

OEI



Operations
Economics Inc.

FINAL REPORT:

**Oliver Airport Master Plan:
*Mapping Out the Future***

SUBMITTED TO:

Town of Oliver

17 June 2024



SUBMITTED BY:

Operations Economics Inc.
With

Tetra Tech



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1 Purpose

The purpose of the Oliver Airport Master Plan is to create a 10-year land use and infrastructure plan for the Airport. At its core, an airport master plan is a description of the desired configuration of an airport, the steps needed to achieve the configuration, and the operational and financial implications of such changes. This Master Plan was developed during 2023 and 2024 by Operations Economics Inc. (OEI), a Vancouver-based consultancy contracted by the Town of Oliver.

The 2024 Airport Master Plan is focused on developing the Airport, increasing airport use and related revenues, and improving the sustainability of airport operations. The Master Plan also discusses proposed changes to governance and marketing for the airport. The Town hopes to develop positive social and economic benefits from the airport that will contribute to ongoing development of the community and surrounding region.

Figure 1-1: Looking North from the Threshold of Runway 01



Source: Jon Spalding

2 Oliver and Region

Location and Development. The incorporated Town of Oliver sits near the south end of the Okanagan Valley in the Southern Interior of BC, at the northern tip of the Sonoran Desert. It is located along the Okanagan River by Tuc-el-nuit Lake between Osoyoos and Okanagan Falls. The Town is 21 km north of Osoyoos, 42 km south of Penticton, and 25 km north of the US border.

The landscape covers a complex array of habitats and supports one of the most diverse sets of species in Canada, including several found nowhere elsewhere in the country. The archaeological record suggests that the ancestors of First Nations people have lived in the region since the last ice age, 10-12,000 years ago.

In 1919, the British Columbia government, under Premier John Oliver, initiated a project to irrigate 8,000 acres of semi-arid desert land in the South Okanagan. The resulting Southern Okanagan Lands Project (SOLP) led to the development of one of the most successful tree fruit and viticulture areas in Canada. The 25-mile-long irrigation works were completed in 1927.

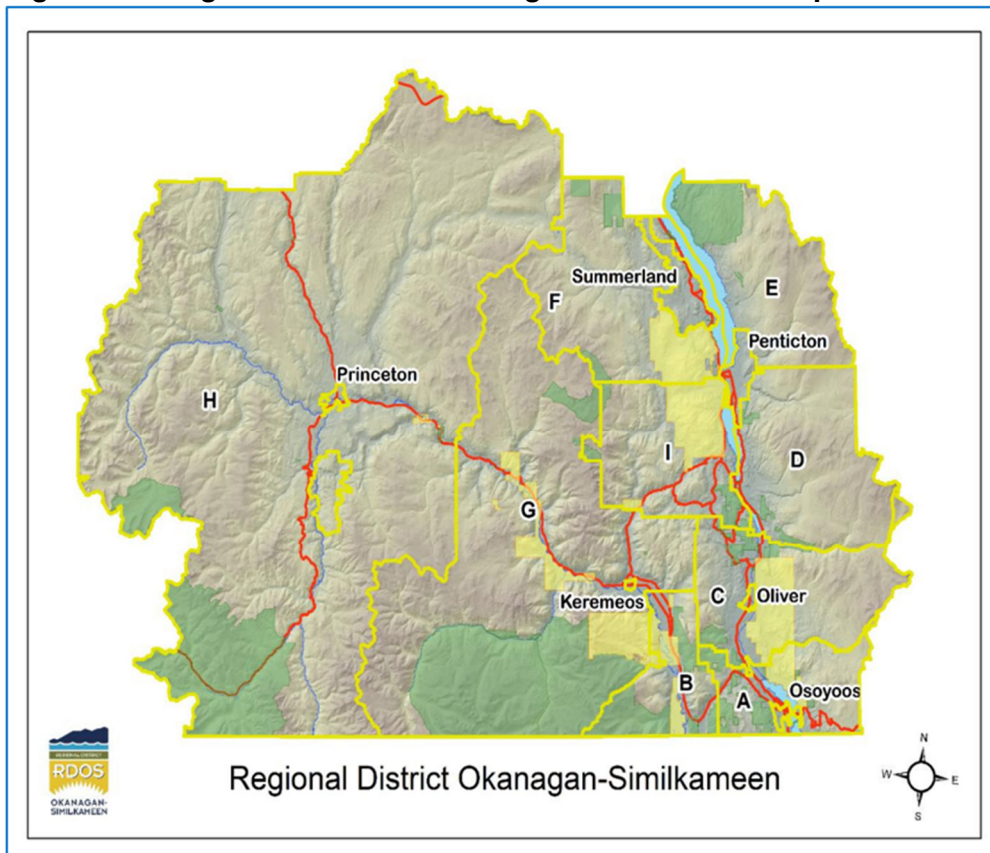
In the 1960s and 1970s, Oliver businesses developed and manufactured articulated hydraulic machines to accelerate fruit picking and tree pruning. The first vineyards were planted in the late 1970s, and by 1992 major vineyards had been planted, several associate wineries had been developed, and the Oliver area boasted nine local wineries. Oliver's trademarked marketing tag is, "Canada's Wine Capital."

Oliver serves a surrounding rural area of some 4,500 people, bringing the total town catchment population to approximately 9,600 people.¹

Government. The catchment area consists of land governed by three areas: the Town of Oliver, the Osoyoos Indian Band, and the Regional District of Okanagan-Similkameen (RDOS). The Town of Oliver is represented on the RDOS Board of Directors by one director.

¹ <https://www.oliver.ca/our-community/about-oliver>

Figure 2-1: Regional District of Okanagan-Similkameen Map



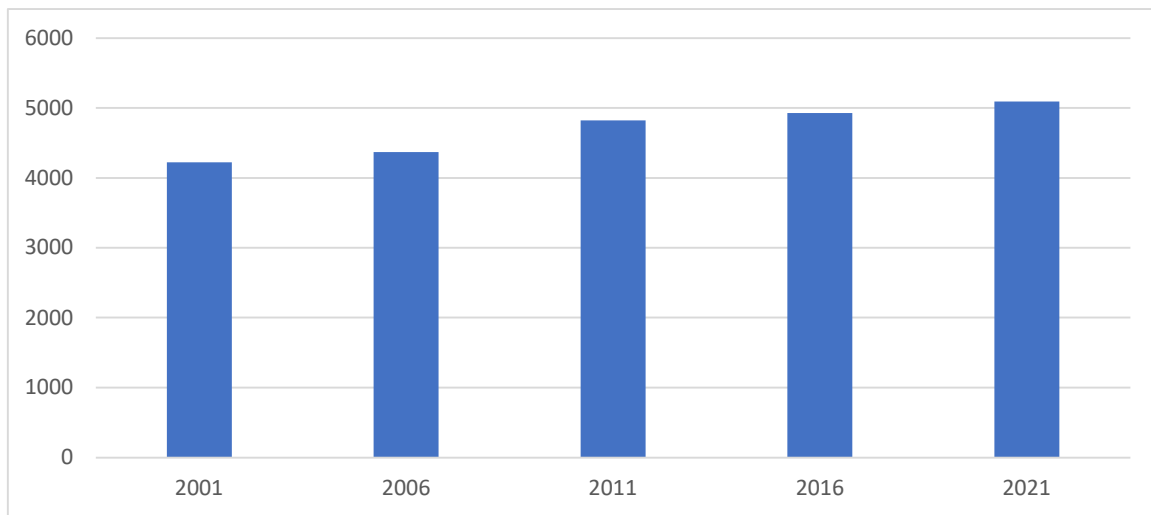
Source: “Regional District of Okanagan-Similkameen Strategic Plan 2023-2026”
 (Note: Areas in solid yellow are Indian Reserves.)

2.1 Population

Oliver’s 2021 population saw an increase of 3.4% over the 2016 Census. This compares to the provincial average of +7.6% and the national average of +5.2% over the same period.

Osoyoos Indian Band. In 2021, the population of the Osoyoos 1 Reserve was 1,426, an increase of 87.1% over 2016. Over that same period, the number of private dwellings rose 60.1% to 565 dwellings. The land area of Osoyoos 1 is 130.3 km². The 2020 after-tax median income of households in Osoyoos 1 was \$68,000, up 31.8% from the \$51,600 of 2015.

Figure 2-2: Town of Oliver Change in Population, 2001-2021

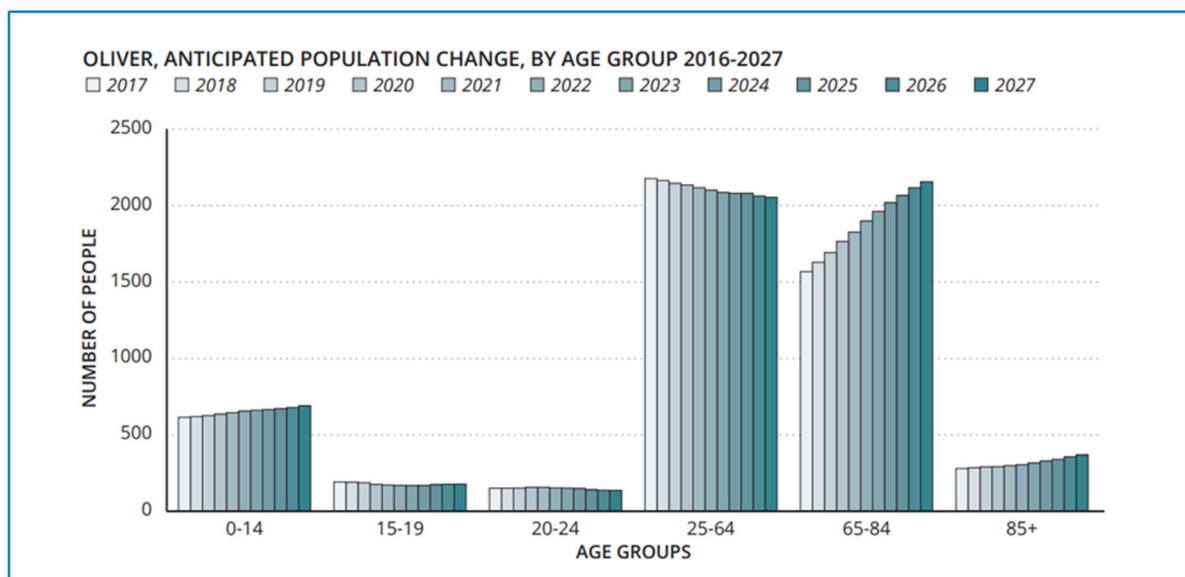


Source: Statistics Canada, Census.

Age

Like much of Canada, the median age of Oliver residents has increased every census year since 2001, when the median was 51.1 years. Twenty years later, the median stood at 58.0 years old. Oliver’s population is aging. Before the end of this decade more than half of Oliver residents are projected to be older than 65 as shown in **Figure 2-3**.²

Figure 2-3: Anticipated Population Change by Age Group



Source: “Grow Oliver! Oliver Local Economic Development Strategy,” Draft, May 2020

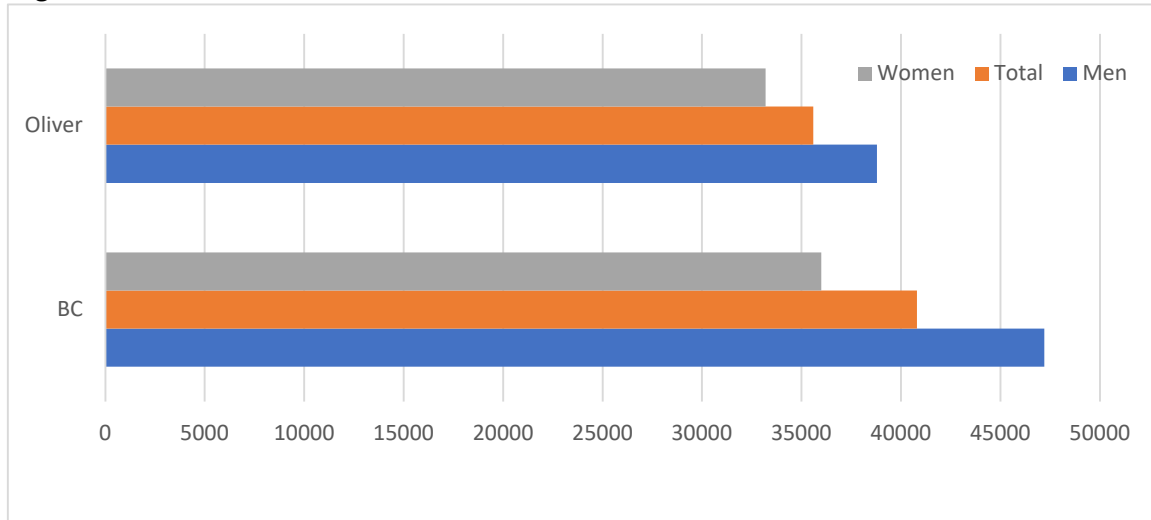
² “Grow Oliver! Oliver Local Economic Development Strategy,” Draft, May 2020

2.2 Regional Economics

2.2.1 Income

The median Oliver total income in 2020 among recipients (aged 15 years and over in private households) was \$35,600 (male \$38,800, female \$33,200). As **Figure 2-4** below shows, these average incomes are lower than those in the RDOS or BC.

