



**TOWN OF CRESTON
SPECIAL COMMITTEE OF THE WHOLE MEETING AGENDA**

Tuesday, March 18, 2025

9:00 AM

Council Chambers, 238-10th Avenue North, Creston, BC

1. **CALL TO ORDER**
2. **TRADITIONAL TERRITORY ACKNOWLEDGEMENT**
3. **ADOPTION OF AGENDA (and additional items if necessary)**
RECOMMENDATION
THAT the agenda for the Special Committee of the Whole meeting of March 18, 2025, be adopted.
4. **BUSINESS**
 - a. Ben Crooks, HM Aero, Creston Valley Regional Airport Overview of Draft Airport Master Plan
5. **QUESTION PERIOD**
6. **ADJOURNMENT**
RECOMMENDATION
THAT the Special Committee of the Whole Meeting of March 18, 2025 be adjourned at TIME.



Creston Valley Regional Airport Town of Creston

Master Plan

Draft Report | March 6, 2025

Acknowledgements

Creston Valley Regional Airport is located on the unceded traditional territory of the yaqan nu?kiy within the Ktunaxa Nations. The yaqan nu?kiy have inhabited the lands adjacent to the Kootenay and Columbia Rivers, as well as the Arrow Lakes of British Columbia, for over 10,000 years. The Town of Creston and Lower Kootenay Band have a positive working relationship that is underscored by the 2009 Memorandum of Understanding and Friendship that continues to guide community relations.

This Master Plan was overseen by a steering committee comprised of the following Town of Creston representatives:

- Mike Moore – Chief Administrative Officer;
- Kirsten Dunbar – Corporate Officer;
- Steffan Klassen – Director of Finance & Corporate Services; and
- Joel Comer – Manager of Community Planning & Development.

The Province of British Columbia provided financial support through the British Columbia Air Access Program. The contributions of the Creston Valley Regional Airport Society to the preparation of this report are acknowledged and appreciated.

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1 INTRODUCTION

1.1 Project Overview

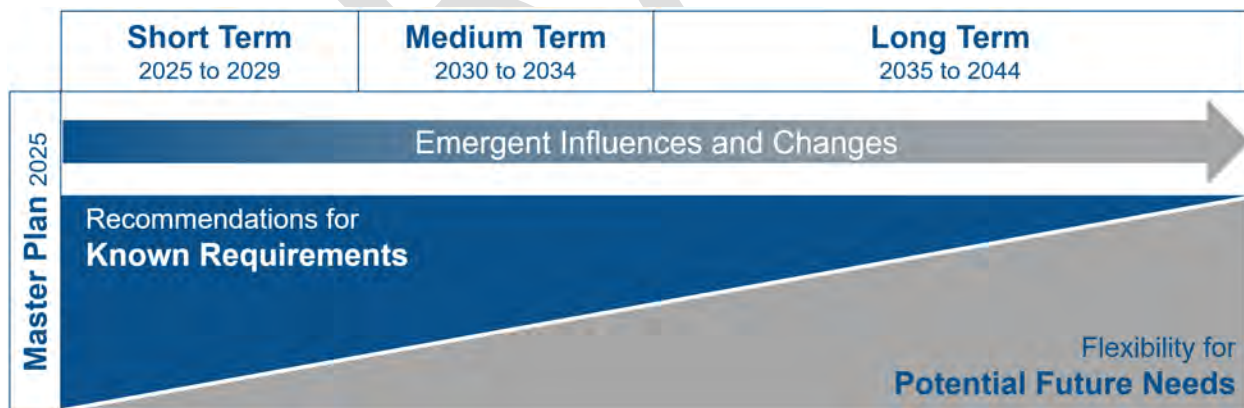
Creston Valley Regional Airport (the “Airport”) is owned by the Town of Creston (the “Town”) and operated by the Creston Valley Regional Airport Society (the “Airport Society”). In May 2024, the Town retained HM Aero Aviation Consulting (“HM Aero”) to complete an Economic Viability Study and Master Plan to ensure the long-term sustainability of the Airport. The Economic Viability Study was received by Town Council on December 3, 2024.

The Creston Valley Regional Airport Master Plan (the “Master Plan”) expands on the initial exploration provided through the Economic Viability Study and has been developed to serve as the primary resource guiding the governance, administration, and development of the Airport across a 20-year period encompassing three planning horizons:

1. **Short Term:** 2025 to 2029;
2. **Medium Term:** 2030 to 2034; and
3. **Long Term:** 2035 to 2044.

The approach taken with the Master Plan’s recommendations over time is shown in Figure 1.1. Detailed requirements are identified for the Airport in the short and medium terms based on known and reasonably anticipated conditions. In the later years of the Master Plan, the focus changes to providing protection and flexibility for meeting potential future needs that are not clearly defined in 2025. As described in Section 10, the comprehensive review and potential updating of the Master Plan will be required at the end of the short-term planning horizon to ensure the document will continue to be a relevant and effective resource, and a new Master Plan will be required at the end of the medium-term planning horizon.

Figure 1.1 - Planning Approach



1.2 Stakeholder and Community Engagement

The collection and assessment of the perspectives of Airport stakeholders, elected representatives from the Town and Regional District of Central Kootenay (“Regional District”), and community members was a priority during the preparation of the Master Plan. The engagement efforts completed with these groups are outlined below and findings are integrated throughout the document.

1.2.1 Airport Stakeholders

The following entities were identified by the Town and HM Aero as being direct stakeholders in the Airport and were engaged through in-person and virtual meetings:

- British Columbia Emergency Health Services (BCEHS);
- British Columbia Wildfire Service (BCWS);
- Canada Border Services Agency (CBSA);
- Carson Air;
- Creston Valley Chamber of Commerce;
- Creston Valley Search and Rescue;
- Creston Valley Tourism Society;
- Hope Air;
- Interior Health – East Kootenay;
- Provincial Emergency Program (PEP) Air – Southeast Zone, Creston;
- Regional District – Community Sustainability;
- Regional District – Planning;
- Regional District – Utilities;
- Royal Canadian Mounted Police (RCMP) – E Division Air Services; and
- RCMP – Creston Detachment.

An in-person discussion session was hosted with the Creston Valley Flying Club and the Airport’s hangar tenants on September 26, 2024, with six individuals in attendance.

1.2.2 Creston Valley Regional Airport Society

The Airport Society’s Directors were engaged through two workshops:

1. An initial workshop was held on September 24, 2024, with seven representatives in attendance; and
2. The draft Master Plan recommendations will be reviewed on March 17, 2025.

1.2.3 Elected Representatives

Elected representatives from the Town and Regional District were engaged through a Special Committee of the Whole meeting on September 26, 2024. An overview of the project was presented by HM Aero and attendees were guided through a discussion session. The following Town and Regional District representatives were in attendance:

- Mayor Arnold DeBoon;
- Councillor Monique Arès;
- Councillor Keith Baldwin;
- Councillor Denise Dumas;
- Councillor Norm Eisler;
- Councillor Carolyn Hawton;
- Councillor Megan Holland;
- Area A Director Garry Jackman; and
- Area B Director Roger Tierney.

A second workshop will be convened on March 18, 2025 to review the draft recommendations of the Master Plan with the Town and Regional District’s elected representatives.

1.2.4 Community Engagement

Community perspectives were collected by HM Aero and the Town through:

1. A **project information webpage** that was launched on Let's Talk Creston in August 2024. The Let's Talk Creston page provided an overview of the project, information on how residents could engage with the project team, and a seven-question survey; and
2. An **open house** that was facilitated by the Town and HM Aero on September 25, 2024 at the Creston and District Community Complex. The open house included informational boards, paper copies of the online survey, and information on online participation.

In addition, the Creston Valley Chamber of Commerce independently hosted an online survey using the questions from Let's Talk Creston, with 32 responses received. Taken together, a total of 98 surveys were received through the preceding engagement methods:

- 57 responses were received through Let's Talk Creston;
- 32 responses were collected through the Creston Valley Chamber of Commerce's survey; and
- Nine paper surveys were received at the September 25, 2024 open house.

As shown in Table 1.1, approximately half of all survey respondents identified as being residents or representatives of a household, with one third of respondents representing a business or organization; all responses received through the Chamber of Commerce were assumed to belong to the latter category. When adjusting to exclude respondents that did not provide a location, 60% of respondents reside in Creston, 21% in Electoral Area B, 14% in Electoral Area C, and 5% in Electoral Area A.

Table 1.1 - Survey Respondent Data

Respondent Type	Proportion	Respondent Location	Proportion
Resident or Household	51%	Creston	39%
Business or Organization (Note 1)	36%	Central Kootenay – Electoral Area B	13%
Airport Tenant or Aircraft Operator	7%	Central Kootenay – Electoral Area C	9%
Other or No Answer	6%	Central Kootenay – Electoral Area A	3%
Total	100%	Other or No Answer	36%
Note 1: All responses through the Chamber of Commerce are assumed to represent Business or Organization respondents.		Total	100%

2 REGIONAL CONTEXT

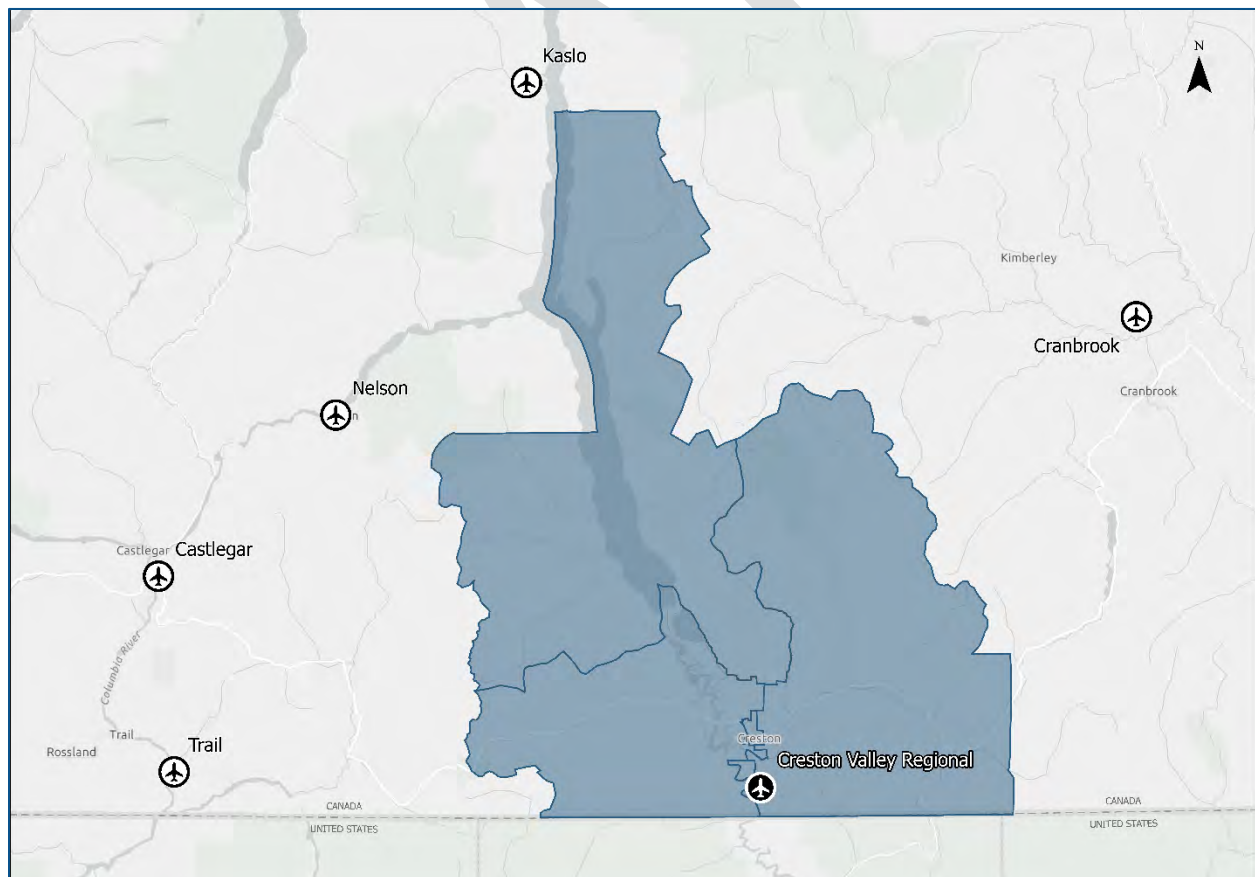
The Airport serves the needs of the residents, businesses, and visitors that define its regional context, also referred to as its catchment area. The demographic and economic composition of the catchment area influences demand for aviation services at the Airport. Demand for the Airport is also influenced by travel distances and times within and beyond the catchment area and the availability of other facilities that jointly form the regional airport system.

2.1 Catchment Area Overview

The Airport is located south of the municipal boundary of Creston in Electoral Area B of the Regional District. Based on the access times by road to Creston and alternative airports in Castlegar, Cranbrook, Kaslo, Nelson, and Trail, the Airport's main catchment area is approximated through five census subdivisions: Creston, Creston 1 Reserve, and Electoral Areas A, B, and C (Figure 2.1).

As described in Section 3.5, aviation services operated from the Airport may extend beyond the boundaries of the catchment area, such as aircraft responding to a wildfire in Area G from the Airport, and end users may travel from outside the catchment area to depart from the Airport, such as a patient from Castlegar being transported by road to Creston for an air ambulance transfer. Conversely, catchment area residents, visitors, and businesses also use airports located outside of the region.

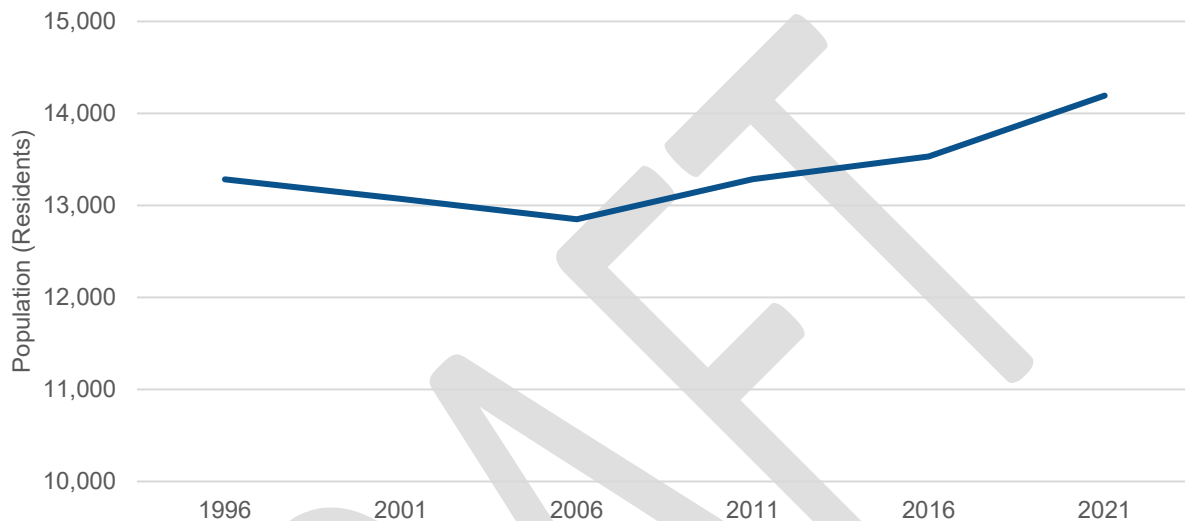
Figure 2.1 - Catchment Area Overview



2.2 Population

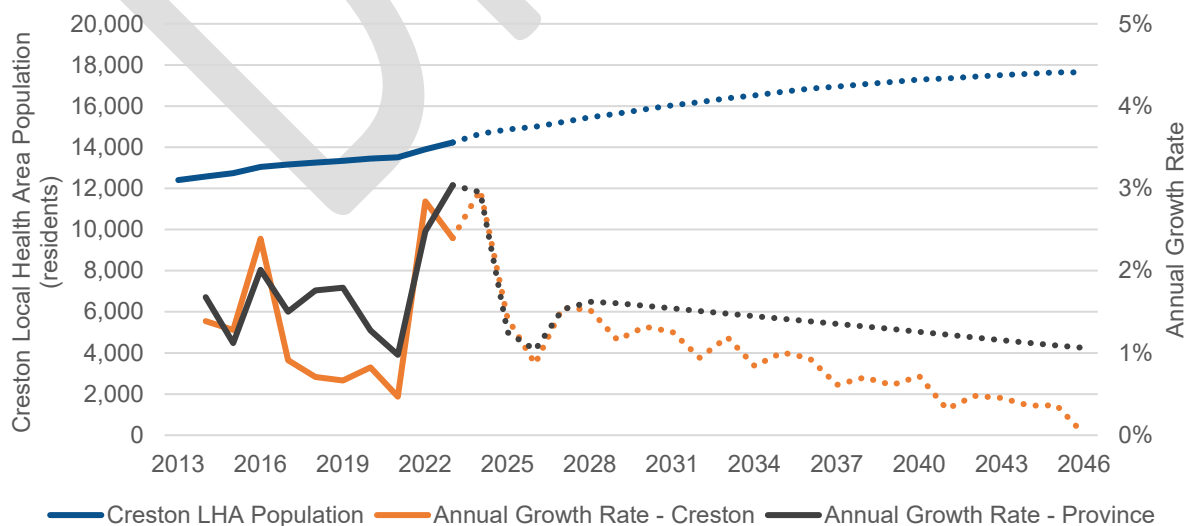
The population of the catchment area has grown since 2006 as shown in Figure 2.2, following a period of decline in the preceding two censuses. The population has increased by 10% from approximately 12,900 residents in 2006 to 14,200 residents in 2021. The Town of Creston is the largest community in the Creston Valley and comprises 39% of the total population of the catchment area, with the balance of the population located throughout the surrounding census subdivisions.

Figure 2.2 - Catchment Area Population (Statistics Canada)



The Province of British Columbia (the “Province”) provides population estimates and projections, with data for the Creston Local Health Area reviewed. Based on the Province’s projections, the population of the catchment area may increase by 24% between 2023 and 2046 to approximately 17,600 residents, as shown in Figure 2.3. Average annual growth is projected by the Province for Creston at approximately 1.0% per year. This rate of growth, while positive, is not anticipated to match the overall provincial projected increase of 38% between 2023 and 2046.

Figure 2.3 - Creston Local Health Area Population Projections (Province of British Columbia)



2.3 Economic Composition and Services

The catchment area's economic base is primarily driven by the agriculture, forestry, retail, and public sectors, with Creston functioning as a regional service centre for the surrounding Creston Valley. Creston Valley's tourism sector is increasing in both its size and economic importance. Tourism offerings are centred on the region's agricultural and recreation amenities, including wineries, farmers markets, agricultural tourism, and outdoor recreation (e.g., hiking, paddle boarding, and kayaking). Based on information shared by Creston Valley Tourism, the tourism sector adds approximately \$12M to the local economy and attracts approximately 80,000 visitors annually, primarily from British Columbia, Alberta, and the northwest United States. Creston is not typically the prime destination for these visitors and instead is often included as part of larger multi-stop trips.

Creston serves as the regional centre for healthcare access and law enforcement. The Creston Valley Hospital & Health Centre is a Level 1 Community Hospital operated by Interior Health that provides emergency, inpatient, and surgical services. The hospital has 20 beds for patient care and is a generalist care facility; patients requiring specialist care that cannot be provided locally are moved to alternative facilities as discussed in Section 3.5.1. The RCMP Creston detachment serves the Creston Valley and is supported in its operations by the deployment of specialized policing resources from other urban centres, as described in Section 3.5.4.

2.4 Regional Transportation and Access

2.4.1 Intercommunity Access

Transportation needs to and from the catchment area are primarily served by road-based access. As shown in Table 2.1, Creston is located within a 1h30m drive of major communities such as Castlegar and Cranbrook that function as regional centres for healthcare, retail, services, and commercial air travel access through their respective airports. Major destinations in Alberta and British Columbia, such as Calgary, Kelowna, and Vancouver, are 5h00m or more by road in normal driving conditions, creating an access challenge for business, healthcare, and personal travel.

Access by road to and from the catchment area can be delayed and restricted from inclement driving conditions, highway maintenance, and vehicle accidents. The Kootenay Pass, which provides access to and from the west as part of Highway 3, is one example of these challenges, with the highway frequently closed to accommodate avalanche control and debris clearing. Temporary closures often range between two and ten hours, negatively impacting ground transportation. Travel by Highway 3 to the east is also routinely affected by poor driving conditions from inclement weather.

The distance from Creston to major communities of interest, protracted driving times, and limitations with access in certain conditions influences the need for air transportation being facilitated through the Airport, alongside other airports serving the catchment area.

Table 2.1 - Typical Travel Times to Select Communities of Interest

Community	Driving Time	Driving Distance
Cranbrook	1h10m	105 km
Castlegar	1h30m	125 km
Kelowna	5h00m	425 km
Calgary	5h30m	500 km
Vancouver	8h30m	740 km
Note: All driving times and distances originate in Creston and are based on normal conditions.		

2.4.2 Regional Airport System

Creston functions as part of a network of airports serving the West, Central, and East Kootenays. As shown in Figure 2.1, the air transportation needs of the catchment area and surrounding region are served by five facilities in addition to the Airport:

- **Castlegar / West Kootenay Regional Airport** is owned and operated by the City of Castlegar. The facility supports daily flights by Air Canada to Vancouver International Airport; prior to the COVID-19 pandemic, service was also provided to Calgary International Airport. Castlegar supports private and commercial airside tenants and the BCWS Southeast Fire Centre headquarters. BCWS maintains a fixed-wing airtanker base at the airport as well as rotary-wing wildfire response operations.

Castlegar is maintained on a year-round basis and is equipped with a 5,300 ft. x 150 ft. runway. The facility is restricted to daytime only operations and has a comparatively high Instrument Approach Minimum Descent Altitude of 2,754 ft. AGL due to the surrounding terrain. The City of Castlegar has made several major investments in the airport's capabilities in recent years, including expanding the air carrier apron, upgrading the airfield lighting system, introducing a shuttle service for weather-related flight cancellations, pursuing the implementation of Required Navigational Performance Instrument Approach Procedures, and commencing work on the expansion of the terminal building.

- **Cranbrook / Canadian Rockies International Airport** is owned by the City of Cranbrook and operated by Elevate Airports Inc. Cranbrook is served by Air Canada, with daily flights to Vancouver, and WestJet, with multiple daily flights to Calgary and Vancouver. BCWS maintains a fixed-wing airtanker base at the airport and the facility is actively used for rotary-wing operations. Commercial tenants provide air taxi, aerial work, and maintenance services.

Cranbrook provides the longest runway among the airports reviewed (8,000 ft. x 150 ft.), airfield lighting, Instrument Approach Minimum Descent Altitudes to 200 ft. AGL, year-round maintenance, and a full range of supporting services.

- **Kaslo Airport** is owned and operated by the Village of Kaslo and is located in a narrow mountainous valley on a plateau. The airport receives limited maintenance by the Village of Kaslo and is not regularly cleared in the winter. Aircraft operations are supported on the 3,700 ft. x 60 ft. runway. No lighting or Instrument Approach Procedures. The facility is primarily used for general aviation, with additional use from search and rescue helicopters and BCWS.
- **Nelson Airport** is owned by the City of Nelson and operated on a volunteer basis by the Nelson and District Airport Society. The facility is located on a constrained parcel between Kootenay Lake and the built-up urban area of Nelson. Nelson Airport is a daytime only facility with no Instrument Approach Procedures and a 3,100 ft. x 75 ft. runway. Maneuvering in the vicinity of the airport is constrained by surrounding mountainous terrain.

Nelson is actively used by based and visiting general aviation traffic, three commercial rotary-wing operators, and a fixed-wing flight training unit. The facility is also used for rotary-wing wildfire suppression and fixed-wing air ambulance operations.

- **Trail Airport** is owned and operated by the City of Trail and supports one to two daily flights to Vancouver on Pacific Coastal Airlines. Several general aviation tenants are located at the airport. The facility is operated as a certified airport and is equipped for daytime only operations with a 4,800 ft. x 75 ft. runway. Instrument Approach Procedures are available to Minimum Descent Altitudes of approximately 2,700 ft. to 4,000 ft. AGL.

Based on the review of the regional airport system from an activity and role perspective as summarized in Table 2.2, the following conclusions are made:

- Scheduled passenger air service demand is served through three airports within a 1h30m drive from Creston in normal conditions, with Air Canada, Pacific Coastal Airlines, and WestJet providing connectivity to Calgary and Vancouver from Castlegar, Cranbrook, and Trail;
- All reviewed airports are available to support general aviation, private, and charter aircraft operations. However, the types of end users served at each airport is influenced by available infrastructure and services, as described further below, as well as local demand;
- While Creston has a well-developed general aviation tenant base, it lacks economically productive commercial operators such as fixed-wing and rotary-wing air taxi and aerial work operators, flight training providers, and aircraft maintenance organizations. These commercial end users are concentrated in Castlegar, Cranbrook, and Nelson; and
- BCWS sustains its fixed-wing airtanker operations in the region from its Castlegar and Cranbrook bases. Creston, Kaslo, Nelson, and Trail are primarily used for rotary-wing operations, which is aided by supporting services, such as jet fuel, available at Creston. Similarly, BCEHS can deploy its fixed-wing air ambulance resources to any of the reviewed airports. However, airports such as Kaslo and Nelson are more constrained versus Creston, owing to their airfield infrastructure and supporting services.

Table 2.2 - Regional Airport System Overview

Airport	Travel Time	Sched. Passenger	Charter / Private	Air Ambulance	Wildfire – Fixed-Wing	Wildfire – Rotary-Wing
Creston	-	No	Yes	Yes	No	Yes
Castlegar	1h20m	Yes	Yes	Yes	Yes	Yes
Cranbrook	1h25m	Yes	Yes	Yes	Yes	Yes
Kaslo	2h25m	No	Yes	Yes	No	Yes
Nelson	1h25m	No	Yes	Yes	No	Yes
Trail	1h25m	Yes	Yes	Yes	No	Yes
Airport	Regulatory Status	Runway	Nighttime Operations	Instrument Approach / Best MDA	Weather Station	Aviation Fuel
Creston	Registered	3,944 ft. x 75 ft.	Yes	1,486 ft. AGL	Yes	Jet, Avgas
Castlegar	Certified	5,299 ft. x 150 ft.	No	2,754 ft. AGL	Yes	Jet, Avgas
Cranbrook	Certified	8,000 ft. x 150 ft.	Yes	200 ft. AGL	Yes	Jet, Avgas
Kaslo	Registered	3,700 ft. x 60 ft.	No	No	No	No
Nelson	Registered	3,100 ft. x 75 ft.	No	No	No	Jet, Avgas
Trail	Certified	4,800 ft. x 75 ft.	No	2,673 ft. AGL	Yes	Jet, Avgas
Notes: <ul style="list-style-type: none"> • Travel times are based on driving times in normal conditions. • Airport specifications are as reported in the Canada Flight Supplement / Canada Air Pilot. • Roles are based on operations in a typical year (e.g., one-off fixed-wing wildfire flights would be classified as “no”). 						

From an infrastructure and operations perspective:

- Creston, alongside Castlegar, Cranbrook, and Trail, is one of four facilities regularly maintained on a year-round basis including priority winter snow clearing;
- Creston's runway exceeds the infrastructure available at Kaslo and Nelson, improving its capabilities for aircraft operations relative in terms of the fleet mix that can be accommodated. However, it does not have the longer runways of Castlegar, Cranbrook, and Trail;
- While constrained, Creston's surrounding obstacle environment is less impacting compared to Castlegar, Kaslo, Nelson, and Trail; and
- Cranbrook and Creston are the only airports serving the catchment area capable of supporting nighttime operations. Both airports also offer the lowest Minimum Descent Altitudes through their respective Instrument Approach Procedures. Accordingly, both airports increase the overall availability of the West, Central, and East Kootenays for aircraft operations during hours of darkness and inclement weather.



Castlegar / West Kootenay Regional Airport (top) and Nelson Airport (bottom)

3 AIRPORT OVERVIEW AND VALUE

Section 3 describes the Airport's current use in terms of its tenants and activity levels, as well as the social and economic impacts that the aviation services conducted from the facility have.

3.1 Airport Tenants

Private hangar development at the Airport is facilitated through land lease agreements between the Town, as the landlord, and individual tenants. A total of 17 land lease agreements are active, with lot sizes ranging between 2,300 ft² and 5,500 ft². The hangars developed to-date house general aviation aircraft that are used for private, business, and charitable or other purposes.

The Town and Creston Valley Horse Association maintain a lease agreement for the use of certain portions of the Airport lands for horse riding trails and rest areas. The horse-riding trails are located outside of the wildlife fencing that encloses the Airport's operational perimeter. Approximately 18 hectares south of the core area are leased for agricultural hay cropping.

3.2 Activity Levels

3.2.1 Aircraft Movements

Airport activity levels are expressed in terms of the number of aircraft takeoffs, landings, touch-and-go's, and other operations that occur, referred to as aircraft movements. Aircraft movements are not consistently tracked by the Airport Society. Estimated aircraft movements in a typical one-year period have been provided by the Airport Society, as shown in Table 3.1. Approximately 1,400 aircraft movements are estimated to occur in a typical year, or 700 flights.

Table 3.1 - Estimated Aircraft Movements, Typical Year

Category	User Type	Aircraft Movements
Visiting Users – Emergency Services	BCEHS Air Ambulance Flights	180
	Volunteer "Angel" Flights	96
	RCMP Air Services Branch	8
	Search and Rescue / Training	30
	BCWS Wildfire Suppression Flights	108
Visiting Users – Non-Emergency (e.g., fuel stops, tourism, etc.)		200
Local Users	Private / Recreational Flights	720
	Business Flights	48
Total		1,390
Note: All aircraft movements (takeoffs and landings) are as estimated by the Airport Society.		

Actual aircraft activity levels and the share of flights operated by each user group vary on an annual basis in response to factors such as nearby wildfire activity, air ambulance transfers, and visiting aircraft volumes, as demonstrated in the aircraft fuel sales data shown in Section 3.2.2. However, the dataset provided in Table 3.1 supports the following conclusions:

- Local aircraft operators represent approximately 55% of all activity at the Airport in a typical year. Most of these flights are for private or recreational purposes, although aircraft being flown for business purposes is a routine occurrence;
- Emergency preparedness and response flights generate approximately 30% of aircraft movements. This encompasses operations by BCEHS, BCWS, and the RCMP, as well as by volunteers through PEP Air and patient transportation services, such as Hope Air; and
- Visiting users comprise approximately 15% of annual activity. This includes aircraft making fuel stops while transiting the region or operating in the area, aircraft arriving for personal and business purposes, and aircraft making enroute diversions.

Averaged on an annual basis, the data provided in Table 3.1 represents approximately two flights per day. However, activity fluctuates on a seasonal basis as described further below.

