avalanche awareness course.

Most Recent Snowmobiling Trip within Utah

We collected data on individuals' most-recent snowmobiling trip within Utah to obtain a random sample of all trips taken throughout the season. These data are subsequently multiplied by the average number of trips taken over the season to obtain seasonal totals. For questions asking about expenditures incurred on individuals' most recent trip, seasonal totals are used in the economic impact analyses. Unless otherwise noted, statistics describing individuals' most-recent snowmobiling trip within Utah are provided in Table 3.

County of Most Recent Trip. Over a quarter (25.8%) of all snowmobiling trips within Utah occur in Wasatch County. This is followed closely by Cache County, which accounts for nearly a fifth (19.5%) of all snowmobile trips within the state. The third most snowmobiled county within the state is Utah, which accounts for over 10% of all snowmobile trips within the state. The proportion of snowmobile trips occurring in other counties are shown in Table 3.

Our findings are similar to those reported by McCoy and her colleagues.[1] In their 2001 study, 28.1% of trips were reported in the areas of Current Creek and Strawberry Valley (both in Wasatch County) and 33.5% of trips were reported in the areas of Hardware Ranch, Monte Cristo, and Logan Canyon. McCoy and her colleagues did not report trip-taking patterns by county, opting instead to lump geographically proximate snowmobiling areas together. Because some of these areas span county boundaries (like the Hardware Ranch, Monte Cristo area), making direct comparisons between survey efforts is not possible.

Day and Overnight Trips. The majority (78.8%) of snowmobiling trips within the state are daytrips. While the majority of snowmobiling trips are one-day outings, they tend to be long. The average length of daytrips was 8 hours. These trips ranged anywhere from 2 to 14 hours. While overnight trips comprise only 21.2% of all snowmobiling trips within the state, they too are relatively long excursions with the average trips spanning two nights and three days.

Group Size. The average size of a snowmobiling group making a daytrip is 2.4 people. For groups going on an overnight trip, the average group size increases to 3.5 people.

Trip-Specific Expenditures. Trip-specific expenditures for both daytrips and overnight trips are detailed in Table 4.

The average cost of a snowmobiling daytrip is $240. Nearly a quarter (23%, $54) of the expenditures incurred during daytrips are attributable to repairs or maintenance to snowmobiles, trailers, and tow vehicles. Nearly as much (22%, $53) is spent on gasoline and oil for snowmobiles. Gasoline and oil for tow vehicles accounts for another 20% ($45) of daytrip expenditures. Retail items such as outerwear and helmets account for 15% ($36) of daytrip expenditures. The remaining costs are split between eating and drinking establishments (8%, $18), food and groceries purchased from grocery stores (7%, $18), other ancillary recreation activities (4%, $9), snowmobile rentals, tour packages, or guide services (2%, $4), and parking/day use fees (.5%, $1).

The average cost of an overnight snowmobiling trip is $520, more than double the cost of a daytrip. Expenditures for repairs or maintenance to snowmobiles, trailers, and tow vehicles accounts for nearly 30% of the cost of an overnight trip ($153). Gasoline and oil for

Table 3. Characteristics of Registered Snowmobile Owners' Most Recent Trip within Utah

	Mean	Std. Dev.	Percent	Total Trips over the Past 12 Months*
County of Most Recent Trip				
Cache			19.5	20,012
Carbon			0.6	647
Duchesne			6.9	7,102
Emery			4.4	4,516
Garfield			0.6	647
Iron			0.6	647
Kane			0.6	647
Morgan			6.9	7,102
Rich			1.9	1,940
Salt Lake			1.3	1,293
San Juan			0.6	647
Sanpete			7.6	7,748
Sevier			1.9	1,940
Summit			5.0	5,162
Utah			10.7	10,971
Wasatch			25.8	26,467
Washington			0.6	647
Wayne			0.6	647
Weber			3.8	3,869
Day or Overnight Trip				
Overnight trip			21.2	
Daytrip			78.8	
Trip Characteristics				
Number of days if overnight	2.9	1.5		
Number of hours if daytrip	8.0	2.3		
Miles snowmobiled	67.1	51.1		
Group size (overnight trip)	3.5	2.2		
Group size (daytrip)	2.4	1.5		

* Derived by multiplying the percentage of all recent trips made by survey respondents to each county by the average number of household snowmobiling trips taken per year (9.04) by the total number of unique households with at least one snowmobile registered for use within Utah.

tow vehicles ($76) and for snowmobiles ($73) account for 15% and 14% of overnight trip costs, respectively. Groceries purchased from grocery stores is another substantial expense (15%, $76). Retail items account for nearly 10% of overnight trip costs ($45). These are followed closely by costs for lodging (8%, $41) and dining (7%, $38). Other marginal costs are attributable to ancillary recreational activities (2%, $9), snowmobile rentals, tour packages, or guide services (1%, $7), and parking/day use fees (.4%, $2).

Seasonal Trip Taking Behavior & Expenditures in Utah

In addition to asking about individuals' most recent trip, we also asked about trip taking behavior and expenditures incurred throughout the entire snowmobiling season. We defined the 2016-2017 winter season as December 1, 2016 to April 1, 2017. We asked about trip taking behavior and expenditures incurred throughout the entire snowmobiling season to capture behaviors and expenditures, such as purchasing a new snowmobile or a trailer, that are not associated with individual trips. These data are also used in the

Table 4. Average Snowmobile Trip Expenditures by Trip Type*

	Mean	Std. Dev.		Mean	Std. Dev.
Overnight Trip Expenditures			***Daytrip Expenditures***		
Gasoline and oil for snowmobiles	$72.88	$57.01	Gasoline and oil for snowmobiles	$53.10	$40.57
Gasoline and oil for vehicles to tow snowmobiles	$75.61	$44.77	Gasoline and oil for vehicles to tow snowmobiles	$45.16	$28.32
Overnight lodging	$40.90	$108.81	Overnight lodging	N/A	N/A
Eating and drinking establishments	$38.27	$45.89	Eating and drinking establishments	$18.07	$24.11
Food from grocery or convenience stores	$76.41	$68.30	Food from grocery or convenience stores	$17.95	$24.18
Parking area fees	$2.32	$5.41	Parking area fees	$1.19	$2.93
Other recreation activities	$8.90	$29.86	Other recreation activities	$9.44	$54.14
Snowmobile rentals, tour packages, or guide services	$7.32	$46.85	Snowmobile rentals, tour packages, or guide services	$4.44	$32.31
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$153.17	$205.89	Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$54.32	$112.80
Retail items	$44.51	$103.00	Retail items	$35.53	$94.04

* Average trip expenditures and total snowmobile-related expenditures by county are reported in Appendix 2

economic impact analyses. Unless otherwise noted, statistics describing seasonal trip taking behavior and expenditures are reported in Table 5.

Trip Taking Behavior. Individuals who snowmobile in Utah indicated taking nearly 8 (7.7) snowmobiling daytrips over the 2016-2017 season. The majority of individuals (70%) said the number of trips they took this season was typical of the number of single day snowmobiling trips they take during a season. However, more than a quarter (28%) indicated that they took substantially fewer trips this season than they normally take during a season. It is worth noting that snowmobiling conditions were fairly good in the 2016-2017 season.

The average number of overnight trips taken over the 2016-2017 season was 1.4. Over three-fourths of respondents indicated that this was typical of the number of overnight trips they take over the season. However, over a fifth (21.5%) reported taking fewer overnight trips than they had taken in past seasons. Again, this is noteworthy given snowmobiling conditions were fairly good in the 2016-2017 season.

McCoy and her colleagues[1] reported individuals who snowmobiled in Utah during the 1999-2000 winter season took an average of 12.3 trips (daytrips and overnight trips combined). Seventeen years later, this number has declined to 9.0 trips (again combining daytrips and overnight trips).