Figure 2-4: Median Total Income for Individuals in Oliver and BC



Source: Statistics Canada, 2021 Census

2.2.2 Labour Force

Labour Force Participation Rates. Labour force participation rate is the percentage of people who are either employed or are actively looking for work. A growing participation rate signals more people entering the labour force. These entrants may be younger people looking for their first jobs, those of working age switching careers or jobs, or people re-entering the job market after career disruptions. Over the last 20 years, the labour force participation rate has steadily increased, as shown in **Table 2-1** below.

Table 2-1: Town of Oliver Labour Market Participation Rates, 2001—2021

2001	2006	2016	2021
45.0%	44.5%	49.3%	50.3%

Source: Statistics Canada

2.2.3 Employers

Agriculture is a largest private industry with 400-plus farms and significant vineyard acreages. The three largest employers in Oliver are: South Okanagan General Hospital (270 employees), School District 53, and the Okanagan Correctional Institute.³ In most communities, education and health are the top employers. Measured by number of businesses, the three largest sectors in Oliver are:

1. Real Estate 144 businesses
2. Agriculture 83 businesses
3. Construction 59 businesses

The economy is driven by small business. As the table below shows, half of local businesses have one to four employees.

There were 1,000 full time positions in 2020 (520 male, 485 female), and 1,160 seasonal or part-time positions (620 male, 535 female).

Table 2-2: Oliver Businesses by Number of Employees, 2022

Number of Employees	Number of Businesses
1-4	128
5-9	53
10-19	40
20-49	13
50-99	13
100-199	0
200-499	2

Source: Statistics Canada

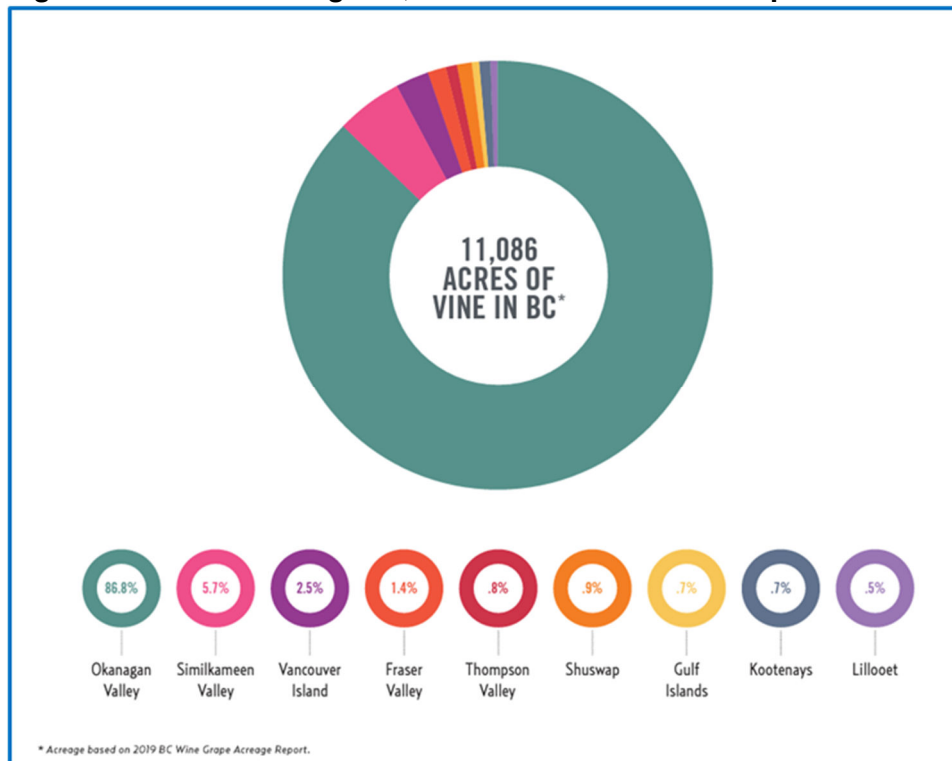
³ <https://www.timeschronicle.ca/sogh-is-olivers-largest-employer-and-most-efficient-hospital-in-entire-interior-health-region/> and <https://www.sochamber.ca/oliver>

2.3 The ‘Wine Capital of Canada’

Nearly half of all BC’s vineyards and more than 40 wineries are found in the Oliver region. The combination of hot days and cool nights and South Okanagan soil cultivates “exceptional flavours and vibrant acidity.”⁴

The BC wine industry contributes \$3.75 billion each year to the provincial economy. It also provides stable, value-added farming and manufacturing jobs to more than 14,000 people. Ninety percent of BC’s vineyards are in the Okanagan and Similkameen Valleys.

Figure 2-5: BC Wine Regions, Measured in Acres of Grape Vines



Source: “Wines of BC Media Kit” Note: Nine regional growing areas (GIs) can be used on labels of BC VQA certified wine. If the grapes come from outside one of these GIs, or are blends from more than one GI, they are labelled “British Columbia.”

Wine Tourism. BC wineries host approximately 1.2 million visitors annually, and these guests generate over \$60 million in revenue for the BC economy.⁵ More than 80 grape varieties are grown province-wide on 1,225 vineyards across 12,700 hectares of planted land. In Oliver, wine tourism is further advanced by fine-dining restaurants associated with the local wineries, as well as an annual wine festival.

⁴ <https://winebc.com/discover-bc-wine-country/okanagan-valley/oliver/>

⁵ <https://winebc.com/industry/media/quick-facts>

3 Oliver Airport

3.1 History

Oliver Airport was opened in 1937 and was used during the Second World War to support the war effort.⁶ The Town has operated it for decades. In recent years it has been used for a wide variety of general aviation activities including forest fire fighting, medevac flights, helicopter operations, airshows, aviation maintenance, search and rescue, and tourism. The figure below shows a camp created to house BC Wildfire Service crews in 2022.

Figure 3-1: BC Wildfire Service Camp at Oliver Airport, 2022



Source: Global News

3.2 Ownership

Oliver owns the Airport. The Town has a Crown grant from the Province of BC for the Airport lands “for so long as the land is used for airport purposes.” The grant is subject to the Ministry of Forests, Lands, and Natural Resource Operations’ operational policy.

⁶ F.C. MacNaughton, “The Oliver Airport.”

3.3 Governance

Governance encompasses the processes by which organizations are directed, controlled, and held to account. It includes the authority, accountability, leadership, direction, and control exercised within an organization.

Currently, the governance of the Airport relies on two authorities. The Town's Director of Public Works, an employee of the Town, has been appointed as the interim Airport Manager. The Director reports to the Chief Administrative Officer (CAO), the senior executive role within the Town. An Airport Committee (Committee) composed of several representative Airport stakeholders has been appointed by the Town Council. The Committee reports to the Town Council and provides recommendations on a variety of Airport uses and developments, ranging from operational decisions through to strategic direction. The Committee reflects past practices when the Airport Manager had a contractual role, outsourced to a local pilot who worked in real estate sales and development. This historic arrangement reflected the Town's commitment to growing the use and importance of the Airport, with an emphasis on increasing the number and value of leasehold tenancies at the Airport.

3.4 OCP Regarding the Airport

Oliver's Official Community Plan (OCP) describes the Airport as part of the town's industrial lands, and notes airport lands can be used for only airport-related purposes.⁷ Airport-relevant policies in the OCP are (numbering as it appears in the OCP) as follows:

7. Maintain the Town of Oliver's airport for airport related uses only.
8. Supports the upgrading of the airport lands and recognizes they must be used for airport related purposes.
9. Develop an airport industrial zone for the Zoning Bylaw.
10. Will not support rezoning for new industrial uses that conflict with adjacent land uses or are detrimental to the environment.⁸

Vision. Within the OCP, the airport vision is described as "to become the premier regional airfield for the South Okanagan providing excellence in services and facilities available to air travelers and aircraft operators and to become recognized as a model for convenient access, cost effectiveness and effective partnerships with the Town's residents and businesses."⁹

Objective. The transportation objective for the Airport is to increase its utilization and strive for financial self-sufficiency.¹⁰

⁷ Town of Oliver Official Community Plan, Bylaw 1370, Consolidated for Public Convenience, 2023.

⁸ Oliver OCP, p. 41.

⁹ Oliver OCP, p. 58.

¹⁰ Oliver OCP, p. 59.

3.5 The Airport

The Oliver Airport is registered. Its Airport Operations Manual (AOM) is in accordance with the 4th Edition of Transport Canada's Aerodrome Standards and Recommended Practices (TP312). The AOM was last updated in 2013.

In the AOM, the design aircraft for the Airport is the Cessna Conquest II, a code letter 1A aircraft (in TP312 4th edition). The Airport has:

- One paved runway (Rwy 19-01) of 3,355 feet
- A paved parallel taxiway, Taxiway D
- An informal grass runway operated during the summer parallel to the paved runway
- Low intensity runway lighting
- Displaced threshold on the south end– 744 feet
- Avgas 100LL available.

The Airport is surrounded by the Town of Oliver to the north and west, and by the Regional District of Okanagan-Similkameen to the south and east.

Public access to the site is made via a gate on the west side of the runway near midpoint, off Airport Street.

The Airport is primarily used by private aircraft. Businesses and organizations based at the Airport include:

- Transwest Helicopters, providing rotary wing maintenance and operations support
- Kootenay Valley Helicopters, which recently leased the hangar north of Transwest
- The Oliver Fire Department
- Aviation maintenance operation
- Oliver / Osoyoos Search and Rescue
- South Okanagan Flying Club
- BC Wildfire Services uses the site on an as-needed basis to support rotary wing operations
- Oliver Hangar Leaseholders Association
- Oliver Amateur Radio Club
- 232 Bighorn Air Cadet Squadron

3.6 Socio-Economic Impacts

This project did not include a detailed socio-economic impact analysis, but based on interviews and research conducted, the following observations on social impacts can be made:

- Airport operations such as helicopter companies support government and business operations.

- The site is a centre for community emergency response, including:
 - Search and Rescue
 - Fire Department, and
 - BC Wildfire Service, as required.
- The Airport’s flying club and recreational activities such as air meets support the quality of life in the community and tourism.
- The facility supports national and international transportation connections, including medevac, forest fire fighting, connections for aircraft flying across the province and country, maintenance services, cadet training, and tourism and recreation services.

Economic Impacts. In 2024, with the arrival of a new helicopter operator, economic impacts at Oliver Airport are strong for a GA site. A survey of tenants allowed the calculation of the table of direct economic impacts below. This table was developed using analysis in COPA’s 2017 study “Economic Impact of General Aviation in Canada,” Statistics Canada economic multipliers, and the Bank of Canada’s Inflation Calculator. The majority of employment is helicopter related, and this analysis does not include the Fire Department.

