

# **Final Report**

## **Economic Evaluation of the Potential Impacts of Allowing Sunday Hunting in Saskatchewan**

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# Executive Summary

This report builds on an extensive economic evaluation completed in 2006 regarding the economic impact of hunting in Saskatchewan. The 2006 work provided a detailed expenditure profile for several subpopulations of hunters.

For this study a broad survey of non-outfitted hunters<sup>1</sup> who have hunted in Saskatchewan was utilized to reveal how hunter behaviour would change if Sunday hunting were allowed. The change in behaviour was quantified by estimating the incremental trip activity as well as the incremental number of days spent on existing trips.

Generally speaking, only new money to the province would add to the net wealth of the province. However, there is a second impact that must be considered as well, the transfer of wealth from urban to rural Saskatchewan. Although more difficult to quantify, it is important to consider.

## *Economic Impact*

To determine the total incremental expenditures average trip expenditures were derived from the 2006 study of the economic impact of hunting. Sunk<sup>2</sup> costs not likely to be triggered by additional trips were not included in the expenditure profile. These costs included such costs as license fees, ATV purchases, and gun purchases.

The incremental expenditures that would be generated by Sunday hunting did not include growth in overall license sales. Given the experience of other jurisdictions and the prevalence of Sunday hunting in Western North America, it is unlikely that Sunday hunting would lead to short-term growth in the hunting population. Saskatchewan is essentially leveling the field in terms of competing for hunting expenditures, not setting itself apart with a unique competitive advantage. It is likely that, over the long term, allowing Sunday hunting would lead to additional mentoring and hunter recruitment.

Based on the survey questions asking individuals how their hunting behaviour would have changed in their last hunting season if Sunday hunting had been allowed, the potential change in behaviour was identified. Respondents were asked how, in days and trips, they would alter their hunting activity.

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<sup>1</sup> Outfitted hunters were not included in the survey as they are consumers of hunting packages and therefore are not the primary decision makers regarding Sunday hunting.

<sup>2</sup> Sunk costs would be expenditures already made by hunters such as gun purchases, vehicle purchases, and other purchases not likely to be made based on an additional trip.

**Incremental Hunting Activity** – There would be 28,301 additional hunting trips, and existing trips would be extended by an additional 121,721<sup>3</sup> days. While this is significant, it should be noted that Saskatchewan residents comprise 99.0% of the new trips generated and 92.8% of the new days generated. While typical economic impact analyses include only new money to the region, the Saskatchewan-based hunter expenditures still represent a significant transfer of capital from urban to rural areas.

**Incremental Hunting Expenditures** – There would be \$9,118,569 in increased trip and extended trip expenses. However, the majority of the expenditures would be made by Saskatchewan residents. Non-resident and Canadian hunters only accounted for 1.04% of increased trip expenditures and 7.78% of expenditures triggered by longer trips.

Amongst Saskatchewan hunters there would also be a substitution<sup>4</sup> effect for hunters currently going outside the province to hunt on Sundays. Respondents were asked if and how often they leave the province to hunt because of the ban on Sunday hunting. Of respondents, 4.8% indicated that they had left the province to hunt elsewhere because of Sunday hunting. The substitution impact of having Sunday hunting would be \$212,863.

<b>Table ES-1 – Total Projected Incremental Annual Expenditures Triggered by Sunday Hunting – Non-Outfitted Hunters in Saskatchewan</b>			
	<b>Total Additional Expenditures Generated</b>	<b>Total New Money to Saskatchewan</b>	<b>Substitution Impact</b>
<b>Hunter Expenditures</b>	\$9,118,569	\$1,557,743	\$ 212,863

The total new money and substitution impact to the province that would be generated through the allowance of Sunday hunting is \$1,770,606, based on increased expenditures from Canadian and non-resident hunters as well as import substitution for Saskatchewan hunters. The new money is the basis for the economic impact as it is the basis for increasing the Province's GDP.

**Change in Total Expenditures** – The following table compares the current hunting expenditures with the projected change in hunting expenditures.

<sup>3</sup> The 121,721 total additional days includes the additional days spent on hunting trips for individuals who both extended trips and took additional trips. For those that both extended trips and took additional trips the incremental activity was recorded in terms of the total additional number of days spent hunting.

<sup>4</sup> The substitution effect occurs when a product being imported is replaced with a domestic product. In this case, individuals leaving the province to hunt on Sunday now would spend their hunting time in the province.

**Table ES-2 – Total Projected Change in Annual Expenditure Triggered by  
Sunday Hunting – Non-Outfitted Hunters in Saskatchewan**

	Saskatchewan Hunters		Non-Saskatchewan Hunters		Total
	Big Game	Game Bird	Canadian Big-Game and Game Bird Hunters	Non-Resident Game Bird Hunters	
<b>Total Non-Outfitted Hunting Expenditures<sup>5</sup></b>	<b>\$27,656,929</b>	<b>\$11,752,164</b>	<b>\$6,256,431</b>	<b>\$9,929,597</b>	<b>\$55,595,122</b>
<b>Projected Change in Expenditures</b>	<b>\$4,703,946</b>	<b>\$2,856,880</b>	<b>\$795,058</b>	<b>\$762,684</b>	<b>\$9,118,568</b>
<b>Change in Expenditures</b>	<b>17.0%</b>	<b>24.3%</b>	<b>12.7%</b>	<b>7.7%</b>	<b>16.4%</b>

The increase in hunting expenditures would be relatively significant at \$9.1 million or 16.4%. Regarding the increase in new money to the province, the increase is somewhat less at \$1.6 million or 9.6% for Canadian and non-resident hunter expenditures.

The greatest increases in hunting activity would come from Saskatchewan hunters in both relative and absolute terms. The total projected increase in Saskatchewan hunter expenditures would be 19.2% or double the increase for Canadian and non-resident related expenditures.

**GDP and Employment Impacts** – The total direct and indirect GDP generated by \$1.8 million in “new money” and substitution impact expenditures is \$0.57 million; including induced impacts the total is \$0.72 million. The total increase in GDP activity would be similar to the increase in expenditures by out of province hunters or 9.6%.

The direct and indirect employment generated by the increase in expenditures associated with Sunday hunting would be 21.1 full-time equivalent positions in the province with \$446,000 in labour income.

**Table ES-3 – Projected Direct and Induced GDP and Employment Impacts  
Triggered by Sunday Hunting – Non-Outfitted Hunters in Total GDP Impact**

	<b>Direct Impacts</b>	<b>Induced Impacts</b>	<b>Total GDP Impact</b>
<b>GDP Generated</b>	<b>\$ 574,741</b>	<b>147,034</b>	<b>\$721,775</b>
<b>Total Employment Income</b>	<b>\$365,434</b>	<b>81,028</b>	<b>\$446,462</b>
<b>Total Jobs (FTE)</b>	<b>18.5</b>	<b>2.6</b>	<b>21.1</b>

<sup>5</sup> Based on 2008 survey results and 2007 hunting license activity. 2006 expenditure profiles were updated using Statistics Canada’s Consumer Price Index.

Incremental hunting activity would create the following marginal tax impacts, based on the previous expenditure impact estimates. The total increase in tax impacts would again be similar to the increase in expenditures by out-of-province hunters or 9.6%.

<b>Table ES-4 – Projected Sunday Hunting Annual Tax Impact – 2007</b>			
	<b>Federal</b>	<b>Provincial</b>	<b>Municipal</b>
<b>Impacts</b>	<b>\$110,306.30</b>	<b>\$102,763.18</b>	<b>\$25,034.22</b>

### ***Sunday Hunting and Hunting Competitiveness***

Hunting in Saskatchewan has a significant impact on the economy, and as such the health of the sport has significant financial implications. For hunting to remain a healthy sport, it must remain competitive, both in terms of other jurisdictions as well as other activities competing for residents' time and money.

As Saskatchewan is the only jurisdiction outside of the far eastern states and provinces to maintain a ban on Sunday hunting, the Saskatchewan hunting product is at a competitive disadvantage within the immediate and broader regions. The ban on Sunday hunting may impact Saskatchewan's ability to attract new hunters to the market. This would impact the long-term sustainability of the hunting industry's economic impact.

As well, in terms of attracting new hunters domestically to the sport of hunting, it must be recognized that hunting, as an activity, is increasingly competing with a host of other activities vying for the individual's time. Increasing urbanization is also impacting individuals' access to the sport as urban lifestyles do not lend themselves as easily to hunting access. Sunday hunting would increase opportunities to participate on a day when time conflicts are not as likely. A diminished domestic market could impact the economic impact of the sport and reduce the hunting infrastructure primarily supported by domestic hunters.

### ***Impact of Domestic Expenditures on Rural Saskatchewan***

Traditional economic impacts regarding tourist expenditures treat only "new money" to the economy as part of the economic impact. However, there is also a significant intraprovincial impact that takes place through the transference of expenditures from urban<sup>6</sup> to rural jurisdictions. While this does not have an impact at the provincial level, there is a significant impact on the communities in which the expenditures are made.

The additional hunting activity generated by Saskatchewan hunters will contribute an additional \$2.2 million to rural Saskatchewan. This is greater than the \$1.6 million in expenditures that would be generated by Canadian and non-resident hunters. Because expenditures by Saskatchewan residents are intraprovincial, there is no GDP calculation for this expenditure.

<sup>6</sup> Urban is defined as province's cities (5,000+ residents).

**Table ES-5 – Incremental Expenditures by Saskatchewan’s Urban Hunters  
Based on Sunday Hunting – 2007**

	<b>Marginal Increase in Saskatchewan Hunter Expenditures<sup>7</sup></b>	<b>Percentage Urban Based Hunters<sup>8</sup></b>	<b>Total Increase in Urban Based Hunting Expenditures</b>
Additional Trips	\$2,122,209	29.2%	\$619,685
Additional Days Spent	\$ 5,438,618	29.2%	\$1,588,076
<b>Total</b>	<b>\$7,560,827</b>		<b>\$2,207,761</b>

If the \$1.6 in new expenditures from Canadian and non-residents is combined with the \$2.2 million in additional expenditures by urban residents there would be an additional \$3.8 million in expenditures, the majority of which would be in rural Saskatchewan. The level of expenditure has a greater significance if the seasonality of hunting is also considered.

### ***Other Survey Findings***

**More Overnight Hunting Trips for the Domestic Market** – Allowing Sunday hunting would provide individuals with an entire weekend in which to hunt, presumably providing more opportunity for individuals who work during the week to have an overnight hunting trip without impacting their work-week schedule. Currently, 15.1% of bird hunting trips and 26.2% of hunting big game hunting trips involve an overnight stay. The additional trips projected by hunters, however, are much more likely to be overnight trips with respondents indicating 35.8% of bird and 48.6% of big game projected additional trips would involve an overnight stay. Hunters are projecting that the additional trips they would take if Sunday hunting were introduced would be more likely to be overnight trips. This indicates that hunters believe that allowing Sunday hunting would likely lead to an increase in overnight hunting trips. In terms of the total number of hunting trips, this would mean that the likelihood of a hunting trip involving an overnight stay would increase from the current 15.1% to 19.85% for bird hunters and from 26.2% to 29.4% for big game hunters.

**Hunters Are Likely to Take Advantage of Sunday Hunting** – Respondents were asked the global question: Would they hunt on Sunday if it were permitted? On average, 79.1% of the non-outfitted hunters indicated that they would hunt on Sundays but only 33.9% of respondents indicated that they would hunt less the remainder of the week if they hunted on Sunday. Clearly, there would be a net gain in terms of hunting activity amongst these four hunting populations if Sunday hunting were permitted in Saskatchewan.

**Saskatchewan Hunters Currently Change their Hunting Behaviour Because of the Ban on Sunday Hunting** – For Saskatchewan hunters 48.1% of bird hunters and 51.1% of big game hunters indicated that the ban on Sunday hunting had impacted how often and when

<sup>7</sup> Based on 2007 hunting activity.

