Focus on North America & Caribbean

CANADA
In June 2018, Vancouver International Airport (YVR) officials announced that construction had started on a CAD 9.1 billion (USD 6.9 billion) expansion, a project expected to last two years. When work is complete, the airport should be able to meet its 2020 capacity goal of 29 million passengers. Work includes one of the largest GeoExchange heating and cooling systems in Canada, new construction and renovations of domestic and international terminals, and a reconfiguration that will allow passengers to go from check-in to gate through one interconnected facility. Unlike in the U.S., the airport is able to raise its passenger fees if necessary, to pay for construction.

Toronto’s ‘Billy Bishop City Airport’ (YTZ) has completed a three-year upgrade, part-financed by an Airport Improvement Fee (AIF) of CAD 20, to improve the passenger experience, says the CEO of Nieuport Aviation Infrastructure Partners, the company that runs the facility’s passenger terminal. Following the completion of the project, the AIF was reduced to CAD 15. “With these big projects complete, and with passenger numbers continuing strong, PortsToronto is in a position to reduce the fees charged to the consumer and ensure a travel experience that is not only efficient, convenient and service-oriented, but also cost effective. The reduced AIF is consistent with recommendations stemming from the 2016 Canada Transportation Act Review, which cited the need for reduced travel costs, increased connectivity, and improved service for Canadian travellers as an important means of keeping the aviation sector healthy and competitive.

“Billy Bishop Airport has grown into a world-class airport and a key gateway to and from Toronto,” said Geoffrey Wilson, Chief Executive Officer, PortsToronto, which manages Toronto Island Airport, located a short ride from downtown. “The airport and its passengers have benefitted from a consistent and strong stream of AIF funds that have been reinvested into infrastructure and capital projects such as the pedestrian tunnel and the airfield modernization, a three-year project that successfully conclude in summer 2018. The reduction in AIF comes as the airport is gearing up to introduce significant enhancements, including an upgraded terminal, which is being undertaken by Nieuport Aviation Infrastructure Partners. The upgrades to the terminal will include new and larger lounge facilities, increased retail, food and beverage services, as well as an 11th gate to further enhance the efficiency offered to passengers who are flying to the more than 20 Canadian and U.S. destinations serviced by Billy Bishop Airport. The upgraded terminal also will be fitted with the framework for a preclearance facility in anticipation of successful negotiations to bring U.S. Customs Border Protection staff and facilities to Billy Bishop Airport. The airport has recently won a series of passenger-driven awards, including being named one of the top airports in North America in both the Airports Council International’s (ACI) 2017 Airport Service Quality Awards and Skytrax 2017 World Airport Awards, and was ranked sixth Best International Airport by Condé Nast Traveler in 2017.
A CAD 100 million renovation project for Ottawa’s ‘Macdonald–Cartier International Airport’ will help the airport accommodate the increase in passenger traffic, while providing top-quality service. The decision to renovate comes in response to several years of steady growth, with the airport surpassing the 5 million passenger milestone at the end of 2018 with 5.11 million passengers handled. Under the five-year multi-phase enhancement programme, a new hotel will be added containing between 150 and 200 rooms; it will be connected to the airport by an indoor skywalk. The terminal will expand its food court and retail services and move passenger security screening from the second to third floor. The airport will also benefit from a new train station as part of Ottawa’s Trillium Line expansion project, with construction set to begin in 2019. Trains are expected to serve passengers from 2021. -- Located just 30 minutes from downtown Ottawa, Macdonald–Cartier International injects CAD 2.2 billion into the local economy each year.

Montreal–Trudeau Airport (YUL) is set to get a CAD 2.5 billion expansion, including a new terminal and underground station. The terminal will connect to the existing one, and the station will be built 35 m underground to connect the airport to the REM light-rail network. Work will start in 2019. The multi-storey carpark and passenger drop off area will be rebuilt over an eight-year period as part of the revamp. Aéroports de Montréal (ADM) Chief Executive Philippe Rainville said: “Montreal will at last join the ranks of world metropolises that have fast, efficient transit links with their international airports.” The planned works are the initial phase of a sequence of projects that will run until 2030. The first stage will be financed by an increase in revenue from traffic and borrowing. An estimated 22 million passengers will use the airport annually by 2025, and the airport anticipates that the number will reach 35 million by 2035.

