



Size doesn't matter

Dr John Kasarda explains how a smaller Brazilian airport aims to revive its fortunes by transforming itself into an airport city.

Great things were expected of Belo Horizonte's Tancredo Neves International Airport (TNIA) when it triumphantly opened for business in March 1984.

The gateway, more commonly known as Belo Horizonte Confins Airport, was built to accommodate rapid passenger and cargo growth and provide a major stimulus for the economic development of Brazil's third largest metropolitan region.

Its original design, at full build-out, called for two long-range runways and four expansive (300,000sqm) passenger terminals, along with a complement of airport service and cargo facilities capable of handling up to 20 million passengers and 150,000 tonnes of cargo annually.

The only trouble is that the anticipated growth never happened and the passengers never came. Indeed, the growth has been so slow that on its 20th anniversary in 2004, just 388,580 people used its single five million passengers per annum capacity terminal and less than 26,600 tonnes of cargo was handled at the airport.

Worse still, while TNIA was languishing, the antiquated, cramped and dangerously congested (but convenient) downtown airport (Pampulha), which it was built to replace, continued to expand well beyond its capacity.

With few passengers and limited air cargo activity, little commercial development occurred in the TNIA area and, in the eyes of many, the new airport was considered an expensive failure.

Airport planners and government officials were disappointed and perplexed. A relatively affluent metropolitan area of 5.3 million people, Belo Horizonte ranked among the five largest urban economies in South America. In fact, the \$100 billion-a-year GDP of the State of Minas Gerais, where it is located, is comparable to those of Norway, Chile and Venezuela.

Furthermore, Belo Horizonte is situated at Brazil's crossroads of major east-west and north-south highway and rail networks with rich tourist attractions and aviation-oriented industries such as digitised auto parts, electronics and biotechnology. Yet, TNIA was not able to leverage these assets.



Barriers to success

TNIA nicely illustrates the critical point that accessibility is as important as location in airport and regional economic development.

Its location 38 kilometres from downtown Belo Horizonte meant that quick and easy ground transportation links were essential, yet the main access highway to the airport was a serious constraint. In fact, at certain points, the highway was narrow, uneven and congested, and had some potentially dangerous intersections. As a result, travel time to the airport from the city centre took around an hour, sometimes more.

A compounding accessibility factor was that most of the growth of aviation-oriented firms (cargo as well as business travellers) was on the opposite side of the metropolitan area. With TNIA's limited domestic flights and only a few international services, many in the region found it more efficient to drive up to six hours to the much larger international airports at Rio de Janeiro and São Paulo or use the old Pampulha Airport to connect to these airports.

Likewise, very little regional air cargo was being shipped through TNIA. Indeed, "leakage" studies revealed that 90% of the considerable

air cargo exports of the State of Minas Gerais were being trucked to Rio's and São Paulo's airports. This was placing the state's time-critical industries of micro-electronics, pharmaceuticals, medical devices, diagnostics and high-value perishables at a strategic disadvantage since hours (not days) had become the delivery-time mantra.

The Governor of the State of Minas Gerais placed a high priority on reducing these constraints so as to revitalise TNIA and boost industrial recruitment and regional economic growth. And the Minas Gerais Secretariat of Economic Development, in partnership with various other government bodies that included Brazilian airport operator INFRAERO, responded to the challenge.

As a direct result of this new wave of support for the airport, reinforcing programmes were initiated to establish the regulatory framework, incentives and hard and soft infrastructure at and around TNIA for it to become Brazil's first industrial airport.

Industrial airport strategy

Legislation was put in place in 2001 and 2002 by Brazil's Ministry of Finance (through its Federal Reserve and Customs Secretariats) to establish the country's first industrial airports.

The primary objective of the legislation was to create a speedy, flexible, cost-saving business environment at and around selected airports to attract new industry and expand trade. And in 2004, the Ministry of Finance and INFRAERO selected TNIA as the first among four designated commercial airports to move forward with the new strategy.

