
Dawson City Airport Demand Forecast

Draft Report

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Executive Summary

The purpose of this study is to confirm the type and level of existing airport use, determine the sources of this demand and forecast future requirements. This study answers these questions:

- Who is using Dawson City airport, why and where are they from
- What has the historic pattern and level of airport use been and what could it become
- Whether present airport operating limitations are really constraining market development opportunities or restricting airline industry operations
- Whether community expectations concerning level of service and airport quality match market trends and growth forecasts.

Relocation of the Dawson City Airport has been considered for many years because of operational limitations. The current airport contains a single 5,000 foot gravel runway with emergency lighting, a non-directional beacon (NDB) and terminal building. It is located in the Klondike River valley approximately 20 kilometres south-east of the community adjacent to the Klondike Highway. Proximity to the valley walls and the height of the surrounding hills coupled with obstacle clearance standards and seasonal weather problems limits airport usability. The airport is certified for day use only instrument and visual flight rules (IFR/VFR).

Six technical studies have been completed over the past decade which have examined a number of options to improve airport operations. A site suitable for full VFR/IFR day and night operations has been identified at the Dempster Highway cut-off approximately 45 kilometres south-east of the community. Preliminary estimates of relocation costs exceed \$12.3 million dollars (1990). The City of Dawson City believes a new airport is an essential piece of community infrastructure necessary for continued economic prosperity. Others question the merit of such an investment.

Demand projections prepared in the past appear to have been overly optimistic. The *Yukon Aviation System Plan 2000* (1988) forecasted significant growth at Dawson City with 10,000 movements a year and 8,000 passengers arriving or departing through the airport by the year 1996. This growth has not materialised. The System Plan also predicted the airport classification would change from a regional centre to a national airport by the year 2001. Current trends reject such a notion. As further evidence of the low activity level at the Dawson City airport, Transport Canada will reduce the level of air navigation service from a Flight Service Station (FSS) to a Community Aerodrome Radio Station (CARS) effective May 31, 1995.

Research carried out for this study leads to the conclusion that even with a new airport Dawson City cannot generate sufficient traffic to attract mainline or direct jet charter service with any degree of regularity. The market only supports a third level regional carrier and this is not forecasted to change. The critical aircraft will remain in the 40-50 seat range similar to a Convair 580, HS-748 or Dash 8 during the summer months and 17-25 seat range in the winter (DC-3, DHC-6). A medium 19-seat

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prop-jet commuter aircraft such as a Beech 1900 or Jetstream 31 would be ideal for passenger service in this market over the long term.

Despite local perceptions, the cost and frequency of service to Dawson City matches market conditions. There is significant under-utilised seat capacity provided by both carriers. If Dawson City were not a convenient enroute stop for flights to Old Crow (the primary traffic generator) and Fairbanks or Inuvik, the community could not support the level of service it receives. With cost recovery today's focus, Dawson City is already hard pressed to justify the facility it already has.

A review of airport infrastructure, flight frequency and traffic patterns at 16 similar Canadian airports was conducted. Population and economic development forecasts were prepared for the Dawson City area and travel patterns examined. Air carriers in western Canada and Alaska were interviewed along with community representatives, and members of the tourism and mining industry to arrive at these conclusions.

Dawson City is the only airport out of 17 similar communities with an unpaved main runway and day only operating limitations. It has limited room to grow because of the proximity to the adjacent highway and surrounding hills. The airport is unable to accommodate present demands for additional apron space, a taxiway and hangar area unless the existing highway is relocated as proposed in the 1989 *Dawson City Airport Development Plan*.

This study answers the question of whether a new airport is needed at this time from a market demand perspective. The answer is that it is not. The existing runway, even with the current operational limitations can accommodate increased traffic demands and larger, more modern aircraft. Although the airport currently can accommodate aircraft up to and including B-737 jets, the critical aircraft from a demand perspective is, at best, in the 40 to 50 seat range.

The Dawson City airport dilemma is this. Although a new, improved airport cannot be justified, improvements to the present airport are needed and merit re-examination to improve overall usability. The airport is only part of the aviation problem. Service frequency and aircraft type are dictated by market conditions including passenger loads and prices. Dawson City residents need to travel more by air and pay higher prices for year-round service to create the demand that will warrant service improvements. Other issues such as the difficulty of mainline connections also need to be resolved. Finally, the Whitehorse and Fairbanks airports need to grow and attract more flights before Dawson City feels significant growth pressure. That neither of these full service airports with their larger market areas, has been able to attract additional aviation industry interest confirms the new realities in which Dawson City must operate.