

*AN ECONOMIC IMPACT ASSESSMENT
OF THE SPRINGBANK AIRPORT : 2007*

prepared for

The Calgary Airport Authority

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AVIATION CONSULTANTS
CALGARY, ALBERTA

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EXECUTIVE SUMMARY

This report documents the economic impact activity attributable to firms operating on the Springbank Airport for calendar year 2007.

The economic impact is reported in terms of full-time equivalents (FTEs), labour income and value-added gross domestic product (GDP). Direct, indirect and induced forms of activity have been considered as has the impact associated with new on-site capital construction.

The response rate to the interview process and survey questionnaire was exceptional : a 100 percent completion rate for the data sought from roughly 60 reporting firms.

In 2007, the Springbank Airport supported a significant level of local and provincial economic activity :

Direct Impact

<u>FTEs</u>	<u>Labour Income</u>	<u>Other Expenditures</u>	<u>Total Value added GDP</u>
345	\$19,999,500	\$33,152,000	\$53,151,500

Total Impact†

<u>FTEs</u>	<u>Labour Income</u>	<u>Other Value added GDP</u>	<u>Total Value added GDP</u>
714	\$43,337,000	\$79,473,000	\$122,810,000

† includes indirect & induced impacts + 'one time' construction benefits

Percentage Change 2007 vs 2004

<u>FTEs</u>	<u>Labour Income</u>	<u>Other Value-added GDP Expenditures</u>	<u>Total Value added GDP</u>
+58%	+110%	+52%	+70%

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Chapter I

Introduction

1.1 About this report

The report was undertaken by RP Erickson & Associates of Calgary for the Calgary Airport Authority. The purpose of the study is to document the economic impact of the Springbank Airport for calendar year 2007.

Economic impact assessments are valuable in that they serve to heighten business, community and political awareness as to the importance of an airport to a local economy; in this case, in terms of employment, labour income and value-added gross domestic product activity. This study compliments similar Springbank Airport economic impact reports utilizing a similar methodology which were conducted in 1998 and 2004.

Any questions arising from this report should be directed to Mr. Garth Atkinson, President & CEO, Calgary Airport Authority, at (403) 735-1244

1.2 The economic impact assessment process

Economic impact analysis is based on the premise that operations within various industries in an economy are closely related or linked to each other; that is, an increase in the activity levels in one industry will produce a positive 'domino' or rippling effect on other industries. Economists discuss the impact that one sector has on another in terms of indirect and induced effects. The total economic impact is the sum of the direct, indirect and induced effects.

In this report :

Direct economic effects are the economic activities related to labour and expenditures emanating from firms located on the airport.

Indirect + Induced economic effects are described separately. These derive from those activities which support on-airport businesses and the increase in the goods and services produced within an economy, arising from the spending power of direct and indirect employees. This economic activity is accounted for by multipliers which attempt to quantify the interactive linkages within the local economy impacted by direct economic activity.

The aviation industry is a good example of a highly integrated sectoral activity which has significant linkages throughout a local economy. The multipliers associated with aviation are higher than most primary sectors and, as such, the potential impact to an economy linked to an increase or expansion in aviation activity is significant.

The most common economic measures used in economic impact surveys are : employment and value-added gross domestic product [GDP]. For this report, the consultants have chosen to display labour income as a separate category of value-added GDP in addition to total value-added GDP.

In this report :

Employment is measured by full-time equivalents (FTEs) and by annual income plus benefits of the employees required to mount an aviation or airport presence. FTEs are expressed in person-years and labour income by dollar value. Employment multipliers are used to generate the associated indirect and induced impacts.

Labour income is the total payroll expense of the canvassed firms, including wages, salaries and all employee benefits. Labour income multipliers are used to generate the associated indirect and induced impacts.

Other Value-added GDP is defined as the amount of value to the local economy created through expenditure activity. A GDP multiplier is used to generate the indirect and induced impacts.

Total Value-added GDP is an aggregate of labour income and other expenditure totals. No multiplier has been applied to this category.

The direct data compiled in this study was obtained via a questionnaire circulated amongst the firms physically located on the Springbank airport. In conducting the interview/questionnaire process, key principals at each identified firm were visited by the consultants, where : the underlying rationale for undertaking the study was explained; the objectives of the study could be examined; the value of their participation could be fully explored; and, the confidentiality of their data could be assured - data has only been released in an aggregated format. This approach resulted in an exceptional 100% response rate from the roughly 60 firms contacted.

