Report

MUSKOKA AIRPORT DESIGNATION

Security Screening & Commercial Air Service

June 15, 2016

InterVISTAS

a company of Royal HaskoningDHV

Executive Summary

Inter*VISTAS* examined the potential to obtain security screening at Muskoka Regional Airport with the eventual end objective to be able to introduce commercial air service into the airport. The District of Muskoka, Explorers' Edge and the Town of Gravenhurst have sought guidance in determining the possibility for the airport to have scheduled services by summer 2017. This report provides the context for security screening, an overview of consultations, the costs to obtain screening, the benefits of having scheduled services, and an implementation plan.

The following four questions are key to deciding whether to pursue security screening services for scheduled commercial flights:

1. Is the community supportive?

Through a series of stakeholder consultations held in the region, media coverage, and surveys, the community has indicated a high level of support for obtaining scheduled air service to the Muskoka region through the airport. Stakeholders saw benefits including increasing benefits to the local economy as well as increasing transportation options for residents. While support was resoundingly positive, support was qualified with the need for companion services (e.g., taxis, rental cars) were available, potential need for an east-west runway, and overall costs were commensurate with benefits.

2. What is the best option for facilities to do this in the short term?

Four facility options were examined for the airport including building a new terminal to meet the requirements or using existing facilities with some modifications. The overall recommendation is to build a new, larger permanent structure over the long-term. This option will require time for planning, design, and obtaining requisite funding. To initiate air services for summer 2017, a temporary facility may be needed in advance of an expanded terminal building.

3. How much is this all going to cost?

In terms of operating costs, CATSA cost recovery is estimated to be approximately $165,000 in the initial year and under $100,000 in subsequent years. The ongoing costs of Class 3 airport requirements are not expected to be less than $8,000 per year. For Year 1, however, $38,000 should be budgeted to help establish aerodrome regulated processes at Muskoka Airport. Therefore, operating costs are approximately $200,000 in the first year and $100,000 thereafter.

In terms of capital costs for construction, the total should not exceed $1.5 million under either of two scenarios. A new building is estimated at $922,000 to $1.2 million. Sharing existing facilities with some new construction is $668,000 to $872,000 in cost. Significant cost mitigation could result if temporary portable facilities are used, costing for a standard trailer is between $65,000-$100,000, including transportation and site preparation. Purpose-built airport temporary facilities would be in the order of $400,000. The quality of the client experience would need to be factored into deciding use of temporary structures vs a permanent build, or use of existing tenant facilities.

Additional costs may be incurred in terms of marketing commercial flights; determination of these costs is outside the scope of this report.

4. Does the expected economic impact justify those costs?

Yes, the economic impact analysis of the expected benefits against the costs indicates that screening services should be sought in order to establish air service at the airport. Depending on the scenario, the net benefit varies. At the minimum, the investment is expected to break even for the amount of capital and operating costs required versus the incremental economic output and GDP creation that is anticipated. On the up side, there could be 3 to 5 times greater benefits than costs, in addition to the corresponding catalytic economic impacts.

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1.0 Introduction

1.1 Context

Recognizing the significant potential impact associated with attracting commercial air service to the local tourism economy, and given recent investments that have been made in airport infrastructure, the Regional Tourism Organization (RTO12/Explorers' Edge) is evaluating what would be involved in having passenger airlines land in the region.

Aviation security screening was introduced in Canada in 1973 as part of a set of amendments to the *Aeronautics Act*. Only a select number of airports are designated for security screening for commercial flights. Under current federal regulations, 89 aerodromes are designated for security screening and have services delivered by a crown corporation, the Canadian Air Transport Security Authority (CATSA). Commercial services can operate freely between designated airports. For example, a passenger screened at Quebec City can land at Toronto Pearson and connect directly to a flight to Vancouver.

Muskoka Airport is not currently part of the group of 89 airports that are designated for security screening. Without security screening, there are major limitations associated with growing commercial flight operations – specifically the inability to access major airports that are part of the group of designated facilities and the rest of the aviation network associated with these airports.

1.2 Objectives

Inter*VISTAS* Consulting was retained by project partners (District of Muskoka, Explorers' Edge and the Town of Gravenhurst) as an aviation expert to provide guidance by delivering:

- Comparison examples of airports that obtained CATSA service (e.g. Mont Tremblant and Red Deer) under old policies, and the 2015 regulations that enable new Class 3 airports;
- A comprehensive process for stakeholder input and consultations;
- High level estimates of capital and operating cost;
- Economic analysis of benefits of obtaining commercial air service; and
- A roadmap to obtain approvals for security screening and commercial passenger air service.

The objective stated by project sponsors is to have the goal of scheduled services by summer 2017.

1.3 Acknowledgements

In authoring this report, Inter*VISTAS* would like to acknowledge the support of the project sponsors, as well as over 225 individuals that provided input to the process locally as well as time from Transport Canada and CATSA.

2.0 Security Screening Context

Aviation security screening is an integral part of the way commercial aviation works in Canada. Key to the initiative for Muskoka Airport is access to the "sterile area" of Canadian airports that allow for connectivity to other flights. Access to the commercial aviation network is critical to link Muskoka to a range of domestic, U.S. and other international destinations.

2.1 Access to Domestic Aviation Network

In order for a commercial air service model to be viable, one which will enable passengers to connect on to other destinations, airports need to have security screening services.

Currently, Muskoka Airport serves a range of flights with operators that access fixed based operators (FBO) at airports such as Toronto or Montreal. Major airlines typically do not operate from FBOs. As shown in Figure 1, a flight can take off from Muskoka Airport, but is limited to the destinations that can be served from commercial scheduled operators.

Figure 1: Current Flight Operations from Muskoka Airport

The reason for the limitation is that the destination airport is limited to:

- Fixed base operators away from the main terminal building; and
- Select airports in Canada that can handle unscreened flight arrivals ("dirty flights").

There are a number of examples of commercial flight operations that use the model currently available for Muskoka Airport (e.g. Nextjet Canada daily flights from Region of Waterloo International Airport to Peterborough/Gatineau/Montreal or Integra Air fights from Edson to Calgary). However, this model is fairly limited because direct access to larger airport terminals is constrained. Direct access is important for major scheduled air carriers to provide global reach.

Figure 2: Bombardier Q-400 Aircraft from Air Canada, Porter and WestJet

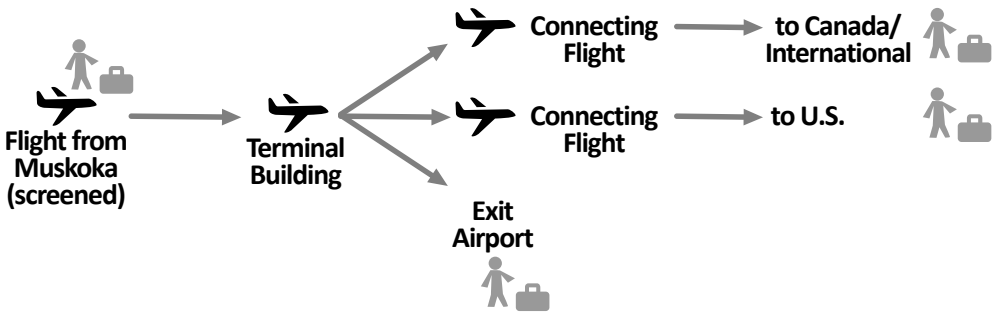
Photo Credit: Bombardier and Alasdair McLellan

Major air carriers such as Air Canada, WestJet and Porter Airlines, those accessing international and U.S. travellers, typically do not work with un-screened flights due to regulatory and facility constraints, as well as difficulty in connecting with the rest of their networks. These carriers have all invested in Bombardier Q-400 equipment that provides a level of services appropriate for the Muskoka Airport market (Figure 2).

With the availability of passenger and baggage security screening, the range of connectivity options are dramatically increased for scheduled commercial air carriers. In the scenario illustrated in Figure 3, the addition of security screening at Muskoka allows for direct access to air terminal buildings, such as Terminals 1 or 3 at Toronto Pearson. The added capability is unrestricted, and direct air terminal building access could assist with the connections to other flights in Canada, international destinations (e.g. United Kingdom) or the United States – depending on the kinds of air services available at the connecting airport.

Under this scenario for Muskoka Airport, a carrier such as Air Canada, WestJet and Porter Airlines can "through check" a bag to a final destination anywhere in the world. The same ticket convenience allows passengers taking off from Muskoka to have checked bags screened at an origin airport, and claimed at a final destination.

Figure 3: Added Connectivity with Security Screening from Muskoka Airport



Note: Simplified diagram. Flights to the United States via U.S. Preclearance have security screening before U.S. Customs and Border Protection processing.

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2.2 Scope of Security Screening

As noted previously, security screening was introduced in 1973 in Canada and augmented after 9/11 to deal with evolving threats to commercial aviation.

For the purpose of Muskoka Airport, security screening capabilities are defined as:

- Pre-board screening: The process to screen passengers in the cabin of aircraft from prohibited items (e.g., explosives, knives, other sharp objects).

- Hold baggage screening: Process to screen checked bags going on to the aircraft from any threats to the aircraft (e.g. explosives). There are items such as knives that are allowed in checked bags, but not in the cabin of the aircraft.

2.2.1 Regulatory Environment

Transport Canada is the regulatory body overseeing aviation security screening. Canada is a member state to the International Civil Aviation Organization and there are international obligations the Government of Canada adheres to in the delivery of security screening and the regulation of aviation security at aerodromes.

Transport Canada codifies its requirements for Muskoka Airport under the *Aeronautics Act* and the *Canadian Aviation Security Regulations, 2012*. Security measures such as the *Aerodrome Security Measures* are also in place.

2.2.2 Service Delivery Model

Since April, 2002, the screening authority in Canada is the crown corporation Canadian Air Transport Security Authority (CATSA) under the federal *CATSA Act*.

The *CATSA Aerodrome Designation Regulations* falls under the *CATSA Act* as the document that defines the 89 airports where security screening is designated[1].

2.3 New Airports Designated for Security Screening

In Canada, the requirement for new airports receiving designation for security screening has two separate processes: one established in 2004 and a new initiative implemented in 2015.

2.3.1 2004 Designations

When CATSA was created in 2002, several facilities (e.g. La Grande 3) were originally designated. In 2004, these facilities were removed from the list of designated airports and two facilities (Red Deer, AB and Mont Tremblant, QC) were added.

Since then, 12 aerodromes have requested security screening:

- Mont Tremblant, Québec, in 2004;
- Red Deer, Alberta, in 2004;
- Puvirnituq, Québec, in 2009-2013;
- Trois-Rivières, Québec, in 2009-2011;
- Schefferville, Québec, in 2012;
- St. Catharines, Niagara District, Ontario, in 2012-2013;
- Bromont, Québec, in 2013;
- Cold Lake, Alberta, in 2013;
- Dawson City Airport, Yukon, in 2013;
- Edson, Alberta, in 2013;

[1] See http://laws-lois.justice.gc.ca/eng/regulations/SOR-2002-180/page-2.html for the full list of 89 airports designated under regulations.

- Sherbrooke, Québec, in 2013; and
- Northern Rockies Regional Airport, Fort Nelson, B.C, in 2013.

Only two airports have been successful since 2004 in achieving designation under the CATSA Act (Mont Tremblant and Red Deer), and these airports are fully funded by CATSA. For both airports, there was a significant political push to obtain the screening services and to replace airports that no longer had operations (i.e. La Grande 3).

The specific criteria for determining which airports receive CATSA designation is not public information. According to former Transport Minister Lisa Raitt, "Transport Canada's security risk methodology is used to determine whether CATSA screening is required at a Canadian airport through the assessment of various criteria including, but not limited to, passenger volumes and threat information. Together the criteria capture the overall risk environment at a particular airport. For security reasons, Transport Canada does not discuss the specific criteria used in the risk assessment."[2]

2.4 Current Process for Designation

Although no new airports were added since 2004, there was recognition amongst policy makers that there *could* be a business case that merited introducing new airports into the domestic commercial aviation system.

The current process for designating new airports for security screening services dates from 2014 and has received a lot of interest from communities throughout Canada. Under direction from the previous Minister of Transport Lisa Raitt, Transport Canada started consultations with a range of airports to examine the potential for new security screening services. Some the airports Including Muskoka, there are some 11 facilities in various states of discussions with Transport Canada and CATSA[3].

In 2015, a private member's bill was passed in the House of Commons that encouraged the ability for non-designated airports to receive security screening services. The bill passed with all party support and supported existing efforts from Transport Canada and the previous Minister of Transport Raitt to explore solutions.