<sup>8</sup> 29.2% of Saskatchewan hunters based on 2006 survey data. Urban-based hunters were calculated based on the postal codes of survey respondents from a broad survey of Saskatchewan hunters in 2006.

they had hunted in the province.

**Some Saskatchewan Residents Go Outside the Province to Hunt on Sundays** – 4.8% of Saskatchewan hunters indicated that they go outside the province to hunt on Sundays. While not a major trend amongst Saskatchewan hunters, this does represent a loss of expenditures for the province.

**Increasing Gas Prices Could Lead to a Reduction in Hunting Activity** – On average a third of the respondents indicated that rising gas prices could force them to reduce their hunting activity. Respondents were asked to quantify this impact in days. On average, 0.91<sup>9</sup> days hunting would be lost per hunter. If gas prices remain high this could have a significant impact on hunting with a loss of \$4.2 million in expenditures, \$1.8 million of which would be out-of-province expenditures.

**Sunday Hunting Would Promote the Mentoring of Younger Hunters** – Overall, surveyed hunters felt that allowing Sunday hunting would have a positive impact on the mentoring of younger hunters. In Saskatchewan, 64.4% of game bird and 66.3% of big game hunters felt that Sunday hunting would have a positive impact on mentoring and only 7.0% and 5.2% of respondents, respectively, indicated a negative impact. The one area in which the hunting groups differed was regarding additional mentoring themselves. Big game hunters (75.2%) were more apt to mentor youth based on the introduction of Sunday hunting than game bird hunters (45.2%).

**Sunday Hunting Would Have Some Impact on the Length of Hunting Careers** – 54.1% of Saskatchewan non-outfitted game bird hunters and 59.3% of big game hunters indicated that they felt allowing Sunday hunting would result in longer hunting careers. Amongst the general population, 45.2% of bird hunters and 48.4% of big game hunters indicated that they would hunt longer themselves. For Canadian hunters, 53% felt that hunting careers would be extended given the addition of Sunday hunting. 38% of respondents felt they would extend the length of their own career. Less than half of the non-resident respondents felt hunting careers would be positively impacted while a third indicated that they would extend their own hunting career.

**Sunday Hunting Would Support Recruiting New Hunters to the Sport** – In terms of recruiting new hunters to the sport, 64.4% of bird hunters and 72.2% of big game hunters indicated that they felt that Sunday hunting would have a positive impact on hunter recruitment. For both Canadian and non-resident hunters, this question received the most positive response. Two-thirds of non-outfitted hunters indicated that they felt Sunday hunting would have a positive impact on hunter recruitment. There is a prevailing opinion amongst hunters that allowing Sunday hunting would have an overall positive impact in terms of hunter recruitment.

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<sup>9</sup> This is based on all surveyed individuals, not only those who responded yes.



# 1.0 Introduction

This report has been prepared for the Ministry of Environment. It has been developed in response to Environment's request for an independent assessment of the potential economic impact of allowing hunting on Sundays in Saskatchewan. This study looks at the potential impact of allowing Sunday hunting and the increased expenditures for:

- Saskatchewan resident big game and bird hunters who did not use the services of an outfitter
- Canadian resident big game and bird hunters who did not utilize the services of an outfitter
- Non-resident<sup>10</sup> bird hunters who did not utilize the services of an outfitter.

The sample population was drawn from provincial hunting license sales. As such the sample does not include Aboriginal or subsistence hunting.

## 1.1 – Study Purpose and Objectives

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The focus of this study is the analysis of potential economic impacts of allowing Sunday hunting in the province of Saskatchewan. This project is an extension of a multi-phase project recently undertaken by the Ministry of Environment looking at the economic evaluation of the value derived from hunting, fishing, commercial fishing, and outfitting in Saskatchewan.

Based on primary data gathered through an extensive survey of individuals who hunted in Saskatchewan the potential change in hunter behaviour has been determined. This change has been translated into expenditures as well as GDP impacts. As well, this study looks at the additional impacts to rural Saskatchewan as the primary recipient of hunting related expenditures.

## 1.2 – Methodology

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### *Survey Methodology*

To determine the change in hunter behaviour given a change in Sunday hunting restrictions, an extensive survey of individuals who have hunted in Saskatchewan was undertaken. This survey looked at four populations:

- Saskatchewan Bird Hunters (270 surveys)
- Saskatchewan Big Game Hunters (270 surveys)
- Canadian Hunters – Big Game and Bird Hunters (270 surveys)
- Non-Resident Bird Hunters (270 surveys)
- **Total Surveys – 1,080**

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<sup>10</sup> Non-resident includes all non-Canadian hunters.

The sample data sets were provided by the Ministry of Environment and were based on the 2005 hunting year. Because the data sets were two full seasons out of date, hunters were asked if they had hunted again since 2005 as well as whether they felt they could recall their hunting activities in the most recent year in which they hunted. It was found that the majority of hunters had purchased licenses in subsequent years. Survey respondents were asked to focus on their most recent year of hunting, whether it was 2005, 2006, or 2007. As such, data gathered through the survey are reflective of a three-year period. After extensive discussions with the survey company and the Ministry of Environment this approach was determined to be the most accurate way to sample the hunting population.

The survey itself gathered information on four main areas including: demographic data, past hunting patterns, perceived changes in hunting behaviour had Sunday hunting been allowed and perceptions of the potential impacts of Sunday hunting on hunter recruitment and retention.

Standard survey methodology was utilized to determine the survey sample sizes. It was determined that there were four distinct populations to be analyzed as identified above. As such, four separate samples were required. These sample sizes are sufficient for the 90% confidence level to have a margin of error of plus or minus 5%.

## ***Interviews***

Interviews were also utilized in gathering relevant information regarding the experience of other jurisdiction reviewing or having recently reviewed bans on Sunday hunting. Representatives from Alberta, Manitoba, New Brunswick, and Newfoundland were interviewed.

## ***Literature Review***

A literature review was also undertaken regarding previous hunting economic impact analysis as well as Sunday hunting studies. These studies provided context for both the study and the methodology. These included:

- Pennsylvania Sunday Hunting Economics and Preferences, Southwick and Associates, 2007
- The Truth About Sunday Hunting: Why Hunters Shouldn't Be Treated as Second-Class Citizens, National Rifle Association, 2005
- A Study of the Potential Economic, Social, and Other Impacts of Expanding Sunday Hunting in Pennsylvania, Joint Committee of the Pennsylvania General Assembly, 2004;
- Economic Importance of Hunting in America, International Association of Fish and Wildlife Agencies, 2001
- Economic Impact of Waterfowl Hunting in the United States, Addendum to the 2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, US Fish and Wildlife Services, 2001
- 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, National and State Overviews, US Fish and Wildlife Service, 2007
- An Assessment of Public and Hunter Opinions and the Costs and Benefits to North Carolina of Hunting on Sunday, Responsive Management, 2006

## ***Economic Impact Model***

**Input-Output Tables** – The economic impact model is based on Statistics Canada's input-output tables. These tables look at the inter-relationships between Canada's industries through the system of national accounts. The model projects the level of economic activity being stimulated in various parts of the economy based on the initial demand placed on the economy by the expenditures being analyzed. For instance, in the case of tourism expenditures, the model would produce an estimate of the related economic activity required to supply the demand created by \$1 million in transportation related expenditures.

The model also estimates the level of economic activity actually occurring within Saskatchewan. Factors of production imported to Saskatchewan to meet the industrial demand within Saskatchewan are removed, as they are economic impacts associated with other jurisdictions. This is necessary because economic activity translates into economic impacts very differently based on the type of industry, as well as location (see Appendix A for a comparative example).

**Open Model** – The model described here is termed an open model. The open model includes only the direct and indirect effects generated by a specific economic activity, excluding induced or spin-off effects. This model calculates only the value added within the economy being analyzed and does not include any induced or spin-off effects.

To run the Statistics Canada simulations, the Parks Economic Impact Model (PEIM), developed by Canadian Heritage and Statistics Canada, was used to assess the impact of the expenditures at a provincial level. Because PEIM utilizes Statistics Canada input-output tables as the basis for calculating economic impacts, it is a very accurate and broadly accepted way of calculating economic impacts. PEIM generates the GDP, employment expenditures, and employment impacts.

Expenditure data, collected in the form of transportation, vehicle rentals, other vehicle, accommodation, food and beverage, recreation and entertainment, and retail/other expenditures, was input into the PEIM model to simulate impacts on the economy. A separate impact analysis was run for each of these categories. The resulting data was the direct and indirect impacts. This model yielded the direct and indirect gross domestic product (GDP), employment expenditures, employment positions, as well as identifying some federal tax revenues.

This model is very beneficial as it is extremely accurate in terms of its assessment of the GDP and employment created. It also is consistent and comparable with the previous economic assessment of Saskatchewan's Provincial Parks. However, the model is lacking in two ways. First, the model only estimates some federal taxes. Second, the model does not calculate any of the induced impacts created by economic activity via labour expenditures.

**Induced Impacts and the Closed Model** – While economists, including Statistics Canada, have been reluctant in the past to include induced impacts, there has been some reconsideration on this front. Induced impacts, while being acknowledged, have long been regarded as somewhat inaccurate and misleading. However, Statistics Canada is now considering adding the induced impacts back into their calculations. A formula generated by Statistics Canada was utilized to calculate the induced impacts of non-outfitted hunting. A model calculating the induced or spin-off activities, as well as the direct and indirect impacts,

is termed a closed or partially closed model (as opposed to the open model described earlier).

Determining the spin-off or induced impacts involves calculating the total labour expenditures generated through the direct and indirect expenditures and determining the impact the labour expenditures have. This is done by first determining the level of taxation and saving to determine the propensity to consume. Actual consumption is determined by the total propensity to consume times the typical basket of goods purchased by a wage earner. Once the actual expenditures have been assessed, the provincial expenditure model is run again based on the typical expenditures made by a wage earner in Saskatchewan.

**Final Results** – The direct and indirect impacts are reported separately from the induced impacts for two reasons. Firstly, it is important to identify the direct and indirect GDP impacts, as these impacts can easily be compared to other industries for which a similar model (the open model) has been applied. These results will compare easily with other economic impact assessments for which no induced impact was calculated.

Second, it will also be important to have the induced impacts reported separately as these results are not as generally accepted as the direct and indirect impacts. However, with growing acceptance, it may be important in the future to include the induced impacts in order to be comparable to other economic impact analyses.

**Taxation Impacts** – Additional work was done to assess the taxation impacts of hunting. The Conference Board of Canada has developed an economic impact model for the Canadian Sport Tourism Alliance based on Statistics Canada input-output data. The taxation portion of this model calculates tax at the federal, provincial, and municipal levels. Because of the breadth of this model it was utilized to calculate the total tax impacts.

The Sports Tourism Economic Assessment Model (STEAM) assesses the impact of sport-related tourism expenditures. The taxation portion of this model was adapted to identify the tax revenue generated by non-outfitted hunting-related expenditures. The STEAM model was used because it has the reliability of being constructed by the Conference Board, and provides a level of detail in the taxation impact not provided in other economic impact models. To ensure consistency, the tax impacts were calculated based on the GDP impact calculated in the PEIM model, with the tax impact structure from the STEAM model.

## 2.0 Background

### 2.1 – Historic Licence Sales

Hunting license sales had been declining in Saskatchewan and throughout North America throughout the 1990's and into the early 2000's<sup>11</sup>. However, this decline seems to have shown signs of leveling off in many jurisdictions and even experiencing some growth in Saskatchewan. While this trend has been short-term, it is a positive indicator for the sport.