A point related to the methodology is worth noting : a conservative approach has been intentionally undertaken in assessing the total economic impact. In fact, only on-airport firms were canvassed, when we are aware that numerous local businesses benefit from users of the airport (eg. accommodation expenses from students under going flight training). In view of this approach, it can be safely stated that the analyses contained in this report should be viewed as the minimum economic impact related to the airport.

One last important consideration is worth imparting : this report represents a 'snap-shot' of economic activity in time. The data displayed represents the economic activity for calendar year 2007 attached to the presence of the Springbank airport.

1.2 A word about the multipliers used in this report

Multipliers are used to infer indirect and induced economic activity from a measure of direct economic activity. Multipliers are not directly observed; they are inferred from an economic model. By far the direct measure is the most accurate. Readers are advised that multiplier analysis remains an imprecise econometric technique and that caution be used in interpreting the indirect and induced impacts + 'one time' construction benefits (ie. the Total Impact) contained in this report. However, multipliers are virtually the only cost-effective tool available to identify the overall impact of a sectoral activity within an economy.

The consultants have chosen a multiplier set produced by the Statistics Unit at Alberta Finance ('Alberta Industry Multipliers', Department of Statistics, Alberta Finance, (July, 2007)). These multipliers are Alberta-specific; that is, they have been purposely tailored to interpret the interaction between various sectors within the provincial economy.

The Alberta Finance Closed model only accounts for economic activity occurring within the province. As such, it is fair to note that some 'leakage' of benefits is likely occurring outside the province which has not been accounted for in our data (eg. aviation components which may be repaired in Winnipeg, Toronto or Montreal or non-Alberta originating construction materials, etc). This model reinforces our earlier premise of undertaking a conservative approach in assessing the overall impact of the airport.

Therefore, it is with confidence that we present the minimum economic impact attached to the presence of the Springbank airport for calendar year 2007.

Chapter II

The Economic Impact of the Springbank Airport

2.1 Background

The Springbank airport is operated and managed by the Calgary Airport Authority (the Authority). The airport is located 10 km W of the City of Calgary on the Trans-Canada Highway. The airport lies roughly 30 km WSW of the Calgary International Airport; the nearest National System Airport.

The airfield features a significant general aviation component, with a number of on-site flight training, maintenance, corporate, charter and speciality aviation services companies. Some 350 to 400 aircraft are based at the airport, housed amongst the 49 hangars located on-site - many of which feature multiple bays.

There is no scheduled air passenger activity at the Springbank airport. In 2007, there were 221,500 aircraft movements which was the 6th busiest airport in Canada. Air

traffic is dominated by flight training, accounting for roughly 80 percent of annual aircraft movements.

The airport property generally exhibits a flat prairie topography. The reference elevation is 3937' above mean sea level. The airport operates on a 24-hour, 7-day per week basis. The main asphalt runway (07-25) is 5000 x 98'; the second runway (16-34) is 3000 x 75'. The airfield has runway and approach lighting; electronic navigation and landing aids including certified ILS and a GPS approach. An on-site NAV CANADA Tower Operation is operated on a 16 hr per day basis; a facility which remains a significant airport asset.

2.2 Economic impact of the Springbank airport

This section depicts the economic impact of the Springbank airport over calendar year 2007. In the main, these benefits accrue where most of the airport's workforce resides and where most external businesses are located which support on-site commercial activities – namely, the City of Calgary, the Municipal District of Rockyview and the nearby Town of Cochrane. The airport supports a robust aviation sector commiserate with its regional role as a leading aviation centre. It is noted that some 'leakage' of the airport's total economic impact is likely spilling over to the province as a whole, primarily in the form of purchased fuels, select aspects of the on-site aviation maintenance services and construction materials.

Direct Impact

<u>FTEs</u>	<u>Labour Income</u>	<u>Other Value-added GDP Expenditures</u>	<u>Total Value added GDP</u>
345	\$19,999,500	\$33,152,000	\$53,151,500

In 2007, there were 345 FTE aviation jobs located on the Springbank airport. This workforce generated a labour income of \$20 million. Aviation firms spent approximately \$33.15 million in non-labour related expenditures over the year. A substantial

proportion of the direct 'Other Value-added GDP Expenditures' benefits find their way into local businesses in support of the airport's aviation activities. The total value-added GDP of the airport (labour + expenditures) summed to \$53.15 million.

Direct, Indirect & Induced Impact

<u>FTEs</u>	<u>Labour Income</u>	<u>Other Value-added GDP Expenditures</u>	<u>Total Value added GDP</u>
611	\$36,579,000	\$69,918,000	\$106,497,000

When the direct indicators are subjected to the multiplier modelling process, the 'rippling effect' of the overall contribution of the airport to the local economy can be assessed : thus, some 611 full-time jobs are dependent upon the airport, generating an annual payroll of roughly \$36.58 million. Other value-added GDP expenditures totalled approximately \$69.92 million. When labour and expenditures are combined, the Springbank Airport created over \$106 million dollars of GDP economic activity in 2007 .