A fundamental difference occurred with both Minister Raitt's direction – the new set of designations would be based on "fee for service" to recover costs from interested airports. In late 2015, CATSA and Transport Canada established a process that explored cost recovery for CATSA services at non-designated airports. Activity included:

- Issuance of a formal *Screening Checkpoint Technical Guidelines*
- Provision of *Screening Application* to the District of Muskoka
- Formal cost estimates for service provision
- Letter of Intent from the CATSA Vice President of Service Delivery

The basis of the new process for designation is under CATSA Act Section 6

[2] Speech in the House of Commons, January 27, 2014.
[3] Interest in the designation program includes Puvirnituq, Trois-Rivières, Schefferville, Bromont, Sherbrooke, in Quebec; Niagara, Ontario, Cold Lake, Alberta, Dawson City, Yukon; Edson, Alberta; and Fort Nelson, B.C.

> **6 (1)** The mandate of the Authority is to take actions, either directly or through a screening contractor, for the effective and efficient screening of persons who access aircraft or restricted areas through screening points, the property in their possession or control and the belongings or baggage that they give to an air carrier for transport. Restricted areas are those established under the *Aeronautics Act* at an aerodrome designated by the regulations or at any other place that the Minister may designate.

Under the basis of "at any other place that the Minister may designate" is the regulatory basis for the potential designation of Muskoka Airport.

Muskoka Airport is one of several requests for security screening designation that are based on a broad-based request for services for both economic development and support of the tourism sector. In addition to support for Tourism Jasper for Edson, Alberta, there are a range of proposals that are based on commuter traffic. Generally speaking, a broad-based effort is critical to ensure an appropriate business case is present for carriers to sustain ticket sales, as well as ensure the viability of air services supported by a broad cross-section of the economy. Simply put, the biggest air carrier risk is volatility in a single market; proving sufficient demand across all sectors is important to take full advantage of the policy changes in security screening that was launched in 2015.

2.4.1 Alternate Service Delivery

The policy to explore cost recovery for security screening was confined to the ability to have CATSA (and its screening contractor) deliver screening services.

The *CATSA Act* does contain a section that enables CATSA to authorize the operator of the aerodrome (District of Muskoka) to deliver security screening.

> **7 (1)** The Authority may authorize the operator of an aerodrome designated by the regulations to deliver screening on its behalf at that aerodrome, either directly or through a screening contractor, subject to any terms and conditions that the Authority may establish.
>
> **(2)** The Authority may not authorize the operator to deliver screening unless it is satisfied that the operator can meet the terms and conditions established by the Authority and deliver screening efficiently and effectively, having regard to the following factors:
>
> (a) the cost and service advantages;
>
> (b) the operator's capability to deliver screening; and
>
> (c) how screening, if done by the operator, would be integrated with other security functions at the aerodrome.

Under this scenario, the District of Muskoka could work with CATSA to provide local staff that are appropriately cleared/trained with the ability to deliver security screening. Transport Canada and CATSA are clear that the direction to establish the current program for security screening cost recovery from 2015 does not currently contemplate using Section 7 of the CATSA Act.

However, there are likely economies of scale that can result from the use of existing staff from the region (e.g., security-cleared staff in law enforcement or correctional services). Cost/service advantages would ensure a reduced fee for security screening. There are added complexities associated with performance standards/review, insurance liability as well as regulatory/policy analyses that require further work.

Summer 2017 is the expected start of air services at Muskoka Airport and it is improbable for the implementation of security screening *other* than through the established 2015 cost-recovery program. It is nonetheless recommended that further work be conducted after the air services starts to review costs with CATSA/TC and consider a business case to implement Section 7 of the CATSA Act.

2.5 Case Studies

The role of aviation security screening is a major pre-requisite to establishment of commercial air services. It is notably not the only factor; other critical ingredients include:

- Support of the community and stakeholders to sustain demand;
- Profitability of routes for airlines; and
- Ability to integrate the facility with local ground access and services.

Several case studies are documented in this report to illustrate parallels to Muskoka Airport; it should however be noted that there are also fundamental differences related to population, market factors and available alternatives.

2.5.1 Red Deer Regional Airport

1. Description

Red Deer Regional Airport (YQF) served as an old World War II training base and has been a general aviation airport for most of its existence. Located mid-way between Calgary and Edmonton, the airport faces significant diversion of traffic with many air passengers electing to drive to a major airport for flights. Although the drive time is about 1h 30 minutes to either Calgary or Edmonton, the airport was faced with competitive challenges and the sustainability of air services.

2. Request for Security Screening Designation

A campaign was advanced to request designations from the federal Minister of Transport. At the Minister's direction, Transport Canada added two airports—Mont-Tremblant, Québec and Red Deer, Alberta at the same time.

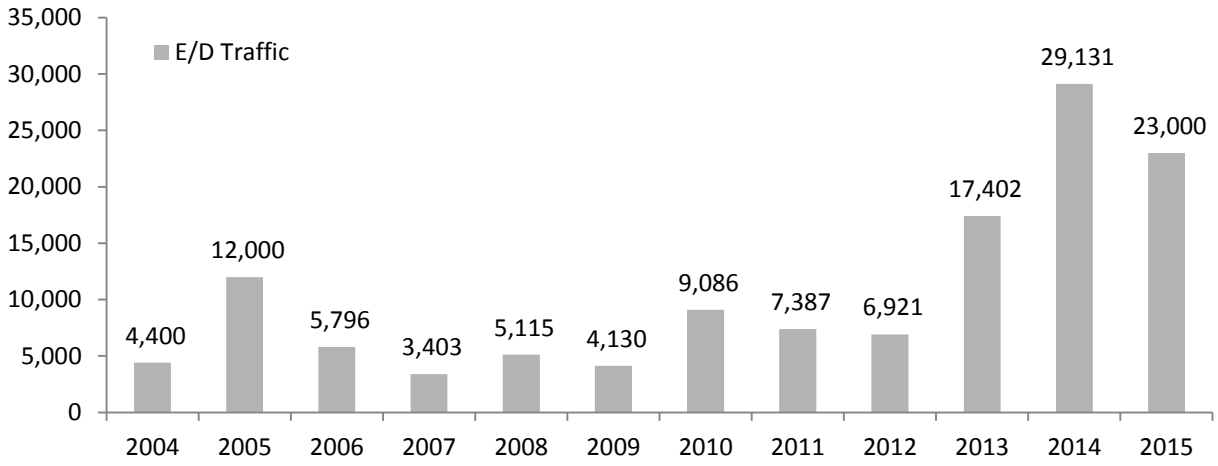
CATSA was able to deploy pre-board and hold baggage screening equipment, train and certifying screening officers to have operations active December 23, 2004.

3. Results

Overall, the results were successful in the long run of the 10-year history of the airport, as shown in the following graph.

The availability of security screening nearly tripled traffic from 2004-05, but the airport lost CATSA services when scheduled passenger service was discontinued. A renewed initiative was advanced in 2012 to regain services.

Figure 4: Enplaned and Deplaned Passenger Traffic at Red Deer Regional Airport (2004-15)



Source: Red Deer Airport Authority; Red Deer Regional Airport EI Study; RDRAA 2016 Business Plan

In May 2013, Red Deer regained CATSA security screening service once again after completing a number of terminal renovations. This allows passengers to be screened in order to be able to make direct domestic connections at other Canadian airports. CATSA screening allowed for new air services and essentially quadrupled the airport's traffic[4]

Scheduled flights grew to 62 from eight scheduled weekly flights in 2013 with this service. In 2014, scheduled service operated to Lethbridge, Fort McMurray, Grande Prairie and Calgary resulted in a record 29,131 passengers using YQF. Passenger numbers may not return to the 2014 record numbers due to scheduled service cuts and Alberta's economic downturn.

4. Lessons Learned

There are a number of lessons learned relevant to Muskoka Airport. Although they were initially successful in achieving CATSA security screening, there was not enough sustained demand and commitment to use the service. In fact, traffic volumes 2007-09 were lower than 2004. Success since 2013 resulted in sustained growth, with significant benefits for local business and community access to flights.

A key lesson is the holistic strategy used to grow traffic. In addition to sustaining services for the community and resulting local economic benefits, the initiative was able to support broader community objectives. Airport access was a key part of the success in the bid for the 2019 Canada Winter Games, which will be hosted in Red Deer.

[4] In 2013, CATSA was only operating half the year but still managed to more than double traffic.

The holistic strategy was part of a dedicated effort and leadership was advanced to regain CATSA services. Starting in 2011, the initiative was advanced to build the airport to become a fully strategy-led, market-driven and community-serving organization by 2013.

> *"Security screening at airports is important for all of us. It protects passengers, travellers and it allows the airport to get fully into the airport value chain. So we can fly from Red Deer to any secure airport through the country and you will not have to exit the aircraft and re-screen or get screened and then enter the aircraft again.*
> *It's really, really important and it's another fundamental step for the airport to move forward because every mainline carrier or large carrier in this country requires passenger screening."*
>
> *Red Deer Airport CEO RJ Steenstra*
> *May 14, 2013*
> *Mountain View Gazette*

Although the air services are more business/commuter driven, there are some parallels to the Muskoka Airport context. The challenge is also notably competition between the automobile and flying. According to the airport CEO RJ Steenstra, "over 93 per cent of current local fliers 'leak' meaning they travel to Edmonton or Calgary to fly instead of starting their air journey in Red Deer." Leakage is a term used in aviation markets to highlight the use of other aviation facilities to meet local/inbound market demand. In the case of Muskoka Airport, air travel in the catchment area around Muskoka is served by driving to airports outside the area (e.g., Toronto).

Based on the experience from Red Deer, a leadership team focused on long-term sustainability of commercial air services is needed to use strategy-led, market-driven insights to foster ongoing benefits to stakeholders, and in particular to ensure adequate and sustained passenger volumes.

2.5.2 Mont Tremblant

1. Description

Mont-Tremblant International Airport (YTM) is located in La Macaza, Quebec, and has been in operation since 1962 where it initially served as a Royal Canadian Air Force emergency landing field. It was converted into civilian use in 2001 as a private airport with a goal to improve access for travellers from southwestern Ontario and northeastern U.S.

2. Request for Security Screening Designation

The airport is a fully private venture, with a long-term lease with the local municipality. The founder (Serge Lariviere) was formerly with Intrawest, the owner of Station Mont Tremblant. Similar to the experience at Red Deer, an initiative was advanced to request designation from the federal Minister of Transport, with CATSA operations active December 23, 2004.

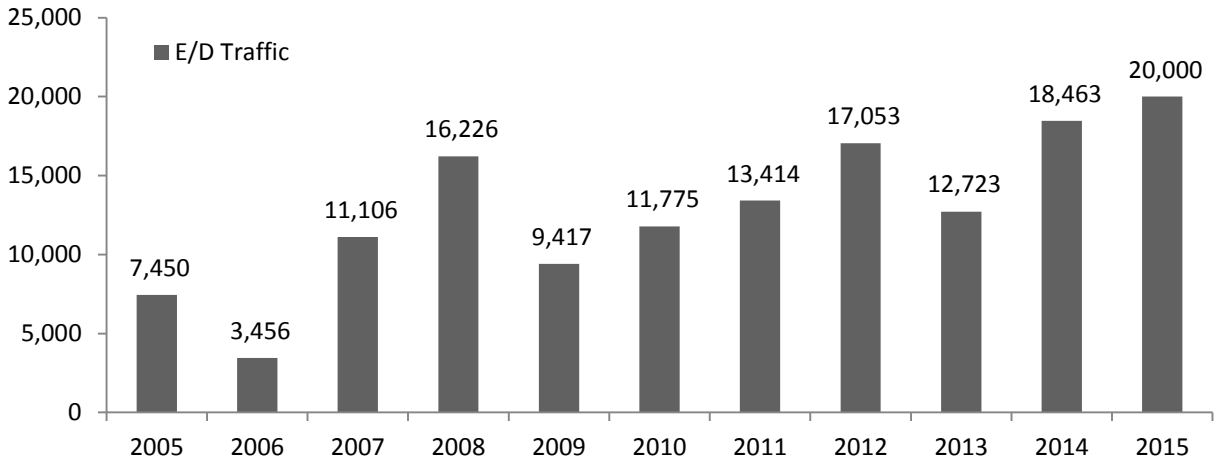
The airport is an integral part of the tourism product to bring skiers in, and summer visitors to the Mont-Tremblant resort area. Located 130km northwest of Montreal, the airport is an integral part of linking visitors to the world.

3. Results

Both Air Canada and Porter Airlines offer scheduled services, along with charter flights from Voyageur Airways on their 50-seat regional aircraft. Air Canada provides a direct link between YTM and Toronto Pearson, while Porter operates from Ottawa, Billy Bishop and Montreal.

Over the past decade, traffic grew steadily to 20,000 passengers a year. Several notable dips occurred due to a strike (2006), economic conditions (2009) and changes in air services (2013). Nonetheless, estimated passenger traffic at YTM has grown consistently between 2009 and 2015 and is expected to grow further.