In line with this new policy, a special economic zone was established at TNIA that provided a number of investment promotional privileges. Chief among these was the suspension of taxes on imported parts and components to firms located in customs-regulated zones on industrial airport property.

The introduction of a fiscal drawback system means that duty imported materials, parts, components and other merchandise can enter the zone tax-free, and duty is only paid on them if they enter the domestic market. If they are re-exported, typically after value-adding manipulation, no taxes are charged. In addition to manufacturing, products may be cleaned, tested, packaged, kitted, broken down to smaller quantities and even destroyed while in the special customs zone.

New software developed by INFRAERO for the monitoring, valuation and taxation of goods entering and exiting the zone was implemented to speed up the customs clearance process while improving transparency and accuracy. The goal was simple – less bureaucracy, lower costs and greater operational efficiency for the import, storage and export of goods at TNIA.

Firms locating in TNIA's special economic zones not only receive reductions in federal taxes and tariffs but also receive benefits from reductions in local and state taxes, along with logistics improvements provided by airport area municipalities and the state.

Improving accessibility

All the efforts to leverage TNIA's industrial airport strategy would, however, likely have counted for nothing if the gateway's serious accessibility problems had not been successfully addressed.

The accessibility problem included the need to overcome poor local and regional transportation linkages as well as limited air service connectivity.

In 2005 work started to substantially improve the main airport access highway (MG-010) from the city of Belo Horizonte and most of this is now complete. By the end of 2007, it will be a double-lane limited access road in both directions with smoothly merging traffic flows replacing dangerous intersections. When open, the commute time to the airport from downtown will be reduced by at least 30 minutes.

As a major first-impression marketing tool, the airport's access highway to the city is being 'beautified'. In the future, much of the highway will also have three-lane expressways in each direction with a possible metro rail link (aero-train) running down the centre.

It was previously noted that TNIA is very difficult to access by many of Belo Horizonte's largest and most important firms because of their location on the outer edges of the opposite side of the metropolitan area. A new northern ring expressway is therefore being constructed from these commercial nodes to a major exchange near the airport.

By speeding up the access of major commercial clusters throughout the metropolitan area to TNIA and reducing traffic congestion on other important arteries, the new northern ring road will also make Belo Horizonte and its suburbs a more attractive location for time-critical industries, which will generate additional air cargo for TNIA.

In terms of TNIA's limited flight connectivity, INFRAERO stepped to the plate again in 2005 by forcing almost all of the flights at Pampulha to move to TNIA. The decision has obviously had a dramatic impact on traffic and air services. A total of 3.7 million passengers passed through Belo Horizonte Confins Airport in 2006 (a ten fold increase on 2004) as the gateway welcomed 45,437 aircraft movements – a 330% increase on the 10,650 flights handled at the airport just two years earlier.

The airport is refusing to rest on its laurels, however, with the Minas Gerais Economic Development Secretariat working diligently to bring more freight forwarders and third party logistics providers to Belo Horizonte to reduce TNIA's air cargo "leakage" and attract more international flights.

It has, to date, been modestly successful in increasing international air cargo charters and international passenger service and is currently in discussions with major US and European airlines as it looks to expand international services out of Belo Horizonte.

What effect?

TNIA is now in an expansion mode with passenger and cargo services showing strong on-going growth.

Action plans are being initiated for a second terminal and future second runway and a number of firms have now been located in the gateway's special economic zone. GOL Airlines recently opened a large maintenance, repair and overhaul (MRO) facility at the airport. Elsewhere, new commercial developments are springing up in the airport's environs, fostering the beginnings of an airport city.

Indeed, since 2003, nearly 100 new electronics firms have located in the Belo Horizonte metropolitan area, many near TNIA. Such development is expected to boost air cargo volumes in the years ahead and attract more supplier firms to TNIA's newly evolving airport city.

Without doubt there is still a long way to go before TNIA achieves its original vision in scale and local economic impact, but an important start has been made and this progress is highly encouraging.

Understanding and addressing constraints of accessibility and connectivity have proven keys to this progress. ➔