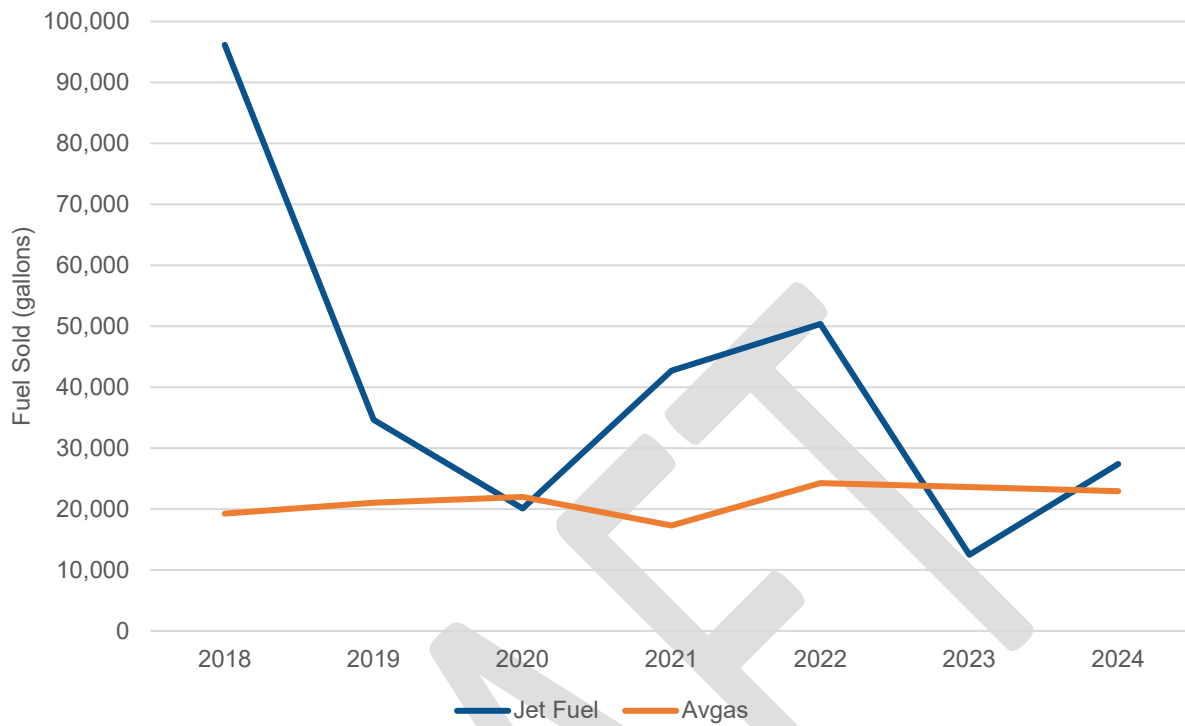
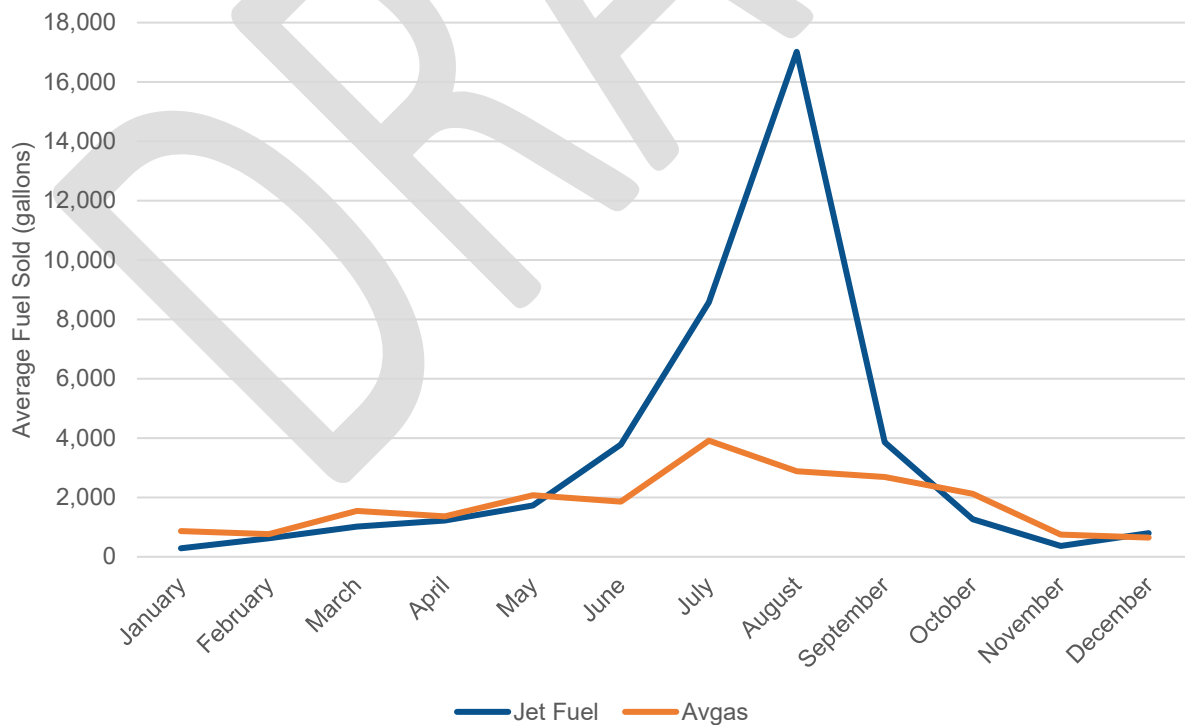
3.2.2 Aircraft Fuel Sales

In lieu of detailed aircraft movement data, fuel sales provide a metric to gauge overall activity at the Airport. Fuel sales are not a perfect representation of overall activity as not all aircraft purchase fuel and the amount of fuel purchased per aircraft varies. However, overall trends in activity can be estimated with this data. Full-year sales volumes were available for 2018 to 2024 for the two types of fuel sold at the Airport:

- **Avgas** is used by aircraft with piston engines and is mainly purchased for use in smaller single and twin-engine aircraft operated for general aviation and flight training purposes; and
- **Jet fuel** is used by aircraft with gas turbine engines, such as aircraft operated for private, charter, air ambulance, and wildfire suppression purposes.

Over the seven-year data period, a total of approximately 434,000 gallons of avgas and jet fuel were sold at the Airport; jet fuel represented 65% of all fuel sold in this timeframe. Avgas sales were generally steady between 2018 and 2024, averaging 21,000 gallons per year as shown in Figure 3.1. Avgas sales generally peak between May and October, as shown in Figure 3.2, based on more favourable weather conditions for flying by general aviation and flight training users.

Jet fuel sales demonstrate greater variability both by year and by season. A monthly average of less than 2,000 gallons of jet fuel were sold between October and May across the seven-year period (Figure 3.2). Sales volumes increase between June and September, primarily due to the increased use of the Airport by turbine rotary-wing aircraft being operated for wildfire response purposes. The relationship between jet fuel sales and wildfire suppression demand is discussed further in Section 3.5.2; in years with major wildfire activity in the region, jet fuel volumes increase as larger numbers of aircraft respond from the Airport. Other drivers of jet fuel demand include larger turbine aircraft operated by private users, charter service providers, and government entities such as the Royal Canadian Air Force (RCAF), BCEHS, and RCMP.

Figure 3.1 - Fuel Sale Volumes by Year (2018-2024)**Figure 3.2 - Average Fuel Sale Volumes by Month (2018-2024)**

3.3 Service Delivery Model

3.3.1 Ownership

The Airport lands (Block A of Section 13, Township 7, Kootenay District) are owned in fee simple by the Town. The Airport lands were originally granted by the Province to the Town, and the terms of the Sponsored Crown Grant entered into in 1981 restrict the use of the land to airport purposes only.

3.3.2 Governance

Governance encompasses the authority and processes for how decisions are made that influence the Airport's administration, operations, and future path, including matters such as its goals, strategic direction, allocated financial resources, and other themes.

As the Town is the owner of the Airport lands, Town Council is the governing body for the Airport, consistent with its exercise of control over all other functions of the municipality. Town Council's need to routinely exercise its governing authority over the Airport has been reduced over the past 15 years through the formation of the Airport Society. Noting the foregoing, the most common forms of how Town Council has exercised its governance authority includes:

- Establishing the strategic direction for the Airport through the Master Plan;
- Entering into agreements, such as the Operating Agreement with the Airport Society;
- Applying for external funding, such as the British Columbia Air Access Program (BCAAP); and
- Approving lease agreements.

The Master Plan is the primary throughline for how the strategic direction established by Town Council translates to the mandate established for the Airport Society based on the Operating Agreement.

3.3.3 Administration and Operations

The administration of the Airport addresses how the directions established by Town Council, as the governing body, will be applied. Administration encompasses the allocation and management of the resources required, as well as ensuring accountability with the direction provided by Town Council. Airport operations include the day-to-day tasks associated with the implementation of Town Council's direction under the established administrative oversight framework, including airfield maintenance, aircraft support services, and project implementation.

From a municipal perspective, the direction of Town Council is implemented by Town Administration, primarily through the Chief Administrative Officer, Corporate Officer, Director of Finance & Corporate Services, and Manager of Community Planning & Development.

Airport Society Overview and Relationship to Governance

The Town was the operator of the Airport from its initial development until 2009 and provided a limited administrative effort and maintenance level of service during this period. In 2009, a group of Airport users expressed an interest in improving the facility as well as concerns about the level of service being provided. The Airport Society was formed pursuant to the Societies Act and an Operating Agreement was signed with the Town in 2009, assuming oversight of the routine administration and operation of the Airport. The Airport Society's purposes are to:

- Support emergency services and life flights;
- Encourage the orderly maintenance, development, growth, and advancement of the Airport;
- Encourage the use and expansion of existing aviation and aerospace facilities and the development of new facilities;
- Enhance safety measures, aircraft operations, and the Airport;
- Provide membership services; and
- Cooperate with other bodies towards the attainment of the aforementioned objectives.

The most recent version of the Operating Agreement was established in March 2021 and sets the responsibilities for a five-year term between the Town and Airport Society. At a high level, the Operating Agreement confers the obligation to the Airport Society to manage, operate, repair, and maintain the Airport:

- As a public aerodrome;
- In accordance with the Master Plan as established and updated periodically by the Town; and
- In accordance with generally accepted standards for regional airports in Canada of a similar size and kind.

Airport Society Administration and Operations

The Airport Society is responsible for the routine administration and operation of the facility. The Airport Society employs one individual as an Airport Caretaker. The Airport Caretaker resides on the property and completes typical administrative and operational functions, such as:

- Liaising with Transport Canada and NAV CANADA;
- Interacting with aircraft operators and providing support services, such as fuelling;
- Completing airside and groundside summer and winter maintenance;
- Repairing airfield infrastructure;
- Maintaining the maintenance equipment fleet; and
- Coordinating with external contractors.

In the Airport Society's current model, the Airport Caretaker provides services during standard business hours and is available on a call-out basis when required. For example, overnight air ambulance requests for runway condition reporting and snow clearing are routinely fulfilled by the Airport Caretaker. The Airport Caretaker's work is supported by the volunteer members of the Airport Society. Volunteerism has been used extensively by the Airport Society to complete the functions described above, including maintenance projects and post-storm snow clearing. This model reduces the staffing levels and associated expenses borne by the Airport Society.

3.3.4 Regulatory Environment

The federal level of government has exclusive jurisdiction over aeronautics and has established a legal framework through the Aeronautics Act and Canadian Aviation Regulations (CARs). The Airport is operated as a registered aerodrome, with the primary regulatory environment for such facilities being a permissive regime established in Part III, Subpart 1 of the CARs. Transport Canada provides regulatory oversight to the Airport in accordance with the CARs.

3.4 Financial Performance

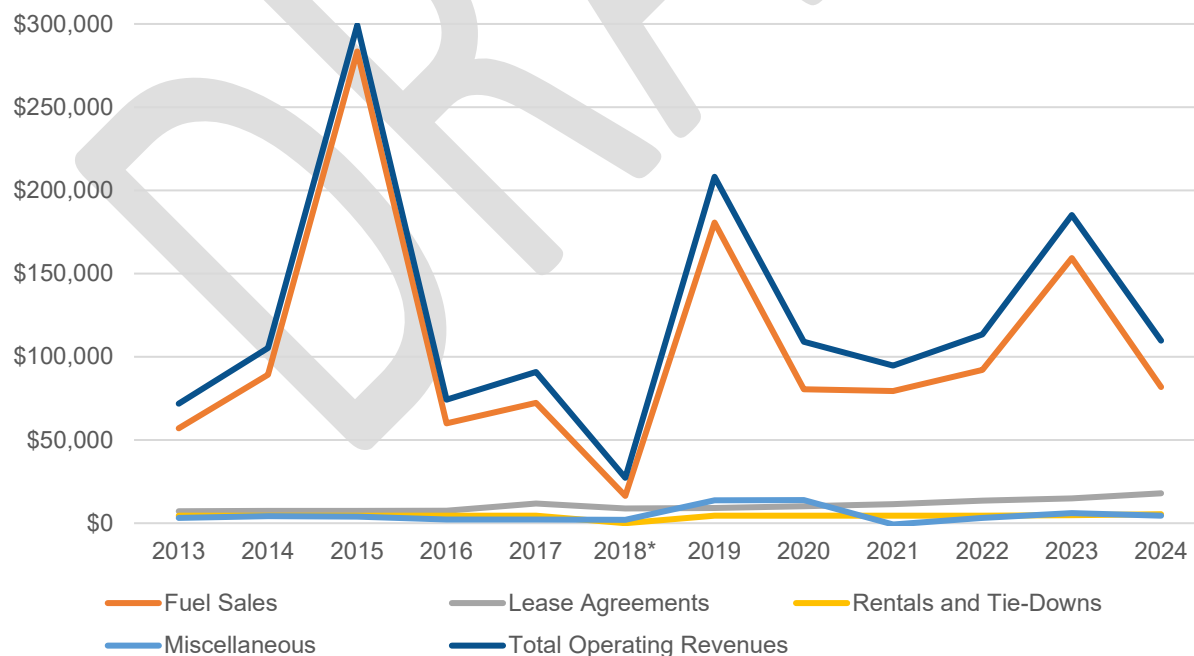
The Airport Society's financial reporting was provided for 2013 to 2024. The Airport Society's fiscal years between 2013 and 2017 ended on December 31 of each year. This was adjusted to July 31 in 2018, resulting in a one-time correction with a seven-month data period. The fiscal year ends in July 31 in all subsequent years. The seven-month correction period is excluded when discussing average values in the following subsections to ensure the comparability of the data.

3.4.1 Operating Revenues

Four categories of operating revenues are generated at the Airport, as shown in Figure 3.3:

- **Fuel Sales:** An average of \$112,000 in gross avgas and jet fuel revenues was generated annually across the period reviewed, and gross fuel sales represent the largest source of operating revenue. As discussed in Section 3.2.2, fuel sale revenues vary significantly year-over-year with changes in activity levels at the Airport;
- **Lease Agreements:** Revenues from hangar land lease agreements and NAV CANADA's Remote Communications Outlet have averaged \$11,000 per year across the period reviewed. Over the past five years, average annual revenues have increased to \$14,000;
- **Rental and Tie-Down Agreements:** Revenues from hay cropping, which generates \$4,500 per year, and fees for the use of the general aviation tie-down area. Approximately \$4,800 in revenues have been generated annually over the past five years; and
- **Miscellaneous:** Revenues from memberships, sponsorships, donations, interest earned, adjustments for losses on the sale of assets, and other sources. Miscellaneous revenues have averaged \$5,400 per year over the past five years.

Figure 3.3 - Operating Revenues (2013-2024)



Note: Years are based on the Airport Society's fiscal year. 2018 values reflect a one-time correction in the Airport Society's fiscal year reporting.

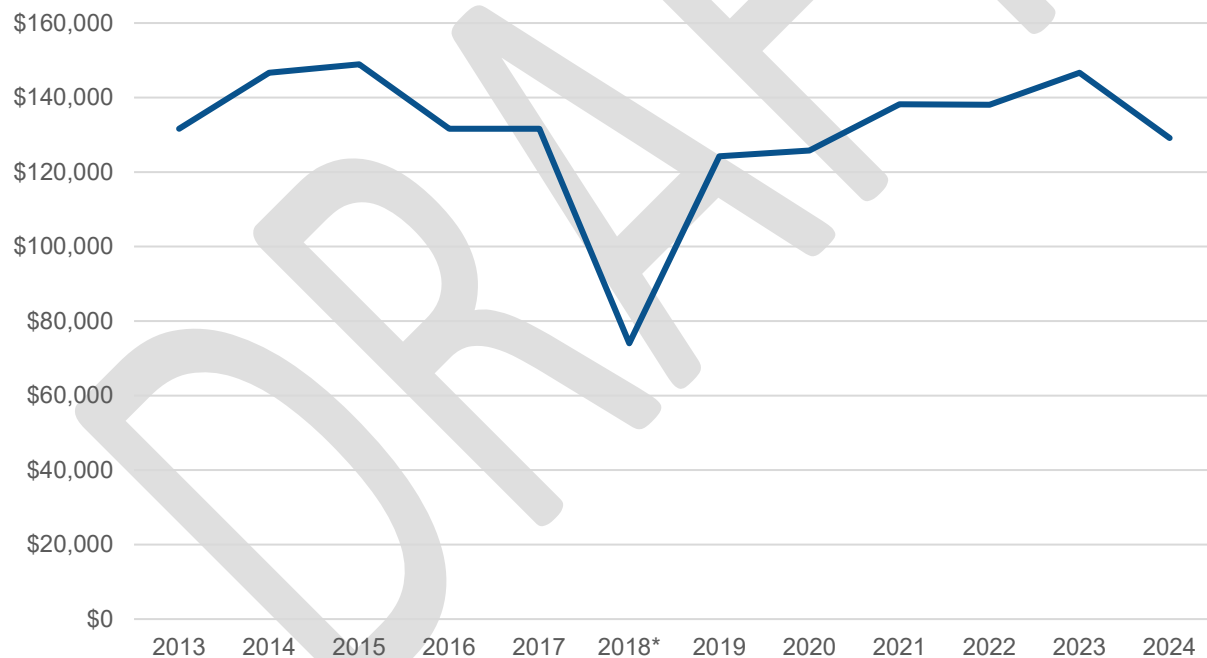
3.4.2 Government Contributions

In August 2007, the Regional District's Board of Directors passed Bylaw No. 1917 creating the Creston Valley Airport Financial Contribution Service Area (the "Airport Service") to provide an annual financial contribution towards the costs of the Airport. The Airport Service's boundaries encompass the Town of Creston, Electoral Areas B and C, and a portion of Electoral Area A. The Airport Service's costs are recovered by a property value tax. The contributions made through the Airport Service to the Airport Society between 2013 and 2024 are shown in Figure 3.4. An average of \$136,000 has been contributed per year in this period, excluding the one-time reporting change made in 2018.

A total of \$507,000 in financial support has also been provided by the Province in the period reviewed. This included a one-time \$180,000 operating grant in 2021 as a COVID-19 relief measure and \$327,000 in funds allocated through BCAAP for the following projects:

- **2015:** Runway lighting improvements;
- **2019:** Maintenance garage purchase;
- **2023:** Fuel cardlock system upgrades; and
- **2024:** Completing the Master Plan.

Figure 3.4 - Regional District Airport Service Contributions (2013-2024)



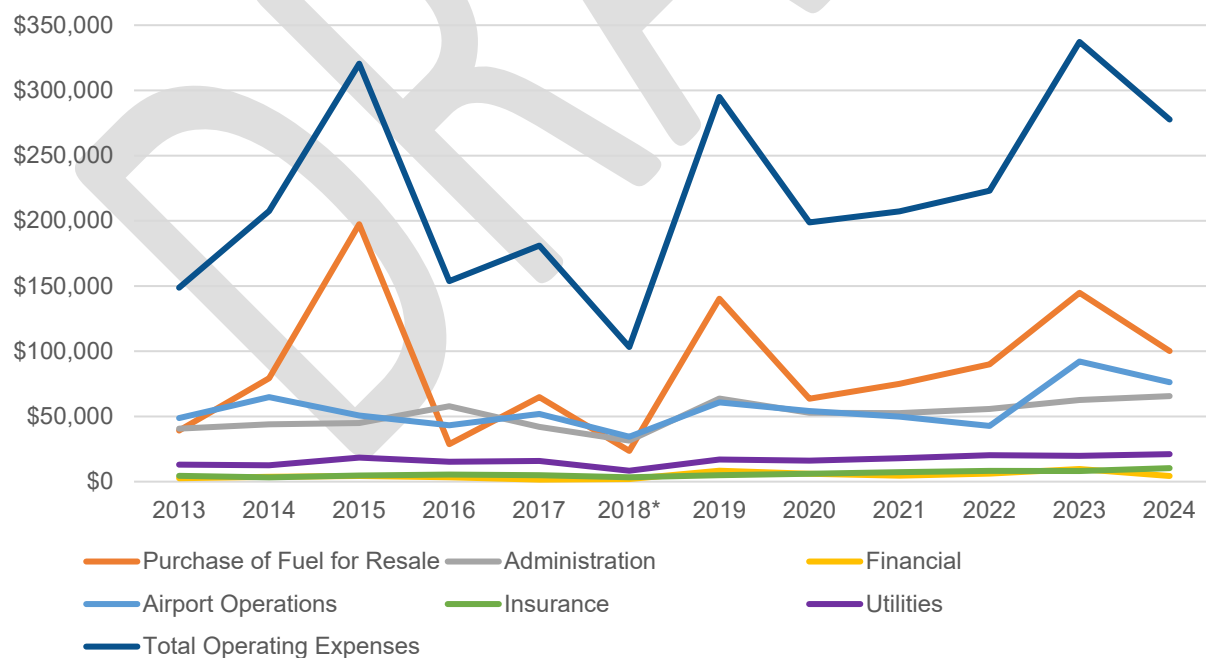
Note: Years are based on the Airport Society's fiscal year. 2018 values reflect a one-time correction in the Airport Society's fiscal year reporting.

3.4.3 Operating Expenses

The Airport's operating expenses have been summarized through six categories. Due to changes in the Airport Society's financial reporting nomenclature across the period reviewed, certain trends may be attributable to the reclassification of expense types between years. Trends by category are described as follows and shown in Figure 3.5:

- **Purchase of Fuel for Resale:** Jet fuel and avgas are purchased by the Airport Society for resale. Fuel purchase costs vary annually with volumes sold and are typically the largest source of operating expenses, averaging \$93,000 per year;
- **Airport Operations:** Costs associated with repair and maintenance projects; supplies; subcontractors; project expenses; the certification of the weather system and Instrument Approach Procedures; and other related expenses. Airport operating expenses have averaged \$63,000 per year over the period of 2020 to 2024;
- **Administration:** General administration and management costs; accounting, consulting, and legal fees; advertising and promotion; special event and meeting expenses; rent; donations; property taxes; licenses; and dues. Expenses have averaged \$53,000 per year across the period of 2013 to 2024 and \$58,000 annually over the last five years;
- **Utilities:** The costs of the Airport's utilities and services, which have averaged \$19,000 per year in the most recent five-year period;
- **Insurance:** Insurance costs have averaged \$8,000 annually over the past five years and have exhibited a gradual increase over time; and
- **Financial:** Costs associated with interest and bank charges, which have averaged \$6,000 per year over the past five years.

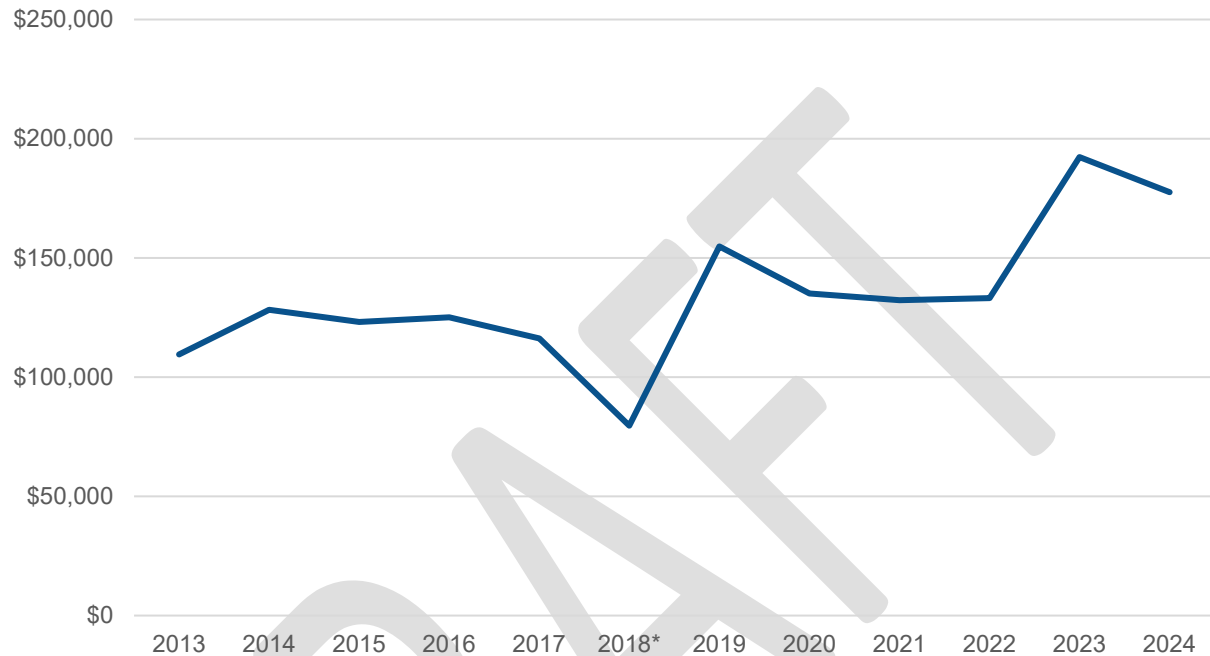
Figure 3.5 - Operating Expenses (2013-2024)



Note: Years are based on the Airport Society's fiscal year. 2018 values reflect a one-time correction in the Airport Society's fiscal year reporting.

When omitting the costs associated with aviation fuel sales that are a net revenue source for the Airport, overall operating expense trends can be identified as shown in Figure 3.6. The Airport's operating expenses have averaged \$139,000 per year between 2013 and 2024 and have exhibited an overall increasing trend in this period. Expenses have increased in the past five years, averaging \$154,000 per year. The increase between 2022 and 2023 is primarily attributable to maintenance.

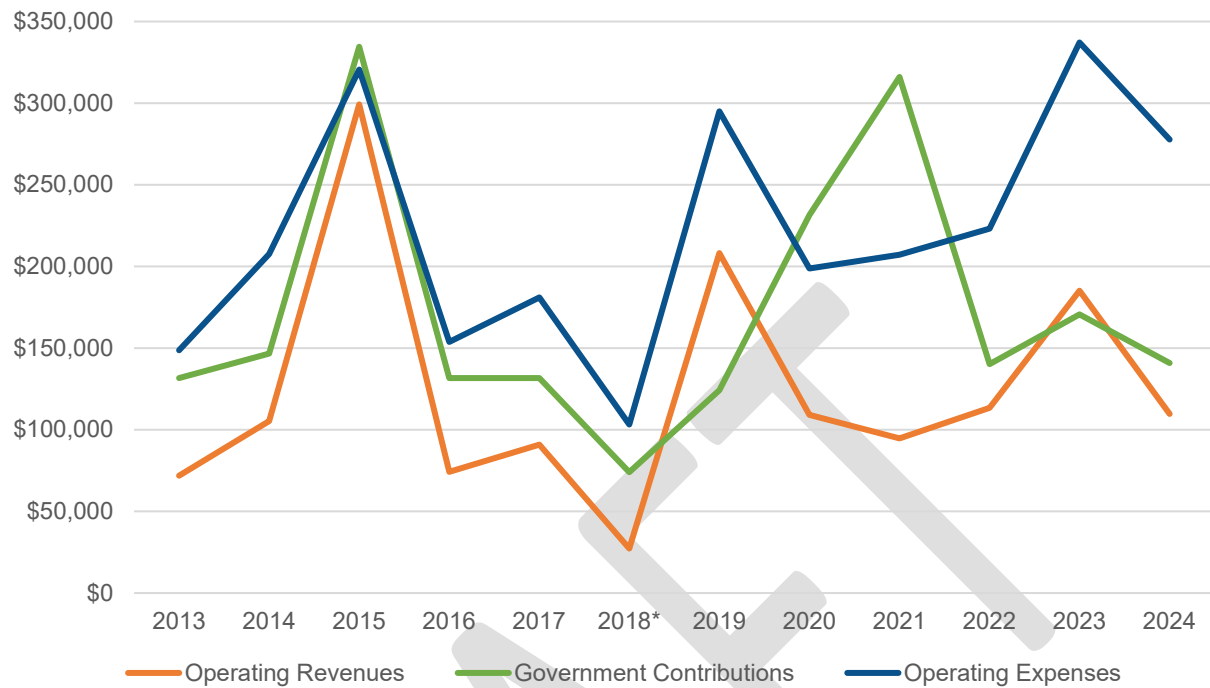
Figure 3.6 - Operating Expenses, Less Purchase of Fuel for Resale (2013-2024)



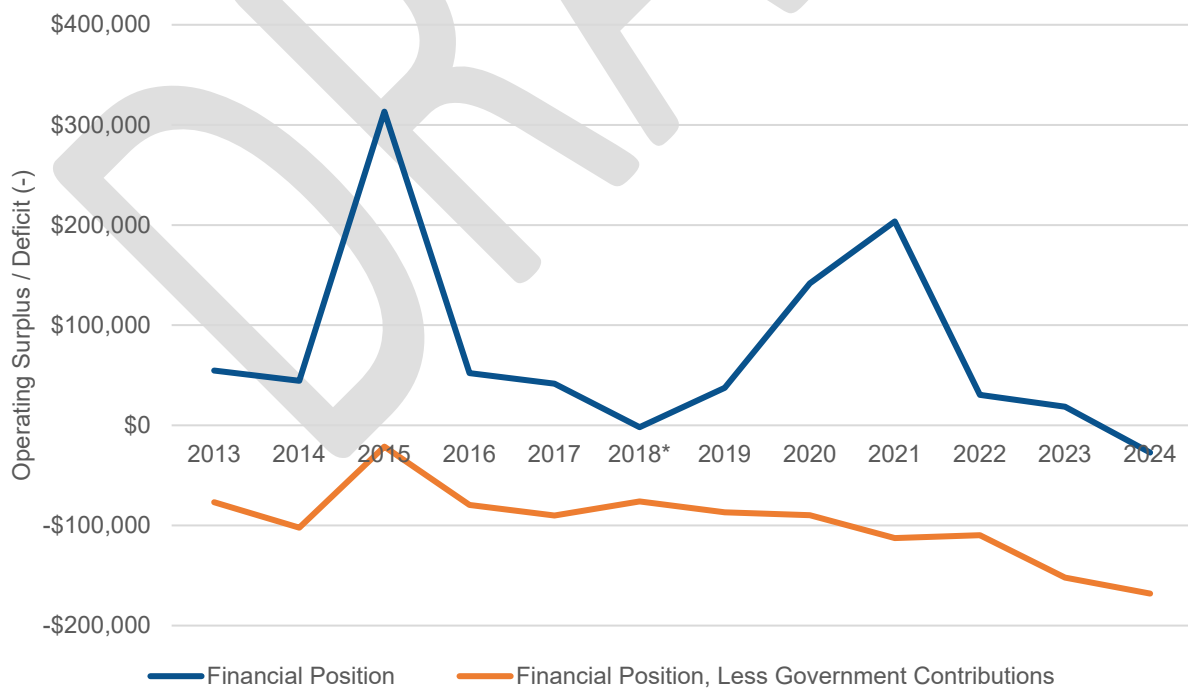
Note: Years are based on the Airport Society's fiscal year. 2018 values are due to a one-time correction in the Airport Society's fiscal year reporting.

3.4.4 Financial Position

The Airport's revenues, expenses, and government contributions are shown together in Figure 3.7. Figure 3.8 identifies the Airport's annual financial position; as shown, the Airport Society incurred operating surpluses in all except for one of the years reviewed. However, when omitting the support provided through the Airport Service and by the Province, operating deficits would have instead been realized in all years. This illustrates the economic dependency of the Airport Society on external funding. The Airport's operating revenues have been insufficient to cover its expenses across the reviewed period, indicating that the facility is not financially self-sustaining or viable from an operating and capital perspective. This is a common financial position for comparable community and regional airports throughout British Columbia and Canada.

Figure 3.7 - Operating Revenues, Expenses, and Government Contributions (2013-2024)

Note: Years are based on the Airport Society's fiscal year. 2018 values are due to a one-time correction in the Airport Society's fiscal year reporting.

Figure 3.8 - Financial Position (2013-2024)

Note: Years are based on the Airport Society's fiscal year. 2018 values reflect a one-time correction in the Airport Society's fiscal year reporting.

3.5 Regional Value

The Airport facilitates aviation operations that generate economic, social, and / or emergency management value. The benefits afforded through these operations are realized in Creston; regionally, throughout the Kootenays; and beyond the region. The Airport itself does not generally yield the value discussed below; instead, its operation and availability facilitate the types of aviation services that confer these benefits.

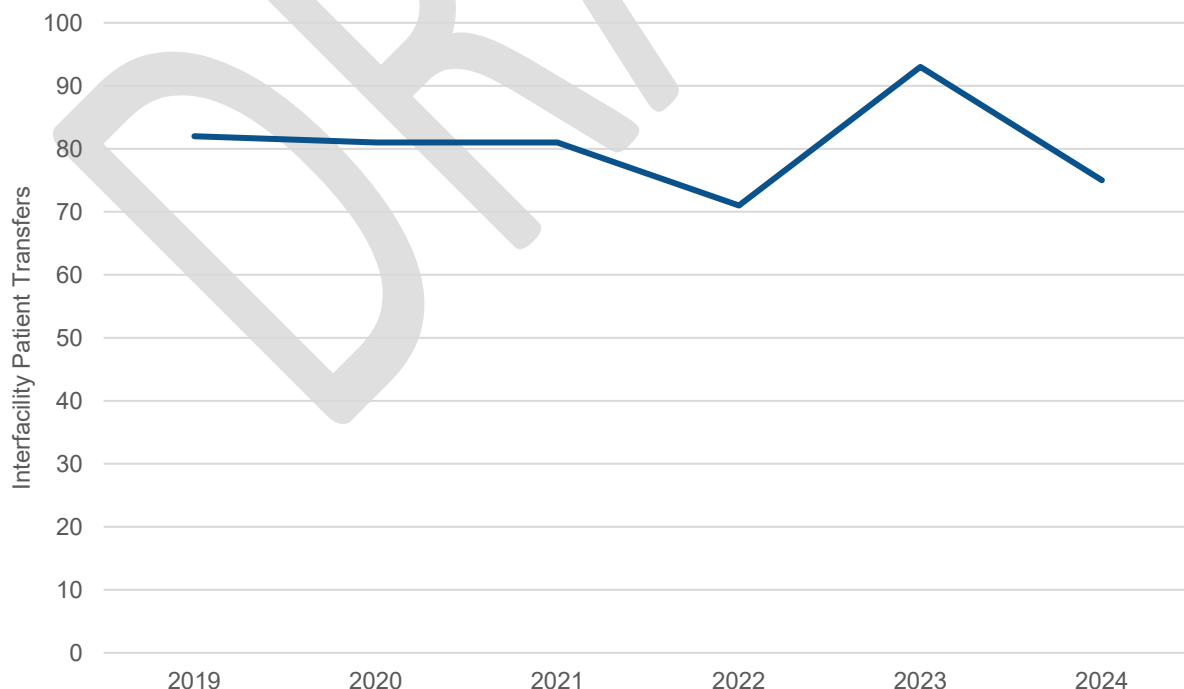
3.5.1 Access to Medical Care

BCEHS Interfacility Patient Transfers

As described in Section 2.3, patient care requirements that cannot be met at the Creston Valley Hospital & Health Centre are facilitated through transfers to higher level of care facilities located outside of the catchment area. BCEHS is responsible for the provincial air ambulance program, through which fixed-wing and rotary-wing resources are operated by contracted air carriers to complete interfacility patient transfers.

BCEHS provided interfacility patient transfer statistics for the Airport for the period of 2019 to 2024, as shown in Figure 3.9. A total of 483 interfacility patient transfers were operated on behalf of BCEHS during this period, or an average of 81 transfers per year. Based on consultations with BCEHS, the frequency of interfacility transfers from the Airport is not solely attributable to patient care requirements from within the catchment area. The Airport is routinely used by patients being transferred by ground before their onward movement by air from communities such as Castlegar, Nelson, and Trail due to the unavailability of these airports for overnight operations and the frequency of inclement weather conditions precluding arrivals. The lighting, Instrument Approach Procedures, runway length, and high operational level of service (particularly in the winter) at the Airport mean that BCEHS can fulfill patient transfer taskings when operations at other airports may be limited.