Oliver Airport Direct Economic Impact, 2024

Jobs	Wages (\$ millions)	GDP (\$ millions)	Output (\$ millions)
24.0	2.22	3.58	8.80

3.7 Regional Context

There are five airports between Vernon and Osoyoos in the Okanagan Valley. Kelowna International Airport is one of the 10 largest airports in Canada and growing quickly. This section discusses the other three airports, which are more comparable to Oliver in scale of operations – Penticton, Osoyoos, and Vernon. The table below describes the runway lengths for each.

Table 3-1: Comparison: Oliver and Nearby Airports

Airport	Runway	length (ft)
Oliver	Runway 19-01	3,355
Penticton	Runway 16/34	6,000
Osoyoos	Runway 12/30	2,477
Vernon	Runway 05/23	3,517

3.7.1 Penticton Airport

Penticton Airport (CYYF) is situated three km southwest of the City of Penticton (pop. 36,885). The airport is owned and operated by Transport Canada. It is the only airport other than Kelowna which has scheduled passenger services in the South Okanagan. The Penticton Airport and tenants employ more than 200 people.

Figure 3-2: Penticton Airport with Skaha Lake to the Right



Source: Google Earth, 18 January 2024

Aviation operators at the airport include:

- Demel Aircraft Corporation, which sources aircraft parts and supplies
- Executive Flight Centre, fuel service for Jet A1 and Avgas, and baggage and cargo unloading services
- Executive Aviation Services, ground support for commercial airlines, executive flights, and private aviators, including de-icing and baggage handling
- Okanagan Smart Storage Centre
- Penticton Flying Club
- BP Aviation, air charter and flight training
- Topflight Elite Training, fixed-wing and helicopter flight training and charters
- NAVCAN Flight Service Station (FSS)
- CBSA office which is open during the work week.

The airport is also home to BC Wildfire Service's Fire Zone and Air Tanker Base and PEP Air & Civil Air Search and Rescue (CASARA).

3.7.2 Osoyoos Airport

Osoyoos Airport is just over two km west of the town centre and adjacent to Highway 3. The airport is owned and operated by the Town of Osoyoos (pop. 5,556). It has a short, paved airstrip 2,477 ft long. The airport has no facilities or services.

Figure 3-3: Osoyoos Airport and Surrounding Area



Source: Google Earth, 19 January 2024

3.7.3 Vernon Regional Airport

Vernon Regional Airport is owned and managed by the City of Vernon (pop 67,100). Situated on 38.5 ha, the airport is eight km southwest of downtown Vernon. Vernon Regional Airport has approximately two hectares available for lease. The airport houses 14 businesses that employ approximately 120 people.

Figure 3-4: Vernon Regional Airport

Source: Google Earth, 18 January 2024

Key enterprises at the airport include:

- Advantage Helicopters
- Aurora Aviation Academy
- Cascadia Airways
- Kal Aviation Group
- Leading Edge Aerospace
- Monashee Helicopters
- Mountain Air Helicopters
- Okanagan College Trades Training Centre
- Okanagan Fix Wings
- Okanagan Skydive
- Rotech Motor Ltd
- Skytek Aircraft Services
- Vernon Flying Club¹¹.

¹¹ www.vernon.ca/roads-transportation/airport/business-airport

4 Activity Demand

This section discusses potential activity at the airport that may lead to new aircraft movements and leasing opportunities. OEI understands that the Town wants to improve the financial position of the airport and improve its economic and social impacts on the community. Three types of opportunities are discussed: 1) tourism and indigenous; 2) aviation and aerospace; and 3) fire training/response.

Figure 4-1: Looking West Across Runway 01-19



Source: Jon Spalding

4.1 Allowable Activity

The Oliver Airport operates on a BC government airport crown grant and is subject to the Airports Land Use Operational Policy of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development. Only uses that would be allowed under this policy are considered in this section. Detail on the policy is provided in **Appendix A**.

4.2 Tourism and Indigenous Opportunities

For thousands of years the Syilx Okanagan people lived in the region. The Osoyoos Indian Band is one of the eight member communities of the Syilx Okanagan Nation Alliance. The Osoyoos Indian Band federal reserve spans over 32,000 acres in the region adjacent to Oliver. With an entrepreneurial approach, the Osoyoos Indian Band Development Corporation (OIBDC), has established many businesses through land leases, partnerships, and other arrangements. Some of the OIBDC's important tourism-related businesses include:

- Nk'Mip Canyon Desert Golf Course
- Nk'Mip Winery
- Hyatt Spirit Ridge Resort (Hotel)

- Nk'Mip Desert Cultural Centre
- Jackson Triggs Winery (land lease with Arterra Wines Canada), and
- Area 27 Motorsports Park.

Oliver, which bills itself as Canada's Wine Capital and BC's Hidden Gem showcases local wineries as a major tourism attraction. In efforts to broaden demand, The Oliver Tourism Association (Tourism Oliver) has also been promoting "culture, community and cuisine opportunities."

The Town of Oliver considers tourism vital to the local economy. The Grow Oliver Local Economic Development Strategy includes an objective to "create local benefits from regional tourism." Oliver Tourism's mission is to identify and promote tourism opportunities and activities within the Town of Oliver and the surrounding area. This registered not-for-profit is the local focus for visitors in Oliver and Area C, the area that includes the Town and the surrounding rural environs within the RDOS.

"The Thompson Okanagan Tourism Association (TOTA) is one of six Regional Destination Management Organizations (RDMO) in BC...that work as an official representative of Destination British Columbia, and whose mandate includes Industry Development, Destination Marketing, Destination Stewardship, and Destination Development."¹²

4.2.1 Challenges

Tourism has faced intense challenges over the last five years.

- COVID 19 severely limited tourism worldwide with steep reductions in all forms of leisure travel. Canadian tourism was no exception, and recovery to pre-pandemic tourism levels has been experienced unevenly across the country. Some regions expect domestic and international visitor numbers in 2024 to meet 2019 volumes.
- Tourism in the Okanagan, and Oliver specifically, was hard hit during the pandemic and the subsequent recovery has been slower than in some other regions. Natural disasters such as fires and floods, extreme weather, landslides, road closures, airspace closures, and provincial emergency orders have all hurt tourism and slowed the return to post-COVID volumes.
- Even before the fires of August 2023, tourism to Oliver was still down relative to 2019.
- There is also an ongoing challenge with visitors perceiving the situation being worse than the actual events. For example, visitors may be reluctant to drive to Oliver as they are afraid of "getting stuck" with future road closures after hearing about landslides. In 2023, some potential tourists had the perception that fires were a problem throughout the entire Okanagan even if there were no fires affecting the Oliver area and Highway 3 access. News reports and social media often leave a lasting impression of the devastation long after the problem has been resolved. Marketing programs have a daunting task of overcoming these impressions and encouraging tourists to visit Oliver in the future.

¹² <https://www.totabc.org/organization>

- Given the lack of air service, Oliver is primarily a drive destination and competes with Penticton and Osoyoos, both of which have a reputation for a lakefront, resort, cottage style product in addition to the wineries.
- There is poor multi-modal connectivity for Oliver. For example, there is no/little public transportation connections to Kelowna or Penticton.
- During COVID many of the wineries changed their business models. Examples of this include requiring appointments of visitors and charging for tasting. This was good for the winery business as their revenues and sales went up and “pours” went down. Some returning tourists are not used to these constraints and are frustrated with the fees, are having problems timing drives between wineries, and are late for scheduled tastings. These constraints can create cascading issues which affect visitor satisfaction resulting in reduced return visits and fewer recommendations.

4.2.2 Opportunities

This section identifies specific ideas for supporting and growing regional tourism and indigenous businesses through airport opportunities.

Take-Off-To-Oliver (TOTO) tour package

- Develop a new package tourism product using small air charter. A chartered aircraft would fly a small group from Vancouver or Calgary to Oliver Airport. The group would be met by a van, limo or other ground transportation or existing luxury van wine tour operator. The day includes visits to several wineries, the Nk'Mip Desert Cultural Centre and a lunch. Biking, hiking or other activities could be included for specific groups. This could be developed as a one-day return product, a weekend getaway or a mid-week escape.
- Take Off to Oliver could be marketed as incentive or team travel for high end businesses to purchase to recognize clients or employees.
- The Airport could support creation of these packages in partnership with local businesses or organizations or co-developed with the Osoyoos Indian Band. Another option would be through oliverosoyoos.com which is an existing partnership between wineries in the Oliver and Osoyoos area. They already have a history of working together with the “Uncork Together” digital passport and the “Oliver Osoyoos Wine Country” marketing campaign.
- Charter tour packages such as this would address some of the visitor perception fears referenced in the challenges section above.

Flight seeing tours

- Visitors who arrive by car may be interested in seeing Oliver, the wineries and incredible beauty of the Okanagan from the air. This is an opportunity to develop airplane or helicopter tours that would arrive and depart from Oliver Airport. Tours could range from 20-minute flights to daytrip adventure packages. Different tour routings and durations would be developed with associated pricing. Private winery specific tours could be offered. This high-end product could be co-developed with one or more of the wineries or with the OIBDC.

Increasing numbers of visiting itinerant pilots

- Small aircraft owner and operators may be more interested in flying into the Oliver airport if they were more aware of, and comfortable with, the airport. A marketing program to increase awareness could be implemented. This might include an ambassador program where local pilots (perhaps from the South Okanagan Flying Club), are paired with visiting pilots.
- Improving car rental or ground transport (taxi, ride hailing, bus transit) would make it easier for visiting pilots to explore and stay in Oliver and environs.
- Consider partnering with Area 27 Motorsports to market and provide facilities for private pilots who are members or drivers at Area 27.

Destination Development

- Historically, marketing to increase demand for tourism was the focus of most tourism organizations — indeed they were called destination marketing organizations (DMOs). Recently there has been a significantly increased effort on destination development and management which emphasizes the supply side. Destination BC defines destination development as “the strategic planning and advancement of defined areas to support the evolution of desirable destinations for travellers, with a sole focus on the supply side of tourism, by providing compelling experiences, quality infrastructure, and remarkable services to entice repeat visitation.”
- Transportation and access are key elements to destination and experience development.
- Dispersion, or maximizing the spread of visitors, is a related objective. By creating desirable destinations this should result in more visitors to parts of BC outside of the traditional Vancouver and Whistler itineraries.
- BC’s destination development program resulted in an updated Thompson Okanagan Destination Development Strategy which has an entire section devoted to improving transportation and access. Of specific note is the recommendation to:
 - “Work with all airports to coordinate a strategic approach to the growth of air routes, and support business case development for new or expanded routes. Develop an ambassador program for visiting itinerant pilots to smaller airports to encourage a growth in small group charter travel.”
- Oliver Airport should be aware of and participate in these regional air service development activities.
- Destination BC’s Investment in Iconics Strategy, “is a long-term strategy to responsibly increase the benefits of tourism throughout British Columbia through the integration of Place Branding and Destination Development to competitively differentiate BC on the world stage.” This approach may provide long-term sources of funding for airport related initiatives that improve access to tourism in and around Oliver.
- Sustainable Journeys, Prairies to the Pacific is a partnership project with Destination Canada, Destination BC and Travel Alberta to develop a tourism corridor along Highway 3. There is an opportunity for Oliver to participate in the development of this strategy and to include the Oliver Airport as a near term destination for flight seeing; small aircraft charter tourism and a long- term air access opportunity. The final plan

will also include a financial plan which may include opportunities for tourism-related funding for the Airport.

Indigenous tourism and business

- Indigenous tourism is a key priority highlighted in the plans and work of Destination Canada, Destination BC, TOTA, as well as through Indigenous Tourism Association of Canada (ITAC) and Indigenous Tourism BC (ITBC). Depending on the specific airport initiative there may be opportunities for funding support to increase access to indigenous tourism experiences.
- OIBDC is a vibrant and vital part of the regional economy. Consideration should be given to business partnerships between the Oliver Airport and OIBDC, and opportunities for collaboration between the two enterprises should be actively sought.
- Consideration should be given to including and reflecting the Indigenous sense of place, arts, and culture in any new or retrofitted public airport facilities. Engaging directly with OIB for suggestions on a culturally appropriate, practical and affordable approach is recommended.

