Manston Airport DCO application from RSP Ltd: Personal Submission

I am a resident of Ramsgate, living directly under RSP's proposed flight path, a Town Councillor and a member of several community groups.

I object in the strongest terms to the granting of a Development Consent Order to RSP Ltd to run a 24-hour cargo hub at Manston Airport.

My principal reasons are:

1) No evidence of need: I understand that a DCO successful application must show an overriding national need, and that this is particularly the case when an application is made concerning property belonging to a third party.

   I have attended an RSP consultation event, read their documentation and consulted other evidence. From this it is clear to me that RSP's plans rely substantially on taking business from other airports - so the air cargo capacity on which RSP intend to build their business is already in place, but located elsewhere in the country.

   Furthermore, Stansted Airport's Sustainability Plan (#A attached) shows that it is operating effectively on very high volumes but retains considerable spare capacity.

   From this I conclude that that a DCO will not meet an overwhelming national need as the UK's needs are already being met/ are capable of being met elsewhere.

2) No evidence of capacity: RSP Ltd is effectively a start-up company seeking to achieve levels of delivery appropriate to a huge corporate.

   RSP's website lists the members of its 'Professional Team' and 'Strategic Team' – but on even cursory examination these simply prove to be either consultancies with whom RSP work or delivery agents such as their lawyers and PR company.

   If any of the groups I am involved in were to list all their partners, their accountants and their stationery suppliers as members of their 'team', not only would the list run to many webpages, but also community members and funders would have a right to assume they all had direct roles in delivering our work, though this would not be so.

   Of RSP's six listed Directors, only one has any airport experience.

   Reports such as that completed by Avia Solutions in 2016 for Thanet District Council (#B attached) spell out the long lead-in time and huge financial resources that would be required to get Manston up and running again. RSP have not provided details of their financial backing or their business plan, and their Companies House accounts filings are not up to date, so we have no evidence that they have in place the levels of funding and detailed business and financial strategy that success would require.

3) 'Severe adverse effects on quality of life': RSP's own PEIR documentation highlights the negative effects on quality of life that they cheerfully admit their proposals would have on residents in several areas, including Ramsgate. They allude to the effects of noise, recognising its negative impact on physical and mental health.

   Many national and international reports document the many and varied negative effects of living near an airport on residents' health. A summary of these from The Independent in 2013 ('Why living near an airport could be bad for your health', #C attached) illustrates the damaging effects of noise on public health.

   Other adverse effects on health not mentioned by RSP would occur through air pollution (from large, heavy cargo planes, from the many HGVs that would be needed to shift goods away from the airport, and from the traffic jams that would inevitably result on Thanet's inadequate roads), light pollution from night-time operations and the knock-on effects on health of disturbed sleep.

   Thanet is an area where health is already poor. Public Health England's Local Authority Profile for Thanet, 2018 (#D attached) shows Thanet as one of the 20% most deprived authorities in England, with nearly a quarter of children living in low-income families. Life expectancy varies by economic status but overall is lower than the national average. Two of the most deprived wards in England lie directly under the proposed flight path.

   RSP's plans, if approved, would have devastating effects on the health of my community, widening inequalities and reducing overall wellbeing.

4) Impact on young people: As a former teacher, College lecturer and head of a national lifelong learning charity, I am particularly concerned about the potential impact of a DCO on young people in Thanet – on their health, on their learning, on their job prospects and on their quality of life. We have seen that health and quality of life for all residents in Ramsgate and surrounding areas would be adversely affected if these proposals were to be realised – but the potential impact of a DCO on young people's education and employment prospects would be just as grim.

   There are five schools directly under the proposed flight path. I was one of two teachers who attended the hearings at the Winter Gardens in Margate last month to speak about my experience of teaching near Heathrow. Every ten minutes we had to pause our lessons for several minutes while a plane went over. Over the course of a year, the children I taught missed out on up to one day a week's teaching and learning. Unsurprisingly, their educational outcomes were often disappointing.

   In Thanet, educational outcomes are already poor. Strenuous efforts are being made in our schools to improve standards and inspire young people, and tiny improvements are starting to be seen. It would be deeply ironic if these were curtailed by noise pollution from a new cargo hub at Manston.

Some of those few residents who are inclined to support a DCO are doing so because they believe the airport will generate employment for our young people – but this is unlikely to be the case.

Brendon Sewill in his 2009 report uncompromisingly entitled 'Airport jobs – false hopes, cruel hoax' (#E attached) argues that airports and their backers have a vested interest in persuading the public that airport expansion will bring jobs, but that their estimates are often wildly over-optimistic: *"With the current recession, when thousands are losing their jobs, and millions fear that they may do so, any promise of more jobs is welcome. Thus the suggestion that a new or expanded airport will create more jobs is a sure way to attract support from the public and a fair wind from the planners. Naturally airport companies and airlines make the most of this. Yet because they have a commercial interest in magnifying the number of new jobs, their figures need careful examination. False hopes can prove a cruel hoax."* (p. 5) In cargo airports in particular, numbers of jobs are severely limited as many operations are automated.

Meanwhile, Thanet's expanding tourist industry is generating increasing numbers of jobs in the visitor economy. Visit Kent's press release in January 2019 (#F attached) shows Thanet achieved the largest increase in day visitors in Kent in 2017, and that tourism now accounts for some 19% of total employment in the District. But these successes and the jobs that come with them are under threat from the DCO, as few tourists will wish to visit an area where quality of life is so severely compromised as even RSP accept it will be if their proposals come to fruition.

A final irony is that RSP's DCO application has prevented the legal owners of Manston airport site, Stone Hill Park Ltd, from implementing their proposals to set up a business park offering training, links with local Colleges, apprenticeships and high quality jobs – exactly the thing our young people need. If the DCO succeeds, this encouraging prospect will be gone for good; if it does not, it will have suffered at least a severe delay.

For all these reasons I urge the Examining Authority to reject RSP Ltd's application for a Development Consent Order.

Tricia Austin Hartley

CT11 8ED

Commercial Viability of Manston Airport

AviaSolutions FINAL Report for Thanet District Council

September 2016

aviasolutions
A GECAS Company

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Glossary of Terms

- **Air Journeys:** Also referred to Journeys. A unit of measurement for the number of flights taken by passengers.
- **Air Traffic Movement:** Abbreviated to 'ATM'. Defined as an aircraft landing or taking-off for commercial purposes.
- **Belly-hold:** A term referring specifically to passenger aircraft (as opposed to freighters). This term refers to the hold of the aircraft that is utilised for the carriage of passengers' baggage and freight.
- **Capacity per ATM:** A unit of measure defined as the number of seats or freight capacity on each ATM. Often an average of a larger sample.
- **Capacity:** The total capacity of an airport or aircraft to transport passengers or freight.
- **Catchment Area:** Airports draw their passengers from within a catchment area. The size of the airport and its network affect the size of the catchment area. Typically, the smaller the airport the smaller the catchment area that it can draw upon.
- **Discovery Park Limited:** Also referred to as Discovery Park. An entity that is closely linked to Stone Hill Park Limited through shared ownership.
- **Freight per ATM:** A unit of measure defined as the number of tonnes of freight loaded on each ATM. Often an average of a larger sample.
- **Freight:** Also referred to as Cargo or Air Freight. This includes all shipments that are transported for commercial purposes on board the aircraft under an Air Waybill excluding 'Mail'.
- **Freighter:** An aircraft specifically designed for the transportation of freight. This type of aircraft has no seats fitted, and in their place, has a cargo hold.
- **Full Service Carrier:** An airline business model that includes carriers who have traditionally offered all services included in one ticket price. This includes carriers such as British Airways, Lufthansa, Air France-KLM and Virgin Atlantic.
- **IATA Airport Code:** A three letter code designated by IATA to many airports around the world. All major airports are assigned a code, the most commonly used in this report are.
- **Kent Airport Limited:** Formally Infratil Kent Airport Limited. An entity whose main purpose is the operation of Manston, Kent's International Airport.
- **Kent Facilities Limited:** Formally Infratil Kent Facilities Limited. An entity whose main purpose is the provision of facilities to the operator Manston, Kent's International Airport. This entity in effect owns the airport site.
- **London System:** Also referred to as London Area Airports. A term referring to six airports of London (LHR, LGW, STN, LTN, LCY, SEN).
    - London City - LCY
    - London Gatwick - LGW
    - London Heathrow - LHR
    - London Luton - LTN
    - London Southend - SEN
    - London Stansted - STN
- **Low Cost Carrier:** Abbreviated to LCC. Low cost carriers are one of the major airline business models. Major European LCCs include Ryanair, easyJet, Norwegian, Wizz, and Vueling.
- **Million Passengers per annum:** Abbreviated to mppa. A standard unit of measurement for airport capacity or throughput.
- **Narrow-Body:** A type of aircraft, typically distinguished as one which has a fuselage wide enough for one passenger aisle. Includes aircraft such as Boeing B737 series and Airbus A320 family.
- **Passenger Movement:** A unit of measure referring to the number of passengers arriving or departing from an airport.
- **Passenger:** Abbreviated to PAX. The fare paying passengers on board an aircraft. Excludes those travelling on non-revenue tickets such as airline employees.
- **Passengers per ATM:** Abbreviated to PAX per ATM. A unit of measure defined as the number of passengers carried on each ATM. Often an average of a larger sample.
- **Peak Demand:** The demand at its highest point for an airport. There are several forms of peak demand, these include a daily peak (often early morning) and annual peaks (often around holiday seasons).
- **RiverOak Investment Corporation LCC:** Also referred to as RiverOak. An American investment firm that is seeking to acquire the Manston Airport site.
- **RTK:** Revenue tonne kilometre. A unit of measure in the freight industry. Calculated as the tonnes uplifted multiplied by distance flown.

- **Stone Hill Park Limited:** Previously Lothian Shelf (718) Limited. The current entity that owns Manston Airport.
- **Unaccommodated Demand:** A term referring to the demand that cannot be accommodated at a particular airport or combination of airports due to it exceeding the capacity available.
- **Wide-Body:** A type of aircraft, typically distinguished as one which has a fuselage wide enough for two passenger aisles. Includes aircraft such as Boeing 767, 777 and 787 series and Airbus A330, A340 and A350 family.

1. Introduction

1.1. Context

Thanet District Council ("TDC") appointed AviaSolutions to provide independent advice on whether a re-opened Manston Airport might a have financially viable future as an operational airport.

The airport closed in May 2014 and the current owner, Stone Hill Park (formally Lothian Shelf 718), has submitted a planning application for a mixed-use development on the site, comprising 2,500 dwellings, general business and commercial areas which is reported to support the creation of up to 4,000 jobs, and a range of leisure and sports activities.

RiverOak Investment Corporation ("RiverOak") is an American investment firm that wish to acquire the Manston site and re-establish airport operations. The re-established airport would be freight focussed but would also offer passenger services along with ancillary businesses. RiverOak are seeking a Development Consent Order (DCO) under the Planning Act 2008 to compel the sale of the site as a Nationally Significant Infrastructure Project.

TDC is seeking guidance on whether the airport has a reasonable prospect of operating as a financially viable, standalone entity within the period of the Local Plan which extends to 2031.

AviaSolutions commenced this study on 13th July 2016.

1.2. Scope and Limitations

The scope of AviaSolutions work was set out in the procurement document issued in June 2016 by TDC and our proposal for services submitted in the same month. Specifically, the scope requested:

> "The Council requires an independent assessment advising whether or not it is possible to run a viable and economically sustainable free-standing airport operation from Manston. The Council is seeking advice from an independent expert aviation consultant who can make this assessment within the context of the national and international air traffic market, the viability of airport operations at a national and international scale and likely future developments in airport operations."
>
> *Source: TDC Briefing Document*

Our proposal and this subsequent report have been developed in the context of these requirements. It is therefore necessary to indicate specifically those areas which fall outside of the scope of our works, and to which we have given no credence in the application of our analysis. These areas include:

- Whether Manston Airport is an asset of national significance
- The effect of any scenario on the wider Kent economy, or subsequently the effect on the UK economy as a whole
- The legal, planning, environmental, or social effects of any scenario, or whether these elements would present any challenges
- The economic benefit or need for industrial or housing units in the Thanet area
- The comparison between any airport scenario and any other alternative use of the airport site
- Passing judgement on the use of the site beyond that of whether an airport may be viable
- We take a neutral view with regards to the local campaign groups, both those for and against the airport

It should also be noted that many of the stakeholders engaged by AviaSolutions sought to broaden the discussion to include a wide range of airport-related topics. Whilst this has provided useful context and highlights the political sensitivity of the airport, AviaSolutions study is restricted to commercial analysis and does not seek to provide any legal, environmental or socio-economic advice or comments.

1.3. Our Approach

AviaSolutions commenced the study with a review of the various documents that describe the history of Manston Airport, the local and national planning context and the current development proposals for the site. The two main aspects of our work however were seeking the views of stakeholders relevant to the specific topic of airport commercial viability, and an extensive analysis of the relevant air transport market.

In conjunction with TDC, we agreed the primary and secondary stakeholders to be contacted for this engagement. Our interview programme was not intended to canvass the views and opinions of the many parties and individuals with views, many strong held, about the airport and its future. It was intended to seek facts about its historic development and proposed future development from the two prospective developers (Stone Hill Park and RiverOak) and from a range of parties within the air transport and freight industries. It is these parties and their like who will determine whether commercial aviation activities could be viable on the Manston site. Whilst conducting these interviews, many companies and individuals spoke on the condition of anonymity.

Our analysis added to our existing knowledge of the air transport industry the specifics that are associated with Manston Airport, namely its historic traffic performance, details of its catchment area, and the experiences of previous airline and freight users of the airport. AviaSolutions has developed two models specifically for this study. The first assessed the capacity of six airports serving the London Area and how future passenger and freight traffic might be distributed between these airports including Manston, and the second was a financial model to assess the potential cashflow outlook for Manston Airport.

1.4. Report Structure

In this report, we first summarise the history of Manston Airport and describe the different visions of its future put forward by Stone Hill Park and RiverOak. We next describe different scenarios for possible air transport use of Manston Airport, before investigating the passenger and freight traffic potential of each scenario. We then describe our financial model, setting out the basis of our revenue and cost assumptions if Manston were to be brought back to use as an operational commercial airport. Finally, we bring together the different threads of our analysis and reach our conclusions on the financial viability of Manston Airport.

1.5. AviaSolutions' Qualifications

AviaSolutions has been appointed to provide an independent assessment of the prospects for Manston Airport. We are is an aviation management consultancy, established in 2001. In October 2012, GE Capital Aviation Services acquired 100% ownership, adding consultancy to the leasing business for which it is known. Since then, AviaSolutions has grown rapidly, building an airline business in addition to our traditional airport advisory services. Over the past 15 years AviaSolutions has earned a strong market reputation in a number of key areas:

- Airport Strategy and Support
- Airline Strategy and Support
- Airport and Aviation Transactions
- Air Service Development
- Regulation, Policy and Planning
- Passenger and Cargo Traffic Forecasting
- Route and Network Strategy
- Ground Handling
- Business and Commercial Advisory

2. Executive Summary

2.1. Summary

AviaSolutions was appointed by Thanet District Council ("TDC") to advise on whether viable airport operations could be re-instated on the site of Manston Airport. Following ownership by the Ministry of Defence, three separate private companies tried and failed to operate Manston Airport profitably and the airport closed in May 2014. TDC needs to prepare its next Local Plan looking forward to 2031, and has two proposals for the use of the site: an operating airport or a mixed residential, business and leisure development.

AviaSolutions has discussed the re-opening of Manston Airport with a number of organisations and individuals, and carried out a detailed assessment of the air transport market and the potential finances of a re-opened Manston Airport. On this basis of this work, we have concluded that it is most unlikely that Manston Airport would represent a viable investment opportunity even in the longer term (post 2040), and certainly not during the period of the Local Plan to 2031.

The assessment of financial performance of a re-opened Manston Airport is based on relatively favourable assumptions for Manston Airport. We would typically position the financial forecast as a 'High Case' as a number of tailwinds are required to deliver the financial forecast in terms of passenger and freight volume and the revenue yield that can be achieved. Throughout the research AviaSolutions has consistently taken a positive outlook with regards to the underlying demand assumptions. Specifically, this means that we have opted for the upper bounds of traffic, the upper bounds of unit operating revenue, the lower bands of unit operating costs, and minimal asset costs and capital investment requirements.

2.2. Background

Since the Ministry of Defence sold Manston Airport in 1998, three separate private sector investors have attempted to develop the airport as a viable commercial undertaking. These ventures have all been unsuccessful and have incurred substantial losses in the process. The airport closed in May 2014. TDC has undertaken extensive exercises to find new investors prepared to re-open the airport, but has failed to identify an appropriate party. One interested party, RiverOak Investment Corporation LLC ("RiverOak"), has though emerged from this process, and is interested in acquiring the site and developing Manston Airport as a freight airport. RiverOak has been critical of previous owners, considering that they were not sufficiently active in seeking to develop and market Manston as a freight airport. In contrast, the current owner of the site, Stone Hill Park Limited ("Stone Hill Park"), has brought forward plans to develop the area for mixed residential, employment and leisure uses. TDC has identified a need to understand whether an airport would be a viable use for the site, and whether there is a reasonable prospect of that occurring within the period of the Local Plan to 2031.

