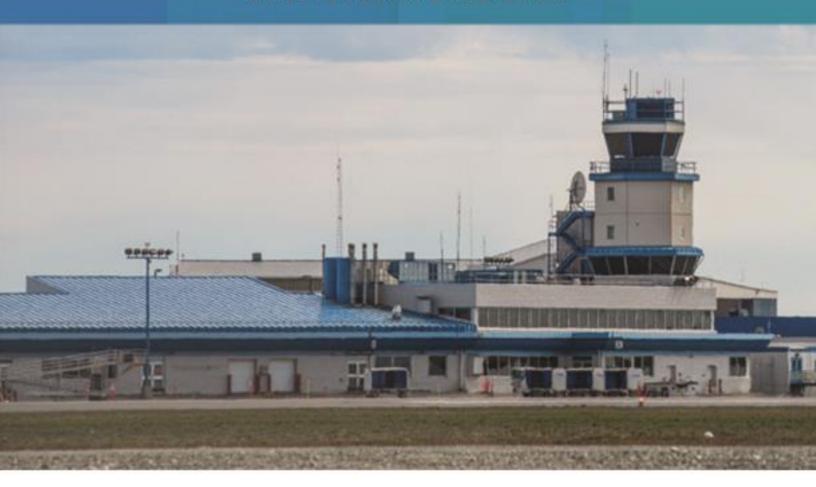
YELLOWKNIFE AIRPORT FIVE-YEAR BUSINESS PLAN 2018-2019 to 2022-2023





Yellowknife Airport L'aéroport de Yellowknife

Where the North Connects | Le rendez-vous du Nord

EXECUTIVE SUMMARY

Focused on Future Economic Opportunities

With the coming into force of the Yellowknife Airport (YZF) Revolving Fund on July 1, 2017 – which changed the status of the Airport from a funded line item within the Government of the Northwest Territories (GNWT) Department of Infrastructure (INF) to a GNWT self-sustaining entity – 2017 was a significant year for YZF and the communities it serves. Under this new structure all funds generated at YZF will stay at the Airport and be reinvested in YZF, enabling it to operate like a business and support growth opportunities.

Operationally, YZF is a 24/7, all-weather Certified Airport, staffed continuously from 04:30 to 00:30 including statutory holidays. There are two paved runways: the longest, 16/34, is 7,503 feet (ft) in length; whilst the shorter runway, 10/28, is 5,001 ft. long.

Passenger traffic at YZF has doubled since the late 1980s and is expected to continue to grow at a higher rate than the national average forecast for the top 100 airports in Canada. Over 575,000 passengers passed through YZF in 2016, a 7% increase over 2015. Most forecasters attribute volume increases to tourism (particularly the growing China market) and higher business travel demand, including mine personnel on shift changes. In the first nine months of 2017, traffic grew by 4.4% and continued this positive trend in July (+5%), August (+10%) and September (+7%).

Food and other perishable cargo are shipped almost exclusively by air from YZF to northern communities, and resource exploration sites in the Northwest Territories (NWT) and Nunavut.

The four main carriers, Air Canada Jazz, Canadian North, First Air and WestJet broadly carry the same traffic (each has approximately 20-25% of the market share), although Canadian North and First Air carry the majority of intra-NWT commercial traffic.

Focused on Future Economic Opportunities

In developing its change management strategy and YZF's Business Plan, the GNWT consulted with many key airport community stakeholders. Significant feedback received during those consultations has been reflected in this Business Plan. Going forward, the newly created YZF Economic Advisory Committee will provide airport management with timely advice and act as a sounding board in identifying business opportunities.

Through its previous engagement with key stakeholders, a number of Strategic Goals were identified as important to YZF and the wider NWT economy. These were: 1. Operate a safe and secure Airport that serves the North; 2. Proactively engage with aviation partners, airport stakeholders and Northerners; 3. Operate in a financially responsible manner, enhance operational efficiencies, and deliver exceptional services and facilities; 4. Maintain a modern, healthy, transparent and accountable work environment; 5. Enhance air service and expand connectivity with the North in support of communities, tourism and economic development; and 6. Identify and promote Airport development in support of aviation, logistics and commercial opportunities. Realising these goals will entail the allocation of significant resources matched to individual business cases to ensure an acceptable return on investment.



Business Plan Forecast Assumptions

In building this 2018-19 to 2022-23 Business Plan, a number of key assumptions have been incorporated based on the Yellowknife Airport's Mission, Vision and Goals, and the known changes that will affect the operation, management and development of the property. These are explicitly stated in the Business Plan.

With appropriate investment, YZF will build on the impressive contribution it already makes. Investments will include: continuing improvements to maintain a safe and secure airport; essential improvements to runways and airport facilities to maintain regulatory compliance; improvements to enhance operational efficiencies; marketing enhancements to attract commercial, development and investment opportunities for all aviation-related businesses; specific Airport facilities focused on tourism and the growing needs of the resource sector; and upgrades to improve the customer experience.

A rolling five-year capital needs assessment, two-year Capital Plan and Capital Budget will be developed annually. Currently YZF estimates its high-level five-year capital needs – both aviation and commercially related – to be some \$35 million. As regulatory compliance needs change and other opportunities emerge in the shorter-term, this figure may be adjusted but investments will be tied to affordability.

Base Case Financial Analysis

Financial pro forma for 2018-2019 through 2022-2023 have been developed based on the Revolving Fund operating model, and an explicit set of conservative assumptions as noted earlier. Significant highlights from these pro forma include:

- The overall operating deficit is projected to be eliminated in the first nine months of the Revolving Fund and move into surplus, although only 82% of aeronautical expenses will be recovered in 2017-2018;
- With the July 2017 increases in aeronautical charges, and modest traffic growth, full aeronautical cost recovery should be achieved in the 2020-2021 timeframe; and,
- On a cumulative basis through March 31, 2023, the identified aviation capital requirements exceed the Yellowknife Airport Improved Fee (YKAIF) generated funds, although there is projected capacity to fund the capital investments from the accumulated operations surplus.

In summary, through the actions taken by the GNWT to make YZF self-sustaining, the operations deficit will be eliminated in the current fiscal year and the anticipated cumulative capital needs can be met over the next five years with the annual Capital Expenditure budget adjusted to reflect the actual funds available.



Vision, Mission and Values

Brand

"Where the North Connects"

Vision

Stronger Airport. Stronger Impact. Stronger Economy.

Mission

To provide and promote safe, secure, reliable and sustainable air transportation that drives economic development by strengthening connections, capturing opportunities and embracing innovation.

Core Values

Collaboration and Partnership

Ongoing Improvement

Northern Innovation and Resilience

Northern Capacity Building

Environmental Sustainability

Care, Respect and Integrity

Teamwork

Excellence in Safety

Dedication to Service



1. Setting the Scene

1.1. Introduction

The 2018-2019 to 2022-2023 Yellowknife Airport (YZF) Strategic Business Plan is the first to reflect the first full year under the Revolving Fund structure. This Business Plan sets the scene based on past investments, identifies challenges and opportunities, and details a high-level action plan to meet the stated strategic goals, which together with assumptions about the short- and medium-term future, enables financial projections to be created for the Airport. It is an important planning tool, a critical management tool and a vital communication tool.

1.2. The Yellowknife Airport in Context

In 1995 the land, assets and operations of all the Transport Canada (TC) airports in the Northwest Territories (NWT), including the Yellowknife Airport (or "YZF"), and the associated federal staff and resources, were transferred to the Government of the Northwest Territories (GNWT)¹. Today the NWT is well served by the 44 aerodromes in the Territories including 27 that are owned and operated by the GNWT Department of Infrastructure (INF).

YZF serves as the primary aviation gateway to communities within the North and is one of the 26 airports in Canada included in the National Airports System (NAS). The NAS is defined by TC as those strategic infrastructure assets essential to Canada's air transportation system. YZF is included as the capital of the NWT.

Aviation traffic at YZF has doubled since the late 1980s and is expected to continue to grow at a higher rate than the national average forecast for the top 100 airports in Canada. To meet the current demands and continue to serve as the aviation hub for the North, YZF must renew and expand its primary facilities in a planned and timely way.

YZF hosts extensive commercial activities that rely on quality aviation facilities and services. Non-aviation related businesses are attracted because of available land and good access. YZF also services federal and territory aviation needs associated with national defence, aircraft forest fire fighting, medevac and charter aircraft operations and base facilities.

YZF is a gateway to the NWT and the Arctic, and plays a major role in supporting industry, tourism and the overall quality of life in the North. Air transportation is recognized by GNWT as an essential component of the implementation of its strategic activities.