4.3 Aerospace and Aviation

Aerospace and aviation are growing, and this includes general aviation (GA) and drones. Trends in GA activity are discussed in **Appendix B**. While tourism opportunities such as those discussed in the previous section are specific to a community or region, aviation opportunities in most cases are more wide-ranging and can move to the location that best suits the owner. Location is a key consideration of the business plan.

4.3.1 Challenges

Oliver Airport faces challenges to developing additional on-site activity. These challenges are described below.

- There are multiple airports in the Okanagan Valley, and three of them – Kelowna, Vernon, and Penticton – are significantly larger than Oliver’s. These airports enjoy a critical mass of activity and labour.
- Penticton Airport has scheduled passenger service, and is only a half-hour drive from Oliver, so it is unlikely that Oliver Airport could attract scheduled or charter passenger services.
- Only fixed-wing aircraft with an AGN I classification are potential users of the site. This includes aircraft with wingspans of 24 m or less. Typical aircraft within this classification would include aircraft like the Piper Navajo, Beechcraft King Air 100, Piper Cheyenne, and smaller jet aircraft with approach speeds less than 121 knots. Given the site geography and the roads north and south of the runway, a significant runway extension at the site is not possible.
- The airport has a relatively small land base, is constrained by surrounding land uses (residential, commercial, industrial and agricultural), and is adjacent to the growing/expanding downtown commercial area.

4.3.2 Opportunities

- Attracting untethered businesses (both aerospace or non-aerospace) to the Oliver/South Okanagan lifestyle and to the relative financial cost benefits of operating in Oliver.
- Growth of the GA community through a combination of South Okanagan lifestyle and unique opportunities afforded by the Airport (e.g., glider operations, combined hangar/residences, and suitability for cost-effective flight training).
- Expansion of rotor wing operations in the southern Interior that attract both operators and certified maintenance specialists. The potential for a rotor wing hub of excellence.
- Expected growth of aerospace-dependent business (e.g. tourism) in the south interior that supports additional fixed and/or rotor wing operators.
- Development of shade hangars, potentially with the flying club.
- Marketing competitive value propositions to attract new, long-term lease tenants to the airport
- Technological change such as EVTOL (electric vertical take-off and landing) aircraft and new business models could create opportunities than do not now seem feasible, including, potentially, passenger and freight/courier activity.

Flight Training Unit (FTU)

- The significant global shortage of pilots is creating an opportunity to open FTUs that would increase supply. This is a well-known opportunity in the aviation industry.
- During the pandemic, for two to four years, flight programs paused flight training.
 - In a normal year, 800 new commercial pilot licenses issued in Canada.
 - 2022 saw 200 commercial licenses issued.
 - 2023 saw 250-300 commercial licenses issued.
- The BC Aviation Council is advocating to qualify pilot training for student funding programs in BC, such as student loans and grants. If successful, this would make BC more attractive to aspiring pilots.
- Training aircraft generally do not pay landing fees due to their low weight (though this is not an issue at Oliver as there are no landing fees). Cost recovery is typically through fuel concession fees on 100 LL fuel (Avgas). Flight training is difficult for an airport to support if it does not make a reasonable profit on its fuel operations.
- Oliver Airport can offer a competitive per-square-meter rate for leases and could also offer lower operating fees than other regional airports.
- The cost of living in Oliver should be cheaper for trainers and students than in more urban environments, though adequate housing may be an issue.
- Oliver can certify students on cross-country journeys, attracting student pilots from across BC and farther afield.
- Proximity to Penticton and Kelowna airports should allow students valuable training experience without the cost of operating from there.

BC Wildfire Light Aviation Operations Hub & Crew Accommodations.

- Lobby BCWS to use the airport as a preferred satellite base in the Okanagan for light water-skimmer aircraft such as Air Tractors and helicopters. While the BCWS already has a site at Penticton, its recent use of Oliver Airport to support fire response shows it requires additional services and bases of operation. Forest fires are projected to increase in severity and number for the foreseeable future.
- Oliver Airport could be the site to establish a pilot base camp where pilots can work and stay. This might include a single-storey modular dormitory-style building with a pilot lounge and individual quarters for crew. This would be similar to the facilities that the Ontario Ministry of Natural Resources has at Pickle Lake, Ontario for flight crews.
- The airport could also be used as a potential warehouse site for firefighting foam agents and supplies.

Light Aircraft Maintenance Operations

- Attract an additional Aircraft Maintenance Engineer (AME) shop.
- Oliver is close enough for pilots to easily fly in and out from the Lower Mainland.
- Look to attract aircraft from further north in the Okanagan to repair/overhaul light aircraft.
- Suggest encouraging specialized shops like:
 - Avionics Repair and Calibrations
 - Interior modifications / Upholstery

GA Winter Parking

- Offer vacant apron space for aircraft parking over winter.

Aircraft Rescue Fire Fighting (ARFF) Training Complex

- Explore the viability of creating an affixed aircraft fire fighting training site on or adjacent to the existing fire training area.
 - Annually recurring training is required for airport fire fighters.
 - Most training is now done in Toronto.

Light Aerospace Manufacturing

- Provide incentives for new development of light aerospace parts manufacturing to support civil and military markets. New technology such as EVTOL and other forms of Advanced Air Mobility (AAM) are emerging and will require parts, repair and maintenance services, and manufacturing. The Oliver Airport has enough land on the east side of its runway to support this. Factors in its favour include its proximity to a major highway and to the Canada-US border.

4.4 Fire Fighting Training

There is a basic fire department training area on the east side of the runway and there has been discussion of improving or expanding it. A more advanced facility already exists on

Pender Island and it is described below to provide a sense of what an upgrade at Oliver Airport might look like.

The Pender Island facility occupies a constrained site of a little less than one acre. The Pender operation uses adjacent classroom and change room facilities in the firehall. Following the development of the site, the fire department realized that it lacked appropriate warehouse and storage facilities for the equipment and materials required. A similar site in Oliver would probably need a half-acre for classroom and change room facilities alone, and another full acre for warehousing and parking.

The Pender Island training facility provides smoke and propane flame training, and vehicle fire rescue training. A photo of the Pender Island operation, below gives a sense of scale of the facility.

Figure 4-2: Pender Island Fire Fighting Training Facility



Source: Jon Spalding

5 Site and Infrastructure Review

5.1 Airfield Infrastructure

The Oliver Airport is classified as registered (not certified) and, therefore, the airfield infrastructure and operations are not regulated by Transport Canada. (Technically a registered aerodrome and not an airport, but registered aerodromes are referred to as airports in common usage.) Registered aerodrome infrastructure is not required to meet Transport Canada standards as described in TP312-5th Edition. However, should airport certification be required or desired, it would necessitate compliance with TP312 both in infrastructure and operations. The aerodrome is published in the Canada Flight Supplement (CFS) as OLIVER, BC with the designation CAU3.

This review is based on the potential to eventually certify the aerodrome. The AGN I classification includes aircraft with wingspans of 24 m or less. Typical aircraft within this classification would include aircraft like the Piper Navajo, Beechcraft King Air 100, Piper Cheyenne, and smaller jet aircraft with approach speeds less than 121 knots.

Figure 5-1: Looking South from Runway 01's Displaced Threshold Markings



Source: Jon Spalding

The constraints of the site preclude certification of larger AGN II aircraft such as the Twin Otter and SAAB 340 because the runway 01-19/taxiway D separation is based on AGN I. Special operating procedures could allow AGN II aircraft to operate if approved Standard Operating Procedures (SOP) were put in place.

The ultimate certified operational designation at Oliver will be AGN I, Non-Instrument.

The aerodrome has no current Instrument Approach Procedures (IAP) published in the Canada Air Pilot (CAP) or the Restricted Canada Air Pilot (RCAP). Even if IAPs are developed for Oliver, it is unlikely the landing limits would be below 150 m. (500 ft) and therefore it would be classified as Non-Instrument (NI).

Oliver aerodrome has had GNSS (GPS based) IAPs in the past however, the cost of maintenance (full reviews and republishing every four years) likely outweighed the benefit as the limits were high and demand was low. New IAPs could be developed but the long-term cost/benefit should be understood. Typical costs for developing the approach and departure procedures are in the range of \$40,000 - \$50,000. The maintenance cost every four years will likely range from \$10,000 - \$20,000.

5.1.1 Runway 01-19

The CFS lists the runway as 3,335 ft (1,017 m) long and 50 ft (15 m) wide. The threshold for runway 01 has been displaced 744 ft (226 m) to protect approaching aircraft from obstructions due to rising terrain and trees to the south.

The minimum width for any runway under TP312 5th Edition is 18 m (60 ft). The minimum runway width for AGN II aircraft (Main Gearspan > 4.5 m) is 23 m (75 ft). To accommodate AGN II type aircraft under SOPs in the future, the runway should be widened from 15 m to 23 m. Due to road and obstacle constraints, any further extension of the runway length is unlikely.

The runway has low-intensity edge and approach/end lighting. Abbreviated Precision Approach Path Indicators (APAPI) are located at both runway touchdown zones. Wind direction indicators and mandatory signage are in place. Should the runway widening occur, the runway edge and approach/end lights will require relocation.

A visual inspection of the runway surface indicates the structural condition is FAIR. The primary defects included MEDIUM severity transverse cracks which have a MODERATE to MAJOR extent. LOW severity longitudinal cracking is occurring at the paver lane joints. A FAIR overall condition suggests that asphalt surface repair/rehabilitation should occur soon.

5.1.2 Taxiway System

The runway has a nearly full-length parallel taxiway (Taxiway D) which has the conforming physical characteristics (width) and runway offset for the AGN I, Non-Instrument classification. Taxiway D ends approximately 36 m short of the threshold of Runway 19 where it connects to the runway with Taxiway A. Taxiway B connects Taxiway D to the runway at mid-field and Taxiway C connects Taxiway D to the runway at the south end. There are private hangar access taxiways connecting Taxiway D and the apron to fixed wing hangars.

A future extension of Taxiway D to the threshold of Runway 19 is recommended. This is a safety enhancement to reduce backtracking when utilizing the full length of the runway for take-off (Runway 19) or landing (Runway 01).

A reserve for a future parallel taxiway east of the runway is recommended. The future taxiway will allow safe runway access to the airside commercial development areas on the east when they are developed. Introduction of taxiways directly from the airside commercial areas to the runway at mid-field, should be avoided.

The runway has low intensity lighting and the taxiways have mirrors and signage.

Taxiways A, B, C and D are in FAIR/GOOD condition and have some years of use remaining prior to rehabilitation.

5.1.3 Apron I

The apron at Oliver provides access to the northern hangars as well as avgas refueling and itinerant tie-downs.

The apron is in FAIR/GOOD condition and with minor maintenance, should be serviceable for several years.

5.2 Ground Transportation

The Oliver Airport is easily accessible by automobile, and by foot or bicycle, because it is one block from Highway 97. A concern raised during consultations was the ability of people to unknowingly drive onto the runway system via the gate on Airport Street. The gate had typically been left open all day. The Town has addressed this issue. It is recommended that new hangar developments south of the current hangars be required to develop new gate access.

5.3 Site Recommendations

Continuing maintenance planning and costs such as airfield pavement crack sealing and minor patching are not included here.

5.3.1 Runway Rehabilitation

The runway is the primary infrastructure component required for the safe functioning of the aerodrome. The current runway condition suggests that repair, rehabilitation, or reconstruction should occur soon.

