

Airports are catalysts for economic diversification and development, writes Chris LeTourneur, president and CEO of MXD Development Strategists.

ake no mistake about it, airports are catalysts for stimulating regional economic diversification and development, particularly within a 15 minute drive time of an airport runway system.

With shifts in the manufacturing and movement of goods, there are a series of 'airport connected' sectors that rely on situating in proximity to airports and their multi-modal ground transportation networks.

This prosperous area both on and off of airports lands has become the driver for enabling and accelerating the diversification of value-added economic sectors involving:

- Logistics and distribution
- Aerospace and defence
- High performance vehicles and parts
- Specialised materials
- Advanced manufacturing
- ICT, research and development and skills training
- Bio-life sciences and medical devices
- · Perishables, agri-business and food products

These sectors rely on the multi-modal interface found at and around airports not only to move goods, but also to host up and downstream industry clusters involving research and development, education/skills training, manufacturing and specialized distribution that add value to the supply chain.

Progressive airports are realising the power of embracing 'catalyst projects' that stimulate these sectors and complementary clusters to enable and accelerate regional economies.

Global airport economic and commercial development company, MXD Development Strategists, has created the diagram above, which

illustrates the time-distance continuum of 'Airport Connected Development' for various economic sectors, as observed at airport regions around the world.

The following airport economic diversification profiles illustrate this 'Airport Connected Development' trend.

Case study: Edmonton International Airport

Edmonton International Airport (EIA), situated in Northern Alberta Canada, is a major economic driver, generating over 12,000 jobs, C\$1.2 billion in GDP and C\$2.2 billion in economic impact annually.

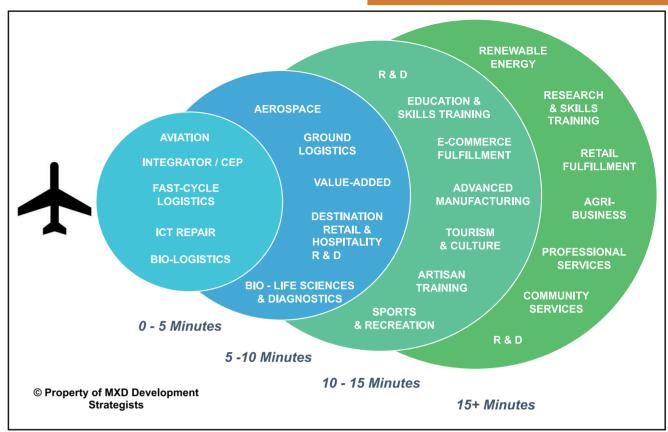
Over the past 10 years, EIA has been Canada's fastest-growing major airport, as reflected by its recent domestic, USA transborder and international terminal expansions.

The airport's cargo volumes have grown by 32% over the past six years, including a 5% annual increase in 2015, demonstrating resilience against the region's challenges relating to the oil and gas energy sector due to low oil prices.

Indeed, EIA has been at the forefront of diversifying Northern Alberta's economy through the strategic development of its international cargo and logistics business, as well as its airport real estate, attracting some of the strongest international developers and operators.

Working in conjunction with Canadian company Rosenau Transport, North American development company Panatonni is developing a 210,000 SF warehouse, due to open in July 2016. The facility includes state-of-the-art temperature controlled and cold chain handling facilities to accommodate ground and ground-to-air logistics for the agri-business and other sectors.

EIA's vice president of commercial development, Myron Keehn, reports that "strong initial interest in this catalyst project is already



suggesting the opportunity for growth of this facility as the focal point of the EIA Logistics Hub".

To support this growing logistics sector, a 20-acre truck driver training facility with driving simulators and a test track are planned in close proximity at EIA.

Driven by its mission to spearhead economic prosperity for the region, EIA has secured an Air China Cargo (ACC) route connecting Shanghai and Tianjin (Beijing) with Edmonton and on to Dallas Fort Worth, and back three times per week, currently providing Canada's only air cargo freighter service directly into mainland China.

This cargo air route development has expanded export markets from the region for Alberta's and Canada's manufactured goods, agricultural, agri-food and other products through increased market access to Asia, diversifying the economy while creating high value job opportunities. It is estimated that the new service will initially contribute up to C\$35 million in GDP annually.

The Alberta Aerospace Technology Centre (AATC) is an additional skills training facility located at EIA. Established in partnership with Canadian North Airlines, Canadian Helicopters, the Edmonton Economic Development Corporation (EEDC) and the Alberta government, the facility forms part of the region's wider plans to create an aerospace and technology cluster around the airport.

In June 2015, Canadian North Airlines launched a new flight simulator for the B737 series of aircraft at the AATC, providing training to regional and international pilots for flight operations of the world's most popular airliner.

The strong demand for this first simulator has prompted Canadian North Airlines to consider adding a second B737 simulator. This success has been followed by the 2016 announcement of Canadian Helicopter's helicopter simulator installation, which will be housed in EIA's main Passenger Terminal Building.

To leverage its local, regional and international destination at the convergence of the QE2 Highway (also known as the CanaMex Corridor) and the airport, EIA has master planned a 300-acre Highway Commercial Area for various forms of commercial development.