Annual Expenditures. Average snowmobiling expenditures not related to registered owners' most recent trip are reported in Table 6. Individuals who registered a snowmobile for use within Utah over the

Table 5. Characteristics of Registered Snowmobile Owners' Annual Trip Taking Behavior within Utah

	Mean	Std. Dev.	Percent
Amount of Trips			
Average overnight trips taken over the past 12-months	1.4	2.2	
Average daytrips taken over the past 12 months	7.7	6.1	
Trips Relative to the Past			
Number of overnight trips taken in the previous 12-months was…			
…typical of the number of trips taken each year.			77.9
…not typical. It was substantially less than usual.			21.5
…not typical. It was substantially more than usual.			0.6
Number of daytrips trips taken in the previous 12-months was…			
…typical of the number of trips taken each year.			69.6
…not typical. It was substantially less than usual.			28.3
…not typical. It was substantially more than usual.			2.2

Table 6. Average Snowmobile Expenditures Not Related to Registered Snowmobile Owners' Most Recent Trip*

	Mean	Std. Dev.
Expenditures		
Snowmobiles	$3,109.06	$5,149.67
Trailers used for transporting snowmobiles	$1,182.49	$3,241.73
Snowmobile repairs, parts, and accessories	$523.62	$791.67
Fuel and oil for snowmobiles and tow vehicles	$523.58	$605.82
Clothing purchased for snowmobiling	$346.43	$596.91
Snowmobile registrations, licenses, and taxes	$180.02	$152.29
Insurance for snowmobiles	$143.70	$220.60
Snowmobile storage	$74.48	$267.13
Snowmobile club dues and other club expenditures	$3.00	$16.76
TOTAL	**$6,086.41**	

* Total snowmobile-related expenditures not related to registered snowmobile owners' most recent trip by county are reported in Appendix 3.

2016-2017 season spent an average of $6,086 on the activity. Over half (51.1%, $3,109) of these expenditures were for snowmobiles. Another 19.4% ($1,182) was spent on trailers used to transport snowmobiles. Fuel and oil costs for both snowmobiles and tow vehicles accounted for 8.6% ($524) of annual expenditures. Nearly the exact same amount (8.6%, $524) was spent on snowmobile repairs, parts, or accessories. Clothing purchased primarily for snowmobiling accounted for another 5.7% ($346) of total annual expenditures. Other, more marginal, costs included snowmobile registrations, licenses, and taxes (3.0%, $180), snowmobile insurance (2.4%, $144), snowmobile storage costs (1.2%, $74.5), and snowmobile club dues (0.0005%, $3).

ECONOMIC IMPACT

This statewide economic impact analysis includes all expenditures related to snowmobiling within Utah over the 2016-2017 snowmobiling season, this includes both the trip and annual expenditures detailed above. Total snowmobiling expenditures are used in an input-output model to determine the total economic impact snowmobiling has on the economy within the state.

Total Snowmobiling Expenditures. Total snowmobiling expenditures are comprised of both the total trip expenditures as well as the total annual expenditures. Totals by expenditure category are reported in Table 7. We calculated total annual expenditures by multiplying

the average annual expenditures for each category by the total number of unique households with at least one snowmobile registered for use within the state (Table 1). After subtracting expenditures that overlapped with trip costs (fuel and oil costs as well as snowmobile repair, parts, and accessories costs), the total annual expenditures were $88.5 million. Not all of these expenditures have an impact on Utah's economy however, as only a portion of each dollar spent within the state is captured by local establishments and workers. We utilized the input-output model, IMPLAN, to estimate the actual economic impact of snowmobiling on Utah's economy. Total direct expenditures by category were input into the model using the most appropriate economic sector (Table 8).

Direct, Indirect, and Induced Effects. Expenditures on snowmobiling within Utah have direct, indirect, and induced effects on the state's economy. Direct effects are the immediate local increases in spending due exclusively to the activity. When a snowmobiler buys gasoline for his/her machine, a portion of the money he/she spends is captured by the gas station owner, this is the direct effect. Indirect effects are changes in inter-industry purchases as they respond to the demand of a direct effect. Continuing with the fuel example, after the snowmobiler buys gasoline for his/her machine, the gas station owner has to purchase more fuel from a regional supplier, this is an indirect effect. Induced effects capture changes in household spending as income increases or decreases in response to the demand of both direct and indirect effects. Again with the fuel example, because the snowmobiler purchased fuel from the gas station owner, it is assumed that the owner is able to retain some of that money for him/herself as profit. As his/her income increases, he/she spends more locally. This happens for both the gas station owner as well as his/her employees and it also happens for the owner of the regional supplier and his/her employees. As money travels from the snowmobiler to the gas station owner and the regional supplier as well as their employees, the household income of each increases. Subsequently, they are able to spend more. These subsequent expenses are induced effects.

Direct, indirect, and induced impacts are estimated for employment, labor income, value added, and output. Employment is the number of jobs supported by snowmobiling within the state. Labor income is the total amount of wages, salaries, and benefits paid to workers as a result of snowmobiling within the state. Value added represents the additional value to each economic sector attributable to snowmobiling within the state. Finally, output is the value of local industry sales attributable to snowmobiling within the state. The total direct, indirect, and induced impacts on

Table 7. Total Direct Spending on Snowmobiling by Expenditure Type*

Expenditure Type	Total Direct Spending
Snowmobiles	$37,099,802
Trailers used for transporting snowmobiles	$17,465,945
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$7,777,549
Fuel and oil for snowmobiles and tow vehicles	$6,274,141
Retail items	$3,882,135
Clothing purchased for snowmobiling	$3,829,878
Food from grocery or convenience stores	$3,054,690
Eating and drinking establishments	$2,229,565
Snowmobile registrations, licenses, and taxes	$1,850,107
Insurance for snowmobiles	$1,650,140
Overnight lodging	$1,080,719
Other recreation activities	$877,208
Snowmobile storage	$826,694
Snowmobile rentals, tour packages, or guide services	$414,870
Parking area fees	$133,180
Snowmobile club dues and other club expenditures	$26,024
TOTAL	**$88,472,647**

* Total snowmobile-related expenditures by county are reported in Appendices 2 and 3. Total direct spending reported in this table accounts for overlapping expenditure categories (e.g., the fuel and oil for snowmobiles and tow vehicles use on the most recent trip (Appendix 2) and the fuel and oil for snowmobiles and tow vehicles used throughout the year (Appendix 3). As a result, total direct spending reported in this Table does not match totals reported in Appendices 2 and 3.

Table 8. Expense Categories and Corresponding Economic Sectors

Expense Category	Economic Sector
Most Recent Trip	
Gasoline and oil for snowmobiles	3402 Retail services - Gasoline stores
Gasoline and oil for vehicles to tow snowmobiles	3402 Retail services - Gasoline stores
Overnight lodging	3057 Newly constructed commercial structures, incl. farm structures
Eating and drinking establishments	3501 Full-service restaurant services
Food from grocery or convenience stores	3400 Retail services - Food and beverage stores
Parking area fees	3500 Other accommodation services
Other recreation activities	3395 Wholesale trade distribution services
Snowmobile rentals, tour packages, or guide services	3442 Automotive equipment rental and leasing services
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	3396 Retail services - Motor vehicle and parts dealers
Retail items	3396 Retail services - Motor vehicle and parts dealers
Expenditures Not Related to Most Recent Trip	
Snowmobiles	3396 Retail services - Motor vehicle and parts dealers
Trailers used for transporting snowmobiles	3396 Retail services - Motor vehicle and parts dealers
Fuel and oil for snowmobiles and tow vehicles	3402 Retail services - Gasoline stores
Snowmobile repairs, parts, and accessories	3396 Retail services - Motor vehicle and parts dealers
Insurance for snowmobiles	3437 Insurance
Clothing purchased for snowmobiling	3396 Retail services - Motor vehicle and parts dealers
Snowmobile club dues and other club expenditures	3496 Other amusement and recreation
Snowmobile registrations, licenses, and taxes	3470 Other support services
Snowmobile storage	3416 Warehousing and storage services

employment, labor income, value added, and output for snowmobiling within the state are shown in Table 9.

Table 10 shows the total direct, indirect, and induced impacts on employment, labor income, value added, and output by county.

Employment. Snowmobiling in Utah directly supported 983 jobs in 2017. Including indirect effects, this number jumps to 1,138. With induced effects included, the total number of jobs created from snowmobiling within the state is 1,378. The economic sectors in which these jobs were created are detailed in Table 11. Most of the jobs supported by snowmobiling are within snowmobile and snowmobile parts retailers (the Retail – Motor vehicle and parts dealers sector, 43% of all generated employment, 609 total jobs). Snowmobiling also supports a large number of jobs at gasoline stations (the Retail – Gasoline stores sector, 8% of all generated employment, 115 total jobs). Other jobs supported by the snowmobile industry include employment in full service restaurants (the Full-service restaurants sector, 5% of all generated employment, 66 total jobs) and employment in grocery and convenience stores (the Retail – Food and beverage stores sector, 4% of all generated employment, 61 total jobs).