The following three runway rehabilitation options are recommended:

- **OPTION 1 – CRACK REPAIR** - Full depth repair of the transverse cracks for the full length of the runway. This would reduce the likelihood of aircraft damage from Foreign Object Debris (FOD) and would likely extend the runway life by 5 – 10 years. The repair would entail sawcutting 1.5 m either side of the crack, removing the asphalt down to the gravel base, and then re-paving to match the current asphalt thickness. The repair would not prevent future transverse cracking from reoccurring; however, it would make crack sealing easier and more effective.

- **OPTION 2 – CRACK REPAIR AND OVERLAY** – This option includes Option 1 (above) with the addition of a 50 mm thick asphalt overlay. This option would provide 12-15 years of life. Maintenance will be required early into the life of the rehabilitation as transverse cracks will likely reflect through to the surface in time.
- **OPTION 3 – RUNWAY RECONSTRUCTION** – Runway reconstruction consists of Rubbleization of the current surface followed by adding granular base material, re-grading, re-compacting and then re-paving with asphalt. This method may significantly reduce future transverse cracking and would likely last from 15-20 years before major maintenance is required.

5.3.2 Runway Widening

Runway widening to 23 m (75 ft) will improve the safety of aircraft operations in crosswinds and conform to future certification requirements for aircraft with a main gear span exceeding 4.5 m. The runway will be widened 3.8 m (12.5 ft) along both edges. The widening will include relocation of the edge and end lights to 1.5 m from the new runway edge. This will be followed by excavation to subgrade and the installation of subbase and base granular materials. The widening will be paved with 100 mm of asphalt and the pavement markings at the thresholds adjusted accordingly.

5.3.3 Taxiway D Extension

The extension of Taxiway D (north end) to the threshold of Runway 19 is a safety enhancement to reduce backtracking when utilizing the full length of the runway for take-off (Runway 19) or landing (Runway 01). This would involve new construction including excavation followed by the construction of granular subbase, granular base, asphalt paving and pavement marking. The new taxiway work will require an extension of the edge lighting system and two new airfield signs.

5.3.4 Ground Transportation

To reduce the risk of runway incursions, it is recommended that an electronic fence be placed at the gate on Airport Street so that only airport tenants can access the runways.

6 Environmental Observations

This section provides observations on the environment for consideration by airport management.

6.1 Species at Risk

The South Okanagan Valley has critical habitat for several identified Species at Risk, and the Town of Oliver Official Community Plan notes three specific species at risk with habitat that is protected within the Town's boundaries, including Lewis's Woodpecker (a threatened bird), the Yellow-breasted Chat (an endangered bird), and Behr's Hairstreak (an endangered butterfly). The Oliver Airport does not appear to support critical habitat for any of the species at risk.

The Oliver Mountain Conservation Area to the west of the Town is a significant bio diverse area and contains some of the last traces of intact Antelope Brush in BC – one of Canada's most endangered ecosystems. Oliver Mountain also contains critical habitat for many species that are federally identified under the Species at Risk Act, including:

- American Badger - Red-listed in British Columbia because the amount of suitable habitat is small and has been adversely affected by human activity.
- Behr's Hairstreak Butterfly - red-listed and depends on healthy Antelope Brush communities.
- Blotched Tiger Salamanders - Red-listed and only live in a very small portion of the southern interior of BC. These amphibians live in very dry environments, depending on the rare wetlands in these areas for breeding.
- Gopher Snakes - Blue-listed species that can often be mistaken for the Western Rattlesnake, because of similar behaviour and appearance.
- Great Basin Spadefoot - blue-listed species (which is closely related to toads) is solitary, spending much of the year burrowed in the soil, awaiting the spring when conditions become warmer and wetter.
- Lewis' Woodpecker - blue-listed species hollows out dead trees for nesting, but unlike other woodpeckers it doesn't generally forage for bugs under bark.
- Western Yellow-bellied Racers - blue-listed fast moving snakes are greyish to olive green.

Compilation of a wildlife inventory would be valuable as the basis for a wildlife management plan, particularly if the aircraft movements at the airport increase. Certified airports are required to have wildlife management plans.

6.2 Puncture Vine Hazard

The Airport supports an extensive growth of Puncture Vine, an invasive species. It prefers sandy or well-drained soils and readily invades disturbed ground. Puncture Vine typically infests vacant lots, gravel parking areas, roadsides, unpaved trails, and beaches. At the

Oliver Airport, the vine has spread to many of the vacant or less used sites, including the transient parking / tiedown area adjacent to the Flying Club. Stiff spines on the fruit readily attach to footwear, clothing, animals, tires, machinery, and supplies and can puncture small tires, including GA aircraft tires. The spines can also injure people.

There are established protocols for managing and eradicating Puncture Vine which for the airport would include:

- Reduce the amount of bare ground/ minimize soil disturbances and re-seed or plant disturbed soils.
- Shallow tilling (~2.5 cm deep) of young plants can be effective in larger areas. Deeper tilling is not recommended since this practice may bury seeds which will continue to germinate for several years.
- Mulch applied prior to germination or when plants are small can effectively suppress outbreaks of Puncture Vine but it needs to be at least 7-8 cm thick. Some hand removal may additionally be required.
- Chemical controls are an option. Recent research conducted in the South Okanagan has indicated that pre-emergent herbicides including Chateau, Prism, and Sandea provide season-long suppression of Puncture Vine. Post-emergent herbicides including Clearview and Overdrive also showed control of Puncture Vine throughout the growing season but can only be applied on non-cropland sites.

The Airport should prioritize the use of pavement in movement and parking areas for aircraft to reduce the potential for human injury and damage to machinery and equipment.

6.3 Net-Zero Future

The Government of Canada has mandated a net-zero emissions by the year 2050 with the *Canadian Net-Zero Emissions Accountability Act*. Airports are not large emitters of carbon themselves, but aircraft and equipment using airports can contribute significant carbon emissions while operating at the airport. The Oliver Airport may be able to reduce net emissions through a variety of initiatives:

- Continued practise of growing alfalfa on the non-movement areas could enable the sale of carbon credits or offsets
- Use of solar panels on roof areas for electrical generation
- Use of roof structures for “living roofs”
- Provision of Sustainable Aviation Fuels
- Incentives for flight training operations employing electric-powered and hydrogen-powered aircraft
- Carbon taxes for aircraft to be used in purchase of offsets (e.g., tree planting)

7 Governance

7.1 Airport Management

An airport manager has several roles, including:

- Managing the use and development of airside- and ground-side airport lands.
 - Ensuring a safe and secure site, including maintaining facilities and infrastructure in accordance with Canadian Aviation Regulations (CARs) and other federal, provincial, and local government statutes and regulations.
 - Negotiating and administering tenancies on airport properties, which could include rentals, leases, and sale of properties.
 - Negotiating and securing other business arrangements that generate revenue for the airport.
 - Negotiating and administering Service Agreements with vendors to conduct capital construction, replacement, and maintenance projects.
 - Conducting and ensuring effective communication(s) with airport and community stakeholders.

Operations. Smaller local and regional airports do not generally require full-time airport managers. The options are typically a choice between a part-time employee or part-time contractor(s). The arrangement is most often one of the following:

- **An employee.** Often a local government member of the Works Department takes on a part-time role overseeing airport operations and management. The benefits of this approach are that Works is typically involved in repair and maintenance of the airport infrastructure, and the approach simplifies and consolidates operations. Unfortunately, airports are complex, and management requires knowledge of the CARs along with experience with regulators and understanding of Transport Canada and NAVCANADA processes. This knowledge is often not available among non-airport employees or managers. Also, municipal employees often do not have sufficient experience with business development that is required by an airport manager.
- **External contractors.** Municipalities often contract with individuals with aviation and or airport backgrounds to undertake the airport manager's role and responsibilities. The benefits and challenges of a contractor are similar to those of an employee. It can be difficult to manage a contractor if the municipality has no internal airport expertise, and a municipality must ensure that a contractor's conduct is aligned with the Town's code of ethics, policies, and procedures.

7.2 Executive Oversight

Executive Oversight. Operations conducted under the roles and responsibilities of the airport manager are subject to executive review and direction, to ensure consistency with the owner's principles, objectives, and values. From the perspective of organizational

effectiveness, there are usually executive accountabilities (who the airport manager reports to) and oversight roles (how the owners monitor and set direction). In the case of the Oliver Airport, the Town Council, supported by the Airport Committee has undertaken the oversight of the airport.

7.3 Observations and Recommendations

Executive Oversight. Review and refine the terms of reference and composition of the Airport Committee and how it reports to Town Council.

- Aim to include a wide range of stakeholders on the Committee such as
 1. Council and Regional District elected officials
 2. Osoyoos Indian Band
 3. Aviation tenants
 4. Non-aviation tenants of the Airport
 5. General public, and
 6. Ex Officio - CAO, Airport Manager.
- Develop a five-year business plan for the airport, with targets updated annually. This could be a brief two-page document. Identify Key Financial and Operational Airport Performance Indicators within the business plan and monitor progress against the financial and operational targets of the airport.
- Update a 10-year Capital Plan, based on available grants and internal revenue contributions.
- Airport Manager. The Town should create a new part-time position of Airport Manager, reporting to the CAO, with a dotted-line reporting relationship to the Director of Public Works for shared Public Work services used for airport maintenance. Airport Manager to be accountable for all operational aspects of the Airport as well as marketing and development. Airport Manager would have the operational responsibility to implement the Airport Master Plan via recommendations to the CAO.

8 Marketing

8.1 Airport Marketing

Marketing an airport is comparable to marketing a mall: You succeed when your tenants succeed. Much of the work is about creating an environment that supports success, and aiding tenants in their initiatives. The work is entirely collaborative. Just as leasing out all the properties at a mall will not make it successful, neither will focusing on properties alone make an airport profitable. A vision and a shared objective are required to move the combined venture from one of also ran to champion.

The airport has many of the attributes that lead to marketing success. These include

- Understanding your niche in the market
- Visualizing areas for successful development
- Taking a broad approach that includes different aspects of the aviation market
- Working with tenants and other players to leverage strengths.

8.2 Social and Economic Impacts

When explaining airports to the public and when seeking funding from senior government, the measures typically used are social and economic measures – these are social benefits and jobs and income. Oliver Airport provides both. When considering initiatives to pursue, the benefits of a successful outcome should be considered. Town residents will be most impressed with an aerospace venture that brings jobs and contributes tax dollars.

8.3 Economic Development and Tourism Connections

Typically, all those supporting development functions within a community are involved in attracting investment to an airport. These stakeholders include businesses involved in economic development, tourism, planning, the airport itself. The meeting of these divergent interests brings insights from different areas of business and government that assist development.

8.4 Revising Crown Grant Terms

The terms of the crown grant are determined by the provincial government and can be modified by the province government. To expand the range of allowable activity at the airport, the Town could talk with the Province about modifying the permitted land uses at the site, and seek support from other municipalities with similar crown grants.

8.5 Examining Housing at the Airport

The Town's agreement with the Province does not allow housing development at the site so this master plan does not include housing. However, there is a high level of interest in the community regarding airport housing and it is recommended that if the Town is

interested that it examine this opportunity further. This is recommended because adding housing is not the same as adding a new hangar and there are numerous considerations for the municipality.

Airparks or airports with airport homes are popular in the US and there are hundreds of them. Most of these are private airports, and residences at public airports are not common. Where airport homes exist at public airports these are usually managed via "Through the Fence" agreements. These agreements allow site owners to legally access the airport. The site owners (home owners) generally own or lease a property adjacent to the airport and access the airport via this type of agreement. These agreements are complex and the US FAA has an on-line page discussing residences at airports, https://www.faa.gov/airports/airport_compliance/residential_through_the_fence. This link is not directly applicable to Canada but will provide a significant amount of information to the municipality.

Airport residences and developments are not common in Canada. In BC, there is the Mabel Lake Resort development beside a grass strip within the Mabel Lake Resort. Mabel Lake is west of Vernon. Canada's most high-profile airpark, Okotoks Airpark, closed its runway a few years ago because the owner said it could not financially justify continuing the project.¹³ The owners of the Carp Airport in Ontario had originally planned to develop airside residences but did not. Reasons for the weak development of airside residences in Canada are not clear.