<b>Table 1 – Saskatchewan Hunting License Sales<sup>12</sup></b>										
<b>License Type</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>Total Saskatchewan Licenses</b>	104,071	93,800	79,909	80,353	81,042	88,550	81,186	83,828	91,209	92,069
<b>Total Canadian Licenses</b>	3,982	4,239	4,489	3,651	4,120	4,491	4,296	4,712	5,314	5,683
<b>Total Non-Resident Licenses</b>	13,665	16,435	17,422	15,179	15,914	17,121	17,413	18,010	18,085	17,062
<b>Youth Licenses</b>	4,410	7,794	7,163	6,704	6,791	6,579	6,279	6,254	6,328	5,960
<b>Total License</b>	126,128	122,268	108,983	105,887	107,867	116,741	109,174	112,804	120,936	120,774

The overall number of hunters in the United States declined from 1996 to 2006, but the latest results for 2006 indicate that the sharp downturn experienced in the 1990s may be abating. The downturn from 1996 to 2001 was 7.0% while the downturn from 2001 to 2006 was 4.0%.

### 2.2 – Sunday Hunting in North America

Outside of Saskatchewan, jurisdictions banning Sunday hunting are primarily located on the eastern coast of North America. Currently seven states ban hunting on Sundays including: Connecticut, Massachusetts, Delaware, Maine, New Jersey, Pennsylvania, and Virginia. An additional four states limit Sunday hunting: Maryland allows hunting on two Sundays during deer season; South Carolina allows Sunday hunting on private land; North Carolina allows Sunday hunting at some federal installations; and West Virginia allows counties to authorize Sunday hunting on private land by referendum. The majority of these States are also at various levels of reviewing the ban on Sunday hunting.

<sup>11</sup> 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, National and State Overviews, US Fish and Wildlife Service – 2007.

<sup>12</sup> Not including habitat and fur licenses.

In Canada, Prince Edward Island, Newfoundland and Labrador, New Brunswick, Nova Scotia and Saskatchewan have restrictions on Sunday hunting. Newfoundland and Labrador recently allowed Sunday hunting in the latter part of the season, and New Brunswick is lifting restrictions on some Sunday hunting this season. Other provinces, such as Alberta and Manitoba, have been lifting restrictions on Sunday hunting for several years and now there are very few restrictions.

In terms of the impacts of Sunday hunting, there has been little follow-up analysis done regarding the economic impact of Sunday hunting after restrictions have been lifted. However, interviews with jurisdictions that have lifted restrictions said there was no discernable spike in terms of license sales. Jurisdictions such as Alberta and New Brunswick who are lifting partial restrictions for this season indicated that they did not anticipate a significant change in license sales based on the allowance of some Sunday hunting. There was some agreement that hunting activity amongst existing hunters would increase as people took advantage of the additional day of hunting.

In terms of Saskatchewan's market area, it is the only jurisdiction with a ban on Sunday hunting. With the majority of jurisdictions currently offering Sunday hunting, it is not likely that allowing Sunday hunting will give the Saskatchewan hunting product an advantage that would translate into a significant short-term jump in license sales. This is not to say that Sunday hunting would not lead to an increase in hunting activity amongst the existing hunting population or foster growth in the hunting market through enhanced hunter recruitment opportunities.

## **2.3 – Tourism and the Saskatchewan Economy**

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The economic impact associated with non-outfitted hunting in the province is based on tourism expenditures triggered by out-of-province visitation. As such it is important to assess the impact tourism has on the Saskatchewan economy. Tourism is a significant and growing part of the Saskatchewan economy. Tourism has grown to become Saskatchewan's fourth largest export according to Saskatchewan Industry and Resources. The industry directly employs 22,000 people through 3,400 tourism-related businesses making it one of the largest employers in Saskatchewan.

While Saskatchewan's tourism industry generates over \$1 billion in expenditures, the majority of the expenditures are generated by Saskatchewan residents and do not have an incremental economic impact value for the province as a whole. Similarly, the tourism expenditures made by Saskatchewan hunters traveling within the province do not have incremental economic impacts for the province's GDP, however, they are important to the primarily rural communities where the expenditures are made. While these expenditures fall outside the realm of a typical economic impact assessment, they are impacts regardless. This report will look at the type of impacts generated by intra-provincial tourism.

For comparative purposes the following table shows the typical visitation levels for other major Saskatchewan tourism attractions.

<b>Table 2</b> <b>Attractor Levels – Comparative Visitation Between Provincial Parks and Other Saskatchewan Attractions</b>			
	<b>Total Visitation</b>	<b>Local Visitation</b>	<b>Tourist Visitation</b>
Gaming (SIGA and SGC)	4,000,000	2,716,000	1,284,000
Saskatchewan Fishing	1,100,000 <sup>13</sup>	623,000	477,000 <sup>14</sup>
Prairieland Exhibition Park	1,000,000	700,000	300,000
Meewasin Valley	900,000	n/a	n/a
Saskatchewan Hunting	535,000 <sup>15</sup>	355,000	180,000 <sup>16</sup>
Saskatchewan Roughriders	264,000	185,000	79,000
National Parks <sup>17</sup>	191,000	10,000	181,000
Mendel Art Gallery	178,000	142,400	35,600
McKenzie Art Gallery	88,000	n/a	n/a

Saskatchewan's hunting product is a significant part of Saskatchewan's tourism economy. In 2005, 2% of Canadian visits and 6% of American visits involved hunting activity<sup>18</sup>. Hunting is a significant generator of visitation to the province with 180,000 hunting-related tourist visits annually.

<sup>13</sup> Total sport fishing trips generated. Includes 17,000 outfitted fishing visits. Including hunting, outfitting generates 28,000 tourist visits.

<sup>14</sup> Includes out-of-province visitation as well as Saskatchewan residents that have traveled over 80 kilometres.

<sup>15</sup> Includes outfitted hunting.

<sup>16</sup> Includes out-of-province visitation as well as Saskatchewan residents that have traveled over 80 kilometres.

<sup>17</sup> Includes averages for Prince Albert National Park and Grasslands National Park.

<sup>18</sup> 2004 Canadian Travel Survey Data – Tourism Saskatchewan.

## 3.0 Survey Overview and Results

To gather data on the prospective changes in hunter behaviour, surveys were administered to each of the four identified populations: Saskatchewan big game, Saskatchewan bird, and Canadian bird and big game, and non-resident Bird hunters. Each respondent was asked to respond to a series of questions relating to demographic data, past hunting patterns, perceived changes in hunting behaviour had Sunday hunting been allowed in their last hunting year, and perceptions of the potential impacts of Sunday hunting on hunter recruitment and retention. The following is an overview of some of the findings of the surveys.

### 3.1 – Survey Results Overview

#### 3.1.1 – Respondent Demographics

**Age** – While the average age of hunters is over 50, Saskatchewan showed the highest number of youth hunters (under 25) and had the lowest average hunter age of the four visitor segments, particularly amongst big game hunters. The age of the average Saskatchewan bird hunter was 54.0 compared to Saskatchewan big game hunters who averaged 47.3 years of age. Canadian hunters averaged 54.4 and non-resident hunters averaged 55.8 years of age. The following shows the breakdown for hunters.

Table 3 – Age of Respondents – 2008 Survey				
	Saskatchewan		Canadian	Non-Resident
	Bird	Big Game		
16 to 24	3.0%	10.8%	1.1%	0.8%
25 to 34	6.0%	9.7%	6.7%	4.9%
35 to 44	14.9%	17.1%	14.2%	17.7%
45 to 54	28.4%	31.6%	28.5%	20.3%
55 to 64	19.8%	19.7%	24.0%	25.6%
65+	28.0%	11.2%	25.5%	30.8%
Total	100%	100%	100%	100%

In terms of gender, the vast majority of the respondents were men. Saskatchewan had the highest female representation at 1.3%.

#### 3.1.2 – Hunting Activity

**Most Recent Year of Hunting** – This survey has once again shown the high incidence of repeat hunting participation amongst Saskatchewan, Canadian, and non-resident hunters.



Because the sample data was based on the 2005 hunting year, respondents were asked to identify the most recent year in which they hunted. Nearly three-quarters of Saskatchewan bird hunters and 86% of big game hunters had hunted in the most recent year. Similarly, Canadian and non-resident hunters had a high return rate with 60% returning to hunt again in 2007.

Table 4 – Most Recent Complete Hunting Year – 2008 Survey – Non-Outfitted Hunters				
	Saskatchewan		Canadian Big Game and Bird Hunter	Non-Resident Bird Hunters
	Bird	Big Game		
<b>2005</b>	<b>16.3%</b>	<b>8.1%</b>	<b>20.9%</b>	<b>26.5%</b>
<b>2006</b>	<b>11.1%</b>	<b>6.3%</b>	<b>17.2%</b>	<b>13.8%</b>
<b>2007</b>	<b>72.6%</b>	<b>85.6%</b>	<b>62.0%</b>	<b>59.7%</b>
Total	100%	100%	100%	100%

Saskatchewan big game hunters are more avid hunters than their bird hunting counterparts with 85.1% of big game hunters hunting again in the most recent year compared with 72.2% of bird hunters. Amongst the Canadian and non-resident hunters there is a return rate that would indicate a very high level of satisfaction with the product.

**Hunting Trip Frequency and Duration** – Saskatchewan bird hunters take the greatest number of hunting trips in a year, but have the shortest average trip length. Conversely, Non-Resident hunters take the fewest trips, but have the highest average trip length. For Saskatchewan residents, the total number of trips is for bird or big game only, and does not reflect the total number of hunting trips in a year, which would be higher if both were included.

Table 5 – Trip Frequency and Duration – 2008 Survey of Non-Outfitted Hunters				
	Saskatchewan Bird Hunting Trips	Saskatchewan Big Game Hunting Trips	Canadian Hunting Trips	Non-Resident Bird Hunting Trips
Total Trips	7.25	5.88	1.35	1.06
Days Spent Hunting (days)	8.71	9.79	7.07	8.71
Average Trip Length (Days)	1.20	1.67	5.24	8.22

**Projected Change in Overnight Trips** – Allowing Sunday hunting would provide individuals with an entire weekend in which to hunt, presumably providing more opportunity for individuals who work during the week to have an overnight hunting trip without impacting their work-week schedule. To determine whether this was indeed a potential impact, respondents were asked how many of their hunting trips in the past hunting year had involved an overnight stay. For those who indicated that they would be likely to take

additional trips the propensity to stay overnight was compared between current behaviour and projected behaviour. The following table compares the current and overnight trips amongst the projected additional trips.

<b>Table 6 – Overnight Hunting Trips – Saskatchewan Hunters – 2008 Survey</b>		
	<b>Saskatchewan Bird Hunting Trips</b>	<b>Saskatchewan Big Game Hunting Trips</b>
Current Percentage of Hunting Trips Involving an Overnight Stay	15.1%	26.2%
Likelihood Additional Trips Would Involve an Overnight Stay	35.8%	48.6%

Currently, 15.1% of bird hunting trips and 26.2% of hunting big game hunting trips involve an overnight stay. The additional trips projected, however, are much more likely to be overnight trips with respondents indicating 35.8% of bird and 48.6% of big game additional trips would involve an overnight stay. Hunters are projecting that the additional trips they would take if Sunday hunting were introduced would be more likely to be overnight trips. This indicates that hunters believe that allowing Sunday hunting would likely lead to an increase in overnight hunting trips. In terms of the total number of hunting trips, this would mean that the likelihood of a hunting trip involving an overnight stay would increase from 15.1% to 19.8% for bird hunters and from 26.2% to 29.4% for big game hunters.

### ***3.1.3 – Sunday Hunting Feedback***

**Propensity to Hunt on Sunday** – Respondents were asked the global question: Would they hunt on Sunday if it were permitted? On average, 79.1% of respondents indicated that they would hunt on Sundays but only 33.9% of respondents indicated that they would hunt less the remainder of the week if they hunted on Sunday. Clearly, there would be a net gain in terms of hunting activity amongst these three hunting populations if Sunday hunting were permitted in Saskatchewan.