Labor Income. The total amount of wages, salaries, and benefits paid to workers as a result of snowmobiling within the state totals $59.9 million. This impact is aggregated across direct effects ($45.6 million), indirect effects ($5.8 million), and induced effects ($8.5 million). Just over half of the wages, salaries, and benefits paid to workers as a result of snowmobiling within the state is captured by snowmobile and snowmobile parts retailers (the Retail – Motor vehicle and parts dealers sector, 55% of all labor income, $39.7 million). Five percent of the wages, salaries, and benefits paid to workers as a result of snowmobiling within the state are captured by gasoline stations (the Retail – Gasoline stores sector, 5% of all labor income, $3.6 million). No

Table 9. Economic Impact of Snowmobiling in Utah

	Employment	Labor Income	Value Added	Output
Direct Effects	983	$45,619,289	$61,788,068	$88,579,245
Indirect Effects	155	$5,834,966	$10,390,053	$20,362,670
Induced Effects	240	$8,461,897	$16,199,293	$29,219,770
TOTAL	1,378	$59,916,152	$88,377,414	$138,161,685

Table 10. Economic Impact of Snowmobiling in Utah to the Economy of Each County

	Employment	Labor Income	Value Added	Output
Beaver	3	$64,887	$84,928	$153,210
Box Elder	55	$2,111,841	$3,139,734	$4,996,867
Cache	90	$3,111,815	$4,507,804	$7,634,909
Carbon	23	$1,034,212	$1,523,878	$2,335,757
Daggett	0	$-	$-	$-
Davis	119	$5,586,416	$8,171,594	$12,578,359
Duchesne	3	$67,544	$88,074	$176,561
Emery	4	$98,703	$130,351	$253,190
Garfield	1	$25,674	$33,367	$67,626
Grand	2	$72,371	$102,122	$182,924
Iron	22	$700,828	$1,067,452	$1,955,939
Juab	1	$22,009	$33,779	$56,560
Kane	22	$691,588	$1,101,469	$1,809,352
Millard	2	$40,461	$54,445	$116,065
Morgan	22	$440,869	$655,561	$1,287,894
Piute	0	$-	$-	$-
Rich	3	$45,316	$86,264	$225,224
Salt Lake	174	$10,542,151	$14,906,151	$22,057,019
San Juan	0	$-	$-	$-
Sanpete	45	$1,379,086	$2,136,625	$3,637,937
Sevier	3	$104,718	$143,345	$310,939
Summit	153	$7,727,421	$11,174,091	$16,296,053
Tooele	26	$1,018,798	$1,554,033	$2,403,824
Uintah	7	$252,146	$371,852	$585,170
Utah	240	$9,731,228	$14,802,060	$24,012,907
Wasatch	202	$7,935,735	$12,058,953	$19,038,167
Washington	7	$209,797	$292,931	$530,278
Wayne	0	$1,958	$2,238	$4,262
Weber	149	$6,898,580	$10,154,313	$15,454,692
TOTAL	**1,378**	**$59,916,152**	**$88,377,414**	**$138,161,685**

other economic sector captured more than 3% of the wages, salaries, and benefits paid to workers as a result of snowmobiling within the state. The total amount of wages, salaries, and benefits paid to workers in other economic sectors are noted in Table 12.

Value Added. The additional value to Utah's economy attributable to snowmobiling within the state totals $88.4 million. This value is aggregated across direct effects ($61.8 million), indirect effects ($10.4 million), and induced effects ($16.2 million). Nearly half of this value is captured by snowmobile and snowmobile parts retailers (the Retail – Motor vehicle and parts dealers sector, 50% of all value added, $55.8 million). The next closest economic sector was gasoline stations, which do not even capture 5% of the additional value generated by snowmobiling within the state (the Retail – Gasoline stores sector, 5% of all value added, $5.5 million). The value added to other economic sectors as a result of snowmobiling within the state are noted in Table 13.

Output. The value of local industry sales attributable to snowmobiling within the state total $138.2 million. Again, this value is aggregated across direct effects ($88.6 million), indirect effects ($20.3 million), and induced effects ($29.2 million). A total of 41% of sales ($68.5 million) within the Retail – Motor vehicle and parts dealers sector is attributable to snowmobiling within the state. Nearly 5% of the sales ($8 million) within the Retail – Gasoline stores sector are attributable to snowmobiling within the state. The value of local sales within other economic sectors is noted in Table 14.

Tax Revenues. Snowmobiling within the state contributes $13.3 million in additional state and local tax revenues. The majority of these revenues (83%, $11.1 million) accrue through state sales and property taxes. A good portion of these revenues (16%, $2 million) accrue through personal taxes (income, fines/fees, vehicle licenses, property taxes, fishing and hunting taxes). A detailed breakdown of state and local

Table 11. Top Five Economic Sectors in which Employment is Supported by Snowmobiling in Utah

Economic Sector	Employment Supported	Percentage of All Employment Supported
Retail - Motor vehicle and parts dealers	609	42.8
Retail - Gasoline stores	115	8.1
Full-service restaurants	66	4.7
Retail - Food and beverage stores	61	4.3
Real estate	48	3.4

taxes generated by snowmobiling within the state is provided in Table 15.

DISCUSSION

This study is the first focused research into snowmobile use across the entire state of Utah in nearly two decades. The most recent comparable work was completed in 2001 by McCoy and her colleagues.[1] Their analysis differed from ours in several important ways. Most notably, they did not collect data on the destination of registered snowmobile owners' most recent trip, opting instead to define trip destinations by snowmobiling complex (e.g., the Logan Canyon, Hardware Ranch, Monte Cristo complex). This was most likely a strategic decision on the part of the researchers due to the fact their survey was administered by phone and the likely probability that most snowmobilers do not know what county they are in when taking a trip (e.g., is a trip just east of Strawberry Reservoir in Wasatch or Duchesne counties?). In our survey, we asked individuals to indicate on a map of the state where they took their most recent trip. It is relatively easy for snowmobilers to locate the point location of the destination trailhead visited on their most recent trip. This allowed us to reclassify the locations survey respondents indicated on the map into counties. By collecting data at the county level (as opposed to by snowmobiling complex) we were able to estimate total snowmobiling-related expenditures at the same unit (the county) required by input-output models to estimate economic impact. The result is county-specific estimates of economic impact – information that is more relevant to local elected officials, snowmobile equipment retailers located throughout the state, and the Utah Snowmobile Association.

In addition to the county-level economic impact analysis, which we hope will guide the decisions of local business owners, snowmobile user groups, as well as state and federal land management agencies, our analysis revealed three noteworthy findings worthy of discussion here. First, the number of registered snowmobile owners has remained steady over the past two decades. Second, the economic impacts of snowmobiling are concentrated in only a few counties around the state. And third, while the economic impacts of snowmobiling are substantial, relatively few sectors benefit.

The number of registered snowmobile owners has remained steady over the past two decades

As of February, 2017 there were just over 11,000 unique households owning a snowmobile registered for use within the state. In 1998, the number of unique individuals owning a snowmobile for use in the state was over 13,000. This measure is slightly different (households versus individuals), so we also compared the number of registered snowmobiles from 1998 to 2017, which revealed the number has stayed relatively

Table 12. Top Five Economic Sectors in which Labor Income is Supported by Snowmobiling in Utah

Economic Sector	Labor Income Supported	Percentage of All Labor Income Supported
Retail - Motor vehicle and parts dealers	$39,717,293	55.4
Retail - Gasoline stores	$3,600,592	5.0
Retail - Food and beverage stores	$1,817,865	2.5
Full-service restaurants	$1,405,555	2.0
Wholesale trade	$1,386,073	1.9

Table 13. Top Five Economic Sectors in which Value (Labor Income, Interest, Rent, and Profit) is Generated by Snowmobiling in Utah

Economic Sector	Value Generated	Percentage of All Value Generated
Retail – Motor vehicle and parts dealers	$55,766,727	49.9
Real estate	$5,522,672	5.2
Owner-occupied dwellings	$3,988,786	3.8
Retail – Gasoline stores	$3,845,730	3.6
Retail – Food and beverage stores	$2,407,255	2.3

constant with 24,489 registered snowmobiles in 1998 and 22,802 in 2017. We would expect a substantially higher number of registered owners and snowmobiles given the population of the state as a whole has increased by 77% over the same time period. The number of registered snowmobile owners within the state has not been keeping pace with population growth, suggesting either snowmobiling is declining in popularity, or that as aging snowmobilers quit the activity, they are not being replaced by younger riders. While it is impossible for this research to say which is the case, our analysis did reveal the average age of registered snowmobilers in 2017 is 54 years old, 11 years older than when McCoy and her colleagues conducted their study in 2001. Future research is needed to determine probable causes of stagnant growth within the activity. There are a variety of potential causes including individuals opting to spend more of their discretionary income on other outdoor recreation activities (e.g., riding off-highway vehicles and side-by-sides), rising participation costs (the cost of a new snowmobile often exceeds $10,000), and more variable snow conditions throughout the winter.