2.3. Historic Performance of Manston Airport

During its years of operation as a commercial airport, Manston had a range of air services to domestic and short haul Europe points, and handled around 30,000 tonnes of freight a year, almost exclusively imports of fresh produce coming on dedicated freighter aircraft. The scale and nature of the passenger traffic suggests that Manston has relatively few air journeys originating or destined for a catchment area of East Kent that it might reasonably be expected to serve: we estimate that demand from this catchment area is about a third of the size of the demand in a catchment area of Southend Airport. While we consider that a re-opened Manston Airport would attract some passenger services and regain freighter operations at a level similar to its historic performance, our financial assessment is that this would be insufficient to support financially viable operations of the airport.

2.4. Manston as an Overflow Airport for London

Manston is located in the South East of England, where there is a need for additional runway capacity. This issue has been researched extensively over recent years, including the Davies Commission which recommended in 2015 that a third runway be constructed at Heathrow. A decision on the new runway

capacity is expected to be made in October 2016. In addition to the recommendation for Heathrow, Davies also considered a second runway at Gatwick, opening up the possibility of alternative decisions, including of course that either both or neither runway may be approved. We have developed a detailed model of how future passenger and freight demand might be distributed around the six airports in the London area under different airport capacity scenarios, in order to assess how much unaccommodated demand would be generated by 2050. We have also assessed how much traffic might be attracted to a re-opened Manston Airport.

These traffic estimates have been inputs to a financial model which AviaSolutions has developed to assess Manston's viability to 2050. We have based our estimates of unit aeronautical revenue, commercial revenue and operating costs on those levels achieved at other UK airports of a similar scale to that projected for Manston. We have also assumed that the site could be acquired for £10 million, and that further capital expenditure of £27 million would be required to re-commission the site as a licensed commercial airport. We further assume that the business is financed initially through an equity injection from shareholders of £50 million with no debt funding.

The scenario recommended to Government by the Davies Commission is the construction of a third runway at Heathrow. Under this scenario, the forecast passenger traffic at Manston would initially grow to almost 2.5 million passengers per annum (mppa) immediately before the opening of the third runway in 2030, but would fall materially afterwards. Retained earnings would not become positive until around 2040, preventing payment of dividends to equity investors until around that date. EBITDA margin would become positive in the early 2030's and grow and reach 41% by 2050. On this basis, we would very much doubt that an informed private sector investor would consider an equity stake in Manston Airport.

The scenario which most supports the re-opening of Manston Airport is one in which no new runways are built in the South East of England in the period to 2050. In this scenario, forecast operating cash flow of Manston Airport is negative until 2025; re-financings of £20 million are required in both 2028 and 2029 to fund terminal expansion; and retained earnings remain negative until 2029 preventing the payment of dividends. Thereafter, financial performance improves significantly, but it is 2043 before EBITDA margin reaches 50%.

It should be noted that these conclusions are based on a set of assumptions that favour Manston Airport at all times, with examples including above market aeronautical yield, aggressive cost reduction projections and minimal acquisition costs, which, while in our opinion are achievable, would nonetheless require some significant management attention. This attention would be focused on two aspects, securing new business at advantageous aeronautical revenue per passengers from LCC's and structuring the business to take advantage of unit cost reduction through scale. . These would not be assumptions which AviaSolutions would suggest are presented as a Base Case to an Investment Committee considering the proposition, but rather ones describing a potential upside scenario. In our experience, it is likely that an Investment Committee would not consider investing on this basis.

This scenario of no runway development in the South East of England before 2050 is also a low probability scenario in our view. It also carries a high risk that a decision in 2016 not to commission another runway could be reversed at any time in the future. If Manston were operational at the time a decision were reversed the impact on the business would be considerable, and the decision is not one in which the owners would have any control whatsoever To give just one minor illustration of the risk, it was reported in early September 2016 that Heathrow Airport Limited was considering requesting permission to operate an additional 19,000 ATMs each year, which if granted would reduce the traffic that might spill to Manston.

The other runway scenarios which collectively are more likely than 'no runway development', produce worse financial forecasts for Manston Airport.

2.5. Conclusions

AviaSolutions concludes that airport operations at Manston are very unlikely to be financially viable in the longer term, and almost certainly not possible in the period to 2031.

3. Manston Airport: History and Development Proposals

3.1. Introduction

In this chapter, we briefly describe the history of Manston Airport and the different development proposals that are currently being tabled. We also summarise the information and views that we gathered during our interviews with each prospective developer of the site.

3.2. Manston Airport History

The history of Manston Airport has been well documented in a series of reports and investigations about its prospects. Like many airports, it started life as a military airfield and played an important role during the Second World War. Although it continued as an Air Force base after the war, civilian operations were permitted. In 1998, the Ministry of Defence sold the site to the Wiggins Group plc, which endeavoured to build up commercial operations, including investment in an airline (EU Jet) to provide passenger services. However, the airline quickly ceased operations in July 2005 and the parent group (renamed Planestation), went into administration.

The following month, Infratil Limited acquired Manston Airport from the administrators, and sought to continue commercial air transport operations. However, without the support of a based airline, passenger numbers returned to the historically low levels experienced prior to EU Jet. In each year that Infratil Limited owned Manston it incurred losses of more than £3 million per annum and wrote off the purchase price of £17 million. Infratil disposed of the airport and associated liabilities in November 2013 for the notional price of £1.

Manston Skyport Limited completed its acquisition of the airport in December 2013, but in the face of continuing financial losses gave notice to staff in March 2014. The airport closed for operations on 15 May 2014.

TDC then explored the possibility of using a Compulsory Purchase Order (CPO) to buy the airport, and then sell immediately onto a private sector investor willing to use the site as a commercial airport. A month-long search yielded a small number of interested parties but further scrutiny indicated that none provided the Council with sufficient confidence that it would be indemnified were it to exercise its CPO rights. This led the Council to reach an initial conclusion in December 2014 that it was unable to find a CPO Indemnity partner.

At the request of RiverOak Investment Corporation (one of the previously interested parties), in May 2015 it started a review of this decision and in October 2015 reached the same conclusion. Nonetheless, at the start of 2016, the Council launched a further search for a CPO Indemnity partner, but this again proved unsuccessful.

In the meantime, the former airport site was sold in September 2014 to the current owners, Stone Hill Park Limited

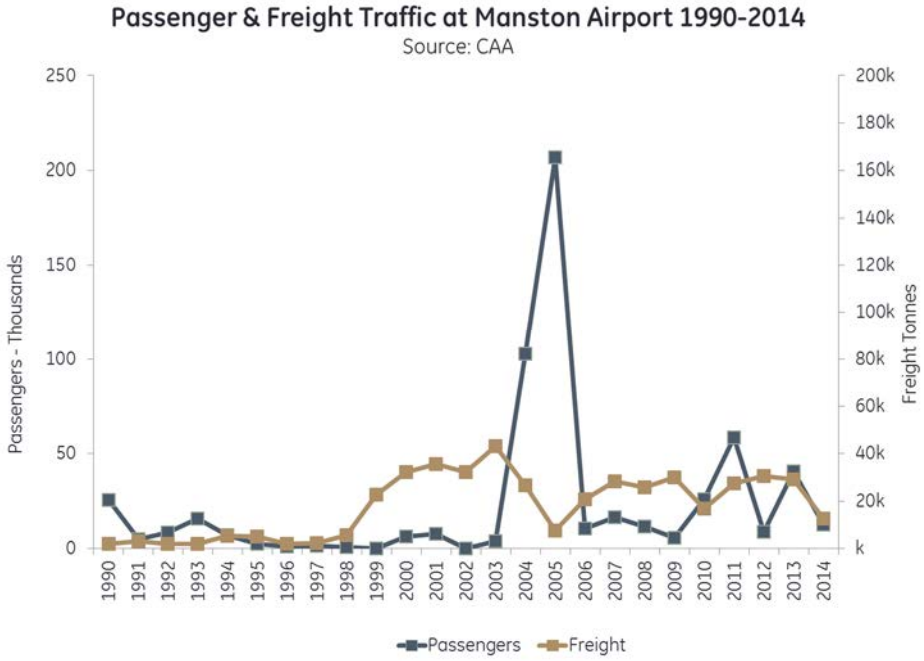
3.3. Commercial Activity at Manston Airport

Immediately after Wiggins Group plc acquired the airport Manston saw an increase in freight traffic. This grew rapidly to circa 30,000 tonnes per annum, however the passenger element of the business stagnated. After Wiggins Group plc invested in an airline specifically for the region, EUJet, the airport saw rapid growth in passengers increasing to 200,000 in 2004. EUJet however, quickly fell into financial difficulty and ceased operations in July 2005 bringing an abrupt halt to the passenger growth.

In the years since, through the ownership of Infratil and Manston Skyport, freight volumes were maintained at circa 30,000 tonnes per annum. Passenger volumes increased with the introduction of Flybe in 2010 but

fell back as the routes were withdrawn. Most recently, KLM began operations from the airport in 2013 but were also withdrawn due to the announcement of the airports closure.

Since being taken into private ownership the airport has averaged 30,500 passengers and 25,000 tonnes of freight per annum, with the peak being 207,000 passengers in 2005 and 43,000 tonnes of freight in 2003.



3.4. Stone Hill Park Development Proposal

Stone Hill Park Limited has lodged a planning application with TDC to construct a mixed development of residential and business units on the site of the former airport.

Stone Hill Park set out its position with regard to the history of the airport, indicating its years of financial losses under various ownerships. The company also outlined the steps that had been taken by management and consultants, both when the airport was operational as Manston SkyPort, and when it came into its ownership, to revive the airport's fortunes. It should be noted that Stone Hill Park indicated that no documents or reports were available to evidence these efforts. Stone Hill Park concluded that the airport site would be better utilised as a redevelopment site than as an airport[1].

3.5. RiverOak Investment Corporation Development Proposal

RiverOak was perhaps the most interested party in TDC's search for an Indemnity Partner to support its consideration of a CPO. It has indicated that its plan for the re-opening of Manston Airport is based on attracting 10,000 annual movements by freighter aircraft.

During AviaSolutions interviews, RiverOak provided a high level review of why it wished to acquire the airport and its vision of the airport's future development. The strategy is to develop a freight hub with supporting passenger services. RiverOak criticised the previous owners' lack of effort to develop air freight traffic at Manston.

[1] The scope of this report does not extend to a consideration of other uses for the airport, and AviaSolutions is therefore not able to comment on the reasonableness or otherwise of the alternative use proposals.

RiverOak was unwilling to disclose any material detail of its Business Plan for reasons of commercial confidentiality. Therefore, the discussion over future viability was at a more generic high-level basis, with RiverOak not disclosing any traffic projections, revenue projections, cost base or specific airlines (passenger or freight) with whom it had discussed plans (with the exception of Ryanair). It did not name any parties that had given firm commitments to use a re-opened Manston[2].

A critical factor for RiverOak's proposal is that in order to establish an airport on the Manston site it will need to obtain ownership of the site from the current owners. They have not secured the site's sale through negotiation with the owners and are currently preparing for a DCO process, a part of which shall aim to demonstrate to the relevant authorities that the airport site is nationally significant transport infrastructure. If successful, RiverOak may then be granted the ability to purchase the site on a compulsory basis. Without this power, there appears little prospect at present of the group securing ownership.

[2] For the avoidance of doubt, AviaSolutions therefore does not offer any opinion about the reasonableness or otherwise of RiverOak's commercial plans for the airport.

4. Potential Development Scenarios

4.1. Introduction

In this chapter, we describe a number of possible development scenarios for Manston Airport. These scenarios have been developed on the basis of our experience of the air transport industry and provided the background for our discussions stakeholders within the air transport industry.

We first describe two scenarios (4.2 and 4.3) that consider possible developments at Manston with regards to cargo and passengers. These scenarios are considered in isolation from decisions made in relation to the provision of a runway in the London area. However, given that Manston is in the South East of the UK, its potential development is likely to be directly influenced by any runway decision. Consequently, we incorporate the first two scenarios into a wider consideration of possible developments in the London area in view of the possibility that Manston might provide some 'over-flow' airport capacity. These considerations are drawn together in our four distinct demand scenarios for Manston Airport.

4.2. Cargo Activity

In the past, Manston Airport was able to attract a certain level of cargo activity, and a potential future role would be for it to again serve this market. In our assessment, we assume as a minimum that Manston attracts this previous freight, totaling 30,000 tonnes per annum.

We also consider whether the scale of activity might be greater than experienced in the past. There would be two possible causes for this:

- The selection of the East Kent area by a major multinational manufacturing (e.g. an Asian electronics or white goods company) or retail group (e.g. Amazon) as the location of its distribution network. Such location decisions can have a significant impact on freight volumes. However the UK's planned exit from the EU leaves makes this less likely.
- As a consequence of their lower sensitivity to airport location, freighters are generally amongst the first category of traffic to be 'squeezed' out of busy airports. With the pressure on runway capacity in the South East of England, it is possible that freighters currently operating through the London airport systems might seek to move to an alternative airport. We discuss this further throughout the remainder of this chapter.

We also considered the role of integrators in the air freight market. Whilst general cargo traffic tends to be more flexible about the location of the airport it uses than passenger traffic, this does not apply to the major integrated freight operators. The business model of operators such as DHL, FedEx and UPS is based on a hub and spoke principle involving both aircraft and road feeder services: the surface element of the network has a greater requirement for a central location within the market being served. We consider the geographic location of Manston precludes it from being a suitable base airport for an integrator in particular when compared to UK competitors such as East Midlands Airport.

4.3. Regional Passenger Airport

Manston Airport played a role from the early 2000s until its closure as a local airport serving the East Kent region. Although our research and analysis (described in Section 5) has indicated that its core catchment area produces significantly less demand for air travel than the area around Southend Airport, we consider that it might nonetheless be able to support an operation equivalent to one or two 150-200 seat passenger aircraft operated by a LCC based at Manston. However, the longevity of such a development may be limited since if a new runway were to be built at Heathrow or Gatwick, the LCC concerned would in all probability transfer its aircraft to the new runway. There are many reasons why these aircraft would be re-based, including:

- Gaining access to vitally important catchment area

- Competitive positioning, the major LCCs are likely to fiercely compete and attempt to gain first mover advantages
- The airlines will need to base multiple aircraft at the airport with a new runway in order to achieve economies of scale on the cost lines of their business
- Securing slots at valuable airports to secure slots
- Airlines have finite resources, including the number of aircraft they have to operate. A major structural change in the runway capacity environment will demand that those resources be reviewed and the optimum allocation revised.

In our analysis we make the assumption that the airport quickly ramps up to 800,000 passengers per annum on this basis until such a time as a new runway is opened, at which point the aircraft are re-based and the passenger traffic lost. This volume of annual passengers is equivalent to two B737-800 based aircraft with a typical LCC seat configuration. We also assume that Manston would not feature in the network plans of airlines for non-based aircraft.

4.4. Runway Development in the South East

The shortage of airport capacity in the South East of England has been widely debated for many years, if not decades. The most recent public investigation was undertaken by the Davies Commission which reported to Government in 2015. No decision on its recommendation to provide a third runway at Heathrow has yet been made, although one is expected in October 2016. Even if a decision is made as currently planned, it could be ten years or more before that runway would be operational. The Davies Commission considered a long list of possible locations for additional runway capacity in the South East, although it should be noted that Manston Airport (still open at the time) was not one of them, and despite its available capacity a new runway was still deemed necessary.

The Commission short-listed two schemes at Heathrow for a third runway (LHR3) and the provision of a second runway at Gatwick (LGW2), and recommended LHR3. During the next ten years, there will be a shortage of airport capacity in the South East, leading to a scenario in which Manston acts as an overflow airport for demand that cannot be accommodated elsewhere. We consider that there are four possible outcomes from the Government's current decision process:

- Build LHR3: While in line with the Davies Commission recommendation, this choice would nonetheless be the most controversial, and probably take the longest time to deliver.
- Build LGW2: It is likely that a runway at Gatwick would be available earlier than at Heathrow. It is probably the outcome that would be least supportive of a re-opening of Manston Airport, since Gatwick is the closest airport to Manston, and a runway there is likely to be operational several years before one at Heathrow.
- Build both: Should Government indicate that its policy would permit both to be built, Gatwick shareholders might well conclude that while its runway could be operational first, there would be a significant risk of loss of traffic to Heathrow as and when its additional runway opened.
- No expansion: It is possible that Government will not sanction any runway expansion in the South East. It is the outcome that would be most supportive of a re-opening of Manston Airport, albeit an outcome that could be reversed at any time in the future, thereby depriving a re-opened Manston of traffic.

It is feasible that there would be a legal challenge, irrespective of which of the above possibilities were chosen (possibly less so with the fourth 'do nothing' option), further delaying the opening of a new runway. It is unclear whether the Government's decision would indicate simply its preferred location with the airport operator then following the normal planning process to obtain the necessary permissions, or whether it would seek to provide the permissions through a Parliamentary process.

4.5. Dynamics of Traffic in the London Airport System

The six airports of the London Airport system all have different owners, and each has a particular characteristic in the traffic which it handles. However, there is a dynamic in the distribution of traffic between the airports, which also have a particular hierarchy.