Figure 3.9 - BCEHS Interfacility Patient Transfers (2018-2024)



Interior Health was consulted to understand how the interfacility transfer capabilities of the Airport function as part of the regional healthcare system. Most transfers from Creston are directed to medical facilities in Cranbrook and Kelowna, which are 1h10m and 5h00m by road, respectively, in normal driving conditions. Interior Health noted that ground ambulance transfers are challenged by temporary highway closures, particularly for the Kootenay Pass, as well as inclement weather.

All interfacility transfer flights were operated by fixed-wing turboprop aircraft, such as the Beechcraft King Air and Beechcraft 1900, during the five years of data reviewed. The prevalence of fixed-wing operations is underscored by the following factors:

- Creston Valley Hospital & Health Centre lacks a heliport for rotary-wing operations and is located in a constrained built-up area with limited options for such a facility to be developed;
- Creston is located at the outer edge of STARS' operational range from its Calgary base;
- The nearest dedicated BCEHS rotary-wing aircraft is based at Kamloops Airport. The rotary-wing platform has a slower time in transit relative to fixed-wing aircraft and the duration of these flights approach operational endurance limits; and
- Rotary-wing air ambulance operations in southeastern British Columbia are generally provided on an ad hoc contracted basis, unlike the dedicated aircraft based in Kamloops. These ad hoc aircraft are typically single pilot, single engine, and restricted to daytime operations in Visual Meteorological Conditions, decreasing their operational capabilities and flexibility to sustain air ambulance operations from Creston.

Based on the foregoing, the unavailability of the Airport would likely increase the frequency of patients being transferred by ground ambulance to alternative facilities, such as Cranbrook, prior to their onward transportation by fixed-wing aircraft, lengthening the transit times for patients to access care.

Volunteer Medical Access Flights

Hope Air is a registered charity that provides transportation solutions to patients accessing healthcare in distant communities. Part of Hope Air's structure includes connecting patients with volunteer general aviation pilots. Based on data shared by Hope Air, five patient flights were operated from the Airport in 2024 by volunteer general aviation pilots. In addition, a limited number of local general aviation pilots volunteer on behalf of Angel Flight East Kootenay, a charity that provides air transportation to East Kootenay residents to medical appointments in Kelowna at no cost.



BCEHS air ambulance patient transfer

3.5.2 Wildfire Suppression Operations

BCWS is responsible for managing wildfires through prevention, mitigation, and suppression on Crown and private lands outside of organised areas such as municipalities and regional districts. Fixed-wing and rotary-wing aircraft are used as part of wildfire suppression operations to support ground crews through water and retardant application, crew and equipment transportation, logistics support, fire detection patrols, and scanning.

BCWS operations in Creston and the surrounding region are overseen by the Southeast Fire Centre, headquartered in Castlegar. The Airport functions as an asset during active wildfires in the region through its support of rotary-wing operations and, to a lesser extent, fixed-wing assets. The extent of BCWS activity at the Airport fluctuates on an annual and monthly basis according to wildfire activity and the operational requirements of the organization. As described in Section 3.2.2, jet fuel sales can be used as an indicator to illustrate how wildfire aircraft operations vary at the Airport, with sales compared to wildfire activity in Figure 3.10 and Figure 3.11.

Figure 3.10 - Southeast Fire Centre Wildfire Area Burned vs. Jet Fuel Sales (2018-2024)

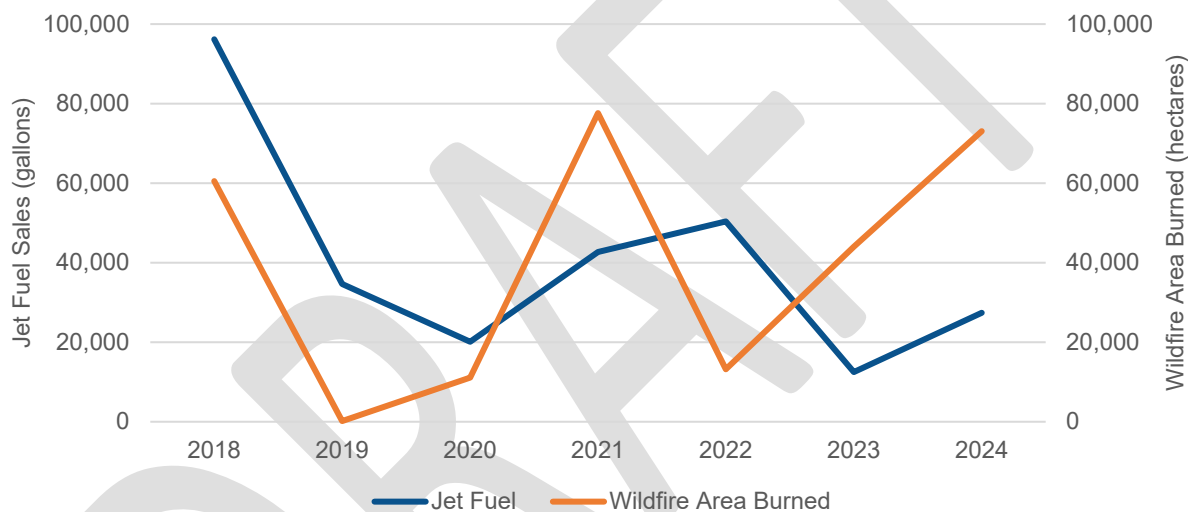
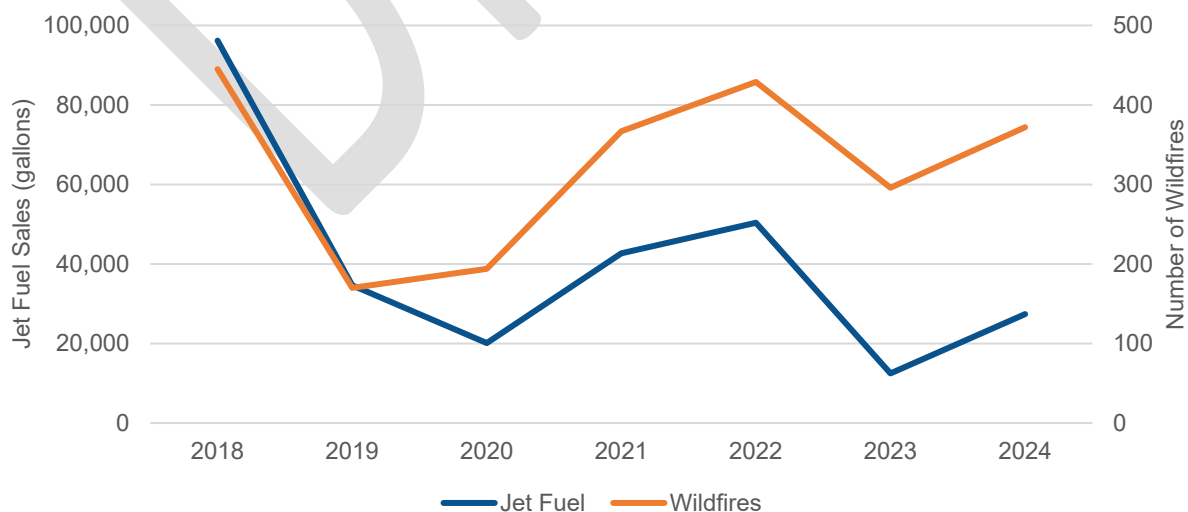


Figure 3.11 - Southeast Fire Centre Number of Wildfires vs. Jet Fuel Sales (2018-2024)



As shown in Figure 3.10 and Figure 3.11, wildfire activity in the Southeast Fire Area exhibits a positive correlation with jet fuel sales, indicating a relationship between aircraft activity at the Airport and wildfire suppression operations. This linkage is confirmed based on consultations with BCWS and the Airport Society on how aircraft have been deployed in major wildfire years. During typical suppression operations, the Airport serves as a:

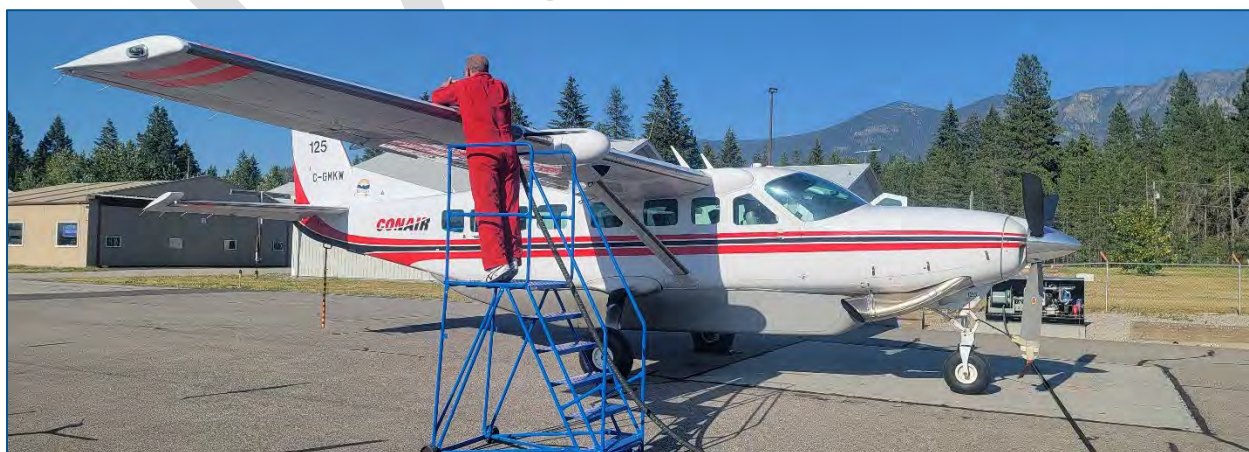
- Base of operations for contracted rotary-wing operators for refuelling, maintenance, and crew rest. The Airport routinely accommodates a mix of medium, intermediate, and heavy helicopters parked on the apron and infield; and
- Day base for initial attack crews to supplement larger staging areas closer to active wildfires.

From a strategic perspective, Creston enables BCWS to effectively distribute its rotary-wing resources responding to wildfires throughout the Southeast Fire Area by:

- Locating aircraft closer to wildfires, decreasing transit times between fuelling and operations;
- Providing additional parking space when other operating bases, such as Castlegar and Nelson, reach capacity. Nelson Airport in particular contends with limited apron and infield space for rotary-wing aircraft parking; and
- Distributing resources across multiple airports to limit instances where large numbers of aircraft become unavailable if conditions at a given airport prevent operations due to wildfire smoke or inclement weather. BCWS has indicated that airports in the West Kootenays (e.g., Castlegar, Nelson, Trail) are prone to temperature inversions that negatively affect ceilings and visibilities; in these instances, aircraft from airports in the East Kootenays, such as Creston, can continue to sustain operations.

Fixed-wing airtanker operations in the Southeast Fire Centre are supported from bases at the Castlegar, Cranbrook, and Revelstoke airports. The Castlegar and Cranbrook airtanker bases are located 80 km and 90 km to the northwest and northeast, respectively; accordingly, fixed-wing operations from the Airport have historically been limited. The Airport has supported limited instances of birddog (observation and coordination) and single-engine airtanker aircraft being operated when responding to wildfires in the region. Consultations with BCWS indicate that widespread airtanker operations being sustained from the Airport are not anticipated based on the:

- Proximity and capabilities of the Castlegar and Cranbrook airtanker bases;
- Availability of other larger reliever airports, such as Fairmont Hot Springs Airport; and
- Airport's limited apron space for parking and insufficient runway length for larger airtankers.



Cessna 208 birddog refuelling

3.5.3 Search and Rescue

The Airport contributes to search and rescue capabilities in the region by supporting operational taskings and training by PEP Air, the RCAF, and Creston Valley Search and Rescue.

PEP Air

PEP Air is a volunteer search organization that provides services throughout British Columbia. PEP Air is the provincial associate of the Civil Air Search and Rescue Association and supports search and rescue operations on behalf of Emergency Management British Columbia and the RCAF by:

- Providing aircraft and crews to support organizations such as the RCAF, RCMP, and ground search and rescue groups (e.g., Creston Valley Search and Rescue);
- Providing trained spotters to supplement RCAF crews during searches; and
- Contributing to search and rescue training.

The Airport is home to one of four PEP Air Southeast Zone units, alongside groups in Cranbrook, Nelson, and Sparwood. The Creston PEP Air group includes approximately 20 volunteers and three aircraft, and the organization maintains an office in the terminal building. Approximately six air search taskings are operated by the Creston PEP Air group in a typical year, including:

- Searches for overdue or missing aircraft, boats, persons, and snowmobilers;
- Disaster response efforts, including the transportation of supplies; and
- Aerial photography infrastructure damage assessments, supporting the Ministry of Emergency Management and Climate Readiness.

In addition to the group's operational taskings, air and ground training is completed on a monthly basis. Creston's PEP Air group also collaborates with and supports RCAF units, such as 442 Transport & Rescue Squadron, in their training.

Royal Canadian Air Force

The RCAF uses the Airport on an occasional basis to support search and rescue training in the region, such as the October 2024 joint training exercise with the College of the Rockies. The Airport has hosted RCAF search and rescue aircraft, such as the CC-115 Buffalo and CC-295 Kingfisher, for training and refuelling. During searches by RCAF resources in the region, the Airport may be utilized depending on operational requirements for refuelling, crew rest, and interagency coordination.



RCAF CC-295 Kingfisher search and rescue aircraft (PEP Air)

Creston Valley Search and Rescue

Creston Valley Search and Rescue is the local ground search and rescue organization and has approximately 25 volunteers. Creston Valley Search and Rescue responds to seven to 10 taskings per year for lost persons. The organization maintains an office at the terminal building and exclusively used the Airport for its training until September 2023. Most of the group's training has since moved to the Creston Emergency Services Building, and training at the Airport is now completed approximately five times per year with a focus on wilderness and back country experience, helicopter familiarization, and joint training with PEP Air.

3.5.4 Law Enforcement and Community Safety

As described in Section 2.3, the RCMP Creston detachment provides law enforcement capabilities throughout the Creston Valley. The RCMP maintains in-house fixed-wing and rotary-wing resources to support its operations throughout the country, including in British Columbia. The RCMP's fixed-wing Pilatus PC-12 and contracted air carriers are mainly used for the transportation of personnel and equipment, while its rotary-wing aircraft provide imaging, surveillance, and transportation capabilities.

The RCMP E Division Air Section has operated at the Airport a total of 16 times over the past five years. Based on consultations with the RCMP Creston detachment, air services operated from the Airport provide value for critical incident response, searches for missing persons, and border patrol operations. The RCMP's specialized personnel and equipment, such as the Emergency Response Team, are located in Kelowna and are deployed to Creston by fixed-wing aircraft, when required. Aviation resources were identified as being especially important during emergency situations when travel times by road from Kelowna would be prohibitive, such as during responses to armed and barricaded individuals, suspicious persons with firearms, and other similar circumstances. Accordingly, the RCMP's operational use of the Airport is categorized as limited frequency, high importance in response to emergent time-sensitive circumstances.

3.5.5 Emergency Response Capabilities

The Airport is identified in the Regional District's database of emergency response assets, and the Airport Society is a participant in the Regional District's quarterly Emergency Preparedness Committee meetings. The Airport's emergency management role historically has primarily been through its support of air ambulance, wildfire suppression, search and rescue, and law enforcement operations, as described in the preceding subsections. During response efforts for major hazards such as wildfires, seasonal flooding and debris flows, and hazardous material accidents, the facility may also be activated in a broader capability to support the transportation of specialized response teams from out of region, the movement of goods and supplies, and outbound evacuation efforts. This requirement may become heightened if road access into the region is negatively impacted.



STARS BK-117 air ambulance

3.5.6 Economic Impacts

The Airport's economic value to the catchment area is exhibited in three forms:

1. The facilitation of intercommunity access by businesses;
2. Visitors arriving by air and contributing to the tourism sector; and
3. The enablement of aerial work through the Airport's role as a refuelling and rest stop.

Business Intercommunity Access

A subset of the general aviation aircraft based at the Airport are used by local residents and companies for business purposes, including moving parts and tools and accessing wholesalers and customers. The Airport Society estimates that approximately 24 flights per year are attributed to local pilots using their aircraft for such purposes. The Airport is also used on an occasional basis by employers with presences in the region (e.g., Canfor, Mark Anthony Group) for the movement of executives, employees, and customers. The number of these flights per year and their purposes are not tracked. For employers, the facilitation of air access decreases travel times and is a positive feature from an economic productivity perspective, although the overall scale of this activity is limited.

Tourism and Visitor Access

The tourism sector, as described in Section 2.3, adds approximately \$12M to the local economy and attracts approximately 80,000 visitors per year. The number of visitors entering the region through the Airport is not tracked and there is limited information with which to make a reliable estimate; however, visitor stays attributable to arrivals through the Airport are expected to represent a limited proportion of total stays given the predominance of access into the community by road. Noting the foregoing, the Airport contributes to the tourism economy of Creston and the Regional District through:

- The arrival of visitors by private aircraft, typically in the four-seat general aviation category;
- Tourism fly-outs by general aviation groups from British Columbia and Alberta. In July 2024, the Airport hosted a multiple night eight aircraft fly-out from Calgary as one example; and
- Charters by larger groups patronizing the region's tourism amenities, such as golf courses. In limited cases, this has included aircraft up to the 50-seat De Havilland Canada Dash 8-300.

Aerial Work Support

Through the availability of refuelling, parking, and crew rest services, the Airport facilitates fixed-wing and rotary-wing commercial operators completing aerial work in the region, such as pipeline and powerline aerial inspections; LiDAR mapping and imaging; game counts and collared wildlife monitoring; and mountain pine beetle mapping. Detailed statistics are not available.



Pilatus PC-24 arriving on Runway 15-33

3.6 Air Navigation System Functions

The Airport improves the overall functioning of the aviation system through its role as an aircraft refuelling and rest stop and as a CBSA Airport of Entry.

3.6.1 Aircraft Planned and Unplanned Stops

The Airport is available as a planned fuel and rest stop for transient aircraft, supported by the availability of jet fuel and avgas services, parking areas, and the pilot facilities in the terminal building. The facility is also a diversion location for aircraft encountering mechanical issues, inclement weather conditions, or other factors that necessitate an enroute change. The susceptibility of aircraft to changing weather conditions while enroute in British Columbia, combined with the limited alternative routes available on account of the terrain environment, together underscore the need for diversion airports. The Airport's role as a fuel and rest stop on both a planned and unplanned basis is accentuated by its location along two corridors frequented by general aviation aircraft, namely:

- The north-south route between British Columbia and Idaho; and
- The east-west and north-south Visual Navigation Routes between Cranbrook, Nelson, Castlegar, and elsewhere in the Kootenays. These navigation routes are designated to assist pilots with pre-flight planning and identifying safe routes in the mountainous regions of British Columbia and Alberta.

3.6.2 Airport of Entry

The CBSA designates Creston as an Airport of Entry for CANPASS private and corporate permit holders. CANPASS is a program to expedite border crossings for frequent, low-risk, pre-approved travellers from the United States into Canada. Under the CANPASS program, aircraft carrying no more than 15 preapproved passengers and crew can be processed through Creston.

The number of conveyances and travellers has varied in recent years, and services were temporarily paused during the COVID-19 pandemic. Pre-pandemic, 13 conveyances were processed per year serving 18 to 23 annual travellers. Activity has been increasing post-pandemic, as shown in Table 3.2.

Table 3.2 - CBSA Conveyances and Travellers

Year ¹	Conveyances	Travellers
2018	13	18
2019	13	23
2020 ²	0	0
2021 ²	0	0
2022	< 5	< 5
2023	9	13
2024 (April to December)	12	19
Notes: ¹ Years are based on CBSA's fiscal year, from April 1 to March 31 ² CBSA services at the Airport were paused between March 2020 and September 2022 due to the COVID-19 pandemic.		

4 OUTLOOK AND ROLE

Section 4 assesses the priorities of the community, Town, and Regional District, as well as the opportunities to increase and diversify the Airport's use. Section 4.3 defines the Airport's role for the Master Plan horizons based on its opportunity assessment and the identified strategic priorities.

4.1 Community and Strategic Priorities Alignment

The Airport is a public asset given its ownership by the Town; financial support through the Airport Service, encompassing ratepayers in Creston, Electoral Areas B and C, and part of Electoral Area A; and capital and operating grant funding received on occasion from the Province. Based on this context, Section 4.1 examines how the Airport's operation, utilization, and regional value explored through the preceding sections align with the priorities established by the Town and Regional District through their respective strategic plans.

Strategic plans maintained by each municipality define their respective businesses, clarify their preferred futures, and identify strategic priorities to guide the allocation of limited resources. Both documents translate the priorities of the community and elected officials into actionable frameworks to provide direction on planning, decision making, and budgeting, and therefore function as appropriate frameworks to guide the assessment of the Airport's provision as a public service.

Community feedback received through the project engagement process is also reviewed to validate the assessment of the Town and Regional District strategic plans and gauge catchment area perceptions of the Airport.

4.1.1 Town Strategic Priorities

The current priorities of the Town are expressed through the 2022-2026 Strategic Plan. The Town's Strategic Plan has a set of overarching considerations and is organized into four thematic goals, each of which have supporting priorities:

1. Community Safety & Security;
2. Service Excellence;
3. Economic Health; and
4. Livability.

The current operation, utilization, and value of the Airport is assessed relative to the Strategic Plan's goals and priorities in Table 4.1, with the following categories of findings made:

- **Contributes:** The Airport supports the intent of the strategic priority. This aspect of the Airport should be preserved and strengthened in the future;
- **Misaligned:** The Airport is inconsistent with, or counter to, the intent of the priority;
- **Future Direction:** A strategic priority's intent is not currently met and could be contributed to by the Airport through further action; and
- **Neutral:** There is no relationship between the Airport and the strategic priority.

The assessment does not consider the opportunity costs associated with the allocation of Town resources to the Airport; i.e., the alternative ways that resources could be directed to other municipal services or projects.

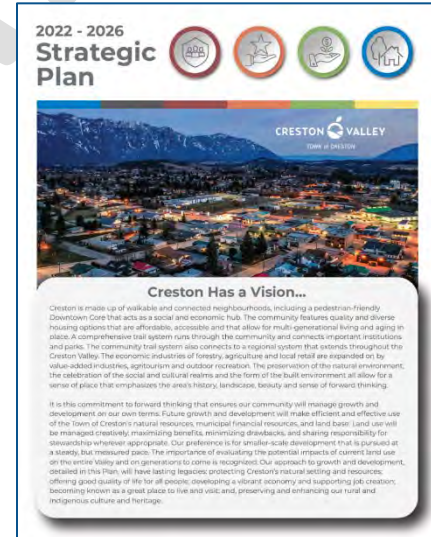


Table 4.1 - Town 2022-2026 Strategic Plan Assessment

Strategic Plan Area	Commentary
Overarching Considerations	
Reconciliation We are grateful to live on the unceded traditional territory of the Yaqan Nukiy, within the Ktunaxa Nations. The Town of Creston will proactively engage with the Yaqan Nukiy and Ktunaxa Nations to build trust and support a respectful relationship. Importantly, the Town of Creston acknowledges that reconciliation is an active process that can continually be improved upon. The Town of Creston is committed to develop strong and fair working relationships and partnerships ensuring respectful and open communication.	Future Direction: There has been limited exploration to-date of the shared priorities and opportunities for collaboration with the Lower Kootenay Band.
Environmental Stewardship Our scenic Valley's natural assets are core to our Town. We recognize changes to the climate will continue to impact the Valley. We commit to make decisions and plans through a lens of environmental stewardship for the benefit of existing and future generations.	Misaligned: The Airport and associated aircraft operations is a source of Scope 1, 2, and 3 greenhouse gas emissions. Future Direction: While limited consideration has been given to environmental stewardship in the provision of the Airport as a public service, opportunities may exist to make progress on this objective over time.
Community Safety & Security	
Public Safety Support the key services that make all our residents feel safe.	Contributes: The Airport facilitates public safety-related air operations for wildfire suppression, law enforcement, and community safety, as well as access to healthcare and search and rescue (Sections 3.5.1, 3.5.2, 3.5.3, 3.5.4, and 3.5.5).
Emergency Management Continue to take a leadership role regionally to prepare, protect and plan for the impact of emergency events.	Contributes: The Airport is an emergency management asset, participant in the Regional District's Emergency Management Committee, and facilitates emergency management-related air operations (Sections 3.5.1, 3.5.2, 3.5.3, 3.5.4, and 3.5.5).
Housing Continue to find innovative solutions to support the dignity of our residents by encouraging diverse housing options.	Neutral: The operation of the Airport does not directly impact this strategic priority.
Transportation Advocate for highway and transportation improvements to make travel within the region safer and affordable.	Contributes: The Airport is part of the catchment area's transportation infrastructure and supplements ground access to the region for the time sensitive movement of people and goods (Sections 2.4, 3.5). Air access provides an alternative means of transportation when highway and road access is inhibited. Neutral: The financial barrier to entry for private and charter air services does not address the priority for transportation affordability. However, public mandate emergency air services are provided without charge.
Service Excellence	
Community Engagement Facilitate proactive and transparent communication with community members.	Future Direction: The level of outward communications and engagement regarding the Airport has varied in recent years.

Strategic Plan Area	Commentary
Participate Regionally Continue to engage regionally to enhance the economic, social, and environmental health of the region.	Contributes: The Airport is supported on a regional basis through the Airport Service. Air services operated from the Airport serve regional needs and yield economic and social value in the catchment area (Section 3.5).
Management of Assets Proactively plan for the financial impact of sustainably managing our assets.	Future Direction: Limited consideration has been given to the lifecycle asset management requirements of the Airport's infrastructure, and an asset renewal plan and accompanying funding strategy is not in place.
Governance Focus on systems and communication that ensures we are supportive and strong leaders in our roles.	Future Direction: The existing governance structure and relationship between the Town, Airport Society, and Regional District requires detailed evaluation to ensure the appropriateness of the current model and opportunities for improvement.
Economic Health	
Business Friendly Provide an environment where new and existing businesses can thrive.	Contributes: The Airport supports the ability of employers in the catchment area to do business through its support of intercommunity access, aerial work, and tourism. These impacts are lesser in scale relative to the Airport's social value. Future Direction: Opportunities may exist for new and / or expanded economically productive end users at the Airport. This will be assessed, including potential end users, their facility and service requirements, and steps that can be taken to improve the Airport's attractiveness for this growth.
Vibrant Downtown Recognize the importance of a vibrant downtown to community pride, livability, and economic prosperity.	Neutral: The operation of the Airport does not directly impact this strategic priority.
Proactive Community Growth Create infrastructure policies and programs so residents can thrive.	Future Direction: Opportunities may exist for new and / or expanded economically productive end users at the Airport. This will be assessed, including potential end users, their facility and service requirements, and steps that can be taken to improve the Airport's attractiveness for this growth.
Livability	
Connectivity Develop sustainable, active, safe, and efficient transportation.	Neutral: This strategic priority is focused on local transportation, including walkability, accessibility, etc. The operation of the Airport does not directly impact this strategic priority.
Vibrant Arts and Culture Celebrate the artistry and diversity of our community based on individual lived experience.	Neutral: The operation of the Airport does not directly impact this strategic priority.
Volunteer Support Enable and encourage volunteers and community organizations addressing social and environmental issues.	Contributes: The success of the facility since the formation of the Airport Society and transfer of operations from the Town in 2009 has been inseparable from the contributions of its volunteers. Volunteer efforts have been used to advance maintenance and repair projects and routine operations while limiting expenses.
Recreation Maintain and enhance opportunities for our residents to connect in community spaces and live healthy lives.	Neutral: The operation of the Airport does not directly impact this strategic priority. The Airport presents opportunities locally for the recreational enjoyment of aviation; however, barriers to entry make this a limited form of recreation in Creston.

The operation of the Airport and the associated air services it facilitates are strongly aligned with the Town's strategic priorities of ensuring public safety, emergency management, transportation access, and being a business-friendly community. Through the review of the Airport's users and their associated value in Section 3.5, the air services that contribute to public safety and emergency management are greater in both their scale and social impact versus other forms of activity, demonstrating closer alignment with the Strategic Plan's priorities. From an operations perspective, the regional collaboration in funding through the Airport Service and strength of volunteerism both reflect alignment with the Strategic Plan. On a future-oriented basis, the Town's Strategic Plan identifies several priorities that require integration in the Master Plan, including the exploration of:

- Collaboration with the Lower Kootenay Band;
- The current governance model and potential changes that may be required;
- Lifecycle asset management requirements, costs, and funding strategies;
- Environmental stewardship;
- Increased community engagement; and
- Proactive business development and increasing the Airport's role as an economically productive asset.

4.1.2 Regional District Strategic Priorities

The Regional District's 2024-2026 Strategic Plan is reviewed in the same manner as the Town's, focussing on its seven strategic priorities as shown in Table 4.2:

1. Organizational Excellence;
2. Manage our Assets and Service Delivery in a Fiscally Responsible Manner;
3. Develop Relationships and Partnerships;
4. Energy Efficiency and Environmental Responsibility;
5. Innovate to Reduce the Impact of Waste;
6. Regional Approach to Growth; and
7. Advocacy.



The assessment of the Regional District's 2024-2026 Strategic Plan yields similar findings to those of the Town's Strategic Plan, demonstrating close alignment of the Airport's emergency services role, volunteer-based operating structure, and regional collaboration in funding with its priorities. Similar directions for future action are also identified, with the addition of an advocacy focus to ensure that external sources of funding, primarily through the Province, remain available to offset expenses.

Table 4.2 - Regional District 2024-2026 Strategic Plan Assessment

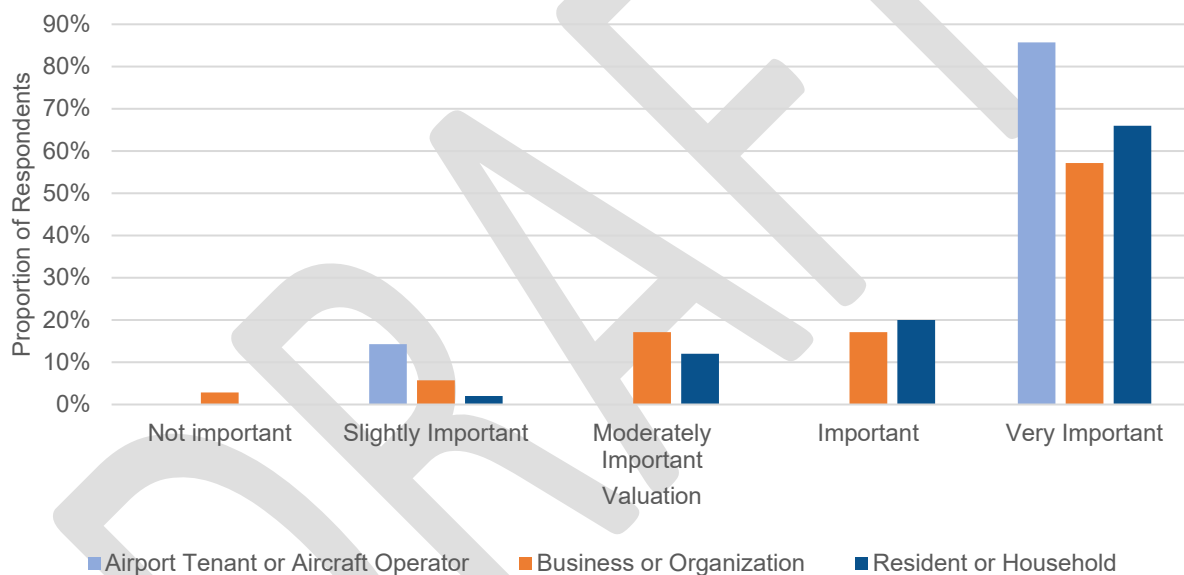
Strategic Plan Area	Commentary
Organizational Excellence Our objective is to provide a resilient governance structure that fosters excellence in every aspect of service delivery.	Future Direction: The existing governance structure and relationship between the Town, Airport Society, and Regional District requires detailed evaluation to ensure the appropriateness of the current model and opportunities for improvement.
	Future Direction: The level of outward communications and engagement regarding the Airport has varied in recent years.
Manage our Assets and Service Delivery in a Fiscally Responsible Manner Our objective is to optimize the utilization of our financial resources, ensuring maximum efficiency and delivering exceptional value.	Future Direction: Limited consideration has been given to the lifecycle asset management requirements of the Airport's infrastructure, and an asset renewal plan and accompanying funding strategy is not in place.
Develop Relationships and Partnerships Our objective is to prioritize the active participation of Indigenous communities and volunteer organizations in decision making processes that directly affect their lives.	Future Direction: There has been limited exploration to-date of the shared priorities and opportunities for collaboration with the Lower Kootenay Band.
	Contributes: The Airport is supported on a regional basis through the Airport Service.
	Contributes: The success of the facility since the formation of the Airport Society and transfer of operations from the Town in 2009 has been inseparable from the contributions of its volunteers. Volunteer efforts have been used to advance maintenance and repair projects and routine operations while limiting expenses.
Energy Efficiency and Environmental Responsibility Our objective is to diligently respond to the expectations of our residents by actively incorporating their perspectives and prioritizing environmental stewardship in all our actions.	Contributes: The Airport is an emergency management asset, participant in the Regional District's Emergency Management Committee, and facilitates emergency management-related air operations (Sections 3.5.1, 3.5.2, 3.5.3, 3.5.4, and 3.5.5).
	Misaligned: The Airport and associated aircraft operations is a source of Scope 1, 2, and 3 greenhouse gas emissions.
	Future Direction: While limited consideration has been given to environmental stewardship in the provision of the Airport as a service, opportunities may exist to make progress on this objective over time.
Innovate to Reduce the Impact of Waste Our objective is to leverage available opportunities in order to enhance our Waste Management System.	Neutral: The Airport's operation results in limited levels of waste production. Waste diversion strategies may be explored for the facility consistent with this priority but do not warrant detailed exploration through the Master Plan.
Regional Approach to Growth Our objective is to ensure that the decisions made by the board are thoroughly analyzed and considered from a comprehensive perspective and community input.	Future Direction: Opportunities may exist for new and / or expanded economically productive end users at the Airport. This will be assessed, including potential end users, their facility and service requirements, and steps that can be taken to improve the Airport's attractiveness for this growth.
Advocacy Our goal is to leverage our rural perspective to advocate for the improvement of the well being of our region through Provincial lobbying efforts.	Future Direction: The Airport is economically dependent on external funding, including the Province's support through the BCAAP. Advocacy may be used to ensure grant funding remains available to support the Airport and decrease the capital expenses supported through the Airport Service and local sources.

