



May 26, 2026

Sky High Potential: Positioning Alberta in Canada's Aerospace and Defence Landscape

Canada's aerospace and defence sector is a major economic driver, annually contributing \$34B to GDP and supporting more than 225,000 jobs. With renewed federal commitments to defence spending – including NATO targets and a growing focus on an Industrial Defence Strategy (IDS) – the sector is increasingly has become prioritized as a cornerstone of national security, economic growth and supply chain resilience.

Within this context, Alberta's aerospace and defence sector is an emerging but strategically significant contributor to both the provincial and national economy. While historically overshadowed by larger aerospace hubs in Quebec and Ontario, Alberta has developed a distinct niche grounded in advanced manufacturing, defence technologies, space innovation and dual-use applications linked to its energy and engineering expertise. As Alberta seeks to diversify its economy, aerospace and defence represents a high-value, export-oriented sector with strong alignment to existing industrial strengths.

Based on industry estimates, the sector in Alberta includes more than 150 companies employing thousands of highly skilled workers across unmanned aerial systems (UAS), satellite communications, defence systems integration and maintenance, repair and overhaul services. Alberta is home to a growing base of aerospace and defence activity, including manufacturers such as De Havilland Aircraft of Canada and defence technology firms such as General Dynamics Mission Systems and Raytheon Canada – alongside a broader network of engineering, technology and service providers supporting the sector.

Alberta's competitive advantage lies at the intersection of industries – an approach shaped by its energy sector and embedded in the province's economic foundation. Deep expertise in energy systems, artificial intelligence and advanced engineering supports innovation in UAS, counter-drone systems and cold-weather testing. The province is also well positioned to transition talent from adjacent sectors with transferable skillsets, supported by leading institutions such as the University of Calgary and University of Alberta.

A defining feature of the aerospace and defence sector is its dual-use nature, where investments support both defence and civilian applications across technologies and infrastructure, and are increasingly crucial to scaling firms, attracting investment, and

accelerating innovation. This includes advanced systems as well as critical assets such as airports, transportation networks and logistics corridors that underpin both economic activity and national security. As a result, investment in aerospace and defence improves connectivity and enhances productivity, offering a pathway to more resilient and efficient industrial systems at a time when infrastructure constraints are a growing challenge.

Alberta role in Canada's defence ecosystem is expanding, anchored by infrastructure such as [CFB Cold Lake](#) – one of Canada's main fighter jet training bases – and a network of SMEs supporting procurement, simulation, and defence innovation. With increasing geopolitical uncertainty and [renewed federal commitments](#) to defence spending, Alberta is well positioned to expand its role in national and continental security and defence ecosystems.

The province's expansive, low-density geography provides access to uncongested airspace and controlled test environments that are increasingly scarce in more populated jurisdictions. Facilities such as [CFB Suffield](#), UAV test corridors, and restricted airspace near Cold Lake position Alberta as a premier location for flight testing and autonomous systems development.

There is also a strong and growing interest among youth in aerospace careers. Demand for aviation and aerospace programs at post-secondary institutions is increasing, reflecting strong student interest. While training capacity remains strained, this demand represents a potential competitive advantage as employers across Canada face persistent labour shortages.

Despite these strengths, Alberta's aerospace and defence sector remains under-recognized. Limited awareness, fragmented branding and competition from established regions constrain growth and investment attraction. Addressing this visibility gap is a key opportunity to position Alberta as a competitive, innovation-driven aerospace and defence hub.

Issues

Partnerships & Collaboration

A key challenge facing Alberta's aerospace and defence sector is fragmentation across the collaboration ecosystem. Canadian firms frequently look to the United States for partnerships, supply chain integration, and access to capital, drawn by the scale, coordination, and procurement alignment of the US market. While this supports firm-level growth, it can also

result in the outflow of innovation, talent, and economic activity that could otherwise be anchored within Canada.

Domestically, collaboration across industry, academia, and government is continuing to evolve, with many partnerships still in early stages of development. Our members note that Canada's ecosystem – particularly in emerging regions like Alberta – remains decentralized, with opportunities to better align research, procurement and commercialization efforts. While institutions such as the [Aerospace Industries Association of Canada](#) and the [Alberta Aviation & Aerospace Council](#) play important convening roles, there is an opportunity to build on this foundation through a more cohesive framework that consistently brings stakeholders together to drive shared outcomes.

Strengthening coordination represents a clear opportunity to accelerate commercialization, reduce duplication, and better position the sector to advance dual-use technologies. For Alberta, a more unified and strategic approach would support firms in scaling, attract greater investment, and enhance competitiveness relative to more established jurisdictions.

Connectivity and Supply Chains

Connectivity and supply chain performance are critical enablers of growth for Alberta's aerospace and defence sector. As outlined in the Calgary Chamber's recent work on rural connectivity, access to reliable and integrated infrastructure is essential for businesses to grow, access markets, attract talent, and improve productivity. Connectivity is a foundational driver of economic growth and competitiveness.