Heathrow is the premier airport, and there are numerous examples of airlines moving services there when they are able to do so. This has been evidenced with airlines purchasing slots from incumbent Heathrow

airlines, for example in February 2016 Oman Air purchased a pair of Heathrow slots from Air France-KLM for a reported $75 million.

Gatwick is clearly the second airport in the system, and secondary slot trading is also beginning to take place. The airports of Stansted and Luton to the north of London play similar roles in supporting the low cost airline market. London City Airport is very much a niche airport and has marginally relieved pressure on Heathrow by serving an increasing range of short haul (often business-oriented) destinations. The least busy airport is Southend which has grown again in the last few years as a result of easyJet basing two to three aircraft at the airport.

4.6. Model Scenarios

Before the construction of a new runway at Heathrow and/or Gatwick, there is expected to be a shortage of airport capacity with passenger demand growing. We have developed a simulation model to estimate the size of unaccommodated demand at one airport, and how the demand might respond to an airport capacity shortage. Our demand cascade follows the form of:

- Some passengers using the airport to connect between flights will choose to use other airports as their connection point (voluntarily to avoid over-crowded facilities and delayed flights, or as a consequence of airlines increasing fares to such passengers);
- Some passengers will choose not to travel, or not to travel by air (as air fares are increased);
- Some passengers will endeavour to use another London airport; and
- The remaining potential travellers are available for attraction by UK airports other than the six London area airports.

We have used our experience and discrete analyses to determine the likely sizes of the first two categories above, and then estimated the passenger handling capacities of the airports. In general, this is based on the number of Air Transport Movements (ATMs) that each airport's runway system can handle[3] and the average number of passengers per ATM at the airport. There is a long-term and widespread trend for passengers per ATM to increase, meaning that the passenger handling capability of an airport can grow even though there may be no change in the number of ATMs that it can handle. We have also divided the maximum ATMs between passenger and freighter operations, maintaining freighter operations at the average level seen over the five years 2011 to 2015[4], except at Stansted. Within this model we have also considered freight demand and the ability of airlines to carry this demand, either on the dedicated freighter ATMs or in the belly-holds of passenger aircraft.

Once the total unaccommodated demand for the London System has been identified we then apply analysis to identify the share of this unaccommodated demand Manston might attract. These 'spill' demand scenarios are in addition to the base loads of 800,000 passengers (up until a new runway) and 30,000 tonnes of freight. Our demand scenarios are therefore:

- LHR3: The spilled passenger demand Manston would capture if a third Heathrow runway were developed and in addition 800,000 passenger per annum and 30,000 tonnes or freight per annum until FY2030.
- LGW2: The spilled passenger demand Manston would capture if a second Gatwick runway were developed and in addition 800,000 passenger per annum and 30,000 tonnes or freight per annum until FY2025.
- Both: The spilled passenger demand Manston would capture if a third Heathrow runway were developed and a second Gatwick runway were developed and in addition 800,000 passenger per annum and 30,000 tonnes or freight per annum until FY2025.
- No Runway: The spilled passenger demand Manston would capture if no new runway were developed and in addition 800,000 passenger per annum and 30,000 tonnes or freight per annum until FY2050.

[3] *In the cases of Heathrow, Stansted and London City there are also statutory limits*
[4] *One of Stansted's S106 conditions specifies the division of ATMs between passenger and freighter, with freighter ATMs being 20,500 per annum, and passenger ATMs 243,500 per annum*

4.7. Development Options Outside of Scenarios

We have not included in the possible scenarios any development that does not include commercial air transport operations. Hence, we do not consider the potential use of the Manston site as; a Maintenance, Repair and Overhaul (MRO) centre, an aircraft refurbishment or fit-out location, aircraft 'tear-down' or storage centre, or flight training facility. These and similar activities are often sought by owners of airports with low levels of aircraft activity as a means of generating ancillary revenue to boost income. However, the operators of these businesses are often flexible about the location of the works, and as such, the businesses providing these types of activities are highly sought-after by existing airports and the businesses are able to negotiate favorable commercial terms.

Given the intense competition that exists for these types of business, in our judgment no private sector investor would re-open Manston Airport based primarily on this type of activity. Similarly, while the site has an historic position in aviation and has a heritage centre, and this activity could add to viability, this would be only a marginal financial contribution and would be dependent on there being a commercially viable airport around which to build such an activity.

We also discounted the possibility of Manston developing as a business aviation (GA) centre: it is simply too distant from London to be an attractive offering to corporations and high net-worth individuals using private jets and would struggle against established airports such as Farnborough and London City.

5. Passenger Analysis

5.1. Introduction

In this section, we discuss the passenger market both at Manston and in the London Area as a whole. We then explore the potential demand scenarios outlined in section 4.6.

5.2. Historic Passenger Traffic at Manston Airport

Various passenger services have operated at Manston Airport in the past. In general, they were consistent with the type that might be expected at a small UK regional airport, namely scheduled services to major short haul domestic and European destinations, supplemented by charter flights to the more popular Mediterranean holiday resorts.

Passenger volumes peaked in 2005, when EUJet, then a subsidiary of Planestation, was operating from Manston Airport. A large number of destinations were served, although EUJet was achieving a load factor of only 41% when it ceased trading in July 2005.

Destinations/Origins of Manston Airport Passengers, 2005

Airport	Passengers	Airport	Passengers
Edinburgh	32,259	Gerona	6,177
Dublin	26,879	Newcastle	5,118
Amsterdam	16,600	Belfast	4,563
Manchester	15,091	Barcelona	4,351
Malaga	14,119	Ibiza	3,657
Prague	10,434	Shannon	2,897
Nice	9,848	Valencia	2,316
Murcia	9,774	Glasgow	2,200
Alicante	7,822	Madrid	2,077
Palma	7,584	Other international	12,186
Geneva	6,801	Other domestic	18
Faro	6,502	Total	209,273

Source: CAA Airport Statistics

After EUJet ceased trading, passenger volumes fell dramatically, and remained persistently below 20,000 per annum until 2010/11 when Flybe commenced some limited flying to domestic destinations. The service to Manchester performed poorly, with an average load factor of 26% (source: CAA) and was soon terminated. A Belfast service had a marginally better load factor at 44% but ultimately was unsustainable. The highest performing route in terms of load factor was to Edinburgh which reached a load factor of 53% Passengers were mainly outbound from Manston and travelling for personal or leisure reasons resulting in fare yields being relatively low. The culmination of this poor demand resulted in Flybe ceasing services from the airport (source: Flybe Interview).

In 2013, KLM commenced a twice daily service on weekdays from and to Amsterdam, aiming to feed its connecting hub at Schiphol as well as facilitating travel to and from the city. KLM operates to many airports in the UK on this basis and in 2013, KLM carried nearly 36,000 passengers. However, in that same year, a further 48,000 passengers from Manston's core catchment area travelled to Amsterdam from other London Area Airports, meaning that the Manston service captured just 42% of the demand that arose from Manston's core catchment area (albeit services started only in April 2013).

Passengers to Amsterdam, 2013

London Area Airport	Passengers to Amsterdam from Manston Catchment Area, 2013
Heathrow	22,008
Gatwick	20,048
London City	4,091
Stansted	1,932
Luton	596
Total	48,675
Passengers on KLM service from Manston	35,854 (42%)
Total Catchment Area Passengers to Amsterdam	84,529 (100%)

Source: CAA Passenger Survey (N.B. Southend not included in survey)

5.3. Local Demand

We have defined an area of eastern Kent as Manston's core catchment area, as shown in the diagram below.

To gauge the demand from Manston Airport's core catchment, we analysed the number of journeys from the core catchment to a basket of easyJet destinations (using Southend Airport's easyJet network as a typical example). The London airports captured 517,000 air journeys to these UK domestic and short haul

European destinations[5]. This figure does not include the small number of passengers that travelled via Manston to Amsterdam in the first three months of the year.

District	Passengers from Manston's Catchment Area
Ashford	59,463
Canterbury	78,339
Dover	48,575
Maidstone	74,279
Medway	131,123
Shepway	41,159
Swale	47,074
Thanet	37,315
Total Using London Area Airports	**517,327**
Passengers on Services from Manston	**12,344**
Total Catchment Area Passengers to these points	**529,671**

Source: CAA Passenger Survey (N.B. Southend not included in survey)

In contrast, in 2014, the core catchment area for Southend generated more than 580,000 passengers to and from these points flying from the other London Airports. This is in addition to the passengers carried by easyJet from Southend to these destinations.

A proportion of the passengers that used services from Southend will have come from outside the airport's core catchment area. The analysis indicates that the maximum proportion of demand from a core catchment area that a small airport might attract is around 60%. This assumed percentage capture is broadly in line with the 42% capture by KLM from Manston during its first nine months of operations in 2013.

Airport Used	Passengers from Southend Catchment Area
Gatwick	270,450
Stansted	251,443
Heathrow	21,978
London City	20,868
Luton	16,820
Total using London Area Airports	581,559 (38%)
Passengers on easyJet services from Southend	959,523 (62%)
Total Catchment Area Passengers to these points	1,541,082 (100%)

Source: CAA Passenger Survey (N.B. Southend not included in survey)

If this same percentage were applied to the 2014 demand from Manston's core catchment area, it suggests that the maximum number of passengers that might be attracted to these points on services from a re-opened Manston would be some 330,000 per annum (529,000 x 62%). To sustain operations, it is therefore conceivable that Manston would, like Southend, almost certainly need to attract passengers from outside its catchment area. Southend is some 55 minutes from central London by rail (with pedestrian access between airport terminal and station), while Manston is scheduled to be 75 to 105 minutes from

[5] *Barcelona, Belfast, Amsterdam, Faro, Alicante, Ibiza, Malaga, Jersey, Palma. Geneva, Venice, Edinburgh, Berlin, Krakow, Tenerife*

Central London. Manston would face a significant challenge to match Southend's attraction to passengers from central London.

Train to London from airport, (Assumes Ramsgate connection for Manston)

Airport	Train to London	Connect to Terminal	Vs. Manston
Heathrow	15 minutes every 15 minutes from Paddington	Direct to terminal	75 minutes quicker
Gatwick	30 minutes every 15 minutes from Victoria	Direct to terminal	60 minutes quicker
Stansted	50 minutes every 15 minutes from Stratford / Liverpool Street	Direct to terminal	40 minutes quicker
Luton	40 minutes every 10 minutes to Kings Cross St Pancras	10 minute shuttle	50 minutes quicker
London City	On the DLR Line	Direct to terminal	Variable
Southend	53 minutes to Liverpool Street, 44 minutes to Stratford. 8 trains an hour at peak	Direct to terminal	37 minutes quicker
Manston	75 - 105 minutes to Ramsgate, four trains per hour to Kings Cross St Pancras	15 minute shuttle	n/a

Source: Airport website, national rail

This potential level of passenger demand at Manston for short haul services would be approximately equal to that which could be handled by one 150 seat narrow-body aircraft (such as a Boeing B737 or an Airbus A319) operated by an LCC based at Manston.

5.4. Airline Interviews

AviaSolutions spoke to several passenger airlines with regards to potential future operations at Manston airport. More detailed notes are provided in Appendix A.

Ryanair provided the most positive indication of future service concluding that:

> '*Ryanair are constantly reviewing their network and remain open to approaches from any airport. If the airport became operational, the airline would review its potential and fit within the wider airline network in due course, and is available to discuss terms with the owners at any time*'
> Ms. Kate Sherry, Deputy Director of Route Development, Ryanair

Whilst Ryanair remained somewhat open to the possibility of future services, it was in our opinion, far from a commitment to serve Manston airport if it should re-open. We received a similar positon statement from KLM, effectively citing that a re-opened Manston would be included in the annual network review.

Discussions with other carriers indicated a less positive outlook for the airport, with Flybe, an airline that had previously served Manston stating:

> '*It is unlikely that, even if Manston should reopen, the airline would choose to serve the airport.*'
> Mr. Martin Pearce, Flybe

Other airlines and individuals interviewed had similar stances, stating that:

> '*...Manston would not be a consideration for us...*'
> Major European LCC

and that:

> '*Following the BREXIT vote many airlines will be considering their approach to the UK. During a period of uncertainty, it will be difficult for Manston to convince carriers to open routes to the airport*'
> Ex-Director of Network Route Development for Major European LCC

We also discussed with a major UK carrier its views on Manston Airport as part of an operational resilience strategy. This is an aspect of the airport which has been made promoted as a potential benefit to the UK aviation sector. Flight Operations within an airline is a highly scrutinised function, in particular with regards to fuel and diversionary airport selection. When calculating a Flight Plan, airlines plan contingency fuel based on regulatory standards that ensure sufficient fuel is available upon landing, meeting this minimum landing fuel is a core part of the duty of all aircraft commanders. Our contact stated that:

'It is my personal view that Manston does not offer any safety or resilience benefits of a material nature to the UK system. The airport is located in close proximity to six London airports which offer excellent resilience already'
Manager, Flight Operations, Major UK Carrier

Based on AviaSolutions interviews in relation to passenger services, we conclude that whilst there is some notional interest in passenger services at Manston Airport, no airline was committed at present, or in the future seeking to serve to the airport should it re-open. No airline wished to give any more commitment beyond that it would consider Manston as part of their process of reviewing their network.

5.5. Potential Overflow from London Area System - Model

We outlined in Section 4 the principles on which we have based our model of how passenger traffic might cascade around the London Area Airport system. In this section we set out the main assumptions and results.

Capacity
The starting point of our assumptions is the ATM capacity of the London airports. At a number of airports, the ATM capacity has a statutory cap (as opposed to an estimate based on its physical capacity). At these airports we have assumed up to 97.5% of the movement cap to reflect constraints on the optimal scheduling and peak demand profiles.

Airport ATM Capacity

Airport	Annual ATM Capacity	Comment
Heathrow	480,000	With two runways. Statutory limit
	720,000	With three runways, from 2030 if added
Gatwick	280,000	Estimated capacity of single runway
	480,000	With two runways, from 2025 if added
Stansted	264,000	Statutory limit. Includes 20,500 for freight flights
Luton	100,000	Estimated. Statutory passenger cap of 18 mppa
London City	111,000	Statutory cap (noise-adjusted) - passenger limit of 6.5 mppa
Southend	53,300	Statutory cap

These ATM capacities are converted into a passenger capacity by multiplying by the average number of passengers per ATM. Passengers per ATM have historically increased over time as a result of larger aircraft with more seats and the increase in the number of seats occupied (the load factor).

We have assumed a continuation of this trend, although at a rate of 0.5% per annum, much lower than seen in recent years. It may be seen that even by 2050, the number of passengers per ATM with this assumption never exceeds 200 at any airport. This assumption acts to increase the demand that cannot be accommodated at the six London Area airports. However, it is likely that when faced with runway capacity constraints, airlines will increase passengers per ATM at a faster rate than would otherwise be the case. Our assumed rate of increase is consequently likely to lead to an over-estimation of the demand that is available to be handled at Manston.

Passengers per ATM

Airport	Passengers per ATM					CAGR 2011 to 2015	CAGR 2015 to 2050	Pax per ATM 2050
	2011	2012	2013	2014	2015			
Heathrow	146.6	149.5	155.0	156.8	159.7	2.2%	0.5%	190.2
Gatwick	137.9	142.5	145.2	149.7	153.5	2.7%	0.5%	182.8
Stansted	142.3	144.1	146.3	149.2	155.9	2.3%	0.5%	185.6
Luton	136.4	139.0	141.8	143.3	145.1	1.5%	0.5%	172.8
London City	49.2	46.9	49.7	52.0	54.5	2.6%	0.5%	64.9
Southend	33.8	84.9	102.4	95.5	100.4	5.7%*	0.5%	119.5

* 2012 to 2015

Demand

We have based our forecasts of future passenger traffic on those set out in the Davies Commission Report - unconstrained carbon traded forecast (the most optimistic). Given that the early forecast volumes have been superseded by actual performance, we have uplifted the forecast figures to reflect actual demand seen across the London System in the intervening years.

Demand Allocation London System

Demand is then compared to capacity available, and assigned to the airport which Davies assumes is its natural first choice. The greatest demand is for Heathrow, and traffic not accommodated there is assumed to (a) spill to other non-London Area airports for connecting traffic, (b) 5% is assumed not to travel (by air), or (c) spill to Gatwick.

A similar process is then followed for Gatwick, with any unallocated demand being allocated to one of the other four London Area airports, until each has reached its capacity. At this point, any unaccommodated demand becomes available for other airports outside the London System to handle. We summarise below the forecast demand at the London Area airports in 2050 for each of our defined scenarios, together with unaccommodated demand.