A 2015 Economic Impact Study shows that more than 1,000 people are employed on the YZF airport campus. In addition, organizations based at the airport directly produce over \$170 million in Gross Domestic Product (GDP), and activity at YZF contributes over \$45 million in various taxes.²

² The Economic Impact of the Yellowknife Airport, The Lindbergh Group Inc. with the Institute on Governance, 2015



¹ Northwest Territories Arctic Airports Transfer Agreement, 1995

Figure 1. YZF Generates Wealth, Employment & Taxes

- **1,000** people are directly employed through activity at the Yellowknife Airport.
 - The Airport supports **2,000** jobs in many sectors.
- Total economic impact, including supplier industries, is \$171 million in direct GDP.
 - Each direct job associated with the Airport results in \$374,000 in direct output.
 - Air Transportation supports 18 jobs for every 10,000 passengers using the Airport.
 - Activity at the Airport contributes over \$45 million in taxes.

The GNWT created a YZF Revolving Fund that came into force on July 1, 2017 and has actively sought to put YZF on a secure, financially self-sustaining basis. The Airport has adopted a more business-like approach to operations, and is actively looking at development and revenue-generating opportunities. Since July 2017, revenues generated by the Airport are retained within the Revolving Fund to pay for all operating and capital expenditures.

Anticipated benefits from this new approach include ensuring costs are properly identified, retention of revenues at YZF, and enhanced accountability and transparency. While an independent and separate entity, GNWT is mindful that decisions made with regards to YZF must not adversely affect other airports in smaller communities across NWT.

In adopting the Revolving Fund structure, the GNWT is assessing the impact of operating, managing and developing YZF like an airport authority while maintaining formal GNWT control over capital and operational activities.

1.3. Political, Economic and Social Overview

Political Environment

The Legislative Assembly consists of 19 members elected by constituencies, but without political party affiliation. The Premier is elected from within this group. While the Assembly acts, for the most part, as a provincial legislature would, it does not have the same constitutional jurisdiction.

Yellowknife's municipal government is made up of a Mayor and eight councillors elected for three-year terms. It does not control the airport, but does receive significant transfers from GNWT in lieu of municipal taxes (PILT) as well as taxes directly from YZF tenants.

Social Environment

The people of the NWT are very much connected to their traditions through essential relationships with the land, wildlife and each other. Indigenous peoples in the NWT have strong interests in maintaining their cultures and preserving their heritage. Music and art festivals are becoming increasingly popular in many parts of the NWT and the cultural identities of the Dene, Métis and Inuvialuit remain strong.



Yellowknife's average household income is double the national average but households also spend 50% more than the average Canadian home. About 64% of NWT residents have completed high school.

Economic Environment

The NWT has an immense land area of over 1.1 million square kilometers and a population of 43,300 in 2012 (compared to 37,360 in 2001³). As of 2010, there were 33 official communities in the NWT. These range in size from 18,700 inhabitants (Yellowknife) to 52 inhabitants (Kakisa).

Yellowknife is the territorial capital and the largest community in the NWT, and is the government and service centre for much of the central Arctic. It is also the economic hub for mining and tourism activity. With the potential opening of the Northwest Passage, the prospects for additional air lift requirements for people and cargo in the medium- to long-term are positive.

The Territory's economic outlook is anticipated to be modest with limited growth in the short-term. With the Gahcho Kué Diamond Mine in production, the Conference Board of Canada forecasts the NWT economy growing by 12.2% in 2017. This economic growth trajectory is not anticipated to continue in the short-term as the NWT GDP is expected to decline from 2018 to 2020 by an average of 1.6% per year. A recovery is forecasted in 2021 when new metal mines are under development. The Conference Board has stated that: "...more stable global economic conditions will help support a recovery in base metal prices going forward and a few projects will see the light of day over the next ten years ..."⁴.

Tourism. The NWT Economic Opportunities Strategy developed by the GNWT in 2013 to grow and diversify the NWT economy, identified tourism as one of the key elements that could support and grow the NWT economy. The strategic plan for tourism in the NWT, Tourism 2020⁵, aims to build on past successes and develop new opportunities for growth and visitor spending.

While the 2015-2016 annual tourism revenues reached \$167 million, the NWT is well on its way to achieve the 2020 revenue goal of \$207 million annually by 2021, which represents growth of 19%.

The NWT tourism industry has tremendous potential: baby boomers with funds to travel are entering retirement and looking for new, unique places to travel; youth travel is expanding globally and they are interested in active adventures; and there is a growing Chinese market interested in the NWT. What each of those target markets has in common is the need to get from "there" to the NWT. GNWT recognizes that the Yellowknife Airport is key to enabling that strategy by providing year round connections to the world.

Natural Resources. Mineral development activities have long contributed to the development, growth and diversity of the territorial economy. For more than 80 years, mineral exploration and development have been critical components of the NWT economy and have led to major infrastructure legacy developments, including the building of highways, rail lines and hydroelectric facilities. The relationship between the NWT and the rest of Canada has been, in part, defined by its mining heritage and its contribution to the Canadian economy.

⁵ Tourism 2020: Opening our Spectacular Home to the World, GNWT Publication, 2016



³ Statistics Canada, 2012; Statistics Canada notes that this increase in population is likely due to improved information gathering for NWT, rather than actual population growth

⁴ The Economic Outlook: Weathering the End of the Commodity Supercycle, Conference Board of Canada, 2016

The direct benefits of mining account for over one quarter of the NWT's GDP. Indirect benefits are also significant through spending on transportation, construction and real estate. Mining is the largest private sector employer in the territory. Since 1998, the diamond mines alone have generated over \$17 billion in NWT business contracts, over \$5 billion of which was spent with Indigenous-owned businesses, and have created over 24,000 total person years of employment, nearly half of which were Indigenous employees.⁶

Mining represents the most significant revenue generator in the NWT and will continue to do so in the future. In 2017, three mines were in operation in the NWT: Ekati, Diavik, and the recently opened Gahcho Kué Mine.

The total estimated value of minerals and diamonds produced in the NWT in 2015 was \$1.79 billion, which is a decrease of \$900 million from 2014, when the total value reached \$1.88 billion. Diamonds accounted for 97% of the total estimated value of metallic and non-metallic production in the NWT in 2015.

The 2016 exploration appraisal expenditures forecast by Natural Resources Canada of \$99.3 million sees only slightly lower spending compared to 2015. Exploration will account for \$32.7 million of this and diamonds account for 86% of the total expenditure forecast.

There is significant geological potential in the NWT's relatively underexplored landmass. Access to areas with mineral potential is a key factor for the mineral exploration industry.

INF is a partner in implementing Goal 1.3 of the NWT Mineral Development Strategy (MDS) "... to improve access to mineral potential by investing in NWT's infrastructure". This goal applies to all types of transportation infrastructure, including ground, water, marine and air infrastructure development.



⁶ Mineral Resources Division

2. Aviation Industry Overview

2.1. Introduction

Air transportation is critical to economic development generally, and North of 60 in particular, and northern airports play a key role in enabling economic activity through natural resource exploration. In the NWT, air transportation is heavily relied on not only for passenger and cargo transportation but also for delivery of essential services such as healthcare, law enforcement and food, given the considerable distance between communities.

A recent industry-wide study⁷ notes that air transportation has value beyond just the cumulative amount of economic output produced by the industry. Air transportation and airports:

- are vital to the livelihood of Canadians in remote regions;
- promote the economic growth of Canada's North;
- help protect the country's natural resources;
- are necessary for emergency response and humanitarian relief;
- broaden people's leisure and cultural experiences, and keep families connected; and
- enhance general business operations and efficiency.

2.2. Airlines

The airline industry internationally and domestically has recently experienced a significant period of growth and positive earnings based on critical industry consolidation and cost cutting. While Canada's two mainline airlines – WestJet (WS) and Air Canada (AC) – have both experienced those overall positive benefits, the financial performance of Canada's regional and northern airlines is not as solid. While the arrival of AC and WS into YZF has brought many benefits to Yellowknife and the territorial economy, it has not been without cost: while consumers enjoy very much lower ticket prices for flights leaving the NWT than previously, and more seamless access to destinations beyond, it has meant that the economics of serving more remote and northern communities has lost the benefit of an implicit cross-subsidization of these "thinner" routes.

The arrival of the major airlines and the continuing viability of the northern airlines puts pressure on YZF to provide an efficient operating platform and to contain costs, particularly those that are directly levied under airline use and lease agreements, including operating fees and charges.

The industry continues to plan changes ahead with both AC and WS seeking to establish new "ultra-low-cost" (ULCC) affiliates and other ULCC start-ups beginning to come on stream in the Canadian market.

⁷ The Economic Impact of the Air Transportation Industry in Canada, the Conference Board of Canada, 2013



2.3. Airports

Historical industry-wide longitudinal studies⁸ note that:

- Airports contribute to the ongoing viability of the communities they serve, particularly isolated communities;
- Successful airports have a healthy income statement and respond effectively to the needs of their community;
- Forward looking airport management seek ways to increase non-aeronautical revenue, such as leasing or selling under-utilized land for light industrial, agricultural or recreational uses; and
- Regulatory increases and changes are having a significant and negative impact on smaller airports' cost of operations (e.g., safety management systems, airport security programs, installation of new baggage screening / explosive detection systems, etc.).