The economic impacts of snowmobiling are concentrated in a few counties

The economic impacts of snowmobiling in Utah are concentrated in relatively few counties, primarily those with the largest concentrations of snowmobile owners and those with the most heavily visited destinations. Salt Lake, Summit, Utah, Wasatch, and Weber counties collectively benefit substantially more than the rest of the state as a whole. Nearly 67% of the jobs created by snowmobiling within the state (918 jobs) are within these five counties. These counties also account for over 70% of the labor income, value, and output generated by snowmobiling within the state (Labor Income – 71.5%, $42.8 million; Value – 71.4%, $63.1 million; Output – 70.1%, $98.9 million). These findings are not surprising given both Utah's population is highly concentrated along the Wasatch Front, and that there are relatively few heavily visited snowmobile destinations throughout the state. The economic impacts of snowmobiling follow the typical trip taking behaviors of Utah's snowmobilers. That is, traveling from the Wasatch Front (Salt Lake, Utah, and Weber counties) to the Wasatch Back (Summit and Weber counties). Most of the expenses related to snowmobiling occur at the county of origin (e.g., fueling up before a trip, having snowmobiles repaired, etc.). Expenses made at the destination are primarily limited to fuel (for the return trip home). Relatively little money is spent en-route from the origin to the destination. These findings are evident in the fact that Cache county, which receives nearly 20% of all snowmobile trips taken within the state, only receives 5 to 6 percent of the economic activity generated by the activity. A full breakdown of the economic impact by county is reported in Appendix 3.

Table 14. Top Five Economic Sectors in which Local Sales are Generated by Snowmobiling in Utah

Economic Sector	Local Sales Generated	Percentage of All Local Sales Generated
Retail – Motor vehicle and parts dealers	$68,551,474	41.4
Real estate	$8,042,985	4.9
Retail – Gasoline stores	$6,470,978	3.9
Owner-occupied dwellings	$5,959,490	3.6
Wholesale trade	$4,114,526	2.5

Table 15. State and Local Tax Generated by Snowmobiling in Utah

Description	Employee Compensation	Tax on Production and Imports	Households	Corporations
Social Ins Tax- Employee Contribution	$9,797			
Social Ins Tax- Employer Contribution	$19,794			
Sales Tax		$5,973,195		
Property Tax		$4,331,758		
Motor Vehicle License		$109,987		
Severance Tax		$223,188		
Other Taxes		$342,805		
S/L Non-Taxes		$119,938		
Corporate Profits Tax				$161,966
Personal Tax: Income Tax			$1,640,806	
Personal Tax: Non-Taxes (Fines- Fees			$157,456	
Personal Tax: Motor Vehicle License			$62,898	
Personal Tax: Property Taxes			$24,225	
Personal Tax: Other Tax (Fish/Hunt)			$86,022	
TOTAL	**$29,591**	**$11,100,871**	**$1,971,406**	**$173,677**

While the economic impacts of snowmobiling are substantial, relatively few sectors benefit

While snowmobiling has a substantial impact on Utah's economy, those impacts occur within only a few economic sectors. Nearly half (43%) of the jobs created and 55% of the labor income generated by snowmobiling fall within the Retail – Motor vehicle and parts sales sector. Another 8% of created jobs, and 5% of the labor income, generated by the activity accrue in the Retail – Gasoline stores sector. These two sectors capture most of the value generated by snowmobiling, with the Retail – Motor vehicle and parts sales sector accounting for nearly 50% of the total value generated and the Retail – Gasoline stores sector accounting for another 4%. Additionally, over 40% of local sales related to snowmobiling are within the Retail – Motor vehicle and parts sector. This is consistent with other economic impact studies of snowmobiling in the western United States,[6] and should not overshadow the substantial role snowmobiling plays in the state's economy.

Collectively, this study has identified some interesting findings relevant to local business owners, snowmobile user groups, as well as state and federal land management agencies. The fact that snowmobile use within the state has remained relatively stable over the past 20 years is noteworthy, but it is not a trend unique to Utah. Data from the International Snowmobile Manufacturers Association reveals the same pattern is being seen all across the United States. Even though snowmobile use has remained stable, it does generate a substantial amount of revenue for the state. Last year alone, over $13 million in state and local tax revenues were generated by the activity. We suggest local business owners and snowmobile user groups utilize this finding to advocate for continued or improved protection and management of Utah's high-quality snowmobile destinations. Future participation and enjoyment in the activity will depend on the continued dedication and tireless work of snowmobile user groups and land management agencies who steward the greatest snow on earth.

References

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APPENDIX 1: SURVEY INSTRUMENT

2017 SURVEY ON THE

ECONOMIC IMPACT OF SNOWMOBILING IN UTAH

A STUDY CONDUCTED BY THE
INSTITUTE OF OUTDOOR RECREATION AND TOURISM
AT UTAH STATE UNIVERSITY

ON BEHALF OF THE
UTAH SNOWMOBILE ASSOCIATION

INSTITUTE OF
OUTDOOR
RECREATION
AND TOURISM
UTAH STATE UNIVERSITY

2017 SURVEY ON

THE ECONOMIC IMPACT OF SNOWMOBILING IN UTAH

This is a quick and easy survey of you and your households' recent snowmobiling activity.

All of your answers are completely confidential.

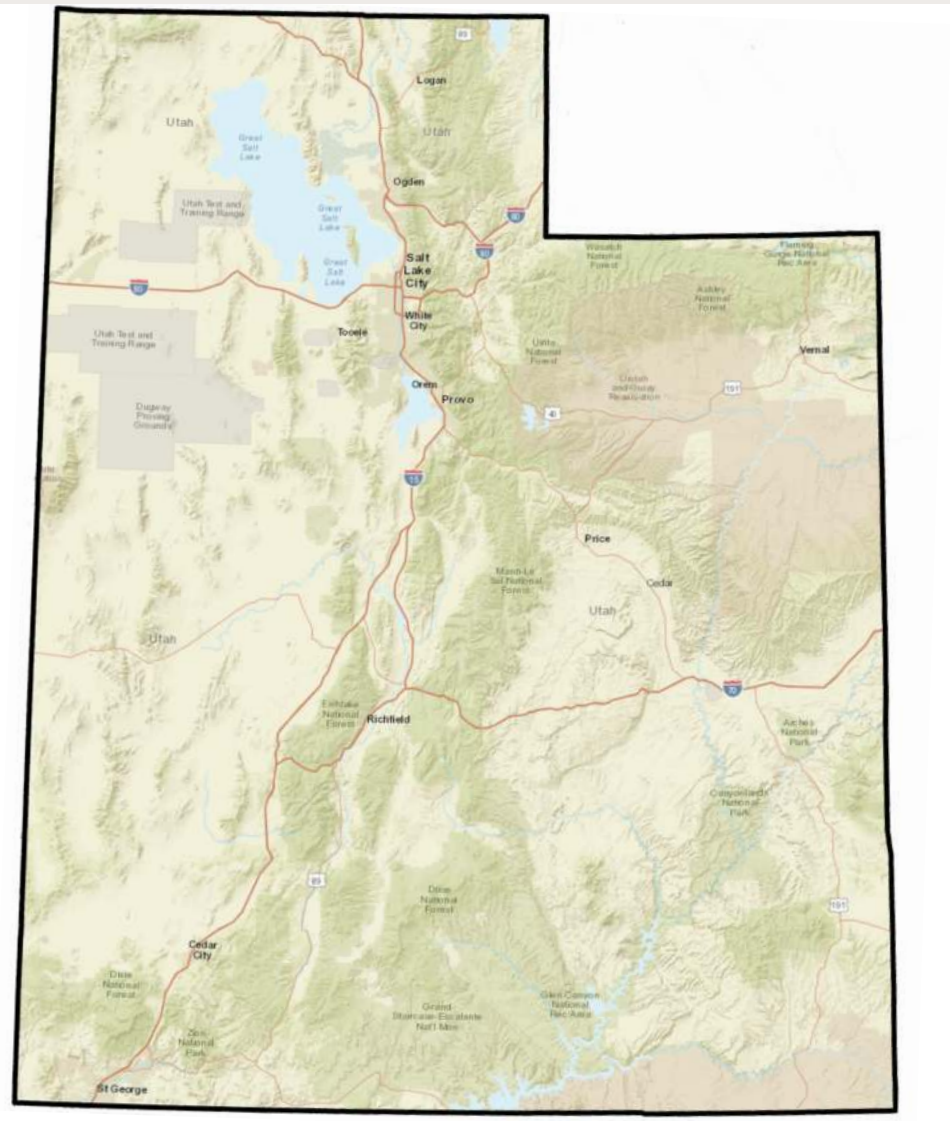
Participate in the survey to assist with decisions about snowmobile use in Utah!