4.1.3 Community Perspectives

The surveying and engagement process described in Section 1.2.4 was used to provide insights on community perspectives regarding the Airport. As noted previously, 98 surveys were received through the Let's Talk Creston online survey; Creston Valley Chamber of Commerce survey; and inputs received at the open house. 59% of respondents providing location information were from Creston, with 39% of inputs received from respondents in Electoral Areas A, B, and C. The representativeness of this data to the larger community may be influenced by response bias, whereby individuals with a vested interest in or against the Airport may be more likely to provide feedback.

Figure 4.1 provides respondent views as to the importance of the availability of the Airport to Creston and the surrounding region. 82% of all respondents identified the facility as being important or very important to the region. Among self-identified residents or household representatives, 86% assigned these levels of importance, while 74% of business and organization representatives assigned these ratings. 5% of respondents identified the Airport as being not important or only slightly important, while a further 12% of all respondents find the facility to be moderately important to the region.

Figure 4.1 - Survey Responses, Overall Airport Importance



De Havilland Canada Dash 8-300 parked on Apron I

Respondents were asked to identify the importance of the various operations supported at the Airport, including three forms of emergency air services: air ambulance access, wildfire suppression operations, and search and rescue. These air services were assigned the highest valuations (important or very important) by 97% of respondents for air ambulance access, 94% for wildfire suppression operations, and 92% for search and rescue, as shown in Table 4.3. Valuations assigned to these air services were consistent across respondents from Creston and Areas A, B, and C.

Table 4.3 - Survey Responses, Importance of Emergency Air Services

Valuation	Air Ambulance and Patient Transport	Wildfire Suppression	Search and Rescue
Not Important	1%	1%	1%
Slightly Important	1%	1%	2%
Moderately Important	1%	4%	5%
Important	9%	17%	15%
Very Important	88%	77%	77%
Total	100%	100%	100%

The importance assigned to commercial aircraft operations was lower versus the valuations given for emergency air services, as shown in Table 4.4. Across all respondents, 70% identified commercial air services as being important or very important, with a further 13% seeing these operations as being moderately important. Airport tenants and aircraft operators assigned a somewhat lower level of importance, while both resident and business respondents assigned comparable valuations.

Table 4.4 - Survey Responses, Importance of Commercial Air Services

Valuation	Respondent Type				
	Resident or Household	Business or Organization	Airport Tenant or Aircraft Operator	Other or No Answer	All Respondents
Not Important	12%	11%	0%	0%	10%
Slightly Important	4%	14%	0%	0%	7%
Moderately Important	14%	6%	43%	17%	13%
Important	24%	49%	0%	50%	33%
Very Important	46%	20%	57%	33%	37%
Total	100%	100%	100%	100%	100%



General aviation aircraft parked in the tie-down area

The final type of activity that was surveyed was the importance of based and visiting recreational aircraft operations (Table 4.5). Across all respondents, 55% of surveys identified this form of activity as being important or very important. Resident and business respondents assigned the lowest valuations, with 54% and 51% of survey responses in these respective categories identifying recreational aircraft operations as being important or very important. Conversely, support was highest among tenants of the Airport and aircraft operators; however, even this group assigned lower valuations compared to the emergency air services identified in Table 4.3.

Respondents were asked to identify their preferred vision for the Airport based on four scenarios:

- **Growth and Development:** The continued operation of the Airport and exploration of new roles and / or growth. 70% of respondents identified this as their vision for the Airport;
- **Status Quo:** The continued operation of the Airport, with no investments made for growth or expansion. 22% of respondents identified this as their preferred option;
- **Closure:** The closure of the Airport. 2% of respondents identified this as their preference; and
- **Other:** 5% of respondents provided comments detailing different preferred visions.

Table 4.5 - Survey Responses, Importance of Recreational Aircraft Operations

Valuation	Respondent Type				
	Resident or Household	Business or Organization	Airport Tenant or Aircraft Operator	Other or No Answer	All Respondents
Not Important	14%	11%	0%	0%	11%
Slightly Important	12%	14%	0%	0%	11%
Moderately Important	20%	23%	29%	33%	22%
Important	38%	34%	14%	17%	34%
Very Important	16%	17%	57%	50%	21%
Total	100%	100%	100%	100%	100%



October 2024 search and rescue training exercise

4.2 Activity Growth and Diversification Opportunities

The Master Plan considers opportunities for increasing and diversifying the Airport's users and activity levels that will:

- Generate additional operating revenues to contribute to the facility's financial sustainability;
- Provide economic benefits in the Creston Valley, including increased local employment and facilitating services that improve the ability of companies to do business in the area;
- Provide social value; and
- Achieve the highest and best use of existing and planned infrastructure and services.

4.2.1 Private Hangar Development

The development of hangars by private aircraft owners represents the primary form of based activity at the Airport and is one of the largest sources of revenues for the facility. A total of 16 private hangars have been developed at the Airport, seven of which have been developed over the approximately 15-year period since 2009, and two of which have been built in the past five years. There is one designated hangar lot remaining for development at the time of the Master Plan's preparation. Demand for private hangar development is expected to be influenced by:

- The availability of existing hangars for purchase at the Airport. Through generational turnover, additional hangars may enter the market in the coming years representing local inventory through resale;
- Private aircraft ownership levels in the facility's catchment area. Most demand is expected to be captured from owners in the Creston Valley residing within a reasonable driving distance from their hangar. Lower levels of additional growth could come from operators located further afield if their nearest airport (e.g., Cranbrook) is not their preferred option;
- The competitiveness of lease conditions and the availability of suitable lots; and
- Broader economic conditions, including construction costs, interest rates affecting the cost of borrowing, and individual or corporate discretionary funds to dedicate to a hangar.

Consultations with the Airport Society identified a modest positive outlook with respect to private hangar development. Demand in the short-term planning horizon may be low amid limited new aircraft operators in the region, construction and borrowing-related cost pressures, and the availability of multiple existing hangars on the market. To provide a cost-effective option for private aircraft storage, consideration is being given by the Airport Society to the development of a multi-bay t-hangar complex north of Apron I. A t-hangar complex could accommodate an estimated nine to 10 general aviation aircraft and, in combination with private hangar development, likely satisfy demand for hangar storage in the short and medium-term planning horizons.

4.2.2 Aviation Commercial Development

The Airport presently does not support any based aviation commercial service providers, with the nearest such services located in Castlegar, Cranbrook, and Nelson. Private-sector interest in the Airport has been received in previous years for the development of a general aviation aircraft original equipment manufacturer and by a rotary-wing air taxi and aerial work provider. Rotary-wing aerial work services were formerly provided by Kootenay Valley Helicopters before the company closed its Creston base.

The attraction of aviation commercial activity to the Airport closely aligns with the Town and Regional District's strategic priorities of economic growth and diversification discussed in Section 4.1 and would positively influence the utilization of the facility. Based on a market scan, the following opportunities represent priority candidates for pursuit:

- Air taxi and aerial work providers, including the attraction of a based helicopter company;
- Aircraft maintenance and associated service providers, including Approved Maintenance Organizations and independent Aircraft Maintenance Engineers; and
- Flight Training Units and freelance Certified Flight Instructors.

Based on the size of the catchment area and its predominant industries, it is anticipated that potential aviation commercial development may be smaller in scale and oriented, at least initially, to supporting general aviation operators as the predominant user group at the Airport. By providing well-maintained infrastructure and services that support the needs of visiting aircraft operators, the Airport can also build a reputation as a suitable temporary base of operation for contract-related aerial work, such as aerial surveying, construction support, wildlife counts, and agricultural support.

Based on the limited commercial activity that occurs at the Airport presently, proactive business development will be required to market the opportunities that exist for prospective businesses and establish the reputation of the facility as a competitive option.

4.2.3 Itinerant Air Access

Activity at the Airport by visiting aircraft operators is primarily tied to individual, group, or corporate requirements to access the catchment area for 1) business purposes; or 2) for discretionary reasons, such as tourism and visiting friends or relatives. Additional activity on a lower scale is also attributed to individuals flying between airports for the primary enjoyment of the flight itself, as well as aircraft transiting between airports as part of initial or recurrent training. The stimulation of additional itinerant air access is a priority advanced through the Master Plan to improve the use of the Airport, generate additional operating revenues, increase its economic and social impact, and expand the awareness and reputation of the Airport from a business development lens. This includes a multi-part focus on:

- **Tourism Access:** The tourism sector is a growing part of the local economy and a priority for future economic success. The Airport may be positioned as an option for visitors to the region, potentially in partnership with local accommodation and experience providers, and by targeted marketing to the general aviation community in British Columbia, Alberta, and the northwest United States;
- **Business Access:** While the travel needs of businesses to and from the catchment area are largely external from the purview of the Master Plan, barriers to this demand occurring at the Airport can be removed by matching its infrastructure and services to the needs of end users and by ensuring employers in the region are aware of the availability of the facility; and
- **Other Forms of Activity:** Positioning the facility as a cross-country destination for initial and recurrent pilot training, as well as a preferred mid-flight refuelling location, including for aircraft transiting to and from the United States.

4.2.4 Scheduled Passenger Air Services

Creston has supported scheduled passenger air services on a limited basis historically, with brief periods of service to Vancouver by small air carriers. Based on available resources, previous periods of service were characterized by challenges in service reliability and challenging market conditions that resulted in operators withdrawing. The community engagement process identified the desire for scheduled services to destinations such as Vancouver and Calgary as a recurring theme. The completion of a detailed air service market feasibility study is beyond the scope of the Master Plan; however, this opportunity is not advanced for further consideration in the short or medium-term planning horizons due to:

- **Market Leakage:** The availability of scheduled passenger air services at three airports within a 1h30m driving time in normal conditions from Creston (Castlegar, Cranbrook, and Trail) as discussed in Section 2.4.2. These airports support multiple daily flights to Calgary and Vancouver operated by Air Canada, Pacific Coastal Airlines, and WestJet, providing passengers in the Creston Valley with numerous options for their travel needs. While access by road to these airports can be challenging on occasion, the reasonable driving times to these airports and longstanding practice of passengers from the Creston Valley using these services would likely result in a high level of market leakage.
- **Regional Air Service Market Challenges:** The five-year period preceding the preparation of the Master Plan has been characterized by marked change and instability in regional passenger air services. Developments of note include the retirement by Air Canada and WestJet of sub-78 seat regional aircraft such as the De Havilland Canada Dash 8-100, Dash 8-300, and Saab 340; decreased route frequencies and destinations from Castlegar and Cranbrook; widespread industry challenges with employee recruitment and retention; and regulatory changes affecting flight duty times and the staffing required to maintain schedules. Numerous airports serving comparable or larger catchment areas across Canada have experienced service decreases and / or the loss of flights altogether.
- **Airport Readiness:** Numerous operational, infrastructure, and service limitations at the Airport would need to be resolved to support service, including the:
 - Attainment and holding of certification, which will increase its regulatory obligations, operational complexity, and staffing requirements. Certification is a prerequisite for airports that support scheduled passenger air services;
 - Substantial modification or replacement of the terminal building to accommodate passenger processing functionality;
 - Modification of operational processes and capabilities to ensure the level of service required by regional air carriers is achieved; and
 - Development of capabilities regarding passenger processing and air carrier ground handling.

The scope of these initial and ongoing investments has not been estimated but will fundamentally change the financial model of the Airport and likely require increased public investment.

This market outlook may be revisited in the medium and long-term planning horizons to assess the demand for service, the state of the regional air travel market, and potential emergent opportunities (e.g., the potential impact of hybrid-electric regional passenger aircraft on route economics).

4.2.5 Non-Aviation Development

The Airport is designated as M4 – Mixed Use Industrial (Airport) in the Regional District's Electoral Area 'B' Comprehensive Land Use Bylaw No. 2316. The M4 land use designation permits a range of non-aviation activities in addition to those related to the aviation functions of the Airport, including light manufacturing, civic administration, general commercial, tourist accommodation, open storage, and recycling uses. Consideration has been given by the Airport Society through past planning exercises to the development of industrial lots in the groundside area to diversify the facility's revenues.

The feasibility of non-aviation development occurring at the Airport is influenced by the Sponsored Crown Grant that applies to the property pursuant to Section 51 of the Land Act. The restrictive covenant on title allows for the land to be returned to the Crown upon the request of the Province if the land is no longer used for the purpose intended. The reversionary clause requires that the lands be used for airport purposes only.

The Province's Ministry of Water, Land and Resource Stewardship – Crown Land Authorizations Branch was consulted to verify the implications of the Sponsored Crown Grant. The Town has permission through the Sponsored Crown Grant to issue leases for ancillary airport uses. The following uses are deemed by the Province through Appendix 2 of its Land Use Operational Policy – Airports (May 9, 2024) as being necessary for the viable operation and management of a public airport facility and permissive under the terms of the Sponsored Crown Grant (please refer to the Land Use Operational Policy – Airports for the exact list):

- Terminal buildings;
- Hangars;
- Runways;
- Grounds maintenance equipment buildings;
- Flight service stations;
- Car parking area;
- Aircraft parking area;
- Water bomber or chemical staging areas for forest protection;
- Air ambulance provisions;
- Flying school facilities;
- Cargo handling and storage facilities;
- Aircraft sales, service, maintenance, airframe, electrical, mechanical, and avionics services;
- Wheels-to-floats conversion facilities;
- Vehicle rental offices and parking facilities;
- Restaurants and gift shops providing airport revenue;
- Scheduled service and charter operators;
- Specialty agricultural and / or forest protection spraying, related services, and storage facilities;
- Flying clubhouses;
- Caretaker's residences;
- Fuel dispensing and storage facilities; and
- Navigation / landing aids.

A narrow interpretive approach should be expected that is focused on the public use dimensions of the Airport as opposed to diversified forms of non-aviation revenue generation, based on consultations with the Crown Land Authorizations Branch. Approval from the Province is required before uses beyond those specified in the Land Use Operational Policy – Airports may be considered. The pursuit of such uses may trigger the reversion clause or require that fair market value for the land be paid.

The combined effect of the permitted uses specified in the Land Use Operational Policy – Airports and the requirement for fair market value to be paid may mean that non-aviation industrial development represents a non-viable opportunity for the Airport. This condition is underscored by additional factors that may render the Airport lands as being less competitive versus other options for end users:

- The unavailability of potable water services for domestic use and fire protection, as well as sanitary sewer services. As discussed in Section 5.4.6, the costs of extending water servicing as part of the Lister water system are significant; and
- The availability of commercial and industrial land available for purchase on a fee simple basis elsewhere in Creston and the Regional District.

Further engagement will be required with the Province to investigate the feasibility of non-aviation land development occurring at the Airport. As part of this process, the opportunity may be considered for exploring interest by the Lower Kootenay Band through the Lower Kootenay Development Corp. in pursuing mutually beneficial economic development opportunities for lands at the Airport. This approach addresses a strategic priority and may represent an opportunity for meaningful economic partnerships between the Town, Lower Kootenay Band, and Regional District.

4.3 Airport Role Definition

The definition of the Airport's role allows for the prioritization of how limited resources will be allocated in the future and in doing so inform the recommendations of the Master Plan, including operating and capital funds; land, infrastructure, and services; staff and volunteer efforts; and business development efforts. The prioritized role of the Airport defined through the Master Plan is as follows:

1. Provide an exceptional level of service for public health and safety air services, including air ambulance, wildfire suppression, search and rescue, and patient transfer operations;
2. Facilitate aircraft operations that support the economic vitality and diversification of the Creston Valley, including the needs of its primary industries and the tourism sector. This includes based and visiting aviation operations, such as charter and air taxi services, flight training, aerial work, maintenance, and other similar forms of activity;
3. Support aviation-related community programming that yields social value; and
4. Accommodate private and recreational aircraft operations.



RCAF CH-146 Griffon arriving at the aircraft refuelling facility

5 INFRASTRUCTURE AND SERVICE REQUIREMENTS

Section 5 evaluates the Airport's infrastructure assets and supporting services and identifies requirements for improvement and renewal based on:

- Their observed condition and anticipated lifecycle asset management requirements;
- The needs of current and future aircraft operators; and
- Opportunities for operational and aviation safety improvements.

As a registered aerodrome, the Airport's primary regulatory obligations are defined in Section 301 of the Canadian Aviation Regulations, which impose limited requirements from an infrastructure and supporting service perspective. Additional resources that are used to provide supplementary guidance in the assessment of the Airport's infrastructure and services include, but are not limited to:

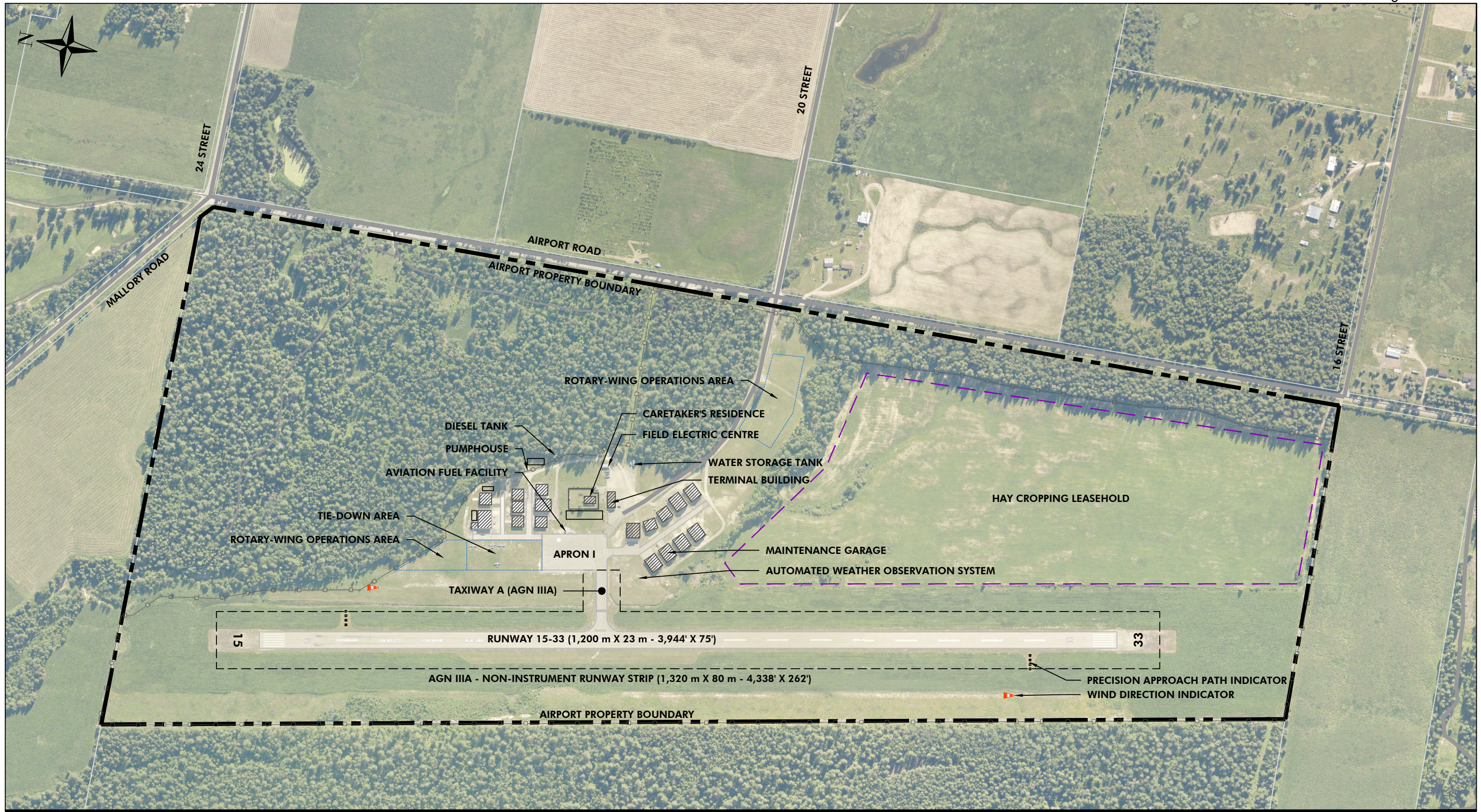
- TP312 – Aerodrome Standards and Recommended Practices (5th Edition);
- Advisory Circular 301-001 – Procedure to be followed in order to support Instrument Approach Procedures (IAP) at a non-certified aerodrome (Issue No. 5); and
- Subject matter published by Transport Canada and the Federal Aviation Administration.

Each recommendation made in Section 5 is assigned one of four categories; a given project may also contribute to other categories:

1. **Improving Airport Safety:** Initiatives to correct regulatory non-compliances or decrease potential hazards to aircraft operators and the public;
2. **Lifecycle Asset Renewal:** Projects to rehabilitate or replace assets to ensure their continued functioning at a comparable level of service, based on their observed or anticipated degradation over time;
3. **Level of Service Improvement:** Recommendations intended to improve the ability of the Airport's primary users to conduct operations through the expansion or upgrading of infrastructure and services; and
4. **Enabling Airport Development:** Projects that enable airside land development.

The identified infrastructure and service projects are consolidated in the recommended Capital Asset Management and Improvement Plan (Section 5.5). The Capital Asset Management and Improvement Plan identifies major renewal and upgrading projects and does not identify routine and ongoing maintenance requirements, such as crack sealing, the reapplication of paint markings, the replacement of damaged equipment, or periodic repairs to maintenance equipment. These requirements and costs will be identified within the Airport Society's operating budget.

The Airport's site plan is shown in Figure 5.1.



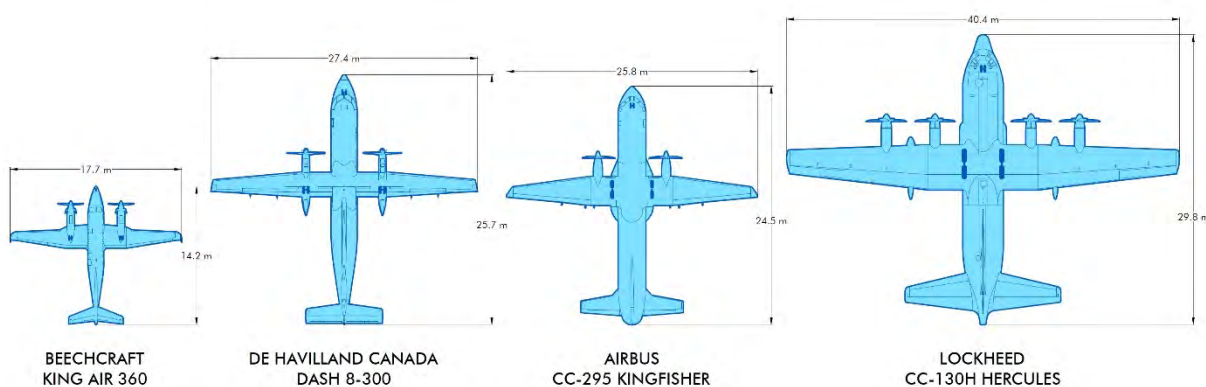
5.1 Design Aircraft

Based on the analysis of Section 4, the design aircraft for the Master Plan is defined as the twin-engine turboprop Beechcraft King Air 360 operated on behalf of BCEHS. The Beechcraft King Air 360 will be the primary aircraft used to evaluate the characteristics of the maneuvering area and guide recommended investments in the airfield infrastructure. The specifications of the design aircraft are provided in Table 5.1.

The design aircraft is used to evaluate the primary components of the movement area (Runway 15-33, Taxiway A, and Apron I). For general aviation development areas, alternative aircraft will be used for evaluation purposes. The selection of the Beechcraft King Air 360 as the design aircraft does not preclude the use of the Airport by more operationally demanding aircraft, such as turboprop aircraft used for charter and emergency response purposes, including the De Havilland Canada Dash 8-300, Airbus CC-295 Kingfisher, and Lockheed CC-130H Hercules. The pilot-in-command of each aircraft is responsible for evaluating and determining that the Airport is suitable for the intended operation prior to taking off from, landing at, or otherwise operating at the facility.

Table 5.1 - Design Aircraft Specifications

Aircraft		Beechcraft King Air 360
Aircraft Group Number	Runway	II
	Taxiway	II
Length		14.2 m
Wingspan		17.7 m
Tail Height		4.4 m
Outer Main Gear Wheel Span		5.7 m
Aircraft Load Rating		2.7 (King Air 350)
Approach Speed Category		Category B



Design Aircraft (Beechcraft King Air 360) and more operationally demanding aircraft

5.2 Movement Area and Transitional Infrastructure

5.2.1 Runway

The current specifications of Runway 15-33 are provided in Table 5.2.

Table 5.2 - Runway Specifications

Designation	15-33
Length	3,944 ft. (1,202 m)
Width	75 ft. (23 m)
Surface Type	Flexible Pavement – Asphalt
Pavement Load Rating / Pavement Classification Rating	Not Reported
Attestation (AC 301-001)	AGN IIIA – Non-Instrument
Design Aircraft	Beechcraft King Air 360 (See Table 5.1)

Runway Length

Runway 15-33 is routinely used to support operations by the design aircraft and its comparable models. The 3,944 ft. length of Runway 15-33 has generally been suitable to support the takeoff and landing performance requirements of the design aircraft with occasional limitations, as well as operations by other aircraft such as the Beechcraft 1900, CC-295 Kingfisher, De Dash 8-300, and Pilatus PC-24. Although the runway length typically precludes operations by multiengine airtankers operated for wildfire suppression purposes, this has not been identified as a limitation based on BCWS's deployment strategy described in Section 3.5.2.

Carson Air, the holder of the current BCEHS fixed-wing air ambulance contract, was consulted to develop detailed performance calculations regarding how the length of Runway 15-33 affects operations by the design aircraft. Carson Air completed performance calculations for the Beechcraft King Air 360 based on different weights and temperatures, with weights based on the most common scenarios for aircraft operating in Creston after dispatching from Kelowna, which represents the most frequently occurring mission profile. Based on the calculations shown in Table 5.3, it was identified that the Takeoff Field Length implications of the runway results in crews incurring performance limitations at temperatures of approximately 15°C. These limitations can include taking on less fuel and / or leaving normal onboard equipment in Kelowna to ensure required values are met.

Table 5.3 - Design Aircraft Takeoff Field Length Performance Calculations

Aircraft Criteria	Aircraft Weight	Outside Air Temperature (°C)						
		-15	-5	5	15	25	30	35
Takeoff Field Length (ft.)	14,500 lbs	3,047	3,261	3,480	3,709	<u>3,948</u>	<u>4,070</u>	<u>4,194</u>
	15,500 lbs	3,321	3,557	3,804	<u>4,065</u>	<u>4,336</u>	<u>4,459</u>	<u>4,591</u>
Note: Current runway length is 3,944 ft. All performance calculations are per Carson Air.								

Through anticipated increased ambient temperatures and the greater occurrence of hot weather events as a result of climate change, the performance penalties described above may increase in frequency with associated operational impacts. The extension of Runway 15-33 to a target length of 4,500 ft. through the expansion of the runway to the south is recommended in the short-term planning horizon to address the performance penalties incurred during the provision of air ambulance services. The extension of the runway will have secondary benefits in terms of the Airport's capability to support larger aircraft operated for search and rescue and commercial purposes, such as the CC-295 Kingfisher, CC-130 Hercules, and De Havilland Canada Dash 8-300.

Runway Width

The width of Runway 15-33 is suitable for the 5.7 m Outer Main Gear Wheel Span (OMGWS) of the design aircraft, as well as the larger CC-130 Hercules (OMGWS of 4.4 m) and CC-295 Kingfisher (4.5 m) operated by the RCAF in British Columbia for search and rescue purposes. While the OMGWS of select regional charter aircraft such as the De Havilland Canada Dash 8-300 (8.6 m) exceed the 6.0 m standard for a 75 ft. runway established in TP312, the width of Runway 15-33 has not limited such operations historically and the need to widen the runway has not been identified within the Master Plan horizons.

Ground maneuvering analyses were completed for the design aircraft and larger category aircraft to identify whether the runway width is suitable for aircraft backtracking and completing 180° turns at the Runway 15 and 33 thresholds. These modelling exercises identified that the 75 ft. runway width is suitable for the backtracking of the design aircraft, which has been validated through consultations with Carson Air. The runway width is also suitable for 180° turns by the CC-295 Kingfisher, CC-130 Hercules, and Dash 8-300 – however, the larger turning radii of these aircraft result in almost the entire usable width being used, with limited margin for error or variability from pilot technique or surface contamination.

The construction of turning bays at the Runway 15 and 33 thresholds is recommended to occur concurrent with the extension of Runway 15-33 in the short-term planning horizon or with the rehabilitation of the asset in the medium-term planning horizon. The development of turning bays is not recommended as a standalone project prior to the runway's extension or rehabilitation given the present suitability of the runway for the design aircraft and to realize construction and financial efficiencies.

Pavement Bearing Strength

The Airport Society does not hold information on the Pavement Load Rating / Pavement Classification Rating of Runway 15-33 or other components of the movement area. Runway 15-33, Taxiway A, and Apron I are used on a year-round basis by the design aircraft (Aircraft Load Rating of 2.7) with no reported challenges and has been used on a limited basis by aircraft with higher load ratings such as the De Havilland Canada Dash 8-300 and CC-295 Kingfisher. The absence of observed or reported distresses associated with the operation of the design aircraft indicate that the pavement bearing strength is likely sufficient and suggests that the strengthening of the runway is not warranted in the Master Plan horizons.

The completion of a pavement bearing strength investigation is recommended in the short-term planning horizon by a qualified engineering consultancy during the engineering design process for the runway extension project. The availability of this information to provide to aircraft operators will enable the Airport Society to ensure that critical movement area pavements are not negatively impacted by aircraft that exceed their bearing strength.

Runway Capacity

Airfield capacity considers the number of aircraft movements that can be safely accommodated in a given period based on the configuration of the runway, taxiway, and apron environment. The configuration of Runway 15-33, Taxiway A, and Apron I introduces the following capacity factors:

- Runway 15-33 has a single point of access at its midpoint for arriving and departing aircraft at Taxiway A. Almost all aircraft taxi to the Runway 15 or 33 thresholds prior to departure (“backtracking”) and arriving aircraft routinely must backtrack to Taxiway A to exit the runway. Backtracking aircraft increase runway occupancy times and decrease airfield capacity; and
- Taxiway A can accommodate a single arriving or departing aircraft at a given time. Concurrent arrivals and departures require that one aircraft must hold on Apron I or Runway 15-33 for the taxiway to be cleared by the other aircraft, requiring prior coordination.

Peak hour aircraft movement data was unavailable to assess runway occupancy and the impacts on airfield capacity. Consultations with the Airport Society suggest that these conditions can result in occasional delays during peak periods, including coordination between aircraft operators, extended holding times, and aircraft modifying their arrivals and traffic circuits. These congestion challenges are understood to typically occur during favourable weather conditions when multiple general aviation aircraft are operating and are compounded by the arrival or departure of higher performance aircraft, such as turboprop and turbofan charter and air ambulance operators.

The Airport Development Plan reserves for the construction of a new Aircraft Group Number I taxiway (Taxiway B) to Runway 15-33 north of Taxiway A. This project is identified in Section 5.2.2 and is recommended as a discretionary project without a defined planning horizon for implementation, as doing so will be informed by available financial resources and observed airfield capacity versus demand. The Airport Land Use Plan reserves for the development of a full or partial-length parallel taxiway; however, the requirement for this investment is not expected to be reached within the Master Plan horizons.

Asset Condition

Runway 15-33 was originally constructed in 1982 and was last rehabilitated in 2004. The scope of the 2004 rehabilitation was not available for review. Based on a visual inspection in September 2024 by HM Aero, the asset is assessed as being in good condition with observed distresses including:

- Low severity longitudinal joint cracking;
- Isolated low severity transverse cracking; and
- Moderate severity pavement edge cracking.

Crack sealing and localized repairs have been completed on an as-required basis, and the majority of sealed cracks exhibit limited instances of reopening. Despite the asset reaching the end of the typical 15 to 20-year useful service life for airfield asphalt pavements, an estimated eight to 10 years may remain before rehabilitation is required in the medium-term planning horizon. Assuming that the runway continues to exhibit similar forms of deterioration and routine maintenance is completed on an ongoing basis, the scope of rehabilitation may be limited to a surface overlay with isolated full depth crack repairs; this assumption has been used to inform the Master Plan’s cost estimate. Ongoing monitoring will be required to validate this estimated timeline, and a geotechnical investigation will inform the actual scope of work for the rehabilitation project, when required.

Recommendation	Category	Planning Horizon	Cost Estimate
Runway 15-33 Extension and Turning Bays	Level of Service Improvement	Short-Term	\$1,175,000
Runway 15-33 Rehabilitation	Lifecycle Asset Renewal	Medium-Term	\$4,300,000

5.2.2 Taxiways

Aircraft ground movement is facilitated through a network of three taxiways as identified in Table 5.4.