<b>Table 7 – Propensity to Hunt on Sunday – 2008 Survey</b>		
	<b>Would You Hunt on Sundays?</b>	<b>If Yes, Would You Hunt Less the Remainder of the Week?</b>
	<b>Yes</b>	<b>Yes</b>
Saskatchewan Bird Hunter	75.5%	35.8%
Saskatchewan Big Game Hunter	80.3 %	40.1 %
Canadian	81.7 %	16.4 %
Non-Resident	79.5 %	10.3 %

**Has the Ban on Hunting Impacted Hunting Patterns?** – Respondents were also asked if the ban on Sunday hunting had impacted when or if they hunted in Saskatchewan in the past. For Saskatchewan hunters 48.1% of bird hunters and 51.1% of big game hunters indicated that the ban on Sunday hunting had impacted how often and when they go hunting. The following shows the breakdown of the impact on trip planning for Saskatchewan bird and big game hunters.

Table 8 – Potential Impact of Sunday Hunting – Saskatchewan Non-Outfitted Hunters – 2008 Survey		
	Bird	Big Game
<b>More Trips</b>	<b>43.94%</b>	<b>19.57%</b>
<b>Longer Trips</b>	<b>19.70%</b>	<b>42.75%</b>
<b>Both Longer and More Trips</b>	<b>36.36%</b>	<b>37.68%</b>
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

The ban on Sunday hunting had not impacted Canadian or American hunters to the same extent regarding their planning of hunting trips in Saskatchewan. 7.5% of Canadian and 7.1% of non-resident hunters indicated that they had altered their plans because of the ban on Sunday hunting. The most significant change in trip planning behaviour for these two groups was to avoid being in Saskatchewan on Sunday. After avoiding Sunday, staying a shorter period and taking fewer trips were the two impacts most mentioned. It is important to note that this survey was only of people who actually came to Saskatchewan to hunt. Hunters who were deterred from coming to Saskatchewan because of the ban on Sunday hunting could not be sampled properly.

**Has the Ban on Sunday Hunting Influenced Saskatchewan Residents to Go Outside the Province to Hunt?** – It appears the ban on Sunday hunting has not been a major factor in hunters' plans to go outside the province to hunt. It should be noted that bird hunters comprised the majority of individuals who did indicate that they had travelled outside the province to hunt on Sunday. Bird hunters are more likely to travel outside the province to hunt than big game hunting counterparts.

Table 9 – Has the Ban on Sunday Hunting Influenced Saskatchewan Hunters to Hunt Outside Saskatchewan? – 2008 Survey		
	Percentage Taking Trips Outside the Province	All Saskatchewan
<b>Bird Hunters</b>	<b>9.26%</b>	<b>4.77%</b>
<b>Big Game Hunters</b>	<b>2.96%</b>	

### ***3.1.4 – Impact of Rising Gas Prices***

Given the rising price of fuel, hunters were also asked about the impact fuel prices could have on hunter behaviour. On average a third of the respondents indicated that gas prices would force them to reduce their hunting. Respondents were asked to quantify this impact in days. On average, .91 days hunting would be lost per hunter. This could have a significant impact on hunting expenditures if gas prices remain high. The total loss of expenditures would be \$4.2 million, \$1.8 million of which would be out-of-province expenditures. The reduction in out of province expenditures would be roughly equal to the projected increase in out of province hunting expenditures that would be triggered by Sunday hunting.

<b>Table 10 – Impact of Rising Price of Gas on Hunting – 2008 Survey</b>		
	<b>Yes, Gas Prices Will Impact Hunting?</b>	<b>By How Much Will Hunters Cut Back on Hunting (Days)<sup>19</sup></b>
Saskatchewan Bird Hunters	40.0%	0.86
Saskatchewan Big Game Hunters	37.8%	0.85
Canadian	25.0%	0.71
Non-Resident	36.2%	1.26

## **3.2 – Attitudinal Responses**

Respondents were asked to give their opinion on some attitudinal questions regarding the potential impacts of allowing Sunday hunting in Saskatchewan. The questions looked at some of the potential non-monetary impacts regarding the sport. These questions are helpful in assessing how Sunday hunting could impact the overall health of hunting in the province.

### ***3.2.1 – Hunters Mentoring Younger Hunters***

Respondents were asked what type of impact Sunday hunting could have on hunters' ability to mentor young people. Hunter recruitment is becoming an important issue in the hunting community as the number of new hunters entering the sport is not sufficient to replace the number of hunters leaving the sport, a problem that is likely to accelerate as the hunting population ages.

Overall, surveyed hunters felt that allowing Sunday hunting would have a positive impact on the mentoring of younger hunters. In Saskatchewan, both game bird and big game hunters had similar views regarding the impact of Sunday hunting on youth mentorship with 64.4% and 66.3% indicating a positive impact, respectively. The one area in which the hunting groups differed was regarding additional mentoring themselves. Big game hunters (75.2%)

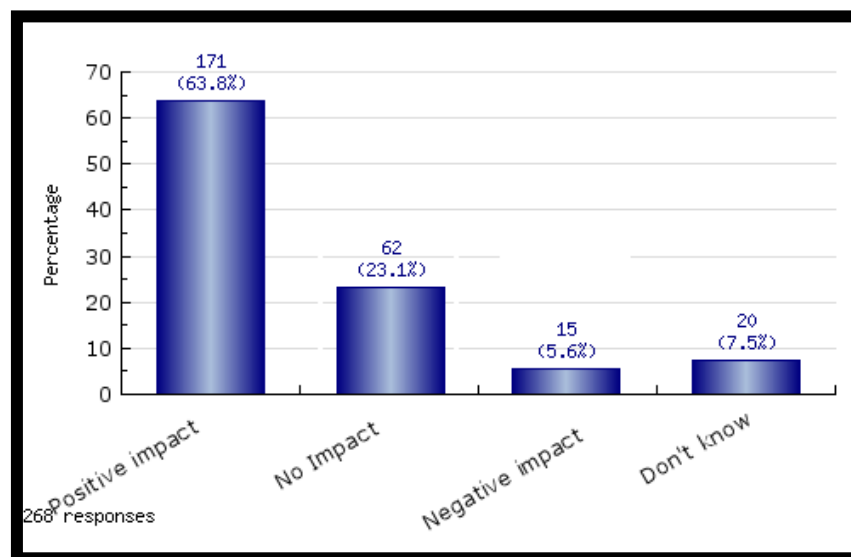
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<sup>19</sup> Based on all surveyed individuals, not only those who responded yes.

were more apt to mentor youth based on the introduction of Sunday hunting than game bird hunters (45.2%).

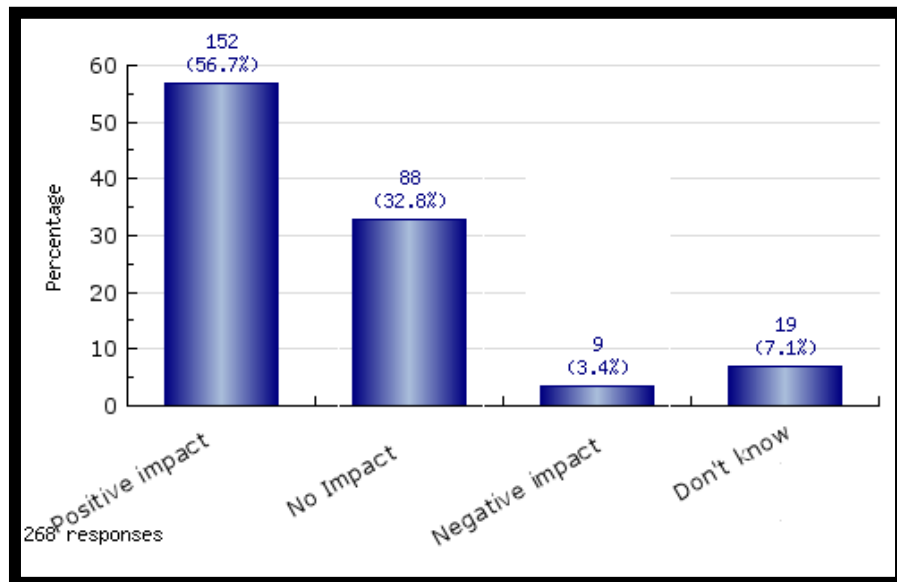
Table 11 – Hunters Mentoring Younger Hunters – Saskatchewan Residents – 2008 Survey		
	Game Bird	Big Game
<b>Positive Impact</b>	<b>64.4%</b>	<b>66.3%</b>
<b>No Impact</b>	<b>22.6%</b>	<b>22.6%</b>
<b>Negative Impact</b>	<b>7.0%</b>	<b>5.2%</b>
<b>Don't Know</b>	<b>5.9%</b>	<b>5.9%</b>
Would you mentor more hunters yourself?		
<b>Yes</b>	<b>45.2%</b>	<b>75.2%</b>
<b>No</b>	<b>50.4%</b>	<b>21.5%</b>
<b>Don't Know</b>	<b>4.4%</b>	<b>3.3%</b>

**Figure 1 –Hunters Mentoring Younger Hunters – Canadian Residents – 2008 Survey**



Canadian hunters had very similar attitudes towards the impact of Sunday hunting on mentoring. However, non-resident hunters did not have as strong an opinion on Sunday hunting with almost a third indicating that they did not feel that Sunday hunting would have an impact. Still, over half of non-residents felt Sunday hunting would positively impact the mentoring of younger hunters.

**Figure 2 – Hunters Mentoring Younger Hunters – Non-Residents – 2008 Survey**



### ***3.2.2 – Longevity of Hunting Careers***

Respondents were asked how they would perceive Sunday hunting impacting the length of hunting careers. This is a key question as the hunting population is aging. If hunters are encouraged to hunt later into their careers, this would lessen the impact of the loss of hunters as they retire and provide a longer window with which to replace retiring hunters. Respondents felt Sunday hunting would have a positive impact on hunter longevity, but this premise received the least support of the attitudinal questions.

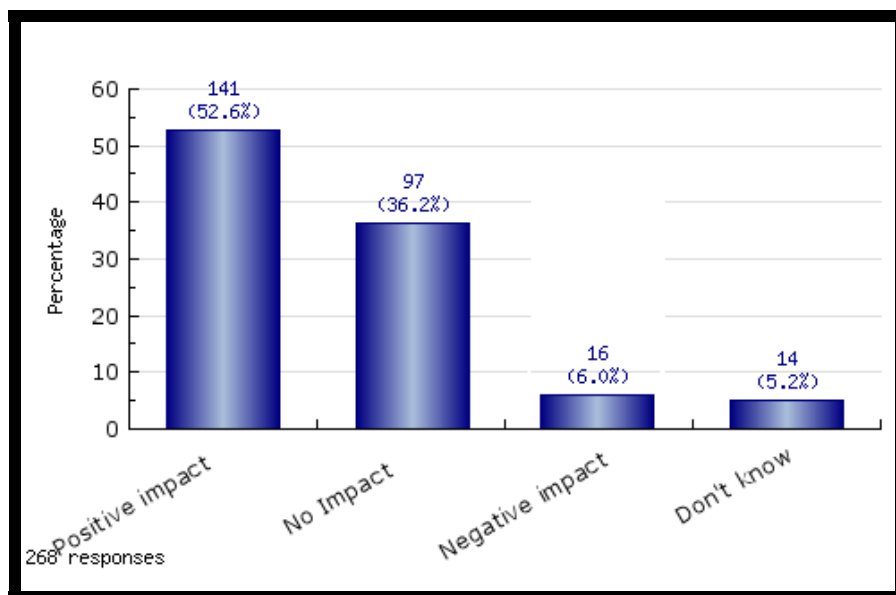
As with the other questions, Saskatchewan respondents had the most positive response. Game bird hunters (54.1%) were not as positive as big game hunters (59.3%) regarding the impact of Sunday hunting on the length of hunting careers. In terms of hunting longer themselves, the hunting segments had similar responses indicating that 45.2% of game bird hunters and 48.4% of big game hunters would hunt longer.

