

An Economic Evaluation of Snowmobiling in Maine:

An Update for 1997-98

Conducted by Stephen Reiling, Department of Resource Economics and Policy
University of Maine, Orono, Maine 04469-5782
For: The Maine Snowmobile Association

Executive Summary

Snowmobiling is a popular winter activity in Maine. It also contributes to the economy of the state as residents and non-residents take to the trails that span the state. A study of snowmobiling for the 1995-96 season determined that snowmobiling has a large impact on the Maine economy. Furthermore, it is generally believed that the sport and its impact on the economy have continued to grow since the 1995-96 season. Consequently a study was conducted to update the 1995-96 study for the 1997-98 snowmobiling season.

The update clearly indicates that snowmobiling has continued to grow in recent years, especially among non-residents of Maine. It was found that resident snowmobile registrations increased about 3.7 percent over the two-year period, but non-resident registrations increased 71 percent over the period. This is a very large increase and clearly illustrates the recent growth in the sport.

In terms of economic impact, snowmobilers spent \$176.3 million on snowmobiling-related expenses in Maine during 1997-98. Expenditures by snowmobilers increased about .15 percent between the 1995-96 and 1997-98 seasons. The total impact of snowmobiling in 1997-98 is estimated to be \$261 million, which is about \$35 million higher than in 1995-96. Finally, snowmobiling accounts for 3,100 full-time equivalent jobs in Maine.

This study does not include some types of expenditures that are included in other economic studies of snowmobiling, such as second home and vehicles used while snowmobiling. These items are seldom purchased exclusively for snowmobiling and, therefore, should not be included. The exclusion of these items should be considered when comparing the results of this study to studies conducted for other states.

Introduction

Snowmobiling is a popular winter recreational activity in Maine. During the 1995-96 snowmobiling season, residents registered over 69,000 snowmobiles in Maine, and non-residents registered another 6,500 for use in Maine. Furthermore, a study conducted by the Department of Resource Economics and Policy, in conjunction with the Maine Snowmobile Association (MSA), found that snowmobiling accounted for over \$150 million in direct expenditures during the 1995-96 season, and over \$225 million in direct and indirect impacts. The study illustrated the large

impact that snowmobiling has on the Maine economy. The study also showed that all areas of the state benefit from snowmobiling activities, and that snowmobiling is one of the most important recreational activities in the State during the winter season.

It is generally believed that snowmobiling has continued to grow since the 1995-96 season. Increased promotion at the State and regional levels seem to have been successful in attracting more non-residents to Maine for snowmobiling. Poor snow conditions in the Mid-west last winter also seemed to benefit Maine. Consequently, the Maine Snowmobile Association requested updated information about the current status of the economic impact of snowmobiling as it prepares to work with the Maine Legislature to develop some new snowmobiling programs.

The purpose of this report is to update the 1995-96 study of snowmobiling to the 1997-98 season so that the MSA will have current information about the recreational activity to present to the Maine Legislature during the 1999 session. Specifically, this report describes the direct and total impacts of snowmobiling in Maine during the 1997-98 season, and the procedures used to update the 1995-96 study to 1997-98.

Section II of the report outlines the procedures used to estimate the economic impact of snowmobiling in Maine for the 1997-98 season. The economic impacts of snowmobiling in Maine for 1997-98 are presented in Section III.

Study Procedures

The 1995-96 snowmobiling study was based on data collected from snowmobilers. Three surveys were conducted: a survey of resident snowmobilers; a survey of non-residents who registered their snowmobiles in Maine; and a survey of New Hampshire resident snowmobilers. The latter survey was required because New Hampshire residents can snowmobile in Maine without registering their sleds in Maine. All three surveys asked respondents to report their Maine snowmobiling-related expenses on a per-snowmobile basis for the 1995-96 season. Information was also obtained from the Maine Snowmobile Program Office, and the Licensing Division of the Maine Department of Inland Fisheries and Wildlife. This Division operates the licensing program for snowmobiles in Maine. The International Snowmobile Manufacturers Association (ISMA) also provided information about the number of new snowmobiles sold in Maine and the average selling price for the sleds. These sources provided a comprehensive data set for measuring the 1995-96 economic impact of snowmobiling in Maine.