Forecast Passenger Demand (mppa) at London Area Airports, 2050

Airport	Scenario			
	LHR R3	LGW R2	Both	Neither
Heathrow	134	89	134	89
Gatwick	51	88	88	51
Stansted	45	45	45	45
Luton	17	17	17	17
London City	7	7	7	7
Southend	2	2	2	2
Unaccommodated	44	40	5	79

Unaccommodated Demand (mppa) by Scenario and Year

Year	Scenario			
	LHR R3	LGW R2	Both	Neither
2020	5	5	5	5
2025	11	9	9	11
2030	17	6	2	25
2035	9	9	4	36
2040	16	16	5	49
2045	27	27	3	61
2050	44	40	6	79

Demand Allocation - Regionals

This Unaccommodated Demand is potentially available to airports other than the six London airports and specifically to airports in regions other than the South East as well as to Manston. Using CAA data, we have calculated the origin and destination distribution of passengers at the London Airports split by the part of the UK they are travelling either to or from. This indicates that 49% of total passengers are travelling to or from Greater London and 4% to or from Kent. We have assumed that the distribution of future Unaccommodated Demand matches the pattern of demand seen in 2014, such that if 100 passengers were unaccommodated, 49 of those are travelling to or from Greater London and 4 to or from Kent.

We have then estimated how much of this Unaccommodated Demand Manston may reasonably be assumed to capture. Given its location in Kent it is reasonable to assume it would capture a large share of the Unaccommodated Demand for Kent (4 passengers in the example above). We have assumed that this share is 90% (90% of the 4 passengers). Applying a similar logic, we assume that the Greater London passengers would have more choice and therefore Manston would capture a smaller share of this market. We have assumed Manston will captures 10% of the Greater London market (10% of the 49 passengers).

It is also important to recognise that currently 27% of passengers using the London Area airports do not have origins or destinations in the South East region, but use surface means to access the air services at the London airports. It is our view that airlines will consider adding additional capacity at airports to the North and West of London (potentially Southampton, Bournemouth, Cardiff, Birmingham, Manchester) to dissipate this excess demand and permit the London System to absorb the demand growth in the Greater London area. These non-London airports, in general, have a wider catchment area already provide services from many carriers with the associated economics of scale and mature presence in these markets.

Surface Origin/Destination of Terminating Passengers at London Area Airports, 2014 (mppa)

Area	LHR	LGW	STN	LTN	LCY	Total	%
South East	36.0	28.1	11.6	10.2	3.3	84.2	73%
of which							
Greater London	24.9	15.0	10.1	5.3	3.1	56.7	49%
Kent	0.9	2.5	0.4	0.1	0.1	4.1	4%
Other UK regions	11.3	7.2	7.5	5.0	0.3	31.2	27%
Total Terminating	47.3	35.2	19.1	10.2	3.6	115.4	100%
Connecting	25.8	2.6	0.8	0.2	0.1	29.5	
Total Terminal	**73.1**	**37.9**	**19.9**	**10.4**	**3.6**	**144.9**	

Source: CAA Passenger Survey

In addition to this overflow of unaccommodated demand, in each of our scenarios we have added the introduction of an LCC base of two aircraft supporting 800,000 passengers per annum from 2018, equivalent to two Ryanair B737-800 aircraft. This base continues at Manston until a new runway is opened at Heathrow and/or Gatwick. In the year when new capacity is introduced, the Manston based aircraft are assumed to transfer to the airport with the new runway, as the airline concerned seeks to establish presence at that airport at the same time as consolidating its operations in the London area.

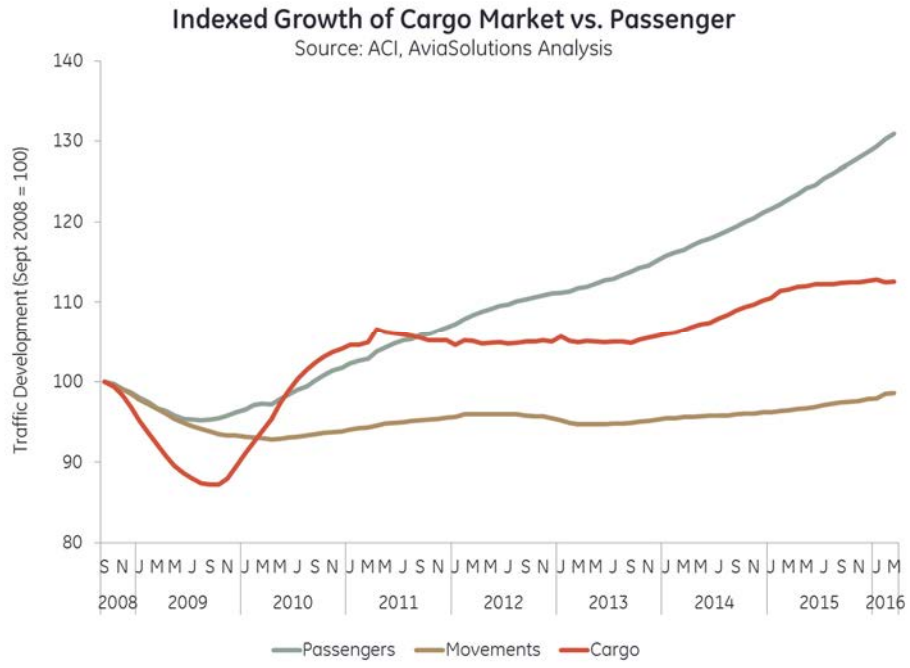
6. Cargo Analysis

6.1. Introduction

In this chapter we examine the air cargo market and its overall prospects. We also consider how freight traffic might develop at Manston Airport in our scenarios.

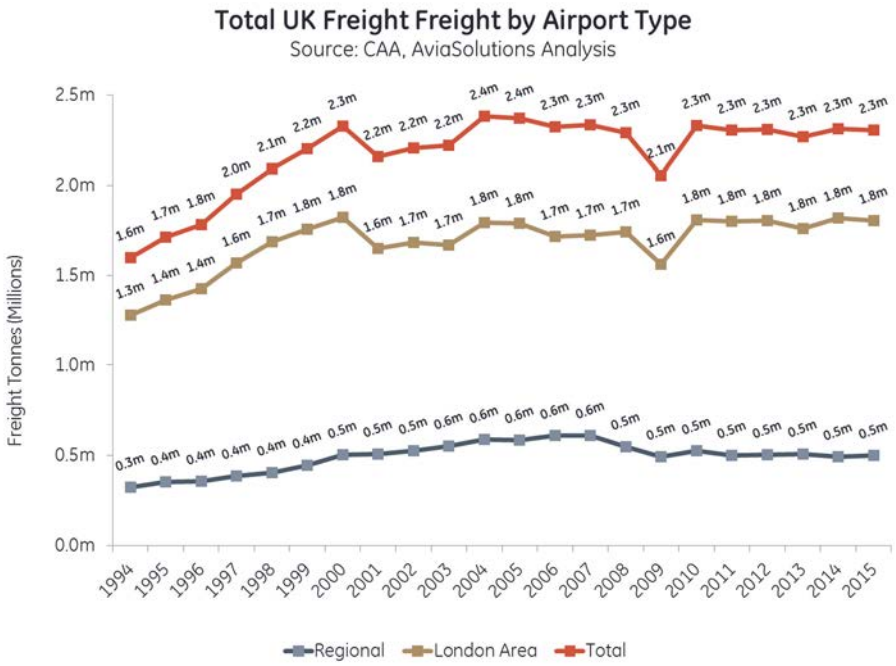
6.2. Overall Cargo Market

The air cargo market declined significantly after the global financial crisis of 2008. Although cargo volumes recovered to previous levels within two years following the crash in 2008, growth over the last five or six years has been modest.



A similar pattern has been observed in the UK. Indeed, total air freight handled at UK airports has been virtually constant at around 2.3 million tonnes per annum since 2000, with the exception of reductions immediately after the start of the recession in the early 2000s and the financial crisis in 2008. Prior to this period, demand for air freight had grown at CAGR of 8% since 1990.

There is a reasonably even split between freight set-down (imports for international freight) at 52.5% and freight picked-up (exports) at 47.5%. More than 95% of UK air freight in 2015 was international.



Within this national context, individual airports' performance has varied, with the five London area airports (Heathrow, Gatwick, Stansted, Luton and City) increasing their aggregate share slightly to just under 80%, with regional airports reducing by an equivalent amount.

The busiest airport for freight has consistently been Heathrow, responsible for two thirds of the country's air freight. This position owes much to the very considerable cargo capacity in the holds of the wide-body aircraft providing the many long haul passenger services from the airport. In contrast, East Midlands' position as the second busiest freight airport is due to its role as the centre of the UK distribution network of the integrated cargo carriers, especially DHL but also UPS and Royal Mail. Stansted is preferred by FedEx and is also used by the cargo operations of a number of airlines. These included British Airways before it discontinued its all-freighter operations in April 2014 and switched to the freighter operations of Qatar Airways.

It has been argued by, for example, York Aviation on behalf of the Freight Transport Association that the stagnation of growth in UK air freight market since 2000 has been caused by a lack of airport capacity in the London area and specifically at Heathrow. Whilst the lack of ATM growth at Heathrow has undoubtedly hampered the development of the national air freight market, it is also true that over this period there was adequate airport capacity available at both Stansted and Manston to support additional dedicated freighter movements. Freighter movements at Stansted decreased over the period[6], while Manston closed. This strongly suggests that the stagnation of UK airfreight is not a consequence of capacity constraints given the excess capacity at Stansted and Manston.

Air freight activity in the UK is highly concentrated, with just six airports handling 95% of the UK's air freight volume.

[6] *Stansted's freight ATMs declined from 13,967 in 2000 to 9,956 in 2015*

Freight by UK Airport

Airport	Freight (Tonnes) 2013	2015	% of 2015 Total	Cumulative Share	% carried on Freighters in 2015
Heathrow	1,422,939	1,496,551	65%	65%	5%
East Midlands	266,968	291,689	13%	78%	100%
Stansted	211,952	207,996	9%	87%	100%
Gatwick	96,724	73,371	3%	90%	0%
Manchester	96,373	100,021	4%	94%	10%
Manston	29,306	-	0%	94%	100% (2013)
Belfast International	29,288	30,389	1%	95%	100%
Luton	29,074	28,008	1%	97%	96%
Birmingham	21,067	7,164	0%	97%	0%
Edinburgh	18,624	19,322	1%	98%	99%
Total	**2,267,812**	**2,304,345**			**30%**

Source: Analysis of CAA Statistics

In 2015, there were around 60,000 ATMs by all-freight aircraft across UK airports. These were split almost equally between international and domestic operations. Freight movements are relatively concentrated on a small number of airports, with East Midlands and Stansted accounting for 64% of movements in 2015.

Airport	Freighter ATMs Domestic	International	Total	Int. as % of 2015 Total
Heathrow	3	2,385	2,388	8%
East Midlands	9,603	12,516	22,119	42%
Stansted	3,445	6,511	9,956	22%
Gatwick	0	3	3	0%
Manchester	205	830	1,035	3%
Belfast International	4,091	17	4,108	0%
Luton	183	1,519	1,702	5%
Birmingham	0	0	0	0%
Edinburgh	3,883	1,088	4,971	4%
Other	10,136	5,032	15,168	17%
Total	31,549	29,901	61,450	100%

Source: Analysis of CAA Statistics

It is important to note that, in the UK market, only 30% of airfreight is carried on dedicated freight aircraft. This is substantially less than the global average, where approximately 56% of RTK's are transported on freighters. In part, this disparity is due to the excellent belly-hold networks available from UK airports and in particular from Heathrow.

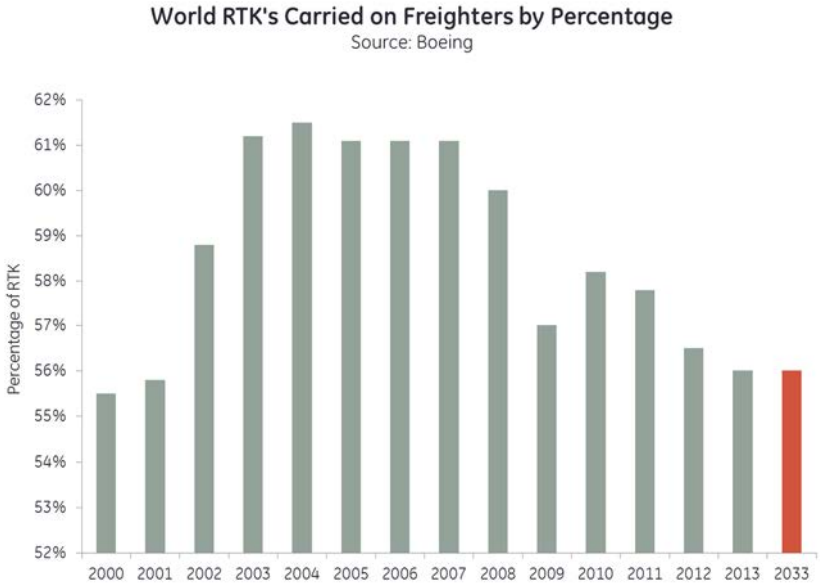
As passenger demand increases additional belly-hold capacity will enter the market. This capacity growth is unhooked from the demand scenario for belly-hold cargo and can result in excess capacity in the market. As a result airlines will often sell this belly-hold capacity using a marginal cost pricing structure. This pricing structure does not need to account for the high cost of the aircraft and must only meet the additional marginal cost that each kilogram of cargo incurs. Through the application of this pricing

structure, belly-hold cargo often undercuts the minimum price that can be charged on dedicated freighter operations.

As a result of this market dynamic, an airport focused on airfreight carried by dedicated freighters may be overly exposed to a declining or stagnant total market, or at best to a market that is not exposed to strong potential.

However, there are some elements of the market that appear to be limiting the increase in belly-hold capacity. These include

- Some of the newer aircraft types have a smaller belly-hold cargo capacity than the aircraft they replace; and
- Low Cost Carriers (such as easyJet and Ryanair) are gaining market share but generally ignore the freight market.



Manston

Before its closure in 2014, Manston Airport was the sixth busiest airport in the UK for freight. For the last ten years of operations the airport handled between 25,000 and 30,000 tonnes of freight annually, representing just over 1% of the UK market (refer table 'Freight by UK Airport' on previous page)

In 2013, the overwhelming majority of the airport's freight was carried on all-freight aircraft, CargoLux being the primary operator. There were 511 freighter movements (landings or take-offs) during the year, with an average of 57 tonnes of freight per movement. In reality Manston was almost exclusively used for imports, and this averaged 107 tonnes per import, with virtually no export volume.

6.3. Freight Industry Interviews

Our discussions with representative of the cargo industry indicate that much of the cargo at Manston was fresh produce from Africa. The airport was popular with shippers as it was uncongested, offered good quality handling services (provided by airport staff) and the airport charges were competitive. While it is close to continental Europe, airlines/shippers nonetheless had to incur the costs of flying freight aircraft virtually empty on the return leg to their base airport (e.g. Luxembourg, Ostend and Liege) after off-loading. When Manston closed, it is understood that some movements transferred to Stansted, whilst others switched to airports on the near-Continent and their loads trucked across the Channel to the UK.

Our primary interest in interviewing representatives of the freight industry (current and former executives), and previous users of the airport was to assess potential future use. It was clear from these discussions that whilst the airport clearly offered a professional service, the strategic position of the airport was a clear disadvantage.

> *'Airlines base the decision on where to operate their freighters based on a multitude of factors. However, the overriding factor is based on where investments in infrastructure have been made by*

their clients, freight forwarders. These capex investments by freight forwarders are required to ensure they maintain economies of scale through their transit facilities and distribution centres. In the UK, these investments are centred at Heathrow, and more recently Stansted'
Senior Executive in Cargo Division for airline operating freighters at Stansted.

The individual went on further to discuss the possibility of relocating his freighters to Manston Airport and was unequivocal in his position:

'The airline would be extremely unlikely to consider moving services to Manston, even if we were no longer able to serve Stansted, regardless of the commercial terms offered. If the airline had to move services, we would consider East Midlands and Manchester or other centrally located airports before Manston'
Senior Executive in Cargo Division for airline operating freighters at Stansted

This view was echoed by Mr. Stanley G. Wraight, a cargo professional with a global reputation, and over 40 years' experience in the cargo industry:

'The conclusion is there is virtually no incentive for operators to move operations to Manston, there are alternative UK airports that offer competitive services on reasonable terms. The UK doesn't need another airport for freight that has no USP. If Manston were to be developed it would be essential for it to gain a niche market such as becoming an Amazon or Alibaba e-commerce base'
Mr. Stanley G. Wraight – Senior Executive Director Strategic Aviation Solutions Limited

Balancing this view were those of an air cargo charter broker who had previously used Manston for charter services. The airport had offered excellent service and, while the broker's use might be for a moderate level of ATMs, it would be keen to re-establish a presence, provided the right commercial terms could be agreed:

'...we would certainly be interested in using the airport again if it re-opened but in order to do so, we would be looking to secure competitive rates for landing, parking and screening charges...'
Air Cargo Charter Broker – UK

We conclude therefore that there is limited interest from the cargo industry in using a re-opened Manston Airport for air freight. The larger scheduled freighter operators are unlikely to relocate their services to the airport, particularly if the airport does not have a unique product offer. We believe it is more likely that were Manston Airport to re-open, the most likely role would be to serve smaller freight operators and the larger operators on an *ad-hoc* basis. There is no compelling reason to believe that the airport would be able to generate appreciably more freight activity than previously, other than in the context of a shortage of airport capacity in the London area.