Game bird hunters were twice as likely as big game hunters to perceive Sunday hunting as potentially having a negative impact on the length of hunting careers with 10.7% of game bird hunters perceiving a negative impact compared with only 5.2% of big game hunters.

Table 12 – Impact on the Longevity of Hunting Careers – Saskatchewan Residents – 2008 Survey		
	Game Bird	Big Game
<b>Positive Impact</b>	<b>54.1%</b>	<b>59.3%</b>
<b>No Impact</b>	<b>30.7%</b>	<b>28.1%</b>
<b>Negative Impact</b>	<b>10.7%</b>	<b>5.2%</b>
<b>Don't Know</b>	<b>4.4%</b>	<b>7.4%</b>
	100%	100%
Would you hunt longer yourself?		
<b>Yes</b>	<b>45.2%</b>	<b>48.4%</b>
<b>No</b>	<b>50.4%</b>	<b>45.7%</b>
<b>Don't Know</b>	<b>4.4%</b>	<b>5.8%</b>
	<b>100%</b>	<b>100%</b>

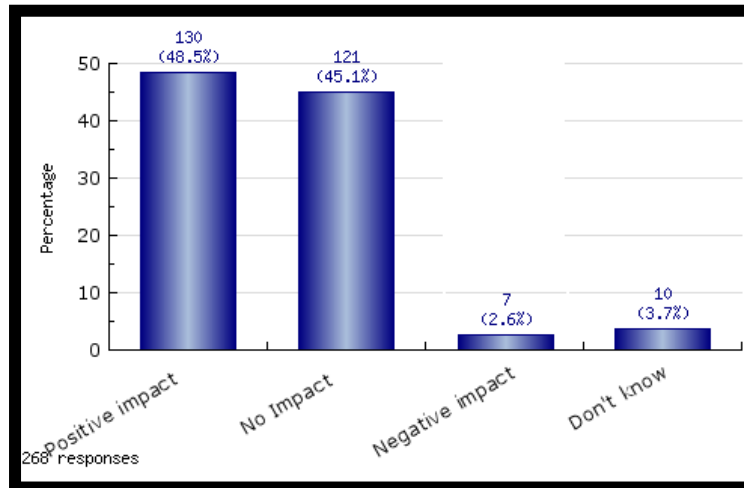
For Canadian hunters, 53% felt that hunting careers would be extended given the addition of Sunday hunting. 38% of respondents felt they would extend the length of their own career.

**Figure 3 – Longevity of Hunting Careers – Canadian Residents – 2008 Survey**



Less than half of the non-resident respondents felt hunting careers would be positively impacted while a third indicated that they would extend their own hunting career.

**Figure 4 – Longevity of Hunting Careers – Non-Residents – 2008 Survey**



### 3.2.3 – Hunter Recruitment

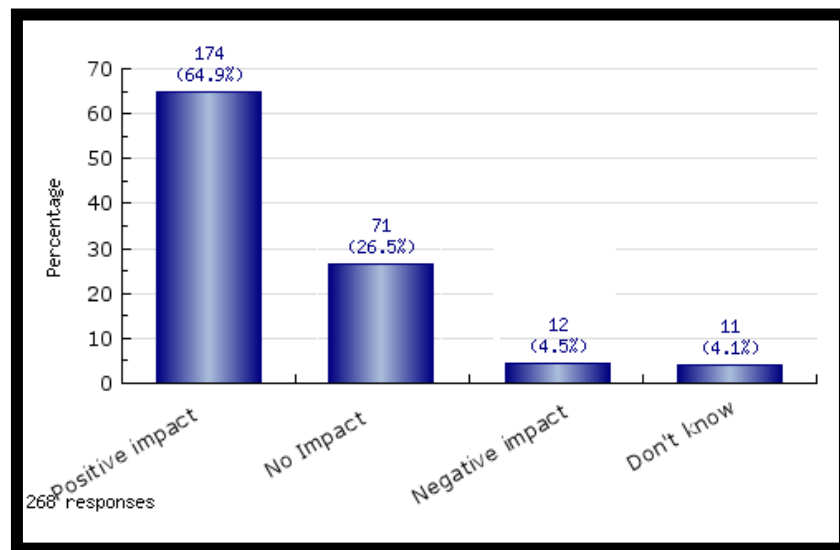
Hunters responded the most positively to the question: “Would allowing Sunday hunting impact the recruitment of new hunters to the sport?” Again, this question is important as hunter recruitment is viewed as being key to the long-term health of the sport. Hunting in Saskatchewan, and North America, has been in decline for several years, although it is showing signs of stabilizing.

64.4% of game bird and 72.2% of big game hunters indicated that they felt that Sunday hunting would have a positive impact on hunter recruitment. As with the other questions, game bird hunters indicated less positive impact responses regarding Sunday hunting and perceived greater negative impacts.

Table 13 –Impact on Hunter Recruitment– Saskatchewan Residents – 2008 Survey		
	Game Bird	Big Game
<b>Positive Impact</b>	<b>64.4%</b>	<b>72.2%</b>
<b>No Impact</b>	<b>24.4%</b>	<b>21.9%</b>
<b>Negative Impact</b>	<b>7.0%</b>	<b>4.8%</b>
<b>Don't Know</b>	<b>4.1%</b>	<b>1.1%</b>
	100%	100%

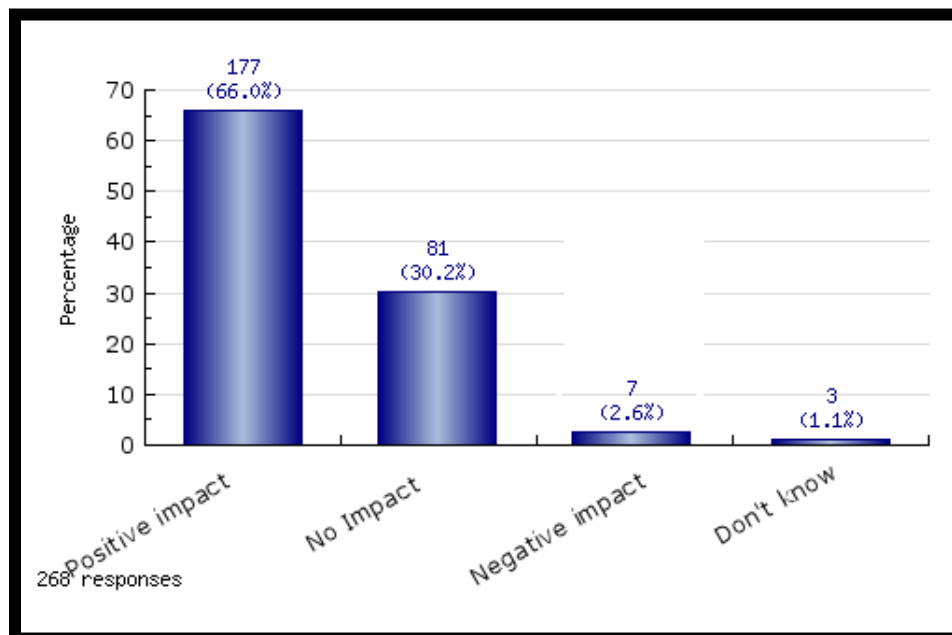


**Figure 5 – Impact on Hunter Recruitment – Canadian Residents – 2008 Survey**



For both Canadian and non-resident hunters, this question received the most positive response. Two-thirds of respondents indicated that they felt Sunday hunting would have a positive impact on hunter recruitment. Clearly there is a prevailing opinion amongst hunters that allowing Sunday hunting would have an overall positive impact in terms of hunter recruitment.

**Figure 6 – Impact on Hunter Recruitment – Canadian Residents – 2008 Survey**



### ***3.2.4 – Other Ways Sunday Hunting Could Impact Hunting in Saskatchewan***

Respondents were asked an open-ended question regarding other ways in which allowing Sunday hunting could impact the number of hunters or the number of times people hunt in a year? There was a high response rate on this question indicating an interest in the topic on the part of those surveyed, particularly amongst the Saskatchewan residents. A great many of the comments were quite eloquent and gave substance to the potential impacts of Sunday hunting. A sample of the comments has been included following each graph.

The additional comments were grouped and displayed in the following graphs. The following table provides a key for the types of comments and the way they were categorized. Some of the comments fit into more than one category; as such the number of comments is greater than the total number of respondents making comments.

Table 14 – Comments Regarding the Impact on Hunters in General – Saskatchewan Residents – 2008 Survey		
Description	Bird	Big Game
<b>General increase in number of times people hunt/Give more opportunity to hunt</b>	<b>35.6%</b>	<b>40.9%</b>
<b>Increase in residential/Weekend hunting for local people who work during the week</b>	<b>22.9%</b>	<b>27.8%</b>
<b>Beneficial economic impact/Increase money spent in Saskatchewan</b>	<b>13.6%</b>	<b>8.7%</b>
<b>Provides more opportunity for youth/Young people to hunt</b>	<b>10.2%</b>	<b>11.3%</b>
<b>Other</b>	<b>8.5%</b>	<b>5.2%</b>
<b>Negatively impact hunters/Sport</b>	<b>6.8%</b>	<b>2.6%</b>
<b>No change/No impact</b>	<b>2.5%</b>	<b>2.6%</b>
<b>Don't know</b>	<b>0.0%</b>	<b>0.9%</b>
	100.0%	100.0%

Of the 540 Saskatchewan hunters surveyed, 198 (36.7%) made comments regarding the potential impacts of Sunday hunting. The most frequent response was that Sunday hunting would increase hunting activity.

There were 11 negative comments regarding Sunday hunting, three of which were stating the potential positive and negative aspects of Sunday hunting. Concerns revolved around animals needing a day of rest, pressure on the animal population itself, and conflict with landowners and First Nations.

## Sample Comments from Saskatchewan Hunters

### Increase Hunting

- Hunters would hunt more often and extend their trip because they have the whole weekend to hunt rather than just the Saturday.
- I think that Sunday hunting would provide opportunities for hunters to take advantage of the entire weekend.

### Residential Impact

- I didn't hunt elk or moose because of my work schedule. I can't drive all that way for only one day. If I could have hunted Sunday, then I could have gone one more day.

### Economic Impact

- It is much easier to make a weekend out of a hunting trip, because of traveling there, and the time you spent is more enjoyable while hunting and more relaxing. I'm strongly in favour of opening up Sunday hunting.
- It will help businesses in small town Saskatchewan.