2.4. Regulatory and Policy Environment

The Canadian Transportation Act Review

The Canadian Transportation Act (CTA) is the federal framework legislation for Canada's transportation system. The CTA sets out the National Transportation Policy, which emphasizes that transportation services will be based on competition and market forces. The Policy states that government regulation and intervention should generally be limited to cases where the market cannot otherwise achieve satisfactory economic, safety, security, environmental and social outcomes.

Of specific note, the most recent review of the CTA delivered in late 2015, recommended two initiatives of particular interest to Northern communities:

- Recommendation 4.1: Northern Transportation Infrastructure Strategy the Government of Canada develop and implement an infrastructure strategy for all modes of transportation in the North; and
- Recommendation 4.3: Community Access to Air Transportation the Government of Canada act to maintain and improve access to air transportation for communities and for the economic well-being of the North.

While these recommendations are still under consideration by the federal government, and the GNWT continues to actively pursue solutions to enhance transportation links, no specific update has been provided to date by TC. However, it is understood that TC is updating its strategic plan for transportation, *Transport 2030*, where these issues could be addressed.

 $^{^{\}rm 8}$ Such as the Municipal Airports in Ontario Study, Jacobs Consultancy Inc., 2006



Aviation Regulation

TC continues to regulate aviation and airports in Canada.

YZF has a Transport Canada approved Airport Operations Manual (AOM), which among other policies and procedures, covers off its regulatory due diligence. The Airport's Operating Certificate is current and was renewed in January 2003.

In the past decade, certified airports and their customers have been faced with considerable regulatory change, often resulting in additional costs with no offsetting funding, for instance in the need to implement Safety Management Systems (SMS) and Runway End Safety Areas (RESA).

GNWT Legislation and Regulation

Applicable GNWT legislation and regulation directly affecting the NWT airports system include:

- Public Airports Act;
- Public Airport Fee Regulations;
- Public Airport Traffic Regulations;
- Commissioner's Public Airport Lands Regulations; and
- Summary Convictions Procedures Regulations flowing from the Summary Convictions Procedures Act.

The GNWT amended the *Revolving Fund Act* (Bill 7) during the 18th Legislative Assembly to establish a revolving fund "for the purpose of meeting the capital, operating and maintenance requirements of the Yellowknife Airport". This legislation came into force on July 1, 2017.

INF also updated the *Public Airport Fee Regulations* to move to an overall cost recovery basis for airport operations and maintenance (0&M) expenditures, and to introduce a Yellowknife Airport Improvement Fee (YKAIF).



3. The Yellowknife Airport Current Market Assessment

3.1. Ownership and Governance

YZF is under the direction and control of the GNWT INF through the Regional Airport Manager, Yellowknife Airport, who reports to the Regional Superintendent of INF's North Slave Region.

3.2. Airport Facilities, Services and Infrastructure

YZF is a certified Airport, operational 24/7, and capable of supporting both day/night and Visual Flight Rules and Instrument Flight Rules operations. The Airport is staffed from 04:30 to 00:30 including statutory holidays. There are two asphalt-paved runways:

- Runway 16/34 7,503 feet (ft) x 150 ft; and
- Runway 10/28 5,001 ft x 150 ft.

There are ten aircraft parking locations on the main apron. Gates 2-10 are used for scheduled passenger aircraft only, and Gate 1 is used to accommodate some unscheduled or charter flights and military aircraft.

There is a NAV Canada control tower at the airport (daily 07:00 to 22:00 including statutory holidays), with a Flight Service Station (FSS) available 24/7.

YZF is an "Airport of Entry" for general aviation aircraft of up to 15 passengers with Canada Border Services Agency (CBSA) provided customs services available to international passengers on weekdays.

YZF is classified as a Category 6 airport for aircraft rescue and firefighting services (ARFF), upgradable to Category 7 to meet specific operational needs, with services provided by 10 airport firefighters (2-3 per shift). Municipal ambulance services are located nearby, and additional firefighting services can be provided by the Yellowknife Fire Department. The firefighters and ERS equipment operate from a state-of-the-art Combined Services Building (CSB)/Fire Hall that was built in 2011.

Airfield maintenance, including airfield electrical, is provided by YZF Operations and Maintenance staff, located in the CSB. It is co-located with Airport and Highways division vehicle and heavy equipment maintenance staff to achieve economies of scale with charge-back to other GNWT departments for services rendered.

Aircraft fuelling is provided by fixed based operators (FBOs). Aviation fuel (100LL Avgas, Jet A-1 turbine, F-34 turbine fuel (military designation), and all types of oil are available from World Fuel (Esso) and Diamond Aviation Services (Shell).

De-icing is undertaken at a central location on the main apron (not at the gates) using de-icing fluids types 1 and 4.

There are third-party hangar, aircraft servicing (minor repairs), and jet aircraft starting units (JASU).



Passenger services available in the terminal include food and beverage concessions, business centre, gift shop, car rental agencies, ATM machine, vending machines, water bottle replenishment facilities and direct courtesy phones to hotels and taxis. There is a pay parking lot for vehicles.

There are three car rental companies (Budget, National, Hertz) located within the Air Terminal Building (ATB), as well as a hotel shuttle service to four hotels, and two taxi services (Aurora and City Cab).

Most airport buildings are maintained by GNWT with many elements outsourced, including janitorial services.

There are some 39 commercial tenants located at YZF offering a variety of aviation services and products including scheduled and charter air passenger services, fuel/FBO and aircraft servicing, commercial retail and food and beverage services, general aviation (corporate and private), ground transportation including car rental, and cargo/logistics and freight forwarding. A full list of tenants is included at Appendix A.

There are a variety of air cargo facilities at YZF operated by carriers (First Air, Canadian North, Buffalo Airways, Air Tindi, WS), and expediting and logistics firms (G&G Expediting, BBE, Deton Cho Logistics). First Air and Canadian North have bonded warehouse facilities on site.

The RCMP "G" Division maintains a hanger at YZF, as does the Royal Canadian Air Force. Canadian NORAD Region Forward Operating Location (FOL) Yellowknife is located at YZF and is used for forward deployment of the CF-18 Hornet in times of conflict and for search and rescue missions with a CC-138. 440 Transport Squadron is an integral part of 17 Wing Winnipeg, with a primary role to provide airlift support to CF Northern Area, transporting Ranger and cadet personnel and a myriad of supplies and cargo throughout the Arctic region.

3.3. Airport Access Control and Security

CATSA (Canadian Air Transport Security Authority) provides pre-board passenger screening in the ATB for those travelling on commercial flights to other screened airports. There is 100% hold bag screening (HBS). Both of these aviation security-screening facilities require upgrades that are currently in planning and design.

Security screening is not available to charters or private aircraft using the FBOs. However, some resource companies are moving passengers to camps through the ATB in order to screen them. In 2016, a separate pre-board screening area (not provided by CATSA although the same baggage screening process is applied) was built by the Airport to accommodate users' needs.

3.4. Passenger Traffic

Over 575,000 passengers passed through YZF in 2016, a significant increase of over 7% from 2015. Over the 16 year period between 2000 and 2015, total passenger traffic increased at an average annual rate of 4.9%. Most traffic reports attribute volume increases to tourism (particularly the growing China tourism market) and higher business travel demand, including mine personnel on shift changes. In the first nine months of 2017 traffic grew by 4.4% and continued this positive trend in July (+5%), August (+10%) and September (+7%).



Together with the increasing number of passengers at YZF, in the last five years more of those passengers have used the ATB rather than the FBO facilities. In 2016 for instance, 80% of passengers used the ATB, up from 68% in 2013.

The split between internal NWT vs. external NWT travel remained largely unchanged in 2016 at 45%:55%.

Air services are provided by five major carriers and a number of smaller regional carriers, as well as several charter operators. There are approximately fifty daily departures to destinations across Canada (Table 1) not including all of the regional and mine charter flights that occur daily. Scheduled routes from YZF are illustrated in Figures 2 and 3.9 Air Canada implemented seasonal non-stop service to Vancouver (YVR) in December 2017.

Table 1. Scheduled Air Carriers Operating at YZF and Direct Destinations

Airline	Destinations Beyond NWT	Destinations within the NWT
Air Canada Jazz	Calgary, Edmonton, Vancouver	n/a
Air North	Ottawa, Whitehorse	n/a
Air Tindi	n/a	Fort Resolution, Fort Simpson, Gameti, Lutsel K'e, Wekweeti, Whati
Buffalo Airways	n/a	Hay River
Canadian North	Cambridge Bay, Edmonton, Gjoa Haven, Iqaluit, Kugluktuk, Taloyoak	Norman Wells, Inuvik
First Air	Cambridge Bay, Edmonton, Gjoa Haven, Iqaluit, Kugluktuk,Taloyoak	Fort Simpson, Hay River, Inuvik, Norman Wells
Northwestern Air Lease		Fort Smith
WestJet	Calgary, Edmonton, Vancouver	

The four main carriers, Air Canada Jazz, Canadian North, First Air and WestJet broadly carry the same traffic (each has approximately 20-25% of the market share), although Canadian North and First Air carry the majority of intra-NWT commercial traffic.