Please use a black or blue pen

1. How many registered snowmobiles did you, and the members of your household own on April 1, 2017?

Number of registered snowmobiles

2. Mark on the map below where the most recent trip that you, or other members of your household, took for the primary purpose of snowmobiling in Utah? *You can mark an area or specific trails.*



EXTENSION UtahStateUniversity

2017 SURVEY ON THE ECONOMIC IMPACT OF SNOWMOBILING IN UTAH

3. **When was the most recent trip that you, or other members of your household took for the primary purpose of snowmobiling in Utah?**

Month ☐☐ Day ☐☐ Year ☐☐

4. **Was this trip more than one day?**

☐ Yes → How many **days** were you gone from home on this trip? ☐☐ Days

☐ No → How many **hours** were you gone from home on this trip? ☐☐ Hours

5. **How many total miles did you, and other members of your household, snowmobile on this trip?** ☐☐☐ Miles

6. **Including yourself, how many members of your household went on this trip?** ☐☐ Members of your household

The next questions are about how much you, and other members of your household, spent JUST ON THIS TRIP.

7. **How much did you, and members of your household, spend ON THIS TRIP for each of the items listed below.** *Only include expenditures made in Utah and only include expenses made by you or other members of your household.*

Gasoline and oil for your snowmobile(s)

Spent in your home city ☐☐☐☐.00 *Spent on the way* ☐☐☐☐.00 *Spent at the destination* ☐☐☐☐.00

Gasoline and oil for vehicles to tow your snowmobiles

Spent in your home city ☐☐☐☐.00 *Spent on the way* ☐☐☐☐.00 *Spent at the destination* ☐☐☐☐.00

Overnight lodging *(for example: motels, lodges, cabins, B&Bs, etc.)*

Spent in your home city ☐☐☐☐.00 *Spent on the way* ☐☐☐☐.00 *Spent at the destination* ☐☐☐☐.00

Eating and drinking establishments *(for example: restaurants, bars, etc.)*

Spent in your home city ☐☐☐☐.00 *Spent on the way* ☐☐☐☐.00 *Spent at the destination* ☐☐☐☐.00

Food from grocery or convenience stores

Spent in your home city ☐☐☐☐.00 *Spent on the way* ☐☐☐☐.00 *Spent at the destination* ☐☐☐☐.00

2017 SURVEY ON THE ECONOMIC IMPACT OF SNOWMOBILING IN UTAH

7 *(continued)*. **How much did you, and members of your household, spend ON THIS TRIP for each of the items listed below.** *Only include expenditures made in Utah and only include expenses made by you or other members of your household.*

Parking area fees

Spent in your home city	*Spent on the way*	*Spent at the destination*
.00	.00	.00

Other recreation activities *(for example: hunting, skiing, snowboarding, etc.)*

Spent in your home city	*Spent on the way*	*Spent at the destination*
.00	.00	.00

Snowmobile rentals, tour packages, or guide services

Spent in your home city	*Spent on the way*	*Spent at the destination*
.00	.00	.00

Repairs or maintenance on your snowmobile(s), trailer(s), or tow vehicle(s)

Spent in your home city	*Spent on the way*	*Spent at the destination*
.00	.00	.00

Retail items *(for example: outerwear, helmets, etc.)*

Spent in your home city	*Spent on the way*	*Spent at the destination*
.00	.00	.00

8. Did you, or other members of your household, have any other expenses that were not listed on the previous page?

☐ Yes ☐ No → Go to Question 9.

List all other expenses below.

Item:	Item:
Cost: .00	Cost: .00
City where money was spent:	City where money was spent:
Item:	Item:
Cost: .00	Cost: .00
City where money was spent:	City where money was spent:

2017 SURVEY ON THE ECONOMIC IMPACT OF SNOWMOBILING IN UTAH

The next questions are about how much you, and other members of your household, snowmobiled between December 1, 2016 and April 1, 2017.

9. **How many single day trips did you, and other members of your hourseholds, take for the primary purpose of snowmobiling between December 1, 2016 and April 1, 2017?**

☐☐ Number of **single day** trips

↓

Is this typical of the number of single day snowmobiling trips you, and other members of your household, take during the season?

- ☐ Yes
- ☐ No, it is substantially less than typical
- ☐ No, it is substantially more than typical

10. **How many overnight trips did you, and other members of your hourseholds, take for the primary purpose of snowmobiling between December 1, 2016 and April 1, 2017?**

☐☐ Number of **overnight** trips

↓

Is this typical of the number of overnight snowmobiling trips you, and other members of your household, take during the season?

- ☐ Yes
- ☐ No, it is substantially less than typical
- ☐ No, it is substantially more than typical

11. **How much did you, and members of your household, spend on each of the items listed below over the past 12 months?**

Snowmobiles

Spent in your home city	*Spent in another city*	*Which city or cities?*
☐☐☐☐.00	☐☐☐☐.00	

Trailers used for transporting snowmobiles

Spent in your home city	*Spent in another city*	*Which city or cities?*
☐☐☐☐.00	☐☐☐☐.00	

Fuel and oil for your snowmobile(s) and tow vehicle(s) *(just for snowmobiling trips)*

Spent in your home city	*Spent in another city*	*Which city or cities?*
☐☐☐☐.00	☐☐☐☐.00	

Snowmobile repairs, parts, or accessories *(for example: sparkplugs, belts, etc.)*

Spent in your home city	*Spent in another city*	*Which city or cities?*
☐☐☐☐.00	☐☐☐☐.00	

Insurance for snowmobiles

Spent in your home city	*Spent in another city*	*Which city or cities?*
☐☐☐☐.00	☐☐☐☐.00	

Clothing purchased primarily for snowmobiling

Spent in your home city	*Spent in another city*	*Which city or cities?*
☐☐☐☐.00	☐☐☐☐.00	

2017 SURVEY ON THE ECONOMIC IMPACT OF SNOWMOBILING IN UTAH

11 *(continued)*. **How much did you, and members of your household, spend on each of the items listed below over the past 12 months?**

Snowmobile club dues and/or other club expenses

Spent in your home city	*Spent in another city*	*Which city or cities?*
.00	.00	

Snowmobile registration(s), license(s), and tax(es)

Spent in your home city	*Spent in another city*	*Which city or cities?*
.00	.00	

Snowmobile storage

Spent in your home city	*Spent in another city*	
.00	.00	

12. Are the expenses above typical for you and other members of your household for a 12-month period?

- ☐ Yes
- ☐ No, they are substantially less than typical
- ☐ No, they are substantially more than typical

13. Where is your favorite place to snowmobile in Utah?

Name of place

↓

Why is this your favorite place to snowmobile in Utah?

Reason

2017 SURVEY ON THE ECONOMIC IMPACT OF SNOWMOBILING IN UTAH

The last set of questions are about your basic demographic characteristics.