6.4. Potential Future Freight Operations - Model

Based on our research and analysis, it is AviaSolutions' view that if Manston were to re-open as an airport, it would attract some dedicated freighter operations. However, in the absence of a firm commitment from a multinational to establish a distribution centre near Manston, the growth of freight activity at the airport would be in line with historic performance, with incremental growth resulting from a general expansion of the UK cargo market and a diversion of freighter flights if these were constrained at Stansted.

Demand

There are very few national forecasts for the development of air freight. One example is the report developed by Oxford Economics and Ramboll for Transport for London as part of the investigation of the development of an estuary airport for London. A potential cause of the stagnation of growth in air cargo since 2000 was identified as the increase in oil and jet fuel price. Trend forecasts were based on average growth from 2000 to 2012 (the Lower Bound) and from 1990 to 2012 (the Upper Bound). The difference in growth rates of the two periods produce very different forecast outcomes.

Average Annual Growth	Period	London Area Airports	UK

Belly Hold Cargo	1990-2012	2.95%	2.87%
Belly Hold Cargo	2000-2012	0.49%	0.48%
Dedicated Cargo	1990-2012	2.76%	3.52%
Dedicated Cargo	2000-2012	0.02%	0.40%

Source: Oxford Economics

We note that despite being one of the world's leading economics consultancy's, Oxford Economics relied on a forecasting technique based on historic trends, rather than econometric regression analysis seeking to correlate historic growth in air cargo with changes in external/exogenous variables such as GDP, international trade etc. that might be driving the freight growth. Boeing and Airbus base their long term forecasts on GDP changes. The Oxford Economics' approach is consistent with it either not being confident in any relationships that exist, or simply not finding any explanation for the stagnation of air freight. Certainly, the forecasts produced have an exceptionally large range between low and upper bounds, which indicate the difficulty of forecasting cargo growth with confidence.

We have used the mid-point of these forecasts to drive our cascade model of how traffic might be distributed across the London area airports as and when airport capacity becomes constrained. We have estimated available capacity for cargo based on belly hold capacity generated on passenger services and on dedicated freighter flights.

Capacity

We have considered only belly-hold capacity Heathrow and Gatwick. At Heathrow with a significant number of wide-bodied aircraft (35%), we estimate the average belly-hold freight capacity to be 7 tonnes per ATM at LHR (2015), significantly higher than the actual freight per ATM of 3 tonnes. In an environment of freight growth, we have assumed this figure would increase at 1% per annum, reaching 4.3 tonnes per ATM in 2050, a load factor of 61%.

Currently, the majority of flights (85%) at Gatwick are narrow-bodied aircraft to short haul destinations, and likely to carry minimal volumes of freight. We estimate Gatwick's belly-hold capacity to be two tonnes per ATM. In 2015, actual belly-hold loads averaged less than 0.3 tonnes per ATM. We have assumed that this increases at 1.5% per annum, and reaches just over 0.3 tonnes per ATM in 2050, reaching a load factor of 15%.

We have assumed that the number of dedicated freighter flights remains at the average activity of the last five years at Heathrow and Luton. However, at Stansted permitted freighter movements may approach the statutory cap of 20,500 per annum. We have not included freighter movements at any of the other London airports. As the capacity per ATM on freighters at both Heathrow and Stansted was significantly above the loads actually carried, we have assumed that loads on freighters at these airports would grow by 1.5% per annum if UK freight market was growing at the forecast rate noted above. These assumptions take average loads on freighters to 55 tonnes and 53 tonnes respectively in 2050, still materially lower than the available capacity. We have assumed that the average load on freighters at Luton continues at 2015 levels.

Airport	Capacity Type	2011	2012	2013	2014	2015	Capacity 2015
Heathrow	Belly Hold load (tonnes)	3.0	3.0	2.9	3.0	3.0	7
	Freighter ATMs	2,456	2,380	2,365	2,084	2,388	2,388
	Freighter load (tonnes)	31.3	30.0	29.9	32.8	32.9	83
Gatwick	Belly Hold load (tonnes)	0.4	0.4	0.4	0.3	0.3	0.3
Stansted	Freighter ATMs	9,359	9,602	9,788	9,340	9,741	20,500
	Freighter load (tonnes)	20.3	21.3	21.2	21.7	21.0*	80*
Luton	Freighter ATMs	1,717	1,810	1,716	1,520	1,701	1,693
	Freighter load (tonnes)	15.6	15.9	16.3	15.1	15.8	15.8

* The average load in international freighter ATMs in 2015 was 31.7 tonnes per ATM, and the capacity on these movements 80.3 tonnes. We have used this as our forecasting base since most freight traffic is international.

Demand Allocation

These assumptions indicate that all forecast freight demand can be accommodated in all scenarios up to 2045. It is only in this year that some demand remains unaccommodated in two of the scenarios, although by 2050 there is unaccommodated demand in all scenarios.

Unaccommodated Demand (Tonnes x 1,000) by Scenario and Year

Year	Scenario			
	LHR R3	LGW R2	Both	Neither
2020	0	0	0	0
2025	0	0	0	0
2030	0	0	0	0
2035	0	0	0	0
2040	0	0	0	0
2045	0	35	0	123
2050	173	178	62	278

There is strong anecdotal evidence that a material proportion, probably around 20%, of air freight flying to and from the UK actually originates or is destined for continental Europe and is trucked across the channel. We have assumed that 20% of unaccommodated demand is lost to the UK air freight industry and flies from continental European airports. For the purposes of our assessment and in recognition of RiverOak's stated intention to develop Manston as a freight airport, we have assumed that half of the remaining unaccommodated demand is flown via Manston, with the other half going to other UK regional airports, potentially led by East Midlands and Manchester.

7. Financial Analysis

7.1. Introduction

In this section, we present the findings of our financial analysis based on the passenger and cargo forecasts set out in the earlier sections following an assumed re-opening of Manston Airport. The principles of the financial model and underlying assumptions are explained, followed by the outputs of the model for the Heathrow Third Runway scenario as it is the recommendation of the Davies Commission to Government. Finally, we present summary results of the other scenarios. A more comprehensive description of the outputs for the other scenarios is given in Appendix C.

7.2. Model Description and Input Assumptions

7.2.1. Financial Model

AviaSolutions has developed a model to assess the financial viability of a re-opened Manston Airport. This model assesses the financial performance of the airport based on various assumptions for four London area capacity scenarios which result in different demand scenarios for Manston. The assumptions have been developed in a number of different ways and draw on a wide range of sources including; analysis of the wider aviation industry, published financial accounts of the companies responsible for Manston Airport, benchmarking of comparable airports, information from our stakeholder interviews and our independent judgment based on knowledge and expertise within the aviation industry.

7.2.2. Brief Overview of Model

The model simulates the financial performance of the airport under different scenarios. This performance is measured through simplified financial statements including a Profit and Loss Statement (P&L), Cash Flow Statement and Balance Sheet. It should be noted that these are simplified statements used to illustrate performance and have not been produced to GAAP standards. The financial statements are modelled over a period from FY2017 to FY2050, on the assumption that the airport is reinstated on the site in FY2018. The Financial Year is assumed to correspond to the calendar year. This time period is typical of that used to evaluate long term infrastructure assets such as an airport, and the specific dates correspond with the period of the passenger forecasts used by the Davies Commission.

7.2.3. Approach to Assumptions

Throughout the research AviaSolutions has consistently taken a positive outlook with regards to the underlying demand assumptions. Specifically, this means that we have opted for the upper bounds of traffic, the upper bounds of unit operating revenue, the lower bands of unit operating costs, and minimal asset costs and capital investment requirements.

We therefore conclude that the assumptions and analysis that follow present the prospects of Manston airport in a very favourable context. We would consider these outputs to represent a 'High Case' and believe they present the airport in a situation where there is a very limited prospect of additional revenue or lower cost structures.

7.2.4. General Assumptions

Revenue

Airports generate revenue from two primary sources: from the charges levied on airlines for using their facilities (referred to as Aeronautical Revenue), and from more discretionary activities including retail, car parking and property (referred to as Non-aeronautical or Commercial Revenue). Manston Airport historically provided ground handling services to its customer airlines, and revenue from these activities is included in Aeronautical Revenues. Previously Manston Airport supplied fuel to some airlines, and our model includes this as a separate revenue line (as a net revenue so that the cost of the fuel does not need to be considered).

Revenue Assumptions within AviaSolutions Model

Revenue	
Aeronautical Revenue per Passenger	£7.00
Revenue per Tonne of Freight	£50.00
Commercial Revenue per Passenger	£5.00
Fuel Revenue per WLU	£0.93

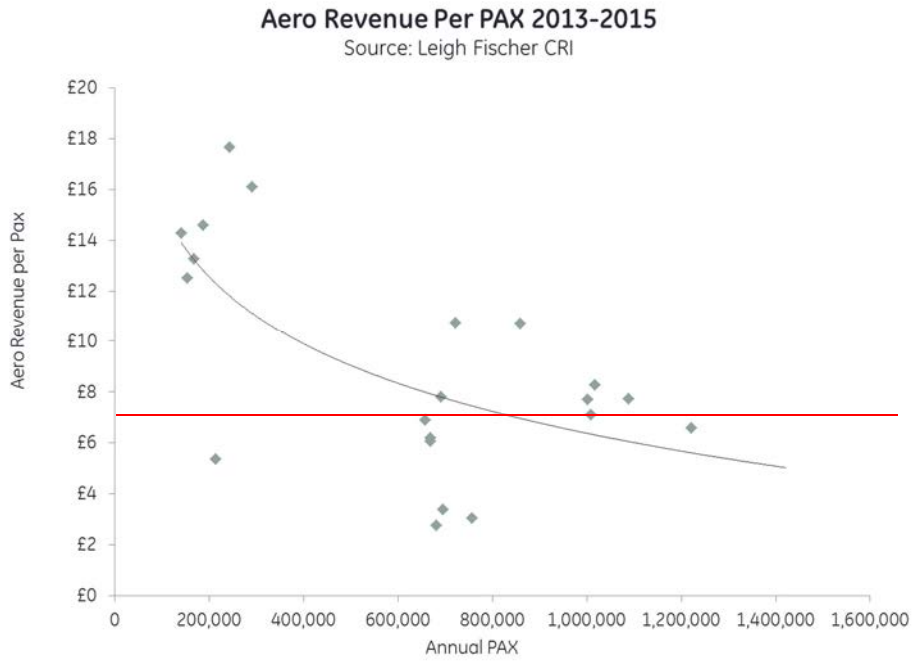
Aeronautical Revenue per Passenger

This revenue includes all airline related fees, including landing charges, passenger charges, and aircraft parking charges. However, it excludes Air Passenger Duty (APD), which is collected by the airline but passed on directly to the UK HMRC. It is normal industry practice, however, and for LCCs in particular to agree a fixed fee per passenger covering the entire range of airport operations (excluding any property rental).

Our experience is that the fees generated by the airport are greatly affected by the type of airline operating at the airport and the level of throughput achieved by the airline. Ryanair's airport charges, across its entire European network in 2015, amounted to €7.80 per total passenger (€15.60 per departing passenger) and during our stakeholder interview the airline indicated it would need to secure a highly competitive airport charge to base aircraft at Manston. The Ryanair average airport charge of €7.80 will include many capital city airports where the airline is very likely to be paying significantly above this average.

We also considered the average aeronautical revenue per passenger of airports that operate with a large share of LCC traffic, as would be expected at a re-opened Manston Airport. In the most recently published accounts (2015) Luton and Bristol airports reported aeronautical revenues of £5.66 and £4.24 per total passenger (£11.32 and £8.48 per departing passenger) respectively.

We have also assessed the aeronautical revenue per passenger achieved across a large sample of similar sized airports in the UK.



Based on these comparisons, we have concluded that a reasonable aeronautical revenue assumption for Manston Airport would be £3.50 per total passenger (£7 per departing passenger) for LCC traffic, and £7.00 per total passenger (£14 per departing passenger) overflowing from the London area.

Revenue per Tonne of Freight

The published accounts of Kent Airport Limited from 2013 identified revenues generated by freight activities. These revenues will reflect the landing charges from freighter movements, the use of the freight warehouses and the handling services provided to the airline. We have confirmed through an independent source that the historic revenue per tonne for freight achieved at Manston is consistent with market rates generally in the UK.

Commercial Aeronautical Revenue

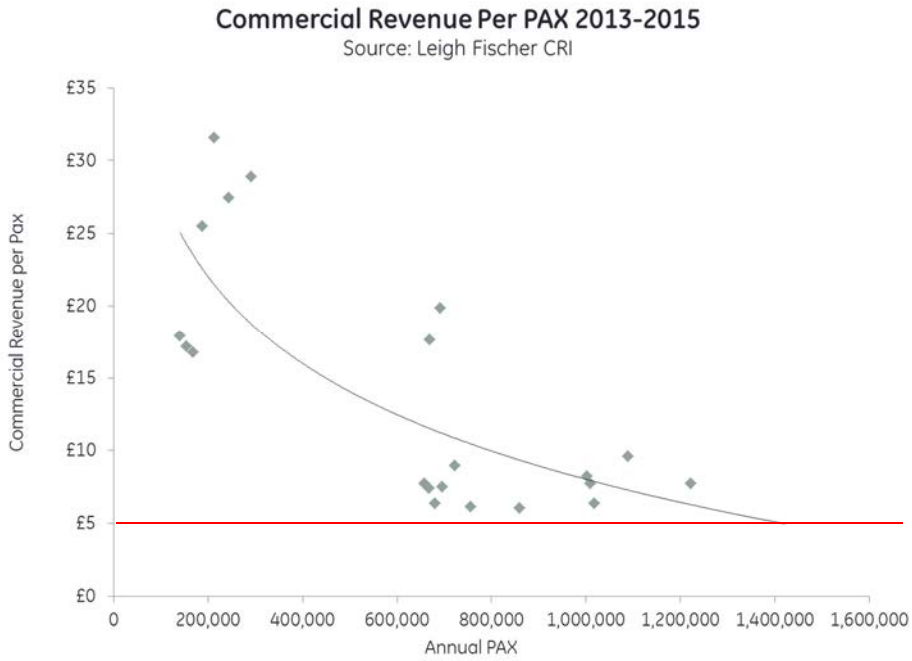
Commercial revenue is generated from passenger-facing services at the airport. One of the main sources of revenue are the airport concessions to operators of the retail shops (including duty free), food and beverage (F&B) outlets, car rental and currency exchange services. The operator will typically pay a percentage of turnover to the airport. Car parking is another source of revenue, with some airports managing operations in-house, whilst others out-source to specialist operators, such as APCOA or NCP.

Property revenue at Manston was £110,000 in 2014, and we have assumed that at a re-opened Manston Airport arrangements would continue on a similar basis.

We have built-up an estimate of potential commercial revenue per passenger by considering typical passenger spending and concession rates (turnover rent) that could be expected at a relatively small airport such as Manston.

In aggregate we have assumed that Manston could generate around £5.00 per total passenger (£10 per departing passenger).

We have also compared the unit commercial revenues generated at a number of smaller UK regional airports. It may be seen that there are a number of airports with low passenger throughputs which record high levels of commercial revenue per passenger. This is almost certainly caused by dividing a relative fixed rental income by a small number of passengers leading to an artificial inflation of the commercial revenue when measured on a per passenger basis.



We therefore conclude that a reasonable initial assumption for commercial revenue per passenger across all non-aeronautical activities is £5.00.

We have also considered the forecast expansion of the terminal to provide the necessary passenger capacity in later years under some scenarios. The terminal expansion would be expected to improve the retail and F&B offer and is assumed to contribute increased commercial revenue by £2 per passenger.

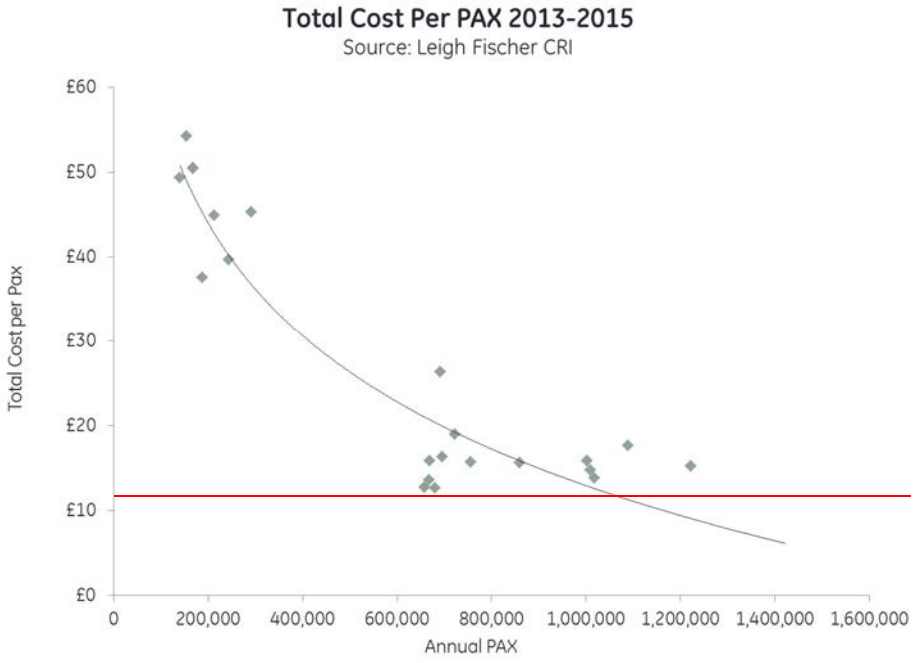
Aviation Fuel

The forecast for aviation fuel revenue is based on the net revenue after cost of fuel has been subtracted. The revenue is effectively the margin payable to the airport for fuel flowage. The margin has been estimated based on industry experience ranging from 3.5% - 7.5%. We have assumed Manston is able to achieve a margin of 5.5% and applied this to the total fuel revenue published in Kent Airport Limited's accounts (2014) to identify the fuel revenue per passenger or tonne of freight.