It is recommended that the municipality explore the implications and needs of on-airport housing before proceeding with plans for it. This would include examination of the legal, regulatory, municipal planning, political, and cost implications of it.

8.6 Observations and Recommendations

Developing beyond hangar development at Oliver Airport may be difficult. Real estate agents are seldom successful in these types of roles unless there is a significant incentive, and leases at an airport are unlikely to create the needed attraction. The first role of an airport manager function must be keeping the site safe and secure. In this age of labour shortages, attracting someone who has both operation expertise and marketing flair will be difficult, though not impossible.

¹³ <https://canadianaviator.com/okotoks-air-ranch-closing-runway/>

9 Land Use Plan

The proposed Land Use Plan for the Oliver Airport is shown in **Figure 9-1**. The site is divided into seven zones as follows:

- Airside reserve
- Fixed-wing hangar reserve
- Airside commercial
- Apron reserve
- Air Terminal Building reserve
- Fuel
- Groundside commercial, for lands that cannot be easily integrated into airside uses
- Fire Department.

Rotary-Wing Itinerant Parking. An additional short-term use, helicopter parking, has been set up in the southwest corner of the airfield. This is a short-term zoning.

Airside Reserve. This is the central area including the runway and taxiway systems. This reserve meets AGN 1 requirements.

Fixed-Wing Hangar Reserve. This area includes the existing fixed-wing hangars north of Apron I and the area south of Apron I all the way to Road 1.

Airside Commercial Reserve. This includes the two existing helicopter hangars and the undeveloped lands on the northeast side of the runway.

Apron Reserve. The apron reserve includes the existing apron and all lands between the hangars to the north and south of the existing apron. The area is intended to be used for fueling, aircraft parking, tiedowns, and special events.

Air Terminal Building Reserve. This area has been set aside for an ATB and/or additional parking, as required. It includes the existing flying club clubhouse, and an expansion of this in the future could be an acceptable use of this space.

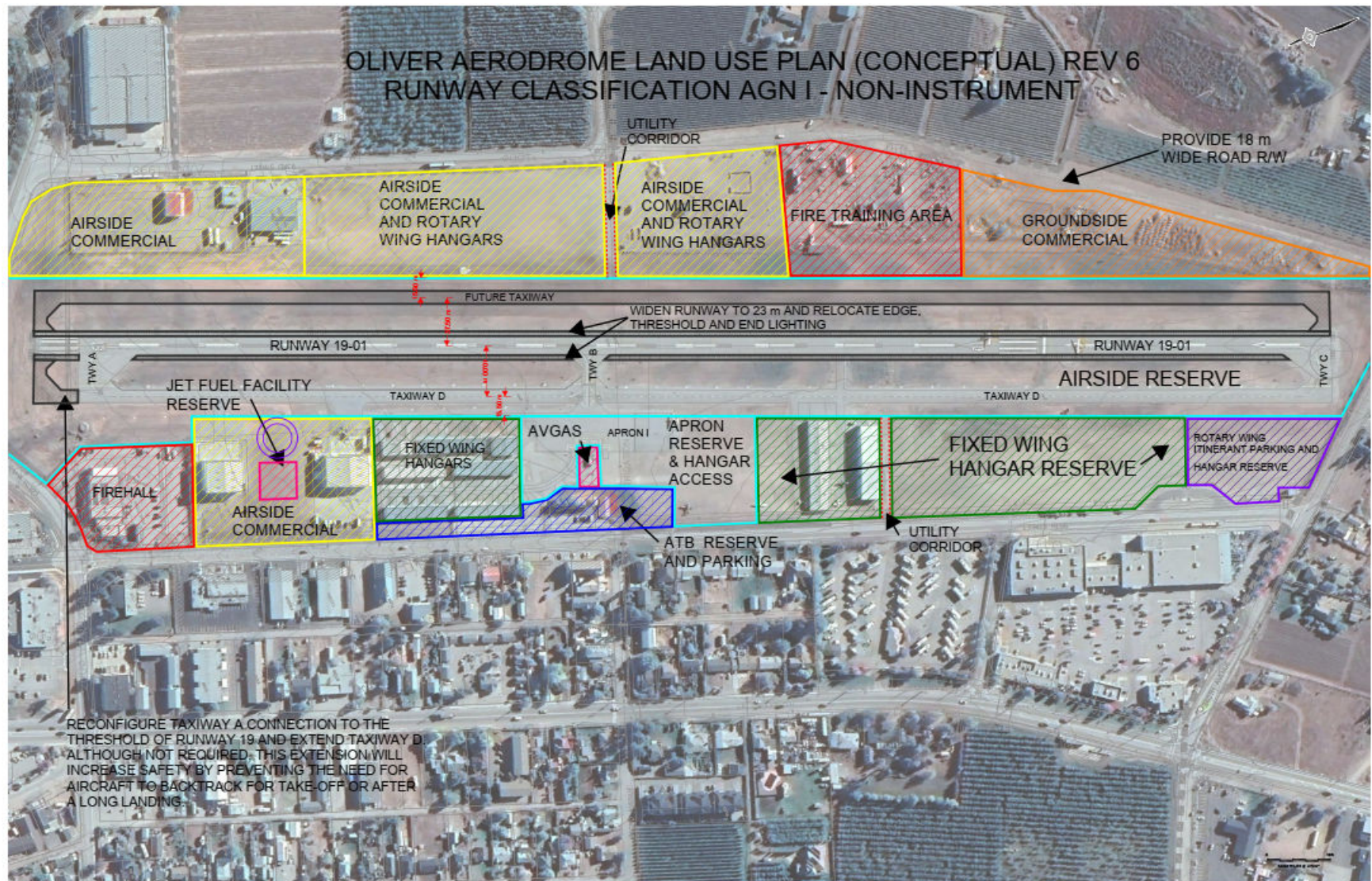
Fuel Reserve. Two locations for fuel have been marked. The first is for avgas at the current location for avgas fueling. The second is a proposed location for jet fuel in the vacant lot between the two helicopter hangars. This location is large enough to accommodate large helicopters fueling and separated from fixed wing operations.

Groundside Commercial Reserve. The groundside commercial area has been created in the southeast corner of the airport. This area is below the grade of the runway.

Fire Department. This zone recognizes the Firehall and the fire training area.

The intent is that future rotary wing operations will be located in the northeast area of the map coded airside commercial and rotary wing.

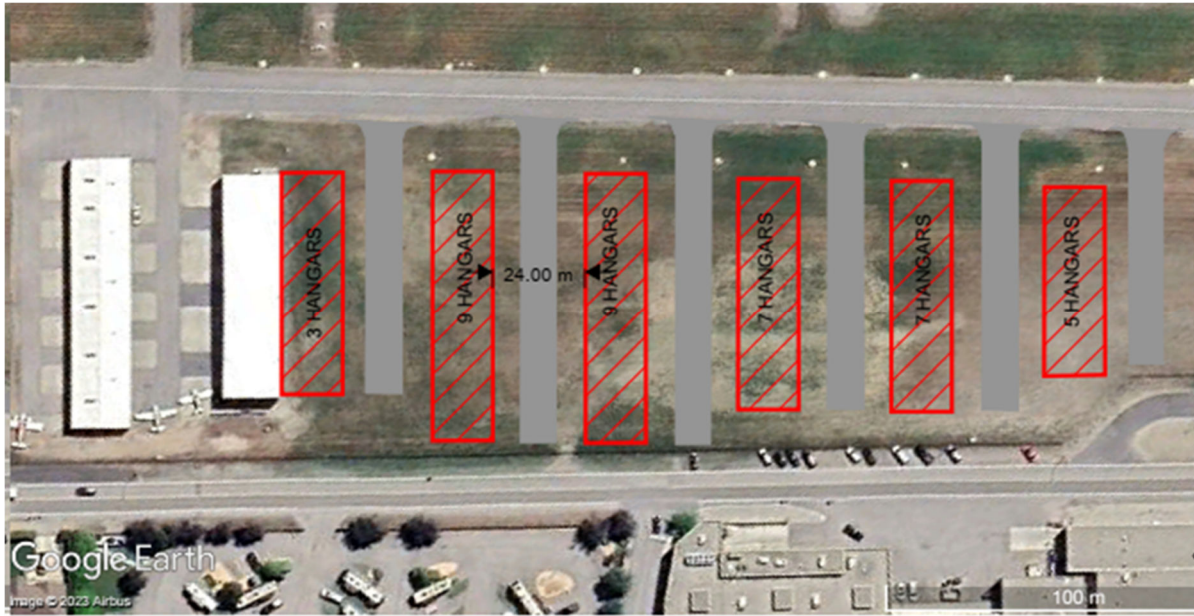
Figure 9-1: Land Use Plan



9.1 Fixed-Wing Hangar Orientation

The recommended configuration for future fixed wing hangars in the southwest corner of the airfield is shown in **Figure 9-2**. The hangars are perpendicular to the parallel taxiway. This approach conforms to taxiway strip coding, allows separation between hangars, and reduce pedestrians and ground vehicles crossing aprons.

Figure 9-2: Conceptual Positioning of New Hangars



10 Capital Plan

This plan discusses five significant capital projects options. The total budget for these items is shown in **Table 10-1**. These are order of magnitude budgets in 2023 dollars. Details on the cost estimates are provided in **Appendix D**. The table is not summed because the first three items are options discussed in **Section 5**. It is recommended that the Town choose one of these three options. The last two are recommended. Whatever options the Town chooses, it would be best to complete projects simultaneously and to apply for funding in the same intake.

Table 10-1: Recommended Capital Budgets

Item	Capital Cost Estimate
Runway and Taxiway Options	
<i>Runway Crack Repair</i>	\$192,000
<i>Runway Reconstruction</i>	\$2,674,000
<i>Runway Rehabilitation</i>	\$1,266,000
Runway Widening	\$1,567,000
Taxiway D Extension	\$350,000

10.1 Funding Options

These projects would all be applicable for the BC Air Access Program (BCAAP), a funding program operated by the Ministry of Transportation and Infrastructure (MOTI). It has an intake at the end of each calendar year and the Province awards funding in the spring, ideally with enough time for municipalities to complete their projects in that calendar year.

As of December 2022, BCAAP had provided grants to 71 airports, water aerodromes, and helipads in BC.

Grant Amounts. BCAAP infrastructure grants are limited to a maximum of \$2 million for any given facility in any given year. Facilities can apply for multiple projects; however, BCAAP funding will not exceed this amount.¹⁴ Funding for infrastructure projects includes base funding, additional funding (up to 95%) and 100% funding for Air Facility Master Plans up to \$35,000.

During COVID when revenue was down for small airports by more than 90%, BC provided operational funding to 55 airports that host medevac operations, to ensure essential services. Details on BCAAP are provided in **Appendix E**.

¹⁴ <https://www2.gov.bc.ca/assets/gov/driving-and-transportation/funding-engagement-permits/grants-funding/funding-airport/documents/bcaap-guidelines-2023-24.pdf>

Transport Canada also has a capital funding program for regional airports but it is available only to sites with scheduled passenger service. The Airports Capital Assistance Program (ACAP) is available to sites that have at least 2,000 passengers per year for two consecutive years. Additional information on the program can be found on the Transport Canada website.¹⁵

¹⁵ <https://www.tc.canada.ca/en/programs/airports-capital-assistance-program>

Appendix A: Permitted Land Uses

The Oliver Airport operates on a BC government airport crown grant and is subject to the Airports Land Use Operational Policy of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development.¹⁶ In the policy, the allowed land uses on an airport crown grant are allowed

- a) Terminal Building
- b) Hangars (either group of individual ownership).
- c) Runways and grounds maintenance equipment building/garage.
- d) Transport Canada flight service station (weather reports, radio, flight plan filing).
- e) Car parking area (either free public or revenue generating).
- f) Aircraft parking area (either free public or revenue generating).
- g) Water bomber or chemical staging areas for forest protection (Forestry).
- h) Air Ambulance provision.
- i) Flying School facilities.
- j) Cargo handling/storage facilities.
- k) Aircraft sales/service/maintenance /airframe/electrical/mechanical/avionics services.
- l) Wheels-to-floats conversion facilities.
- m) Vehicle rental office and parking facilities.
- n) Restaurant/gift shop providing airport revenue.
- o) Base operators – scheduled service/charters (airplane and helicopter).
- p) Specialty agricultural and/or forest protection spraying and/or related services/storage facilities.
- q) Flying Club House.
- r) Caretaker's residence.
- s) Fuel dispensing and storage facilities.
- t) Navigation / landing aids.