In the context of aerospace and defence, connectivity includes transportation networks, regional access, and the ability to operate effectively across urban, rural and northern environments. These factors are closely linked to supply chain performance. Aerospace and defence activities rely on coordinated, multi-jurisdictional supply chains; gaps in connectivity – particularly in rural and remote regions – can limit access to talent, constrain operational coordination, and reduce the sector's ability to scale and compete.

At the same time, supply chain resilience remains a growing priority. Limited domestic manufacturing capacity and reliance on external inputs increase exposure to disruption, while fragmented logistics and infrastructure systems can reduce efficiency and responsiveness. Strengthening connectivity – across digital infrastructure, regional transportation networks and economic corridors – will be essential to improving supply chain

integration, enabling the movement of goods, services and talent, and positioning Alberta as a reliable partner within Canada's aerospace and defence ecosystem.

Talent and Workforce

Alberta's aerospace and defence sector faces growing talent constraints across skilled trades and specialized technical roles. These pressures are compounded by reduced immigration and intensifying competition from the United States, where larger aerospace clusters and defence spending continue to attract Canadian talent. Workforce availability is widely identified as a key constraint, with demand for skilled labour expected to outpace supply over the coming decade. The Aerospace Industries Association of Canada estimates that the sector is projected to require over [55,000](#) additional workers by 2035, highlighting the urgency of expanding and modernizing the talent pipeline.

At the same time, barriers to credential recognition further limit workforce entry. Skilled newcomers often face lengthy and inconsistent processes to validate their qualifications, delaying entry into the labour market and exacerbating existing shortages. Addressing these inefficiencies represents a near-term opportunity to unlock additional capacity within the talent pool.

Training gaps also persist. Alberta's aviation education system remains focused on traditional mechanical and pilot training, with less emphasis on adjacent and increasingly critical skillsets such as digital systems, cybersecurity, data analytics and business functions. As aerospace and defence become increasingly software-driven, this creates a misalignment with evolving industry needs. While collaboration between government, industry and post-secondary institutions exists, national and provincial stakeholders highlight ongoing challenges in aligning skills development systems with the rapidly evolving needs of the aerospace and defence sector.

Finally, limited in-province training capacity and program specialization means some students pursue aviation and aerospace programs in other provinces, a common pattern in Canada for specialized fields, which may create challenges in retaining talent and building a self-sustaining ecosystem.

Government Engagement & Awareness

Our members consistently identify a gap in government awareness and engagement, particularly at the provincial level. Limited participation in key industry forums has

contributed to a perception that the sector is not fully understood or prioritized as a diversification opportunity. Government engagement is often viewed as reactive – waiting for fully formed projects to emerge – rather than enabling and facilitating early-stage growth and investment. Operational barriers further limit growth. Our members cite slow and unpredictable approval processes, as well as limited internal expertise within government, as key constraints.

This is compounded by a broader visibility challenge. The aerospace sector and enabling infrastructure – such as Calgary International Airport – are not consistently reflected in policy, investment attraction, or economic development narratives, which tend to prioritize other sectors and infrastructure priorities. This is partly a function of the sector itself; historically, aerospace and defence activity has flown under the radar with a lower public profile, reflecting its non-consumer-facing nature and the sensitivity of many applications. As a result, it has not always been positioned or communicated in the same way as other industries. The combined effect is that the scale and sophistication of Alberta's aerospace ecosystem remain under-recognized.

At the federal level, approximately [80 per cent](#) of Canada's aerospace employment, and consequently the vast majority of policy and investment, is concentrated in Quebec and Ontario. While reflective of established clusters, this has contributed to Alberta being under-promoted. As a result, Alberta-based firms often find it easier to position their capabilities in international markets than within Canada.

Infrastructure & Regional Opportunities

Alberta's aerospace and defence sector is supported by a diverse infrastructure base, but underinvestment – particularly in northern regions – is limiting its potential. With Canada accounting for approximately [25 per cent](#) of the global Arctic landmass, northern infrastructure and logistics are becoming increasingly central to national defence priorities, yet face aging infrastructure and limited long-term planning.

Key defence regions such as CFB Cold Lake offer significant advantages for testing and operations. However, maximizing this opportunity requires improved coordination with civilian industry and greater clarity around access and use for commercial and dual-use applications.

Regionally, Alberta's major urban centres play complementary roles. Calgary is well positioned as a hub for corporate leadership, innovation, and aerospace services, supported

by assets such as Calgary International Airport. Edmonton, by contrast, is strategically positioned as a gateway to the North, with strengths in logistics, defence operations, and proximity to northern and Arctic activity. Strategic trade and logistics initiatives – such as the [Prairie Economic Gateway](#) and [Port Alberta](#) – further reinforce Alberta's role in connecting supply chains across the province and to global markets.

Alberta has emerging strengths in UAS innovation and training. University-led programs are advancing research and applied testing, with growing recognition for their quality and relevance. However, scaling these capabilities will require stronger integration between academia, industry, and government. Overall, Alberta's infrastructure represents a significant but underleveraged asset base that requires coordinated investment and planning.

