

# Aerotropolis: modelling cities after airports

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The impact connectivity has had on our lifestyles is nowhere more prominent than in ultramodern airport cities, where having the world on your doorstep is the ultimate convenience and top selling point.

Traditionally, airports have been built much like add-ons to busy cities. The need to cut down on travel times and the associated hassle has led to the development of bigger and better connected airports, but so far, they have mostly been relegated to the outskirts of our cities.

Now, a number of initiatives around the world are aiming to shift this pattern on its head and promote the idea of “aerotropolis”, a fully integrated airport city, built from scratch with international connectivity at its core.

The concept was originally championed by John Kasarda, director of the Centre for Air Commerce at the University of North Carolina and author of “Aerotropolis: The Way We’ll Live Next”.

In simple terms, an aerotropolis is an urban region whose infrastructure, land-use, and economy are centred on an airport. Kasarda, who has conducted more than 20 airport city studies for organizations such as the International Civil Aviation Organization (ICAO) and the World Bank, believes that “the functional and spatial evolution is transforming many city airports into airport cities.”

“Cities used to be almost exclusively destinations and airports solely places of departure,” Kasarda writes. “Now airports are becoming destinations and cities places of departure as their residents and workers increasingly travel to emerging airport cities and aerotropolises around the world.”

Statistics seem to give some weight to his vision: before 2034, worldwide passenger traffic will likely increase to approximately 14 billion, according to IATA, and world air cargo traffic is expected to nearly triple.

This type of living space is primarily focused on hosting business and retail opportunities, with some space dedicated to residential and leisure properties. Since they tend to be brand new, a common feature of cities modelled on the aerotropolis mould is that they have state-of-the-art urban infrastructure and connectivity, and are often seen as testbeds for the future “smart city”.

From the Netherlands, South Africa, Germany, the US and South Korea, investment keeps pouring into airport cities, with developers and entrepreneurs equally keen to see what opportunities this type of living can bring up.

## **Amsterdam’s Zuidas: a new place to work and play**

Amsterdam’s main financial hub and business district comes very close to Kasarda’s concept. Known as Zuidas, which literally means “southern axis”, the area is strategically placed between Amsterdam city centre and Schiphol Airport.

Covering an area of the size of 180 football fields, Zuidas is situated only six minutes by train to Amsterdam Schiphol Airport and 15 minutes to Amsterdam’s canal district and city centre. As of 2016, approximately 2,300 residents were living in the neighbourhood, which has evolved to become a dynamic part of the Dutch capital.

With 2,000 housing units already completed, the aim is that by 2030, Zuidas will see a total of 7,000 new homes built, ranging from studio apartments, student housing, mid-price and social housing and penthouses with panoramic views.

The district also hosts over 700 companies, including big names such as Google, AkzoNobel and ABN AMRO. The ultimate goal is to make the area as inviting as any other part of Amsterdam, and the next few years will see more and more schools, kindergartens, shops, cafes and restaurants pop up to breathe more life into this stretch of land.

## **South Korea’s technological utopia**

Songdo International Business District is the world’s first purpose-built “smart city” and the largest private real estate development in history, with a price tag of \$40bn to date.

Also dubbed as South Korea's High-Tech Utopia, Songdo is a futuristic, highly commercialised area connected to Incheon International Airport via Korea's longest bridge in just 18 minutes travel time.

Songdo's tagline is advertising a city "located within a three and a half hour flight to one third of the world's population".

Built on 1,500 acres of reclaimed land, it started off as a gateway city to central Korea from Incheon Airport, but thanks to heavy investment, the district has transformed into a technologically advanced utopia. Residents can control their lighting, heating, ventilation and air conditioning usage all within a single panel, enjoy state of the art recycling facilities, and all data is tracked, stored and shared between medical, transport, housing and other public service associations.

Around 40% of the city has been set aside as green public space and the city also contains 20 million square foot of LEED-certified space.

"Songdo offers residents, visitors, and businesses an idyllic and sustainable place in which to live, work, and play," its developers promise.

## **Riverfields: a new city within "Africa's workshop"**

South Africa's own aerotropolis came to be in 2011, when Mayor Mondli Gungubele announced plans to develop a new business and residential district within the Ekurhuleni Municipality of Gauteng.

"If rail, road and sea travel constitute the tried and tested modes of transport of a bygone era, research shows that air travel is the future," Gungubele said in his State of the City address at the time.

The region of Ekurhuleni – often referred to as "Africa's workshop" thanks to its industrial and manufacturing power, is linked to Tambo International Airport via the Albertina Sisulu Corridor, identified as a prime investment and development location that is on course of being transformed into "a sustainable urban node that facilitates a thriving economy and community."

Riverfields Development, as the new residential and business project is known, is located only a twelve-minute drive away from Tambo airport. The City of Ekurhuleni has now given the go-ahead for a 30-year plan that aims to create Africa's first aerotropolis.

The project is still ongoing, but aims to become a massive new urban conglomeration within the north of the Ekurhuleni, and its proximity to the airport is hoped to open up the area to considerable international investment. Over the next two years, there are plans to finalise a new 80,000 m<sup>2</sup> shopping centre, schools, a sports and community centre, a residential estate and social housing.

## **Helsinki's Aviapolis takes off**

One of the most advanced airport city developments in Europe can be found in close proximity to Helsinki Airport in Finland.

The City of Vantaa is currently developing Aviapolis, identified as the largest and strongest growing business area and employment centre in the Helsinki region, and the whole of Finland. Its developers attended last year's Smart City Expo in Barcelona to highlight some of the opportunities an airport can offer its nearby regions.

Today, Aviapolis is accessible to 150,000 people by train in less than half an hour and it is home to more than 18,000 residents, with many more residential units planned in the near future. It also hosts 1,900 companies employing 35,000 people and new connections are to be forged thanks to the Ring Rail Line, connecting Helsinki Airport to Helsinki city centre.

Thanks to its location, residents are less than an hour away from St Petersburg, less than three from London and just under nine hours away from New York.

The area also sports some household visitor destinations such as Jumbo, the second largest shopping centre in the Nordic countries, the Flamingo Entertainment Centre, featuring a spa, hotel, restaurants, a bowling alley and cinema, as well as the International School of Vantaa. A new entertainment and media centre is primed to open 2018.