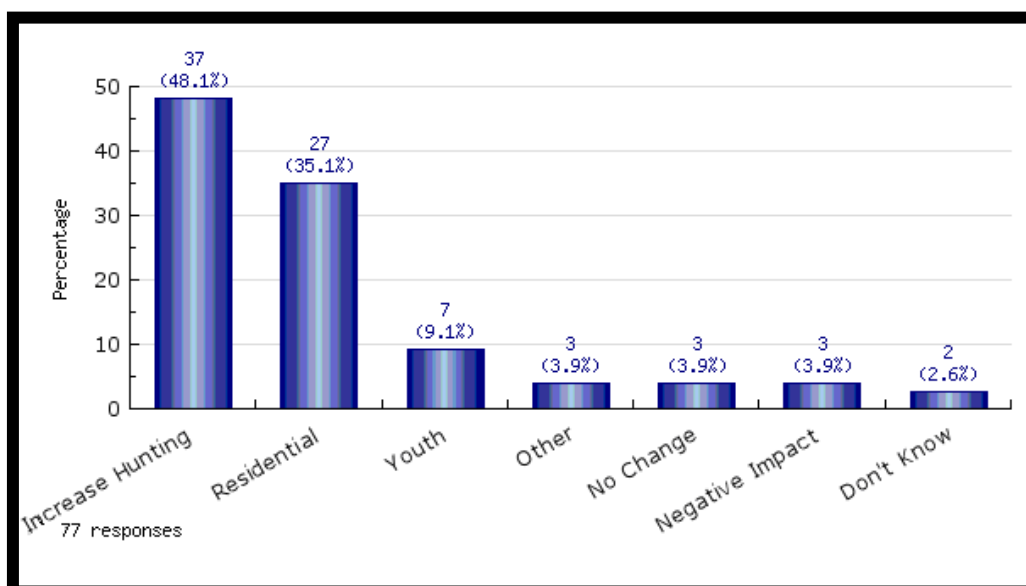
### Youth

- A lot of kids sports are on Saturdays, so an extra day would be better.
- Father and sons would get out a lot more together.
- I think it will keep more people involved in hunting, and will also help attract new hunters to the sport.

### Negative Impact

- It is a double-edged sword. It would be nice to Sunday hunt, but you can't get into a field because of the tourists. It would be good for the economy.
- Landowners may get upset with people always hunting on their land.

**Figure 7 – Impact on Hunter Recruitment – Canadian Residents – 2008 Survey**



## Sample Comments from Canadian Hunters

### Increase Hunting

- Hunting would become more convenient if Sunday hunting was allowed.
- Most people would be more likely to hunt for full weekends if Sunday hunting was allowed.

### Residential Impact

- Youth and business people would not have to take time off from school or work in order to go hunting. It would free up another day for them on the weekend.

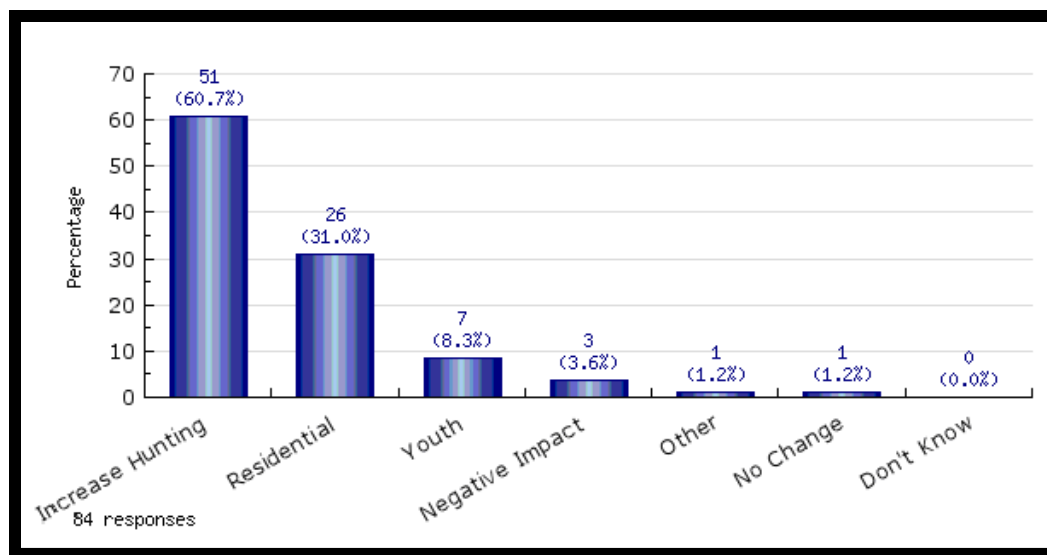
### Youth

- Parents will have more time to spend hunting with their kids. Working people will have an extra day to hunt per week.

### Negative Impact

- Sunday hunting gives the animals a day of rest.

**Figure 8 – Impact on Hunter Recruitment – Non-Residents – 2008 Survey**



## Sample Comments from Non-Resident Hunters

### Increase Hunting

- A lot of other provinces allow Sunday hunting so I think removing the ban on Sunday hunting would increase the number of hunters and the number of times people hunt in a year.
- I think allowing Sunday hunting would make hunting trips more convenient and increase the number of times that people hunt in a year.

**Residential Impact**

- I think more people would hunt in the province because they would have an extra day to hunt without having to take a day off of work.
- It's hard for local residents because of travelling issues. Scouting takes a morning at least to do and for a one-week trip you can make it work, but if you're local and trying to get work off you can't do it.

**Youth**

- Youth would have double the amount of time to hunt if Sunday hunting was allowed.

**Negative Impact**

- It was good to have that day off for us.

## 4.0 The Economic Impact of Non-Outfitted Hunting

This study builds on an extensive piece of work completed in 2006 regarding the economic impact of hunting in the province. The 2006 work provided a detailed expenditure profile for each of the hunting populations. To determine a change in economic impact a survey of hunters was undertaken. This survey revealed how hunter behaviour would change if Sunday hunting were allowed in Saskatchewan. The change in behaviour was quantified through additional trips generated as well as an estimate of the number of days that hunting trips would be extended.

Generally speaking, only new money to the province would add to the net wealth of the province. However, there is a second impact that must be considered as well, the transfer of wealth from urban to rural Saskatchewan. Although more difficult to quantify, it is important to consider.

The out-of-province visitation has been separated from the intra-provincial expenditures because both have separate impacts. The total additional trips and days generated, combined with the per trip expenditure levels render the gross expenditures.

The change in gross hunter expenditures is the basis for forming the economic impact. The expenditures in various sectors of the economy have various impacts on the economy and as such, are analyzed separately. From the gross expenditures the GDP, labour expenditures, and employment are generated. GDP is used as the measure of economic activity because it is the most precise measure of economic activity specific to Saskatchewan.

### 4.1 Key Assumptions

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Several key assumptions were made in the generation of the economic impact as outlined below:

- **New Money** – The economic impact of hunting in Saskatchewan has been calculated on the basis of new money being injected into the economy. It is the new monies brought into the province by other Canadian and non-resident visitors that provides a true net addition to the province's wealth. Surveys were designed to solicit information on expenditures made within the province of Saskatchewan as well as to determine if there was some level of import substitution.
- **GDP Impact Calculation** – The economic impact analysis is being calculated based on the GDP generated by the gross economic activity. The GDP analyzes the value added within Saskatchewan and provides a precise measure of the economic activity stimulated within Saskatchewan. The employment positions and expenditures were also calculated relative to only new positions created within Saskatchewan.
- **Regional Analysis** – The calculation of the economic impact of hunting on the province of Saskatchewan does not include regional expenditure impacts stimulated by Saskatchewan residents within the province. However, these impacts are noted and discussed.

## 4.2 – Change in Economic Activity

To generate the change in gross economic activity triggered by a change in Sunday hunting policy the change in the total number of trips and days spent hunting were estimated. This was done through primary survey research.

### 4.2.1 – Average Trip Expenditures

Average trip expenditures were derived from previous work completed regarding the economic impact of hunting. Sunk costs not likely to be triggered by additional trips were not included in the expenditure profile. These costs included such costs as license fees, ATV purchases, and gun purchases. The expenditure profile was also updated to 2007 dollars using the Consumer Price Index from Statistics Canada.

<b>Table 15 – Average Per Trip Expenditures – 2007</b>				
	<b>Saskatchewan</b>		<b>Canadian</b>	<b>Non-Resident</b>
	<b>Big Game</b>	<b>Bird</b>	<b>Bird/Big Game</b>	<b>Bird</b>
Transportation	\$32.47	\$37.56	\$224.81	\$340.58
Food/Beverage	\$10.33	\$10.37	\$223.03	\$306.99
Recreation and Entertainment	\$3.48	\$2.21	\$56.07	\$51.01
Lodging and Accommodation	\$4.24	\$3.56	\$134.39	\$325.27
Retail and Other Expenditures	\$4.15	\$3.63	\$54.95	\$87.13
Meat Processing	\$11.64	\$5.97	\$21.55	\$26.70
Ammunition	\$3.72	\$6.57	\$27.84	\$34.10
Vehicle Rentals	\$0.00	\$2.85	\$8.27	\$12.47
Other Expenditures	\$4.62	\$4.13	\$30.99	\$22.95
<b>Average Trip Expenditure</b>	<b>\$74.65</b>	<b>\$76.85</b>	<b>\$781.90</b>	<b>\$1,207.20</b>

Because respondents also responded with additional days that would be spent hunting, as opposed to additional trips, a daily expenditure profile was also created. This profile was based on survey data regarding the length of the average trip. Pre-trip costs, such as flights and out-of-province travel, were not included in the original expenditure profile and were not included in the daily expenditure profile.

<b>Table 16 – Average Per Day Expenditures – 2007</b>				
	<b>Saskatchewan</b>		<b>Canadian</b>	<b>Non-Resident</b>
	<b>Big Game</b>	<b>Bird</b>	<b>Bird/Big Game</b>	<b>Bird</b>
Transportation	\$19.50	\$31.26	\$42.76	\$41.45
Food/Beverage	\$6.20	\$8.63	\$42.42	\$37.36
Recreation and Entertainment	\$2.09	\$1.84	\$10.66	\$6.21
Lodging and Accommodation	\$2.55	\$2.96	\$25.56	\$39.58
Retail and Other Expenditures	\$2.49	\$3.02	\$10.45	\$10.60
Meat Processing	\$6.99	\$4.97	\$4.10	\$3.25
Ammunition	\$2.23	\$5.47	\$5.30	\$4.15
Vehicle Rentals	\$0.00	\$2.37	\$1.57	\$1.52
Other Expenditures	\$1.38	\$1.71	\$5.89	\$2.79
<b>Average Trip Expenditure</b>	<b>\$43.43</b>	<b>\$62.23</b>	<b>\$148.71</b>	<b>\$146.91</b>

#### ***4.2.2 – License Sales Growth***

Growth in license sales due to the introduction of Sunday hunting has not been included in this report, only additional expenditures identified through the survey have been identified as the incremental impact of Sunday hunting based on the existing hunting population. Given the experience of other jurisdictions and the prevalence of Sunday hunting in Western North America, it is unlikely that Sunday hunting would lead to short-term growth in the size of the hunting population. Saskatchewan is essentially leveling the field in terms of competing for hunting expenditures, not setting itself apart with a unique advantage.

Given the widespread belief that allowing Sunday hunting would lead to additional mentoring and hunter recruitment, it is likely, however, that Sunday hunting would lead to long-term growth in terms of recruitment to the sport. This may not lead to overall growth in the hunting population as the aging demographic of the hunting population will require additional hunter recruitment just to replace retiring hunters.



### 4.2.3 – Determination of the Additional Trips Generated

To determine the marginal impact of Sunday hunting, the data collected from the survey must be extrapolated to the entire hunting population utilizing licensing data. Working from Saskatchewan Environment licence sales the total number of hunters for each population was determined. The following table shows the generation of the number of hunters by type and origin.

<b>Table 17 – Total Hunters – 2007</b>		
<b>Hunter Type</b>	<b>Total Licenses Sold<sup>20</sup></b>	<b>Total Hunters<sup>21</sup></b>
<b>Saskatchewan Resident</b>		
Saskatchewan Resident Game Bird	16,231	8,258
Saskatchewan Resident Both Big Game and Bird		7,973
Resident Big Game	75,838	32,436
<b>Total Saskatchewan</b>	<b>92,069</b>	<b>48,667</b>
<b>Canadian Resident</b>		
Canadian Resident Game Bird	1,959	1,901
Canadian Resident Big Game	3,724	3,507
Canadian Resident Both Big Game and Bird		58
<b>Total Canadian</b>	<b>5,683</b>	<b>5,466</b>
<b>Non-Resident</b>		
Non-Resident Game Bird	10,331	10,331
Non-Resident Big Game	6,731	6,018
<b>Non-Resident Total</b>	<b>17,062</b>	<b>16,349</b>
<b>Totals</b>	<b>114,814</b>	<b>70,482</b>

With the total number of hunters established, the number of trips taken by each hunter type has also been isolated. The additional trips projected to be taken by each hunter population must be identified.