14. In what year were you born?

☐☐☐☐ Year

15. How many people, including yourself, were living in your household on April 1, 2017?

☐☐ Number of individuals

16. Of the people living in your household, how many have taken a snowmobile education course?

☐☐ Number of individuals

17. Of the people living in your household, how many have taken an avalanche awareness course?

☐☐ Number of individuals

18. What is the highest level of school you have completed?

- ☐ Less than 9th grade
- ☐ Some high school
- ☐ High school or equivalent
- ☐ Some college, no degree
- ☐ Associates degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Professional degree
- ☐ Doctoral degree

19. What is your sex/gender?

- ☐ Male
- ☐ Female
- ☐ Other
- ☐ Prefer not to answer

20. Do you consider yourself Hispanic/Latino?

- ☐ Yes
- ☐ No
- ☐ Prefer not to answer

21. What is your race?

- ☐ White
- ☐ Black/African American
- ☐ American Indian or Alaska Native
- ☐ Some other race → _____ Please specify

22. What was your total annual household income for 2016? *This includes your personal income as well as the incomes of other wage earners living in your household.*

☐☐☐☐☐☐☐ 00 .

Thank you for participating!

Your information will assist in decisions affecting snowmobile use in Utah.

To find out more about the study and its results, go to:
www.extension.usu.edu/iort/snowmobile

APPENDIX 2: TOTAL SNOWMOBILE TRIP EXPENDITURES BY COUNTY

Expenditure	Beaver	Box Elder	Cache
Gasoline and oil for snowmobiles	$53,173	$98,371	$860,642
Gasoline and oil for vehicles to tow snowmobiles	$63,808	$63,808	$525,566
Overnight lodging	$-	$-	$-
Eating and drinking establishments	$-	$-	$416,253
Food from grocery or convenience stores	$-	$66,467	$246,214
Parking area fees	$-	$-	$16,238
Other recreation activities	$-	$-	$53,173
Snowmobile rentals, tour packages, or guide services	$-	$-	$-
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$-	$159,520	$598,201
Retail items	$-	$15,952	$140,910
TOTAL	**$116,981**	**$404,118**	**$2,857,196**

Expenditure	Carbon	Daggett	Davis
Gasoline and oil for snowmobiles	$64,743	$-	$557,257
Gasoline and oil for vehicles to tow snowmobiles	$26,587	$-	$630,105
Overnight lodging	$-	$-	$-
Eating and drinking establishments	$13,073	$-	$101,029
Food from grocery or convenience stores	$9,805	$-	$255,764
Parking area fees	$-	$-	$5,317
Other recreation activities	$-	$-	$212,694
Snowmobile rentals, tour packages, or guide services	$-	$-	$-
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$-	$-	$1,405,373
Retail items	$-	$-	$316,382
TOTAL	**$114,208**	**$-**	**$3,483,922**

Expenditure	Duchesne	Emery	Garfield
Gasoline and oil for snowmobiles	$19,610	$139,648	$12,990
Gasoline and oil for vehicles to tow snowmobiles	$23,532	$-	$-
Overnight lodging	$-	$-	$-
Eating and drinking establishments	$39,054	$11,691	$16,238
Food from grocery or convenience stores	$26,064	$35,724	$11,071
Parking area fees	$3,897	$-	$7,794
Other recreation activities	$-	$-	$-
Snowmobile rentals, tour packages, or guide services	$-	$-	$-
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$-	$-	$-
Retail items	$-	$-	$-
TOTAL	**$112,157**	**$187,063**	**$48,094**

Expenditure	Grand	Iron	Juab
Gasoline and oil for snowmobiles	$-	$106,347	$-
Gasoline and oil for vehicles to tow snowmobiles	$53,173	$87,736	$26,587
Overnight lodging	$-	$312,983	$-
Eating and drinking establishments	$-	$23,928	$-
Food from grocery or convenience stores	$53,173	$13,293	$-
Parking area fees	$-	$-	$-
Other recreation activities	$-	$64,952	$-
Snowmobile rentals, tour packages, or guide services	$-	$-	$-
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$-	$265,867	$-
Retail items	$-	$106,347	$-
TOTAL	**$106,347**	**$981,453**	**$26,587**

Appendix 2 (continued). Total Snowmobile Trip Expenditures by County

Expenditure	Kane	Millard	Morgan
Gasoline and oil for snowmobiles	$16,238	$31,904	$274,309
Gasoline and oil for vehicles to tow snowmobiles	$53,173	$31,904	$187,437
Overnight lodging	$-	$-	$-
Eating and drinking establishments	$29,229	$-	$93,313
Food from grocery or convenience stores	$95,712	$10,635	$92,492
Parking area fees	$-	$-	$12,990
Other recreation activities	$-	$-	$-
Snowmobile rentals, tour packages, or guide services	$-	$-	$-
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$53,173	$-	$205,669
Retail items	$191,424	$-	$106,347
TOTAL	**$438,950**	**$74,443**	**$972,558**

Expenditure	Piute	Rich	Salt Lake
Gasoline and oil for snowmobiles	$-	$58,457	$1,016,845
Gasoline and oil for vehicles to tow snowmobiles	$-	$-	$1,101,468
Overnight lodging	$-	$-	$-
Eating and drinking establishments	$-	$32,476	$145,824
Food from grocery or convenience stores	$-	$16,238	$573,921
Parking area fees	$-	$3,248	$3,248
Other recreation activities	$-	$97,428	$236,622
Snowmobile rentals, tour packages, or guide services	$-	$-	$106,347
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$-	$-	$2,198,720
Retail items	$-	$-	$1,090,664
TOTAL	**$-**	**$207,847**	**$6,473,659**

Expenditure	San Juan	Sanpete	Sevier
Gasoline and oil for snowmobiles	$-	$225,189	$-
Gasoline and oil for vehicles to tow snowmobiles	$-	$58,050	$-
Overnight lodging	$-	$118,213	$-
Eating and drinking establishments	$-	$99,175	$-
Food from grocery or convenience stores	$-	$33,175	$2,659
Parking area fees	$-	$3,248	$-
Other recreation activities	$-	$-	$-
Snowmobile rentals, tour packages, or guide services	$-	$-	$113,667
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$-	$122,299	$-
Retail items	$-	$66,467	$-
TOTAL	**$-**	**$725,817**	**$116,325**

Expenditure	Summit	Tooele	Uintah
Gasoline and oil for snowmobiles	$456,247	$85,077	$37,221
Gasoline and oil for vehicles to tow snowmobiles	$292,112	$85,077	$63,808
Overnight lodging	$-	$-	$-
Eating and drinking establishments	$362,161	$-	$10,635
Food from grocery or convenience stores	$225,320	$-	$10,635
Parking area fees	$19,981	$-	$-
Other recreation activities	$6,537	$-	$-
Snowmobile rentals, tour packages, or guide services	$-	$-	$-
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$419,918	$244,598	$53,173
Retail items	$278,060	$39,880	$53,173
TOTAL	**$2,060,335**	**$454,633**	**$228,646**

Appendix 2 (continued). Total Snowmobile Trip Expenditures by County

Expenditure	Utah	Wasatch	Washington
Gasoline and oil for snowmobiles	$861,454	$319,081	$96,776
Gasoline and oil for vehicles to tow snowmobiles	$1,152,081	$184,593	$106,347
Overnight lodging	$-	$649,523	$-
Eating and drinking establishments	$330,318	$358,653	$-
Food from grocery or convenience stores	$664,707	$236,831	$31,904
Parking area fees	$4,547	$37,023	$-
Other recreation activities	$205,802	$-	$-
Snowmobile rentals, tour packages, or guide services	$194,857	$-	$-
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$1,461,303	$-	$53,173
Retail items	$1,184,666	$142,978	$15,952
TOTAL	**$6,059,736**	**$1,928,681**	**$304,152**

Expenditure	Wayne	Weber	STATEWIDE
Gasoline and oil for snowmobiles	$-	$348,001	$5,739,581
Gasoline and oil for vehicles to tow snowmobiles	$-	$386,571	$5,203,525
Overnight lodging	$-	$-	$1,080,719
Eating and drinking establishments	$-	$146,515	$2,229,565
Food from grocery or convenience stores	$-	$342,887	$3,054,690
Parking area fees	$3,248	$12,402	$133,180
Other recreation activities	$-	$-	$877,208
Snowmobile rentals, tour packages, or guide services	$-	$-	$414,870
Repairs or maintenance on snowmobiles, trailers, and tow vehicles	$-	$536,560	$7,777,549
Retail items	$-	$132,933	$3,882,135
TOTAL	**$3,248**	**$1,905,869**	**$30,393,022**