Peak hours are between 06:00 and 07:00, 13:00 to 14:30 and again at 17:00 to 19.00. Passengers start arriving at the airport for check-in around 04:00. Load factors are reported to be high.

There is also significant charter helicopter traffic.



⁹ Source: Yellowknife Airport, May 2017

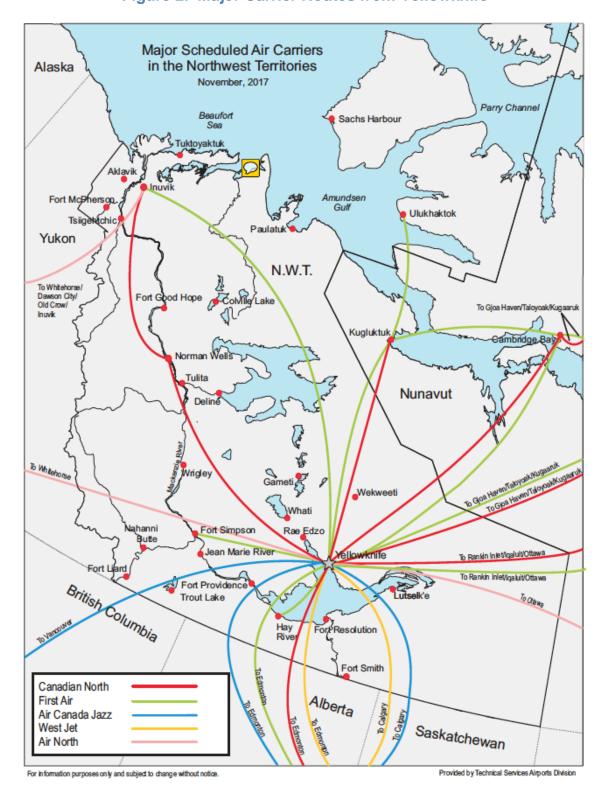


Figure 2. Major Carrier Routes from Yellowknife



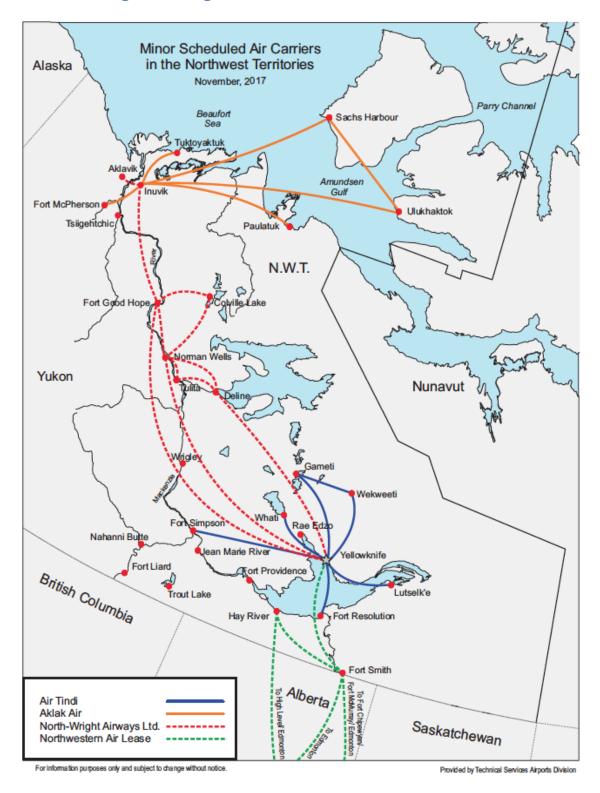


Figure 3. Regional Carrier Routes from Yellowknife



3.5. Cargo Traffic

Each of the air carriers operating from YZF offers a mix of passenger and cargo services. Air Cargo is carried on B-737, RJ85, ATR 72, ATR-42, Dash-8 and Dash-7, DC-3 and C46 aircraft in "combi" passenger / cargo or all-cargo configurations. Large volumes of the cargo shipped through YZF travels as intermodal freight from highway transport to air. Food and other perishable cargo is shipped almost exclusively by air to northern communities and resource exploration sites in the NWT and Nunavut from YZF. Cargo originating at YZF for export includes high value shipments of rough diamonds, which require special handling during transport and loading. A detailed cargo study completed in 2014 determined that up to 200,000 tons of air cargo could be airlifted annually from YZF to support northern and remote infrastructure and resource projects. INF is working to better quantify cargo opportunities.

3.6. Aircraft Movements

There were 50,635 air traffic movements at YZF in 2016, an increase of 3% over 2015 and a reversal of the 4.4% decline between 2011 and 2015. YZF is ranked as the 34th busiest airport in Canada among the 41 with control towers¹⁰. The majority of the aircraft traffic at YZF (nearly 90% in 2016) is itinerant, i.e. aircraft proceed to or arrive from another location.

3.7. YZF Organizational Structure

There are 28.5 FTE positions. There is one collective agreement that encompasses all airport staff. From a benchmark study of similar sized airports in Canada, YZF's unit-costs are in line (but generally lower) than peers.

There are three managers in addition to the Regional Airport Manager:

- The Manager, Operations and Maintenance, has airfield maintenance, including airfield
 electrical and ATB electrical staff. He is also responsible for airport and highways vehicle
 and equipment maintenance which takes place at the Combined Services Building (CSB).
 At times, equipment and personnel are shared. Most building trades are outsourced,
 including janitorial services. For other work independent contracts are awarded following
 a public, competitive process.
- The Manager, Safety and Security, is responsible for airfield access control and security including the Airport Security Program (ASP). The Manager also manages the Emergency Response Services (ERS) staff, who in addition to their primary duties as airport fire fighters, also undertake perimeter security patrols, and bird and wildlife management (patrols, reporting, bird control etc.).
- The Manager, Finance and Administration, is a new post responsible for all financial tracking and reporting. The Manager supervises two staff: an Accounts Receivable Clerk; and an Accounts Payable Clerk.

The Deputy Minister, INF, is the Accountable Executive for Safety Management.



3.8. Stakeholder Engagement

In developing its change management strategy and YZF Business Plan, YZF reached out to a number of key airport community stakeholders. Feedback received from stakeholders and the general public during those consultations in 2016-2017 highlighted the need:

- For active engagement with stakeholders and presentation of a clearly articulated vision for the future of the airport.
- To show the linkages to economic benefits that will be driven by future development at YZF.
- To make YZF a 'destination point' through ATB renovations that makes it more tourist friendly and provides a "sense of place" for those who arrive in the NWT through YZF.
- To review the costs and benefits of Jet Bridges to the overall customer experience, especially visitors in winter conditions.
- For a non-stop connection to Vancouver both for residents and to encourage potential onestop travel for tourists from Asia/Pacific, particularly Japan and China, and from Europe.
- For additional domestic cargo routes in the North from the YZF hub.
- To improve YZF's standing in the airfreight sector and develop a multimodal freight cargo facility for Northern cargo distribution.
- For a business development focus that provides benefits such as enhanced efficiency in passenger processing, pre-camp screening or cargo handling for the resource sector.
- For a commercial plan for aviation and non-aviation business development opportunities on airport lands.
- For continuing pressure on the Government of Canada to reduce costs for Northern travellers, and to provide funding for Northern airport operations and development in line with the recommendations of the *Canada Transportation Act* Review Panel.

3.9. **SWOTCh Analysis**

The Yellowknife Airport has many strengths to build upon. But the Airport also faces numerous challenges. Table 2 is a summary of the strengths, weaknesses, opportunities, threats and challenges faced by YZF.