2.3 The economic impact associated with new construction on the Springbank airport

There is a 'one-time' impact of economic benefits accompanying the Authority's on-going capital construction program at Springbank alongside a number of tenant facility expansion. All of these projects provide direct work to the local construction sector and indirectly to the province's construction materials sector.

From the questionnaire survey, the consultants have identified \$8.88 million of new capital construction on the Springbank airport in 2007; the CAA accounted for nearly 60 percent of this total. In assessing the economic impact of this activity, the consultants have utilized the Alberta Commodity Intensity Ratios in Producer Prices (Table 8,

Commodity 30 'Non-residential Construction', Alberta Economic Multipliers, produced by Alberta Finance, Statistics, (July, 2007).

The following table depicts the 'one-time' economic impact activity associated with capital construction spending on the Springbank airport in 2007 and distributed throughout the province.

Direct, Indirect & Induced Impact from Construction

<u>FTEs</u>	<u>Labour Income</u>	<u>Other Value-added GDP Expenditures</u>	<u>Total Value added GDP</u>
103	\$6,758,000	\$9,555,000	\$16,313,000

2.4 The total economic impact of the Springbank airport

When all forms of direct, indirect and induced economic impact are summed, the total economic impact for the Springbank airport in 2007 amounted to :

Total Economic Impact of the Springbank Airport in 2007			
<u>FTEs</u>	<u>Labour Income</u>	<u>Other Value-added GDP Expenditures</u>	<u>Total Value added GDP</u>
714	\$43,337,000	\$79,473,000	\$122,810,000

2.5 A comparison of the direct economic impact of the Springbank airport : 2007 vs 2004

The consultants undertook an economic impact review of the Springbank airport in 2004 using a similar methodology. The following chart depict the findings of the 2004 and 2007 reports alongside the comparative changes for each of the respective categories reviewed.

Direct Impact 2004

<u>FTEs</u>	<u>Labour Income</u>	<u>Other Value-added GDP Expenditures</u>	<u>Total Value added GDP</u>
218	\$9,515,000	\$21,783,000	\$31,298,000

Direct Impact 2007

<u>FTEs</u>	<u>Labour Income</u>	<u>Other Value-added GDP Expenditures</u>	<u>Total Value added GDP</u>
345	\$19,999,500	\$33,152,000	\$53,151,500

Percentage Change 2007 vs 2004

<u>FTEs</u>	<u>Labour Income</u>	<u>Other Value-added GDP Expenditures</u>	<u>Total Value added GDP</u>
+58%	+110%	+52%	+70%

Clearly, the airport has enjoyed substantive growth over the past three years, especially in the number of FTEs and the labour income attached to this workforce. Reflected in this trend has been the considerable growth in the number of general and corporate aviation firms. A surprising new addition has been an on-site medical office specializing in aviation medicine alongside the first of a new category of business - an on-site, non-aviation firm which have become common at the Calgary International airport. Overall,

the number of on-site firms continues to rise and numbers approximately 60 companies.

2.6 Social benefits of the Springbank airport

The Springbank Airport provides the residents of its catchment area with significant social benefits of a non-monetary dimension. These range from : expansive career development opportunities for the 345 on-airport employees; furthering the aviation hobby pursuits of local residents; and, aviation-related opportunities for volunteerism. The airport remains a critical business 'attractor' to the Springbank area. Additionally, the airport provides access for important air-related environmental and emergency response services, although not medivac flights : it is noted that the Springbank region falls well within the range of STARS Calgary; as such, all local medivac activity involves rotary-wing aircraft operating directly to and from local hospitals and accident sites.

The consultants have identified the following specific social benefits attributable to the airport :

- Aviation Alberta's 'Young Eagles' program is accessed through one of the flight schools to encourage an interest in aviation by taking local high school students for an initiation flight;
- the airport supports the 'Thrill of Flight' distance learning education experience which is integrated into Alberta Learning's Grade 6 Science curriculum by facilitating school visits. The airport co-ordinator of the program estimates some 100 to 300 students participate each year; and,
- the Calgary Flying Club has over 650 members, operating some 40+ aircraft. The club supports a variety of local aviation interests and hosts a number of aviation re-fresher training courses each year. Annual club volunteerism to local aviation pursuits is reported to be in the "hundreds of hours".