Total Operating Costs

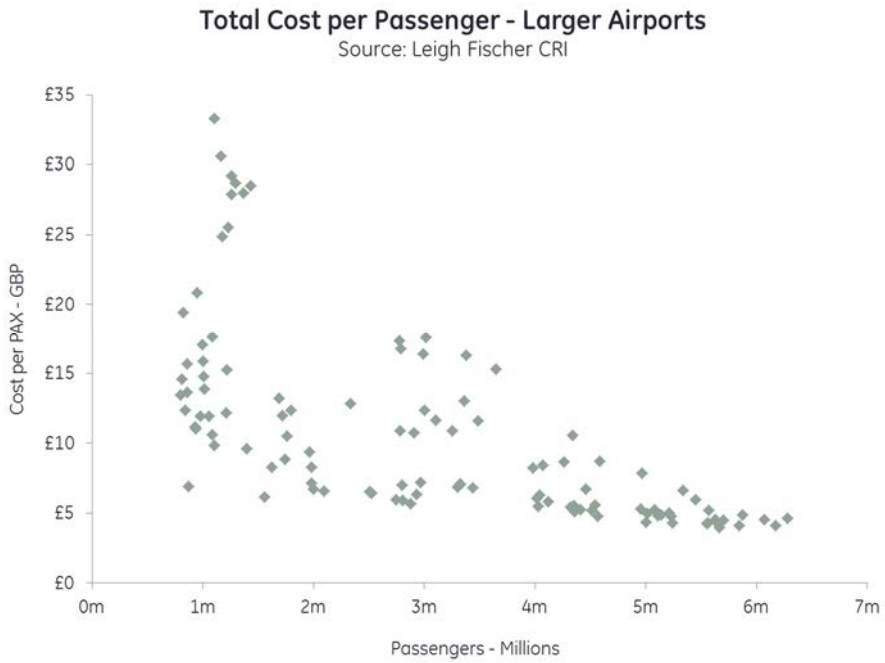
Airports with very low throughput have a high cost of operation per passenger: the fixed cost of airport operations can only be distributed across a low volume. Within a limited range, the marginal operating cost of an additional passenger is zero, but the marginal revenue of an additional passenger will be close to the average revenue per passenger.

This financial characteristic is common to capital intensive infrastructure assets. The chart below illustrates the relationship between volume and unit operating costs (per passenger) at a sample of small UK regional airports.



To reflect the expected evolution of the airport's operating costs over the forecast period we have assumed a fixed total operating cost of £7 million when annual passenger throughput is below 0.5 million. As passenger volume increases beyond 0.5 million we assume that the total operating cost per passenger will decline on a linear basis to reach £12 per passenger at around 1.0 million passengers. This would position Manston Airport amongst the best in class cost per passenger within its UK peer group.

It is reasonable to assume that unit operating costs will continue to decline with further increases in throughput leading to additional economies of scale, as illustrated below. We have linked unit costs to annual passenger throughput such that when annual throughput reaches 6.5 million passengers the unit cost would be £5.00.



Costs specifically associated with freight have been estimated at circa 60% of freight revenue based on the historic performance at Manston.

Overheads

Overheads have been obtained from the published accounts of Kent Airport Limited (2014) and exclude any restructuring costs. In a standard business plan these would often be linked with elasticity to revenue growth. However, as growth would come from a very low base AviaSolutions' view was this would have introduced too many additional costs into the business. Therefore, we estimated that these costs grew at a rate of 0.1x Work Load Units.

Other Assumptions

We have made several assumptions about the initial equity and purchase price of the airport. These assumptions have come from our stakeholder interviews and other research. They are for illustrative purposes only and may differ significantly from any actual investment.

Our estimate of the site purchase price is derived from the recognised value of the airport in Kent Facilities Limited's 2014 published accounts (£7 million) inflated by circa 50%. It is believed that this could be considered a conservative valuation of the site, dependent on the designation of the land at the time of acquisition. The current owners (Stone Hill Park) are seeking planning permission for up to 2,500 dwellings, should this permission be granted, we would assume the land to be valued far in excess of £10m.

We have developed our own estimate of the costs of re-establishing the site as an operational airport based on our industry experience and a site visit. The estimate includes the necessary work to return the airport to a serviceable condition that would satisfy the CAA and facilitate the handling of up to about 2 million passengers annually. We have excluded any advisory or legal fees associated with the Development Consent Order, though these may be considerable.

Cash Flow & Balance Sheet	
Initial Capital Injection	50,000,000
Airport Site Purchase Cost	10,000,000
Airport Site Development Costs	27,000,000
Debt Interest Rate P.A	3.0%
Straight Line Depreciation Years	60
Effective Tax Rate on Net Income	20%
Dividend Payment % of Profit / Cash	0%

We have also assumed that the investment in Manston is funded solely by equity with no debt facility. This is in part to reduce the assumed cash outflow in the early years of operations, but also because we believe that debt-financing would be difficult to secure and relatively expensive.

Additional Capital Expenditure (CAPEX)

Additional capital expenditure is assumed to be required at the point when the airport reaches 2.0 million passengers per annum and is forecast to remain at this level or above. Where the airport is growing rapidly (notably in the 'No Runway' scenario), the additional capacity investment is in two £50 million stages. Where the airport is expected to grow more slowly, additional capacity investment is assumed in a single £30 million stage.

Financial Statements

Taking the combined effect of the financial assumptions and the demand scenarios we have developed a number of illustrative financial statements. These include:

Profit and Loss:

- Operating Statistics
- Revenue Lines
- Direct Cost Lines
- Gross Income
- Overheads
- EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation)
- EBITDA Margin (EBITDA as a percentage of revenue)
- EBIT (Earnings Before Interest and Tax)
- Net Income (EBIT less Interest and Tax))

Cash Flow Statements:

- Opening Cash Balance
- Net cash flow from Operating activity
- Net cash flow from Investing activity
- Net cash flow from Financing activity
- Closing Cash Balance

Balance Sheet:

- Total Assets
- Long Term Liabilities
- Owner Equity
    - Retained Earnings (which in part determines the ability to dividends to equity investors)
    - Share Capital

7.3. Outputs for LHR Third Runway Scenario

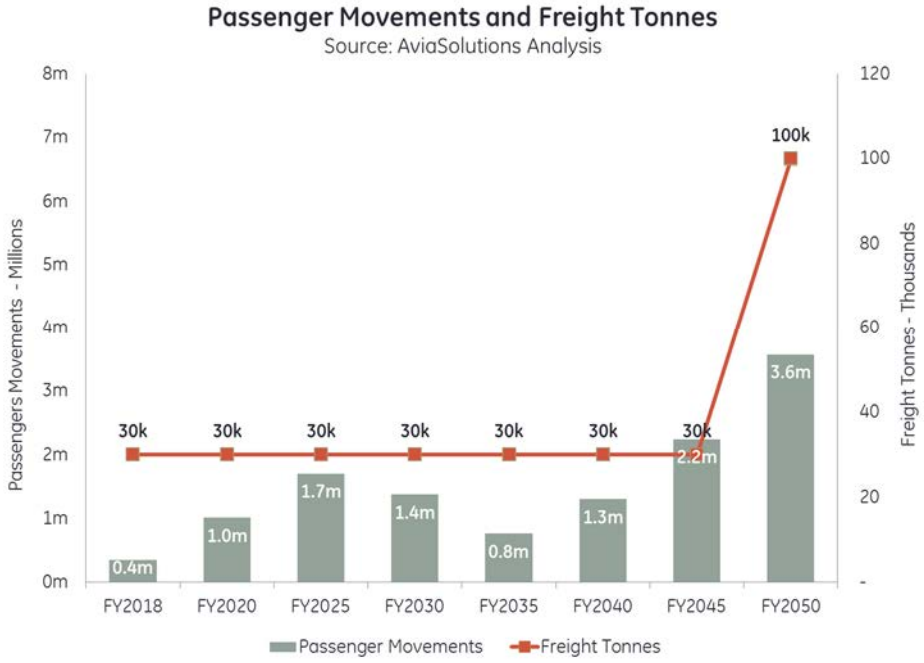
In the following paragraphs we explore the financial viability of Manston Airport based upon there being a third runway at Heathrow. This is the option which was recommended by the Davies Commission and therefore may be presumed to be the most likely outcome. However, the likelihood is that a runway at Heathrow would take longer to commission than one at Gatwick so consequently, Manston may have an initial boost to traffic before falling back and then growing again. This scenario takes spill from the London system in addition to a base level of activity generated from the presumed small LCC operation and freighters. This scenario is more favourable for Manston Airport than a development at Gatwick, and is perhaps the most likely.

7.3.1. Volume Profile

Passenger numbers are forecast to grow to nearly 2.5 million by 2029, the year before the assumed opening of the third runway at Heathrow Airport, but immediately fall back from 2030 and decline to a low of 0.5 million in 2033. From this low point, traffic volume grows as a result of the resumption of overflow, reaching 3.5 million passengers in 2050. Overall growth between FY2018 and FY2050 averages 10% annually.

Freight is not forecast to grow beyond the 30,000 tonnes of the core freighter operations until FY2040, but at that point, freight is assumed to spill from the London Area taking it to some 100,000 tonnes by FY2050.

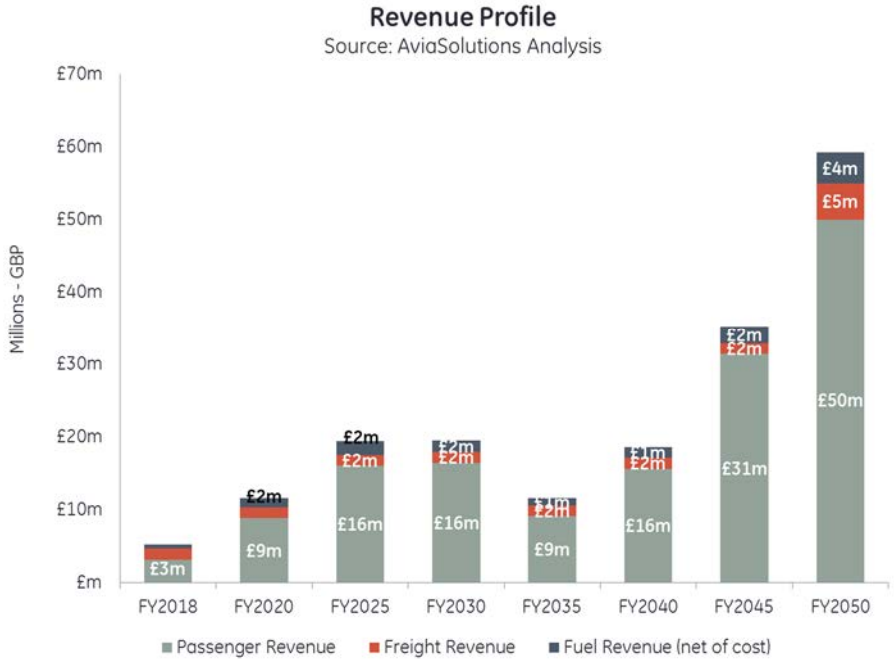
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Passenger Movements	350k	1,010k	1,700k	1,370k	760k	1,300k	2,240k	3,570k
Freight Tonnes	30k	30k	30k	30k	30k	30k	30k	100k
Total ATMs	1,100	2,900	6,400	9,600	5,300	9,200	15,800	28,000



7.3.2. Revenue Profile

Airport revenue is forecast to grow at CAGR 12% between FY2018 and FY2030, driving revenues to about £20m by FY2030, and at CAGR 8% between FY2018 and FY2050 to reach total annual revenues of around 0m by FY2050.

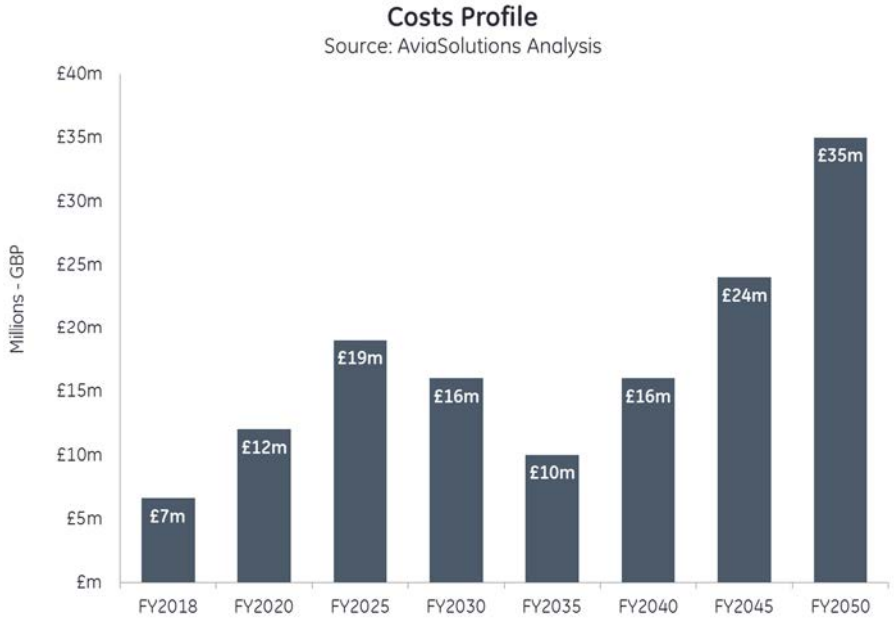
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Revenue	£5m	£12m	£19m	£19m	£12m	£19m	£35m	£59m

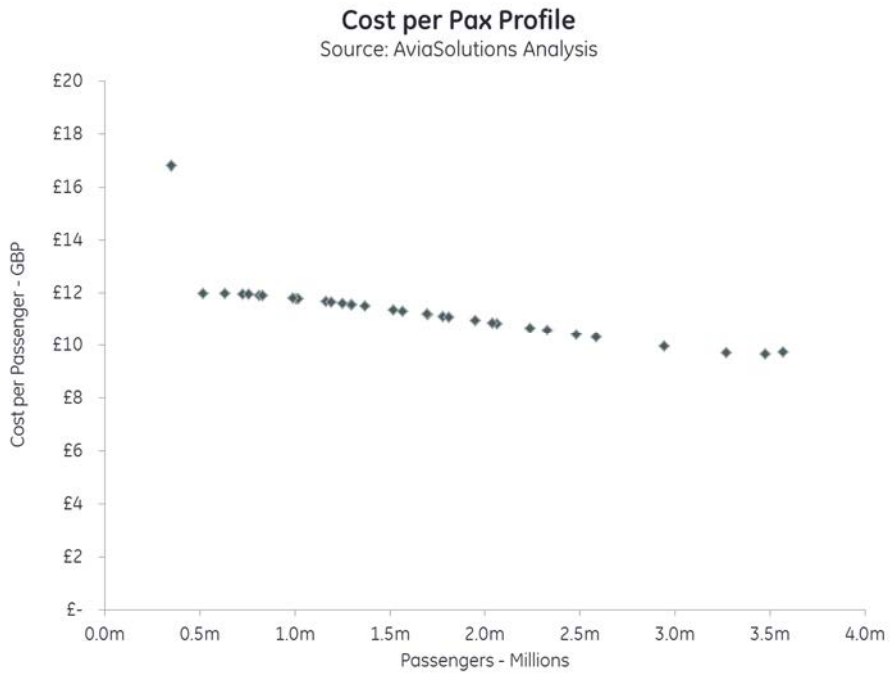


7.3.3. Cost Profile

Total Costs are forecast to grow at 8% per annum on average between FY2018 and FY2030, resulting in total costs of about £15m by FY2030, and at 5% per annum between FY2018 and FY2050 to produce total annual costs of £35m by FY2050.