Table 2. SWOTCh Analysis

STRENGTHS

- In aviation regulatory compliance
- YZF is recognized as a critical component of the NWT transportation system by residents and businesses
- Political support for development
- New approach to airport business under Revolving Fund model
- Revenues stay on airport property to fund capital expenditures and O&M needs
- Access to corporate services within GNWT providing economies of scale and scope
- Responsive airport management
- Good morale within airport employees
- Access to some ACAP funding
- Good number of competing airlines on the trunk routes coupled with strong O/D passenger traffic
- Runways in good condition
- Space for runway extensions
- Developable lots for commercial development
- Combined Services Building in good condition

WEAKNESSES

- Small population base
- Aging and undersized infrastructure with growing passenger volumes
- Congested Apron
- Lack of centralised de-icing facility
- Limited commercial focus not within purview of airport general manager
- Majority of based aircraft are piston (and thus not a large revenue generator)
- International routes difficult with current infrastructure
- No clear picture of amount of cargo processed each year
- Legacy IT and equipment
- Departure lounge and PBS undersized cramped aviation security facilities increase passenger processing time

OPPORTUNITIES

- Prospects generally positive over long-term for more resource exploration and development projects in north leading to more air travel
- Potential for multi-modal logistics centre / cargo hub for the North (NWT/Nunavut) to help lower northern communities' cost of living
- Potential to realize cold-weather testing opportunities within aerospace and hi-tech communities
- Availability of cargo processing facilities and services
- Availability of dependable revenue stream for Capital and 0&M
- Political Support for the growth and development of this airport
- Additional cross training of ERS and airfield maintenance staff possible
- Land available for commercial development
- Potential for international flights
- Year-round non-stop air service to Vancouver
- Increased international tourism with focus on Asia and Europe
- Additional airside passenger services
- Potential to enhance the passenger experience through better amenities, sense of place
- Potential for additional federal support for Northern airports

THREATS & CHALLENGES

- Financial performance of regional and northern airlines
- Pressure from airlines on airports to reduce costs and keep fees below cost-recovery
- · Increasing regulatory burden
- Downturn in the exploration and mining industry
- Fluctuations in the economy and the GNWT budget makes planning more difficult



4. 2016-2017 and 2017-2018 Report Card

The past 18 months has been a period of significant change, and planning for further change in the near future. Significant achievements since 2016 include:

- Developing a change management process to achieve the most significant change in the approach to the airport business at YZF since the federal transfer in 1995;
- Tabling and achieving legislative support to create the Yellowknife Airport Revolving Fund;
- Development of a communications plan to update the Airport's marketing materials, identify key stakeholders and inform the community of the importance of YZF to the NWT economy;
- Undertaking significant general stakeholder engagement that saw GNWT staff meet with 40 separate groups and consultations with the general public, which overall resulted in constructive feedback. Stakeholder inputs were taken into consideration as plans were finalized to create the YZF Revolving Fund structure;
- A more proactive engagement with the Airport's key air carrier business partners, and the
 activation of the Airline Consultative Committee at YZF's prompting to provide a high-level
 forum to discuss future business opportunities and capital investments;
- Development of a longer-term capital investment needs assessment;
- Moving to a more business-like approach in all aspects of Airport operations, management and development, including the need for financial sustainability. This included the creation of the Airports first standalone business plan, a review of aeronautical rates and charges, and the introduction of an airport improvement fee to fund capital; and
- Considerable behind the scenes work to identify the real cost of operations and quantum of revenue streams to enable future financial projections to be based on a more sound footing.

Specific actions taken in the past year include:

- Established a community-based, business-focused Economic Advisory Committee to provide a link to the NWT business community and to help identify opportunities to deepen YZF's impact on the YK and NWT economies;
- Worked closely with CATSA to identify and cost in-terminal screening options to maintain a secure environment, ease congestion and improve passenger service throughput which were identified as important by many stakeholders: Guy Architects is currently designing improvements, which should be in place in 2018;
- Updated the *Public Airports Fees Regulations* and other legislation necessary for YZF's future sustainability and development;
- Worked closely with the airport community to identify bottlenecks and inefficiencies within the current operation, such as de-icing and car parking, and to proactively develop options and solutions; additional parking lot facilities, which came on-line in July 2017.



- Developed and implemented an active marketing effort to promote nonstop access to Yellowknife from Vancouver. Service was added in December 2017; and,
- Developed an outline concept for the renewal of the current ATB and an ATB Retail and Food/Beverage Concession Strategy to improve services to YZF's clients and maximize the Airport's non-aeronautical revenues.



5. Moving Ahead: Focused on the Future

5.1. Introduction

YZF does not operate in a vacuum and to be successful in the future the Yellowknife Airport must understand where it has come from, what has worked well in the past and, prospectively, what needs to be done to meet the ever changing needs of the industry and the airport community it serves. YZF is faced with a significant period of change which will need to be proactively managed to ensure that the best outcomes are achieved in the short- to medium-term.

5.2. Aspirations and Options for Change

With appropriate investment, YZF could build on the impressive contribution it makes to the whole NWT economy. YZF already enhances the prosperity of the NWT by:

- Directly generating employment and income by carrying out its mission, and indirectly
 through the many companies supporting activity at the airport, such as logistics firms and a
 range of domestic and technical suppliers to the aviation sector;
- Enabling those firms directly involved in the transportation of people and cargo by air, and those undertaking essential activities such as medical transportation and firefighting, to carry out their functions in an effective and efficient manner;
- Enhancing and promoting the welfare of citizens; and
- Improving connectivity to other parts of Canada and to other parts of the world, thereby
 acting as a catalyst to enhance business and tourism growth. Simply put, air transportation
 better allows visitors and residents to go where they want, when they want for business or
 pleasure.

Development will create new opportunities to grow the Northern economy, create jobs and attract business and visitors. Revenues generated at YZF could be invested in:

- Improvements to maintain a safe, secure airport;
- Improvements to runways and airport facilities;
- Improvements to operational efficiencies;
- Enhancements to attract commercial growth and development opportunities for all aviation-related businesses:
- Facilities focused on tourism and the growing needs of the resource sector; and
- Upgrades to improve the customer experience.

5.3. Airport Marketing and Communications

Product. YZF is a designated strategic infrastructure asset under the National Airports Policy. The Airport serves Yellowknife and its surrounding region and supports the regional economy through commercial and private aviation services. It also provides a primary gateway to northern NWT where there are significant resource, forestry and agricultural activities.



YZF is also the NWT's primary travel gateway to the South: the Airport's CATSA run aviation screening facilities allow passengers connecting at southern airports to transfer seamlessly through their main concourses without the need for passenger or baggage rescreening.

YZF plays host to a number of different airport related businesses and organizations: commercial and scheduled charter aircraft, commercial rotary wing operators, local and visiting private aircraft operators, military operations, and supporting fuelling and aircraft maintenance activities. More specifically, the airport provides:

- A reliable, safe, efficient facility for air service;
- A base for operations for private fixed wing and rotary wing operators;
- Facilities for transfer of cargo to and from aircraft;
- Initial and advanced flight training; and
- Maintenance services for helicopter and fixed wing aircraft.

Pricing. In updating YZF's fee structure, the GNWT has applied the following principles:

- Fees will be competitive, while recognizing the cost of operating in the North;
- Fees will be set to maintain and operate a self-sufficient airport;
- Revenues will be retained in the YZF Revolving Fund which will be the primary source for funding capital projects;
- GNWT will work with stakeholders (air carriers) when implementing aeronautical fee increases; and
- GNWT will maximize non-aeronautical revenues to decrease charges to air carriers over time.

Air Service. Stakeholders – residents, business and tourist interests – have identified additional year-round non-stop service to Vancouver as a priority, as well as working with carriers with interlining agreements to expand one-stop service to Asia-Pacific and Europe. Funds for the initial work have been included in the Business Plan.

Promotional Activities. YZF will apply additional marketing resources to promote the Yellowknife Airport in general. Anticipated actions include:

- Meeting regularly with tourism and business sector representatives, including NWT Tourism, the Department of Industry, Tourism and Investment, the NWT Chamber of Mines, and the City of Yellowknife, as well as the NWT and Yellowknife Chambers of Commerce.
- Participating in territorial, and city advertising programs promoting tourism and economic development.
- Continuing engagement with Edmonton International Airport to explore cargo and business commercial opportunities that have the potential to compliment both airports.
- Working with the YZF Economic Advisory Committee to identify and realize opportunities.
- Actively building on YZF's cold-weather testing capabilities.



Communications. The primary focus of the communications activity will be on building the YZF "brand" through a series of multi-platform communications targeting pre-identified audiences. A contemporary, user-friendly website will be developed as the main communications platform for those seeking information in relation to YZF. The website will be supplemented by other communications channels such as: social media, print, radio, video, and other web-based application, along with participation in business and transportation conferences, and special event activities.

Messaging will support the retention and acquisition of business partners, maximizing economic opportunities, and maintaining an ongoing commitment to YZF's overarching strategic goals.

In addition to sharing YZF good news stories dedicated to the positive impact of Yellowknife Airport as an economic engine for the City of Yellowknife and the NWT, communications will highlight improvements and enhancements to YZF as a safe, secure, transportation hub and as a better cargo, leisure travel, and business development experience.

5.4. Strategic Goals

The following Strategic Goals were identified with Yellowknife Airport stakeholders as important to the future of YZF and the wider NWT economy:

- SG1. Operate a Safe and Secure Airport that Serves the North.
- SG2. Proactively Engage with Aviation Partners, Airport Stakeholders and Northerners.
- SG3. Operate in a Financially Responsible Manner, Enhance Operational Efficiencies, and Deliver Exceptional Services and Facilities.
- SG4. Maintain a Modern, Healthy, Transparent and Accountable Work Environment.
- SG5. Enhance Air Service and Expand Connectivity with The North in Support of Communities, Tourism and Economic Development.
- SG6. Identify and Promote Airport Development in Support of Aviation, Logistics and Commercial Opportunities.



