Alberta Economic Development

The Economic Impact of Visitors to Alberta's Rocky Mountain National Parks in 1998

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Executive Summary

Expenditures in Alberta by visitors to Alberta's Rocky Mountain National Parks (Banff, Jasper and Waterton) produce significant economic impacts on the Alberta economy. In this report Alberta Economic Development (AED) has attempted to provide an estimate of the economic impact of this spending. Visitor expenditure information was utilized from the 1998 Canadian Travel Survey and 1998 International Travel Survey. The expenditure data and subsequent impacts are presented in 1998 dollars. The Demand Economic Impact Model (DEIM), which utilizes sophisticated input/output technology, was used to estimate economic impact on a province-wide basis.

The Economic Impact of Visitor Expenditures to Alberta's Rocky Mountain National Parks (Banff, Jasper and Waterton) in 1998

- Expenditures by visitors to Alberta's Rocky Mountain National Parks were estimated to be in excess of $**954 million.**
- These expenditures resulted in an **economic impact (value added) of over $1.0 billion** on a province-wide basis.
- Over **28,000 person years of employment** were sustained province-wide attributable to the impact of visitor expenditures in the three National Parks.
- **Approximately $401 million taxation revenues** accrued to all levels of government. The Federal share accounted for $211 million. The Provincial share was $135 million. Local governments province-wide accounted for $55 million.

1.0 Introduction:

The purpose of this report is to measure the economic benefits derived by Alberta residents and governments from the dollars spent in the province by visitors to Alberta's Rocky Mountain National Parks (Banff, Jasper and Waterton). These economic benefits include total expenditures made by tourists, number of person years of employment supported by these expenditures, value-added impact on the provincial economy and government tax revenues generated. The basic procedures employed to develop these measures are outlined in the technical appendix to this report.

The estimate of economic impact developed from these procedures and analyzed in the report can:

1) be used to document the importance of tourism as a key segment of Alberta's economy; and

2) assist in gaining greater knowledge of relative contributions by visitors to Alberta's Rocky Mountain National Parks.

The tourism impact estimates in this report replace all the estimates from Alberta's Rocky Mountain National Parks previously reported by AED. Our new estimates for 1998 may differ from figures previously established by the department primarily because:

1) Previous visitor expenditure data was obtained from the 1991 Alberta-Non Resident Travel Exit Survey and the 1991 Alberta Resident Travel Survey. The data obtained from these surveys separated expenditures for each of the three National Parks. Data for this analysis was obtained from the 1998 Canadian and International Travel Surveys released by Statistics Canada in 1999. These surveys do not provide expenditures by National Park. Their data reflect a gross expenditure number for all three National Parks, presented as one expenditure estimate by all visitors to the area. As a result this report does not consider impact by National Park as was previously done by AED in 1994.

2) The current Demand Economic Impact Model (DEIM) used for this analysis has been upgraded to include the latest input/output data as provided by Statistics Canada, reflecting the state of the Alberta Economy in 1998.

Report Limitations

The data used in the analysis was generated from the 1998 Canadian and International Travel Surveys, which are deemed reliable for the purpose of this study.

It should be stressed that the results of an economic impact analysis are estimates based on an accounting framework that represents average parameter values of the underlying background, structural and technical relationships of the economy. Thus, in evaluating these estimates, there should be some allowance for a margin of error to the extent that observations deviate from actual values.

2.0 Visitor Expenditure Data:

Data used in this economic impact analysis was obtained from the 1998 Canadian Travel Survey (CTS) and the 1998 International Travel Survey (ITS). Both surveys are conducted by Statistics Canada who analyze and disseminate the results.

2.1 The Canadian Travel Survey (CTS)

The CTS presents data, charts and analytical text on socio-economic characteristics of Canadians travelling within Canada. Trip information includes purpose, activities, mode of transportation, length of stays, origin, destinations and expenditures. In addition to providing national data, information is also provided on a provincial and metro population level.

2.2 The International Travel Survey (ITS)

The ITS collects data on characteristics of international travelers between Canada and other countries, including expenditures by Canadian residents on trips abroad and by visitors to Canada. The type of information collected on expenditures is similar to that collected by the CTS.

2.3 Harmonization of data from CTS and ITS

In 1998, Alberta Economic Development contracted Research Resolutions to review the data for Alberta from CTS and ITS and provide specific provincial data relative to visitor origin and expenditures, in 1998. The data from this harmonized report, which has specific information on visitors and expenditures to Alberta's Rocky Mountain National Parks, is being used for this economic impact analysis.

2.4 Visitor Direct Expenditures

The total direct visitor expenditures in Alberta's Rocky Mountain National Parks in 1998 were estimated at $954 million. The following table identifies the breakdown of direct spending.