Work has started on upgrades to the Victoria International Airport’s lower passenger departure lounge. In February 2018, the Victoria Airport Authority (VAA) had announced it was starting work on its CAD 19.4 million terminal expansion project. Over 27 months, work is being done to doubling the size of that lounge, creating dedicated aircraft gates and covered walkways. There will also be new washrooms and additional space for more retail and food services. This is part of a multi-phase terminal and apron expansion plan. In its 2012 masterplan documents, the VAA said over its 20-year planning period, ”some facilities will easily handle demand and others are only sufficient.” It also mentioned that facility expansion at the airport can adopt a “just in time phased development approach” to meet passenger demand. Over the last few years, the airport has been making improvements to parking, aircraft tarmac space, and to its baggage-handling area to keep up with increased passenger volumes. The airport (YYJ) had a record increase in passengers in 2018 at 2.05 million people going through the terminal.

U.S.A.
New York’s flagship ‘John F. Kennedy International Airport’ is getting a USD 13 billion facelift that will add two new terminals, possibly a new runway, new roads, taxiways, a better layout for terminals, and increase capacity by around 15 million passengers a year, Governor Andrew Cuomo has announced. The hope is to “transform JFK into a unified, interconnected, world-class airport. The new international terminals will add 4 million ft² to the airport, with the first new gates opening in 2023 and the project to be completed by 2025. Some 90% of the USD 13 billion price tag will come from private investment. Cuomo said the project would transform JFK into ”a 21st century transportation hub” and enable it to join “the ranks as one of the finest airports in the world.” In 2017, more than 59.4 million passengers passed through JFK, making it the fifth busiest airport in the United States. The Port Authority projects that 80 million people will fly in and out of JFK by 2035. The airport first opened to commercial aviation in 1948 serving America’s most populous city and was renamed in 1963 following the assassination of President John F. Kennedy. Major construction work is also on-going at New York’s domestic LaGuardia Airport, which Cuomo promised three years ago would
be rebuilt from the ground up in what has turned into an USD 8 billion project. Much has been said about New York’s aging transport infrastructure, which is contrary to the image that the U.S. financial and entertainment capital likes to project as the best city in the world.

*A new concourse with 18 gates opened at LaGuardia Airport in Late November 2018 as part of a broader plan to modernize the dilapidated and oft-mocked facility.* The new gates of which eleven are open, with the other seven becoming operational in 2020, are part of LaGuardia’s Terminal B. The concourse also includes additional dining and shopping for those traveling through the airport. All told, the USD 8 billion plan to modernize LaGuardia includes 72 gates in six concourses and two new arrival and departure halls, for a total of 2.7 million ft². Other planned improvements include rail service between LaGuardia and midtown Manhattan and 14 miles of new road connecting motorists to the facility. Gov. Andrew Cuomo had joined local officials in Queens for a ceremonial opening. The Democrat said the on-going work will transform an aging, crowded and inefficient airport into a 21st-century facility "worthy of the State of New York." -- LaGuardia now handles over 30 million passengers each year.

**A USD 2.7 billion project is under way at Newark Liberty International Airport (EWR) to replace one of its oldest terminals and help catapult the airport city into the next century.**

The million-ft² Terminal One, as it will be called, will replace the antiquated Terminal A, which has been around since 1972, said Catherine Cronin, Programme Director of Redevelopment at Newark Airport. She said Terminal One will have a more modern feel, more technology embedded in it, and more access to Wi-Fi. Visitors will be able to get through Security faster with a centralized security checkpoint. There also will be more of the mobile check-in pods. "We're going to be able to build it off to the southern portion of the airport, an entirely new roadway network, which will keep you out of the traffic for folks going to Terminal B and Terminal C," she said. Local content will be provided so passengers know they are at a New Jersey terminal. Some of that includes farm-fresh food. There will be entertainment and shopping, and there will be plenty of things for people to do while they are waiting to board their flight, just like at other terminals that have been built recently, said Cronin. There’re art programmes happening, they want to make sure they’re incorporating things in the New Jersey Hall of Fame and input from other local artists and performers. Terminal One will also help relieve congestion at baggage claim, check-in and Security areas. There will be 18 check-in lanes that will serve the entire terminal plus all-new modern technology that processes passengers much faster. Baggage claim will have a larger hall for passengers to circulate and exit. The project on the roadway component started in 2017. In April 2018, the airport gave notice to the contractor to proceed. **Part of Terminal One should be completed in 2021 but the entire project should be done in 2022.** Cronin said the airport staged it so they can move the airlines out of Concourse A1 and A2 into the new terminal, allowing them to finish the airfield that requires the demolition of the concourses. Then they will move the final airlines in 2022 and demolish Concourse A3. **Terminal One will serve 13.6 million fliers through 33 gates and a new parking garage.** It is also expected to create more than 23,000 jobs. While Terminal One is being built, construction work should not impact customers going through Terminal A.