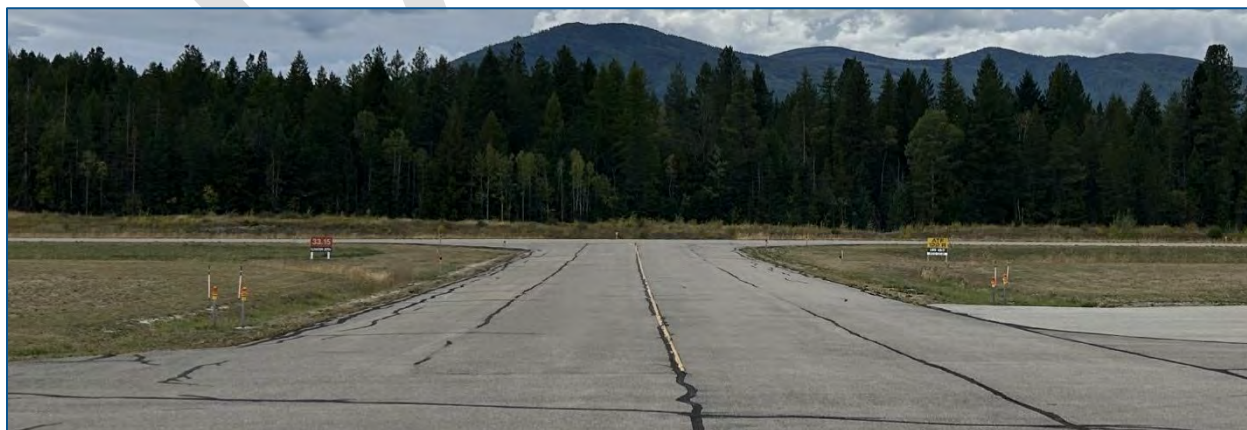
Table 5.4 - Taxiway Specifications

	Taxiway A	Hangar Taxiways – North	Hangar Taxiway – South
Width	45 ft. (14.0 m)	26 ft. (7.5 m)	20 ft. to 28 ft. (6.0 m to 8.5 m)
Surface Type	Flexible Pavement – Asphalt	Flexible Pavement – Asphalt	Flexible Pavement – Asphalt
Pavement Load Rating / Pavement Classification Rating	Not Reported	Not Reported	Not Reported
Aircraft Group Number	IIIA	I	I
Design Aircraft	Beechcraft King Air 360 (See Table 5.1)	Cessna 206	Cessna 206

Taxiway A

Taxiway A provides access between Apron I and Runway 15-33. Based on TP312 5th Edition, the 14 m width of Taxiway A is sufficient for aircraft with OMGWS of up to 6 m, which encompasses the design aircraft and RCAF aircraft operated for search and rescue purposes (i.e., CC-130 Hercules, CC-295 Kingfisher). While the taxiway width is substandard based on TP312 to support regional charter aircraft with larger OMGWS, such as the Dash 8-300, such aircraft have been able to operate at the Airport historically with attention paid to landing gear clearances during taxiing. The need to widen Taxiway A or modify its intersection fillets with Runway 15-33 has not been identified through the Master Plan. As noted above, the pavement bearing strength is unknown and will require evaluation in the short-term planning horizon.

Taxiway A was constructed in 1982 and was last rehabilitated in 2004 concurrent with Runway 15-33. The taxiway surface was seal coated in 2012. The asset is assessed as being in a fair to good condition as of September 2024 with similar distresses as observed on the runway, specifically low severity longitudinal joint, transverse, and edge cracking. Based on the asset's observed condition, it is estimated that rehabilitation will next be required in the medium-term planning horizon, potentially through a surface overlay depending on future geotechnical findings.



Taxiway A viewed from Apron I

Hangar Taxiways – North

The eight hangars and the aircraft tie-down area located north of Apron I are accessed through a network of paved taxiways. These taxiways have historically been used by single-engine general aviation aircraft up to the Cessna 206 in size and are suitable in their width and design for this category of users. This network of taxiways was reportedly constructed in or around 1996 and was observed to be in fair condition in September 2024, with identified distresses including low to medium severity edge cracking, joint deterioration, alligator cracking, and vegetation growth. The northern hangar taxiways experience limited pavement loading from operations and crack sealing that has been completed to address the distresses noted above has generally been effective at limiting further degradation, with larger scale failures and Foreign Object Debris not observed. The need to rehabilitate the northern hangar taxiways may therefore not be required until the long-term planning horizon with continued routine maintenance and ongoing monitoring.

Hangar Taxiway – South

General aviation aircraft accessing the southern private hangar area from Apron I are supported by a 7.5 m wide paved taxiway. The width of the southern hangar taxiway is suitable for the OMGWS of the current and anticipated future general aviation users. The southern hangar taxiway was resurfaced in 2014 to address damage incurred during the expansion of Apron I and was extended by approximately 20 m to service new development within the past five years. The original portion of the southern hangar taxiway was observed to be in fair condition in 2024, with distresses including low severity joint deterioration, vegetation growth, and alligator cracking at the intersection of the extended paving area. The 20 m extension was observed to be in good condition with no notable distresses. The need to rehabilitate the southern hangar taxiway is not anticipated to be required until the long-term planning horizon with ongoing maintenance.

Recommendation	Category	Planning Horizon	Cost Estimate
Taxiway A Rehabilitation	Lifecycle Asset Renewal	Medium-Term	\$450,000
Hangar Taxiways – North Rehabilitation	Lifecycle Asset Renewal	Long-Term	\$300,000
Hangar Taxiway – South Rehabilitation	Lifecycle Asset Renewal	Long-Term	\$300,000
New Runway Access Taxiway	Level of Service Improvement	Discretionary	\$230,000
Hangar Taxiway – South Extension	Enabling Airport Development	Discretionary	\$230,000
New T-Hangar Taxiway	Enabling Airport Development	Discretionary	\$300,000



Northern (left) and southern (right) hangar taxiways

5.2.3 Apron and Aircraft Parking Areas

Apron I

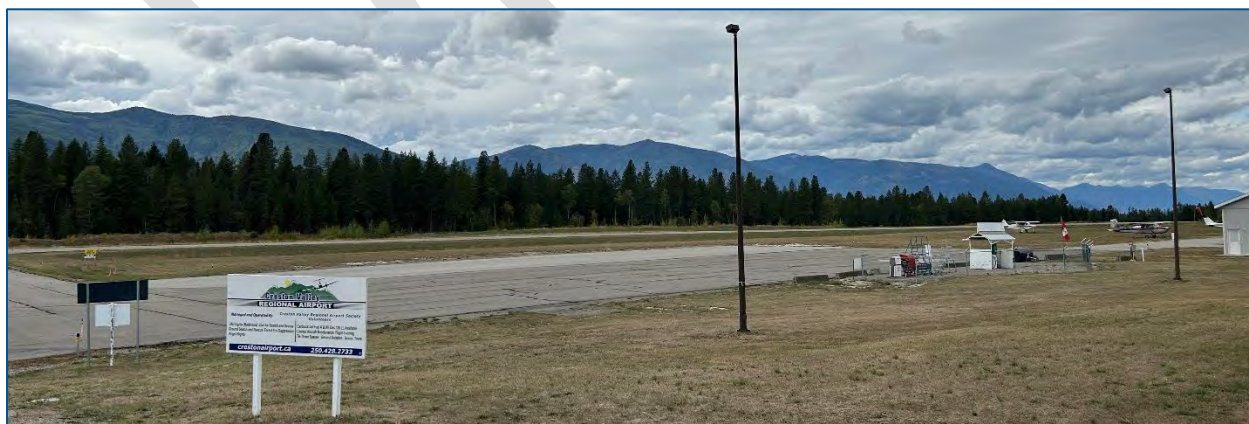
Apron I provides a paved area of approximately 3,800 m² and is used for aircraft parking, servicing, and taxiing to the northern and southern hangar areas. The entirety of Apron I is asphalt surfaced with the exception of a concrete parking position adjacent to the jet fuel facility.

Apron I provides sufficient aircraft parking capacity during routine and peak periods for the Airport's current and anticipated types of users. Through the availability of other infield aircraft parking areas as described below, long-term aircraft parking on the apron is reduced, which preserves the asset's availability for short-term users. Aircraft up to the CC-295 Kingfisher and Dash 8-300 have been accommodated, as well as heavy category wildfire helicopters such as the Sikorsky S-61. The need to expand Apron I has not been identified within the Master Plan, provided that overall parking demand is appropriately managed on an ongoing basis through the use of the functional spaces described below. This will include directing light, intermediate, and medium category wildfire helicopters to infield parking areas to preserve space on Apron I for aircraft refuelling, taxiing, and occupancy by heavy-category helicopters that ideally have a paved surface.

The original 2,300 m² portion of Apron I was constructed in 1982. Apron I was expanded by approximately 1,500 m² to the west in 2014. Information was not available on the most recent comprehensive rehabilitation completed on the asset, with the exception of a seal coating treatment completed in 2012. The original portion of Apron I was observed to be in fair condition in 2024, with distresses including low to medium severity longitudinal cracking associated with the deterioration of paving joints and transverse cracking. The expanded portion of Apron I was observed to be in good condition, with limited evidence of surface distresses. The rehabilitation of Apron I is anticipated to be required concurrent with Runway 15-33 and Taxiway A in the medium-term planning horizon.

Fixed-Wing Tie-Down Area

The fixed-wing tie-down area is located in the infield, north of Apron I, and is comprised of two rows of in-ground anchors, with a capacity for 12 general aviation aircraft. Peak demand for general aviation tie-downs is typically associated with flying groups arriving in Creston for multiple night stays, with approximately 25% of positions regularly occupied through long-term rental agreements. Improvements to the fixed-wing tie-down area have not been identified through the Master Plan; as described in the Airport Development Plan, the potential construction of a t-hangar in this area may require the relocation of the tie-down area. A five aircraft tie-down area is conceptually included along the extension of the southern hangar taxiway.



Apron I (foreground) and fixed-wing tie-down area (background)

Northern Rotary-Wing Operations Area

The infield north of the tie-down area and west of Apron I is reserved for operations by light, intermediate, and medium rotary-wing aircraft and is typically used during wildfire suppression operations. Space is available for up to nine medium-sized helicopters while accommodating for the long-term build out of airfield infrastructure associated with the planned t-hangar development. Adjacent lands are recommended to be reserved for operational support, including crew vehicles and equipment trailers. Improvements to the northern rotary-wing operations area are recommended in the short-term planning horizon, including earthworks to resolve uneven areas, the extension of the gravel access road to the west to facilitate support vehicles, and hard surfaced aircraft parking pads.

Southern Rotary-Wing Operations Area

The open field to the east of the southern hangar row and south of the main access driveway is used by a full range of light to heavy rotary-wing aircraft during wildfire operations. The need for improvements to the southern operations area has not been identified with the exception of routine maintenance, such as turf rolling, as required. The size of this area will be impacted by the eastward expansion of private hangars and the lands reserved for a commercial rotary-wing tenant.

Recommendation	Category	Planning Horizon	Cost Estimate
Northern Rotary-Wing Operations Area Improvements	Level of Service Improvement	Short-Term	\$80,000
Apron I Rehabilitation	Lifecycle Asset Renewal	Medium-Term	\$805,000



Southern rotary-wing operations area (top) and aircraft operating from west of Apron I (bottom)

5.2.4 Airfield Lighting System and Visual Navigation Aids

The airfield lighting system supports operations during hours of darkness and consists of the following components:

- Medium intensity runway threshold, end, and edge lighting;
- Medium intensity edge lighting for Taxiway A and Apron I;
- Precision Approach Path Indicators for Runways 15 and 33;
- Illuminated wind direction indicators located east of the Runway 15 threshold and west of the Runway 33 threshold; and
- Three LED floodlights located on the eastern side of Apron I.

The airfield lighting system, except for the apron floodlights, is pilot-operated through an Aircraft Control of Aerodrome Lighting System. Additional visual navigation aids include runway and taxiway paint markings and two nonstandard mandatory instruction and information signs at the runway holding position.

The lighting system was installed in 1986 and was subject to a comprehensive renewal and upgrading project in 2015 through BCAAP funding, the scope of which included the installation of new:

- Airfield cabling using existing conduit raceways;
- Quartz runway, taxiway, and apron edge lights, including new frangible couplings and stakes, transformers, and pulpit lids; and
- Illuminated wind direction indicators.

The ages of the Precision Approach Path Indicators and Aircraft Control of Aerodrome Lighting System could not be verified. Consultations with the Airport Society indicate that the airfield lighting system is performing well. The preservation of the availability afforded during hours of darkness through the airfield lighting system is an essential requirement prioritized through the Master Plan, particular in terms of the value this provides for air ambulance and emergency operations. The following recommendations are made with respect to the airfield lighting system and visual navigation aids:

- **Runway Holding Position Signage:** The existing signs at the runway holding position are non-standard per TP312 in their size, information displayed, and design and are not retroreflective. Mandatory instruction signs are provided at the runway holding position to indicate to pilots and maintenance vehicle operators to not enter the runway environment until they have verified that it is clear, decreasing the likelihood of runway incursions. Replacing the existing signs with two retroreflective TP312-compliant mandatory instruction signs on frangible bases is recommended in the short-term planning horizon to provide additional visual conspicuity to the holding position.

TP312 specifies that retroreflective mandatory instruction signs are only suitable for taxiways serving AGN I and II non-instrument runways; illuminated signs would be required given the AGN IIIA runway designation. Given the costs of illuminated units and the competing priorities for limited financial resources, retroreflective signage is recommended as a cost-effective option to provide short-term safety improvements. Consideration may be given as part of the airfield lighting system rehabilitation project to installing illuminated mandatory instruction signs depending on the available financial resources.

- **Taxiway Edge Markers:** The northern and southern hangar taxiways require blue retroreflective edge markers given their nighttime use. The installation of these markers is recommended in the short-term planning horizon.

- **Precision Approach Path Indicators Replacement:** The age of the Precision Approach Path Indicators could not be verified. However, the existing installations are halogen units, and the Airport Society has encountered difficulties in securing spare parts with limited manufacturer support. The replacement of both installations with new LED units is assumed to be required at the end of the short-term planning horizon, depending on the observed condition of these assets. This project should be implemented concurrent with the extension of Runway 15-33, with the Runway 33 unit to be relocated to account for the extension.
- **Airfield Lighting System Rehabilitation:** Based on an estimated 20 to 25-year useful service life of primary components, the next comprehensive rehabilitation project is estimated to be required in at the outset of the long-term planning horizon. Ongoing maintenance and component replacements will be required in the intervening years. As noted above, consideration may be given to adding illuminated mandatory instruction signs concurrent with this project to achieve financial efficiencies.

Recommendation	Category	Planning Horizon	Cost Estimate
Runway Holding Position Signage	Improving Airport Safety	Short-Term	\$5,000
Hangar Taxiway Edge Markers	Improving Airport Safety	Short-Term	\$5,000
Precision Approach Path Indicators Replacement	Lifecycle Asset Renewal	Short-Term	\$30,000
Airfield Lighting System Rehabilitation	Lifecycle Asset Renewal	Long-Term	\$1,980,000

5.2.5 Instrument Flight Procedures

The following GPS-based Instrument Flight Procedures are maintained on behalf of the Airport Society by a third-party External Design Organization and published by NAV CANADA in the Canada Air Pilot:

- **RNAV (GNSS) A:** Circling approach procedure with a Minimum Descent Altitude of 1,486 ft. Above Ground Level and a minimum visibility of 3 Statute Miles;
- **RNAV (GNSS) B:** Circling approach procedure with a Minimum Descent Altitude of 2,926 ft. Above Ground Level and a minimum visibility of 3 Statute Miles; and
- **BOXAT FIVE DEP:** Departure procedure for Runway 33.

The RNAV (GNSS) A procedure provides additional availability through its lower Minimum Descent Altitude versus the RNAV (GNSS) B procedure, with the limitation that aircraft must be able to meet higher performance missed approach climb requirements.

The Instrument Flight Procedures increase the Airport's availability and are of particular value for air ambulance patient transfers. As noted in Section 2.4.2, the Airport provides the second lowest Minimum Descent Altitude among the reviewed airports serving the Kootenays, with this capability leveraged on occasion by aircraft unable to access more restricted sites, such as Castlegar.

Carson Air has indicated that Instrument Flight Procedures with lower Minimum Descent Altitudes would further improve availability for air ambulance patient transfers. Consultations with the External Design Organization indicate that the surrounding terrain environment may pose challenges negatively affecting the ability to achieve lower minimums through an LPV approach, with further detailed assessment required to confirm the feasibility of improvements. The initiation of this study is recommended in the short-term planning horizon to identify whether such improvements may be feasible and inform future planning and budgeting.

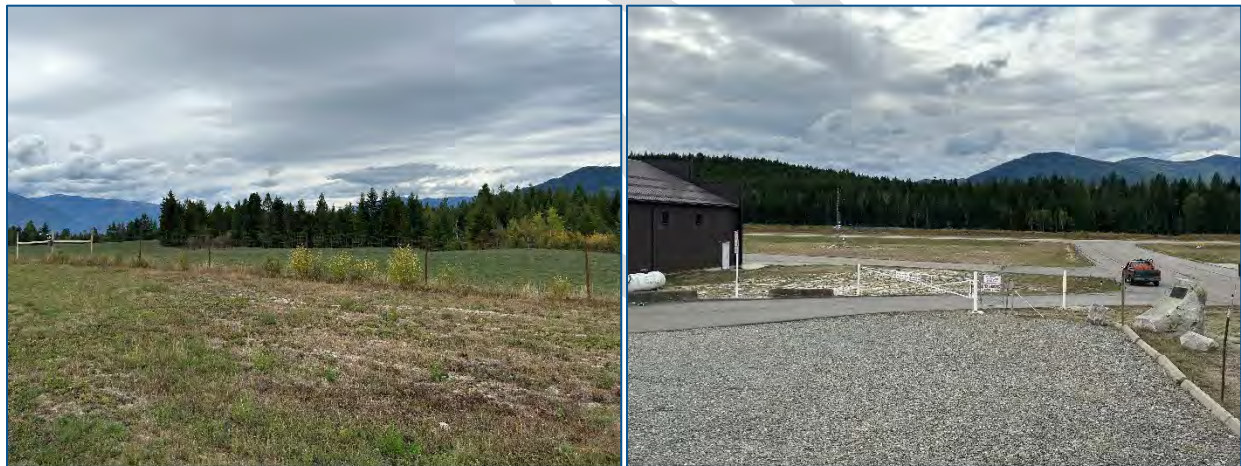
Recommendation	Category	Planning Horizon	Cost Estimate
Instrument Approach Improvements Study	Level of Service Improvement	Short-Term	\$5,000

5.2.6 Perimeter Fencing and Access Controls

An approximately 4,200 m alignment of elk fencing encloses the Airport's operational perimeter to limit unauthorized access and wildlife incursions. Two unpowered vehicle gates are located at the main access at Airport Road, with the primary gate also supported by a cattle grate, two one-way gates allow for wildlife to exit the Airport's operational area, and several additional gates are located throughout the perimeter to facilitate access for maintenance and emergency response purposes. The perimeter fencing was installed in 2006 and has been repaired on an ongoing basis by the Airport Society. Based on an estimated useful service life of 25 to 30 years, it is anticipated that the replacement of the perimeter fencing will be required in the long-term planning horizon with periodic localized repairs in the interim years.

The core area, encompassing the hangars, terminal building, caretaker's residence, and movement area, is semi-enclosed by vehicle gates leading to Apron I and the northern hangar area, as well as a basic post and wire fence near the apron. Numerous instances have been reported of vehicles and individuals entering the movement area without authorization from the Airport Society, which represents a risk from an aviation safety and security perspective. Concerns have also been raised with the risk of unauthorized access, theft, and vandalism to private hangars. The installation of security fencing and access gates to enclose the core area is recommended in the short-term planning horizon to address these safety and security risks.

Recommendation	Category	Planning Horizon	Cost Estimate
Core Area Security Fencing	Improving Airport Safety	Short-Term	\$120,000
Perimeter Fencing Replacement	Lifecycle Asset Renewal	Long-Term	\$430,000



Perimeter fencing (left) and access controls to Apron I and the movement area (right)

5.3 Aircraft Support Services

5.3.1 Weather Observation and Reporting Services

Aircraft operations are supported by a Limited Weather Information System located to the south of Taxiway A. Automated weather observations are reported by VHF radio and phone and include winds, visibility, sky conditions, temperature, dewpoint, and the altimeter setting. A webcam is provided on the Airport's website to provide a visual perspective of meteorological conditions. The Airport Society is in the process of pursuing the certification of the unit as an Automated Weather Observation System. Based on the useful service lives of various sub-components of the system, it is anticipated that the replacement of the tower, cabling, field data collection unit, and select sensors may be required in the medium-term planning horizon.

Recommendation	Category	Planning Horizon	Cost Estimate
Weather System Renewal	Lifecycle Asset Renewal	Medium-Term	\$50,000



Weather observation and reporting station (left) and aircraft fuelling station (right)

5.3.2 Aircraft Fuelling System

An aircraft fuelling system is located at the eastern edge of Apron I and is comprised of:

- Two 24,000 L fibreglass reinforced plastic underground fuel tanks used for storing jet fuel and avgas. Both underground tanks were installed in 1984;
- Into-wing jet and avgas fuel dispensers. The avgas fuel dispenser is original to 1984, with the jet fuel dispenser installed in 2016; and
- A cardlock point of sale system that was installed in 2023.

Both underground fuel tanks are now at 40+ years in service, exceeding their estimated useful service lives of 25 to 30 years. While both tanks are regularly inspected and there have been no challenges encountered to-date, proactive replacement with above-ground storage units is recommended in the short-term planning horizon to:

- Improve the ease of monitoring and maintenance;
- Decrease the potential for groundwater contamination associated with leaks;
- Address potential challenges with insurance coverage; and
- Ensure the system's long-term functionality, given the importance of fuel sales from revenue generation and activity-facilitation perspectives.

Concurrent with the fuel tank replacement project, it is recommended that the avgas fuel dispensing unit be replaced and that opportunities for upgrading the jet fuel equipment be evaluated, including the functionality for single-point refuelling and higher flow rates.

Recommendation	Category	Planning Horizon	Cost Estimate
Aircraft Fuelling System Tank Replacements and Upgrades	Lifecycle Asset Renewal	Short-Term	\$600,000

5.3.3 Terminal / Emergency Services Building

The terminal building / emergency services building consists of a double-wide prefabricated home that was installed in 2011. The 2,000 ft² terminal building is a multifunctional space consisting of:

- A crew rest and flight planning area, including washroom and shower facilities;
- Administrative space for the Airport Society;
- Offices leased to Creston Valley Search and Rescue and PEP Air; and
- An open gathering and kitchen space that is used for training, meetings, and events.

The terminal building provides facilities comparable to, or exceeding those, of other community airports and is of noteworthy value to the Airport's primary users, including air ambulance, wildfire, and search and rescue crews. Based on the facility's current and anticipated future role, the need to expand the terminal building or accommodate new functional spaces has not been identified. In the event that scheduled or larger-scale charter passenger air services emerge as a viable opportunity in the Master Plan horizons, demand-specific improvements may be required to the terminal building. However, such circumstances are not foreseen at the time of the Master Plan's preparation.

Based on an assumed lifespan of 30+ years for prefabricated homes, it is anticipated the current facility will meet the Airport's needs throughout the Master Plan horizons. For planning purposes, it is assumed that a series of lifecycle maintenance requirements may be required in the long-term planning horizon, including the building's Heating, Ventilation, and Air Conditioning; windows and doors; and roof. Ongoing maintenance will be required as part of annual operating budgets.

Recommendation	Category	Planning Horizon	Cost Estimate
Terminal Building Lifecycle Maintenance Projects	Lifecycle Asset Renewal	Long-Term	\$50,000



Terminal building and parking lot

5.3.4 Airport of Entry Services

As described in Section 3.6.2, the CBSA designates Creston as an Airport of Entry for CANPASS private and corporate permit holders. Under the CANPASS program, aircraft carrying no more than 15 preapproved passengers and crew can be processed through Creston. An average of 12 to 13 conveyances have occurred annually outside of the years affected by COVID-19 service restrictions.

Consideration is given through the Master Plan to requesting that the Airport of Entry status be changed to Airport of Entry / 15. This status is not restricted to CANPASS permit holders and enables the Airport to be used for unscheduled private and corporate general aviation aircraft with 15 or fewer travellers. As noted in Section 4.2.3, removing the restriction to CANPASS members only may enable to the Airport to attract additional American aircraft entering British Columbia, particularly given the additional services available compared to the next closest Airport of Entry / 15 (Eckhart Airstrip).

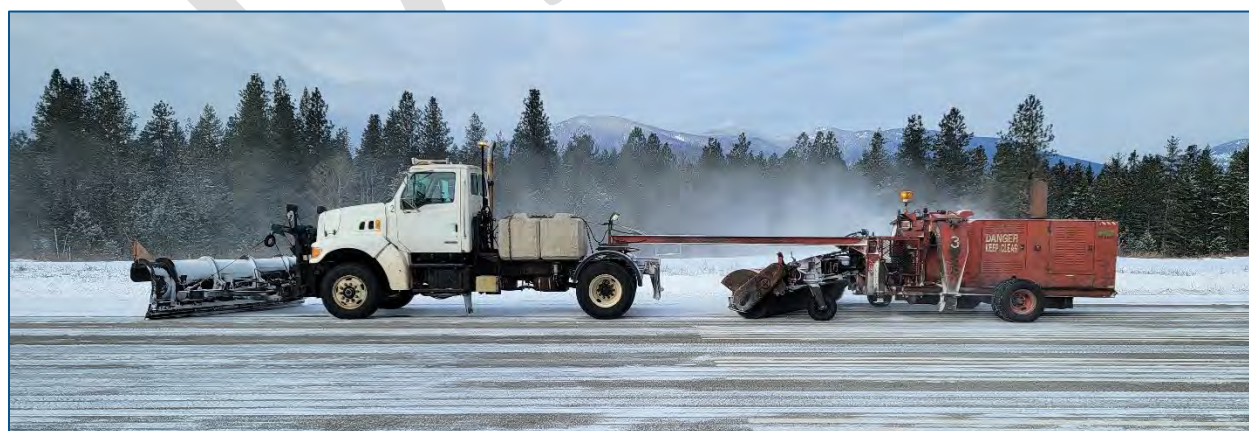
The CBSA evaluates Core Service Requests per its Air Services Policy Framework. Requests for additional services require the preparation of a detailed business plan for evaluation by the CBSA, including factors such as anticipated traveller volumes, impacts to the community, economic value, and stakeholder engagement efforts. The initiation of this process is recommended in the short-term planning horizon through the preparation of a business plan for consideration by the CBSA.

Recommendation	Category	Planning Horizon	Cost Estimate
CBSA Airport of Entry / 15 Request Business Plan	Level of Service Improvement	Short-Term	\$10,000

5.3.5 Aircraft Ground Handling Services

Aircraft ground handling services are not currently provided by the Airport Society. Through consultations with the air ambulance service provider, the unavailability of aircraft de-icing was raised as a consideration within the broader context recognized by the operator that a limited number of community airports that sustain BCEHS service have this capability. A specific recommendation has not been made through the Master Plan for the Airport Society to initiate aircraft de-icing services owing to upfront equipment costs, additional training required, greater operating costs, and potential exposure to additional liability. Further engagement is recommended with BCEHS in the coming years to inform future decision-making on this matter.

Recommendation	Category	Planning Horizon	Cost Estimate
Aircraft Type I De-icing Capabilities	Level of Service Improvement	Discretionary	\$90,000



Plow truck towing the airfield sweeper on Runway 15-33

5.4 Airport Maintenance and Groundside System

5.4.1 Maintenance Equipment Fleet

The Airport Society's maintenance equipment fleet is used to support year-round operations and is comprised of the units identified in Table 5.5. On account of the financial resources of the Airport Society, all units in the equipment fleet have been purchased used or surplus and have generally been operated beyond their estimated useful service lives. The successful operation of the equipment fleet in this manner is attributable to the ongoing maintenance completed by the Airport Society, skill of the equipment operators, continued ability to source spare parts, and modest usage of each asset.

Considering these factors and competing priorities for limited financial resources, typical industry useful service lives may not represent an appropriate metric for planning purposes. The estimated replacement years in Table 5.5 take a prioritized approach based on the operational criticality of each unit and estimated service lives remaining. It is anticipated that the sourcing of used or surplus assets is likely to continue in the future to decrease replacement costs where possible.

Table 5.5 - Maintenance Equipment Fleet Overview

Unit Type	Description	Year	Target Replacement Year ^{Note 1}	Replacement Cost ^{Note 2}
Wheeled Loader	John Deere 544C	1983	Operational spares, no replacement planned	
Plow Truck with Blade	Sterling L8500	2003		
Towed Airfield Sweeper	SMI 324D	1989	2028	\$450,000
Airfield Snowblower	Duke, Self Propelled	1987	2030	\$250,000 ^{Note 3}
Wheeled Loader	CAT 950E	1990		\$400,000
Tractor and Finish / Rough Cut Mower Decks	Ford 3600	1978	2031	\$150,000
Pickup Truck	GMC Sierra	2002	2032	\$50,000
Plow Truck with Blade	Sterling L8500	2003	2033	\$400,000
Riding Lawn Mower	Kubota F2560	2005	2035	\$40,000
Crew Courtesy Vehicle	Chevrolet Equinox	2013	2038	\$25,000
Skid Steer	John Deere 318G	2018	2043	\$50,000
Notes: ¹ Replacement years are based on the estimates of HM Aero and are not tied to industry useful service lives given the historically equipment fleet approach taken by the Airport Society. ² Replacement costs assume the acquisition of new equipment. Used or surplus equipment may be procured to decrease costs. ³ The replacement cost estimate assumes that a loader-mounted blower attachment is used instead of a self propelled airfield snowblower.				

Recommendation	Category	Planning Horizon	Cost Estimate
Maintenance Equipment Fleet Renewal	Lifecycle Asset Renewal	Per Table 5.5	Per Table 5.5

5.4.2 Maintenance Garage

The Airport Society purchased a 55 ft. x 65 ft. cold storage hangar with a bifold door that was built in 2010 and acquired in 2019, which is used to store and service the maintenance equipment fleet. Based on the long-term operational model and associated equipment needs of the Airport identified through the Master Plan and the numerous competing priorities for capital funding, the expansion of the maintenance garage has not been recommended through the Master Plan. It is anticipated that a series of lifecycle maintenance projects will be required in the long-term planning horizon to address the bifold door, roof, and building envelope. The Airport Land Use Plan reserves groundside lands for a potential new maintenance garage if the need is identified within or beyond the Master Plan horizons.

Recommendation	Category	Planning Horizon	Cost Estimate
Maintenance Garage Lifecycle Renewal Projects	Lifecycle Asset Renewal	Long-Term	\$50,000

5.4.3 Caretaker's Residence

The caretaker's residence consists of a double-wide prefabricated home that was purchased following the Airport Society assuming oversight of the Airport. Aside from routine maintenance, no significant asset rehabilitation projects are anticipated within the Master Plan.

5.4.4 Site Circulation and Parking Lot

Access to the Airport occurs through Airport Road. A paved access roadway with a 5 m cross-section extends from Airport Road to the terminal building and parking lot. The access roadway was resurfaced in 2020 and was observed to be in good condition in September 2024. Rehabilitation is not anticipated to be required within the Master Plan horizon with continued maintenance.

Gravel roadways facilitate access to the northern and southern hangar areas. Both roadways were observed to be in fair condition and will require periodic repairs and regrading to ensure their continued usability. The realignment of the southern hangar access road may be required to accommodate future development, as described in the Airport Development Plan.

Recommendation	Category	Planning Horizon	Cost Estimate
Southern Hangar Access Road Realignment	Enabling Airport Development	Discretionary	\$425,000

5.4.5 Airfield Electrical Distribution Infrastructure

The electrical power service to the Airport is provided by FortisBC through three-phase overhead lines that enter the property from Airport Road north of the main access roadway. Concerns were not identified by the Airport Society with the main service or switchgears.

The Field Electric Centre is located east of the terminal building. The two Constant Current Regulators were replaced in 2015 with 7.5 kilowatt units and were reported to be functioning well by the Airport Society. Replacement is not anticipated to be required within the Master Plan horizons.

The Airport has no capability to sustain its critical systems (e.g., airfield lighting, Limited Weather Information System) in the event of power failures. This represents a vulnerability in the Airport's ability to sustain operations, particularly during extended power failures such as during severe weather events and natural disasters and is misaligned with its role as emergency management infrastructure. The acquisition of a backup generator is recommended in the short-term planning horizon.

Recommendation	Category	Planning Horizon	Cost Estimate
Backup Generator Installation	Improving Airport Safety	Short-Term	\$130,000

5.4.6 Potable Water Services

Water services to the terminal building and caretaker's residence are provided through two private groundwater wells. Limitations with the two wells include water supply challenges and concerns associated with the taste and potability of groundwater. The groundwater wells provide insufficient flows for fire suppression purposes. A 95,000 L water storage tank is located at the Airport and is intended for fire suppression, although its suitability for such purposes could not be verified.

The Airport is not connected to the Regional District's Lister water system and is outside of the bylaw-defined service area. The Regional District completed a preliminary review in 2020 of Lister water system capacity and line extension options to service the Airport, which found that:

- The nearest line is a one-inch service on 20th Street that would not provide adequate capacity;
- A nearby two-inch water line located 225 m away on 20th Street would likely provide adequate capacity to service the Airport with limited usage. The Regional District estimated that extending the two-inch service to the Airport would cost approximately \$180,000. New two-inch water lines are not permitted under Water Bylaw No. 2712 due to capacity and expansion limitations and this option would require a variance; and
- The nearest six-inch water line is located 610 m away on 20th Street. The high-level estimated cost to extend the six-inch line to the Airport was \$645,000.