Figure 5: Enplaned and Deplaned Passenger Traffic at Mont Tremblant International Airport (2004-15)



Source: Sabre MIDT OD Data; http://montrealgazette.com/business/local-business/mont-tremblant-airport-flying-high-with-more-traffic-expected-in-2016
Note: YTM was unable to provide E/D passenger information therefor the data has been estimated using origin-destination traffic data accessed through Sabre Profit Essentials.

4. Lessons Learned

Mont Tremblant Airport has some fundamental differences to Muskoka – it was converted from a military base to a private company (Mont Tremblant Airport Inc.) and has a primary mission to

support resort activities. As well, it is a “Prior Permission Required” airport – and will not accept aircraft landings without prior application.

There are, however some similarities associated with the support from resort development as well as overall marketing efforts. Similar to the Explorers’ Edge area, a large majority of visitors arrive by car. The airport, however, became a catalyst to increasing reach to other markets.

Connectivity was an important ingredient to the success of the airport. For example, express shuttle to and from the resort using executive minibuses is available with a 38-minute ride, including luggage valet service delivery to/from 8 hotels. The idea was to maximize the ability for skiing/adventures up to the last minute.

One of the important lessons from Mont Tremblant is the use of a “consumer-centric regional application” approach. Similar to the initiatives of the RTO to put travellers first, Mont Tremblant is an example of ensuring all services and suppliers will be required in order to get people in and out of the airport to regional attractions, accommodations, etc, such as car rentals, shuttles, taxis, etc.

“Tremblant has a steady clientele coming by car. But, the future of our destination is by air — that is where the growth potential is.” (January 1, 2016 Montreal Gazette)

“We had to increase the Toronto and New York clientele. And you have to make it as quick a trip as possible, so you can get the weekenders as well as those on holiday. In the mind of a lot of people, a transport commitment of two or two-and-a-half hours is OK. It's like having a cottage.” (January 2, 2007 Edmonton Journal)

Mont Tremblant Airport President Serge Lariviere

The airport itself is completely infused in its design with the tourism product. Originally built as a log cabin with a beautiful fireplace, this exceptional arrival and departure point embodies French-Canadian character. We note that some aspects of the existing Muskoka Terminal already follow same look-and-feel principles (see Figures 6-7 below).

Figure 6: Mont-Tremblant Airport Terminal: Infused with Local Character

Photo credit: Mont-Tremblant International Airport and Matthew Lausch

Figure 7: Current Terminal at Muskoka Airport

Photo credit: Muskoka Airport

Another lessons learned from Mont Tremblant are that the economic benefits are not just for airlines or the airport. The revenue generated by passengers arriving at Mont Tremblant International Airport was about $7 million for fiscal year March 2014-March 2015, and was estimated to be $10 million for the fiscal year ending in March 2016[5]. The airport is looking to grow further with direct transborder air services, pending resolution of fee structure for Canada Border Services Agency staff.

[5] Montreal Gazette, January 1, 2016

2.5.3 International Examples

Globally, there are dozens of new airports under construction that will connect passengers with tourism resorts – primarily in Africa and Asia. A number of these facilities are large scale investments that include brand new runways, terminal buildings and include connectivity to the security-screened commercial aviation network. Others are brownfield redevelopment of military bases, similar to Mont Tremblant. Overall, there are few comparators that can directly mirror the unique potential of a facility such as Muskoka – and its diverse roles for general aviation, business aviation and other services.

From a security screening perspective, the international context is harder to compare to the Canadian experience, and difficult to match identically to the context for Muskoka Airport. A lot of the differences associated with other countries is due to the way aviation security is regulated. Globally, Airports Council International estimates that a full 40% of passengers are screened by airports/airport contractors. As a result, there are considerably different relationships between the regulator (civil aviation authority) and other countries where screening is not federalized like CATSA or the Transportation Security Administration in the United States.

Security screening nonetheless plays a critical supporting role and pre-requisite to the growth of tourism and economic development. Some examples of airports that are implementing tourism-based developments include the following:

- **Low cost carriers in Europe have adopted a strategy to open new routes** from regional and secondary airports exclusively or as intently as major airport hubs. As a result a number of airports have opened and sustained air services on the basis of meeting a range of regulatory requirements, including provision of security screening. Castellon Airport in Spain is a recent example that has attracted low-cost carrier Ryanair.
- **The relationship with tourism and aviation is increasingly viewed as linked.** Michael Cawley, Chairman of the Irish national tourism development authority (and former Deputy CEO of Ryanair) highlighted that “downstream tourist spend benefits are 10 times the air fare! The benefits only exist because the airline routes exist”
- **Benefits are not confined to brand new airports.** Hervey Bay Airport in Queensland Australia is a regional airport that was elevated in 2005 to be a “security-controlled airport” by the Australian federal government as part of a wider aviation security initiative, and was upgraded to full baggage screening in 2009. The number of passengers jumped from under 40,000 a year to almost 150,000 in the first year, supported by whale watching and beach front attractions.

3.0 Consultations

An extensive stakeholder consultation process was undertaken to assess community reaction to bringing commercial air services to the Muskoka Airport. The lessons learned from the case studies in the previous chapter highlight the importance of community buy-in. Inter*VISTAS*' experience in the development of air services and tourism strategies tells us that airlines value the level of commitment demonstrated in the community to sustain flight frequencies.

3.1 Overview of Process

A broad-based consultation was undertaken, with feedback solicited from the general public, from tourism operators and stakeholders, from municipal and district government representatives, from various business interests, from current airport stakeholders, etc. Written feedback was encouraged, in addition to recording the input from participants in the consulting process.

3.1.1 Online Survey

An online survey, hosted by Explorers' Edge, yielded 61 responses from private individuals, resorts, local businesses and associations. Written responses were received for 9 questions:

1. Generally speaking, what are your impressions of the proposal to bring in commercial air service to the Muskoka Airport?

2. Are you pleased to see the Muskoka Airport – an important asset of the District of Muskoka – being used as a "tool" to bring more visitors to the region? If yes, why? If not, why not?

3. Do you think commercial flights into the Muskoka Airport will help build the region as a vacation destination? If so, how (what benefits can you identify)?

4. If tourists are the primary target for this project, which additional industries do you think can benefit from regional air service to the Muskoka Airport? In what way?

5. Can you identify any obstacles, challenges or impediments you believe may hinder the plan to bring commercial air service to the Muskoka Airport?

6. What programs do you think need to be in place for regional air service into the Muskoka Airport to be a success? (e.g. Info centre at the airport? Shuttle service? Marketing plan? Please name as many as you can.)

7. What investments and/or incentives do you think are appropriate to attract this air service?

8. Will the introduction of regional air service impact your organization/business? In what way? What type of demand do you think might be stimulated for your organization/business with the introduction of this service? Will this impact the number of jobs/investment your organization makes? If so, how?

9. What is your organization/business prepared to do to support and sustain commercial air service at the airport – if anything?

3.1.2 In-person Meetings

To focus discussions with select groups, a set of meetings were held from April 11 to 14, 2016. 17 meetings were held in total including:

- 14 meetings with local municipal government leaders, resort management and tourism operators (approximately 50 people)
- A public meeting of the local General Aviation community and airport tenants (approximately 25 people)
- A public meeting of tourism operators (approximately 40 people)
- A presentation at the Muskoka Tourism AGM (approximately 50 people)

3.2 Key Findings

Consultations from both surveys and meetings yielded comments on a wide range of topics associated with the airport – with some aspects unrelated to security screening services. Overall there were seven key findings, summarized below. Additional results are in Appendix A.

3.2.1 Strong Support for Commercial Air Services to Muskoka Airport

There is near-unanimous support for the proposal to attract commercial air services to the airport. The support indicated a strong degree of enthusiasm for the potential to attract new visitors to the region, as well as support for improved access for local residents to markets nationally and internationally.

Specific comments associated with the support for air services included:

- Many feel that the airport is an underutilized asset that should be better leveraged for economic development purposes.
- Some municipal leaders felt that it was very positive that this proposal came from the business community, rather than government trying to force it.

Continuing the messaging from Explorers' Edge to convey the potential to create "net new" visitors from Northeastern U.S. will be important to ensure that there are incremental benefits. As well some respondents commented on the ease to attract Japanese, Chinese and German tourists up for a quick 4-day weekend to the area during their visit to Canada.

> *"This is a great opportunity to generate interest in Muskoka and to provide an alternate transportation method. In the summer months, Highway 11 gets very busy It could take 2.5-3 hours to travel from Toronto to Muskoka."*
>
> Local Hotel Manager

3.2.2 Tourism Package Development Appealing

For tourism interests, there was a strong realization that commercial air services could potentially open new markets and also extend the length of stay. Today, the baseline is a limited amount of visitors from the U.S.. Some resort properties indicated that U.S. tourists only represent 2-5% of visitors. The potential of commercial air services at Muskoka Airport was described as enabling easy access to markets like New York, Boston, Pittsburgh and Chicago.

Several near-term trends were cited. With current exchange rates, U.S. visitors typically spend more and stay longer. As well, the recent tragedies of terrorism attacks overseas were perceived as a potential driver for more visitors from the U.S. and Canada.

Currently, many visitors are staying Friday to Sunday. The potential for a Thursday to Sunday and Sunday to Thursday set of flight schedules schedule was seen as potentially increasing average length of stay.

Tourism operators were very enthusiastic about working together and with Explorers' Edge to develop packages. One resort property shared that they just hired a U.S. sales person for meetings and events. They felt that this commercial service could be a key factor in winning new corporate business, particularly to increase ease of access to the region.

Some municipal leaders felt that the packages would be a good way to ensure that the air service draws in new tourists to the area, and gets them moving around and spending money in local businesses.

Explorers' Edge recently retained renowned consultants Twenty31 to develop packages; this will be a critical success factor in generating alignment and support from municipal leaders and tourism operators. Along with pre-generated packages, some business leaders felt it would be important to have a central place where visitors can create their own, customized packages.

Photo credit: Explorers' Edge

3.2.3 Longer Window for Potential Flights

Discussions surrounded an initial July 2017 11-week trial. Along with July and August, the general consensus was that September and early-October would be the ideal time for the initial pilot. The reasons for this are that:

- There is significant interest in Fall colours for tourists in late-September and early-October.
- Some resort properties felt that air service could help them attract corporate business and events in the early-Fall.
- While many spoke about mid-July to late-August being the busiest season in Muskoka, business is softer in the first 2 weeks of July, something the commercial service could help to solve.
- Some also felt that commercial air service would help improve occupancy from Sunday through Thursday.

This information is important to convey to air carriers to help sustain a longer timeframe for air services.

3.2.4 Action needed to ensure the Region is Market-Ready for New Tourists

While not specifically tied to attracting new air services based on CATSA security screening, a number of stakeholders raised the need to be market-ready for new tourists. A number of stakeholders commented that you only get one chance to make a first impression. There is some concern that local operators may not be ready, that certain services may not be readily available and that there is a variation in the quality of customer service across the region.

Specific gaps include:

- Access to rental cars, shuttles, taxis, bike rentals, and other public transportation will be critical.
- A number of resort properties indicated that they would likely send their own shuttle down to pick up visitors.
- Along with transportation linkages, stakeholders offered a number of important assets/services to have in place: visitor information kiosk or Ambassador, food services and free Wi-Fi

A number of tourism operators however commented that they could handle the increased volume within existing staffing models. A 12-week service, with 2 flights of week, will not bring in enough volume to justify hiring a lot of new staff. However, down the road tourism operators felt that job creation would follow very quickly with more volume from air traffic. At the same time, there may be challenges for resort operators to be able to continue to attract and retain hospitality workers.

3.2.5 Attracting New Investment to the Area could be a Key Benefit

Many spoke about the commercial air service “putting Muskoka on the map” and giving the region credibility to investors. This was seen as the ability to have fly-in/fly-out capabilities for individuals that wanted to establish a business relationship locally, such as purchasing property. Another example was raised with a local boat company that has customers in the United States

and Southern Ontario, and felt that they would be able to increase sales by being able to bring these customers to the area to complete a sale.

Convenience of access was noted as a contributing factor to attracting new businesses and investment. One proposed commercial development could benefit, and potentially be expanded, if the developer could attract investment from a larger market. Air services would make it easier to attract 4-day corporate events, Board meeting and retreats.

3.2.6 Establishing an Appropriate Return on Investment

While overall support was heard, there were some cautionary notes expressed about the potential for the impact on taxpayers to advance the initiative ahead. As well, there were several comments associated with the danger of creating a product that was geared towards wealthy cottage owners.