5.5. Action Plan¹¹

Based on these longer-term goals, the following short- to medium-term actions have been developed. Achievements against plan will be reported in annual business plans going forward.

SG1. Operate a Safe and Secure Airport that Serves the North

Previous Business	Plan
Action 1.1	Maintain Regulatory Compliance
Timeline	On-going
Lead	Airport Manager (APM)
Status	In compliance
Action 1.4	Implement ATB Infrastructure changes to accommodate CATSA+
Timeline	June 30, 2018
Lead	APM
Status	Awaiting design completion
2018-2019 New A	ctions
Action 1.5	Project Manage HBS Upgrades
Timeline	September 2018
Lead	APM
Status	In design

SG2. Proactively Engage with Aviation Partners, Airport Stakeholders and Northerners

Previous Business	Plan
Action 2.2	Develop and implement an Airline Operating Agreement
Timeline	November 30, 2017
Lead	APM/ Regional Superintendent (RS)
Status	On-going. Comments received from air carriers and the Department of Justice has addressed issues.
Action 2.4	Actively support Tourism to create and participate in "Destination NWT"
Timeline	On-going
Lead	RS and Director, Policy, Planning and Communications (DPPC)
Status	Meeting planned with new NWTT Board to discuss support to Tourism
Action 2.6	Continue community and stakeholder engagement
Timeline	On-going
Lead	RS/DPPC
Status	Continuing
Action 2.7	Update Airport Master Plan

 $^{^{11}}$ The following acronyms are used for action item leads listed in the text: APM, Airport Manager; DP, Director of Policy; RS, Regional Superintendent North Slave.



Timeline	November 30, 2018
Lead	RS
Status	Contract initiated in January 2018

SG3. Operate in a Financially Responsible Manner, Enhance Operational Efficiencies, and Deliver Exceptional Services and Facilities

Previous Busine	ss Plan		
Action 3.4	Enhance existing and identify new non-aeronautical revenue sources and operational		
	cost reduction opportunities		
Timeline	On-going		
Lead	APM/RS		
Status	In process		
Action 3.5	Identify metrics to track key operations such as cost per enplanement, screening		
	throughput, checked baggage delivery times, lost bags, de-icing delays, etc., and provide		
	to carriers and airport businesses to assist in stream-lining and improving their		
	operations and profitability		
Timeline	March 31, 2018		
Lead	RS/APM		
Status	In process		
Action 3.7	Plan and Implement Common Use Terminal Equipment (CUTE)		
Timeline	March 31, 2018		
Lead	APM		
Status	Contract awarded to Rockwell Collins for hardware and support		
Action 3.9	Identify passenger needs and develop options and solutions to create a sense of place		
	for visitors, and address identified customer service improvements		
Timeline	December 30, 2018		
Lead	RS/DPPC/APM		
Status	In process		
Action 3.15	Finalize YZF Business Plan (2018-2019 to 2022-2023)		
Timeline	January 30, 2018		
Lead	RS		
Status	Complete. Copy sent to Standing Committee on Economic Development and		
	Environment for review.		
A 0.4.6			
Action 3.16	Develop a comprehensive 2018-2019 Capital Program in consultation with air carriers		
m: l:	and airport stakeholders		
Timeline	March 31, 2018		
Lead	APM		
Status	In process		
2018-2019 New	Actions		
Action 3.18	Complete Design for Centralised De-icing Facility		
Timeline	March 31, 2018		
rinienne	Mai Cii 31, 2010		



Lead	APM
Status	WSP awarded contract September 2017
Action 3.19	Construct new Centralised De-icing Facility
Timeline	October 31, 2019
Lead	APM
Status	Tender to be issued following receipt of Design
Action 3.20	Complete YZF Asset Condition and Replacement Study
Timeline	June 30, 2018
Lead	RS/APM
Status	Contract awarded

SG4. Maintain a Modern, Healthy, Transparent and Accountable Work Environment

Previous Business Plan		
Action 4.3	Continue engagement with YZF staff to deliver exceptional customer service	
Timeline	On-going	
Lead	APM	
Status	On-going	

SG5. Enhance Air Service and Expand Connectivity with The North in Support of Communities, Tourism and Economic Development

Previous Busine	ss Plan
Action 5.3	Develop and implement active marketing effort to promote one-stop access to
	Yellowknife from Asia
Timeline	December 30, 2017
Lead	RS/APM
Status	Started in Fall 2017
Action 5.4	Develop and implement active marketing effort to promote additional domestic cargo
	services from the YZF Hub
Timeline	September 30, 2018
Lead	APM/RS
Status	On going
2018-2019 New	Actions
Action 5.5	Develop and implement active marketing effort to promote additional non-stop air
	service routes from YZF
Timeline	March 31, 2019
Lead	APM
Status	Data gathering began January 2018



SG6. Identify and Promote Airport Development in Support of Aviation, Logistics and Commercial Opportunities

Commercial Op	•
Previous Busines	
Action 6.4	Develop Joint Multi-modal Logistics Business Concept and Opportunity with NWT
	logistics and expediting companies in conjunction with Edmonton International
	Airport
Timeline	July 31, 2020
Lead	RS/APM
Status	In process
Action 6.5	Develop a commercial development strategy for aviation and non-aviation business
	opportunities on YZF lands
Timeline	March 31, 2019
Lead	RS/APM
Status	In process
Action 6.6	Identify the aviation related infrastructure and government services required to
	facilitate long-haul international flights at YZF and develop an overall benefits and
	costs analysis to assist in long range planning
Timeline	June 30, 2018
Lead	APM
Status	Ongoing
2018-2019 New	
Action 6.7	Create an ATB Retail and Food/Beverage Concession Development Plan
Timeline	June 30, 2018
Lead	APM/RS
Status	RFP to be issued
Action 6.8	Develop overall design for ATB renewal based on carrier, passenger, tourism and
riction 6.6	community consultation, and commercial opportunities
Timeline	November 30, 2018
Lead	RS/APM
Status	RFP to be issued
Action 6.9	Create a marketing program for Airport Development including Cold Weather Testing,
	Parking, Northern Airship Operations
Timeline	May 31, 2018
Lead	APM/DP
Status	In process



6. Capital Needs and Planned Expenditures

6.1. Introduction

There are two broad streams of major capital expenditures: those that are aviation related (and thus funded by the YKAIF); and those that are commercial development orientated. Each is dealt with separately below.

YZF has developed a longer term, five-year needs assessment of the Airport's likely capital needs from which a more focused medium-term, two-year Capital Program has been identified with input from air carriers through the Airline Consultative Committee (ACC).

From the Capital Program the Airport will develop its annual Capital Expenditure budget based on projected YKAIF revenues and other funding available for capital investments, such as Airport Capital Assistance Program (ACAP), a discretionary federal airport fund that will cover up to 100% of the capital expenditure (although most eligible items are covered on a discretionary basis to a limit of 85%).

6.2. Long-Term Capital Needs Assessment (2018-2019 to 2022-2023)

Aviation Related Capital

To meet the potential opportunities YZF has identified and to maintain regulatory compliance, its longer-term aviation related capital needs are shown in Figure 5. Investments for these capital needs will be made from the YKAIF revenues held within the Revolving Fund.

Operating Surfaces & Flight
Aids
\$15.95M

Aviation Related
Capital Needs
\$29M

Aviation Mobile Equipment
Renewal
\$2.90M

Air Terminal Building (ATB)
Renewal
\$4.35M

Aviation Related
Capital Needs
\$29M

Non-ATB Aviation Facilities
Renewal
\$4.50M

Figure 5. Aviation Related Capital Needs





Commercial Development Related Capital

To meet the potential commercial opportunities YZF has identified its five-year commercial development related capital needs are shown in Figure 6.

Figure 6. Commercial Development Capital Needs 2018-2019 to 2022-2023

Commercial Development Investments

\$6.65 million

There are several opportunities that are included in the commercial development estimate. For instance, GNWT has identified the potential to improve air cargo handling in the space occupied by the old maintenance garage and provision is included in the 2018-2019 capital plan to demolish the old garage.

Opening the west side of the airfield is seen to have major benefits. Airport management has indicated that there is little airport land left to develop that is in its current serviced parcels and developing new serviced parcels would require road access. In addition, to move forward with this development would require mains water/sewer to be extended to this area.

YZF will work with Edmonton Airports on identifying and implementing commercial development opportunities.