City officials are in the planning stages of an USD 8.5 billion expansion at Chicago’s O'Hare International Airport. The proposed scope of work includes renovation of three existing terminals and construction of a new terminal with capacity for larger aircraft. **The Chicago Department of Aviation has unveiled five proposed designs for the expansion of O'Hare** with a new global terminal that combines both domestic and international flights. When construction is complete, the airport’s surface area will have increased by 3 million square feet. In order to pay for the project, city officials renegotiated fees and charges with the airlines that service O'Hare and authorized USD 4 billion in bonds to pay for upfront costs. Designs by some of the world’s leading architecture firms including Santiago Calatrava, SOM, Foster + Partners, and Studio Gang Architects, aim to optimize efficiency while capturing the contemporary spirit of the city.
Chicago Mayor Rahm Emanuel has encouraged the public to vote on their favourite designs to shape the future of O'Hare, scheduled to open in 2026. The project will be the largest and most expensive terminal expansion in the airport’s entire 74-year history. The City and Chicago Department of Aviation are being pushed to make a decision on the design before Mayor Emanuel departs in May 2019. Models of each team’s submission were on display at the Chicago Architecture Center until 31 January 2019.

*While the countdown for completion of the O'Hare Modernization Plan (OMP) is still a couple of years away, members of the O'Hare Noise Compatibility Commission were reminded recently that the installation for Runway 9C-27C is well under way.* Frank Grimaldi, Assistant Commissioner for the Design & Construction Division from the Chicago Dept. of Aviation, reviewed the various phases left to tie things together by 5 November 2020. **This new runway will run east-west north of the terminal core.** It will be 11,247 ft long and 200 ft wide, capable of moving Group 6 and Categories 2 and 3 aircraft. The city split the big project into four smaller construction packages. The ‘east’ package, which started in July 2016, was finished in September 2018 with lighting installation. Construction of the runway had to be co-ordinated with work on various runways and taxiways, some short term and some long term. It can service the Northwest Cargo area and provide links when work is done on the other end. The next segment, called ‘Package 1’, has been under way since May 2017 and was expected to finish in late December 2018. It will connect to the north and south and to Runway 9L later. The airport built temporary and permanent pavements, installed airfield lighting, plus utility infrastructure, concrete, signage and graded drainage across the middle and far west ends of the runway corridor. Ductwork is being added to power the electrical and navigation systems. ‘Package 2’ focuses on the far western end. While it involves new airfield pavements, lighting and signage, it also involves demolition of existing structures and installing new underground utilities, grading and drainage. Part of Terminal 2 will also be replaced with new gates and a global terminal, but that is not part of OMP.

Seven airline facilities and one City building are being taken down as part of this segment OMP project. American and United hangers are involved here, along with two flight kitchens, and a health facility for American. United’s health facility will stay in its current location. This project started in June 2018 and will finish in October 2020. Building a new runway also requires relocating related airline facilities, such as hangers and vehicle maintenance buildings. This started in 2016 and was estimated to finish in December 2018. O'Hare has been relocating an Aircraft Rescue and Firefighting Station on the northeast end of the airport. The single-storey building will include six bays for fire-fighting equipment. The airport is adding a centralized de-icing facility located west of the core terminals, with several taxiways. To coordinate operations as aircraft are set to be de-iced, a ramp tower is being built to keep track of aircraft moving in and out of the de-icing area. De-icing fluid will be directed to the same vault where other de-icing materials go.