> *"Increased tourism in Muskoka can only have positive benefits, both short and long term. We would expect to initially see a slight increase in business, but with the ability to interest people on a longer term basis, the possibility of visitors becoming more permanent residents bodes well. Also, if there is job creation, the local economy will see the benefit of that by way of increased spending by those employed."*
>
> Local Business Owner
> (in survey response)

Stakeholders, primarily within municipal government, are awaiting more information on the costs and benefits. While it is understood there could be 3-5 years before the return on investment is realized, there are sensitivities to the current financial model of the airport and how any new investment could increase the burden on taxpayers.

3.2.7 Benefits are not just for Inbound Flights

While a lot of emphasis is placed on the potential to attract new visitors, there was also a number of comments about the value of air access to local residents and businesses.

Some of the specific comments include:

- There are a number of businesses and manufacturers who are travelling regularly for work. This service would make it more convenient for them rather than driving to Toronto.
- Local families would benefit from easier access to vacation destinations.

3.3 Additional feedback

In addition to feedback about the provision of security screening service to attract scheduled commercial air carriers, consultations highlighted several additional comments that need to be reviewed further:

- Cross-wind runway: several respondents indicated the need to ensure the airport was usable based on wind conditions – potentially to review future runway requirements
- Perception of product: the description of any project needs to highlight the positioning of the aviation product as one that isn't only for wealthy individuals
- Long-term view: several respondents wanted to ensure that there was a long-term view for future development at the airport

While these comments were not specific to security screening, they were received in consultations.

4.0 Cost Estimates

Inter*VISTAS* was tasked to deliver high-level cost estimates to be able to obtain security screening. Under the program that Transport Canada and CATSA have advanced in January 2016 to allow security screening at non-designated airports, the pre-requisites are to:

- Ensure the facility meets/exceeds Class 3 security levels based on regulations under the *Aeronautics Act*
- Provide facilities that are suitable for CATSA security screening

There are both operational and capital costs associated with moving to a level equivalent to a security Class 3 facility.

4.1 Capital Costs

4.1.1 Air Terminal Building

The current airport Air Terminal is about 600 m^2 of space and provides the ability for flights to be processed from the apron. For general aviation flights, the Air Terminal functions as a fixed based operator, including a pilot's lounge, seating areas and washrooms.

Figure 8: Current Air Terminal at Muskoka Airport

Photo Credit: Muskoka Airport

New Program Requirements

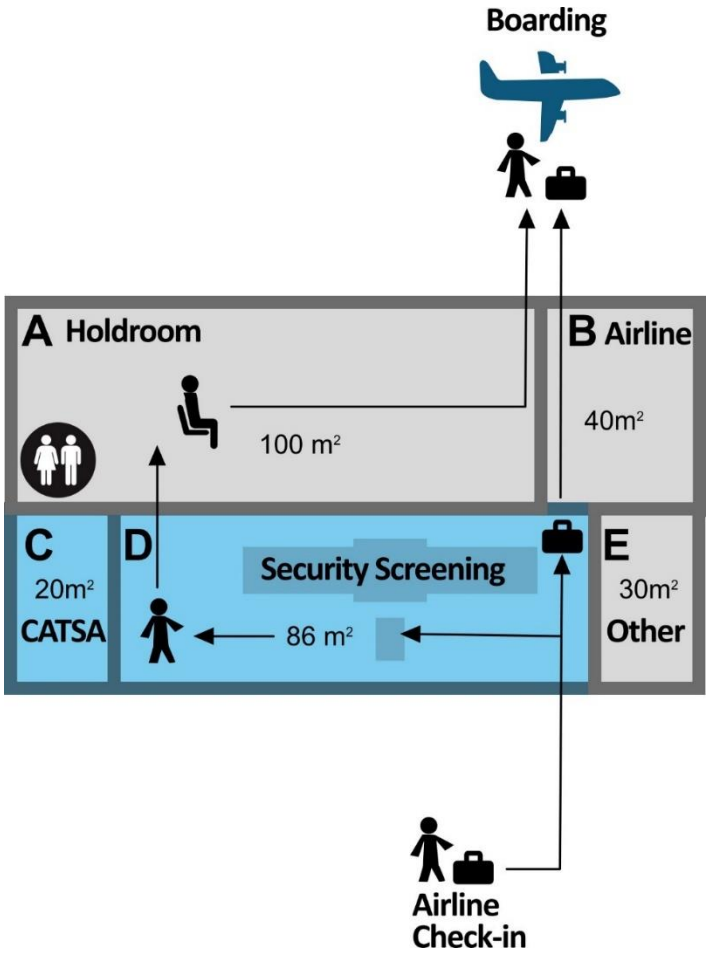
There are five new functional areas that need to be allocated to help with security screening operations. Some (security screening) are exclusive use. Others are potentially dual-use: dedicated during screened flight operations, but available for other uses outside of operations.

Overall, the process is as follows (outlined in the flows below):

- Passengers check-in with the airline (or have a mobile boarding pass)
- If the passenger has checked bags, a bag tag is provided by an airline agent

- The passenger and bag proceed to security screening (marked “D”) in the diagram below
- The baggage is screened and then provided for airline baggage makeup/loading
- Passengers, in the meantime, are screened and directed into the passenger holdroom to wait for boarding

Figure 9: Usable Space Requirements – Base Scenario



The description of the space parameters are as follows:

A. Holdroom

The passenger holdroom is based on the critical aircraft size (Dash 8-400) that has 70 passengers. There may be times that a fully loaded aircraft will require holdroom space, and guidance material for airport planning calls for a range of 1.0 to 1.5 square metres per passenger, depending on the level of service desired. A washroom is recommended to be in place.

In total, 100 m^2 is recommended for planning purposes, including a washroom.

Additional space for retail/concessions is possible, but unlikely to be viable given the relatively small number of passengers. Smart vending/coffee machines may be a more feasible alternative to provide amenities for guests waiting in the holdroom.

The holdroom must be completely sealed from the public and there is no mixture with other individuals other than authorized staff with a valid restricted area pass/identification card.

B. Airline

Airline space is needed to help with baggage handling. In markets similar to Muskoka, airlines often have large oversized bag items (e.g., golf clubs, fishing rods) that may require temporary storage after security screening. The 40 m^2 area does not necessarily need to be an internal building structure and can be semi-exposed to the outside, with direct access to the apron.

Some storage area may be needed for airline consumables (bag tags, small equipment).

C. CATSA Administration Space

The screening contractor employed by CATSA will need several areas, including the following:

- 7 m^2 Support office
- 9 m^2 Lunch room
- 1 m^2 Locked storage area + space for parts
- 1.5 m^2 training desk

It is recommended that 20 m^2 be allocated for this function. Note however that given the hours of operation for the proposed flight, a lunch room may not be immediately needed and could use common space already available at the airport. This may be the subject of further discussion with CATSA to plan for current and future needs.

D. CATSA Security Screening Area

CATSA's technical documentation from January 2016 calls for an area suitable for deployment of equipment that measures 86m^2. In addition to the area itself, there are specifications for power, lighting, alarms, close-circuit television and the ability to connect to a wide-area network/phone lines.

The assumption is for one (1) lane of security screening – which is appropriate for the current level of traffic proposed. The design should allow for a pathway for expansion in future.

E. Other Space

An additional 30m^2 is suggested to be available for the operations, including areas appropriate for incident response, management of local security procedures and storage.

The summary of space allocation is for new program requirements that are estimate to be 276 m^2 of usable area. When including gross area coverage (e.g. circulation), the requirements are some 300 m^2.

Several options are reviewed to assess programing elements, summarized as follows:

Figure 10: Estimated Usable Space Requirements

Area	Space Allocation (m^2)	Dedicated?	Notes
A. Holdroom	100	No	During screening operations it has to function as a restricted area.
B. Airline	40	Yes	Not all areas have to be interior space; activities could be advanced at ramp level.
C. CATSA Admin	20	Yes	Some reduction in space demand should be explored (e.g., lunch room)
D. CATSA Screening	86	Yes	Meets current proposed flights
E. Other	30	No	Program could be accommodated within the current building.
TOTAL USABLE SPACE	276 – baseline		Space requirements could be reduced to 200 m^2 if space is shared with existing facilities

Options for Meeting Space Requirements

There are three options available to be able to meet the programming elements

- Option 1: re-use the existing facility
- Option 2: construct new space
- Option 3: use temporary portable structures
- Option 4: Temporarily use tenant facilities on the airport site

Option 1: Re-use the existing facility

An evaluation was undertaken of the current Air Terminal to be able to reconfigure the space for the program requirements for security screening. Note that the terminal building construction was co-funded by the government of Norway in order to house their Norwegian Flight Training Museum. While there are benefits to minimizing the capital cost impacts, there are significant challenges to this option, including:

- Disruption for existing use of the pilot's lounge
- Inability to modify or re-purpose portions of the existing terminal building (i.e. museum) and space constraints for 70 passengers with remaining portions of building
- Costs to segregate a facility fully for screened passengers

- Other operational disruption of the facility
- Need to secure the area for CATSA screening equipment when facility is not being used for security screening

With the existing facility at 600 m^2 of space, and program elements that require 200-276 m^2 of space, there are difficulties with this option, even with the ability to completely dedicate the Air Terminal for screened flight operations.

Option 2: Construct New Space

An add-on to the terminal building is another option worth reviewing, subject to the space availability landside or airside to erect an appropriate structure. The benefits of this option is the ability to fully meet the regulated requirements from Transport Canada, and a purpose-built facility to house CATSA operations.

The Altus Group of cost estimators was consulted for the range of capital construction costs. The 2016 Canadian Cost Guide[6] covers cover construction costs only, based on the Canadian Institute of Quantity Surveyors' definition of measuring each floor to the outer face of the external walls.

The Altus Group has four measurements that are worth noting for Ontario:

- A "regional airport terminal" is estimated to be
  -$260-$300 per square foot in Ottawa
  -$275-$350 per square foot in the Greater Toronto Area
- A "bus terminal/garage" is estimated to be:
  -$230-$305 per square foot in Ottawa
  -$230-$300 per square foot in the Greater Toronto Area

A broad range of $230-$300 per square foot is used to provide a high level cost estimate for a building. Assuming the entire program described on the previous page is built as a separate structure, the estimated overall cost is $922,000 to $1.2 million in capital costs.

As noted previously this amount could be mitigated if existing facilities were reused and shared with airline/CATSA requirements. A $668,000-$872,000 cost is estimated as a result of having 200 square metres of usable space.

Architectural fees and other costs are not included as part of this amount.

Option 3: Trailer/Temporary Structures

A third option is to use temporary structures to be able to house programming elements. The benefits of this option is to mitigate long-term costs, and potentially house programming elements for security screening/holdroom while Option 2 is constructed.

Portables are readily used throughout Muskoka and could provide a low-cost option, particularly if a retrofitted modular office portable is used. Some evaluation would need to be undertaken to ensure CATSA equipment loads can be sustained with the structure.

[6] See http://www.altusgroup.com/services/cost-guide/ for more information and caveats for use of the data.

Airports similar to Muskoka are facing similar issues to bring facilities online quickly and the use of temporary/semi-permanent structures is growing for airports. To accommodate a new carrier (Ryanair), in 2011 the Magdeburg-Cochstedt airport in Eastern Germany decided to use a temporary structure instead of investing in a longer design process. This was seen as being less costly amidst uncertainty for Ryanair's longevity at the airport.

A specialist provider Neptunus connected a 900 m^2 semi-permanent structure to an existing building to create a larger open plan terminal all under one roof in just a few weeks. The program is about 3 times larger than the environment contemplated.

Figure 11: Neptunus Temporary Airport Structure (Germany)

Photo credit: Neptunus BV

In December 2013 Ryanair announced the cancellation of these routes; while the airport is seeking new routes it was not left with a costly building and the assets can be redeployed to a different location to recoup the investment.

Significant cost mitigation could result if temporary portable facilities are used, costing for a standard trailer (e.g. ATCO) is between $65,000-$100,000, including transportation and site preparation. Purpose-built airport temporary facilities would be in the order of $400,000-$600,000, depending on the current location of a temporary airport structure such as the Neptunus product. While there may be some cost mitigation for the use of temporary structures, there are potential issues with the overall product. Mont Tremblant, for example, built a terminal infused with local tourism theming; the current facility at Muskoka has similar attributes. To preserve the "last" and "first" impression for visitors, there will need to be careful evaluation of any temporary facility to ensure the experience for the customer is maximized.

Option 4: Temporarily use tenant facilities on the airport site

A fourth option is available to work with existing tenants at the airport to use space for CATSA processing. The concept of operations is as follows:

- Conduct security screening and flight check-in operations at a hangar
- Bus passengers to an apron for flight operations
- Passengers to board aircraft

Similarly, for flights deplaning from flights, baggage and other functions would occur in a hangar.

One private operator (Lake Central Air Services) has expressed interest to assist in provision of space in its facility in the northern part of the airport. Its facility has over 1,000 m^2 of space in total, with some of it that could be allocated to process passengers and conduct security screening.