APPENDIX 3: TOTAL SNOWMOBILE EXPENDITURES NOT RELATED TO REGISTERED OWNERS' MOST RECENT TRIP BY COUNTY

Expenditure	Beaver	Box Elder	Cache
Snowmobiles	$-	$895,730	$1,377,836
Trailers used for transporting snowmobiles	$8,400	$1,556,750	$345,210
Fuel and oil for snowmobiles and tow vehicles	$7,350	$361,166	$402,223
Snowmobile repairs, parts, and accessories	$3,150	$493,920	$461,045
Insurance for snowmobiles	$2,100	$127,911	$122,797
Clothing purchased for snowmobiling	$-	$407,150	$383,727
Snowmobile club dues and other club expenditures	$-	$-	$1,549
Snowmobile registrations, licenses, and taxes	$1,470	$81,217	$148,724
Snowmobile storage	$-	$143,700	$-
TOTAL	**$22,470**	**$4,067,543**	**$3,243,110**

Expenditure	Carbon	Daggett	Davis
Snowmobiles	$29,137	$-	$2,582,815
Trailers used for transporting snowmobiles	$1,421,901	$-	$1,895,650
Fuel and oil for snowmobiles and tow vehicles	$14,127	$-	$755,902
Snowmobile repairs, parts, and accessories	$-	$-	$436,570
Insurance for snowmobiles	$5,150	$-	$178,156
Clothing purchased for snowmobiling	$-	$-	$331,179
Snowmobile club dues and other club expenditures	$-	$-	$-
Snowmobile registrations, licenses, and taxes	$7,725	$-	$261,286
Snowmobile storage	$-	$-	$144,828
TOTAL	**$1,478,040**	**$-**	**$6,586,386**

Expenditure	Duchesne	Emery	Garfield
Snowmobiles	$-	$-	$-
Trailers used for transporting snowmobiles	$-	$-	$-
Fuel and oil for snowmobiles and tow vehicles	$-	$-	$-
Snowmobile repairs, parts, and accessories	$17,300	$-	$-
Insurance for snowmobiles	$-	$-	$-
Clothing purchased for snowmobiling	$-	$-	$-
Snowmobile club dues and other club expenditures	$-	$-	$-
Snowmobile registrations, licenses, and taxes	$14,186	$-	$-
Snowmobile storage	$-	$-	$-
TOTAL	**$31,486**	**$-**	**$-**

Expenditure	Grand	Iron	Juab
Snowmobiles	$-	$23,833	$-
Trailers used for transporting snowmobiles	$-	$238,333	$34,500
Fuel and oil for snowmobiles and tow vehicles	$-	$40,517	$17,250
Snowmobile repairs, parts, and accessories	$-	$70,157	$-
Insurance for snowmobiles	$8,000	$-	$-
Clothing purchased for snowmobiling	$-	$76,267	$-
Snowmobile club dues and other club expenditures	$-	$-	$-
Snowmobile registrations, licenses, and taxes	$-	$33,367	$15,611
Snowmobile storage	$-	$-	$-
TOTAL	**$8,000**	**$482,473**	**$67,361**

Appendix 3 (continued). Total Snowmobile Expenditures Not Related to Most Recent Trip by County

Expenditure	Kane	Millard	Morgan
Snowmobiles	$896,750	$-	$48,000
Trailers used for transporting snowmobiles	$580	$2,200	$-
Fuel and oil for snowmobiles and tow vehicles	$27,813	$18,480	$62,400
Snowmobile repairs, parts, and accessories	$30,779	$-	$14,400
Insurance for snowmobiles	$-	$13,200	$-
Clothing purchased for snowmobiling	$4,930	$-	$-
Snowmobile club dues and other club expenditures	$-	$-	$-
Snowmobile registrations, licenses, and taxes	$3,190	$7,920	$31,920
Snowmobile storage	$-	$-	$17,344
TOTAL	**$964,042**	**$41,800**	**$174,064**

Expenditure	Piute	Rich	Salt Lake
Snowmobiles	$-	$11,726	$4,209,058
Trailers used for transporting snowmobiles	$-	$15,713	$1,059,210
Fuel and oil for snowmobiles and tow vehicles	$-	$69,186	$1,006,465
Snowmobile repairs, parts, and accessories	$-	$-	$1,140,676
Insurance for snowmobiles	$-	$-	$233,862
Clothing purchased for snowmobiling	$-	$-	$519,397
Snowmobile club dues and other club expenditures	$-	$-	$15,229
Snowmobile registrations, licenses, and taxes	$-	$-	$431,132
Snowmobile storage	$-	$-	$117,183
TOTAL	**$-**	**$96,626**	**$8,732,210**

Expenditure	San Juan	Sanpete	Sevier
Snowmobiles	$-	$1,912,565	$-
Trailers used for transporting snowmobiles	$-	$6,150	$23,287
Fuel and oil for snowmobiles and tow vehicles	$-	$193,406	$47,714
Snowmobile repairs, parts, and accessories	$-	$85,910	$14,554
Insurance for snowmobiles	$-	$40,274	$-
Clothing purchased for snowmobiling	$-	$123,000	$-
Snowmobile club dues and other club expenditures	$-	$-	$-
Snowmobile registrations, licenses, and taxes	$-	$28,290	$4,332
Snowmobile storage	$-	$-	$-
TOTAL	**$-**	**$2,389,594**	**$89,888**

Expenditure	Summit	Tooele	Uintah
Snowmobiles	$7,807,940	$685,125	$172,500
Trailers used for transporting snowmobiles	$1,066,020	$640,844	$11,500
Fuel and oil for snowmobiles and tow vehicles	$168,715	$75,364	$115,000
Snowmobile repairs, parts, and accessories	$293,750	$14,648	$138,000
Insurance for snowmobiles	$33,563	$44,888	$-
Clothing purchased for snowmobiling	$328,760	$11,104	$46,000
Snowmobile club dues and other club expenditures	$5,764	$-	$-
Snowmobile registrations, licenses, and taxes	$97,345	$18,002	$40,250
Snowmobile storage	$28,013	$-	$-
TOTAL	**$9,829,869**	**$1,489,974**	**$523,250**

Appendix 3 (continued). Total Snowmobile Expenditures Not Related to Most Recent Trip by County

Expenditure	Utah	Wasatch	Washington
Snowmobiles	$5,893,088	$5,941,428	$-
Trailers used for transporting snowmobiles	$1,507,358	$4,602,418	$-
Fuel and oil for snowmobiles and tow vehicles	$963,754	$100,412	$35,650
Snowmobile repairs, parts, and accessories	$1,055,761	$101,826	$106,248
Insurance for snowmobiles	$446,268	$127,872	$4,030
Clothing purchased for snowmobiling	$841,160	$423,770	$930
Snowmobile club dues and other club expenditures	$-	$-	$-
Snowmobile registrations, licenses, and taxes	$288,447	$-	$20,708
Snowmobile storage	$208,697	$-	$-
TOTAL	**$11,204,534**	**$11,297,726**	**$167,566**

Expenditure	Wayne	Weber	STATEWIDE
Snowmobiles	$-	$4,612,270	$37,099,802
Trailers used for transporting snowmobiles	$-	$3,029,920	$17,465,944
Fuel and oil for snowmobiles and tow vehicles	$-	$740,272	$5,223,166
Snowmobile repairs, parts, and accessories	$-	$1,061,314	$5,540,008
Insurance for snowmobiles	$-	$262,071	$1,650,140
Clothing purchased for snowmobiling	$-	$332,505	$3,829,878
Snowmobile club dues and other club expenditures	$-	$3,483	$26,024
Snowmobile registrations, licenses, and taxes	$-	$314,987	$1,850,107
Snowmobile storage	$-	$166,930	$826,694
TOTAL	**$-**	**$10,523,752**	**$73,511,764**