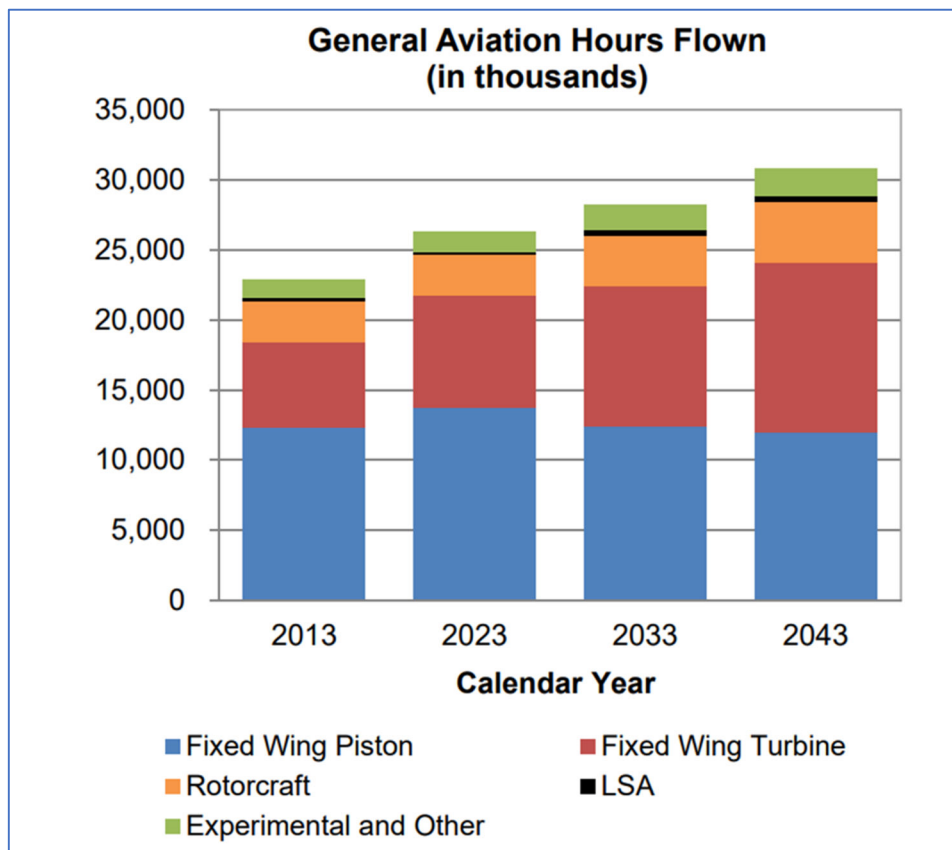
¹⁶ Ministry of Forests, Lands, Natural Resource Operations and Rural Development, "Land Use Operational Policy, Airports," amended 2015.

Appendix B: Future of General Aviation

GA Trends

General aviation covers a wide range of activity, essentially everything except scheduled passenger and cargo air services. General aviation traffic characteristics in North America are changing. Transport Canada does not produce long-term forecast for GA, but the US Federal Aviation Administration (FAA) does. The projected changes in activity are shown in **Figure B-1** below, measured by annual hours flown by aircraft type. We cannot assume that these trends will be exactly replicated in Canada, but the FAA projections provide an idea of how GA traffic is growing. The figure projects growth in fixed-wing turbine aircraft, rotorcraft, and experimental and LSA (light sport aircraft).

Figure B-1: FAA GA Flight Projections



Source: FAA Aerospace Forecast, FY 23-43

Rotorcraft includes helicopters but also much of what is now referred to as AAM aircraft. They are often powered by electric batteries. A Joby Aviation rotorcraft is shown in the figure below. Joby is currently applying for certification of these aircraft to operate passenger services over New York harbour. Many of these new rotorcraft designs are

operated remotely. As they are rotorcraft, they do not require a runway, but depending on the design, the powerplant may require significant electric service.

Figure B-2: Joby S4 Rotor Aircraft



Light Sport Aircraft (LSAs) in the US are called **Advanced Ultra-Light Aeroplanes (AULA)** in Canada, and they do not “include powered parachute aircraft, trikes or powered gliders.” LSAs and AULAs are lighter and smaller than standard GA aircraft and therefore less expensive to buy and operate. They require runways, but they require less runway length than typical GA aircraft. A table comparing US LSAs and Canadian AULAs is provided below for clarification. In Canada, any ultra-light aircraft with a stall speed greater than 39 kts must meet the design standards for AULA.

Table B-1

	AULA	LSA
Max Take-off Weight	1,232 lbs (two seat aircraft) 770 lbs (single seat aircraft)	1,320 lbs
Max Stall Speed	45 mph	51 mph
Max Speed - Level Flight	Not provided	138 mph
Max Seats (inc. pilot)	2	2
Landing Gear	Fixed	Fixed
Power	Propeller	Propeller

Figure B-3: AULA Example

Engines and Fuel

While the future is unclear, GA traffic will be impacted by decarbonization efforts. Some examples of this are provided below.

- **Electric aircraft.** A significant amount of energy is going into developing electric aircraft, though significant issues remain, particularly because of battery weight. A flight school at Qualicum Beach Airport received an electric training aircraft earlier this year, and Air Canada has invested in a company planning to produce electric aircraft for regional passenger services. Many of the unmanned aircraft being developed are also powered by electric engines. Some airports are examining whether they will have to upgrade to three-phase power to support electric aircraft operations.
- **Sustainable Aviation Fuel (SAF).** In 2024 the Province of BC announced a program to require jet fuel to have lower levels of carbon intensity by 2030. How this would be implemented is unclear.¹⁷ The FAA has also announced an initiative to replace low-lead avgas by 2030. The FAA Eliminate Aviation Gasoline Lead Emissions (EAGLE) goal “is to eliminate leaded aviation fuels in piston-engine aircraft safely by the end of 2030.”¹⁸ Transport Canada is monitoring the EAGLE initiative. The transition from avgas to a new fuel would have significant impacts on GA activity.

¹⁷ BC Ministry of Energy, Mines and Low Carbon Innovation, “Low Carbon Fuel Standard,” January 2024.

¹⁸ <https://www.faa.gov/unleaded>

Appendix C: Consultations

For this project the consulting team has consulted with a wide variety of users, stakeholders and area residents. Consultations included

- NAVCAN
- Transport Canada
- BC Ministry of Transportation and Infrastructure (MOTI)
- BC Ambulance service provider
- BCWS (BC Wildfire Service)
- Kismet Winery
- BP Winery
- Top Flight Elite
- Osoyoos Indian Band
- Area 27
- Tourism Oliver
- Destination BC
- Destination Canada

Appendix D: Capital Cost Estimates

Detailed cost estimates for the major recommended capital improvements are provided on the following pages.

OLIVER AIRPORT RUNWAY CRACK REPAIR					
Town of Oliver					
Class 'D' Estimate of Probable Costs					
					Revised: 2024/01/26
Item	Cost Summary				Total
Civil					
1.00	General Requirements				\$ 34,000.00
2.00	Runway 01-19 Crack Repair				\$ 108,100.00
Sub-totals					\$ 142,100.00
	Project Contingencies			35%	\$ 49,735.00
Total Estimated Civil Cost					\$ 191,835.00
Item	Description	Est. Quantity	Est. Quantity	Unit Price	Total Price
1.00 General Requirements					
1.01	Mobilization / Demobilization / Permits / Facilities / Bonding / Insurance / Environmental Protection / Gate Guard	1	LS	\$5,000.00	\$ 5,000.00
1.02	Supply and Maintain Temporary Runway Closure Markers	1	LS	\$15,000.00	\$ 15,000.00
1.03	Construction Survey, include preconstruction survey, survey layouts, and	1	LS	\$2,000.00	\$ 2,000.00
1.04	Airside Security Escort - Cash Allowance	1	LS	\$12,000.00	\$ 12,000.00
Sub-total item 1.0					\$ 34,000.00
2.00 Runway 01-19 Crack Repair					
2.01	Sawcut Asphalt for Crack Repair	750	LM	\$20.00	\$ 15,000.00
2.02	Asphalt Removal for Transverse Crack Repair	1,100	m ²	\$15.00	\$ 16,500.00
2.03	Asphalt Tack Coat	1,100	m ²	\$2.00	\$ 2,200.00
2.04	Hot-Mix Asphalt Paving for Crack Repair (100mm depth)	1100	m ²	\$64.00	\$ 70,400.00
2.05	Supply and Install Permanent Pavement Marking	1	LS	\$4,000.00	\$ 4,000.00
Sub-total item 2.0					\$ 108,100.00
Notes:					
1)	Costs shown do not include taxes.				
2)	This Estimate of Probable Costs is provided for budgetary purposes only based on previous pricing for similar works. It is not to be interpreted as a guarantee by Tetra Tech of the actual project costs. The actual project cost shall be determined by the tender and construction process.				

OLIVER AIRPORT RUNWAY RECONSTRUCTION					
Town of Oliver					
Class 'D' Estimate of Probable Costs					
					Revised: 2024/01/26
Item	Cost Summary				Total
Civil					
1.00	General Requirements				\$ 125,000.00
2.00	Runway 01-19 Reconstruction				\$ 1,856,000.00
Sub-totals					\$ 1,981,000.00
	Project Contingencies			35%	\$ 693,350.00
Total Estimated Civil Cost					\$ 2,674,350.00
Item	Description	Est. Quantity	Est. Quantity	Unit Price	Total Price
1.00 General Requirements					
1.01	Mobilization / Demobilization / Permits / Facilities / Bonding / Insurance / Environmental Protection / Gate Guard	1	LS	\$75,000.00	\$ 75,000.00
1.02	Supply and Maintain Temporary Runway Closure Markers	1	LS	\$15,000.00	\$ 15,000.00
1.03	Construction Survey, include preconstruction survey, survey layouts, and Airside Security Escort - Cash Allowance	1	LS	\$12,000.00	\$ 12,000.00
1.04		1	LS	\$23,000.00	\$ 23,000.00
Sub-total item 1.0					\$ 125,000.00
2.00 Runway 01-19 Reconstruction					
2.01	Pulverization of the Existing Asphalt full Depth and Compaction	15,400	m ²	\$15.00	\$ 231,000.00
2.02	Supply, Place, and Compact Granular Base Course (100mm)	1,540	m ³	\$90.00	\$ 138,600.00
2.03	Asphalt Tack Coat	15400	m ²	\$2.00	\$ 30,800.00
2.04	Hot-Mix Asphalt Paving (100mm depth)	15400	m ²	\$64.00	\$ 985,600.00
2.05	Supply and Install Permanent Pavement Marking	1	LS	\$80,000.00	\$ 80,000.00
2.06	Supply, Place, and Compact Shoulder Granular (150mm)	4000	m ²	\$90.00	\$ 360,000.00
2.07	Raise Edge and End Lighting	1	LS	\$30,000.00	\$ 30,000.00
Sub-total item 2.0					\$ 1,856,000.00
Notes:					
1)	Costs shown do not include taxes.				
2)	This Estimate of Probable Costs is provided for budgetary purposes only based on previous pricing for similar works. It is not to be interpreted as a guarantee by Tetra Tech of the actual project costs. The actual project cost shall be determined by the tender and construction process.				