As the Airport is outside of the Lister water system's service area, the Regional District also noted that the following steps would be required:

1. Recommendation from the Lister Water Commission to extend the service area boundary;
2. Approval from the Board of Directors to extend the service area boundary;
3. Confirmation of water system capacity to supply the Airport; and
4. Construction of a water main extension and service connection to property line.

Further assessment is required to study the feasibility of extending water services to the Airport. As the owner is responsible for all costs associated with the provision of a water service and is also responsible for a Capital Infrastructure Charge of \$10,000, the costs associated with extending water services will likely compete with other Airport priorities. The extension of services from the Lister water system to the Airport is therefore raised as a discretionary priority for consideration by the Airport Society, Town, and Regional District for further investigation and consideration.

Recommendation	Category	Planning Horizon	Cost Estimate
Lister Water System Connection	Level of Service Improvement	Discretionary	\$200,000+ to \$700,000+

5.4.7 Septic Systems

The Airport is not located on the municipal sanitary sewer network. Based on mapping provided to HM Aero, a total of four septic drain fields are located throughout the property to support the terminal building, caretaker's residence, and private hangars. Private septic systems will continue to be used to support new development within the Master Plan horizons.

5.4.8 Utilities

Propane services are arranged with private contractors for the caretaker's residence, terminal building, and by hangar tenants. Electrical power is provided by FortisBC; limitations on service capacity or the ability to extend power to new development were not identified by the Airport Society. Work by the Airport Society to arrange for improved fibreoptic internet services is ongoing.

5.5 Capital Asset Management and Improvement Plan

The Capital Asset Management and Improvement Plan, summarized in Table 5.6 and detailed in Table 5.7, consolidates the recommended projects identified in the preceding sections into a phased implementation framework. The Capital Asset Management and Improvement Plan is subject to the following assumptions and limitations:

- All cost estimates are presented at the Class D level of detail in 2025 Canadian dollars;
- Inflation-adjusted cost estimates are based on an assumed 2% annual rate of inflation;
- Ongoing maintenance requirements and periodic repairs are not included and are part of the Airport Society's annual operating expenses;
- Cost estimates are presented at the Class D level of detail. Projects should be advanced to the Class C or B level of detail as part of annual budgeting and applications for funding;
- Costs associated with due diligence studies, engineering design, tendering, and project management are not included;
- Estimates do not account for cost reduction measures, such as the use of in-house labour and equipment for construction, or the acquisition of used or surplus maintenance equipment; and
- The timing and need for all recommendations will require validation on an ongoing basis prior to implementation, and new projects not identified through the Master Plan may also be raised as requirements in the future.

Table 5.6 - Capital Asset Management and Improvement Plan Summary

Category	Baseline Cost Estimate	Inflation-Adjusted Cost Estimate
Short-Term Projects (2025-2029)	\$2,610,000	\$2,775,000
Medium-Term Projects (2030-2034)	\$6,855,000	\$8,110,000
Long-Term Projects (2035-2044)	\$3,225,000	\$4,270,000
Total, Recommended Projects	\$12,690,000	\$15,155,000
Discretionary Projects	\$1,495,000+ to \$1,995,000+	-



Runway 33 threshold, facing north

Table 5.7 - Capital Asset Management and Improvement Plan

Recommendation	Category	Year	Baseline Cost Estimate	Inflation-Adjusted Cost Estimate
Short-Term Planning Horizon (2025-2029)				
Hangar Taxiway Edge Markers	Improving Airport Safety	2025	\$5,000	\$5,000
Runway Holding Position Signage	Improving Airport Safety		\$5,000	\$5,000
Backup Generator Installation	Improving Airport Safety		\$130,000	\$130,000
Instrument Approach Improvements Study	Level of Service Improvement	2026	\$5,000	\$5,000
Core Area Security Fencing	Improving Airport Safety		\$120,000	\$120,000
CBSA Airport of Entry / 15 Request Business Plan	Level of Service Improvement	2027	\$10,000	\$10,000
Northern Rotary-Wing Operations Area Improvements	Level of Service Improvement		\$80,000	\$85,000
Towed Airfield Sweeper Replacement	Lifecycle Asset Renewal	2028	\$450,000	\$480,000
Aircraft Fuelling System Tank Replacements and Upgrades	Lifecycle Asset Renewal		\$600,000	\$635,000
Precision Approach Path Indicators Replacement	Lifecycle Asset Renewal	2029	\$30,000	\$30,000
Runway 15-33 Extension & Turning Bays	Level of Service Improvement		\$1,175,000	\$1,270,000
Total, Short-Term Planning Horizon			\$2,610,000	\$2,775,000
Medium-Term Planning Horizon (2030-2034)				
Airfield Loader-Mounted Snowblower Replacement	Lifecycle Asset Renewal	2030	\$250,000	\$275,000
Wheeled Loader Replacement	Lifecycle Asset Renewal		\$400,000	\$440,000
Tractor and Mower Decks Replacement	Lifecycle Asset Renewal	2031	\$150,000	\$170,000
Pickup Truck Replacement	Lifecycle Asset Renewal	2032	\$50,000	\$55,000
Weather System Renewal	Lifecycle Asset Renewal	2033	\$50,000	\$60,000
Plow Truck Replacement	Lifecycle Asset Renewal		\$400,000	\$470,000
Taxiway A Rehabilitation	Lifecycle Asset Renewal	2034	\$450,000	\$540,000
Apron I Rehabilitation	Lifecycle Asset Renewal		\$805,000	\$960,000
Runway 15-33 Rehabilitation	Lifecycle Asset Renewal		\$4,300,000	\$5,140,000
Total, Medium-Term Planning Horizon			\$6,855,000	\$8,110,000

Recommendation	Category	Year	Baseline Cost Estimate	Inflation-Adjusted Cost Estimate
Long-Term Planning Horizon (2035-2044)				
Maintenance Garage Lifecycle Renewal Projects	Lifecycle Asset Renewal	2035	\$50,000	\$60,000
Riding Lawn Mower Replacement	Lifecycle Asset Renewal		\$40,000	\$50,000
Perimeter Fencing Replacement	Lifecycle Asset Renewal	2036	\$430,000	\$535,000
Crew Courtesy Vehicle Replacement	Lifecycle Asset Renewal	2038	\$25,000	\$30,000
Hangar Taxiways – North Rehabilitation	Lifecycle Asset Renewal	2039	\$300,000	\$395,000
Hangar Taxiway – South Rehabilitation	Lifecycle Asset Renewal		\$300,000	\$395,000
Airfield Lighting System Rehabilitation	Lifecycle Asset Renewal	2040	\$1,980,000	\$2,665,000
Terminal Building Lifecycle Maintenance Projects	Lifecycle Asset Renewal	2041	\$50,000	\$70,000
Skid Steer Replacement	Lifecycle Asset Renewal	2043	\$50,000	\$70,000
Total, Long-Term Planning Horizon			\$3,225,000	\$4,270,000
Discretionary Projects				
Aircraft Type I De-icing Capabilities	Level of Service Improvement	-	\$110,000	-
New Runway Access Taxiway	Level of Service Improvement	-	\$230,000	-
Southern Hangar Taxiway Extension	Enabling Airport Development	-	\$230,000	-
New T-Hangar Taxiway	Enabling Airport Development	-	\$300,000	-
Southern Hangar Access Road Realignment	Enabling Airport Development	-	\$425,000	-
Lister Water System Connection	Level of Service Improvement	-	\$200,000+ to \$700,000+	-
Total, Discretionary Projects			\$1,495,000 to \$1,995,000	-

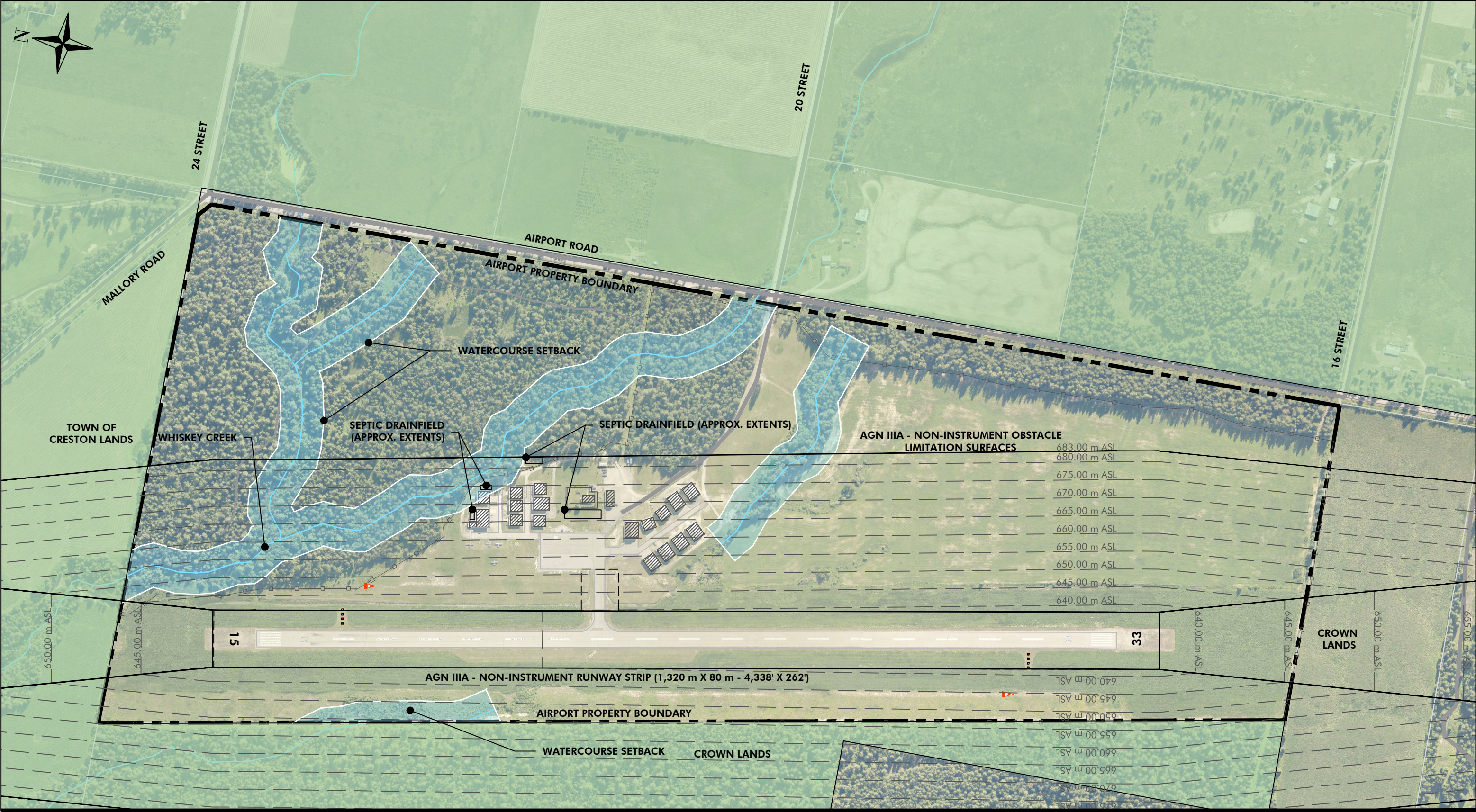
6 AIRPORT DEVELOPMENT PLAN

The Airport Development Plan and Land Use Plan identify the preferred future configuration of the Airport over the Master Plan horizons, accounting for applicable planning influences, the end users identified in Section 4, and infrastructure expansion projects described in Section 5.

6.1 Planning Influences

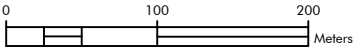
A desktop review of planning influences was completed by HM Aero, supported by on-site observations and consultations with the Regional District. The following planning influences have been identified and are shown in Figure 6.1:

- **Aeronautical Constraints:** The Airport is required to protect Aircraft Group Number IIIA – Non-Instrument Obstacle Limitation Surfaces per its Instrument Flight Procedure attestation. New development and infrastructure projects will be designed in accordance with TP312 – Aerodrome Standards and Recommended Practices, the Canadian Aviation Regulations, and other federal guidance;
- **Airfield Infrastructure:** Appropriate setbacks will be provided in the vicinity of all existing and planned airfield infrastructure, including but not limited to the Wind Direction Indicators, Precision Approach Path Indicators, Limited Weather Information System, aviation fuelling facility, and other assets;
- **Adjacent Lands:** The abutting parcel to the north is owned by the Town, with the lands to the west and south owned by the Crown. Areas of vegetation to the north, west, and south on these properties will require continued monitoring and periodic clearing to ensure the Airport's Obstacle Limitation Surfaces are not violated. The abutting properties to the west and north are designated as Agricultural Land Reserve, with associated land use protection requirements;
- **Use Agreements:** The Town and Creston Valley Horse Association maintain a lease agreement for the use of the forested northwest portion of the property for horse riding trails and rest areas. 17 private hangars are located on the Airport per long-term lease agreements;
- **Sponsored Crown Grant:** The Sponsored Crown Grant and Land Use Operational Policy – Airports affect the permitted use of the property, as described in Section 4.2.5;
- **Watercourses and Environmental Features:** Approximate watercourse centrelines were identified through the Regional District's geospatial data, with the drain located adjacent to the southern hangar row estimated by HM Aero. The Regional District encourages preserving riparian areas and biodiversity through the provision of a 30 m setback from all watercourses. Development will be discouraged within the watercourse setback areas and disturbance mitigations may be implemented where avoidance is not possible. Several areas of the property are also forested and have environmental protection value; and
- **Septic Drain Fields:** Four septic drain fields have been identified based on mapping provided to HM Aero. Disturbance will be avoided in these areas.



CRESTON VALLEY REGIONAL AIRPORT
MASTER PLAN
**FIGURE 6.1 - SITE PLANNING
CONSIDERATIONS**

NOTE: AREAS HATCHED IN LIGHT GREEN
DENOTE AGRICULTURAL LAND RESERVE



*FOR PLANNING PURPOSES ONLY

6.2 Airport Development Plan

The Airport Development Plan, shown in Figure 6.2, identifies the preferred layout for new development and infrastructure projects.

6.2.1 Airside Development

The Airport Development Plan reserves lands for:

- The expansion of the southern hangar row for five new 350 m² private or commercial hangars, served by a 7.5 m wide paved taxiway. The development of the northern four hangars in this area will require the extension of a 7.5 m wide paved taxiway and the relocation of the existing gravel access road. Further planning will be required to identify the requirements for fill in this area to support the access road construction and whether mitigation measures are required for approaching the buffer zone for the drain to the south;
- The construction of a t-hangar building north of Apron I to accommodate approximately nine general aviation aircraft. The development of a new 7.5 m wide paved taxiway will be required, with connections to both Apron I and the northern hangar taxiway recommended to preserve access if aircraft parking on Apron I block the entrance; and
- A rotary-wing commercial development area to the south of the main access road. Development plans in this area will be informed by proponent requirements.

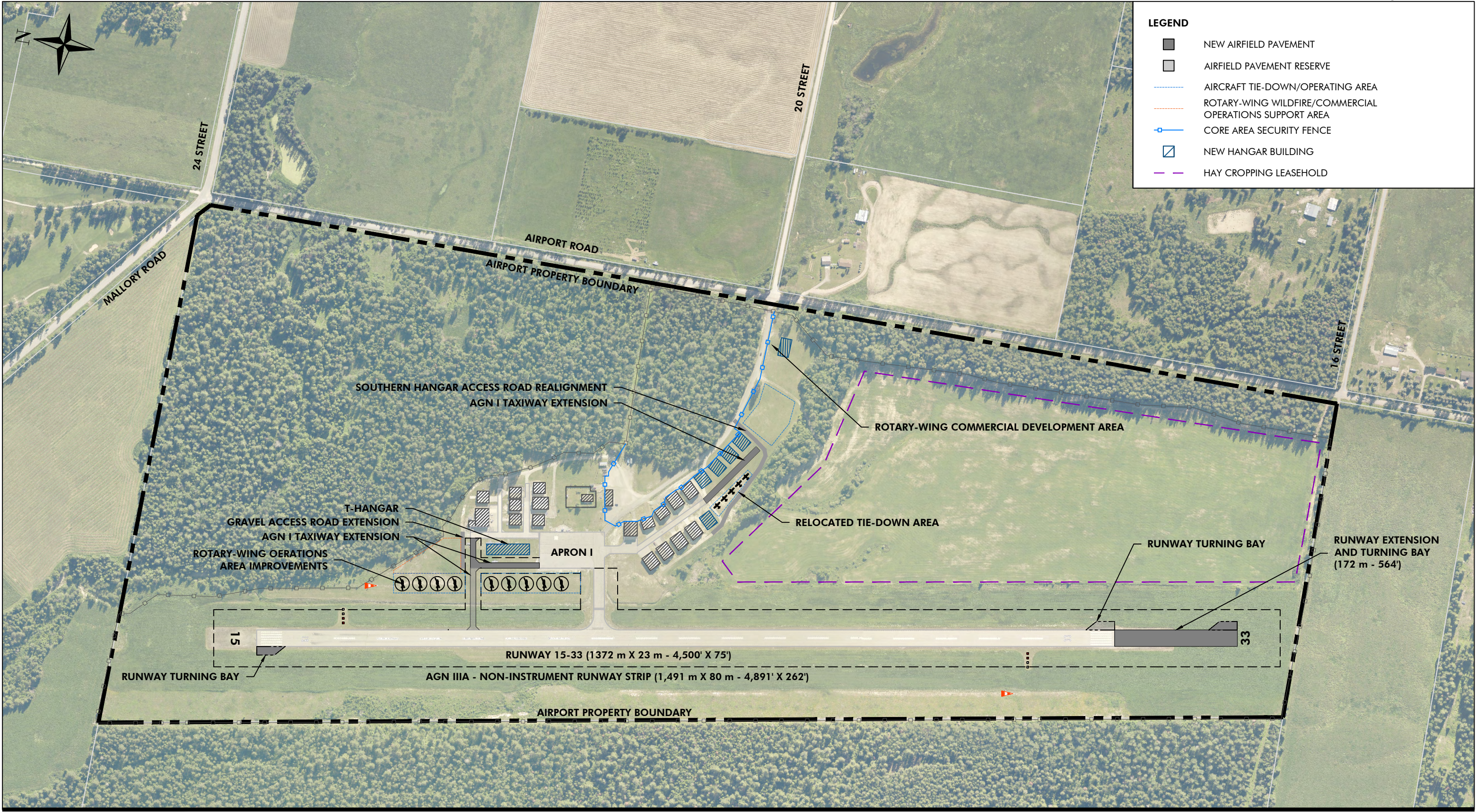
The Airport Reserve designation of the Land Use Plan (Section 6.3) allocates space for potential development inquiries beyond those that can be accommodated in the areas described above.

6.2.2 Airside and Groundside Infrastructure Expansion Projects

The Plan shows the preliminary configuration of the following infrastructure expansion projects:

- Improvements to the northern rotary-wing operations area, including earthworks to resolve uneven areas, the extension of the gravel access road to facilitate support vehicles, and nine hard surfaced parking pads for medium category rotary-wing aircraft;
- The development of a new five aircraft tie-down area along the southern hangar taxiway depending on the construction of the t-hangar project;
- The installation of a new security fence separating the airside and groundside areas;
- The construction of turning bays at the Runway 15 and Runway 33 thresholds concurrent with the runway rehabilitation project. The Runway 33 turning bay will be constructed at its current location if the runway extension described below is not initiated concurrent with the runway rehabilitation. All turning bays are approximately 40 m long and 12 m wide to permit unrestricted maneuvering by the Dash 8-300, CC-295 Kingfisher, and CC-130 Hercules;
- The southerly extension of Runway 15-33 to a total length of 4,500 ft. with a turning bay, including the extension of the airfield lighting system. The detailed design process will inform implications in terms of the surrounding obstacle environment, including whether tree clearing to the south is required or if the threshold will be displaced. The relocation of the Runway 33 Precision Approach Path Indicators may also be required; and
- A potential 7.5 m Aircraft Group Number I taxiway connecting to Runway 15-33 that may be developed pending the identification of peak hour demand warranting this capacity measure.

Infrastructure expansion projects not shown include the backup generator, runway holding position signage, hangar taxiway edge markers, and the extension of water services.



6.3 Airport Land Use Plan

The Airport Land Use Plan, shown in Figure 6.3, delineates the property into five land use districts, with the allocation of space per district as shown in Table 6.1:

- **Airfield:** Lands reserved for the current and future movement area, including associated airfield infrastructure;
- **Airport Operations:** Lands protected for supporting operational functions, such as the terminal building, caretaker's residence, aviation fuelling area, accesses, and vehicle parking;
- **Aviation Development:** Areas intended to be used for airside development, including private hangars, based commercial operators, and other land uses described in Section 4.2.2;
- **Airport Reserve:** Lands without defined development or capital project requirements within the Master Plan horizons that should be held in an undeveloped state until a need is identified and detailed planning and an update to the Master Plan is completed. Agricultural cropping and other forms of non-permanent activity are acceptable interim uses; and
- **Environmental Reserve:** Lands recommended for long-term protection to preserve their environmental value. Limited disturbances may be permitted to facilitate Airport operations (e.g., vehicle accessways) in consultation with the Town and Regional District. These lands may be used for environmentally compatible outdoor recreation at the discretion of the Town, such as equestrian trails.

Table 6.1 - Airport Land Use Plan Space Allocation

Land Use District	Area (ha)
Airfield	34.5
Airport Operations	3.3
Aviation Development	1.7
Airport Reserve	18.2
Environmental Reserve	38.3
Total	96.0



Rotary-wing operator parked on Apron I



7 SERVICE DELIVERY MODEL

The Airport's existing service delivery model, described in Sections 3.3 and 3.4 has been in place since 2009 and encompasses the facility's ownership, governance, administration, operations, and funding. The effectiveness of the service delivery model affects all aspects of the Airport's future and influences the degree to which the recommendations of the Master Plan can be implemented. Accordingly, the current service delivery model is reviewed through the Master Plan and options are presented for potential updates to ensure its continued suitability.

7.1 Commentary on Existing Conditions

HM Aero has completed a preliminary review of the Operating Agreement, Creston Valley Regional Airport Society Bylaws, and the Creston Valley Airport Financial Contribution Service Establishment Bylaw No. 1917, 2007; an external legal opinion solicited by the Town; and feedback shared by the Airport Society Board of Directors, Town Administration, and elected officials from the Town and Regional District. This review of service delivery conditions is intended to identify areas potentially requiring attention to assist with Airport outcomes and to protect the primary parties involved:

- **Town Oversight:** The Airport is publicly owned by the Town and numerous clauses of the Operating Agreement set the criteria for when approval is required to be sought by the Airport Society from the municipality, such as for the entry into agreements and new facility construction. The Master Plan is the primary throughline for the exercise of Town Council's governance. The costs and timelines associated with preparing and updating Master Plans and the high-level scope of such documents mean that there is limited flexibility to provide updated direction. The Town is entitled to provide a representative to attend the Airport Society's Board meetings to promote the sharing of information; however, this does not explicitly allow for a voting role on the Board. The Airport Society is required to report annually to Town Council, although this does not confer an approval obligation;
- **Airport Service and Regional District Representation:** The Operating Agreement requires that the Airport Society presents a business plan and budget to the Regional District annually prior to the release of the Airport Service funds. The Regional District presently is not entitled to representation on the Airport Society's Board of Directors. While ratepayers from Areas A, B, and C of the Regional District contribute to the Airport Service, they do not benefit from representation on the Airport Society. The indirect exercise of authority through the Regional District's ability to tie funding to the approval of a business plan and budget is a reactive as opposed to a proactive form of governance;
- **Liability and Exposure to Claims:** A legal opinion solicited by the Town suggests that the Town may be exposed to claims arising from the operation of the Airport and decisions made by the Airport Society. The Operating Agreement includes clauses pertaining to indemnification and insurance. These clauses mean that the Town can seek to have the Airport Society pay for claims made against the municipality, but do not immunize the Town. The Airport Society may lack the financial resources to pay for claims against the Town;
- **Performance Standards:** The Operating Agreement provides limited performance standards in how the operation of the Airport is completed and transfers significant latitude to the Airport Society in how the facility is run. Direction is provided that the management of the Airport be completed in accordance with an Airport Operations Manual, yet no such document could be produced and the obligation for the development of such a manual is held by the Town;
- **Public Representation of Town:** The Airport Society is required to provide all public, government, and media liaison and communication roles, and in doing so indirectly represents the Town given the facility's ownership;

- **Optimized Responsibilities:** Opportunities may exist for the skillsets of the Town, Regional District, and Airport Society to be better leveraged in the interest of the Airport, such as the Town's expertise in grant funding applications, procurement, and capital project management;
- **Airport Society Succession and Volunteer Resources:** Potential threats to the sustainability of the service delivery model and its financial efficiency include decreased interest and availability by volunteers, as well as future changeover in the Airport Caretaker position and challenges with attracting a new candidate that can deliver the same services at a competitive cost. Should either or both factors arise, the Airport's service levels may decrease and / or operating expenses rise; and
- **Representation by Other Interested Parties:** While specific unaccommodated interest in representation on the Airport Society's Board of Directors was not identified through the stakeholder consultation process, value may be found in the future in integrating members from the Lower Kootenay Band and regional stakeholders such as the Creston Valley Chamber of Commerce and Creston Valley Tourism Society.

It should be noted that while this discussion above focuses on areas for improvement, numerous aspects of the current service delivery framework have been designed and implemented in a manner that has resulted in significant benefits for the Airport and the services it facilitates. Potential changes to the service delivery model must ensure that these existing strengths are not negatively impacted as an unintended consequence.

7.2 Service Delivery Options

Consideration is given through the Master Plan to alternative service delivery models that may be implemented to address the observations made in Section 7.1. These options are introduced in Table 7.1 and are sorted based on the level of direct involvement by the Town. These options are presented at a high level with the understanding that further assessment will be required to identify the preferred option. It is assumed that funding through the Airport Service will continue to be provided in all options based on the Airport's financial sustainability outlook (Section 8).

In all scenarios, the continued operation of the Airport as a registered aerodrome pursuant to all applicable regulatory obligations is recommended. With reference to the three triggers for certification identified in CAR 302.01(1):

- (a) The Airport is not located within the built-up area of a city or town and significant urban development is not planned that would change this condition for the foreseeable future. This outlook is supported by the Agricultural Land Reserve designation that applies to the majority of the lands to the north, east, southeast, and west;
- (b) The Airport is not used by air operators for the purpose of scheduled services for the transport of passengers. Certification is not anticipated to be warranted per this trigger until market conditions indicate that scheduled passenger air services represent a feasible opportunity for pursuit and sufficient financial and staffing resources are available to address the initial and ongoing expenses of securing certification. As noted in Section 4.2.4, the viability of scheduled passenger air services is not anticipated to be revisited until the medium-term planning horizon at the earliest and this type of activity is not a focus of the Master Plan; and
- (c) No conditions are observed or anticipated that could lead to the Minister of Transport being of the opinion that meeting the requirements necessary for the issuance of an airport certificate would be in the public interest and would further the safe operation of the aerodrome.

While certification is unlikely to be required within the Master Plan horizons, capital asset expansion and improvement projects are recommended to be completed to certified standards, both in the interest of aviation safety and to safeguard the ability to secure certification if required.

Table 7.1 - Service Delivery Model Options Scan

Model	Characteristics and Observations	Examples
In-House Municipal Service Delivery	<p>Overview: Termination of the Operating Agreement with the Airport Society and the transition of Airport administration and operations to the Town as an in-house municipal service (e.g., under Engineering and Public Works).</p> <p>Ownership: Town</p> <p>Governance: Town Council, potentially with advisory support from a committee of Council or user group</p> <p>Administration: Town Administration</p> <p>Operations: Town Department of Engineering and Public Works</p> <p>Funding: Airport Service</p> <p>Observations:</p> <ul style="list-style-type: none"> This service delivery model captures the conditions of the Airport prior to the Operating Agreement taking effect in 2009. Challenges at that time included limited Town resources for the administration and operation of the Airport; Subject matter expertise would need to be developed within the Town for Airport operations; Liability and potential exposure to claims may increase; and The Town already sustains a significant workload with providing other municipal services and may have limited residual capacity to absorb extra responsibilities. 	<p>City of Castlegar – West Kootenay Regional Airport</p> <p>City of Trail – Trail Regional Airport</p> <p>Town of Golden – Golden Municipal Airport</p> <p>Town of Creston – Creston Valley Regional Airport (prior to 2009 Operating Agreement)</p>
Fee-for-Service Contracted Operations	<p>Overview: Termination of the Operating Agreement with the Airport Society and the transition of Airport operations to a contracted third-party services provider reporting to the Town on a fee-for-service basis.</p> <p>Ownership: Town</p> <p>Governance: Town Council, potentially with advisory support from a committee of Council or user group</p> <p>Administration: Town Administration as the contract administrator; assistance by the contracted third-party services provider</p> <p>Operations: Contracted third-party services provider</p> <p>Funding: Airport Service</p> <p>Observations:</p> <ul style="list-style-type: none"> Contracted services agreement would enable the use of performance standards; Operating expenses could increase through the integration of private profit margins; and Level of private sector interest and availability of prospective bidders requires further evaluation. 	<p>Columbia Shuswap Regional District – Contracted operations of Revelstoke Airport by third-party service provider</p> <p>Cariboo Regional District – Contracted operations of South Cariboo Regional Airport (108 Mile Ranch) by third-party service provider</p>
Operating Agreement (Status Quo)	See Sections 3.3 and 3.4; commentary on existing conditions provided in Section 7.1.	Town of Creston – Operating Agreement with Creston Valley Regional Airport Society

Model	Characteristics and Observations	Examples
Operating Agreement With Updates	<p>Overview: Continuation of the Operating Agreement with the Airport Society with changes made to its terms prior to the end of the current five-year term in March 2026 to address identified areas for improvement.</p> <p>Ownership: Town</p> <p>Governance: Town Council, with the governance relationship with the Airport Society Board of Directors to be clarified</p> <p>Administration: Town Administration, with the administrative roles and responsibilities of the Airport Society to be clarified</p> <p>Operations: Airport Society</p> <p>Funding: Airport Service</p> <p>Observations:</p> <ul style="list-style-type: none"> • Option is the lowest level of effort to implement and, depending on the updates made, can preserve the existing strengths of the Operating Agreement arrangement; • Areas of focus for updates are as identified in Section 7.1 and Table 7.2, as well as other matters identified by the Town, Regional District, and Airport Society; and • Select limitations may continue, such as multi-level decision-making and split responsibilities between the parties (e.g., approval and enforcement of lease agreements by the Town). 	Town of Creston – Operating Agreement with Creston Valley Regional Airport Society (pending updates)
Municipal Corporation	<p>Overview: Incorporation by the Town of a municipal corporation under the BC Corporations Act as a separate legal entity for the purposes of governing, administering, and operating the Airport.</p> <p>Ownership: Town, with long-term lease to municipal corporation; shares wholly owned by the Town and potentially the Regional District</p> <p>Governance: Corporation Board of Directors</p> <p>Administration: Employees of the corporation or a third-party services provider</p> <p>Operations: Employees of the corporation or a third-party services provider</p> <p>Funding: Airport Service</p> <p>Observations:</p> <ul style="list-style-type: none"> • Newly formed municipal corporation could integrate substantial elements of the Airport Society, including skills-based members of the Board of Directors; • Accountable to the Town and checks and balances built in, including annual information meetings, audited financial statements, and annual reports to the Province; • Increased independence and decision-making authority and focused directly on the Airport; • Increased ability for borrowing without the limitations of the Municipal Finance Authority; and • Further due diligence is required on the costs, advantages, and implementation efforts required, including whether funding can continue to be provided through the Airport Service. 	

Model	Characteristics and Observations	Examples
Full Transition to Airport Society	<p>Overview: Full transition of the Airport to the Airport Society, with the removal of the Town from all aspects of the facility's future.</p> <p>Ownership: Airport Society</p> <p>Governance: Airport Society Board of Directors</p> <p>Administration: Airport Society</p> <p>Operations: Airport Society</p> <p>Funding: Airport Service</p> <p>Observations:</p> <ul style="list-style-type: none"> • This model represents the lowest level of effort in terms of public involvement in the Airport; • Airport Society would have full discretion in governance, administration, and operations; • Potential risks to long-term viability in the event that the Airport Society disbands or becomes financially insolvent; and • Further due diligence on the feasibility of this model would be required, including the Sponsored Crown Grant between the Town and Province and the funding provided through the Airport Service. 	<p>Fairmont Hot Springs Airport – Columbia Valley Airport Society</p> <p>Pitt Meadows Airport – Pitt Meadows Airport Society</p>

7.3 Preferred Service Delivery Options

The establishment of the preferred service delivery model is a priority initiative for 2025 and 2026, as described in Section 10.2. The Master Plan identifies two service delivery options for detailed exploration following the adoption of the Airport Master Plan, in order of preference:

1. The continuation of the Town's Operating Agreement with the Airport Society, with updates made to the Operating Agreement, Creston Valley Regional Airport Society Bylaws, and the Creston Valley Airport Financial Contribution Service Establishment Bylaw No. 1917, 2007 to address identified areas of concern; and
2. The formation of a municipal corporation dedicated to the governance, administration, and operation of the Airport.

Modifying the current Operating Agreement is viewed as the preferred alternative from an implementation feasibility perspective, provided that the areas of attention identified in Section 7.1 can be suitably resolved to the mutual agreement of all parties. Preliminary guidance is provided on how the Operating Agreement could be updated to resolve these matters in Table 7.2. If fundamental concerns will prevail with this model to a level that is deemed to be unacceptable, consideration may be given to the relative benefits and disadvantages of forming a municipal corporation.

The formation of a municipal corporation, if identified as the preferred alternative for service delivery, will require the preparation of a detailed business plan to support its implementation and the retention of third-party subject matter expertise to guide its formation.