6.3. Medium-Term Capital Program (2018-2019 and 2019-2020)

The medium-term Capital Program is predicated on meeting all regulatory standards and requirements, plus those investments addressing essential safety/security and operational efficiency issues. As at November 2017, the following investments – subject to annual budgetary approval and funding allocation – are as follows:

2018-2019

- Upgrade ATB Pre-Board Screening Facility (with CATSA funding support);
- ATB Airline Check-in Enhancements (Common Use);
- Hold Baggage Screening Modifications (with CATSA funding support);
- Integrated De-icing Bay Design;
- On-going Airside Pavement Renewal Program;
- Potential Glycol Retention Pond Liner Renewal;
- Combined Service Building Capacity Enhancements;
- Repurpose former Airport Firehall;
- Redevelop ATB second floor offices for air carriers use;
- Public Car Parking Facility Enhancements; and,
- Airfield lighting upgrades.



2019-2020

- Repurpose former Airport Firehall for Airport Ops/management offices;
- Redevelop ATB second floor offices for air carriers use;
- Expand departures holdroom into former air carrier space on ATB first floor;
- Build centralised de-icing facility;
- On-going Airside Pavement Renewal Program;
- Potential Glycol Retention Pond Liner Renewal;
- Airfield Lighting System Upgrades;
- Airport fencing renewals;
- Miscellaneous airside mobile equipment upgrades; and,
- Combined Service Building Capacity Enhancements.

In the short to medium-term, YKAIF revenues will fall short of the identified non-funded capital expenditures need of \$8 million in 2018-2019 and \$8.75 million in 2019-2020. Capital expenditures authorization controls and/or alternate short-term funding sources will be required.

Beyond the currently identified needs, there are also known developing issues that will have implications for capital investments at YZF including:

- Runway End Safety Areas (RESA) are likely to be a regulated requirement in the next few
 years but may not attract federal funds to implement. With a significant price tag GNWT
 will need to look for a funding mechanism, including funds from the federal government, to
 implement and maintain YZF in regulatory compliance; and
- Some parking improvements will be required to enable the airport operator to accommodate growth and capture additional offsetting revenues. Depending on the final design, these investments (within the next five years) will be significant but will be undertaken based on the additional projected income which will be generated.

6.4. External Capital Investment Funding Sources

YZF will continue to look for opportunities for external capital funding, including federal programs. The GNWT has worked with stakeholders to make the case to the federal government for special recognition of the strategic importance of northern aviation infrastructure. The GNWT will continue to pursue these opportunities.



7. FINANCIAL PROJECTION

7.1. Base Case Financial Analysis

A financial pro forma for 2018-2019 through 2022-2023 has been developed based on the Revolving Fund operating model, and the assumptions outlined in Appendix B.

With a significant change program in place the assumptions and allocations in the final two years of the projections are more speculative at present.

A Net Operating Income (NOI) financial pro-forma (including the nine-month period July 1, 2017 to March 31, 2018) is shown in Figure 7.

YELLOWKNIFE AIRPORT REVOLVING FUND	FY2017-18 f (9 Months)	FY2018-19 f	FY2019-20 f	FY2020-21 f	FY2021-22 f	FY2022-23 f
Expenses						
Annual O&M Expenses	\$4,858,046	\$7,448,049	\$7,569,210	\$7,568,794	\$7,746,870	\$7,928,508
GNWT Chargeback (PILT, etc)	\$1,182,681	\$974,911	\$980,669	\$986,542	\$992,533	\$998,643
Asset Amortization/Depreciation	\$1,733,204	\$1,809,896	\$1,838,250	\$1,698,267	\$1,510,614	\$1,360,491
Total Expenses	\$7,773,931	\$10,232,857	\$10,388,129	\$10,253,604	\$10,250,017	\$10,287,642
Revenues						
Aeronautical Revenues	\$5,899,787	\$8,601,280	\$8,945,479	\$9,303,517	\$9,675,953	\$10,063,368
Non-Aeronautical Revenues	\$2,255,588	\$3,413,475	\$3,882,194	\$4,421,300	\$5,102,703	\$5,971,282
Total Revenues	\$8,155,375	\$12,014,755	\$12,827,673	\$13,724,818	\$14,778,656	\$16,034,649
NET OPERATING INCOME (LOSS)	\$381,444	\$1,781,898	\$2,439,544	\$3,471,214	\$4,528,639	\$5,747,007
Aeronautical Related Cost Recovery Ratio	82%	91%	94%	99%	103%	106%

Figure 7. Net Operating Financial Projections

Significant elements highlighted in this table include:

- The operating deficit is projected to be eliminated in the first nine months of the Revolving Fund, although only 82% of aeronautical expenses are recovered in 2017-2018.
- With the July 2017 increases in aeronautical charges, and modest traffic growth, full cost recovery is achieved in the 2020-2021 timeframe.

YELLOWKNIFE AIRPORT REVOLVING FUND FY2018-19 f FY2019-20 f FY2020-21 f FY2021-22 f FY2022-23 f (9 Months) **AVIATION Related Capital USES: Identified Capital Needs (Aviation)** (\$8,775,000 (\$4,175,000) (\$3,100,000 (\$3,800,000) SOURCE: Potential Borrowing & Grants \$150,000 \$850,000 \$0 \$0 \$0 \$0 \$4,565,752 **SOURCE: Airport Improvement Fee** \$1,799,068 \$3,790,305 \$4,411,354 \$4,725,553 \$4.890.947 (\$4,209,695 (\$4,363,646 \$1,625,553 \$1,090,947 **Annualised Net Capital - Aviation** \$999,068 \$390,752 Rev Fund Cumulative Net Capital - Aviation \$999,068 (\$3,210,627) (\$7,574,273 (\$7,183,521 (\$5,557,969 (\$4,467,021) **COMMERCIAL Development Related Capital USES: Identified Capital Needs (commercial)** (\$950,000) (\$2,700,000 (\$400,000) \$0 (\$50,000) (\$2,600,000 \$5,747.007 SOURCE: Net Operating Income \$381,444 \$1,781,898 \$2,439,544 \$3,471,214 \$4,528,639 **Annualised Net Capital - Commercial** \$331,444 \$831,898 (\$260,456 \$3,071,214 \$1,928,639 \$5,747,007 Rev Fund Cumulative Net Capital - Commercia \$331,444 \$1,163,342 \$902,886 \$3,974,100 \$5,902,739 \$11,649,747

Figure 8. Capital Need and Finance Projections



A rolling five-year capital needs assessment, two-year Capital Plan and Annual Capital Budget will be developed throughout the course of this Business Plan timeline. On-going stakeholder consultation concerning developing needs and capital expenditures will continue.

On the basis of the asumptions already outlined, Figure 8 indicates that on a cumulative basis though March 31, 2023 the identified aviation capital requirements exceed YKAIF generated funds, although there is capacity to fund the capital investments from the accumulated operations surplus: this projected Total Cumulative Net Capital – both aviation and commercial related – is shown in Figure 9.

Figure 9. Total Cumulative Net Capital Projection

YELLOWKNIFE AIRPORT REVOLVING FUND	FY2017-18 f (9 Months)	FY2018-19 f	FY2019-20 f	FY2020-21 f	FY2021-22 f	FY2022-23 f
Total Cumulative Net Capital Projection	\$1,330,512	(\$2,047,285)	(\$6,671,387)	(\$3,209,421)	\$344,771	\$7,182,725



APPENDIX A

YZF Tenant List¹²

¹² Source: Yellowknife Airport, October 2017

Yellowknife Airport Tenant List

Air Carriers (scheduled and charter):

- Air North Partnership
- Air Tindi Ltd.
- Bradley Air Services Ltd. (First Air)
- Summit Air (8199400 Canada Inc.) charter
- Buffalo Airways Ltd.
- Canadian North Inc.
- Great Slave Helicopters Ltd.
- Jazz Aviation LP
- Matrix Aviation Solutions Inc
- Northwestern Air Lease
- Summit Helicopters
- Techi?q Ltd. (North-Wright Airways Ltd.)
- Ursus Aviation (charter)
- WestJet Airlines
- Diamond Air Inc.

General Aviation (corporate and private)

- Department of National Defence
- RCMP (Air Services branch)
- ~ 50 private and corporate aircraft owners

Fuel / FBO / Aircraft Servicing

- Imperial Oil Ltd.
- Shell Canada Products Ltd.
- Strategic Aviation Services
- Northern Star Aviation (aircraft groomer).
- Suncor Energy Products Partner
- Superior Propane a division of Superior Plus LP (heating)
- Tundra Transfer Ltd.