Similar to a facility control on the south end of O'Hare, an east airfield lighting control vault is being built next to the north aircraft rescue and fire-fighting station. It will house switchgear, ALSC, and regulators to power airfield lights and signage for Runways 9C-27C, 9R-27L and nearby taxiways. Its year-long construction is planned for a July 2019 completion. ‘Package B’ will add a two-lane airport road, Tank Farm Road, to link Taxiways ZJ and SS on the west side of the airfield. This is part of connections west of the runways, so an aircraft can taxi from the north end to the south end of the airfield, and so airport employees can drive from one end of the airport to another, without being in the way of arrivals or departures.

Hillsborough County Aviation Authority has awarded Hensel Phelps Construction a USD 66 million contract for new facilities and site preparation of 35 acres at Tampa Airport’s new SkyCenter development area. In fiscal year 2018, the airport served 21 million passengers – an all-time record. "The passenger growth we’re experiencing at the airport underscores the importance of the entire masterplan,” said Jeff Siddle, the airport’s Vice President of Planning & Development. “SkyCenter is a key part of it. It will help us accommodate growth for years to come by allowing us to move our existing offices away from the terminal and repurpose that space for our passengers and guests.”
Hensel Phelps will develop the SkyCenter site, which is located just west of Tampa International Airport's new rental car centre. Other aspects of the project include building a 40,000-ft² atrium and a pedestrian bridge. Construction was to begin in January 2019. The site development and construction of the atrium and walkway are expected to be complete in 2020. Future plans for SkyCenter include a hotel, a retail space, and at least one office building. In addition to SkyCenter, the second phase of the masterplan includes adding express lanes to the airport's main terminal pick-up and drop-off areas. Phase 1 of the masterplan – a main terminal expansion, 1.4-mile peoplemover, the new rental car centre, and an overhaul of concessions – is largely complete. The third and final phase is a 16-gate airside expansion.

With millions of extra passengers anticipated at San Antonio Airport over the coming years, the City's airport officials have been trying to decide on the best way forward. For a long while, an option for the future of air travel in San Antonio has been to start again with a brand-new airport on a different site. The current airport is situated only eight miles from downtown, making it one of the most convenient of America's larger airports for access to the city it serves, particularly for business travellers. However, an estimated price tag of USD 10 billion to create a new airport has proved unpopular to cash-strapped officials under pressure to provide a solution sooner rather than later. At a recent meeting, Mayor Ron Nirenberg told the task force appointed with the job not to pursue using a new airport site, and instead look at retaining and expanding the current site. Present-day San Antonio International Airport has three runways and two terminals, with a combined 24 gates. It handled 10.04 million passengers in 2018. The most likely option for the expansion of the airport would see an additional runway constructed, parallel to its most frequently used north-south strip, and a new terminal built to the north of Terminal B. "The plans that we are examining for the future really envision a world-class airport experience that you see in modern airports all over the county, so that's really going to be the objective as we move forward," San Antonio Aviation Director Russ Handy said. The cost of completing this work has not been finalized, but it is expected to be significantly lower than the cost of a whole new airport. The expansion may require up to 200 acres of neighbouring land to be added. In order to construct a new runway, the airport footprint will need to be increased, and in its way sit businesses and industrial areas which will need to be flattened or relocated. The decision not to create a new airport for San Antonio seems a wise choice. As well as the huge cost savings, it would be a big gamble over whether the future passenger demand would warrant it. The city is not likely to enter the big leagues of the hub airports, or even attract some of its much-sought-after destinations any time soon, despite the growth it has seen over the past two years, mainly on domestic routes. Turning the current airport into one that can handle the moderate growth seems a much safer bet. The planned expansion work would be completed by 2040.

Pittsburgh International Airport officials are gearing up for a USD 1.1 billion modernization, a project that will help the facility meet forecast capacity demands and plans for a future that does not include hosting a major airline hub. Since U.S. Airways closed its Pittsburgh hub 14 years ago, the airport has focused on expanding domestic direct-flight and international markets. To accommodate that shift, workers will demolish the old U.S. Airways terminal, which was designed to handle 32 million passengers a year and replace it with a new one that features ticketing, boarding, security, an updated international arrivals area, and a new parking deck. The new terminal building will cost USD 783.8 million, the new parking garage USD 258.8 million and new roadways around the airport USD 57.1 million. The project is expected to be complete in 2023.