APPENDIX 4: ECONOMIC IMPACT OF SNOWMOBILING IN UTAH BY COUNTY

County	Effect Type	Employment	Labor Income	Value Added	Output
Beaver	Direct	2	$58,740	$66,736	$120,131
	Indirect	0	$3,045	$9,203	$16,632
	Induced	0	$3,103	$8,990	$16,446
	TOTAL	**3**	**$64,887**	**$84,928**	**$153,210**
Box Elder	Direct	41	$1,762,936	$2,485,886	$3,653,383
	Indirect	6	$151,358	$239,288	$535,568
	Induced	8	$197,547	$414,560	$807,916
	TOTAL	**55**	**$2,111,841**	**$3,139,734**	**$4,996,867**
Cache	Direct	64	$2,380,184	$3,163,411	$4,834,427
	Indirect	10	$279,636	$485,234	$1,106,308
	Induced	16	$451,994	$859,158	$1,694,174
	TOTAL	**90**	**$3,111,815**	**$4,507,804**	**$7,634,909**
Carbon	Direct	17	$821,874	$1,132,442	$1,563,994
	Indirect	2	$69,009	$116,221	$252,392
	Induced	4	$143,329	$275,215	$519,372
	TOTAL	**23**	**$1,034,212**	**$1,523,878**	**$2,335,757**
Daggett	Direct	0	$-	$-	$-
	Indirect	0	$-	$-	$-
	Induced	0	$-	$-	$-
	TOTAL	**0**	**$-**	**$-**	**$-**
Davis	Direct	82	$4,309,044	$5,790,748	$8,121,884
	Indirect	14	$547,137	$941,403	$1,815,432
	Induced	23	$730,235	$1,439,443	$2,641,043
	TOTAL	**119**	**$5,586,416**	**$8,171,594**	**$12,578,359**
Duchesne	Direct	3	$54,861	$63,544	$126,231
	Indirect	0	$6,647	$11,339	$26,534
	Induced	0	$6,037	$13,192	$23,796
	TOTAL	**3**	**$67,544**	**$88,074**	**$176,561**
Emery	Direct	4	$85,105	$98,891	$187,063
	Indirect	0	$8,144	$15,403	$35,479
	Induced	0	$5,454	$16,056	$30,649
	TOTAL	**4**	**$98,703**	**$130,351**	**$253,190**
Garfield	Direct	1	$22,347	$25,890	$48,088
	Indirect	0	$1,391	$2,942	$9,793
	Induced	0	$1,936	$4,535	$9,745
	TOTAL	**1**	**$25,674**	**$33,367**	**$67,626**
Grand	Direct	2	$56,560	$68,694	$114,347
	Indirect	0	$7,202	$15,745	$35,643
	Induced	0	$8,608	$17,683	$32,934
	TOTAL	**2**	**$72,371**	**$102,122**	**$182,924**
Iron	Direct	16	$543,474	$765,851	$1,312,725
	Indirect	3	$65,249	$116,506	$270,347
	Induced	4	$92,105	$185,094	$372,866
	TOTAL	**22**	**$700,828**	**$1,067,452**	**$1,955,939**

Appendix 4 (continued). Economic Impact of Snowmobiling in Utah by County

County	Effect Type	Employment	Labor Income	Value Added	Output
Juab	Direct	1	$19,420	$27,880	$43,837
	Indirect	0	$979	$2,042	$5,077
	Induced	0	$1,610	$3,857	$7,647
	TOTAL	**1**	**$22,009**	**$33,779**	**$56,560**
Kane	Direct	18	$582,305	$859,012	$1,316,571
	Indirect	2	$52,953	$101,657	$226,532
	Induced	2	$56,330	$140,800	$266,249
	TOTAL	**22**	**$691,588**	**$1,101,469**	**$1,809,352**
Millard	Direct	1	$33,057	$40,108	$79,283
	Indirect	0	$4,211	$7,121	$22,456
	Induced	0	$3,193	$7,215	$14,327
	TOTAL	**2**	**$40,461**	**$54,445**	**$116,065**
Morgan	Direct	18	$376,165	$520,318	$962,512
	Indirect	2	$42,258	$72,494	$199,270
	Induced	1	$22,447	$62,749	$126,112
	TOTAL	**22**	**$440,869**	**$655,561**	**$1,287,894**
Piute	Direct	0	$-	$-	$-
	Indirect	0	$-	$-	$-
	Induced	0	$-	$-	$-
	TOTAL	**0**	**$-**	**$-**	**$-**
Rich	Direct	2	$32,117	$57,918	$160,116
	Indirect	1	$10,703	$21,138	$50,692
	Induced	0	$2,495	$7,208	$14,417
	TOTAL	**3**	**$45,316**	**$86,264**	**$225,224**
Salt Lake	Direct	107	$7,259,119	$9,087,785	$12,050,723
	Indirect	22	$1,182,279	$2,081,786	$3,600,314
	Induced	45	$2,100,753	$3,736,580	$6,405,982
	TOTAL	**174**	**$10,542,151**	**$14,906,151**	**$22,057,019**
San Juan	Direct	0	$-	$-	$-
	Indirect	0	$-	$-	$-
	Induced	0	$-	$-	$-
	TOTAL	**0**	**$-**	**$-**	**$-**
Sanpete	Direct	34	$1,158,555	$1,706,444	$2,642,598
	Indirect	5	$99,263	$160,445	$443,765
	Induced	5	$121,267	$269,735	$551,575
	TOTAL	**45**	**$1,379,086**	**$2,136,625**	**$3,637,937**
Sevier	Direct	2	$75,929	$87,901	$191,419
	Indirect	1	$16,658	$30,880	$72,011
	Induced	0	$12,131	$24,564	$47,509
	TOTAL	**3**	**$104,718**	**$143,345**	**$310,939**
Summit	Direct	117	$6,203,610	$8,233,753	$11,258,956
	Indirect	16	$754,154	$1,421,261	$2,496,970
	Induced	19	$769,657	$1,519,077	$2,540,126
	TOTAL	**153**	**$7,727,421**	**$11,174,091**	**$16,296,053**

Appendix 4 (continued). Economic Impact of Snowmobiling in Utah by County

County	Effect Type	Employment	Labor Income	Value Added	Output
Tooele	Direct	20	$865,945	$1,241,699	$1,779,258
	Indirect	2	$71,650	$122,686	$271,579
	Induced	3	$81,203	$189,648	$352,987
	TOTAL	**26**	**$1,018,798**	**$1,554,033**	**$2,403,824**
Uintah	Direct	5	$206,427	$281,805	$411,789
	Indirect	1	$17,710	$31,014	$63,114
	Induced	1	$28,008	$59,033	$110,267
	TOTAL	**7**	**$252,146**	**$371,852**	**$585,170**
Utah	Direct	165	$6,873,955	$9,704,506	$14,280,653
	Indirect	29	$1,154,847	$1,994,620	$4,091,938
	Induced	46	$1,702,427	$3,102,934	$5,640,316
	TOTAL	**240**	**$9,731,228**	**$14,802,060**	**$24,012,907**
Wasatch	Direct	153	$6,512,136	$9,022,699	$13,122,975
	Indirect	22	$670,214	$1,345,104	$2,741,335
	Induced	27	$753,384	$1,691,150	$3,173,857
	TOTAL	**202**	**$7,935,735**	**$12,058,953**	**$19,038,167**
Washington	Direct	5	$148,811	$177,330	$294,169
	Indirect	1	$25,412	$48,526	$106,179
	Induced	1	$35,574	$67,074	$129,930
	TOTAL	**7**	**$209,797**	**$292,931**	**$530,278**
Wayne	Direct	0	$1,792	$1,864	$3,245
	Indirect	0	$78	$124	$467
	Induced	0	$88	$250	$550
	TOTAL	**0**	**$1,958**	**$2,238**	**$4,262**
Weber	Direct	102	$5,174,821	$7,074,951	$9,898,870
	Indirect	15	$592,778	$995,870	$1,866,843
	Induced	32	$1,130,981	$2,083,492	$3,688,979
	TOTAL	**149**	**$6,898,580**	**$10,154,313**	**$15,454,692**
STATEWIDE	Direct	983	$45,619,289	$61,788,068	$88,579,245
	Indirect	155	$5,834,966	$10,390,053	$20,362,670
	Induced	240	$8,461,897	$16,199,293	$29,219,770
	TOTAL	**1,378**	**$59,916,153**	**$88,377,414**	**$138,161,685**

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