Discussions are still preliminary; there may however be operational issues with a busing operation that would rely upon all passengers to leave on-time and all together. A bus would need to wait for the last passenger to board before heading to the aircraft. While larger airports (e.g., Montreal) use busing as a model, there is added complexity that needs to be factored into use of this option.

Summary of Options

As shown below, there are a range of facility and planning options to achieve terminal facilities for Summer 2017.

Figure 12: Comparison Options for Terminal Facilities

Option	Pros	Cons
1. Reuse Existing Space	• Limited capital cost • Integration with existing assets	• Will not meet program requirements • Disruptive
2. New Build	• Meets entire space program • Allows for continuation of existing terminal theme	• Requires highest amount of capital investment • Time to design and build limited before Summer 2017
3. Temporary Structure	• Limits capital dollar and business risk • Modular for future growth	• Costs to integrate • May not meet the quality of facilities expected by passengers/carriers
4. Use airport tenant space	• Private sector interest • Limits capital dollar and business risk	• Limitations for direct apron access for aircraft • Operational constraints for busing on the airfield

In consideration of the four facility options, the overall recommendation is over the long-term build a new, larger permanent structure. This option will require time for planning, design, and obtaining requisite funding. To initiate air services for summer 2017, a temporary facility may be needed in advance of an expanded terminal building.

4.1.2 Screening Equipment

Under the proposed arrangement, CATSA has indicated it would provide a fee structure to the District of Muskoka that would be inclusive of any equipment leasing costs, maintenance and installation.

As a result, there is no capital cost expedited for the provision of walk-through metal detectors, x-ray screening equipment that would be used by CATSA screening contractors.

4.1.3 Airside Facilities

Apron

The terminal apron is an area used for aircraft parking and temporary use to load goods/people for aviation operations (see picture below).

Figure 13: Muskoka Airport Terminal Apron

Photo credit: Muskoka Airport

For operations for security-screened flights, it is expected that ramp level segregation will be used to prevent screened individuals/baggage during operations.

There are however implications for this operational procedure during flight operations, including:

- Limitation for other activities on the apron;
- Need for staffing to be present to prevent co-mingling; and
- Other operational restrictions.

Operations should be monitored to evaluate future apron expansion in order to minimize impacts on existing operations and allow for smooth activities for screened flights.

Cross-wind Runway

Muskoka Airport has a 6,000' asphalt runway and a 2,180' turf runway. A number of respondents during consultations highlighted that a cross runway in the east-west direction would be desirable to ensure reliable service.

Inter*VISTAS* reviewed a November 2010 report prepared by Pryde Schropp McComb Inc.[7] for Muskoka Airport using Environment Canada data from 1990-2008. The report meets typically accepted standards to conduct wind analyses and usability calculations. We note that the report concluded that the longer 6,000' runway is the preferred runway for use under a single runway configuration achieving 98.58% usability. This usability value is significantly higher than the minimum 95% outlined by Transport Canada; there is not expected to be any issue with the airport accommodating a Dash 8 Q-400 aircraft.

Ultimately, the reliability of an airport is function of air carrier equipment in combination with prevailing weather conditions. The wind rose analysis from the report should be provided to air carriers interested in serving the airport to inform flight operations planning and any analyses needed by commercial air carriers to review Muskoka Airport.

4.2 Operations Cost

4.2.1 Cost Recovery to CATSA

In February 2016, CATSA provided an initial estimate of costs to the District of Muskoka for the provision of services, including all operations, maintenance and consumables. Discussions are ongoing for the overall fees that would be charged for the proposed 11-week set of flights. While the specific numbers will be finalized if and when the airport indicates to CATSA it wishes to have cost recovery services, the operating costs are estimated to be approximately $165,000 in the initial year and under $100,000 in subsequent years.

An initial review of the costs with the project sponsors indicated that the fee structure was acceptable for the flights and further discussions are being advanced with CATSA to finalize a fee structure to enable discussions with an airline.

4.2.2 Additional Requirements

Transport Canada has indicated that the airport needs to comply with all regulations associated with a Class 3 airport. This includes, but is not limited to:

- Canadian Aviation Security Regulations, including Sections 401-496 specific to Class 3 airports;
- Aerodrome Security Measures – security sensitive information that will not be discussed in this document; and
- Canadian Aviation Regulations – covering safety-related aspects for airport operations.

Overall, there are requirements for key areas including:

- Maintaining control of a "sterile area" where screened passengers will be present
- Ensuring appropriate responses to threats and incidents

[7] Pryde Schropp McComb Inc. operates as WSP Canada Inc.

- Providing safeguards appropriate to the national aviation security level (AVSEC) 1 (normal), 2 (elevated) and 3 (imminent/critical)
- Appointment of security official/acting security official and training of aerodrome security personnel
- Access control system to the restricted area
- Creation of an airport security program, strategic airport security plan, airport security risk assessment
- Operations-based security exercise every four years, table-top discussion every year
- Response to CATSA security alarms

For the airport, there is the need to ensure appropriate documentation and processes in place. In Regulatory Impact Assessment Statements (RIAS) in the Canada Gazette, Transport Canada has indicated minimal recurring costs for Class 3 airports – less than $8,000 per year in incremental costs/contract security during operations. However, for Muskoka Airport there will be up front investments to ensure appropriate documentation is in place, which can be insourced or outsourced. A recommended budget of $30,000 is advanced to ensure appropriate assessment, plans and outputs are delivered to meet/exceed regulated requirements.

In addition, there are requirements in Canadian Aviation Regulations (CARs) Section 303 for firefighting. One level for consideration is achieving Category 6 firefighting service – two dedicated trucks with speeds of water flow. However, Transport Canada regulations are based on “three consecutive months with the highest total number of movements by commercial passenger carrying aircraft in all aircraft categories for firefighting.” As proposed flights may not fall within a consecutive period for periodic services, there is no requirement in regulations to implement a Category 6 level of firefighting.

4.3 Summary of Costs

For capital costs, overall costs are not expected to exceed $1.5 million, including:

- $922,000 to $1.2 million in capital costs for construction is estimated for a completely new building, excluding architects/other fees.
- Sharing existing facilities together with partially new construction is estimated at $668,000-$872,000 in cost.

Ongoing costs of implementing Class 3 requirements are not expected to exceed $8,000 per year, with a Year 1 cost budget of $38,000 to help establish aerodrome regulated processes at Muskoka Airport. CATSA cost recovery operations is estimated to be $165,000 the initial year and less than $100,000 the following years.

Cost mitigation in the first year could be advanced via a temporary structure, such as a set of portables. This solution may be helpful to manage business risks of flight service viability.

4.4 Optional Costs

Currently, the proposed flights for Muskoka Airport will be a service from a major centre in Canada such as Toronto.

In future, there may be the market potential to achieve direct services from the United States. If this is the case, there is the need to look at future planning for Canada Border Services Agency (CBSA) clearance for customs/immigration purposes. Muskoka Airport is currently a CBSA airport of entry and limited to 15 passengers on general aviation flight. Specifically, CBSA defines the limitation to Muskoka Airport as an Airport of Entry/15 set of services.

There are a number of issues associated with the future potential of direct commercial air services from an international origin (i.e., United States), to land directly at Muskoka Airport. CBSA is facing considerable funding shortfall, but increasing requests to fund core services for border clearance.

Since 2009, CBSA operates under a “Air Services Policy Framework”[8] to manage requests for public funding. Alternatives are available for fee-based services, subject to resource availability.

Currently, Muskoka Airport cannot meet the requirements to move to a “Tier 3” level of service. Tier 3 would provide Muskoka Airport with eligibility to receive up to eight hours of publicly funded border clearance services seven days a week or seasonal border clearance services if it has regularly scheduled international flights. However, the airport has to handle 2,500 cleared passengers a year.

In future, if direct services are pursued from the United States for scheduled commercial operators, there will need to be further evaluation with CBSA on the options for public or fee-based services based on federal Treasury Board guidelines. This is however a subject that is independent from the ability for Muskoka Airport to receive CATSA designation for security screening.

[8] See http://www.cbsa-asfc.gc.ca/agency-agence/csr-esb/fsum-somc-eng.html for more information.

5.0 Economic Impacts

The economic impact analysis measures the specific benefits of new aviation services and the accompanying tourism spending to compare against the estimated costs, as outlined above. Benefits are typically measured by employment and economic output (i.e. dollars going to the local/regional/Canadian economy).

Each departure of a passenger flight at Muskoka Airport (YQA) generates labour hours for individuals with jobs involved in handling passengers, their baggage and the aircraft. This focused economic impact analysis examines the economic inputs and outputs from potential air service by determining the labour necessary to operate every aspect of a flight. These analyses are called “micro” studies to differentiate them from other broader economic impact studies of an airport that take into account all employment and economic activity at an airport, not just that associated with a given service to a particular destination. The analysis that follows provides the average economic impact of labour hours associated with turning around an aircraft on a per flight basis.

Figure 14: Examples of tourism benefits from new air services

Photo credit: Explorers’ Edge and Resorts of North Muskoka, Rocky Crest Golf Resort & GB Water Taxi

Further to this, any additional visitors arriving on to the Muskoka Region due to the new air service will inject money into the local economy on items such as resorts/hotels, taxis, food and beverage, entertainment, etc. The analysis in this report is validated by qualitative feedback from local businesses during consultations outlined in Chapter 4. The direct spending impacts of the visitors are also estimated. There are also economic impacts associated with visitor spending, in addition to the employment and other economic impacts, related to servicing the flight. These would include the suppliers to the hotel and restaurant industries that benefit from visitor spending. Hotel and restaurant employees spend their wages on other goods and services that create induced impacts. To avoid double-counting of impacts, Inter*VISTAS* excludes these impacts. Thus, only the direct impact of visitor spending is shown. [9]

5.1 Air Service Scenarios at Muskoka Airport

To gauge impacts over a three-year time period, three possible scenarios were defined - High, Medium and Low – with gradual increases in weekly frequency, weeks per year and load factor (percent of aircraft seat capacity filled by passengers).

[9] Average spend per visitor is based on data available from the Ontario Tourism Research Unit for Canada & U.S. travellers to the Muskoka District for 2012 and updated with Consumer Price Indices to account for inflation. An estimate of $820 per visitor per trip to Muskoka is used to compute the estimated tourism expenditure, based on average spend rates collected by Ontario Tourism Research Unit.

The potential new air service would be operated by a 70-seat Dash 8-Q400 aircraft. The seasonal air service would begin with twice weekly operations for 10-12 weeks per year, equivalent to an annual frequency of 22 flights, for all scenarios. The scenarios are outlined in the tables below.

Figure 15: Details of Potential New Air Services

Potential Air Service: High Scenario	Year 1	Year 2	Year 3
Aircraft Type	Q400	Q400	Q400
Seat Capacity	70	70	70
Load Factor	80%+	80%+	80%+
Weekly Frequency	2	3	4
Weeks per Year	11	16	20
Annual Frequency	22	48	80
Passengers per Flight	60	60	60
Passengers per Annum	**1,309**	**2,856**	**4,760**

Potential Air Service: Medium Scenario	Year 1	Year 2	Year 3
Aircraft Type	Q400	Q400	Q400
Seat Capacity	70	70	70
Load Factor	65%	65%	65%
Weekly Frequency	2	3	3
Weeks per Year	11	14	16
Annual Frequency	22	42	48
Passengers per Flight	46	46	46
Passengers per Annum	**1,001**	**1,911**	**2,184**

Potential Air Service: Low Scenario	Year 1	Year 2	Year 3
Aircraft Type	Q400	Q400	Q400
Seat Capacity	70	70	70
Load Factor	55%	55%	55%
Weekly Frequency	2	2	2
Weeks per Year	11	11	11
Annual Frequency	22	22	22
Passengers per Flight	39	39	39
Passengers per Annum	**847**	**847**	**847**

- The **High Scenario** assumes a very high load factor of 80%+, with concerted marketing and packages sold. This scenario would result in some 4,760 on-board passengers per annum 80 or more flights a year.[10]
- In the **Medium Scenario**, a moderate load factor of 65% is assumed, with annual frequency increasing to 48 flights and annual on-board passengers increasing to 2,184 passengers in Year 3.
- In the **Low Scenario**, load factor of 55% and annual frequency of 22 flights remain the same over the three years, with 847 passengers on-board per annum.

5.2 Annual Aviation and Visitor Spending Economic Impacts

Economic impacts are typically measured in four broad categories:

Jobs (in full-time equivalents) | Wages (in dollars) | Gross domestic product (in dollars) | Economic output (in dollars)

The annual employment (full-time equivalents or FTEs),[11] visitor spending and other economic impacts associated with the potential air service to/from Muskoka Airport are estimated for each year over a three-year time period. Annual impacts are assessed for each of the three scenarios.