In April 2018, the Authority announced that it had narrowed the list of potential design firms for the project down to four: AECOM; Corgan and Michael Baker; a joint venture of Gensler and HDR with Luis Vidal + Architects/ Cannon Design. Now the Allegheny County Airport Authority announced that the Pittsburgh-based engineering and consulting firm Michael Baker International has been awarded a USD 8 million contract to assist in the airport’s Terminal Modernization Programme. The firm will join Gensler, HDR, and Luis Vidal + Architects in the project. In June 2018, the Authority hired Jacobs Project
Management to oversee the new terminal project, awarding the Dallas-based Jacobs a USD 12.8 million programme management contract over five other companies competing for the job. With partners signed on, designs to be unveiled soon and construction set to break ground before the end of 2019, the new landside terminal at Pittsburgh Airport is shaping up to be one of the region’s most significant development projects of 2019. As part of the design, the airport could provide a sensory room in the new terminal for special-needs passengers and for those with autism. The room would have calming features like special lighting and textured surfaces. If the airport moves forward with that plan, it would be only the third airport in the world to offer such a room. -- The airport is also the centre of other non-flight-related economic activity. The Alleghany County Airport Authority has a 3,000-acre non-residential development on the 8,800-acre property, and in 2014, the Authority allowed Consol Energy to drill oil and gas wells on the outer edges of airport land in exchange for USD 46 million and an 18% royalty.

BAHAMAS
The National Insurance Board (NIB) of the Bahamas will receive a cash flow boost in return for smoothing the BSD 139.1 million refinancing of Nassau’s airport operator, Nassau Airport Development Company (NAD), according to Dionisio D’Aguilar, Minister of Tourism & Aviation. NIB as holder of around 50% of the NAD debt being refinanced had effectively ensured the offering made to investors will be successful by agreeing to roll over into the new securities. The NAD offering, which closed on 21 December 2018, will refinance the airport operator’s second-tier participating debt tranche that carries a 2% fixed rate and 11% floating rate. The latter portion was frequently being deferred and rolled over, meaning it was accruing as a bill that had to be paid at some point in the future. Mr D’Aguilar reiterated his belief that the NAD refinancing is a ‘win-win all around’, for besides aiding NIB’s cash flow, it is also projected to help NAD turn a net profit for the first time in its decade-long history. The ‘Lynden Pindling International Airport’ operator was frequently deferring payment of the floating 11% and rolled it over for future payment. The NAD’s total outstanding debt stood at BSD 522 million as at end-June 2018, with the participating debt accounting for BSD 125.3 million of that sum then. The most senior debt tranche added a further BSD 396.7 million. with the airport operator’s total cash on hand pegged at BSD 57.8 m. NAD’s financial statements for the year to end-June 2018, released to investors as part of the offering materials, reveal that its net comprehensive loss fell by almost BSD 10 million year-over-year - dropping from BSD 14.153 million to BSD 4.371 million as it slashed losses by some 70%. The improved financial performance was driven by increased passenger traffic stemming from Baha Mar’s full opening, plus fee increases, both of which contributed to significant hikes in passenger processing and facilities fees. Passenger facility charge revenue grew by 15.5% or over BSD 7 million, rising to BSD 52.508 million, while processing fees were up by 51.4% from BSD 7.525 million to BSD 11.396 million. As a result, total operating revenue jumped from BSD 77.028 million to BSD 89.396 million, a 16% rise that put NAD closer than ever before to covering both operating expenses and BSD 68.473 million in financing costs. The airport operator is projecting that it will turn a comprehensive profit of BSD 2.56 million for its current financial year to end-June 2019, driven by further increases in passenger facility and other forms of revenue. Its bottom line has previously been weighed down by interest costs associated with the BSD 522 million debt taken on to redevelop Nassau Airport into a world-class facility.

The Nassau Airport Development Company’s (NAD) lease to manage Lynden Pindling International Airport (LPIA) has been extended by a further 20 years to 2057. The revelation is contained in the just-released request for proposal (RFP) for the development of an airport hotel at The Bahamas’ major gateway - a project that has effectively been on the drawing board for at least seven years. In April 2007, NAD signed a 30-year lease with the government to manage and operate LPIA on a commercial basis while providing Bahamians with opportunities for business and investment. In 2019, the lease was extended a further 20 years to 2057. No further details on the rationale for the lease
extension, or its terms, were provided in the bid documents. There was also no mention of whether the contract with NAD’s operator, the Canadian-headquartered Vantage Airport Group, will be extended beyond its current expiry date of April 2019. Vantage manages NAD on behalf of the latter’s owner, the government, with the corporate structure designed to enable it to operate as a private entity with no political interference.