<sup>20</sup> Based on Saskatchewan Environment data.

<sup>21</sup> Actual hunters are less than the total licenses sold as some hunters hold more than one license. The average number of licenses sold to hunters was based on the 2006 survey of hunters.

Based on the survey questions asking individuals how their hunting behaviour would have changed in their last hunting season if Sunday hunting had been allowed, the potential change in behaviour was identified. Respondents were asked how, in days and trips, they would alter their hunting activity.

<b>Table 18 – Additional Hunting Activity Generated Per Hunter</b>		
<b>Hunter Type</b>	<b>Additional Trips Generated</b>	<b>Additional Days Generated</b>
<b>Saskatchewan Big Game Hunter</b>	<b>0.342</b>	<b>2.092519</b>
<b>Saskatchewan Bird Hunter</b>	<b>0.874296</b>	<b>1.748741</b>
<b>Canadian Bird and Big Game Hunter</b>	<b>0.041045</b>	<b>0.819963</b>
<b>Non-Resident Bird Hunter</b>	<b>0.011194</b>	<b>0.651381</b>

Based on license information and the total number of hunters, the total projected change in the number of trips was generated. The following table identifies the total number of trips that would be generated if Sunday hunting were allowed.

<b>Table 19 – Total Incremental Hunting Trips</b>		
<b>Hunter Type</b>	<b>Additional Trips Generated</b>	<b>Additional Days Generated</b>
<b>Saskatchewan Big Game Hunter</b>	<b>13,819.88</b>	<b>84,556.58</b>
<b>Saskatchewan Bird Hunter</b>	<b>14,190.70</b>	<b>28,383.81</b>
<b>Canadian Bird and Big Game Hunter</b>	<b>211.86</b>	<b>4,232.43</b>
<b>Non-Resident Bird Hunter</b>	<b>78.18</b>	<b>4549.08</b>
<b>Total Additional Hunting Activity</b>	<b>28,300.62</b>	<b>121,721.90<sup>22</sup></b>

There would be 28,301 (7.7% increase) additional hunting trips, and existing trips would be extended by an additional 121,721 (19.2% increase) days. While this is significant, it should be noted that Saskatchewan residents comprise 99.0% of the new trips generated and 92.8% of the new days generated. While typical economic impact analyses include only new money to the region, the Saskatchewan-based hunter expenditures still represents a significant transfer of capital from urban to rural areas.

<sup>22</sup> The total additional days includes the additional days spent on hunting trips for individuals who both extended trips and took additional trips. For those that both extended trips and took additional trips the incremental activity was recorded in terms of the total additional number of days spent hunting.

Based on the introduction of Sunday hunting, the average Saskatchewan big game hunter would hunt an additional 2.1 (21.4% increase) days as well as take an additional 0.34 trips (5.8% increase). Bird hunters would hunt an additional 1.7 days (20.1% increase) as well as taking an additional 0.87 trips (12.1% increase). The following table shows the percent changes for hunting activity for each hunting segment. It should be noted that the additional days spent hunting are on top of the additional trip activity.

<b>Table 20 – Change in Hunting Activity – 2008 Survey of Non-Outfitted Hunters</b>				
	<b>Saskatchewan Bird Hunting Trips</b>	<b>Saskatchewan Big Game Hunting Trips</b>	<b>Canadian Hunting Trips</b>	<b>Non-Resident Bird Hunting Trips</b>
Total Trips	12.1%	5.8%	3.0%	1.1%
Days Spent Hunting (days)	20.1%	21.4%	11.6%	7.5%

#### ***4.2.4 – Total Expenditure Generated***

The following tables outline the total additional expenditures projected to be generated by Sunday hunting. The first table outlines the additional expenditures generated by additional trips and the second table outlines expenditures generated by additional days spent hunting.

Again, Saskatchewan based hunters comprise the majority of the expenditures. While there would be \$9,118,569 in increased trip and extended trip expenses, the majority of the expenditures would be made by Saskatchewan residents. Non-resident and Canadian hunters only accounted for 1.04% of increased trip expenditures and 7.78% of expenditures triggered by longer trips.

<b>Table 21 – Total Incremental Annual Expenditures Triggered – Trips</b>			
<b>Hunter Type</b>	<b>Additional Trips Generated</b>	<b>Expenditure Per Trip</b>	<b>Change in Expenditures</b>
<b>Saskatchewan Resident</b>			
Saskatchewan Resident Game Bird	14,190.70	\$76.85	\$1,090,555
Saskatchewan Resident Big Game	13,819.88	\$74.65	\$1,031,654
<b>Total Saskatchewan</b>	<b>28,010.58</b>		<b>\$2,122,209</b>
<b>Canadian Resident</b>			
Canadian Resident Big Game and Bird	<b>211.86</b>	<b>\$781.90</b>	<b>\$165,653</b>
<b>Non-Resident</b>			
Non-Resident Game Bird	78.18	\$1,207.20	\$94,379
<b>Totals</b>	<b>28,300.62</b>		<b>\$ 2,382,242</b>

<b>Table 22 – Total Incremental Annual Expenditures Triggered – Days</b>			
<b>Hunter Type</b>	<b>Additional Days Generated</b>	<b>Expenditure Per Day</b>	<b>Change in Expenditures</b>
<b>Saskatchewan Resident</b>			
Saskatchewan Resident Game Bird	28,383.81	\$62.23	\$ 1,766,325
Saskatchewan Resident Big Game	84,556.58	\$43.43	\$ 3,672,292
<b>Total Saskatchewan</b>	<b>112,940.39</b>		<b>\$ 5,438,618</b>
<b>Canadian Resident</b>			
Canadian Resident Big Game and Bird	<b>4,232.43</b>	<b>\$148.71</b>	<b>\$629,405</b>
<b>Non-Resident</b>			
Non-Resident Game Bird	4,549.08	\$146.91	\$668,305
<b>Totals</b>	<b>121,721.90</b>		<b>\$ 6,736,328</b>

## 4.3 – Economic Impact Analysis

### 4.3.1 – Total Expenditure Impact

The total new money to the province that would be generated through the allowance of Sunday hunting is \$9,118,569, based on increased expenditures from Canadian and non-resident hunters. The new money is the basis for the economic impact as it is the basis for increasing the provinces GDP.

<b>Table 23 – Change in Expenditures by Source</b>	
<b>Expenditure Type</b>	<b>Change in Expenditures</b>
Saskatchewan-based Expenditures	\$7,560,826
New Money to Province (Canadian and Non-Resident Expenditures)	\$1,557,743
<b>Totals</b>	<b>\$9,118,569</b>

While the Saskatchewan-based expenditures are not new money to the province, the \$7.6 million in expenditures does have a substantial impact on rural Saskatchewan and represents a significant transfer of wealth from urban to rural areas. This will be explored later in this section.

Amongst Saskatchewan hunters there would also be a substitution effect for hunters currently going outside the province to hunt on Sundays. Respondents were asked if and how often they leave the province to hunt because of the ban on Sunday hunting. Of respondents, 4.8% indicated that they had left the province to hunt elsewhere because of Sunday hunting.

<b>Table 24 – Saskatchewan Substitution Effect</b>				
	<b>Number of Licenses</b>	<b>Trips Substituted</b>	<b>Trip Expenditures</b>	<b>Expenditures</b>
Bird Hunters	16,231	2,188	\$76.85	\$ 168,147.80
Big Game Hunters	40,409	599	\$74.65	\$ 44,715.35
<b>Totals</b>		<b>2,787</b>		<b>\$ 212,863.15</b>

<b>Table 25 – Total New Money to Saskatchewan</b>	
<b>Expenditure Type</b>	<b>Change in Expenditures</b>
Canadian and Non-Resident New Money	\$ 1,557,743
Saskatchewan Resident New Money	\$ 212,863
<b>Total</b>	<b>\$ 1,770,606</b>

#### ***4.3.2 – Determination of Direct and Indirect GDP and Employment Impact***

The determination of the direct and indirect GDP impact was based on the Parks Economic Impact Model (PEIM). The model, created by Heritage Canada, utilizes Statistics Canada Input-Output data to simulate the impact of tourist expenditures on the Saskatchewan economy in the areas of transportation, vehicle rentals, other vehicle, accommodation, food and beverage, recreation and entertainment, and retail/other expenditures. Because the model uses Statistics Canada Input-Output data it is highly accurate in terms of GDP and employment generation. As GDP is the most comparable assessment of economic impacts, this model was the most appropriate for assessing the economic impact of hunting. This model is also consistent with the 2006 Economic Impact Assessment for Hunting.

The following table has amalgamated the expenditure data for out-of-province visitors. For each of these expenditures a separate analysis was run to determine the precise impact on the respective sectors of the economy.

<b>Table 26 – Expenditures by Impact Category</b>	
<b>Category</b>	<b>Expenditures</b>
Transportation	545,423.71
Food/Beverage	449,622.18
Recreation and Entertainment	96,154.44
Lodging and Accommodation	352,464.08
Retail and Other Expenditures	121,330.97
Meat Processing (business services)	58,825.18
Ammunition	66,478.12
Vehicle Rentals	22,522.30
Other Expenditures	57,784.53
<b>Total</b>	<b>1,770,605.52</b>

GDP was utilized as the measure of economic impact because it is the most precise measure of actual economic activity that has occurred within the province. GDP measures the actual value added by Saskatchewan companies within the province. The value added is the sum of all economic activity less the inputs required that were supplied extra-provincially. **The total direct and indirect GDP generated by \$1.77 million in expenditures is \$0.57 million.**

<b>Table 27 – GDP Impact</b>				
	<b>Direct Expenditure</b>	<b>Direct GDP<sup>23</sup> Impact</b>	<b>Indirect GDP Impact</b>	<b>Total GDP Impact</b>
<b>Impacts</b>	<b>\$ 1,770,606</b>	<b>\$ 370,449</b>	<b>\$ 204,291</b>	<b>\$ 574,741</b>

The direct and indirect employment generated by the increase in expenditures associated with Sunday hunting would be 18.5 full-time equivalent positions in the province with \$356,000 in labour income.

<sup>23</sup> Gross Domestic Product (GDP) is the measure of the value of the total outputs of an industry less the total inputs.

<b>Table 28 – Employment Impact</b>			
	<b>Direct Employment Impact</b>	<b>Indirect Employment Impact</b>	<b>Total Employment Impact</b>
<b>Total Expenditure</b>	<b>\$270,765</b>	<b>\$94,669</b>	<b>\$365,434</b>
<b>Total Jobs</b>	<b>15.0</b>	<b>3.5</b>	<b>18.5</b>

This model is very beneficial as it is extremely accurate in terms of its assessment of the GDP and employment created. It also is consistent and comparable with the previous economic assessment of non-outfitted hunting. However, the model is lacking in two ways. First, the model only estimates federal taxes. Second, the model does not calculate any of the induced impacts created by economic activity.

#### ***4.3.3 – Determination of Induced GDP and Employment Impact***

While widely acknowledged, economists have been reluctant in the past to include induced impacts in calculations as they are open to interpretation, as well as inflation. Induced impacts have long been regarded as somewhat inaccurate and misleading, as well as open to exaggeration. Increasingly, however, induced impacts are gaining acceptance, provided they are calculated based on reliable modeling. As such, a calculation of the induced impacts has been included in this report.