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Cost	£7m	£12m	£19m	£16m	£10m	£16m	£24m	£35m

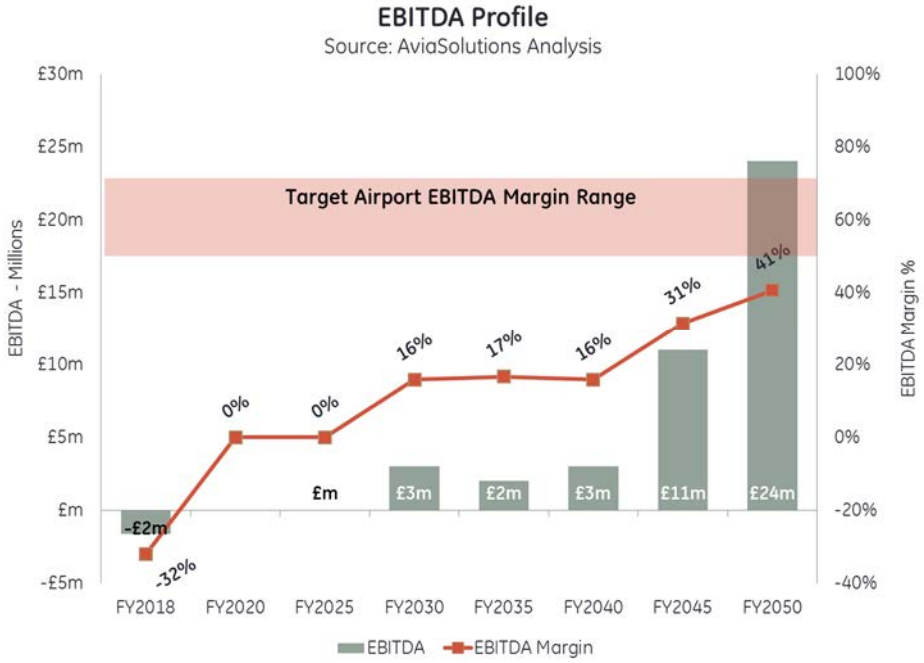




7.3.4. EBITDA Profile

EBITDA is initially forecast to be negative, indicating that the airport would be loss making in the early years at an operational level. It first returns an operating profit in FY2030, generating £9m of operating income and an EBITDA margin of 16%. As the third Heathrow runway comes on-stream, EBITDA at Manston would stagnate due to the lack of available volumes. The EBITDA margin in the long term is forecast to reach 41%, with an EBITDA of £24m in FY2050. This level of EBITDA is significantly below that which we would typically expect for an airport to be attractive to the investment community.

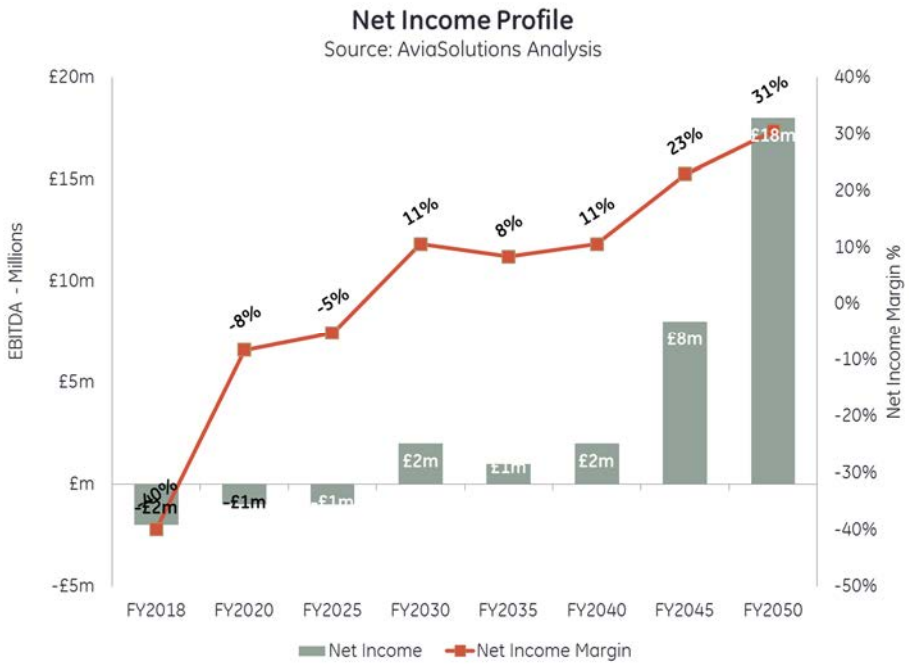
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
EBITDA	-£2m	£m	£m	£3m	£2m	£3m	£11m	£24m
EBITDA Margin	-32%	0%	0%	16%	17%	16%	31%	41%



7.3.5. Net Income Profile

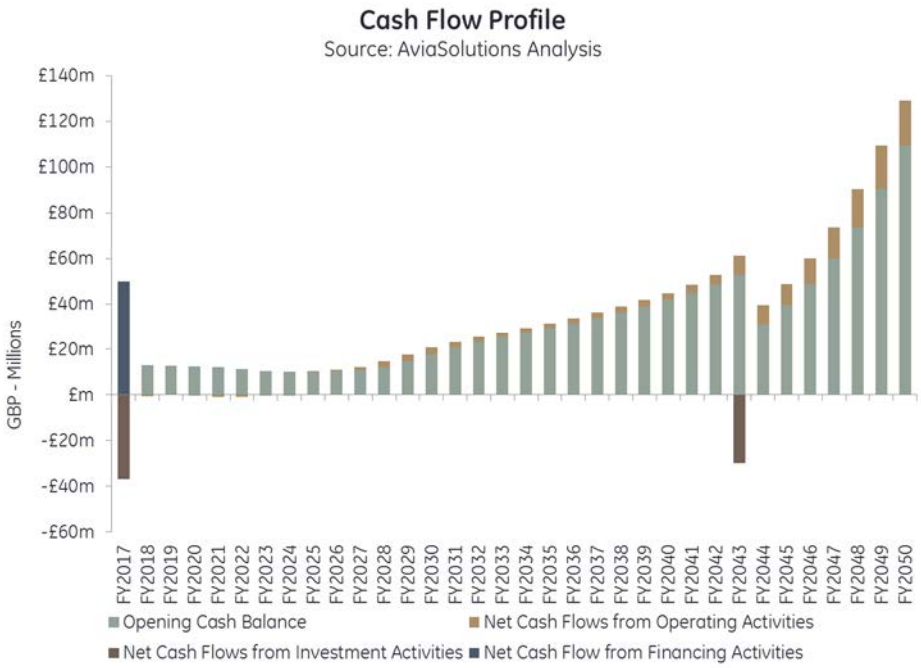
Net income, the profit after deductions, is forecast to be negative until FY2025. The first positive results are generated around FY2030 when the airport is expected to generate net income of £2m. The income stream remains constant for the following 15 years before increasing as capacity becomes constrained once more in the London system. It reaches £18m in FY2050.

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Net Income	-£2m	-£1m	-£1m	£2m	£1m	£2m	£8m	£18m
Net Income Margin	-40%	-8%	-5%	11%	8%	11%	23%	31%



7.3.6. Cash Flow

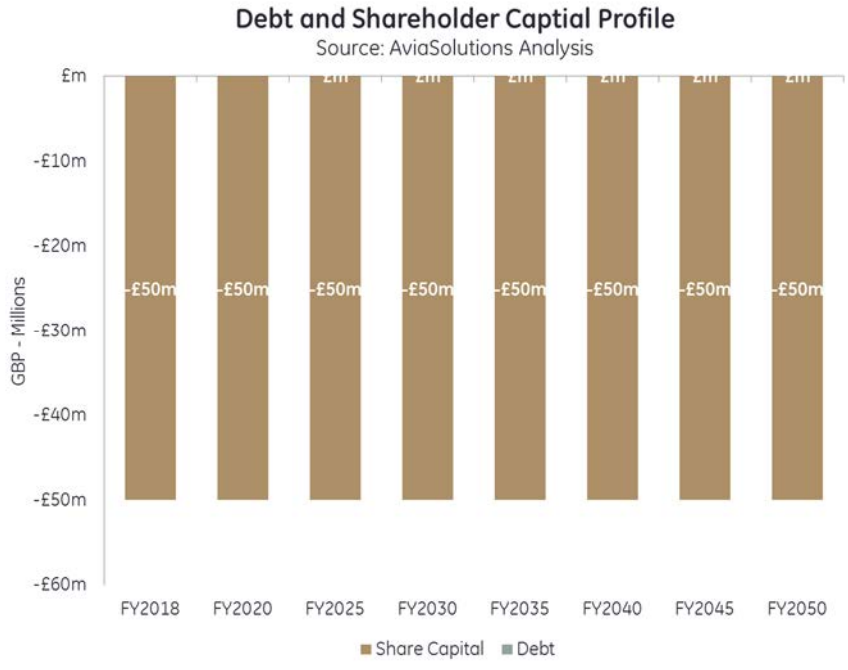
The airport is forecast to develop its cash position with limited additional capital requirements until FY2042 when there would be a requirement to expand the terminal. We have assumed that although demand would exceed terminal capacity in the late 2020s, new terminal capacity would not be provided in anticipation of the loss of traffic following the commissioning of the third runway on 2030. The position shown below excludes any dividend payments that the owner may wish to extract from the asset: such payments would reduce its cash position.



7.3.7. Debt and Shareholder Capital

Whilst the exact nature and mixture of debt and shareholder capital would be subject to complex financial optimisation, we have illustrated below a simple capital structure used in the analysis to illustrate the need for additional capital throughout the period. To maintain the business no further financing would be required. Whilst the business does not generate significant revenues or income, there is little requirement for significant CAPEX investments, thereby eliminating the requirements for additional financing

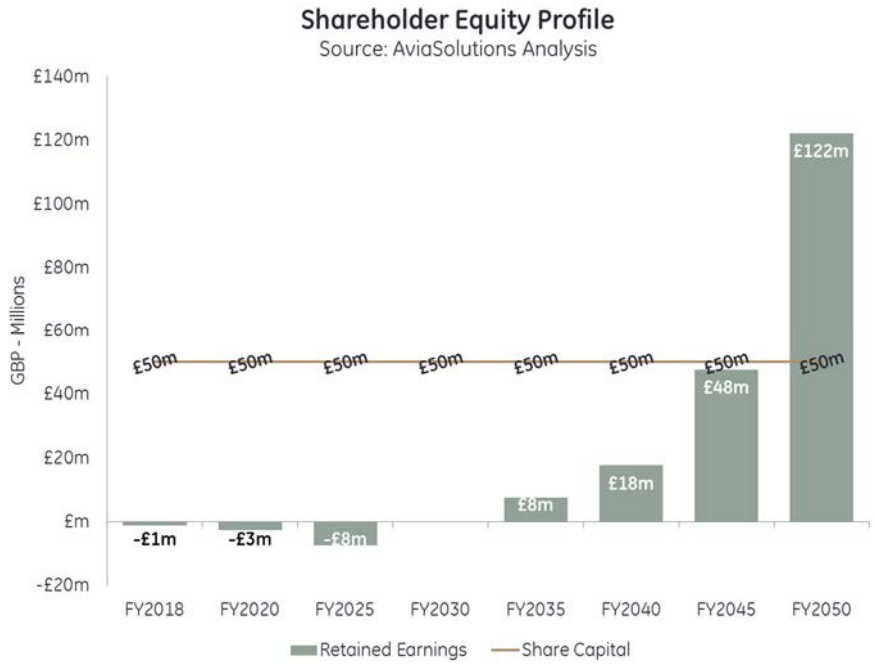
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Debt	£m	£m	£m	£m	£m	£m	£m	£m
Share Capital	£50m	£50m	£50m	£50m	£50m	£50m	£50m	£50m



7.3.8. Shareholder Equity

Considering the effects of earnings on shareholder equity, the business does not post positive retained earnings until nearly FY2035. This in effect limits the business's ability to pay dividends to shareholders until this point at the earliest.

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Retained Earnings	-£1m	-£3m	-£8m	£m	£8m	£18m	£48m	£122m
Share Capital	£50m	£50m	£50m	£50m	£50m	£50m	£50m	£50m



7.3.9. Conclusion

The asset would require significant long term investment but would only generate a marginal return on the capital invested. These returns are also predicated on a large number of external variables over which the owner of Manston Airport has limited influence. It is AviaSolutions' view that based on this scenario there is no viable long term prospect of an economically viable airport being established at Manston. It should also be noted that the scenario outlined above excludes any return to the investor, and we have therefore effectively weighted the cost of equity at zero in our model. Investors will always be seeking to maximise the return on their investment in a manner appropriate to the risk they bear in the asset. Given the risks involved with Manston, it would be right to consider that any investor would be seeking the potential for above average returns, which, according to the analyses, may not materialise.

7.3.10. Non-Technical Summary

AviaSolutions' analysis indicates that the airport, operating as a standalone trading entity and in the scenario where a third runway is built at Heathrow, is unlikely to be a financially viable proposition. Airport operations are not anticipated to generate material profit until FY2040.

This is due to the relatively low level of revenue that can be generated and the high level of fixed costs required to operate the airport. This in turn means that the airport would not be able to distribute profits to investors in the airport for many years.

Generally, investors seek to achieve a return on their capital with an expected return commensurate with the risk of the investment. As the risks of investing in Manston are significant there would need to be reasonable prospects of a high return, which does not appear likely based on our analysis.

7.4. Summary of Other Scenarios

We have presented in this main body of text the scenario deemed most likely to occur e.g. LHR3. This is the current recommendation of the Davies Commission and therefore, at the time of writing, believed to be the Government's current preferred option. Details of the three other capacity development scenarios are given in Appendix C.

7.5. Comparison of Scenarios

We compare some key aspects of the four scenarios below.

Measure	LHR R3	LGW R2	Both	Neither
First year retained earnings positive	2031	2032	N/A	2029
Retained Earnings at 2050	£122m	109m	-£20m	£516m
Refinancing				
When?	None	None	None	2028, 2029
Why?	n/a	n/a	n/a	Capex
How much?	n/a	n/a	n/a	£40m
EBITDA Margin				
Year first greater than 50%	n/a	n/a	n/a	2043
or in 2050	41%	40%	34%	60%
Probability	40%	40%	10%	10%

8. Conclusions

8.1. Introduction

In this chapter we draw together the conclusions of our research and analysis to form our conclusions, specifically to opine on whether there is a realistic prospect of a financially viable airport operating on the Manston Site.

8.2. Summary

It is AviaSolutions view that having considered the stakeholder interviews and independent research and analysis into historic accounts and 'reasonable' adjustments for one-off costs that there is little prospect of a financially viable airport on the site.

The only circumstances in which we believe the airport may be viable is that in which no new runway were developed in the South East of England. However, this scenario presents extreme risk to the investor, as a decision to increase runway capacity at those not physically constrained (e.g. legally constrained LHR and STN) could be made at any time, or a new runway may be authorised at any time in the future.

8.3. Stakeholder Interviews

Our stakeholder interviews were split between those focused upon passenger development and those focused upon freight development. The range of interviews provided an understanding from the industry as to their position on the airport.

Our passenger service interviews suggested that overall there is little interest in serving the airport, in particular from airlines that had previously served the airport such as Flybe. There was some limited interest from airlines such as Ryanair and KLM, who would consider the airport as part of their standard UK market review, however they were not actively seeking to serve the airport. It is our view that we must consider this in light of its context; for an airline that bears no risk in an airport's reinstatement and for whom its reinstatement may present upside risk, it would be illogical to rule out the possibility of serving it. Overall, our interviews suggested there was very limited interest in the airport for passenger services thus suggesting a long term viable passenger service may be difficult to sustain.

Our freight interviews indicated that the demand to use the airport for freight was very limited. This, in large parts, is due to two factors; the infrastructure investments that have already been made by the industry around Heathrow and Stansted, and the geographical location of the airport. Infrastructure, and the associated knowledge, skill and supporting industry at airports such as Heathrow and Stansted, as well as the major European hubs such as Frankfurt, and Paris, would be almost impossible for Manston to replicate. The geographic location of the airport, tucked into the corner of the UK, cannot compete with airports such as East Midlands for Integrator services that are sold as fast delivery, due to the increases in surface transportation times. The interviews did however indicate that charter services and ad-hoc freighter flights would certainly return, providing some revenue income for the airport. In summary, we conclude that freight would return to the airport in limited quantities, not dissimilar to the tonnage previously processed at the airport.

8.4. Simulations

AviaSolutions' models provided simulations of the financial performance of an airport on the site under different demand scenarios. These scenarios were developed with a positive view of the potential demand profile, unit revenue and unit cost and investment costs. Two simulations (LHR3 and LGW3) suggested that the airport was unlikely to generate profits at an operational level (EBITDA) until circa FY2025, and that these profits would remain muted through until FY2040. The EBITDA profile suggests that, based on recent industry exit multiples, it would not be possible to recover the initial equity through a sales process as this point. Furthermore, these scenarios suggest that retained earnings would not turn positive for 15 to 20 years, thus limiting the ability of an investor to recover their costs of equity. In summation, these scenarios present very large risks with small returns over a long time horizon.

Our 'Both' runway scenario, naturally, provides an even less favourable result for Manston airport. If this runway scenario were to materialise there would be no prospect of Manston operating on a sustainable basis.

Our 'No Runway' scenario presents some opportunity for the airport. As demand through the London System increases and capacity remains muted, this demand will be spill to alternative airports. Manston, located within reasonable distance to London could be an airport to benefit from this spill, along with airports such as Southampton and Birmingham who are well connected by train to London. In our simulation, this scenario generated sufficient operational income (EBITDA) to support itself, and only required additional financing to expand. However, we must caution that this scenario is balanced in a careful equilibrium, should this be disturbed through the introduction of additional capacity via a new runway or loosening of regulation, the prospects of Manston could be severely diminished.

9. Appendix A: Stakeholder Interviews

Throughout the study, AviaSolutions spoke to many companies and individuals to gather their feedback. Given that these companies operate in a competitive commercial environment, it is not unsurprising that many of those spoke on the condition of anonymity. This is not unusual, particularly given the particular sensitivities around the project. In the following section detailing our interviews, and summarising the comments made, any company or individual that spoke on the basis of anonymity has been identified by only their sector and seniority.