TRINIDAD & TOBAGO
The Government has approved construction of a new terminal building and supporting infrastructure at the ‘ANR Robinson International Airport’ in Crown Point, Tobago. The National Infrastructure Development Company (NIDCO) has been given the mandate by the Government, to oversee and manage the project. Consultants ACQ & Associates have been engaged by NIDCO to facilitate the land acquisition process of the project and will be conducting social surveys in the Crown Point area to gather information for the initial phase of the project.

According to Finance Minister Colm Imbert a request for financing the world-class airport to the Andean Development Bank (CAF).

While the Cabinet has given the green light for a TTD 500 million terminal in Tobago, Port of Spain’s Piarco Airport also needs an injection of capital expenditure for necessary upgrades that would include proper in-transit facilities. The General Manager of the Airports Authority (AATT), Hayden Newton, told the Public Accounts Committee of the Parliament that the airport had been “ineffectively” designed and the work done on it was of poor quality. He said the airport was not designed for in-transit passengers and did not have appropriate facilities for them. He told the Committee that the Authority was cognisant of the fact that it would need to upgrade ageing infrastructure. The AATT was aware of the challenges of the current economic climate and had worked and tried to find solutions, he said, but had to look at renewing the facilities. The Manager of Engineering Services at the Authority, Racquel Miller, said rehabilitation would cost approximately TTD 400 million. Newton said when benchmarked, AATT ranks second in terms of infrastructural development in the region.

JAMAICA
Airports Authority of Jamaica (AAJ) President, Audley Deidrick, says public-private partnerships (PPPs) will be pivotal in generating an estimated USD 78 billion in additional investments needed for airport infrastructure developments globally over the next four years. Mr Deidrick said data from a recent Airports Council International (ACI) research conducted in 50 countries indicate that planned airport investments from 2018 to 2022 total USD 355 billion, as against the required USD 433 billion, based on forecasts for increased passenger traffic. He was speaking at the opening ceremony for the second annual two-day aviation seminar, jointly hosted by the AAJ, Jamaica Civil Aviation Authority (JCAA) and Aeronautical Telecommunications Ltd (AEROTEL), in New Kingston on 6 December 2018.

The AAJ President noted that airports, by nature, require expansive and extensive infrastructure developments at intervals rather than incrementally, to meet passenger growth forecasts. “Capital intensive infrastructure, such as airports, seaports and highways, can only be adequately funded with the help of private capital [as obtains with] public-private partnerships,” he pointed out.

Jamaica’s two major international airports, Norman Manley in Kingston and Sangster in Montego Bay, currently operate under the PPP framework, through arrangements forged between the Government and Mexican entity, Grupo Aeroportuario del Pacifico S.A.B. De C.V. (GAP). “This is not just a Jamaican scenario. It is a worldwide phenomenon that has taken on increasing importance and practice over the last 30 years. Jamaica has simply joined the game early, to our benefit,” Mr Deidrick added. Public-Private Partnerships was among the topics for discussion during the two-day seminar, held under the theme ‘Air Transport as an Engine of Economic Development in Jamaica and the Caribbean’. The event formed part of Jamaica’s observance of International Civil Aviation Day on 7 December 2018, in commemoration of the establishment of ICAO in 1944.
ISRAEL
Prime Minister Benjamin Netanyahu inaugurated the new ‘Ramon Airport’ 18 km north of the Red Sea resort town of Eilat on 21 January 2019, releasing Eilat from its small old airport, which blocked the main part of the city and made development and change in the beautiful desert town impossible. Located in the Timna Valley, Ramon is the first civilian international airport built in Israel since independence. Named after Ilan and Assaf Ramon, the first and only Israeli astronaut and his crashed fighter pilot son, it is designed to handle up to 4.5 million passengers annually. Speaking at the ceremony, Netanyahu said: "This is a great project. We are building and developing the country for our children and grandchildren. Here at Timna, we are making the Negev and the Arava bloom, and adding another element to the vision of building the Negev. Today, we are expanding our civil aviation revolution many times over. Netanyahu added: "This airport comes on top of Ben Gurion Airport at Lod. It will be bustling with domestic and international activity. We will add another civilian airport as required at times of emergency, so that the civil aviation artery essential to the country will not be cut off. We adapted the length of the runways to the size of airplanes, so that everyone will be able to take off and land here. We are expanding access to the Negev by paving roads, expanding communities, and taking care of Jewish and non-Jewish citizens.”