A conservative approach was undertaken with commonly accepted indicators to assess the impacts of additional flights, as well as tourism spending.

Economic multipliers from Statistics Canada for the Province of Ontario are used to estimate wages and other economic impacts, such as gross domestic product (GDP) and economic output. GDP is a measure of the money value of final goods and services produced as a result of economic activity, while economic output is the dollar value of industrial output produced or total sales. For example, if a local travel agent sells a tour package that includes accommodations, fishing operations, gas and other supplies, the total economic output is the addition of all sales within the package for local businesses. GDP is only the total value-added to the economy, excluding reselling.

The total economic impact of a flight would also include indirect and induced effects. Indirect (e.g., businesses that supply goods and services to the airport and airline) and induced (e.g., spending in the general economy by airport and airline employees) impacts are those stimulated by the direct employment and activities at the airport.

The combined economic impact of the potential air services, which includes the total impact of the airport related operations and the direct visitor spending impacts, are presented in this

[10] In the High Scenario, upgauging of aircrafts is likely required depending on the carrier, very aggressive marketing and commitments from vacation and resort packages is needed, and there must be solid community and business support for the air service. More than one carrier could be operating the services by Year 3.
[11] One full time equivalent (FTE) year of employment is equivalent to the number of hours that an individual would work on a full time basis for one year. Full time equivalents are useful because part time and seasonal workers do not account for one full time job.

section.[12] Figure 2 to Figure 4 summarizes the annual combined aviation and visitor spending impacts for each of the scenarios.

- In Year 1 of the **High Scenario**, the potential air services would support 7.6 FTEs and $430,000 in GDP, while in Year 3 the services would support 27.1 FTEs and $1.6 million in GDP.
- In the **Medium Scenario**, the combined direct impacts of the potential new service would increase from 5.6 FTEs and $340,000 in GDP in Year 1 to 12.3 FTEs and $750,000 in GDP in Year 3.
- In the **Low Scenario**, the annual combined direct impacts of the potential services are estimated to be approximately 4.6 FTEs and $300,000 in GDP for each of the three years.

[12] The aviation and visitor spending impacts are presented separately in Appendix A.

Figure 16: Annual Combined Economic Impacts (Airport + Tourism Spending) – High Scenario

Impact	Employment (FTEs)	Wages ($ Thousands)	GDP ($ Thousands)	Economic Output ($ Thousands)
		Year 1		
Direct	7.6	$310	$430	$920
Indirect	0.4	$30	$50	$110
Induced	0.2	$10	$30	$50
Total	**8.3**	**$360**	**$500**	**$1,080**
		Year 2		
Direct	16.3	$680	$930	$2,010
Indirect	0.9	$60	$100	$230
Induced	0.5	$30	$60	$110
Total	**17.8**	**$780**	**$1,100**	**$2,350**
		Year 3		
Direct	27.1	$1,140	$1,550	$3,350
Indirect	1.6	$110	$170	$390
Induced	0.9	$50	$110	$180
Total	**29.5**	**$1,300**	**$1,830**	**$3,920**

Note: Totals may not add up due to rounding.

Based on the above table, we expect a high scenario to yield close to $4 million in total economic output by the third year. This includes all the activity and purchases by companies involved, including expenditures by the air carrier, taxis, hotel operators, restaurants, etc., as well as spending of their employees in the region. The high scenario, by Year 3 would also see 1.8 million in total GDP (including multiplier effects), which is a statement of value-added activity (i.e., removing the value of intermediate sales involved). In total, direct airport-related operations and tourism spending, together with the businesses that supply the goods and services (indirect impacts) and spending of employees in the wider economy (induced impacts), of potential Muskoka Airport passenger services are estimated to support approximately 30 FTEs, earning wages of about $1.3 million, in Year 3.

Figure 17: Annual Combined Economic Impacts (Airport + Tourism Spending) – Medium Scenario

Impact	Employment (FTEs)	Wages ($ Thousands)	GDP ($ Thousands)	Economic Output ($ Thousands)
		Year 1		
Direct	5.6	$250	$340	$750
Indirect	0.4	$30	$50	$110
Induced	0.2	$10	$30	$50
Total	**6.3**	**$290**	**$420**	**$900**
		Year 2		
Direct	11.1	$480	$660	$1,430
Indirect	0.8	$60	$90	$200
Induced	0.5	$30	$60	$90
Total	**12.4**	**$560**	**$800**	**$1,720**
		Year 3		
Direct	12.3	$550	$750	$1,630
Indirect	0.9	$60	$100	$230
Induced	0.5	$30	$60	$110
Total	**13.7**	**$640**	**$910**	**$1,970**

Note: Totals may not add up due to rounding.

In the medium scenario, we have more modest job creation due to a lower load factor for flights, as well as frequencies. Just under 14 FTEs would be created (including multiplier impacts), earning $640,000 in wages by Year 3. Total economic output would be just under $2 million in the same year, based on total purchases and activities from all companies helping to support the flight, and associated visitor spending at hotels, restaurants, resorts and other services. The total GDP (value-add) would total $910,000 – a subset of economic output by netting out reselling of component goods and services.

Figure 18: Annual Combined Economic Impacts (Airport + Tourism Spending) – Low Scenario

Impact	Employment (FTEs)	Wages ($ Thousands)	GDP ($ Thousands)	Economic Output ($ Thousands)
		Year 1		
Direct	4.6	$220	$300	$660
Indirect	0.4	$30	$50	$110
Induced	0.2	$10	$30	$50
Total	**5.2**	**$260**	**$380**	**$820**
		Year 2		
Direct	4.6	$220	$300	$660
Indirect	0.4	$30	$50	$110
Induced	0.2	$10	$30	$50
Total	**5.2**	**$260**	**$380**	**$820**
		Year 3		
Direct	4.6	$220	$300	$660
Indirect	0.4	$30	$50	$110
Induced	0.2	$10	$30	$50
Total	**5.2**	**$260**	**$380**	**$820**

Note: Totals may not add up due to rounding.

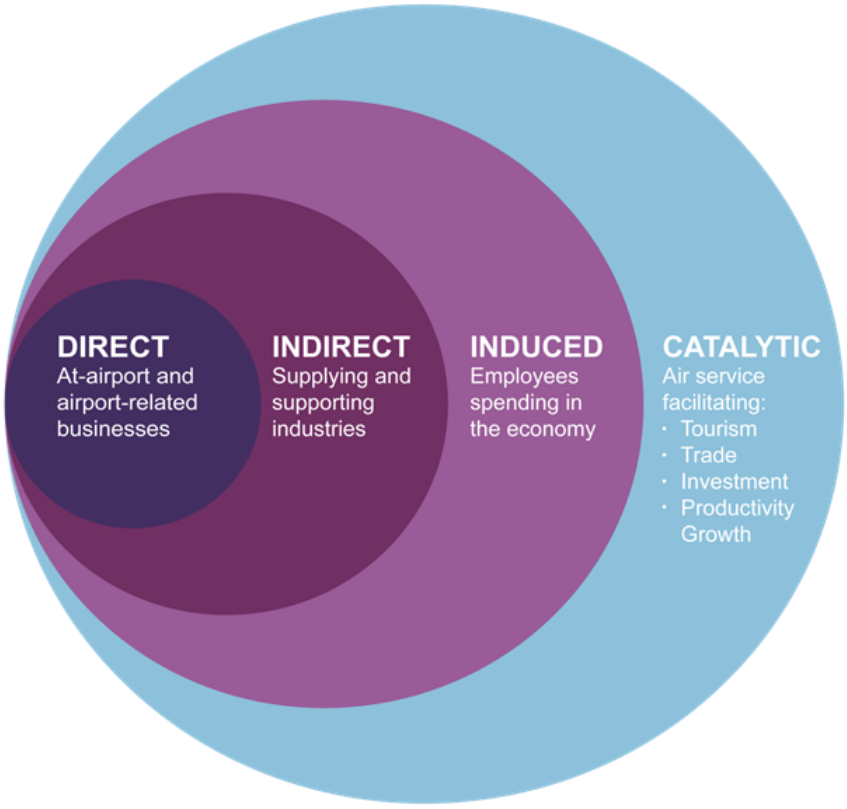
A low scenario assumes a modest set of services for flight frequencies and load factor averaging 55%. In this case the benefits are expected to be modest, with total employment at 5.2 FTEs per year over the course of Years 1-3. Total economic output is about $820,000 per annum, with GDP (value-add) estimated at $380,000 each year. Compared to the medium and high scenarios, the annual economic impacts remain constant each year in the low scenario, as the parameters of the air service, number of visitors, and visitor spending in the region are not assumed to be changed over the three years in this scenario.

5.3 Catalytic Impacts in the Broader Economy

The benefits for the District of Muskoka is not just confined to tourism-related and aviation economic impacts. Beyond the direct, indirect, and induced economic impacts noted earlier, air service also contributes other positive effects to a region that can be more difficult to quantify. From the recent Canada Transportation Act Review report, research by Richard Florida and other subject matter experts, there is considerable value to "connectivity" for a community to provincial, national and global markets.

These "catalytic effects" of air transport contribute in other ways to a local or regional economy. They are important beneficial economic events or activities that occur in an area that are attributable to the presence of the airport or of a particular type of air service. Figure 5 illustrates the potential catalytic impacts of an airport, together with the direct, indirect and induced economic impacts. The connectivity provided by the potential air service will help attract tourists, facilitate trade and investment, and contribute to the growth of the economy. This section provides a discussion of these potential catalytic impacts.

Figure 19: Overview of Potential Direct, Indirect, Induced and Catalytic Impacts



Air transportation facilitates employment and economic development in the national and regional economy through increased trade, attracting new businesses to the region and encouraging investment. It supports long-term economic growth by providing linkages between a region and the national economy through greater connections to business markets and

greater access to resources. Industries and activities that would otherwise not exist in a region can be attracted by improved air transport connectivity. Thus, aviation yields additional benefits to direct users and generates further positive impact on performance and economic activity of a region.

A concrete example of catalytic impacts was offered during consultations. A local boat manufacturer could tap into potential purchasers from the U.S. market – primarily because there is increased value to having a direct inspection of operations on-site for purchasers.

Catalytic impacts (also known as Wider Economic Benefits) capture the way in which the airport facilitates the business of other sectors of the economy. As such, air transportation facilitates employment and economic development in the regional economy through a number of mechanisms:

- **Tourism**. Air service facilitates the arrival of tourists to a region. This includes business as well as leisure tourists. The spending of these tourists can support a wide range of tourism-related businesses: hotels, restaurants, theatres, car rentals, etc. Of course, air service also facilitates outbound tourism, which can be viewed as reducing the amount of money spent in an economy. However, even outbound tourism involves spending in the home economy, on travel agents, taxis, etc. In any case, it is not necessarily the case that money spent by tourists flying abroad would be spent on tourism at home if there were no air service.

- **Trade in Goods and Services**. Although air cargo accounts for 0.5% of the volume of global trade shipments, it accounts for over 35% by value, meaning that air cargo is high value, often times perishable or time-sensitive.[13] Both the trade of goods and the trade of services are facilitated by passenger air services. Face-to-face meetings play a crucial role in making sales and delivering services and support. The ability be at a client's side rapidly and cost-effectively is important to many industries. Much of the time, these functions cannot be replaced by teleconferencing or other forms of communication.

  Air transport connects businesses to a wide range of markets, providing a significantly larger customer base for their products than would be accessible otherwise. It is particularly important for high-tech and knowledge-based sectors, and suppliers of time-sensitive goods.

- **Investment**. Air connectivity is important in attracting business and investment into a region. A key factor many companies take into account when making decisions about the location of offices, manufacturing plants or warehouses is proximity of an airport. Therefore, airports are essential assets for regions wishing to expand industrial activity. Their proximity encourages industrial development. Industries choose to locate close to airports in order to gain easy access to air transport and the associated infrastructure.

- **Productivity**. Air transportation offers access to new markets, which in turn enable businesses to achieve greater economies of scale; inward investment can enhance the productivity of the labour force (e.g., state-of-the-art manufacturing facilities); air access also enables companies to attract and retain high quality employees. All of these factors contribute to enhanced productivity, which in turn increases the regional income.

[13] Source: Air Transport Action Group: http://www.atag.org/.

Taken together, these issues contribute to an overall sense of a region's attractiveness and competitiveness. With a significant tourism and service sector, a number of international manufacturing firms and an educated workforce,[14] the introduction of new scheduled air services at YQA will play a significant role in providing the necessary transportation access and linkages. This will contribute to the growth of overall economy for the District of Muskoka.