A formula generated by Statistics Canada was utilized to calculate the induced impacts of non-outfitted hunting. The formula essentially assesses the impact labour expenditures have on the economy whereby closing the model. The previous analysis shows that the total labour expenditure generated is \$365,000. After accounting for taxes and savings, the \$365,000 in labour expenditures generates \$311,000 in induced expenditures. These expenditures are run through the economic impact model again, based on the typical basket of goods purchased by a wage earner in Saskatchewan.

These induced expenditures create an additional \$147,000 in GDP. The following tables show the total induced GDP impact generated from the induced labour expenditures.

<b>Table 29 – Induced GDP Impact</b>				
	<b>Direct Expenditure</b>	<b>Direct GDP Impact</b>	<b>Indirect GDP Impact</b>	<b>Total GDP Impact</b>
<b>Induced Expenditures</b>	<b>\$310,618.90</b>	<b>118,575.66</b>	<b>28,458.16</b>	<b>147,033.82</b>

The total direct, indirect, and induced impact of non-outfitted hunting in Saskatchewan is \$722,000 generating 21.1 full-time equivalent positions. The total labour income generated is \$446,000.

**Table 30 – Projected Direct and Induced GDP and Employment Impacts Triggered by Sunday Hunting –Non-Outfitted Hunters in Total GDP Impact**

	<b>Direct and Indirect Impacts</b>	<b>Induced GDP</b>	<b>Total GDP Impact</b>
<b>GDP Generated</b>	<b>\$ 574,741</b>	<b>147,034</b>	<b>\$721,775</b>
<b>Total Employment Income</b>	<b>\$365,434</b>	<b>81,028</b>	<b>\$446,462</b>
<b>Total Jobs (FTE)</b>	<b>18.5</b>	<b>2.6</b>	<b>21.1</b>

The direct and indirect impacts have been reported separately as to be easily separated from the induced impacts. This allows the results of this economic impact to be easily compared to other economic impacts, whether they have calculated the induced impacts or not.

The majority of the 21.1 full-time equivalent jobs created would be in the service sector. The expenditures triggered by the additional hunting activity would be tourism expenditures, primarily made in the service sector. Employment impacts in hunting-related fields such as taxidermy, dog training, and bird plucking would be supported primarily by expenditures made by Saskatchewan residents, and to some extent, outfitted hunters.

#### ***4.3.4 – Determination of Tax Impacts***

The Parks model also lacks the type of tax information that would be useful at the provincial level. As such, a separate tax model was utilized. The Sport Tourism Economic Assessment Model (STEAM), developed by Statistics Canada, the Conference Board of Canada, and the Canadian Sport Tourism Alliance provides more detailed analysis of the tax modeling. To ensure that the tax analysis was consistent with the previous findings the tax impact was generated relative to the direct and indirect GDP activity already calculated. Incremental hunting activity would create the following marginal tax impacts, based on the previous GDP impact estimates.

**Table 31 – Projected Sunday Hunting Annual Tax Impact – 2007**

	<b>Federal</b>	<b>Provincial</b>	<b>Municipal</b>
<b>Impacts</b>	<b>\$110,306.30</b>	<b>\$102,763.18</b>	<b>\$25,034.22</b>



### ***4.3.5 – Sunday Hunting and Hunting Competitiveness***

For hunting to remain a healthy sport, it must remain competitive, both in terms of other jurisdictions as well as other activities competing for residents' time and money.

As Saskatchewan is the only jurisdiction outside of the states and provinces on the eastern coast of North America to maintain a ban on Sunday hunting the question becomes one of competitiveness. The ban on Sunday hunting may impact Saskatchewan's ability to attract new hunters to the market. This would impact the long-term sustainability of the hunting industry's economic impact.

Increasing urbanization in Saskatchewan may also have long-term impacts on hunting. Rural lifestyles provide greater access and opportunity for hunting. As the rural population declines, this may lead to more limited hunting opportunities for Saskatchewan residents. As more Saskatchewan residents reside in urban areas, it will become more important to accommodate urban lifestyles in terms of hunting access if hunting activity is to be maintained at its current levels.

## **4.4 – Economic Impact of Provincial and Rural Expenditures**

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Traditional economic impacts regarding tourist expenditures treat only "new money" to the economy as part of the economic impact. However, there is also a significant intraprovincial impact that takes place through the transference of expenditures from urban<sup>24</sup> to rural jurisdictions. While this does not have an impact at the provincial level, there is a significant impact on the communities in which the expenditures are made.

Of the 48,667 licensed Saskatchewan hunters 14,211 (29.2%) are based in urban centres based on the 2006 Economic Evaluation of Hunting in Saskatchewan. Based on the total marginal increase in expenditures of \$7.6 million for Saskatchewan hunters, the total increase in urban-based expenditures would be \$2.2. million.

Because the expenditure profile does not include sunk costs likely made at the point of origin, the expenditure profiles can be used for each of the urban trips made. The additional hunting activity generated by Saskatchewan hunters will contribute an additional \$2.2 million to rural Saskatchewan. This is greater than the \$1.6 million in expenditures that would be generated by Canadian and non-resident increased expenditures. Because the Saskatchewan resident expenditure is intraprovincial, there is no GDP calculation for this expenditure.

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<sup>24</sup> Respondents were deemed to be urban if they listed their home as one of the province's cities (populations of 5,000+).

**Table 32 – Incremental Expenditures by Saskatchewan’s Urban Hunters  
Based on Sunday Hunting – 2007**

	<b>Marginal Increase in Saskatchewan Hunter Expenditures<sup>25</sup></b>	<b>Percentage Urban Based Hunters<sup>26</sup></b>	<b>Total Increase in Urban Based Hunting Expenditures</b>
Additional Trips	\$ 2,122,209	29.2%	\$619,685
Additional Days Spent	\$ 5,438,618	29.2%	\$1,588,076
<b>Total</b>	<b>\$7,560,827</b>		<b>\$2,207,761</b>

If the \$1.6 million in new expenditures from Canadian and non-residents is combined with the \$2.2 million in additional expenditures by urban residents there would be an additional \$3.8 million in expenditures, the majority of which would be in rural Saskatchewan. The level of expenditure has a greater significance if the seasonality of hunting is also considered.

There is a symbiotic relationship between urban and rural jurisdictions. Healthy rural economies support urban economies, while healthy urban economies lead to expenditures in rural areas, as evidenced here. Urban hunters supporting rural businesses leads to a stronger regional economy. While the majority of these expenditures will eventually wind their way through the retail economy back to the major centres, it is an excellent illustration of the symbiotic relationship between rural and urban centres in Saskatchewan.

## **4.5 – Change in Total Expenditures**

To provide an order of magnitude for the projected change in non-outfitted hunting expenditures the following table compares the current hunting expenditures with the projected change in hunting expenditures.

<sup>25</sup> Based on 2007 hunting activity.

<sup>26</sup> 29.2% of Saskatchewan hunters based on 2006 survey data. Urban-based hunters were calculated based on the postal codes of survey respondents from a broad survey of Saskatchewan hunters in 2006.

**Table 33 – Total Projected Change in Annual Expenditure Triggered by  
Sunday Hunting – Non-Outfitted Hunters in Saskatchewan**

	Saskatchewan Hunters		Non-Saskatchewan Hunters		Total
	Big Game	Game Bird	Canadian	Non-Resident	
Total Non-Outfitted Hunting Expenditures <sup>27</sup>	\$27,656,929	\$11,752,164	\$6,256,431	\$ 9,929,597	\$55,595,122
Projected Change in Expenditures	\$4,703,946	\$2,856,880	\$795,058	\$ 762,684	\$9,118,568
Change in Expenditures	17.0%	24.3%	12.7%	7.7%	16.4%

The increase in hunting expenditures would be relatively significant at \$9.1 million or 16.4%. Regarding the increase in new money to the province, the increase is somewhat less at \$1.6 million or 9.6% for Canadian and non-resident hunter expenditures.

The greatest increases in hunting activity would come from Saskatchewan hunters in both relative and absolute terms. The total projected increase in Saskatchewan hunter expenditures would be 19.2% or double the increase for Canadian and non-resident related expenditures.

<sup>27</sup> Based on 2008 survey results and updated 2006 hunting expenditure profiles.

## Appendix A – Economic Impact Model Explanatory Example

### *Economic Impact Model – Car Dealership vs. Hotel*

Economic activity translates into economic impacts very differently based on the type of industry, as well as location. As an example, we can compare two businesses and their respective impacts on the economy, a car dealership and a hotel operation located in Saskatchewan. Both the car dealership and the hotel did \$10.0 million in business last year, net of taxes. The car dealership has a 20% markup on the cars that they import from Ontario (Saskatchewan does not supply any of the cars). The 20% or \$2.0 million markup is the gross profit over and above the cost of importing the cars.

The \$2.0 million is used to pay sales staff wages, operating costs, and amortization with the remainder as profit for the Saskatchewan-based owners. Of the operating expenditures, 50% (\$1.0 million) will be labour expenditures. Because the employees are all Saskatchewan-based, the entire \$1.0 million would remain in Saskatchewan.

\$400,000 will be spent on operational goods and services, half of which (\$200,000) will be supplied within the province. \$300,000 in amortization will also be allocated, 50% of which was originally paid to out-of-province suppliers. The remaining \$300,000 is profit for the Saskatchewan-based owners. The input-output tables would calculate, from the total \$10 million in economic activity, the actual economic impact in Saskatchewan. In this example, the actual economic impact is \$1.65 million based on the level of car importation (\$8.0 million) and \$350,000 in other out-of-province imports.

The hotel operation is operating at operational margins of 40% labour, 40% operating expenditures, 10% amortization, and 10% profit. The 40% labour expenditure, or \$4 million, is paid entirely to Saskatchewan-based employees and, therefore, remains in Saskatchewan. Of the 50% operating expenditures (which include a wide assortment of goods and services ranging from plumbing to sheets) approximately 50% will be supplied by Saskatchewan businesses and therefore remain in Saskatchewan. Of the 10% amortization, half was originally paid to out-of-province suppliers with the other half remaining in the province as a provincial economic impact. \$1.0 million is profit for the Saskatchewan-based owners.

As such, the total economic impact of \$10.0 million in hotel expenditures is \$7.5 million, compared to the \$1.65 million for the car dealership. In general, the economic impact of service-based industries is much higher because they have a low cost of goods sold and higher labour expenditures. The following table shows the different levels of economic impacts.

<b>Table A-1 – Sample Economic Impacts for Car Dealership and Hotel Operation</b>				
	<b>Car Dealership</b>		<b>Hotel</b>	
	<b>Total Expenditure</b>	<b>Saskatchewan Economic Impact</b>	<b>Total Expenditure</b>	<b>Saskatchewan Economic Impact</b>
Labour	\$ 1,000,000	\$ 1,000,000	\$ 4,000,000	\$ 4,000,000
Cost of Goods Sold <sup>28</sup>	\$ 8,000,000			
Operational Expenditures	\$ 400,000	\$ 200,000	\$ 4,000,000	\$ 2,000,000
Amortization	\$ 300,000	\$ 150,000	\$ 1,000,000	\$ 500,000
Profit	\$ 300,000	\$ 300,000	\$ 1,000,000	\$ 1,000,000
<b>Total</b>	<b>\$ 10,000,000</b>	<b>\$ 1,650,000</b>	<b>\$ 10,000,000</b>	<b>\$ 7,500,000</b>

While this is a highly simplified assessment of the economic impacts, it does give a general overview of how differently expenditures can impact the economy. If the economic impact were being done on a Canada-wide basis, it would be much higher for the car dealership because it would include the economic activity spurred within the Ontario auto industry, as well as goods produced in other provinces.

<sup>28</sup> Because the hotel is primarily selling a service, there are no costs of goods sold as in the case of the raw goods required for a manufacturing or sales company. While individual hotels would likely report the cost of goods sold in their profit and loss accounts, for the sake of simplicity we are assuming that the costs are all reported as operational expenditures such as marketing and administration.