The first phase of this site is triggered by the Premium Outlet Collection, a 585,000 square foot destination shopping centre being developed by Canadian-based retail stronghold Ivanhoé Cambridge in partnership with the largest global retail developer/operator, Simon Property Group and EIA.

In fact, this catalyst project is under construction and targeted to open in the third quarter of 2017. It has already stimulated adjacent economic opportunities for tourism, hotels, restaurants and large format retail, as well as an initial 180,000 square foot office campus.

Over the past year, EIA has been co-operating with its neighbouring communities including Leduc County, the City of Leduc and the Leduc-Nisku Economic Development Association to leverage the connectivity of EIA for enabling and diversifying economic activities in the greater region surrounding the airport to establish the 'Alberta Aerotropolis'.

This opportunity has been crystalised through the evolution of a land use framework prepared by MXD Development Strategists and Stantec that embraces the Airport Connected Development approach.

Barbara Engelbart McKenzie, executive director of the Leduc-Nisku Economic Development Association notes: "The Leduc-Nisku region is working with partners including EIA to enhance investment and diversification opportunities in the region, particularly around Agri-Business.

"Developing a food-processing cluster is a primary area of interest for us as we can leverage the supply chain infrastructure such as the Food Development Processing Centre/Agrivalue Processing Business Incubator (APBI), located just minutes from the airport.

"By enhancing value-added opportunities, connected mobility and technical innovation in agriculture, food and bio-industrial products, we will grow and diversify our agri-business industry."

AIRPORT WORLD/IUNE-IULY 2016

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Facilities such as the Food Development Processing Centre/Agrivalue Processing Business Incubator pictured above are already located within a few minutes' drive of Edmonton International Airport.

Case study: Charlotte Douglas International Airport

Charlotte Douglas International Airport (CLT) in North Carolina is the second largest American Airlines hub, handling over 44 million passengers per year.

Over the next ten years, a \$2.5 billion investment is being made in terminal, runway and parking facility improvements to prepare the gateway for future growth.

Additionally, CLT has embarked on the creation of an Airport Area Strategic Development Plan to leverage its intermodal connectivity and embrace the airport as a catalyst for regional economic diversification.

This strategy is looking closely at identifying enabling infrastructure and road improvements that will establish a platform for recruiting target business sectors, as well as facilitating private-public partnerships between the city, the airport and private sector developers.

This strategic economic development initiative is being led by CLT's economic affairs manager, Stuart Hair, and interim aviation director, Brent Cagle, in partnership with the City of Charlotte's Community and Capital Planning Department and City Manager's Office.

MXD Development Strategists is leading a multi-disciplinary team to prepare this economic-driven Airport Area Strategic Development Plan.

A decade ago, CLT exhibited strong foresight by incorporating the Norfolk Southern Intermodal (Rail/Truck) facility in between the runway system, in a secured area with direct ground transportation connections to Interstates 485 and 85. This intermodal complex currently handles over two trains and 1,200 trucks per day, and has the capacity for up to 200,000 container lifts per year.

Provisions are being made in the Airport Area Strategic Development Plan to provide for future growth and flexibility of this facility, while at the same time leveraging this incredible enabler to stimulate and accommodate state-of-the-art logistics and distribution facilities.

The plan will provide a strong framework to take advantage of the established Foreign Trade Zone #57, which provides various advantages for attracting international companies to Charlotte.

In conjunction with CLT's direct route connections with American Airlines and Lufthansa Airlines to Germany, there are already strategic business partnerships with German companies including BMW, Würth and Siemens, which have a strong presence in the region.

The goal is to embellish the abilities of Foreign Trade Zone #57 in conjunction with CLT's international connectivity, to further attract and cultivate business relationships with European, South American, Caribbean and Asian companies.

A specific 'value-added' economic diversification sector that the CLT Airport Area Strategic Development Plan will foster for the greater region involves the next generation of advanced manufacturing and handling of specialised materials. Recognising the 'just-in-time' nature of such materials and components, CLT will seek opportunities for supporting the diversification of the region's manufacturing sector beyond traditional textiles and towards advanced specialised materials.

These materials include composites, plastics and metals that are used in industries ranging from aerospace and defence to automotive components, high performance vehicles (such as NASCAR Racing and military vehicles), medical devices and agri-business/food-processing and packaging.

With the growing trend and demand for three-dimensional printing/ additive manufacturing of these specialised materials, CLT has adopted a slogan that this advanced manufacturing renaissance involves "making the machines that make machines and materials".

Outlook

All around the world, airports and their regions are embracing the Airport Connected Development approach to grow and diversify their economies.

A direct correlation is being evidenced between air route connectivity and the economic clusters that evolve at and around airports.

The most progressive airports and their regional partners have realised the greatest opportunities lie in their ability to leverage their regional niche business activities by optimising the multi-modal ground transportation and air route connectivity of products, people and information.

As a result, the strategic lands at and around airports are quickly becoming highly desirable regional and international economic interchanges.

About the author

Chris LeTourneur is the president and CEO of global consulting company MXD Development Strategists, who are leading experts in planning, developing and implementing Airport Connected Development and growing regional economies.