Ground Transport incl. Car Rental

- Aurora Taxi Ltd.
- Yellowknife Ford Sales Ltd. (Budget Rent a Car)
- City Cab (1993) Ltd.
- Darryl's Shuttle Services Ltd.
- Larga Kitikmeot Ltd.
- Ted's U Drive Ltd. (National Car Rental)
- Deton Cho Logistics
- Yellowknife Chrysler Ltd. (Hertz Rentals)
- Yellowknife Tours Ltd.
- 4720 NWT Ltd. (Aurora Village)
- We Le Dai Corporation (Vital Abel)
- Chateau Nova Shuttle Service

Commercial Retail / Food and Beverage / Advertising

- Alanco Holdings Ltd.
- Bell Mobility Inc
- GT Technology Vending (novelty items)
- Hay River Liquor Retailers
- 7214936 Canada Inc. (Javaroma Gourmet Coffee and Tea)
- Hub Publications Ltd.
- Inukshuk Publishing
- Mohua Rasikal NWT Ltd. (Quiznos)
- Northern News Services Ltd.
- Tundra Transfer Ltd.
- Private Sky Aviation
- KBL Environmental Ltd.
- 4912 NWT Ltd. (Explorer Hotel)
- La Federation Franco-Tenoise

Cargo / Logistics / Freight Forwarding

- Buffalo Parcel Courier Service
- Canada Post Corp.
- 6380 NWT Ltd. (Det'on Cho Logistics Ltd.)
- Metcor Inc.
- Nolinor
- Partner Properties (G & G Expediting)
- BBE Expediting Ltd.

 Midnight Sun Energy Ltd. Territorial Beverages Ltd. Tetra Tech EBA Inc. Up Here Publishing Ltd. Kellett Communications Inc. Air Tindi Ltd. Summit Helicopters Ltd. Great Slave Helicopters Ltd. Scarlet Security Services Ltd. 	
GNWT Garda Security Screening Inc. NAV Canada Scarlet Security Services RS Cleaning Ltd. Thein Nguyen Services Concierge YZF Inc .	 Miscellaneous The Bottleshop Recycling Depot 506952 NWT Ltd. Yellowknife Golf Club Cooperative (recreation) Deepak International/Callidus Capital Corporation Diavik Diamond Mines Inc. Dominion Diamond Marketing Corp. Bell Mobility Inc. (Communication) SITA Inc. (Communication) Mike Priestner Real Estate (Aurora Ford)

APPENDIX B

Business Plan Assumptions

2018-2019 to 2022-2023 Business Plan Assumptions

Introduction

In developing the 2018-2019 to 2022-2023 Business Plan the following key assumptions have been used based on YZF's Mission, Vision and Goals, and the known changes that will affect the operation, management, development and investment in the Airport.

Legislative and Regulatory Changes

There are no airport-specific legislative or regulatory changes anticipated in the planning period.

Consumer Price Index (CPI)

A projected CPI of 2%.

Traffic Forecasts

- Passengers:
 - Passenger traffic increases by 3.5% in each year of the planning period from the 2015 base year;
 - 45% of the departing passenger traffic is intra-territorial and 55% is extra-territorial.
- Cargo: growth assumed to be flat for the first two years in the planning period based on current activity, and then +3% in Year 3, +4% in Year 4, and +5% in Year 5.
- Aircraft Movements:
 - Annual growth of 2% in air traffic movements has been assumed;
 - Air traffic mix (type, gauge of aircraft, etc.) remains stable over the forecast period.

Planned Revenue Enhancements

Aeronautical Fee Schedule Changes

The regulated Aeronautical Fee Schedule implemented on July 1, 2017 is unchanged through 2018-2019 and then Landing Fee Revenue, General Terminal Fee Revenue and Aircraft Parking Fee Revenue increases at rate of forecast movement growth plus CPI.

Fuel Concession Fee

The current Fuel Concession Fee Schedule whereby suppliers pay a base lease rate for properties on airport (\$2.40/m2) and a concession fee of \$0.0501 per litre of AvGas and \$0.0123 per litre on oils and lubricants dispensed, remains in effect. A concession fee is not charged on jet fuel pumped.

Common Use Terminal Equipment Fees

YZF will install Common Use Terminal Equipment (CUTE) and implement new common-use fees by March 31, 2018. It is recognized that counter space leases will decrease with the implementation of CUTE; however, it is assumed these revenue decreases will be offset by CUTE recoveries from the air carriers (for 0&M and capital expenditures).

Yellowknife Airport Improvement Fee (YKAIF)

The YKAIF will remain at \$20 for departing passengers travelling outside of the NWT, and \$10 YKAIF for departing passengers travelling within the NWT. This revenue stream will be segregated within the Revolving Fund and will fund essential aviation capital. It will be levied on most enplaned passengers, including those using a Fixed Base Operations (FBO) facility but not those "in-transit within 4 hours" to/from other NWT community airports.

It is assumed that 45% of the departing passenger traffic is intra-territorial and 55% is extraterritorial. In addition, 5% of departing passengers are assumed to be "in-transit" and so not subject to the YKAIF.

For planning purposes, YKAIF revenue for the first 12 months following implementation is assumed to rise gradually from approximately 40% of potential revenue in July 2017, to 60% in September 2017 to 90% in June 2018 to account for tickets having being purchased prior to YKAIF implementation.

Non-Aeronautical Revenue Changes

Commercial Fees / Rates:

Overall, it is assumed that lease revenues (ATB and non-ATB) will grow at the rate of inflation. A modest growth in number of leases and value (ATB and/or land) anticipated during the planning period.

Building Rentals. Some increases may be possible as leases come due for renewal. Increases to building rental fees, however, will be based on appraisals, and increases will reflect the length and timing of lease agreements. No net revenue increases have been assumed for planning purposes.

Land Lease / Rentals. It is assumed that lease rates and maintenance charges will increase with inflation as leases come up. The basis for change however should be an appraisal to ensure that leases are appropriate and in line with market rates in the community.

Commercial Land Development. Preliminary commercial land development options have been identified by YZF on the west side of the airport. There are, however, no immediate or short-term plans to implement these. The average per hectare development costs would need to be recovered and reflected in the implementation of a one-time development surcharge based on a per hectare rate. These development costs have not been identified or included in this business plan.

Air Terminal Concessions. Increases in scope for, and expansion of, retail and food concessions in the terminal building, combined with updates to existing contracts are expected to yield revenue increases in 2018-2019 through 2022-2023 of 25%.

Vehicle Parking Fees. Vehicle parking rates will increase by 10% effective November 1, 2017. Curbside parking charges are being added which it is estimated will yield \$250,000 annually from 2018-2019. Short-term parking capacity will increase by 50% in 2018-2019. Revenues will increase in step with this increase in capacity, and with increase in fees. Vehicle parking is included in "concessions" revenue and was estimated to be 50% of the concessions total in 2016-2017.

Planned Expenditure Changes

Organizational. Going forward, 28.5 FTE positions have been authorized with effective from 2018-2019, down from 30 shown in the Base Year plan. Any salary cost increases will be based on the GNWT/Union of Northern Workers (UNW) Collective Agreement.

Governance Model Changes. Additional professional services will be required to implement and maintain the Revolving Fund. An additional \$50,000 in 2018-2019 and \$35,000 per year thereafter is required for external audit.

Marketing and Promotion Costs. YZF recognizes that it will require enhanced promotional activities to create more business revenue and \$35,000 annually has been assumed.

Commercial Development Planning, Administration and Marketing. With a new emphasis on commercial planning, annual expenditures of \$180,000 have been built into the financial projections. Commercial development planning, marketing and implementation assistance will be undertaken by a qualified third party under contract.

Productivity Enhancements. \$50,000 investment annually has been assumed in hardware and software.

Miscellaneous Costs. A number of cost lines are assumed to increase with inflation, including:

- Materials and Supplies;
- Travel costs plus the additional travel for increased marketing efforts;
- Utilities costs:
- Contracts costs (plus adjustments); and
- Fees and payments.

Payments in Lieu of Taxes (PILT). PILT assumed to remain at 2015-2016 levels.

Asset Amortization. Amortization remains stable. New additions will be amortized based on the straight-line method over a period of 25 years for buildings and airside surfaces, and 15 years for mobile equipment and non-ATB facilities.

Strategic Goals. Beyond the specific expenditures outlined above, the following annual cost allowances associated with implementing identified miscellaneous actions have been assumed in the projections:

2018-2019: \$375,000 2019-2020: \$325,000 2020-2021: \$150,000 2021-2022: \$150,000 2022-2023: \$150,000

Planned Capital Expenses

A rolling two-year Capital Plan and Annual Capital Budget will be developed throughout the course of this Business Plan timeline. On-going stakeholder consultation concerning developing capital needs and the associated budget will be undertaken.

Aviation-related capital needs of approximately \$29 million have been identified for implementation during the five-year planning period and will be inflated at the rate of inflation to reflect the year in which the expenditure is incurred. Some of this capital expenditure will likely only be undertaken if outside sources of funding are available (such as ACAP). However, the degree of ACAP or other investment fund investment is not clear at this time and some capital expenditures may need to be financed:

2018-2019: \$8.850 million 2019-2020: \$8.775 million 2020-2021: \$4.175 million 2021-2022: \$3.1 million 2022-2023: \$3.8 million

Identified potential **commercial development capital expenditures** of \$6.7 million in 2017 dollars will be inflated at the rate of inflation to reflect the year in which the expenditure is incurred:

2018-2019: \$950,000 2019-2020: \$2.7 million 2020-2021: \$400,000 2021-2022: \$2.6 million