Photo credit: Explorers' Edge and Resorts of North Muskoka

In effect, the catalytic impact of aviation is to increase the productive potential of the economy (in economist terms, moving the production–possibility frontier). Improvements in aviation connectivity enable economies to attract more tourists, conduct more trade and draw more investment. The overall effect of all these mechanisms is an increase in employment and GDP. Without effective air transportation links, it is much harder for economies to attract tourists, to conduct trade and attract investment. As a result, the region's economy and employment potential would suffer.

It should be noted that catalytic impacts are not a simple matter of the airport generating employment and economic activity in the same way that direct, indirect and induced impacts arise. Economies are far more complex than that. It clearly takes a wide range of players acting together to generate economic growth – government, business, infrastructure providers, residents, etc. For example, providing air connectivity alone does not guarantee large volumes of tourists. There also needs to be hotels, restaurants, retail, entertainment, etc. to make a destination an attractive tourism destination. Nevertheless, without convenient air services, a destination will find it more difficult to attract tourists.

What the catalytic impacts capture is that without an efficient airport and the air services it supports, the economy would not be as large or affluent. Thus, catalytic impacts are about the economic value and employment that airports facilitate rather than generate. The connectivity enabled by airports is not sufficient on its own to fully support economic activity, but it a necessary element of economic growth and development.

In discussing catalytic impacts, the issue of causality often arises. For example, while air service can facilitate trade, it is also true that increased trade leads to increased demand for air services. This study recognizes that there is a two-way relationship between air connectivity and economic growth. Economic growth stimulates demand for air services while at the same time, these air services open up new opportunities for tourism, trade, business development, etc. This in turn can stimulate further demand for air services, and so on, in a "virtuous cycle."

[14] Source: The District of Muskoka Economic Profile, Sept. 2011

6.0 Roadmap/Next Steps

6.1 Conclusions

An upfront capital investment of up to $1.5 million is suggested with incremental costs of $200,000 in year 1 and a recurring incremental cost of less than $100,000.

The economic impact estimates a “low” scenario” of producing incremental $380,000 in GDP $820,000 in economic output.

If the initiative is successful to increasing frequencies of flights and a very high load factor (80%+ of aircraft filled), the upside could be $1.8 million in GDP and $3.9 million in economic output.

Overall, the payback period of the investment is several years, but could be even faster when considering the potential for catalytic economic impact benefits. As well, the $1.5 million in facilities could be significantly mitigated in cost with alternate options for capital expansion of the existing terminal building.

6.2 Roadmap/Next Steps

There are several important steps to pursue following a meeting on June 23, 2016 to review the results of the Inter*VISTAS* analyses. The following seven steps are critical to achieving approvals for the ability to conduct security screening by the summer of July 2017. It is an achievable timeline provided that there is a dedicated group of individuals and staff assigned to realizing the outcomes, and obtaining requisite approvals.

6.2.1 Step 1: Design Terminal Solution & Validate High Level Estimates (July 2016)

An architect should be retained to review the program requirements for CATSA security screening and estimate the best path ahead.

A review should also be undertaken to obtain a quote for appropriate temporary airport-specific facilities that could house program elements.

6.2.2 Step 2: CATSA / Transport Canada Meetings (July-August 2016)

CATSA has provided a letter of intent as well as an estimate of fees. The ability to signal an intent to proceed and integrate the Transport Canada inspector into the design process is recommended, particularly when dealing with dual-use space allocation, and potential requirements for regulatory exemption/clarification.

6.2.3 Step 3: Financing Structure (July-August 2016)

Rates and charges should be reviewed to determine an appropriate per passenger fee. At the minimum, consideration should be given to a $5 fee that would be commensurate with the Air Traveller’s Security Charge automatically added to airline tickets for flights from one of the 89 CATSA designated airports. This fee is only intended to cover the CATSA operational costs and would not recover capital expenditures or cover other ongoing expenses.

Consideration should also be given to determining whether an Airport Improvement Fee would be used to help finance the costs of terminal expansion.

Other funds that would be used to pay for capital/operating requirements would need to be determined.

6.2.4 Step 4: Airline negotiations (July to October 2016)

With the formal CATSA Letter of Agreement from Vice President, Service Delivery, there is the ability to work with air carriers to formalize potential flights. Formal air service development presentations should be held to present the opportunity as well as report on the positive outcomes of consultations. Letters of support from senior officials from resorts and key business interests should be collected and presented, along with other key elements to establish the business case. Operational plans would follow to establish start of service requirements.

6.2.5 Step 5: Implement facilities and Designate (September 2016 to May 2017)

Depending on the timing of construction of facilities – and a decision on temporary or permanent structure, a “go-live” facility option will need to be implemented by May 2017. The ability to house a temporary screening solution while a final solution is developed has occurred many times before at Canadian airports; while there is added complexity this may be the eventual outcome due to construction challenges during winter months.

Transport Canada would need to approve designations for the aerodrome to be equivalent of a Class 3 security facility. Support is needed to ensure appropriate drawings, plans and operational procedures are submitted.

6.2.6 Step 6: Conclude CATSA negotiations (November to May 2017)

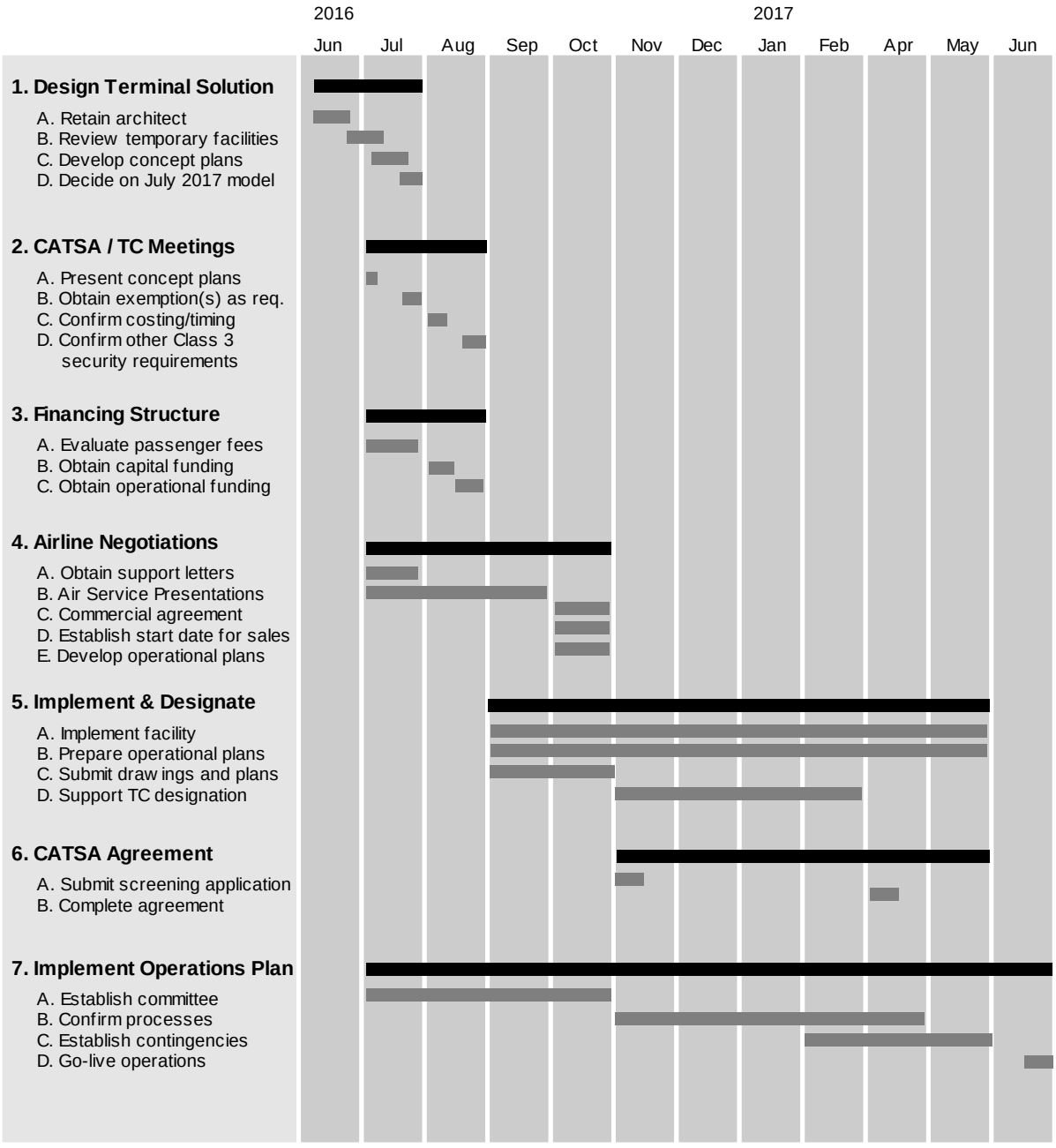
Following confirmation of intent for services to start, the form “PD-010 Screening Application for Cost Recovery Airports Form” should be completed and filed with CATSA to start the process of securing services. The approvals would be contingent on Transport Canada designation of the aerodrome for security screening.

6.2.7 Step 7: Implement operational plans (July 2016 – June 2017)

There is a committee of CATSA, the air carrier and airport that will need to establish a process regularly to create and maintain appropriate security assessment, plans and processes. This will need to occur in concert with the physical solution, along with documentation and clear roles/responsibilities.

6.3 Summary of Roadmap

The following summary outlines a set of steps necessary to achieve approvals for commercial designation. Note that there may be other requirements depending on requirements from the air carrier and timing for pre-sales/package development.



Appendix A: Survey Summary

A formal survey was launched and published during town hall meetings and in local media reports about the potential for security screening at Muskoka Airport. Participants and members of the public were asked to comment on several aspects.

62 responses were received.

1. Generally speaking, what are your impressions of the proposal to bring in commercial air service to the Muskoka Airport?

Of the survey responses, 92% indicated strong support for the initiative. Samples of written responses included:

- I am generally supportive of the concept. It is important to take every possible step to ensure the provider of service has an excellent record related to safety, customer service, and environmental responsibility.
- I am a supporter of the proposal, as it will provide a significant boost in tourism to the region from beyond the Greater Toronto Area.
- As I have understood the information it seems like a smart, conservative plan to bring a somewhat regular route to Muskoka during peak times that will benefit the airport and local region.
- Great news, wonderful idea! p.s. After this project, please consider advocating to get passenger train service back to the area.

Only one response was negative about the initiative with a comment "Do not see the benefit or disadvantage."

The balance of the responses was neutral (e.g., "it seems like it can't hurt"), but not opposed to the concept.

2. Are you pleased to see the Muskoka Airport – an important asset of the District of Muskoka – being used as a "tool" to bring more visitors to the region? If yes, why? If not, why not?

A similar set of results were advanced, with 92% indicating "yes" to the answer.

Most respondents highlighted the reasons for a "yes" answer due to the ability to raise the profile of the region for tourism, and also to grow jobs locally. Others linked the initiative to increasing the viability of the airport.

The four "no" responses were variable. Two responses objected to the way the question was asked and indicated that the airport should not be viewed as a "tool" but as a piece of infrastructure. One response diverged from the question and promoted the use of Gravenhurst Airport. A final respondent disputed a comparison to Mont Tremblant airport due to that airport's reliance on a resort.

3. Do you think commercial flights into the Muskoka Airport will help build the region as a vacation destination? If so, how (what benefits can you identify)?

82% of respondents indicated “yes” for the ability to build the region as a vacation destination.

A sample of opinions for respondents who indicated “yes” included:

- Costs of larger air tour operators who operate from Toronto Pearson Airport are huge. You can bus people from Toronto (e.g. Yorkdale or other), clear customs, handle their baggage and send them on their way much cheaper from Muskoka, and in a much short time.
- It provides travellers another option to access our communities.
- Many now dread the Friday night/ Sunday night highway traffic, or the long drive from US points. Shortening the journey will be an incentive for more tourists to visit Muskoka.

A larger amount of uncertainty was noted from previous questions. Respondents who did not say “yes” provided a qualified response. An example included the following:

- Maybe. It will depend on where and how the flights are marketed. The potential to bring more 'high end' tourists increases. This will create a new marketing story for the region and it defeats the traffic naysayers
- Only if packages are marketed by the tourism industry complete with pick up and return to airport. Must be done on a higher scale than I see most of Muskoka operating. USA is most accessible and lucrative market. To work packages would have to come out of an airline hub to collect the volume required. Chicago, New York, Pittsburgh, etc. Most potential will be in the North East USA.

4. If tourists are the primary target for this project, which additional industries do you think can benefit from regional air service to the Muskoka Airport? In what way?

There was a wide range of responses including

- Aviation-related businesses such as aircraft repair and other support services
- Tourism and transportation-related support businesses
- Consultants or internet-based businesses
- Manufacturing (e.g. boats)

5. Can you identify any obstacles, challenges or impediments you believe may hinder the plan to bring commercial air service to the Muskoka Airport?