Federal procurement

Recent increased federal defence spending – including [\\$180B](#) in defence procurement opportunities and \$290B in defence-related capital investments over 10 years – is a positive step, but procurement remains a major barrier to growth, particularly for emerging aerospace and defence regions such as Alberta. Despite increased funding, industry stakeholders consistently cite outdated processes, long timelines, and misalignment with the pace of innovation.

Canada's aerospace supply chain includes over [700 SMEs](#), many of which face barriers to participating in federal procurement activities due to complexity and timelines. Several companies also note that financial thresholds and program limits have not kept pace with inflation or market conditions, further limiting project advancement. A key example of structural misalignment is the disparity in purchasing authority between Canada and the United States. U.S. military commanders often have significantly greater discretionary spending authority, enabling faster adoption of new technologies. In contrast, Canada's centralized system reduces agility and limits opportunities for domestic firms – particularly given that pace is a competitive advantage in today's context.

Regional coordination also plays an important role in enabling access to procurement opportunities. Organizations such as the [Edmonton Region Defence Alliance \(ERDA\)](#) demonstrate the value of a coordinated, regionally focused approach to connecting industry with defence opportunities. There is an opportunity to establish a similar model in Calgary to strengthen industry coordination, improve visibility, and better position firms to participate in federal procurement.

Supply chain challenges compound these issues. High production costs and reliance on foreign suppliers, particularly for specialized components and advanced manufacturing inputs, limit Canada's ability to capture value and create vulnerabilities, especially in times of geopolitical instability.

Recommendations

Federal-Provincial Collaboration

1. Fully integrate and promote Alberta within national aerospace and defence strategies, including coordinated representation in trade missions, sector initiatives, and federal engagement efforts to ensure Alberta firms can access defence opportunities.
2. Strengthen domestic supply chains through improved interprovincial collaboration, increased manufacturing capacity, and enhanced connectivity and trade-enabling infrastructure, including strategic initiatives such as the Prairie Economic Gateway and Port Alberta.
3. Align infrastructure investment with northern and defence priorities, positioning Edmonton as a gateway for Arctic logistics, defence operations, and supply chain coordination.
4. Improve coordination between civilian and defence infrastructure, including around CFB Cold Lake, to enable greater access, investment alignment, and dual-use opportunities.
5. Align workforce strategies across jurisdictions, including immigration, training capacity, and credential recognition to support the evolving needs of the aerospace and defence sector.

Federal

1. Modernize procurement processes to reduce timelines, complexity and barriers for SMEs, aligning with the Industrial Defence Strategy's (IDS) objective to improve industry access and accelerate capability development.
2. Update financial thresholds and program limits to reflect inflation and current market conditions, enabling more effective deployment of capital under IDS.
3. Increase decentralized purchasing authority to enable faster adoption of innovative solutions and strengthen Canada's ability to rapidly integrate emerging technologies, an identified priority within the IDS.

Provincial

1. Co-develop a Provincial Aerospace & Defence Strategy with industry.

2. Coordinate with industry to advance the mandate of the Ministry of Jobs, Economy and Trade to maximize federal and private investment in defence-related infrastructure and the defence industry in Alberta.
3. Designate aerospace and defence as a priority sector for economic diversification, supported by a dedicated government lead or function, strengthened internal expertise and capacity, and expanded concierge-style services to improve coordination, sector understanding, and investor support.
4. Improve timelines and predictability for project approvals, particularly for testing and infrastructure.
5. Support cluster development, aligned with existing initiatives such as [YYC AeroNex](#).
6. Increase investment in northern airport infrastructure, aligned with long-term planning.

Industry and Post-Secondary Institutions

1. Develop targeted reskilling and upskilling pathways to transition talent from adjacent sectors.
2. Expand industry-led training partnerships to enable continuous, sector-specific alignment between curriculum and workforce needs.
3. Align capabilities to target federal procurement opportunities, particularly in autonomous systems, defence tech, and advanced manufacturing.

Conclusion

Alberta has not only the assets to compete, but the talent, industrial base, and geographic advantages to play a meaningful role in Canada's aerospace and defence future. As the federal government advances its IDS and increases investment in national security, there is a clear opportunity to position Alberta as a key contributor to domestic capability, supply chain resilience, and Arctic operations.

However, without coordinated action across government and industry, this opportunity risks being missed. Continued misalignment will result in talent outflow – particularly to the US – reduced participation in federal defence procurement and missed opportunities to strengthen domestic manufacturing and innovation ecosystems. It also risks limiting Alberta's contribution to northern and Arctic infrastructure, which is increasingly central to Canada's sovereignty and security objectives.

The cost of inaction is not simply lost economic opportunity – it is a diminished role for Alberta in shaping Canada's industrial and defence future. With alignment, Alberta can help

deliver on the core objectives of Canada's IDS: strengthening domestic capability, accelerating innovation, and enhancing national security. The window to act is open, but it will require deliberate, coordinated effort to ensure Alberta is not only prepared to participate, but positioned to lead.