OLIVER AIRPORT RUNWAY REHABILITATION					
Town of Oliver					
Class 'D' Estimate of Probable Costs					
					Revised: 2024/01/26
Item	Cost Summary				Total
Civil					
1.00	General Requirements				\$ 100,000.00
2.00	Runway 01-19 Rehabilitation - Crack Repair and Asphalt Overlay				\$ 838,100.00
Sub-totals					\$ 938,100.00
	Project Contingencies			35%	\$ 328,335.00
Total Estimated Civil Cost					\$ 1,266,435.00
Item	Description	Est. Quantity	Est. Quantity	Unit Price	Total Price
1.00 General Requirements					
1.01	Mobilization / Demobilization / Permits / Facilities / Bonding / Insurance / Environmental Protection / Gate Guard	1	LS	\$50,000.00	\$ 50,000.00
1.02	Supply and Maintain Temporary Runway Closure Markers	1	LS	\$15,000.00	\$ 15,000.00
1.03	Construction Survey, include preconstruction survey, survey layouts, and Airside Security Escort - Cash Allowance	1	LS	\$12,000.00	\$ 12,000.00
1.04		1	LS	\$23,000.00	\$ 23,000.00
Sub-total item 1.0					\$ 100,000.00
2.00 Runway 01-19 Rehabilitation - Crack Repair and Asphalt Overlay					
2.01	Sawcut Asphalt for Crack Repair	750	LM	\$20.00	\$ 15,000.00
2.02	Asphalt Removal for Transverse Crack Repair	1,100	m ²	\$15.00	\$ 16,500.00
2.03	Asphalt Tack Coat	1,100	m ²	\$2.00	\$ 2,200.00
2.04	Hot-Mix Asphalt Paving for Crack Repair (100mm depth)	1100	m ²	\$64.00	\$ 70,400.00
2.05	Asphalt Tack Coat for Overlay	15400	m ³	\$2.00	\$ 30,800.00
2.06	Hot-Mix Asphalt Paving Overlay (50mm depth)	15400	m ²	\$38.00	\$ 585,200.00
2.06	Supply and Install Parmanent Pavement Marking	1	LS	\$80,000.00	\$ 80,000.00
2.07	Supply, Place, and Compact Shoulder Granular (50mm)	4000	m ²	\$8.00	\$ 32,000.00
2.08	Sawcut for Taxiway Tie Ins	300	LM	\$20.00	\$ 6,000.00
Sub-total item2.0					\$ 838,100.00
Notes:					
1)	Costs shown do not include taxes.				
2)	This Estimate of Probable Costs is provided for budgetary purposes only based on previous pricing for similar works. It is not to be interpreted as a guarantee by Tetra Tech of the actual project costs. The actual project cost shall be determined by the tender and construction process.				

OLIVER AIRPORT RUNWAY WIDENING					
Town of Oliver					
Class 'D' Estimate of Probable Costs					
					Revised: 2024/01/26
Item	Cost Summary				Total
Civil					
1.00	General Requirements				\$ 90,000.00
2.00	Runway 01-19 Widening				\$ 1,070,400.00
Sub-totals					\$ 1,160,400.00
	Project Contingencies			35%	\$ 406,140.00
Total Estimated Civil Cost					\$ 1,566,540.00
Item	Description	Est. Quantity	Est. Quantity	Unit Price	Total Price
1.00 General Requirements					
1.01	Mobilization / Demobilization / Permits / Facilities / Bonding / Insurance / Environmental Protection / Gate Guard	1	LS	\$40,000.00	\$ 40,000.00
1.02	Supply and Maintain Temporary Runway Closure Markers	1	LS	\$15,000.00	\$ 15,000.00
1.03	Construction Survey, include preconstruction survey, survey layouts, and Airside Security Escort - Cash Allowance	1	LS	\$12,000.00	\$ 12,000.00
1.04		1	LS	\$23,000.00	\$ 23,000.00
Sub-total item 1.0					\$ 90,000.00
2.00 Runway 01-19 Widening					
2.01	Excavation to Subgrade	4,800	m ³	\$18.00	\$ 86,400.00
2.02	Supply, Place, and Compact Granular Base Course (300mm)	2,400	m ³	\$90.00	\$ 216,000.00
2.03	Supply, Place, and Compact Granular Subbase Base Course (150mm)	1,200	m ³	\$90.00	\$ 108,000.00
2.03	Asphalt Tack Coat	8000	m ²	\$2.00	\$ 16,000.00
2.04	Hot-Mix Asphalt Paving (100mm depth)	8000	m ²	\$64.00	\$ 512,000.00
2.05	Supply and Install Permanent Pavement Marking	1	LS	\$4,000.00	\$ 4,000.00
2.06	Supply, Place, and Compact Shoulder Granular (150mm)	4000	m ²	\$8.00	\$ 32,000.00
2.07	Relocate Edge and End Lighting	1	LS	\$96,000.00	\$ 96,000.00
Sub-total item 2.0					\$ 1,070,400.00
Notes:					
1)	Costs shown do not include taxes.				
2)	This Estimate of Probable Costs is provided for budgetary purposes only based on previous pricing for similar works. It is not to be interpreted as a guarantee by Tetra Tech of the actual project costs. The actual project cost shall be determined by the tender and construction process.				

OLIVER AIRPORT TAXIWAY D EXTENSION					
Town of Oliver					
Class 'D' Estimate of Probable Costs					
					Revised: 2024/01/26
Item	Cost Summary				Total
Civil					
1.00	General Requirements				\$ 54,000.00
2.00	Taxiway D Extension				\$ 205,300.00
Sub-totals					\$ 259,300.00
	Project Contingencies			35%	\$ 90,755.00
Total Estimated Civil Cost					\$ 350,055.00
Item	Description	Est. Quantity	Est. Quantity	Unit Price	Total Price
1.00 General Requirements					
1.01	Mobilization / Demobilization / Permits / Facilities / Bonding / Insurance / Environmental Protection / Gate Guard	1	LS	\$25,000.00	\$ 25,000.00
1.02	Supply and Maintain Temporary Runway Closure Markers	1	LS	\$15,000.00	\$ 15,000.00
1.03	Construction Survey, include preconstruction survey, survey layouts, and Airside Security Escort - Cash Allowance	1	LS	\$4,000.00	\$ 4,000.00
1.04		1	LS	\$10,000.00	\$ 10,000.00
Sub-total item 1.0					\$ 54,000.00
2.00 Taxiway D Extension					
2.01	Sawcut Asphalt for Crack Repair	40	LM	\$20.00	\$ 800.00
2.02	Excavation to Subgrade	600	m ³	\$18.00	\$ 10,800.00
2.03	Supply, Place, and Compact Granular Base Course (300mm)	300	m ³	\$90.00	\$ 27,000.00
2.04	Supply, Place, and Compact Granular Subbase Base Course (150mm)	150	m ³	\$90.00	\$ 13,500.00
2.05	Asphalt Tack Coat	1000	m ²	\$2.00	\$ 2,000.00
2.06	Hot-Mix Asphalt Paving (100mm depth)	1000	m ²	\$64.00	\$ 64,000.00
2.07	Supply and Install Permanent Pavement Marking	1	LS	\$4,000.00	\$ 4,000.00
2.08	Supply, Place, and Compact Shoulder Granular (150mm)	400	m ²	\$8.00	\$ 3,200.00
2.09	Add Edge Lighting and 3 signs	1	LS	\$80,000.00	\$ 80,000.00
Sub-total item 2.0					\$ 205,300.00
Notes:					
1)	Costs shown do not include taxes.				
2)	Estimated project cost for 100% design include 15% contingency for civil and electrical and are rounded to the nearest ten, hundred or thousand depending on order of magnitude.				
3)	This Estimate of Probable Costs is provided for budgetary purposes only based on previous pricing for similar works. It is not to be interpreted as a guarantee by Tetra Tech of the actual project costs. The actual project cost shall be determined by the tender and construction process.				

Appendix E: BCAAP

The description of the BCAAP provided on the MOTI website is provided below for the 2023 intake year.¹⁹

Eligibility

To be eligible for B.C. Air Access Program (BCAAP) consideration, the applicant must:

- Operate a public use airport, heliport or water aerodrome
- Serve fewer than one (1) million passengers annually
- Be the air facility operator (local government, non-profit operating society or contracted operator)

A contracted operator can apply on behalf of a local government or non-profit society. However, the local government or non-profit society must sign off on the application and be available to receive grant funds should the application be successful.

Ineligible air facilities include:

- Private air facilities, such as those owned and operated by resorts and used exclusively for their guests and staff
- Air facilities that are owned and operated by the federal government

If you are uncertain whether your facility is eligible, please reach out to the BCAAP team by email at BCAAP@gov.bc.ca or phone at (778) 974-5468.

An eligible entity may submit an application if they meet the following criteria:

- Do not have an active BCAAP project with a start date of more than one year ago
- Have a proposed project that can be completed within one fiscal year
- Can confirm that a project can begin once funding is announced

Grant Funding Cap

The program caps the value of grants to any one applicant (regardless of the number of projects) to \$2 million in any given year. However, applicants may submit for multiple projects as long as a separate application is prepared for each. As BCAAP is a cost-share program, the specific percentage share that any given project will qualify for is detailed in “Funding Amount”.

¹⁹ <https://www2.gov.bc.ca/gov/content/transportation/funding-engagement-permits/funding-grants/aviation-infrastructure-funding#chapter-overview>

Grant Funding for Airport Master Plans

BCAAP will accept applications for Airport Master Plans from small facilities – those that have a service area of 10,000 or fewer people. These grants are capped at \$35,000 and may be funded at a higher percentage level than other projects.

Funding Amounts

BCAAP is a cost-share program supporting the infrastructure and environmental needs of airports, heliports and water aerodromes. The percentage of funding that BCAAP provides varies based on a range of factors, including:

- Project type:
 - Airside operating areas and avionics projects begin at 75% funding
 - Environmentally focussed projects begin at 75% funding
 - Transitional projects begin at 60% funding
 - Groundside projects begin at 50% funding

Applicants that meet certain criteria may be eligible for a higher percentage (up to an additional 15%) of BCAAP funding, thereby reducing the required contribution from the applicant. The following categories, relating to the project, community or facility, are considered in determining whether a particular application qualifies for additional funding:

- The community is Indigenous, isolated, rural or remote
- The facility:
 - Has limited revenue streams available
 - Has a greenhouse gas reduction plan in place
 - Has policies, procedures or infrastructure in place to support active transportation
- The project is:
 - Required for medevac operations
 - Required for wildfire suppression activities
 - Needed for emergency response/preparedness
 - Required due to an extraordinary event (e.g., flooding)
 - Required to correct a non-compliance with federal aviation regulations
 - Required for climate change mitigation or adaptation
 - Likely to result in significant economic impacts and/or generate revenue for the air facility

Successful recipients of a grant will:

- Be asked to sign a Conditional Grant Agreement (CGA), which lays out the parameters of the grant funding to the proponent
- Receive funding in two or three installments depending on the size of the project, with the initial installment forwarded once the CGA is signed
- Submit progress reports as required

Submit a final claim package at project conclusion to receive the final payment under the CGA

Isolated, rural or remote communities are those that can only be reliably accessed by air or those that are more than three hours' travel by road to the next nearest airport.

Overview

The BC Air Access Program provides cost-sharing opportunities for infrastructure, environmental and in select cases, airport master plans – all of which must be at eligible, public-use facilities.

Examples of projects that are eligible for BCAAP funding:

- Airside operating area projects such as those related to aprons and runways
- Avionics such as hazard beacons and runway lighting
- Air terminal building enhancements
- Environmental projects such as the preparation of a greenhouse gas inventory (baselining)
- Groundside projects such as parking facility enhancements
- Airport master plans for small airports

Funding is not available for:

- Operation and maintenance costs for existing infrastructure
- Projects that are not in compliance with all applicable regulations and standards

Benefits

Through this cost-sharing program, facility operators can invest in safety, social improvements (such as improved medevac) and climate/environmental projects that help strengthen local, regional and provincial economies. BCAAP encourages funding partnerships with Indigenous, local, regional and federal governments, as well as agencies and private-sector organizations.

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