A variety of views were cited about the overall drive towards the initiative

- Ten respondents (16%) warned about whether there was sufficient political will to deliver on the ability to get commercial air services.

- Eight respondents (13%) cited concerns about the runway usability and the lack of a cross-wind runway.

Additional views were raised with potential challenges from noise, increased activity and potential costs of the initiative.

6. What programs do you think need to be in place for regional air service into the Muskoka Airport to be a success? (e.g. Info centre at the airport? Shuttle service? Marketing plan? Please name as many as you can.)

25 responses (40%) indicated the need for ground access connectivity via taxis, car rental, shuttle services or other provision of ground transportation linkages to local attractions.

16 responses (26%) cited the need for an appropriate marketing plan around the initiative.

Other responses were more terminal-specific, such as food and beverage, shopping or other amenities typically found at an airport terminal.

7. What investments and/or incentives do you think are appropriate to attract this air service?

There was little consensus that could be drawn from responses to the question that was equal in quantities of responses that promoted new public investment, creative financing, support from all levels of government and costs to be borne fully by the private sector.

8. Will the introduction of regional air service impact your organization/business? In what way? What type of demand do you think might be stimulated for your organization/business with the introduction of this service? Will this impact the number of jobs/investment your organization makes? If so, how?

20 responses (32%) provided a qualified “no” in that the scale of impact depends on the kind of air services. The respondents described that the benefits would be indirect through the ability for additional opportunities for business with the growth of tourism.

There were seven responses (7%) that cited the importance of international access. This includes being able to attract Chinese travelers visiting BC to the ability for Muskoka area businesses to access global markets more easily.

9. What is your organization/business prepared to do to support and sustain commercial air service at the airport – if anything?

More than half of the respondents (35) indicated they would be able to provide support through co-marketing, promotions or advocacy to help with the initiative.

This includes integration the approach for messaging as well as ensuring there was broad awareness of new capabilities at the airport.

Appendix B: Aviation and Visitor Spending Economic Impact

Direct On-Site Airport Employment Impacts

To assess the potential on-airport benefits, this micro study assesses the impact of all activities related to aircraft landing, departure and activities completed during turnaround time and in-flight. Among others, these activities include unloading inbound passengers and their baggage, and then re-loading the aircraft with outbound passengers and their baggage. The estimated labour hours in this study also includes the employment involved in processing each aircraft and its passengers, such as catering, cleaning, maintenance, fuelling, ground service, etc. The employment and earnings associated with these activities are considered to be "direct" impacts of the flight. They are immediately associated with the operation of the aircraft.

Furthermore, the study measures the direct labour hours of other services offered at the airport, such as car rental services for which passengers may engage. As noted in consultations this was an important aspect of connectivity to the development of new commercial flights. In addition to the airline employees in the public areas of the terminal, the airlines also have administrative employees in the office area of the terminal. The labour hours of employees behind the scenes, such as managers and supervisors, are included in this micro study, as well. The figures in this study represent the average labour impacts of the potential air service. It includes the sum of all of the labour hours from all jobs/tasks associated with the potential flight - both "hands-on" jobs as well as "overhead" jobs.

In summary, as shown below, this study estimates that each round-trip (i.e., "return") flight will generate approximately 49 person hours of labour, corresponding to roughly 0.03 full-time equivalents per flight.

Figure A-1: Local Person Hours by Job Function per Return Flight

Job Type	Person Hours per Return Flight
Airline In-Terminal	11
Other Terminal	23
Ground Support	15
Total Hours	**49**

Notes: Airline In-Terminal includes labor hours of check-in agents, gate agents, escorts (e.g. for wheelchairs) and supervisors. Other Terminal includes labor hours of jobs in air traffic control, security screening, car rental, local ground transportation and airport administration attributed to the air service. Ground Support includes labor hours of jobs in ramp crew, bag room, fueling, and grooming.

Aviation Economic Impacts

The annual employment and other economic impacts associated with the potential air service to/from Muskoka Airport are estimated for each year over the three-year time period. Annual impacts are assessed for each of the three scenarios.

Economic multipliers from Statistics Canada for the Province of Ontario are used to estimate wages and other economic impacts, such as gross domestic product (GDP) and economic output. GDP is a measure of the money value of final goods and services produced as a result of economic activity, while economic output is the dollar value of industrial output produced.

The total economic impact of a flight would also include indirect and induced effects. Indirect (e.g., businesses that supply goods and services to the airport and airline) and induced (e.g., spending in the general economy by airport and airline employees) impacts are those stimulated by the direct employment and activities at the airport.

Year 1 of operations in the High Scenario would support 0.6 direct FTEs during the year, earning $50,000. The annual direct local employment associated with the air services in Year 3 would increase to 2.1 FTEs, earning $170,000. The direct GDP contribution to the local economy is estimated at $70,000 and $270,000 in Year 1 and Year 3, respectively. Over the three years, the total economic impacts (including multiplier effects) of the air service would increase from 1.3 FTEs and $150,000 in GDP in Year 1 to 4.6 FTEs and $550,000 in GDP in Year 3. The economic impacts associated with the labour hours generated annually in the High Scenario are summarized in Figure B-2.

Figure B-220: Total Annual Economic Impacts of Potential Air Services at YQA – High Scenario

Impact	Employment (FTEs)	Wages ($ Thousands)	GDP ($ Thousands)	Output ($ Thousands)
		Year 1		
Direct	0.6	$50	$70	$190
Indirect	0.4	$30	$50	$110
Induced	0.2	$10	$30	$50
Total	**1.3**	**$90**	**$150**	**$350**
		Year 2		
Direct	1.3	$100	$160	$420
Indirect	0.9	$60	$100	$230
Induced	0.5	$30	$60	$110
Total	**2.8**	**$190**	**$330**	**$760**
		Year 3		
Direct	2.1	$170	$270	$700
Indirect	1.6	$110	$170	$390
Induced	0.9	$50	$110	$180
Total	**4.6**	**$320**	**$550**	**$1,260**

Note: Totals may not add up due to rounding.

In the Medium Scenario, the potential air services are estimated to support 0.6 direct FTEs during the year, earning $50,000, in Year 1. By Year 3, the direct local employment associated with the air services would increase to 1.3 FTEs, earning $100,000, annually. The direct GDP contribution to the local economy would increase from $70,000 to $160,000 over the three years. Including multiplier effects (indirect and induced), the total economic impacts of the potential air service could support 1.2 FTEs and contribute $150,000 in GDP in Year 1, while the potential air service would support 2.7 FTEs and contribute $330,000 in GDP in Year 3. Figure B-3 provides the economic impacts associated with the labour hours generated annually in the Medium Scenario.

Figure B-3: Total Annual Economic Impacts of Potential Air Services at YQA – Medium Scenario

Impact (Medium Scenario)	Employment (FTEs)	Wages ($ Thousands)	GDP ($ Thousands)	Output ($ Thousands)
		Year 1		
Direct	0.6	$50	$70	$190
Indirect	0.4	$30	$50	$110
Induced	0.2	$10	$30	$50
Total	**1.2**	**$90**	**$150**	**$340**
		Year 2		
Direct	1.1	$90	$140	$360
Indirect	0.8	$60	$90	$200
Induced	0.5	$30	$60	$90
Total	**2.4**	**$170**	**$280**	**$660**
		Year 3		
Direct	1.3	$100	$160	$410
Indirect	0.9	$60	$100	$230
Induced	0.5	$30	$60	$110
Total	**2.7**	**$190**	**$330**	**$750**

Note: Totals may not add up due to rounding.

In the Low Scenario, the potential air services would support 0.6 full-time equivalents (FTEs) of direct local employment in the Muskoka District each year, earning wages estimated at approximately $50,000. The labour hours associated with the potential air service at YQA could potentially generate an estimated $70,000 in direct gross domestic product (GDP) and $190,000 in direct economic output. Considering multiplier effects (indirect and induced), the total economic impacts of the potential air service might support approximately 1.2 FTEs and contribute $150,000 in GDP annually. As the parameters of the air service are not assumed to be changed over the three years in this scenario, the annual economic impacts remain constant each year. The economic impacts associated with the labour hours generated annually in the Low Scenario are presented in Figure B-4.

Figure B-421: Total Annual Economic Impacts of Potential Air Services at YQA – Low Scenario

Impact (Low Scenario)	Employment (FTEs)	Wages ($ Thousands)	GDP ($ Thousands)	Output ($ Thousands)
		Year 1		
Direct	0.6	$50	$70	$190
Indirect	0.4	$30	$50	$110
Induced	0.2	$10	$30	$50
Total	**1.2**	**$90**	**$150**	**$340**
		Year 2		
Direct	0.6	$50	$70	$190
Indirect	0.4	$30	$50	$110
Induced	0.2	$10	$30	$50
Total	**1.2**	**$90**	**$150**	**$340**
		Year 3		
Direct	0.6	$50	$70	$190
Indirect	0.4	$30	$50	$110
Induced	0.2	$10	$30	$50
Total	**1.2**	**$90**	**$150**	**$340**

Note: Totals may not add up due to rounding.

Visitor Spending Impacts

The number of visitors on the potential air services is estimated based on assumed load factors and percentage of visitors on-board the flight. Based on point-of-sale data at comparable airports, it is assumed that approximately 70% of passengers on-board each flight from YQA will be visitors that stay in the Muskoka region. The remainder of deplaning passengers is likely to be returning passengers whose trips originated in Muskoka.

The number of visitors to the region resulting from the potential air services to YQA in Year 1 of the High Scenario is estimated to be approximately 920 visitors, spending nearly $730,000 per annum. The direct employment and economic impacts associated with visitor spending from the first year could potentially include seven direct FTEs and $350,000 in direct GDP in the region. In Year 3, the number of visitors is estimated to grow to 3,330 visitors and associated visitor spending is assumed to increase to close to $3 million. The associated direct economic impacts are estimated to grow to 25 direct FTEs and $1 million in direct GDP by Year 3. The direct economic impacts of the annual visitor spending from the potential air service to YQA in the High Scenario are summarized in Figure B-5.

Figure B-522: Annual Direct Visitor Spending Impacts of Potential Air Services at YQA – High Scenario

Impact	Employment (FTEs)	Wages ($ Thousands)	GDP ($ Thousands)	Output ($ Thousands)
Year 1: 920 Visitors				
Direct	7	$270	$350	$730
Year 2: 2,000 Visitors				
Direct	15	$590	$770	$1,590
Year 3: 3,330 Visitors				
Direct	25	$980	$1,280	$2,650

Note that these are estimates only: if there are greater proportions of visitors from overseas markets (e.g. United Kingdom), the spend rate is typically higher for long-haul passengers.

In the Medium Scenario, 700 visitors are estimated in Year 1 as a result from the potential air services to YQA, spending over $560,000. The direct employment and economic impacts associated with visitor spending from the potential new air service to YQA could potentially include five direct FTEs and $270,000 in direct GDP per annum in the region. In Year 3, the number of visitors and associated visitor spending per annum is assumed to increase to 1,530 visitors and $1.2 million in visitor spending. Likewise, the associated direct economic impacts are estimated to increase to 11 direct FTEs and $590,000 in direct GDP in Year 3. Figure B-6 provides the direct economic impacts of the annual visitor spending from the potential air service to YQA in the Medium Scenario.

Figure A-6: Annual Direct Visitor Spending Impacts of Potential Air Services at YQA – Medium Scenario

Impact	Employment (FTEs)	Wages ($ Thousands)	GDP ($ Thousands)	Output ($ Thousands)
Year 1: 700 Visitors				
Direct	5	$210	$270	$560
Year 2: 1,340 Visitors				
Direct	10	$390	$520	$1,070
Year 3: 1,530 Visitors				
Direct	11	$450	$590	$1,220

In the Low Scenario, the yearly number of visitors to the region resulting from the potential air services to YQA is estimated to be approximately 590 visitors, spending over $470,000 per annum. The direct employment and economic impacts associated with visitor spending from the potential new air service to YQA could potentially include four direct FTEs and $230,000 in direct GDP per annum in the region. The number of visitors and associated visitor spending per annum is assumed to be the same in each year, as the air service parameters in the Low Scenario remain constant. The direct economic impacts of the annual visitor spending from the potential air service to YQA in the Low Scenario are summarized in Figure B-7.

Figure B-7: Annual Direct Visitor Spending Impacts of Potential Air Services at YQA – Low Scenario

Impact	Employment (FTEs)	Wages ($ Thousands)	GDP ($ Thousands)	Output ($ Thousands)
Year 1: 590 Visitors				
Direct	4	$170	$230	$470
Year 2: 590 Visitors				
Direct	4	$170	$230	$470
Year 3: 590 Visitors				
Direct	4	$170	$230	$470

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