Airport Society volunteers seal coating Taxiway A

Table 7.2 - Areas of Focus for Operating Agreement Updates

Area of Focus	Potential Changes to Operating Agreement
Town Oversight	<ul style="list-style-type: none"> • Development of criteria for the composition of the Board of Directors, including a set number of seats for representatives of the Town beyond the provision of a liaison as is currently in effect. • The Airport Society's annual reporting requirements to the Town should be broadened to include the approval of the business plan in the same manner as is required of the Regional District's Creston Valley Services Committee.
Airport Service and Regional District Representation	<ul style="list-style-type: none"> • Development of criteria for the composition of the Board of Directors, including a set number of seats for representatives of the Regional District. • Continued inclusion of approval requirements for the annual business plan and budget.
Liability and Exposure to Claims	<ul style="list-style-type: none"> • Further due diligence is required through legal subject matter experts to identify 1) opportunities to reduce the Town's liability and potential exposure to claims; and 2) if exposure cannot be reduced, whether this is of sufficient concern to warrant an alternative service delivery model.
Performance Standards	<ul style="list-style-type: none"> • Additional specificity may be provided on the intended operating conditions, including 24-hour availability and year-round maintenance. • It is recommended that direction be provided for the Airport Operations Manual to be reviewed and updated annually by the Town and Airport Society. • Consideration may be given to providing direction that policies will be established for the use of the airport by its users that require approval by the Town. • Land lease agreements are recommended to remain with the Town as the landlord and being responsible for lease enforcement.
Public Representation of Town	<ul style="list-style-type: none"> • Further due diligence is required to identify the most appropriate strategy for protecting the Town and Regional District while enabling the Airport Society to respond to public concerns and promote the Airport.
Optimized Responsibilities	<ul style="list-style-type: none"> • Permissive language may be integrated in the Operating Agreement that the Town may provide specialized support at its discretion, such as capital project management, procurement, and grant funding applications. • Responsibility for fuel sales administration and the collection of user fees and charges may be shifted to the Airport Society. • Consideration should be given to providing direction on the implementation of the Supporting Strategic Pillars, including community awareness, advocacy, revenue generation, business development, and environmental sustainability.
Airport Society Succession and Volunteer Resources	<ul style="list-style-type: none"> • It is recommended that direction be provided for the Airport Operations Manual to be reviewed and updated annually by the Town and Airport Society, decreasing the loss of organization knowledge in the event of Airport Caretaker turnover. • Further due diligence is recommended to ensure that individuals can continue to volunteer at the Airport, including that appropriate protections are made.
Representation by Other Interested Parties	<ul style="list-style-type: none"> • Development of criteria for the composition of the Board of Directors, potentially including a set number of seats for representation by other parties pending a fulsome assessment of the skills-based requirements of the Board and regional collaboration with parties such as the Lower Kootenay Band.

8 FINANCIAL SUSTAINABILITY

Section 8 provides a forward-looking view of the Airport's potential future financial position through the Master Plan horizons to:

- Inform future capital budgeting efforts;
- Identify the scale of external support that may be required through the Airport Service; and
- Underscore the requirement for prudent financial management, including additional revenue generation and the control of operating and capital expenses.

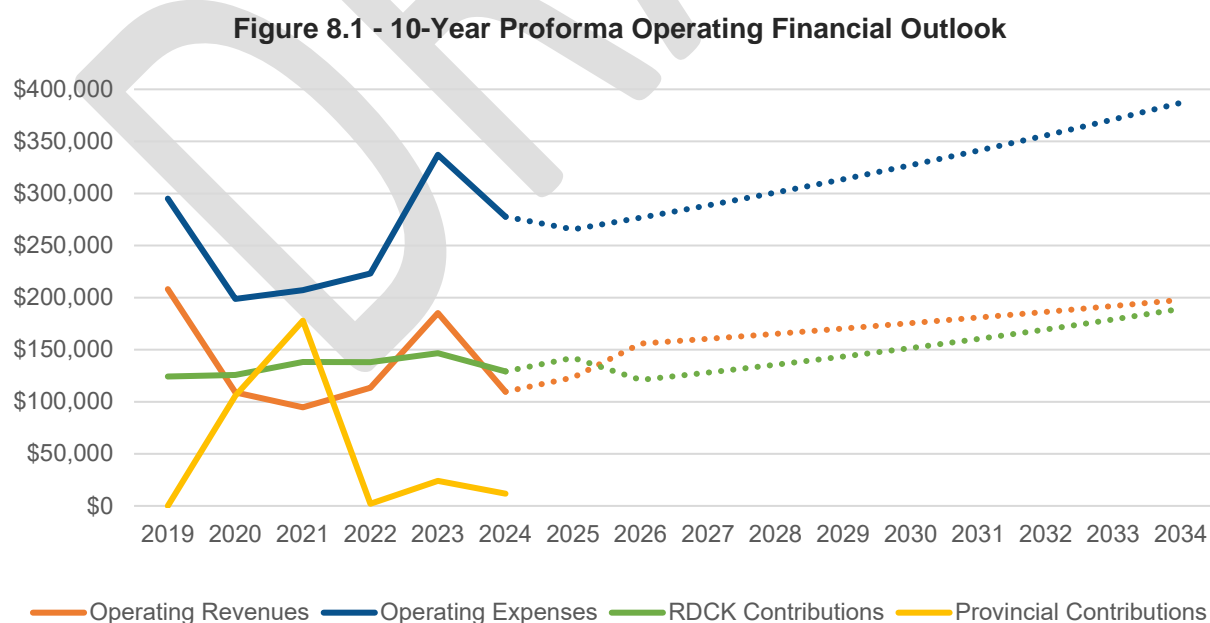
The preliminary analyses of operating and capital expenses and revenues made through Section 8 will be supplemented on an ongoing basis by detailed annual budgets and five-year financial outlooks, as discussed in Section 10.1.

8.1 Operating Financial Position

8.1.1 10-Year Proforma Operating Financial Outlook

A 10-year proforma financial outlook is provided in Figure 8.1 to illustrate the Airport's potential future position subject to a series of assumed conditions. The proforma financial outlook should not be used for detailed budgeting or financial planning purposes but instead is a tool to guide the consideration of how revenue generation and external support may be required to sustain operating expenses.

Based on the assumptions described below, the 10-year outlook projects a scenario whereby operating expenses increase at a higher pace versus revenues despite the continuation of a comparable service delivery model. Although the implementation of select revenue generation measures described through the Master Plan is assumed, this scenario foresees the need to increase the support provided through the Airport Service from an average of \$135,000 between 2019 and 2024 to approximately \$190,000 by the end of the medium-term planning horizon. The scenario shown in Figure 8.1 models a 6% annual increase to the allocation required through the Airport Service.



Note: Years are based on the Airport Society's fiscal year. Financial outlook is for illustrative purposes only and is not for budgeting.

8.1.2 Operating Financial Requirements

The Airport's actual operating financial performance within the short and medium-term planning horizons may be more or less favourable than the conditions shown in a given year. Operating revenues and expenses are subject to variability on an annual basis as has been demonstrated historically (Section 3.4) due to factors such as fuel sale fluctuations and operating expenses for major maintenance projects. This variability will continue across the proforma analysis period and will deviate from the linear scenarios generally modelled. Operating surpluses are recommended to be allocated to a dedicated reserve fund to provide stability in years with weaker financial performance.

With the limitations of the financial outlook acknowledged, the following conclusions are supported:

1. **Airport Service:** The continuation of the funding provided through the Airport Service is imperative to ensure that the Airport can be operated at service levels that meet the needs of its emergency service users. The scale of support provided through the Airport Service may also need to increase in the coming years to account for operating expense increases that outpace revenue generation efforts. Further assessment will be required to identify whether the scale of funding required may necessitate an amendment to the maximum contributions established through the Airport Service Bylaw No. 1917. While the Airport benefits from significant public support on account of its social and economic impacts, the willingness and / or ability for ratepayers to sustain increases to the Airport Service may change over time;
2. **Operating Expenses:** The expense outlook presented in Figure 8.1 largely models inflationary (5% per year) increases from baseline values, and as such is a reflection of the assumed continuation of a similar operational service delivery model. Initiatives to increase the operational and maintenance service level, such as additional staffing, or the decreased availability of volunteer resources will result in accompanying cost increases; and
3. **Revenue Generation:** The financial outlook makes assumptions for the realization of several revenue generation scenarios, including:
 - The updating of lease rates to \$5.00 per m² in 2026, representing a marked one-time increase in lease revenues with 2% annual increases in subsequent years;
 - Increased fuel sales margins beginning in 2026 and 3% growth in sales per year; and
 - The implementation of an aeronautical user fees structure with landing fees for commercial and emergency service users beginning in 2026.

Operating revenues are unlikely to keep pace with expenses creating a continued reliance on external support. While operating revenues are unlikely to transition the Airport to viability, all available options should be explored and implemented in a manner that is consistent with broader objectives for the facility as described in Section 9.3.

These findings must be further considered alongside the future expenses associated with the renewal and improvement of the Airport's capital infrastructure, as discussed in Section 8.2.

8.2 Capital Financial Position

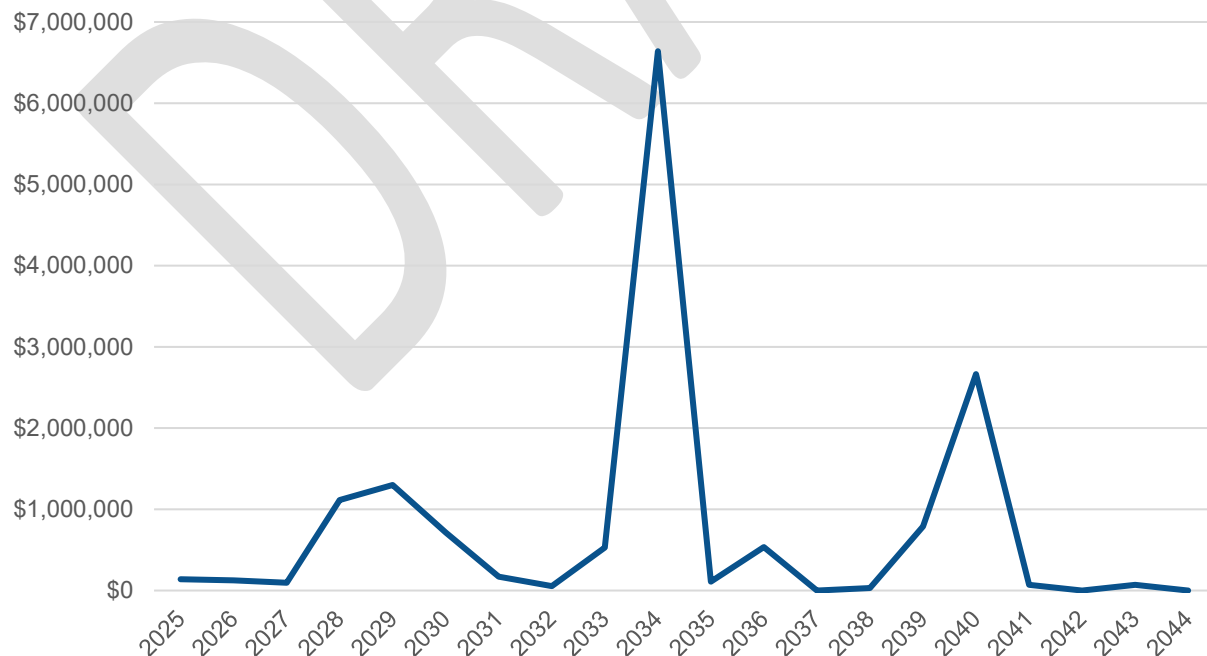
8.2.1 20-Year Capital Asset Management and Improvement Outlook

The Capital Asset Management and Improvement Plan provided in Section 5.5 identifies approximately \$12.7M (2025 Canadian dollars) in projects required to improve the safety of the Airport, renew assets at the end of their useful service lives, and improve the level of service for its primary users that substantiate its social and economic role. The allocation of these costs over time is shown in Figure 8.2. An additional \$1.5M to \$2.0M in discretionary projects may be implemented to improve service levels and enable revenue-generating private and commercial development.

Inflation-adjusted capital costs are typically less than \$200,000 per year. The Capital Asset Management and Improvement Plan integrates three planned periods of increased capital expenses that will require advanced preparation from both a financial (i.e., allocation of reserve funds, securing external financial support) and a project management perspective:

1. At the end of the short-term planning horizon and beginning of the medium term (2028-2030), costs increase with the recommended replacement of the aviation fuelling system; three equipment replacement projects for the airfield sweeper, loader, and loader-mounted snowblower; and with the extension of Runway 15-33. Annual costs in these years increase to between \$700,000 and \$1,300,000;
2. The maximum single-year costs are incurred in 2034 at the end of the medium-term planning horizon with the rehabilitation of Runway 15-33, Taxiway A, and Apron I. Costs in the assumed implementation year are estimated at \$6,640,000; and
3. Mid-way through the long-term planning horizon, a two-year period of increased capital expenses (2039-2040) is shown with the rehabilitation of the north and south hangar taxiways and the comprehensive renewal of the airfield lighting system. Total inflation-adjusted expenses over these two years are estimated at \$3,455,000.

Figure 8.2 - Capital Financial Outlook



Note: Please refer to Table 5.7 for detailed annual project costs. Discretionary project costs are not shown.

8.2.2 Capital Funding Strategies

Through the proforma exercise completed in Section 8.1, it is evident that the Airport will remain economically dependent on public support through the Airport Service, and that the funding provided will likely require increases in the short and medium-term planning horizons to cover anticipated shortfalls between revenues and operating expenses. As the Airport is not anticipated to be financially self-sustaining from an operating perspective, it is similarly expected to remain economically depend on external support from a capital standpoint.

Section 8.2.2 provides preliminary guidance on capital funding opportunities available at the time of the Master Plan's preparation to facilitate the implementation of the Capital Asset Management and Improvement Plan. The capital funding landscape evolves on a regular basis, particularly from a grant funding perspective as program funds are depleted and close and as new opportunities are opened. Examples of sources of external capital support that have been available in recent years include the Rural Economic Diversification and Infrastructure Program and Investing in Canada Infrastructure Program. Ongoing monitoring will be required to identify emergent sources of funding, potentially in collaboration with the Town and Regional District given their grant funding expertise.

- British Columbia Air Access Program:** BCAAP is administered by the Province's Ministry of Transportation and Transit to support airports and enhance the long-term potential of the aviation sector. Between 50% and 75% project cost sharing may be provided through BCAAP for airside, transitional, groundside, and climate / environmental initiatives. Applicants that meet certain eligibility criteria may allocated up to an additional 15% in funding, up to a maximum of 90% cost sharing. Funding intakes have been opened annually in previous years.

The funding provided by the Province through BCAAP has been leveraged for several projects at the Airport in recent years and continues to be of critical importance to community airports throughout British Columbia. From a capital planning perspective, BCAAP funding will be integral to implementing the Capital Asset Management and Improvement Plan; however:

- Funding intakes are routinely oversubscribed given the magnitude of airport funding needs across the province. This heightens the need for competitive grant applications to be developed and funding may still not be awarded for projects with considerable merits based on the available financial resources, delaying implementation timelines;
- The continuation of BCAAP is at the discretion of the Province and may be influenced by the evolving priorities of the government and available financial resources; and
- In its current structure, a maximum of \$2M will be allocated to a given airport in a single year. As described below, the recommended rehabilitation of Runway 15-33, Taxiway A, and Apron I in the medium-term planning horizon that would otherwise be eligible for a minimum of 75% cost sharing would be capped at \$2M, leaving an estimated \$4.6M in unfunded project costs.

The importance of the continuation of BCAAP, its capitalization to sufficient levels, and potential revisions to increase funding maximums underscores the advocacy recommendations of the Master Plan described in Section 9.2.

- Airport Service Funding:** As described in Section 8.1.2, the Airport will remain operationally reliant on the Airport Service funding derived from Creston, Areas B and C, and part of Area A. Increased requisitions through the Airport Service are anticipated to be required from an operating perspective in the short and medium-term planning horizons, and consideration is also recommended for further increases to contribute to a capital reserve fund for the Airport. The scale of this incremental funding will not fully cover the costs of the Capital Asset Management and Improvement Plan but can contribute to the Airport Society's ability to implement smaller capital projects and cover the recipient's share of external funding awards.

- **One-Time Town Contributions:** The Town is under no obligation under the terms of the Operating Agreement to contribute to the costs of capital projects. However, such contributions may need to be carefully considered where other sources are exhausted or unavailable, or where funding stacking is required for major capital projects (e.g., pursuing BCAAP funding alongside municipal contributions for major airfield pavement rehabilitations). Capital budget requests may be considered by Town Council as part of its financial planning and annual budgeting processes, and the costs to the Town may be reduced through the use of municipal funding sources such as the Community Works Fund.

The Canada Community-Building Fund – Strategic Priorities Fund is a funding source available to the Town that should be carefully evaluated for its potential for major projects of strategic importance, such as the recommended runway extension in the short-term planning horizon. It is recognized that the Town contends with numerous competing capital priorities in its delivery of core municipal services, and that applications to funding streams available to the Town must be considered alongside other eligible capital initiatives.

- **One-Time Regional District Contributions:** Capital contributions may be sought from the Regional District through the following grant programs: Community Works (per the Regional District's Community Works Fund allocation), Community Development, and Discretionary.
- **Private and Corporate Support:** For capital projects with significant social and / or economic benefits throughout the catchment area, the Airport Society may be able to solicit private and corporate fundraising support. This opportunity is discussed further in Section 9.3.4.

Funding for airport-related projects through the Columbia Basin Trust has been deemed ineligible in recent years with the view that such support would relieve other levels of government from their obligations. Further outreach is recommended with the Columbia Basin Trust on this matter given the alignment of numerous recommendations advanced through the Master Plan with the objectives of funding streams such as the Community Development Program.

While not a source of direct funding, the Airport Society has been successful with securing used and surplus maintenance equipment to reduce the costs associated with fleet renewal. This approach should be implemented where appropriate on an ongoing basis when positive cases can be made on account of acquisition costs, unit useful remaining service lives, appropriateness for intended use, and considering maintenance costs versus new units. This approach may be supported by further developing the Airport Society's existing relationships with other airports in British Columbia to secure surplus maintenance equipment at discounted prices or as donations.

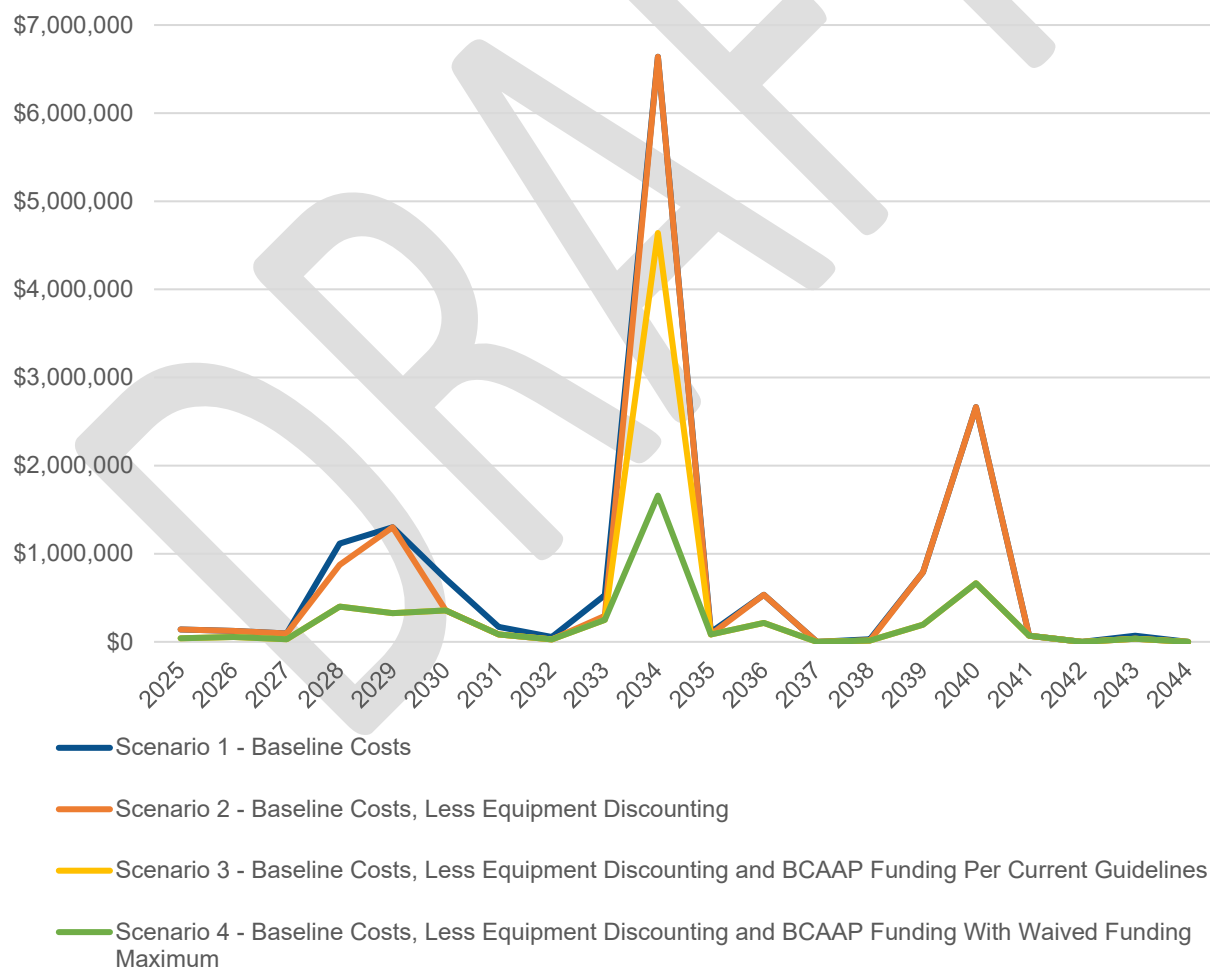
Figure 8.3 provides a visual overview of how the costs of projects recommended for the short, medium, and long-term planning horizons through the Capital Asset Management and Improvement Plan are structured over time; discretionary projects are not included in this analysis. The costs borne by the Airport Society are considered in four scenarios:

1. **Baseline Costs:** The non-discretionary project costs of the Capital Asset Management and Improvement Plan;
2. **Baseline Costs, Less Equipment Discounting:** The impacts of an assumed 50% discounting of all maintenance equipment replacement costs to represent scenarios whereby used equipment is procured, or surplus equipment is donated by other sources;
3. **Baseline Costs, Less Equipment Discounting and BCAAP Funding Per Current Guidelines:** The aforementioned assumption with equipment discounting and the securing of BCAAP funding for select projects to a maximum of \$2M per year; and
4. **Baseline Costs, Less Equipment Discounting and BCAAP Funding With Waived Funding Maximum:** The modification of Scenario 3, with the assumption that the BCAAP funding cap of \$2M per year is waived with revisions to the Program.

Scenarios 2, 3, and 4 demonstrate incrementally more positive outlooks of how the Capital Asset Management and Improvement Plan can be implemented through external support, including equipment discounting and BCAAP funding. Emergent grant opportunities and private and corporate contributions may be further leveraged to improve the capital financial outlook. In these scenarios, the magnitude of financial support that would be directly required from the Airport Service, one-time contributions from the Town and Regional District, and other sources would decrease accordingly. Based on inflation-adjusted capital costs:

- Baseline costs in Scenario 1 over the 20-year period are estimated at \$15,155,000;
- Costs assuming the discounting of equipment renewal projects in Scenario 2 are estimated at \$14,135,000;
- In Scenario 3, total expenses with equipment renewal discounting and the securing of BCAAP funding for select projects based on the Program's currently guidelines are estimated at \$7,490,000; and
- Expenses in Scenario 4, with the \$2M BCAAP cap waived by the Province, are estimated at \$4,510,000 over the 20-year period.

Figure 8.3 - Capital Financial Outlook With Realization of Select Funding Scenarios



9 SUPPORTING STRATEGIC PILLARS

Section 9 outlines a series of subject matter areas that respond to the Airport's strategic priorities, opportunities and threats, and future needs to implement the objectives of the Master Plan, with parallels to the principles of corporate social responsibility. Unlike the defined recommendations made with respect to infrastructure and service renewal and improvement, development, and financial requirements, these supporting pillars are high level and thematic in nature and will require implementation and evaluation on an ongoing basis.

9.1 Community Awareness

As an asset that is publicly supported from a financial perspective and that is operated with the primary objective of facilitating public health and safety air services that yield social value, an important component of the facility's ongoing governance and operation is its accountability to the community. Building community awareness of the Airport, the operations it facilitates, and its economic and social value is intended to:

- Build accountability between the Airport Society and the community served;
- Contribute to community attachment and support of the Airport;
- Assist with the willingness of elected officials in allocating support to the facility, based on the aforementioned community support;
- Assist with volunteer recruitment to the Airport Society;
- Develop corporate support and fundraising;
- Facilitate stronger applications for external funding by demonstrating local project support; and
- Accomplish secondary objectives of exposing the public to the career opportunities of the aviation industry.

Techniques that can be used to build community awareness vary in their level of effort, financial resources, and impact. The development of an ongoing community awareness campaign may include the consideration of a full range of techniques, such as:

- Improving the area in the vicinity of the terminal building with picnic tables, informational signage, and landscaping as a public viewing area following the core area security fencing project in the short-term planning horizon;
- Recurring touchpoints through social media to communicate items of interest, such as air ambulance and wildfire statistics, community interest pieces, and interesting visitors;
- Collaborating with local media organizations to facilitate public interest stories, such as coverage of search and rescue training;
- The updating of the Airport website to provide introductory information for public readers on the Airport's operation and value;
- Youth-oriented activities, such as the continued facilitation of access by youth programs and the completion of school tours;
- Annual reporting to the community on the year in review, including a summary of the Airport's social and economic impacts in that period; and
- Occasional larger scale community events, such as open houses and fly-ins.

9.2 Advocacy

Airport capital rehabilitation and improvement projects with costs beyond what can be internally funded have historically been dependent on grants from the Province. The BCAAP is the sole ongoing source of airport funding provided by the Province and is highly competitive given the number of facilities vying for contributions. Failure to secure capital funding will increase the costs borne locally and / or require the deferral of projects, and the renewal of this grant program is based on the priorities of the provincial government over time.

Consistent with the seventh strategic priority of the Regional District's 2024-2026 Strategic Plan, the Master Plan identifies advocacy as a requirement for ongoing action. This includes advocacy for capital projects being advanced for the Airport, as well as participation in broader industry-wide efforts to communicate the priorities of community airports and accompanying solutions. Advocacy pertaining to the Airport is recommended to be advanced through:

- The participation of the Airport Society as a member of the British Columbia Aviation Council;
- The development of a strong working relationship and positive awareness with the Kootenay Central Member of the Legislative Assembly; and
- The development of a collaborative approach to advocacy that leverages the well-established practices, relationships, and experience of the Town and Regional District at both the administration and elected official levels.

9.3 Revenue Generation

As discussed in Section 8, the Airport is not anticipated to transition to self-sustaining financial viability within the Master Plan horizons from an operating or capital perspective. Despite this outlook, the pursuit of appropriately structured forms of operating revenues is a priority of the Master Plan to limit the extent of the public financial resources that are required to sustain the Airport.

Increases in the Airport's use and development, as discussed in Section 4.2, will yield further revenues in terms of fuel sales, land lease revenues, and existing types of charges. Section 9.3 provides an overview of select revenue-related actions that can be taken in parallel to pursuing growth to improve the Airport's financial position. Opportunities for revenue generation will require review on an ongoing basis throughout the Master Plan's implementation.

9.3.1 Aeronautical User Fees

Aeronautical fees on aircraft operations are presently limited to tie-down charges and generate minimal revenues for the Airport. The establishment of fees and charges is at the discretion of the Airport Society, and historically such revenue generation tools have not been used to improve the reputation of the Airport as a user-friendly facility with revenues to be derived through fuel sales. The consideration of user fees requires a measured approach that balances the:

- Strategic objectives established for the Airport;
- Financial contribution of users to the operating expenses of the facility, while understanding that some form of non-user public support will likely be required into the future;
- Elasticity of demand and influence of fees on user willingness to operate at the Airport;
- Practicality of implementing the fee structure; and
- Scale of revenues that may be generated.

It is recommended that an aeronautical user fee structure be designed and implemented for the Airport in the short-term planning horizon that accounts for these factors and the strategic objectives designed for the facility. Based on a preliminary assessment, examples of considerations that may be integrated through a user fee structure could include:

- Charging landing fees on fixed-wing and rotary-wing turboprop and turbofan aircraft, aircraft above a minimum weight threshold, or by registration category (e.g. commercial and government users). The implementation of an appropriate landing fee structure would account for the routine use of the Airport by larger users that do not result in revenue generation, such as air ambulance aircraft that do not purchase fuel. Levying landing fees on smaller general aviation aircraft routinely results in major user pushback and could run counter to the business development objectives for the Airport, while simultaneously yielding limited revenues;
- A fixed daily operating fee for wildfire suppression aircraft that accounts for both aircraft landings and parking, potentially scaling with the type of aircraft (i.e., increasing fees for medium, intermediate, and heavy rotary-wing aircraft);
- Evaluating daily and monthly tie-down fees to ensuring appropriate revenue generation; and
- Exempting locally based aircraft from user fees, as revenues from this group are generated through land lease agreements and monthly tie-down fees. Consideration may also be given to exempting private aircraft operated for charitable or not-for-profit purposes.

It is estimated that the additional revenues generated through a user fee structure could range between \$5,000 and \$10,000 per year, depending on the fees levied and activity in a given year.

9.3.2 Fuel Sales

Aviation fuel sales are an important part of the Airport's usability for aircraft operators and contribute to its operating revenues. The Airport Society's fuel pricing is routinely evaluated with each fuel delivery to account for changes in acquisition costs for resale and fluctuates with market conditions. The following observations are made that warrant further review in the short-term planning horizon:

- Commercial rotary-wing operators contracted by BCWS routinely bring jet fuel trucks onto the Airport property for into-aircraft fuelling. This approach is necessary to provide additional fuelling capacity and accommodate operations in the southern rotary-wing area; however, the Airport Society derives no revenue from this practice, and this may negatively impact jet fuel sales. It is recommended that consideration be given to levying a reasonable flowage concession fee (e.g., \$0.05 per litre) for all non-Airport Society operated fuelling that occurs on the Airport property. This may be implemented as part of the recommended wildfire suppression daily operating fee structure described in Section 9.3.1;
- Based on consultations with the Airport Society, it is understood that fuelling prices are typically set to be at or near the lowest level in the region. While this approach may contribute to the attraction of additional aircraft activity owing to competitive fuel pricing, fuel profit margins may be negatively impacted in the process. It is recommended that an internal policy for fuel pricing be developed that accounts for both regional competitiveness and revenue generation; and
- Avgas is understood to be sold to non-aviation users on an occasional basis. The Province's Land Use Operational Policy – Airports identifies "Fuel dispensing and storage facilities" as an approved ancillary use and does not differentiate by fuel purchaser (i.e., aircraft vs. non-aviation vehicles). Despite the foregoing, the discontinuation of this practice is recommended given that access to the movement area occurs by individuals that do not necessarily have airside safety awareness.

9.3.3 Land Lease Agreements

A preliminary review of the Town's standard land lease agreement has been completed to ensure its continued suitability in the interest of both the municipality and tenants. This does not represent a comprehensive assessment of the standard lease, nor does it constitute a detailed legal review. The following observations are made that may guide future revisions, pending further detailed evaluation:

- **Use Limitations:** All lease agreements presently include a clause limiting the use of each hangar to aircraft storage and maintenance, as well as the prohibition of residential uses. Stakeholder input received as part of the Master Plan indicates that this clause has received mixed support, with select parties seeking to see this limitation maintained whereas other individuals would prefer for a mix of uses to be permitted.

The clause as written is consistent with the restrictions imposed on the Airport lands through the Sponsored Crown Grant and the comparatively narrow permissions of the Land Use Operational Policy – Airports. While the permitted use(s) may need to be updated for aviation commercial development, the limitation as written continue to be appropriate for private hangars. The expansion of permitted uses to include non-aviation functions not in line with the Land Use Operational Policy – Airports is not recommended. Future updates to the Policy may enable corresponding lease agreement revisions.

- **Term:** Lease terms vary by tenant depending on their effective date, with all leases coming due for renewal on December 31, 2025. Tenants have the option of a five-year extension. It is recommended that consideration be given to a longer lease term (e.g., 10 to 20 years) to improve the environment for tenants to consider making investments in their facilities and secure financing. Longer lease terms may be especially important for attracting commercial operators that are investing more significant financial resources in their facilities.
- **Lease Rate:** Tenants currently pay an average base rent of \$0.277 per ft² (\$2.98 per m²) per year that is updated in subsequent years with Consumer Price Index changes. A preliminary market scan was completed of the airports serving Castlegar, Cranbrook, Elk Valley / Sparwood, Golden, Kaslo, Nelson, Oliver, and Salmon Arm. Bare land lease rates vary by airport and factors such as tenant type (e.g., private vs. commercial), the availability of servicing, and whether an additional Airport Maintenance Charge is levied. Annual lease rates ranged between \$1.41 and \$5.20 per square metre, with the exception of Elk Valley / Sparwood with rates set at \$0.48 to \$0.75:
 - **Kaslo Airport:** Lease rate of \$3.18 per m²
 - **Canadian Rockies International Airport:** Both a bare land lease rate and Airport Maintenance Charge are levied:
 - Airside, Fully Serviced: \$2.16 per m²
 - Airside, Not Serviced: \$1.62 per m²
 - Groundside: \$1.62 per m²
 - Fuel Supplier: \$2.79 per m²
 - Airport Maintenance Charge: \$0.40 per m²
 - **Elk Valley / Sparwood Airport:** \$1,200 per lease regardless of lot size – depending on the given lot, this averages to between \$0.48 and \$0.75 per m²

- **Golden Municipal Airport:** The rates reported below are based on 2024 values and will be updated in 2025 based on the Consumer Price Index:
 - Airside, Commercial: \$2.82 per m²
 - Airside, Non-Profit / Private: \$1.41 per m²
 - Airside, Government: \$1.22 per m²
- **Nelson Airport:** Calculated at the greater of 15% of assessed value of the land or the minimum annual fee (\$500 for residents, \$1,000 for non-residents); the City of Nelson indicates that lease rates range around \$43.00 per m² based on this method
- **Oliver Municipal Airport:** Lease rate of \$5.20 per m²
- **Shuswap Regional Airport:**
 - Regular, Non-Commercial: \$5.01 per m², minimum of \$630 per year
 - Commercial / Industrial / Non-Airport: \$8.16 per m², minimum of \$1,520 per year
- **West Kootenay Regional Airport:** Lease rate of approximately \$5.00 per m²

Land leases are the largest source of net operating revenues for the Airport, and consideration may be given to increasing rates towards the upper end of the reviewed bracket to contribute to the facility's financial sustainability. Depending on the scale of the lease rate increases contemplated for the Airport, consideration may be given to phasing these changes over a multiyear period.