A different approach was used to conduct this updated study. Similar to the 1995-96 study, information was obtained from the Snowmobile Program Office, the Department of Inland Fisheries and Wildlife and from ISMA. These sources provided information about municipal and snowmobile club 1997-98 expenditures for trail maintenance and grooming, the number of resident and non-resident snowmobiles registered in Maine during 1997-98 and the number and average price of new snowmobiles sold in Maine during 1997-98. However, surveys of

snowmobilers were not conducted. Since the expenditures per snowmobile from the 1995-96 study is only two years old, the data can be adjusted to describe snowmobiling expenditures in Maine during the 1997-98 season.

To estimate the level of snowmobiling expenditures in Maine for the 1997-98 season, the expenditures per snowmobile from the 1995-96 study were multiplied by the number of snowmobiles registered in Maine by residents and non-residents during the 1997-98 season. Hence, the 1997-98 estimates of expenditures by snowmobilers take in account any increase in the number of snowmobiles registered in the State between 1995-96 and 1997-98. These expenditures were also adjusted for the level of inflation that occurred between the two time periods. The Consumer Price Index increased 4.66 percent between January, 1996 and January, 1998. Therefore, the expenditures of snowmobilers for trip-related expenses, maintenance, repairs and clothing were increased by 4.66 percent to account for the inflation that occurred between the two time periods. Expenditures made in Maine by New Hampshire snowmobilers were only adjusted for inflation. No adjustment was made for the number of snowmobiles registered in New Hampshire.

It should be emphasized that the procedures used in the study to update the expenditures by snowmobilers implicitly assume that all of the growth that occurred in trip-related maintenance, repairs, accessories and clothing expenses between 1995-96 and 1997-98 is due to the increase in the number of snowmobiles registered in the State and the rate of inflation. This approach assumes that the average number of miles traveled per snowmobile and the average number of snowmobiling trips taken by snowmobilers remained the same in the two time periods. This is considered to be a valid assumption in that changes in snowmobiling habits change slowly and should be relatively constant over a two-year period.

This updated study also utilized information obtained from businesses that cater to snowmobilers. Snowmobile dealers, restaurant and lodging operators were contacted to determine how snowmobiling-related business activity had changed over the two-year period. This information was used to determine if the estimates obtained in the study were consistent with the change in business activity that occurred between 1995-96 and 1997-98. The changes in business activity reported by the business operators are generally consistent with the estimates reported in this study.

Results

Since part of the growth in snowmobiling expenditures is dependent on the number of snowmobiles registered in Maine in 1997-98, it is useful to examine Maine snowmobile registration data. Table 1 shows the number of snowmobiles registered in Maine during the 1995-96 and the 1997-98 seasons.

Residence of Registrants	Registrations for 1995-96	Registrations for 1997-98	Percent Change from 95-96 to 97-98
--------------------------	---------------------------	---------------------------	------------------------------------

Maine Residents	69,857	72,471	3.74
Non-Resident	6,620	11,326	71.09
Seasonal	5,210	7,464	43.26
10-Day	992	1,265	27.52
3-Day	418	2,587	518.90

Snowmobile registrations by Maine residents increased from about 70,000 in 1995-96 to 72,471 in 1997-98 or 3.74 percent. However, as indicated by the information obtained from businesses that serve snowmobilers, registration of snowmobiles by non-residents increased quite dramatically. Non-residents have three choices for registering in Maine. They can register their sleds for a three-day period, a ten-day period or for the entire season. All three of these non-resident registration options increased substantially between 1995-96 and 1997-98. Ten-day registrations increased the least, but still grew by over 27 percent over the two-year period. Non-resident seasonal registrations increased over 40 percent between 1995-96 and 1997-98, and three-day registrations increased over 500 percent. In total, non-resident registrations increased by 71 percent. These data clearly indicate that snowmobiling in Maine has attracted a much larger following of non-resident participants during the last two years.

After adjusting for inflation, the resident and non-resident average expenditures per snowmobile were used to estimate the total expenditures made by snowmobilers during the 1997-98 season. The information provided by the International Snowmobile Manufacturers Association and the Snowmobile Program Office of the Maine Department of Parks and Lands was also used to compile an overall direct impact of snowmobiling for the 1997-98 season. This information is summarized in Table 2.

Expenditures on new and used snowmobiles in 1997-98 accounted for about \$84.6 million, or about 48 percent of total expenditures. Although the number of new snowmobiles sold in Maine was slightly lower in 1997-98 than in 1995-96, the increase in the average price of the new snowmobiles and an active market for used snowmobiles resulted in an increase in expenditures of about \$11 million over the two-year period.