The Ramon Airport terminal, designed by Mann Shinar Architects, is capable of managing up to 2 million passengers annually and will have its capacity expanded so that it can welcome 4.2 million travellers by 2030. It is equipped with a 3,600-m by 45-m runway and has apron parking space that can accommodate up to nine large and wide-body aircraft. The airport also features freight-handling services.

The new airport will serve as an emergency alternative to Tel Aviv’s Ben-Gurion Airport. Initially it will handle domestic flights only operated by Israeli airlines Arkia and Israir. International airlines including Ryanair, Wizz Air, EasyJet, SAS, Finnair, and Ural will start offering services at a later date.

A total of ILS 1.7 billion (USD 455 million) has been invested in the development of the airport since construction started in 2013. The Israel Airports Authority (IAA) changed the original plans for the Ramon project during the 2014 Gaza war. "In an emergency, not only will Israel's entire passenger air fleet be able to land and park there, but also additional aircraft,” said the IAA. A 26 m high and 4.5 km long ‘smart’ anti-missile fence has reportedly been installed in and around the airport to protect flights landing and taking off from Ramon Airport which lies close to the border with Jordan.

CHILE
The country is fine-tuning a strategy to expand its airport infrastructure in order to deal with rapidly increasing passenger traffic, a plan that includes renewing the concessions for several airports and modernizing secondary domestic terminals. During a conference held at the Engineers’ Guild in Santiago, Claudia Carvallo, advisor to the Public Works Ministry's (MOP) Airport Division, said the Government plans to tender studies to determine the infrastructure shortfalls in the airport network. The first of the studies will cover the airports of the central-south zone (Los Ángeles, Chillán, Pucón, Valdivia, Araucanía, and Concepción).

"The idea behind these studies is to detect infrastructure deficits for commercial operations, as there aren’t commercial operations at Los Ángeles, Chillán, and Pucón, but these are destinations that low-cost airlines are interested in,” Carvallo said. Another part of the plan is the development of airport masterplans. The official said that the drawing up of these plans will also be tendered by zones, with the first bidding process starting by year-end 2018.

On concessions, the Government is looking to jumpstart public-private alliances and that, for the first time in Chile, authorities are mulling tendering concession packages that would include more than one airport, according to Carvallo. MOP is looking at tendering the concessions for the Carlos Ibáñez del Campo (Magallanes region) and Balmaceda (Aysén region) airports as one contract.
Carvallo also unveiled the long-term plan for the airports that currently operate under concessions, with the exception of Calama's El Loa which was not mentioned:

- **Chacalluta (Arica and Parinacota)** - Second concession to be tendered shortly with a budget of USD 99 million. Works under the new concession include: Expansion of the airport to 10,000 m². Expansion of the aircraft parking space. Expansion of the parking lot. New aeronautic complex. Works expected to begin in 2020.

- **Iquique's Diego Aracena (Tarapacá)** - fourth concession awarded in 2017 to Aport with a budget of USD 60 million. Works under the new concession: Expansion of the terminal to 20,000 m². Adding 3,000 m² of aeronautic installations.

- **Andrés Savella airport (Antofagasta)** - Expansion of the runway to be executed by MOP instead of the concessionaire Aport which is developing a real-estate project in the area of the concession. It entails the construction of several installations to give logistical support to the airport. The works will be financed by the concessionaire in exchange of a small extension of its contract. Installations include a new cargo area and a bus terminal.

- **Copiapó’s Desierto de Atacama (Atacama)** - Preliminary project for the second concession to be tendered at the end of 2018. This draft will serve as reference for the upcoming concession tender.

- **La Serena (Coquimbo)** - New concession to be tendered in 2019. MOP ruled out a project to build a new terminal at Tongoy. Carvallo said "both projects are profitable but [the new La Serena concession] is more profitable." Works under new concession: Expansion of the terminal to 10,000 m².