Visitor Expenditures - Alberta Rocky Mountain National Parks 1998		
Accommodation	$372,384,000	39%
Meals & Refreshments	$215,716,000	23%
Vehicle & car rental	$93,851,000	10%
Local & comm transportation	$56,586,000	5%
Rec & Entertainment	$95,708,000	10%
Retail Purchase & other	$120,542,000	13%
Total	$954,787,000	100%

Source: 1998 Canadian Travel Survey & 1998 International Travel Survey

In 1998:

- Approximately ***87% of all direct expenditures*** in Alberta's Rocky Mountain National Parks were attributed to visitor spending on ***accommodation (39%), meals and refreshments (23%), vehicle and car rental (10%), recreation and entertainment (10%) and local and commercial transportation (5%).***

- An estimated ***13% of all expenditures were attributed to retail and other spending.***

3.0 Economic Impact Summary

3.1 Economic Impact of Visitors to Alberta's Rocky Mountain National Parks

Economic Impact of Visitors to Alberta's Rocky Mountain National Parks Province - Wide Impacts In 1998 Dollars	
Direct Visitor Expenditures in 1998	$954,787,000
Economic Impact	
(Value Added)	
Direct	$413,625,000
Indirect & Induced	$639,751,000
Total	$1,053,376,000
Employment	
(Person Years)	
Direct	13,845
Indirect & Induced	14,290
Total	28,135
Taxes	
Federal	$211,605,000
Provincial	$134,868,000
Local	$54,994,000
Total	$401,467,000

Source: 1998 CTS Travel Survey, 1998 ITS Travel Survey and Demand Economic Impact Model

The major economic impacts of visitors to Alberta's Rocky Mountain National Parks are referenced in the above table and can be summarized as follows:

- Tourism expenditures of $954 million in Alberta's Rocky Mountain National Parks (Banff, Jasper and Waterton) generated a province-wide economic impact (value added) of $1.0 billion in 1998.

- These expenditures sustained approximately 28,000 person years of employment province–wide in 1998.
- An estimated $401 million (1998) in taxation revenues accrued to all levels of government. The Federal share accounted for $211 million. The Provincial share was $135 million. Local governments province–wide accounted for $55 million.

Technical Appendix

1.1 What is Economic Impact Analysis?

Economic impact analysis is used to determine the effects of additional tourist spending primarily on employment, value added (income) and government tax revenues in an economy. It is based on the premise that initial or direct effects alone are poor measures of the total impact of tourism on the economy. It is often the case that indirect and induced effects are just as large, if not greater than direct effects, and frequently involve sectors and activities distantly, but importantly, connected to the initial activity.

Let's suppose a tourist travels to Alberta from the USA and spends $20 at a gas station traveling in the province. In an economic impact analysis, the focus is not on the amount of sales (in this case $20) as such, but rather the impact of those sales on the provincial economy. If you consider:

1. The gasoline station owner must take part of the $20 spent by the tourist and buy more gasoline from a wholesale distributor as well as pay wages and salaries. This first round of effects is commonly referred to as the DIRECT IMPACT.

2. In the second round, the wholesale gasoline distributor buys additional items, pays salaries and wages, all with part of the $20. This round of effects is commonly referred to as INDIRECT IMPACT.

3. The gasoline station employees and the employees of the wholesale distributor spend part of their salaries on groceries, rent, automobiles and so on. This is referred to as INDUCED IMPACT.

Like the ripples resulting from a stone hitting a pool of water, the initial amount of tourist spending circulates throughout the economy and creates a "multiplier" effect.

1.2 How the Demand Economic Impact Model (DEIM) Works

The DEIM models consider information from a demand side perspective (i.e. what is purchased or "demanded" by purchasers). The model accepts inputs organized by visitor origin and expenditure categories commonly utilized in tourist surveys such as expenditures on accommodation, meals, transportation, etc. The model is specific to Alberta.

DEIM utilizes input/output matrices in estimating economic impact. The model describes Alberta's provincial economy as a system of integrated flows of goods and services. What is measured in the analysis is a change in income, employment, taxes, etc. in the economy as a result of additional tourism spending. The model is based on the 1996 Alberta Input/Output Tables that were prepared by Statistics Canada. Econometric Research Ltd., developer of the model, adjusted the 1996 data to reflect the state of the economy in 1998. These tables portray, in detail, the intricate structural framework of Alberta's economy for a single period of time. The economy is divided into 27 industrial sectors and 43 commodities. DEIM was developed for Alberta Economic Development in 1993.

1.3 What is the Multiplier Concept?

The multiplier may be regarded as a coefficient, which expresses the amount of change generated in an economy by an additional unit or tourist spending. A commonly-used multiplier in tourism impact studies is the income multiplier.

It should be noted that in an economic impact analysis the calculation of multipliers are the end result of impact analysis, not the starting point. The multipliers are calculated within the model based on the pattern of initial expenditures and the interrelationship of industries represented by the Alberta Input/Output matrix.

1.4 Value Added (Income)

Measures the total value of expenditures or final goods and services sold in the economy. It is what remains from revenues after all material and supplies have been paid for and is available for wages, capital, rent and property. The higher the proportion of value-added income generated, the greater the impact on the provincial economy. This variable is used as a measure of the economic impact on the economy.

1.5 Employment

Employment is the amount of labour time used in production, measured in full-time equivalent (FTE) person years. The DEIM model can estimate the number of person-years of employment that will be created or sustained by an activity. The number of jobs cannot, however, be estimated because the model cannot predict whether the person-years involved will be made up of full-time part-time, or casual employment.

1.6 Taxes

The model includes a number of taxes; each is linked directly with the level of government receiving it. For example, taxes on imports are received only by the federal government, whereas business and property taxes are received solely by local government. On the other hand, corporate and personal income taxes are shared between the federal and provincial governments.

1.7 Leakages

The direct income for an area is the amount of tourist expenditure that remains locally after taxes, profits, and wages are paid outside the area after imports are purchased; these subtracted amounts are called leakages. Leakages occur in each round of spending (Direct, Indirect, and Induced). For example the gasoline distributor may purchase gasoline stock from a refinery outside the local area.