Expenditures on snowmobile trailers increased from about \$7.5 million in 1995-96 to about 8.4 million in 1997-98. The average price of snowmobile trailers has increased as more participants purchase covered trailers to protect their machines during travel.

Trip-related expenditures increased about seventeen percent over the two-year period to \$44.8 million in 1997-98. A large part of this increase is directly attributable to the growth in the number of non-resident snowmobile registrations

over the period.

Maintenance, repair and accessory expenditures were \$18.8 million in 1997-98. Clothing and specialty items item expenditures increased to about \$10.5 million. Both of these categories increased about eleven percent over the two-year period.

Insurance expenditures increased from \$4.4 million to 4.8 million or about 8.5 percent. The lower growth rate is attributable to the fact that the study assumes that only residents insure their snowmobiles through Maine insurance agencies. Hence, the growth in non-resident registrations has no effect on insurance expenditures.

Snowmobile registrations collected by the state increased from \$1.75 million in 1995-96 to \$2.4 million in 1997-98. This represents an increase of almost 37 percent and is largely due to the increase in non-resident registrations. It should be noted that the inflation factor was not applied to the registration expenditures because these fees are set by the State. Therefore, any changes in the fees are known.

Municipalities have substantially increased their level of support for snowmobiling in the last two years. In 1995-96, municipalities only contributed \$37,000 over and above the amount they received from snowmobile registrations. In contrast, municipalities contributed almost \$550,000 more in 1997-98 than they received in registration fees. This increase suggests that communities are more aware of the economic value of snowmobiling, and are contributing more to trail maintenance and promotion activities to attract snowmobiling participants.

One new category of expenditures was added in this update that was not included in the 1995-96 study. It is a category for snowmobile rental expenditures. The snowmobile rental business was in its infancy two years ago, but has grown quite rapidly in subsequent years. Hence, people familiar with the snowmobile rental segment of the market were consulted to derive an estimate of the total expenditures for snowmobile rentals during the 1997-98 season.

It was determined that there were about 250 rental sleds available in Maine during the ten-week snowmobiling season. The average rental price was about \$135 per day. It is also believed that about 65 percent of the sleds were rented on weekends and 20 percent were rented during weekdays. Based on these data, it is estimated that \$747,500 was expended on snowmobile rentals during last season. This segment of the industry is expected to continue to grow rapidly in the coming years.

Total expenditures associated with snowmobiling in Maine during the 1997-98 season were \$176.3 million. This represents an increase of about \$24 million or 15.6 percent over the two-year period. This is a substantial increase for the time period and confirms that snowmobiling has continued to grow in recent years. The growth is especially large among non-residents. This is a positive finding in that non-residents spend more than residents on trip-related expenses (lodging, restaurants, etc.), thereby increasing economic activity among the businesses that serve the needs of non-

residents.

Expenditure Category	Expenditure amount
Total Expenditures on Snowmobiles	\$84,596,400
Total Expenditures on Trailers	\$8,414,000
Total Trip-Related Expenditures	\$44,835,933
Total Maintenance, Repair & Accessory Expenditures	\$18,865,300
Total Clothing & Specialty Item Expenditures	\$11,090,015
Insurance Expenditures (Residents Only)	\$4,809,433
Snowmobile Registration Expenditures	\$2,396,000
Extra Municipal Expenditures	\$549,113
Snowmobile Rental Expenditures	\$747,500
Total Expenditures	\$176,303,694

The \$176.3 million represents the direct impact of snowmobiling. The total impact is determined by multiplying the direct impact by a multiplier that captures the indirect effect associated with the direct expenditures made by snowmobilers. In the 1995-96 study the multiplier was calculated to be 1.48. Hence, the overall economic impact of snowmobiling in Maine during 1997-98 is \$261 million (\$176.3 million x 1.48). Compared to 1995-96, the total impact of snowmobiling increased \$35 million or 15 percent. Finally, the economic activity associated with snowmobiling provides the equivalent of 3,100 full-time jobs for people in Maine.

The reader is again reminded that the procedures used to estimate the direct and total impact of snowmobiling in Maine are much more conservative than those used in several other states. For example, some states include the purchase of a new truck and even a second home if they are used for snowmobiling. These procedures are not considered to be valid and were not used in the Maine studies. A conservative process was also used to estimate the multiplier associated with snowmobiling. These differences should be kept in mind when comparing the results of this study with the results of studies conducted in other states.