- **Santiago’s Arturo Merino Benitez (Metropolitana)** - Concession awarded in 2015 to consortium Nuevo Pudahuel with a budget of USD 650 million. Works in progress on a new 157,000 m² international passenger terminal. Expansion of the existing terminal by 9,000 m². Expanding the parking lot. Addition of five boarding bridges. Carvallo added that the concession has an ‘investment trigger’ in case of the need for further expansions. To that end, MOP is seeking to expropriate 640 hectares of land.

- **Concepción’s Carriel Sur (Biobío)** - Second concession awarded in 2016 to a consortium made of Icafal Construcciones and Icafal Inversiones, S.A., a Chilean investment firm that owns and manages companies operating in different sectors, such as public and private sanitation, railway, agribusiness, and transportation. The budget is USD 36 million - Works in progress: Expansion of airport surface area to 12,000 m². Works expected to finish in 2019.

- **Puerto Montt’s El Tepual (Los Lagos)** - Fourth concession awarded in February 2018 to a consortium made of Sacyr and Agunsa with a budget of USD 35 million.

### Green Airports

The New York State Public Service Commission (PSC) has approved the Port Authority of New York and New Jersey’s (PANYNJ) request to proceed with renewable solar power projects at John F Kennedy International Airport (JFK), which will help the agency meet its aggressive greenhouse gas (GHG) emission reduction goals. PSC’s action allows the Port Authority, in collaboration with New York Power Authority (NYPA), to move forward with plans to create more than 10 MW of on-site solar facilities at JFK, including a 5-MW solar generation facility that will offer power at reduced rates to nearby communities. Residents, particularly those in low-income neighbourhoods, would have first access to purchase solar-generated renewable energy at a reduced rate from their normal utility bill. The facility would be sited on a portion of JFK’s long-term parking lot. The project is part of NYPA’s interim target to lower GHG emissions 35% by 2025 and long-term reduction goal of 80% by 2050. JFK’s solar initiative is expected to reduce CO2 emissions by 4,374 t annually.
The Port of Seattle is set to make Seattle-Tacoma (Sea-Tac) International Airport the first in the US to be heated completely by renewable natural gas. The Port has solicited proposals to supply renewable natural gas to Sea-Tac Airport’s boilers and bus fuelling systems that account for more than 80% of the Port-owned emissions. Also known as biomethane, the renewable natural gas (RNG) is produced by the decomposition of organic matter. Port of Seattle aviation environment and sustainability director, Arlyn Purcell, said: “If we can attract a project developer to supply the airport, this will spur more opportunities to feed the current gas pipeline with RNG rather than have landfills or digesters flare the gas on-site or allowing their methane emissions to escape into the air.”

The Port of Seattle has adopted greenhouse gas reduction goals as part of its ‘Century Agenda’ and is looking to cut emissions from its own operations by 50% from 2005 levels by 2030, and to be carbon neutral by 2050. It believes that replacing fossil natural gas with RNG will place the Port ahead of its 2030 target and well on the way to achieving the 2050 goal. The Port’s top legislative priority is advocating for a clean fuel standard for the state of Washington in the upcoming legislative session.

Gevo Inc. has joined with the San Francisco International Airport (SFO), CA, certain airlines and other industry participants for the use and advancement of sustainable aviation fuels (SAF), a low-carbon and sustainably produced alternative to conventional, petroleum-based jet fuel. Gevo has signed a memorandum of understanding (MoU) with a group of eight airlines and certain fuel producers to work cooperatively on expanding the use of SAF at the airport. The consortium, initially formed in September 2018, is the first of its kind to include fuel suppliers, airlines, and airport agencies in a collaborative effort to accelerate the global transition to SAF.

The four airlines – United Airlines, Alaska Airlines, American Airlines, and Cathay Pacific – represent nearly 70% of all flights at SFO, while the four fuel producers include SFO’s two primary suppliers, Chevron Corporation and Shell Oil Company, along with Neste and LanzaTech Inc. Together with SFO Fuel Company, the Airport’s fuel consortium, Gevo and these partners will strive to increase SAF supply globally and at SFO. Airlines at SFO currently use more than 1 billion gal of jet fuel annually. If SAF suppliers are able to increase the global supply from the current 5 million gal/year to 500 million gal/year, the use of SAF could prevent nearly 4.8 million t of greenhouse gas emissions per year.