The completion of a detailed review of the Town's lease agreement template that builds on the guidance of the Master Plan, including the observations pertaining to terms and rates, is recommended in 2025 ahead of upcoming renewals. As part of this process, all clauses in the standard agreement template should be assessed to confirm their continued appropriateness.

9.3.4 Private and Corporate Sponsorship

Private and corporate sponsorship has been leveraged to a limited extent to generate revenues for the Airport. The considerable social and economic value of the Airport documented in Section 3.5 and community support identified in Section 4.1.3 may result in the conditions being suitable for establishing a private and corporate sponsorship program. This could include the solicitation of operating and / or capital support on an ongoing basis; or through the development of a structured contribution structure. This may include options such as building naming rights. As the Airport Society is not a registered charity, further examination will be required as to how a sponsorship program could be structured in terms of aspects such as the issuance of tax receipts.

9.4 Business Development

Proactive business development efforts are recommended to pursue the opportunities identified in Section 4.2, given the importance of development and growth to improving the Airport's revenue base, economic, and social impacts. The implementation of a business development framework will require the integration of the Airport Society; Town; and Regional District where applicable, as the building permit authority. Support may also be provided pending further assessment from aligned organizations, such as the Creston Valley Chamber of Commerce and Creston Valley Tourism Society. Business development strategies and implementation will require ongoing planning and review over time and will be responsive to internal (e.g., development lot availability) and external (e.g., regional economic trends) conditions. Frameworks that may be developed and implemented to pursue the priority opportunities identified through the Master Plan include:

- Updating the Airport website to provide specific information on development opportunities, including target opportunities, the development process, and the facility's competitive advantages;
- Active marketing of developable lands for private and commercial hangars, including direct outreach with prospective aviation commercial end users;
- Coordination with regional tourism stakeholders to identify opportunities for the co-promotion of the Airport and air access; and
- Direct outreach to flying groups in western Canada and the United States to market aviation tourism.

9.5 Environmental Sustainability

Environmental stewardship and responsibility have been identified by both the Town and Regional District through their respective strategic plans as priorities for action. The operation of the Airport and the aircraft activities that it facilitates results in environmental impacts, including Scope 1, 2, and 3 greenhouse gas emissions; implications for wildlife activity and biodiversity; and the reduction of waste and water consumption. The Town has recently led the development of the Creston Climate Action Plan which includes the commitment to mitigate climate change and create an environmentally sustainable, resilient, and emissions-free future.

9.5.1 Greenhouse Gas Emissions

Greenhouse gas emissions at the Airport can be classified as:

1. **Scope 1:** Emissions directly associated with the operation of the Airport, such as the fuel used by maintenance equipment. Potential initiatives that may be considered for the Airport include:
 - Prioritizing the acquisition of electric and low emission small tools used for the maintenance of the Airport; and
 - Considering efficiency when evaluating the procurement of next maintenance equipment. It is recognized that maintenance equipment, such as the plow trucks and sweeper used for winter maintenance, represent a more challenging prospect for electrification due to their greater energy requirements and extended use between charging cycles.
2. **Scope 2:** Indirect emissions from the consumption of electricity and natural gas (e.g., from powering and heating the airfield electrical system, terminal building, caretaker's residence, maintenance garage, etc.). Initiatives addressing Scope 2 emissions may include:
 - The conversion of all airfield lighting fixtures from quartz units to more energy efficient LED options as part of the next replacement project;
 - The implementation of efficiency measures as part of renewal projects for the terminal building, caretaker's residence, and maintenance garage. This may include the use of photovoltaic panels to reduce the energy consumption of these buildings, geothermal, and energy efficient fixtures and systems; and
 - The application of energy efficiency requirements as part of new development plans.
3. **Scope 3:** Emissions from sources not under the direct control of the Airport Society, such as emissions from aircraft fuel combustion and vehicles used by tenants and visitors. Emissions associated with aircraft operations represent the most challenging area for improvement and will be associated with broader research, development, and adoption of measures such as:

- Sustainable Aviation Fuel being developed using biomass and waste resources as a drop-in replacement for jet fuel, as well as hydrogen aircraft propulsion;
- The electrification of aircraft propulsion. Given the capabilities of current electric aircraft, the expected path of technological maturation, and limitations such as battery power density, it is anticipated that the early adoption of electric aircraft will be seen in smaller single-engine flight training, air taxi, and general aviation aircraft fleets; and
- While not representing a greenhouse gas improvement, the use of unleaded avgas replacement fuels as they become available to reduce the dispersal of tetraethyl lead.

All greenhouse gas emissions reduction opportunities will be evaluated based on their environmental value, costs relative to the financial capacity of the Airport Society and available funding sources, and the efficacy of the preferred solution in terms of its core purposes.

9.5.2 Biodiversity, Groundwater, and Habitat Preservation

Approximately 30 ha of the Airport property are in a largely undisturbed and forested state, with watercourses running through these areas. These natural areas have ecological value, are carbon sinks, and are used for low-impact outdoor recreation and education. Aircraft operations have the potential to conflict with birds and wildlife, posing a risk to both fauna and the safety of aircraft. Preliminary strategies advanced through the Master Plan include:

- The protection of lands with environmental value. As identified in Section 6, the Airport Development and Land Use Plans preserves these lands for their environmental value and to respect riparian area buffer recommendations established by the Regional District;
- Where disturbances to the natural environment are required (e.g., tree clearing or trimming to preserve aeronautical safety and regulatory compliance), completing compensatory tree replacement / habitat restoration measures and complying with all environmental requirements (e.g., tree trimming outside of migratory bird seasons);
- The limitation of groundwater contamination through preventive measures; and
- The implementation of best practices with the movement of soils to and from the Airport as part of development and infrastructure projects.

9.5.3 Waste Reduction and Water Consumption

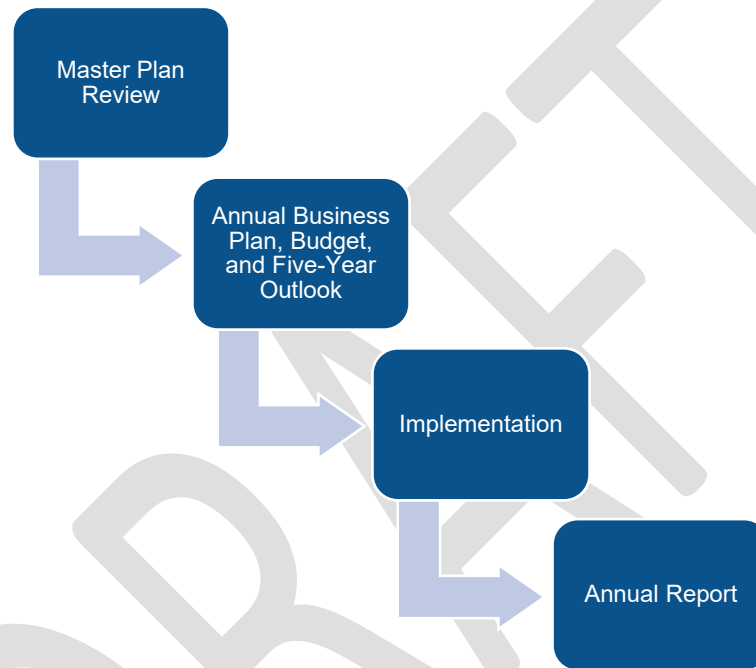
Waste reduction and diversion efforts may be advanced through the provision of landfill, organic waste, and recycling options in public spaces (the terminal building), the caretaker's residence, and as part of tenant facilities. Opportunities for reducing the Airport's water consumption in both Airport Society and tenant facilities include the use of low-flow fixtures as part of facility renewal and development projects; rainwater collection measures; and the use of drought tolerant species.

10 IMPLEMENTATION

10.1 Annual Implementation Framework

The implementation of the Master Plan will occur on an annual basis through the parties responsible for the governance and administration of the Airport, as discussed in Section 7.3. Figure 10.1 illustrates the annual process recommended to be followed in translating the direction of the Master Plan into action planning and implementation.

Figure 10.1 - Annual Implementation Framework



On an annual basis, a four-step process is recommended to be followed:

1. **Master Plan Review:** At the start of the annual planning process, the recommendations of the Master Plan will be assessed for their applicability in the given year. The implementation of the Master Plan recommendations will depend on a range of factors including the Airport's financial performance, availability of external funding, ongoing use and development, and the evolving characteristics and priorities of the catchment area served;
2. **Annual Business Plan, Budget, and Five-Year Outlook:** Detailed planning for the year will be completed with associated operating and capital budgets prepared, as well as a five-year outlook of estimated revenues, operating expenses, and capital expenses;
3. **Implementation:** Tasks required to implement the annual business plan are moved forward in line with the approved budget. This can range from daily operations to level of service improvement initiatives, capital projects, business development, and other undertakings; and
4. **Annual Report:** The previous year's successes, challenges, and financial reporting are compiled in an annual report for presentation to the community, Town, and Regional District. This should also include an overview of the economic and social value facilitated through the Airport in that year.

10.2 Short-Term (2025-2026) Critical Path Items

To implementation of the Master Plan in the short-term planning horizon requires the resolution of several critical path items to establish the foundation for ongoing success. These include:

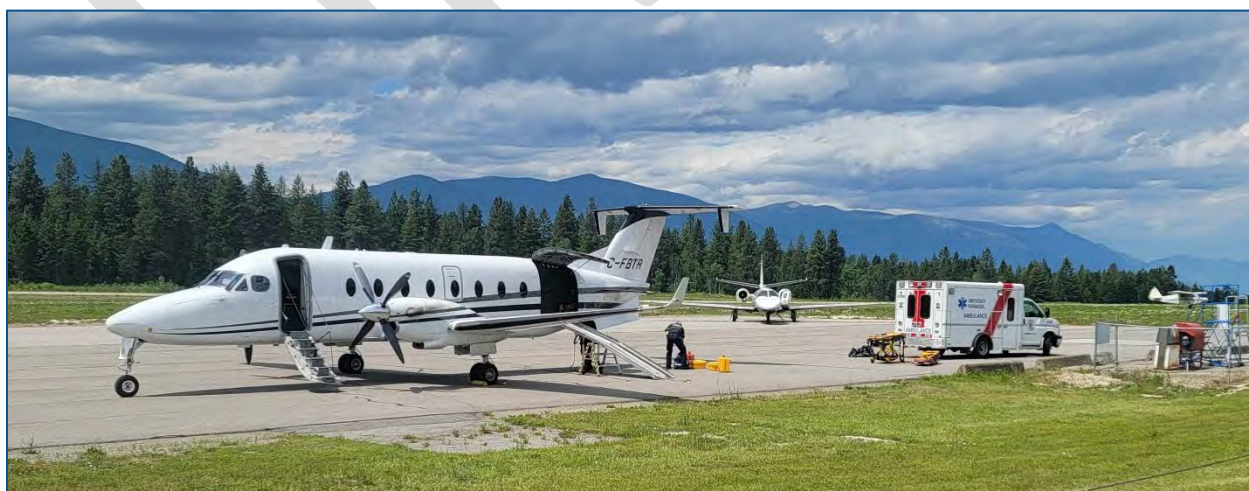
- | 2025 | 2026 |
|---|--|
| <ul style="list-style-type: none"> • Acceptance of the Master Plan • Identification of preferred service delivery model and implementation – may extend into 2026 (Section 7.3) • Review of the standard land lease agreement terms and completion of renewals (Section 9.3.3) | <ul style="list-style-type: none"> • First year of the annual implementation framework (Section 10.1) • Initial Airport Service allocation increase (Sections 8.1.2 and 8.2.2) • Development of an aeronautical user fees structure (Section 9.3.1) • Implementation of fuel sales recommendations (Section 9.3.2) |

These actions will require a higher level of effort associated with the administration of the Airport for the Town, Regional District, and Airport Society. However, successful resolution will enable a return to more stable workloads in subsequent years and greater levels of overall success.

10.3 Master Plan Comprehensive Reviews and Updates

Ongoing reviews and updates will be required to ensure the continued suitability of the Master Plan to assist in the governance and administration of the Airport. This includes:

- **Annual:** The annual review of the document as part of the implementation framework (Figure 10.1) to confirm the Master Plan's priorities for that year and assess the ability to advance the recommendations;
- **Every Five Years:** The completion of a comprehensive review of all recommendations and direction provided through the Master Plan to identify emergent priorities and changing conditions that will affect implementation; and
- **Every Ten Years:** The preparation of a new Master Plan covering the next 20-year horizon.



Air ambulance patient transfer on Apron I



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Ottawa, ON K1K 4R4
hmaero.ca



Creston Valley Regional Airport

Draft Master Plan Review Session | March 18, 2025



Project Overview

Pursuing the **long-term sustainability of Creston Valley Regional Airport** through:

Economic Viability Study

- How is the airport operated?
- Is the facility economically viable?
- What value does the airport provide?
- What are the priorities for the future?

Airport Master Plan

- What is the desired future position for the airport?
- What is required to achieve this future state?
- Who will advance the airport?
- How will the facility be funded?



Master Plan Structure

1. Introduction
2. Regional Context
3. Airport Overview and Value
4. Outlook and Role
5. Infrastructure and Service Requirements
6. Airport Development Plan
7. Service Delivery Model
8. Financial Sustainability
9. Supporting Strategic Pillars
10. Implementation



Outlook and Role

- Community and Strategic Priorities (**Economic Viability Study**)
- Growth and Diversification Opportunities
 - Private Hangar Development
 - Aviation Commercial Development: Aircraft maintenance, flight training, and rotary-wing aerial work providers
 - Itinerant Air Access
- Non-Viable Opportunities At This Time
 - Scheduled Passenger Air Services
 - Non-Aviation Land Development
- Airport Role

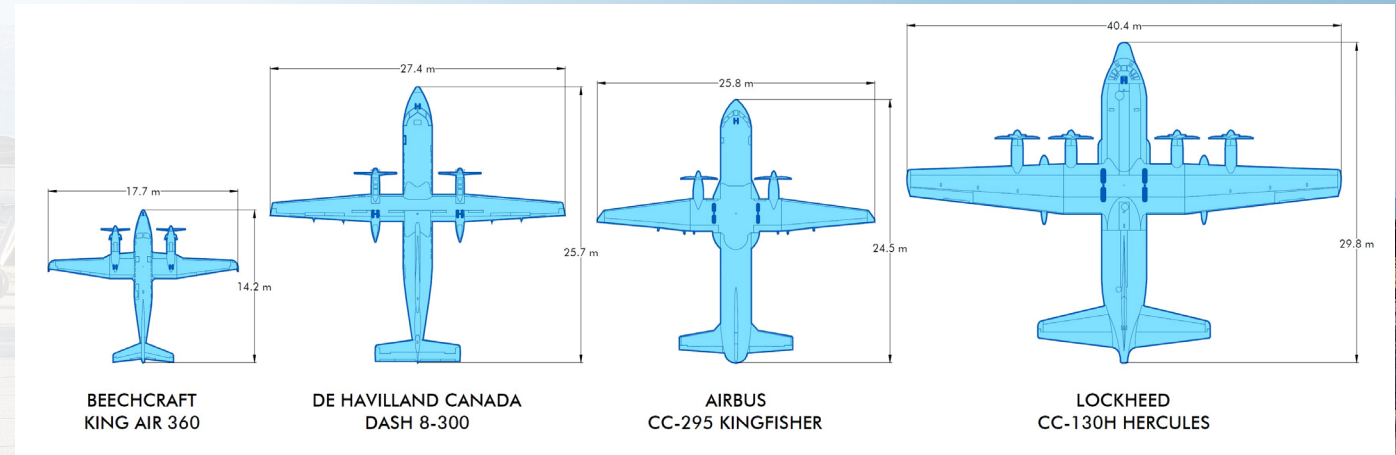


Airport Role Statement

1. Provide an exceptional level of service for public health and safety air services
2. Facilitate aircraft operations that support the economic vitality and diversification of the Creston Valley
3. Support aviation-related community programming that yields social value
4. Accommodate private and recreational aircraft operations

Infrastructure and Service Requirements

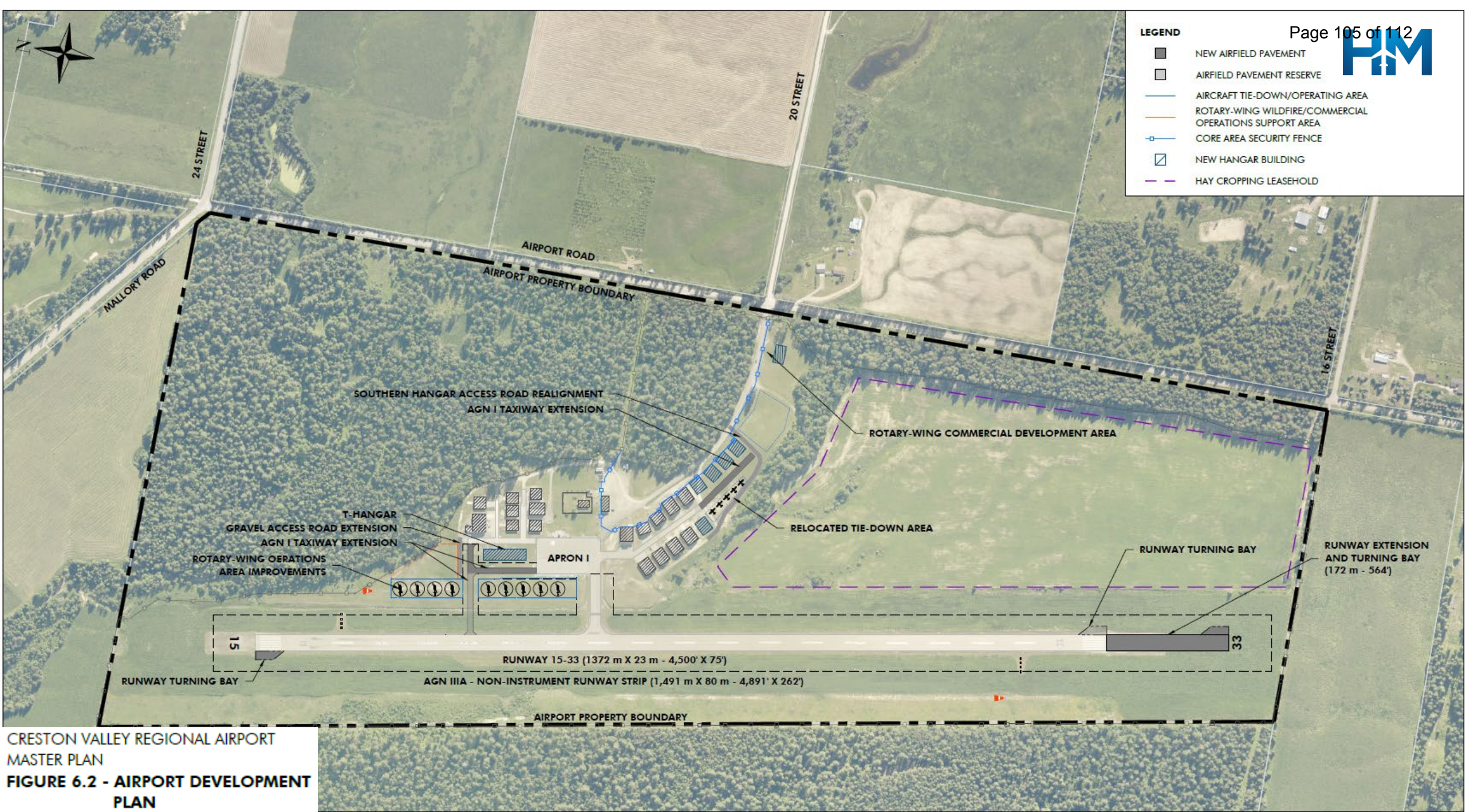
- Primary end user from a design perspective (Design Aircraft): Beechcraft King Air 360
 - Air Ambulance
 - Private / Corporate Charter
- Consideration of larger regional commercial and search and rescue aircraft in addition to the Design Aircraft
- Four types of projects:
 1. Improving Airport Safety
 2. Lifecycle Asset Renewal
 3. Level of Service Improvement
 4. Enabling Airport Development



Category	Short Term (2025-2029)	Medium Term (2030-2034)	Long Term (2035-2044)	Discretionary
Improving Airport Safety	<ul style="list-style-type: none"> • Backup Generator • Runway Holding Position Signage • Hangar Taxiway Edge Markers • Core Area Security Fencing 			
Lifecycle Asset Renewal	<ul style="list-style-type: none"> • Aircraft Fuelling System Tank Replacements and Upgrades • Precision Approach Path Indicators Replacement • Towed Airfield Sweeper Replacement 	<ul style="list-style-type: none"> • Runway 15-33, Taxiway A, and Apron I Rehabilitation • Weather System Renewal • Loader, Loader-Mounted Snowblower, Tractor, Plow Truck, and Pickup Truck Replacement 	<ul style="list-style-type: none"> • Airfield Lighting System Rehabilitation • Hangar Taxiways – North / South Rehabilitation • Perimeter Fencing Replacement • Terminal Building Repairs • Maintenance Garage Repairs • Mower, Courtesy Vehicle, and Skid Steer Replacement 	
Level of Service Improvement	<ul style="list-style-type: none"> • Runway Extension and Turning Bays • Northern Rotary-Wing Operations Area • Instrument Approach Improvements Study • CBSA AOE/15 Business Plan 			<ul style="list-style-type: none"> • New Runway Access Taxiway • Aircraft Type I De-icing Capabilities • Lister Water System Connection
Enabling Airport Development				<ul style="list-style-type: none"> • Hangar Taxiway – South Extension • New T-Hangar Taxiway • Southern Hangar Access Road
Total	2025 CAD: \$2,610,000 Adjusted CAD: \$2,775,000	2025 CAD: \$6,855,000 Adjusted CAD: \$8,110,000	2025 CAD: \$3,225,000 Adjusted CAD: \$4,270,000	2025 CAD: \$1,495,000 to \$1,995,000



- LEGEND**
- NEW AIRFIELD PAVEMENT
 - AIRFIELD PAVEMENT RESERVE
 - AIRCRAFT TIE-DOWN/OPERATING AREA
 - ROTARY-WING WILDFIRE/COMMERCIAL OPERATIONS SUPPORT AREA
 - CORE AREA SECURITY FENCE
 - ▣ NEW HANGAR BUILDING
 - HAY CROPPING LEASEHOLD



CRESTON VALLEY REGIONAL AIRPORT
MASTER PLAN
**FIGURE 6.2 - AIRPORT DEVELOPMENT
PLAN**



- LEGEND**
- AIRFIELD
 - AIRPORT OPERATIONS
 - AVIATION DEVELOPMENT
 - AIRPORT RESERVE
 - ENVIRONMENTAL RESERVE



CRESTON VALLEY REGIONAL AIRPORT
MASTER PLAN
**FIGURE 6.3 - AIRPORT LAND
USE PLAN**

Service Delivery Model

- Options Evaluated

- In-House Municipal Service Delivery
- Fee-for-Service Contracted Operations
- Operating Agreement (Status Quo)*
- Operating Agreement With Updates**
- Municipal Corporation**
- Full Transition to Airport Society

- Areas of Focus

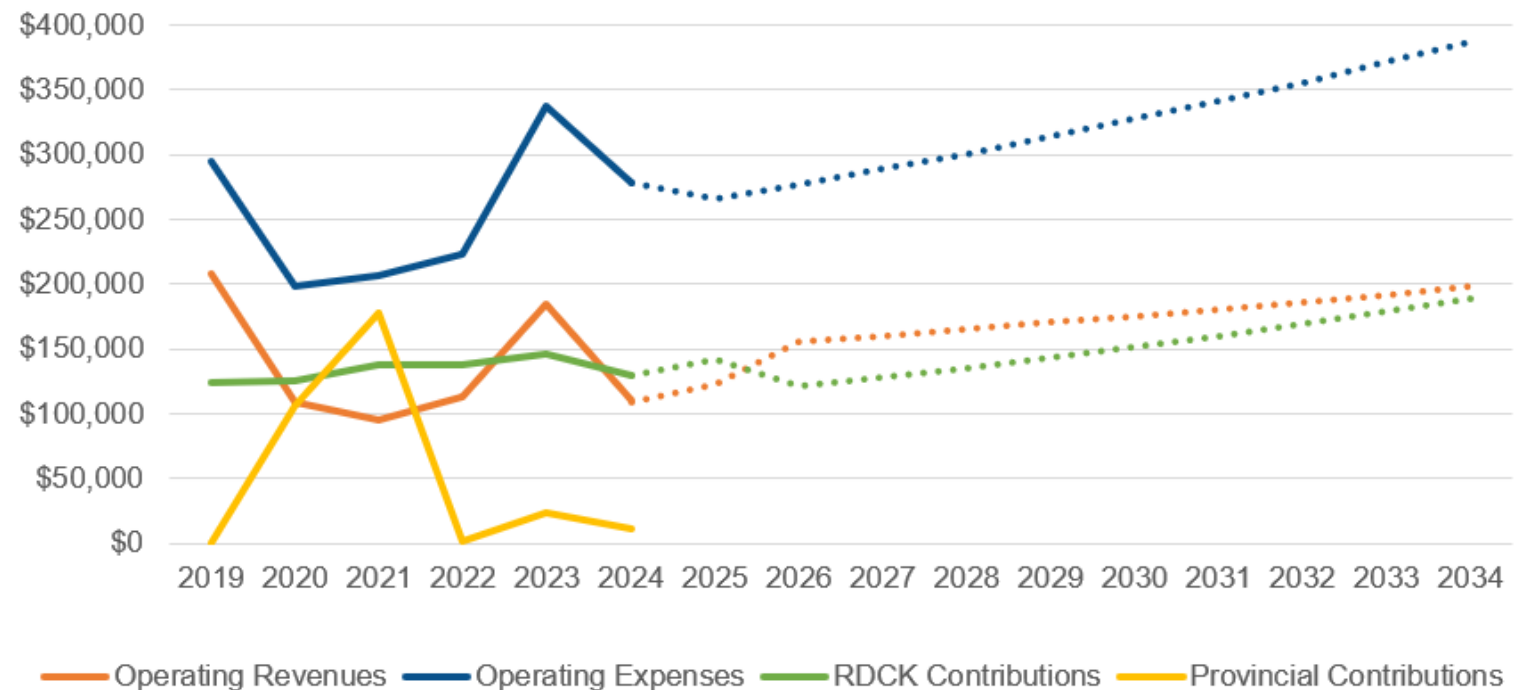
- Increased Town and RDCK oversight
- Addressing liability and exposure to claims
- Performance standards
- Public representation of Town
- Optimized responsibilities
- Succession and volunteer resources
- Representation by other parties



Financial Sustainability

- Potential growth in the gap between operating revenues and expenses based on the assumptions of the proforma (conservative revenue approach)
- Focus on revenue generation
 - Airside land development
 - Lease rate updates
 - Fuel sale margins review
 - Focused and appropriate aeronautical user fees
 - Private and corporate sponsorship
- Operating model and expenses
- Airport will likely remain economically dependent from an operating perspective on public support through the Airport Service

Figure 8.1 - 10-Year Proforma Operating Financial Outlook

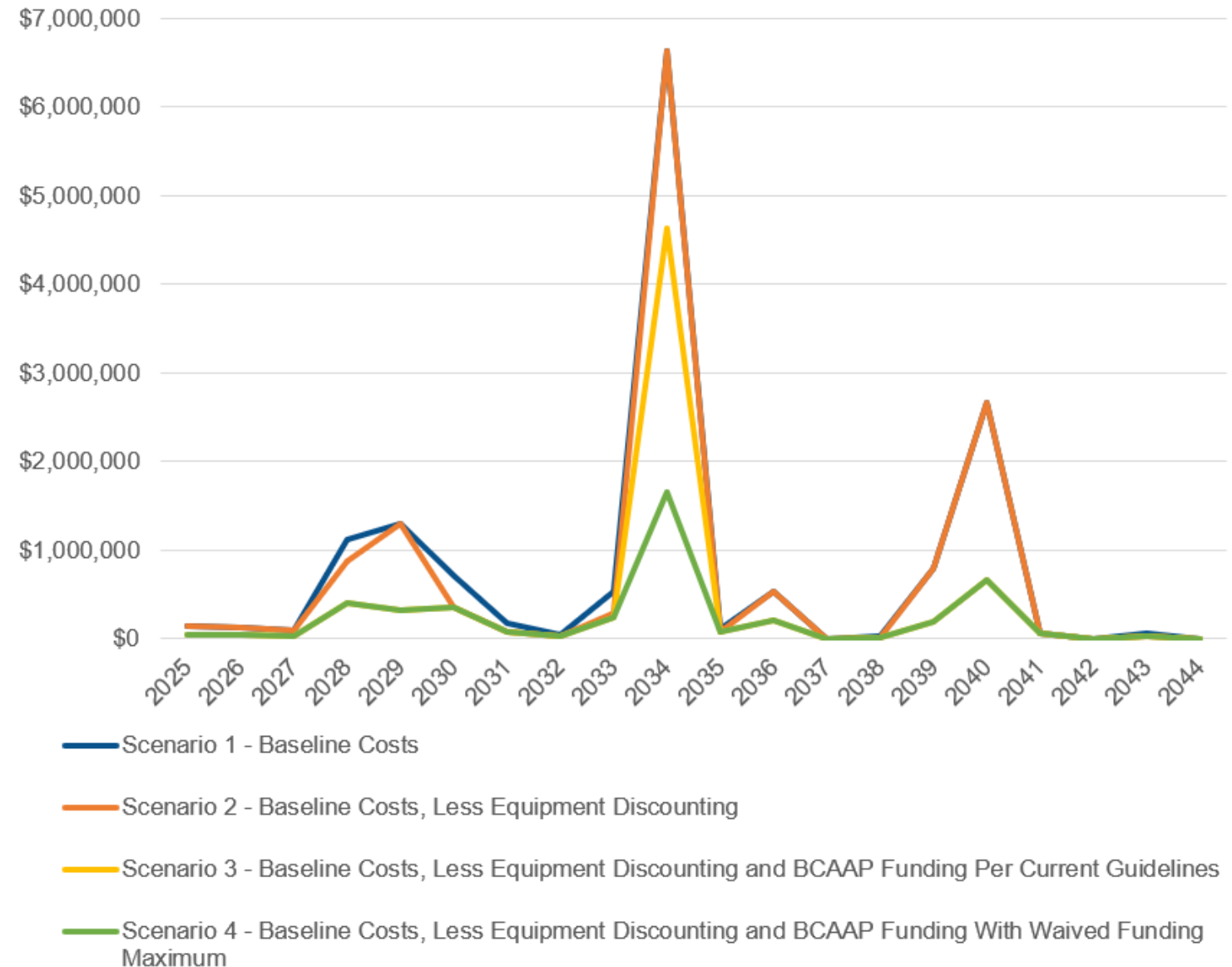


Note: Years are based on the Airport Society's fiscal year. Financial outlook is for illustrative purposes only and is not for budgeting.

Financial Sustainability

- \$15.5M in inflation-adjusted capital costs over the 20-year period, in addition to \$1.5M to \$2.0M in discretionary projects
- Capital funding opportunities
 - BC Air Access Program
 - Airport Service funding and capital reserve contributions
 - One-time Town and RDCK contributions – Community Works Fund, Strategic Priorities Fund
 - Private and corporate support
- Impacts of used equipment acquisition and further engagement with the Columbia Basin Trust
- Potential reduction in capital costs from \$15.5M to between \$4.5M and \$7.5M

Figure 8.2 - Capital Financial Outlook With Realization of Select Funding Scenarios



Supporting Strategic Pillars

1. Community Awareness
2. Advocacy
3. Revenue Generation Initiatives
4. Business Development
5. Environmental Sustainability





Next Steps & Implementation

- Review of the Draft Master Plan with CVRAS (March 17) and Town Council / Regional Directors (March 18)
- Review by Town Administration
- Actioning of comments on the Draft Master Plan by HM Aero and issuance of Final Master Plan by March 31
- Acceptance of the Master Plan and implementation

2025	2026
<ul style="list-style-type: none">• Acceptance of the Master Plan• Identification of preferred service delivery model and implementation• Review of the standard land lease agreement terms and completion of renewals• Priority Capital: Backup Generator, Taxing Edge Markers, Airside Signage	<ul style="list-style-type: none">• First year of the annual implementation framework• Initial Airport Service allocation increase• Development of an aeronautical user fees structure• Implementation of fuel sales recommendations• Priority Capital: Core Area Security Fencing, Instrument Approach Study

The background is a wide-angle photograph of a snowy, icy road stretching into the distance. The road is flanked by dark evergreen trees on the left and rolling hills or mountains in the background under a cloudy, overcast sky. The entire image has a blue color overlay.

Thank You & Questions