AviaSolutions spoke to the follow stakeholders and / or their representatives:

- Discovery Park / Stone Hill Park
- RiverOak Investment Corporation
- Ryanair Ltd
- Flybe
- KLM
- Mr. Stanley G. Wraight
- Sir Roger Gale MP

Anonymous Sources

- Major European LCC
- Freighter Operator at Stansted
- Air Cargo Charter Broker – UK
- Ex-Director of Network Planning – Major European LCC
- Manager, Flight Operations, Major UK Carrier
- Ex-Senior Executive DHL

Disclaimer: The following Stakeholder Interview notes are representative of the views and opinions of the stakeholders only and not that of AviaSolutions. The notes represent, in AviaSolutions view, an accurate account of the interview but are not a verbatim account of our interview.

Mr. Paul Barber, Managing Director, Discovery Park
Mr. Paul Barber is the Managing Director or Discovery Park, and represents the current owners of the airport site.

- Mr. Barber outlined the ownership structure of the airport site. The airport is owned by Lothian Shelf 718 which is ultimately owned by Chris Musgrave, Trevor Cartner and Ann Gloag.
- Paul Barber is Managing Director and responsible for the day-to-day running of Discovery Park which is the *de facto* administrator of the site.
- The current owners, Mr. Cartner and Mr. Musgrave, are specialists in the redevelopment of the brownfield sites; they have redeveloped Discovery Park and a second site in the north of England.
- Mr. Barber gave a frank view as to the difficulties PricewaterhouseCoopers had when attempting to dispose of the site. After two years the only offer made on the site was from Ann Gloag for £1. Thus, in the view of the current owners, demonstrating the lack of financial interest in the site as an airport.
- During the period of ownership by both Manston Skyport, and under Lothian Shelf 718, Mr. Alistair Welch was heavily involved in the airport. Whilst under Manston Skyport, Mr Welch was chairman of the airport. Later in his career Mr. Welch became Managing Director of Southend Airport and was responsible for introducing EasyJet to Southend.
- Throughout the period of ownership whilst the airport was open Mr. Welch made high-level contact with every reputable airline and not a single airline was interested in operating from Manston, even with aeronautical charges at zero. The only airline that even considered operations was Ryanair, but the option was declined within 48 hours.
- Whilst the airport was open for operations freight was the main source of income. This freight was predominantly import driven from Africa. Whilst the site was able to offer quick access from aircraft to road there was little value-add to clients.

- Thanet Parkway Railway Station will add little value. It is not certain if or when it will be operational, and costs appear to be overrunning already. There is a funding gap and it does not improve journey time to London by more than 10-12 minutes.
- Due to the lack of airlines operating from the airport, Mr. Barber stated that the airport losses were running at close to £5.0m per annum.
- Mr. Cartner and Mr. Musgrave bought into the airport site after the airport had closed. They had no stake in the business whilst it ran as an airport. The business men approached Ms. Gloag given their proximity to the airport and specialisms in the development of brown field sites.
- Stone Hill Park Ltd was formed with Ms. Gloag, Mr. Cartner and Mr. Musgrave. The company believe that Thanet District Council require an additional 15,600 homes. The development will offer around 2,500 of these homes, mixed between starter homes up to five bed executive homes. The planning application includes a provision for social infrastructure such as schools.
- At present there are some small costs associated with the site, but these are mainly the single employee and the security of the site, and utilities. The current owners are not fundamentally against the concept of an airport being run, however they see no credible business plan to evidence its possibility, nor do they believe it is best economical use of the site.
- When pressed on RiverOak's desire to reopen the airport, Discovery Park "don't know where RiverOak are coming from stating an airport is viable". Discovery Park has not had sight of any business plan from RiverOak and RiverOak have not made any credible offers for the site.

RiverOak Investment

AviaSolutions met with RiverOak Investment and its representatives:

- *Mr. Tony Freudmann*
- *Ms. Sally Dixon*
- *Mr. Richard Connelly*
- *Ms. Angela Schembri*

- RiverOak Investment (RiverOak) became interested in Manson airport due to a previous project in the U.S.A. A RiverOak Partner (Nial Oldman) had organised a bond for a U.S airport that was freight driven and found excellent returns on the investment, thus sought an investment of similar characteristics.
- With regards to the asses itself, RiverOak believes the airport is geographically well positioned to capture freight, being in the South East and near the Channel Tunnel. It acknowledges that considerable investment will be required to return the airport to an operational state. However, they are confident through their initial plans that this is feasible and the asset can quickly be returned to a state in which is can handle in excess of 10,000 freighter movements per annum.
- The total investment that RiverOak would seek to make is in the region of £300m over the course of a 12 year period. This would ensure the airport site delivers a high level product and service. Further to this investment, the group would need to sink costs in the DCO process, the DCO purchase cost (circa. £4m in RiverOak's view) and finally in compensation to the current owners (although RiverOak have a value in mind, they are unable to disclose). RiverOak believe the minimum investment needed to bring the airport back to viability is circa £20m, excluding DPO, site purchase and compensation.
- The driving force behind the business plan is air freight and is the vital link to secure a NSIP designation.
- The absence of a national freight strategy is an opportunity which RiverOak seek to influence and develop.
- When probed as to the previous failures at the airport, the RiverOak team held strong views as to the causes of this, and what could be done to overcome this situation in the future. The team had strong views that whilst the airport offered excellent service, the previous owners had done nothing to exploit the asset, or its niches, or to improve its market position. In particular, the team felt strongly that the airport had not made any efforts to promote the airport to Freight Forwarders.
- It is RiverOak's understanding that the airport should be heavily involved in the sale of capacity on board freighters. They believe the previous owners were satisfied to allow freighters to depart with unutilised capacity, and this is an area they would seek to address as owners. ***(Note, AviaSolutions understand this to be an irregular market position to take and pressed to clarify this point during our interview).***
- RiverOak have also considered the geographic location of Manston airport and how it feeds into the ATC systems. They believe Manston is ideally located for aircraft to plug in and out of the national ATC

network. Furthermore, they would expect to receive an EASA license and have had discussions with the CAA to understand the processes required to re-license the airport.
- Further to passenger and freight traffic, RiverOak believe the airport would offer additional services as a diversionary airport within the UK system. There may also be revenue streams from permitting the airport to be used for training purposes.

Traffic

The team talked to AviaSolutions briefly on their Traffic forecast, this area of the business plan has been developed by Ms. Sally Dixon.

- Initially, Ms. Dixon began by reviewing the currently available literature. York Aviation's report of January 2015 suggested that due to capacity constraints 2.1m tonnes of freight will be lost from the London system if no runway is built. RiverOak estimate that this is the equivalent to 100,000 truck movements across the Channel, should this freight all be lost to Europe.
- With regards to capacity type, RiverOak stated that capacity is 70/30 split in the UK with only 30% of capacity offered on Maindeck-freighter services. In Europe, it is stated that this is much closer to 60/40. It is RiverOak's belief that this is caused through a lack of slot availability for freighters in the UK, thus the demand is being constrained.
- The business plan forecast that Manston would achieve 10,000 freighter ATMs in the fifth year of service, these ATMs would be predominantly wide-body aircraft. This level of freighter movement is supported, in RiverOak's view by the wider industry.
- The airport would also seek to develop a passenger business and seek volume from several sources. RiverOak believe that KLM would be keen to return to the airport (despite low load factors). They also state that they are in advance discussions with Ryanair over the potential to base two to three aircraft at the airport. RiverOak are also in preliminary discussions with EasyJet. Finally they believe there is a potential to develop Charter traffic, in particular with the cruise markets and Dover port.
- Taking all these considerations together RiverOak state that they would 2m passengers per annum in the second year of operations.

Ms. Kate Sherry, Deputy Director of Route Development, Ryanair

- Ryanair have recently discussed with RiverOak potential future operations at Manston airport. These conversations have been on the same basis as Ryanair is open to discussions with any airport wishing to obtain services from the airline.
- Previous to these discussions, Ryanair held talks with the owners of Manston airport prior to its closure. These talks were halted when the airport closed and therefore not concluded.
- If Manston were to become an operational airport once again, it is not a foregone conclusion that Ryanair would serve the airport. The airline would look to base any decision on a multitude of factors, including the size and depth of the catchment area and also the commercial terms proposed. Securing a low cost base to the airline is a core aspect of the analysis; this includes the handling and airport charges, effects of APD, operating economics of the route, and in the case of the UK, FX rates to Euros.
- When considering the Catchment delivered from population size Ryanair would look to the airport to sell the benefits of their specific catchment. It is difficult to comment at present on the quality of the Catchment.
- When considering the effects of the London System, Ryanair are not currently concerned with spillage from the London System to periphery airports. The airline is comfortable that there is room for expansion at Stanstead.
- If Ryanair were to serve the airport, the depth of the network would permit the airline to serve it without necessarily basing aircraft at Manston. However, it is possible in the future that the airline could choose to base a single aircraft at the station.
- Once a decision to operate had been reached, generally a lead time is permitted to allow the sales and marketing processes to embed. This also ensures the airline can plan its schedule appropriately, working approximately six to nine months in advance.
- As has been recently stated in the media, BREXIT remains a concern for Ryanair and any effects of the UK's exit from Europe would be factored in to a decision to operate.
- In summary, Ryanair are constantly reviewing their network and remain open to approaches from any airport. If the airport became operational, the airline would review its potential and fit within the wider airline network in due course, and is available to discuss terms with the owners at any time.

Mr. Martin Pearce, Flybe

- Europe's largest regional airline, Flybe, operated several routes from Manston in the years' preceding its closure. The airline did not base aircraft at Manston. In their experience the service offered was excellent with no issues arising from handling or passenger services. The passengers traffic was were mainly leisure and VFR, with very few business passengers.
- Mainly outbound e.g. Manston to the destination, very little in terms of other end originating
- These routes closed predominantly due to poor load factors, there was insufficient demand for the service from the local catchment area and very little demand for inbound traffic to Manston. Furthermore, the yield profile of the traffic did not meet with the airlines expectations.
- In normal circumstances the airline would permit a two to three year ramp up period following a route opening, however given the operating conditions the airline ceased operations within 12 months.
- The reasons the route performed below expectations are varied, but these are believed to have been exacerbated by the relatively small local catchment, less favourable average economic development and poor public transport infrastructure links to London.
- The airlines have reservations as to whether the airport could serve the South East catchment, and do not believe that the airport could realistically serve spilled traffic from the London system.
- It is unlikely that, even if Manston should reopen, the airline would choose to serve the airport.

Major European LCC

- Manston is not an airport the airline is considering. The company focuses on core catchment areas with less than 60 minute travel to the airport, and at most 90 minutes.
- Manston has a weak demand and the local catchment area is not overtly wealthy.
- Alternative airports offer better options, Southend and Stansted tap the London catchment area and can be really cost-effective airports
- Manston would have to tap into Gatwick's catchment and price would need to be very low (no more than a few pounds per passenger.
- The airport is probably not for the LCC in question. If there was no runway capacity available in the South East, the LCC would opt for a larger aircraft type before selecting Manston and would probably consider alternatives such as Southampton and Bournemouth first.
- Other carriers without a footing in Gatwick might consider Manston, as might freighters.

Ex-Director of Network Route Development for Major European LCC

- Following the BREXIT vote many airlines will be considering their approach to the UK. During a period of uncertainty it will be difficult for Manston to convince carriers to open routes to the airport.
- LCC's would look to secure deals with minimal aeronautical charges. Without an extremely competitive rate there is no possibility an LCC would locate services at an airport. In some cases, LCC's have walked away from airports offering negative aero-charge deals due to poor volumes.

Manager, Flight Operations, Major UK Carrier

- The individual plays a key role in the Flight Operations team at a major UK carrier.
- It is the individual's view that Manston does not offer any safety or resilience benefits of a material nature to the UK system. The airport is located in close proximity to six London airports which offer excellent resilience already.
- The airline would also not consider using Manston airport as diversion airport except in an on-board Mayday emergency (which are extremely rare).
- When considering diversion airports the airline considers multiple factors such as; does the airline already offer services at the airport, the size of the airport, the facilities at the airport to handle passengers, the local facilities to provide hotel and accommodation, the equipment at the airport to handle all types of aircraft required e.g. GSE equipment, and other legal requirements such as the provision of sufficient Fire Cover. On these measures, it is considered unlikely that Manston would be selected as an alternative airport, when Gatwick, Heathrow and Stanstead can all provide superior services within London.
- In the individuals view, whilst Manston would be used in an absolute emergency, it would be very unlikely to receive regular diversions for routine operational reasons, such as weather or runway closures.

KLM Position

- We are evaluating our network to the UK on a yearly basis. We are constantly being approached by airports who would like us to operate to their airports. These opportunities that arise are being looked into and MSE could be one of them.
- It is not possible to say how likely the chance would be that this would materialize in a new operation in the next 5 years in case MSE airport would be operational again

Senior Executive in Cargo Division for Airline Operating Freighters at Stanstead

- Airlines base the decision on where to operate their freighters based on a multitude of factors. However, the overriding factor is based on where investments in infrastructure have been made by their clients, Freight Forwarders. These CAPEX investments by Freight Forwarders are required to ensure they maintain economies of scale through their transit facilities and distribution centres. In the UK, these investments are centred at Heathrow, and more recently Stanstead.
- The airlines first choice of destination was Heathrow, as the majority of Freight Forwarders have their major infrastructure in and around Heathrow. The airline was unable to access slots at Heathrow and so selected Stanstead due to runway length, a mature offering including infrastructure development and third party handlers
- Stanstead operates a world class facility and has the competencies to handle freighters. It is questionable whether this would be possible, at least initially, at Manston.
- The airline would be extremely unlikely to consider moving services to Manston, even if they were no longer able to serve Stanstead, regardless of the commercial terms offered. If the airline had to move services they would consider East Midland and Manchester or other centrally located airports over Manston.
- The individual also believes that there is virtually no chance that a Freight Forwarder would choose to relocate services to Manston.
- Furthermore, as air cargo is a commodity virtually all operators offer the same service and compete on prices. Therefore, most operators implement similar strategies and business models. The result of this is that, in the individual's opinion, other freighter operators would also take a similar stance.

Air Cargo Charter Broker – UK

- The company had made use of Manston Airport in the past (circa. Up to 2 x flights per week) and found it to be a reliable and efficient airport that was well placed for access to the South East of England. The airport had the facilities to handle many aircraft gauges, from small freighters right through to B747F operations. The airport provided good access and the company had no difficulty in obtaining slots. The cost of operating from Manston was more effective than at Stansted, this included the aeronautical landing fees and associated handling costs.
- The company's over riding view was that Manston was an easy airport to use, it provided a good service and gave priority to freight.
- The airport provided all services on the ground, including ramp handling for freight.
- The company was aware that many of its competitors also used the airport along with scheduled operators such as Cargolux and ANA.
- The company was cognizant that, whilst the inbound demand for freight existed, there was little demand for outbound freight, which resulted in aircraft departing with unutilised capacity. The inbound demand was largely from West Africa, with strong volumes of fresh flowers and produce imported. Manston was particularly efficient at handling this cargo and permitted road feeder services to access the apron which resulted in quick access to the UK road network.
- Alongside produce, the airport had a reputation as being able to handle outsized freight such as engines and turbines.
- The airport's location prohibited its use for more northern destinations, East Midlands and Doncaster were favourable in these instances
- The Air Cargo Charter Broker confirmed that they would certainly be interested in using the airport again if it re-opened but in order to do so they would be looking to secure competitive rates for landing, parking and screening charges.

Ex-DHL Aviation Senior Sales Executive

The individual has held senior positions in the cargo industry for over 15 years.

- Whilst Manston may offer an opportunity for some it is unlikely that DHL would relocate its operations. The setup at East Midlands is tuned to its needs. Further, East Midlands is geographically well located for quick access to the UK road network which is exceptionally important for the courier business model.
- In their experience, they believe it unlikely that any integrator would be interested in moving their operations to Manston.
- Generally, more and more freight is being shipped as General Cargo from Heathrow. Given the six hour close out period, it is reasonable to assume carriers could then use road feeder services to distribute this via Manston.
- Regarding other freight uses, Charter operators and scheduled all cargo operators may wish to locate services at Manston but this is highly dependent on the commercial offer. The sole purpose of utilising Manston would be to reduce cost, either through reduced flight operations or lower airport charges.
- One point of note is that the UK is a lot cheaper to export form at present. Thus, a lot of freight originates in continental Europe and moves via belly hold.
- Overall the individual's view was that whilst Manston would undoubtedly attract some business it is unlikely to be significant volumes.

Mr. Stanley G. Wraight – Senior Executive Director Strategic Aviation Solutions Limited

Mr. Wraight is an industry veteran with over 40 years' experience in the air cargo industry. Previously, Mr. Wraight held the positon of CEO at AirBridgeCargo, and Senior Executive roles at Atlas Air and KLM.

- The airport offered a good location for freight being imported from Africa; this was the predominant origin market. Generally, the freight that was imported was pre-packed shop-ready fruit and vegetables that could be transported directly into the supply chain.
- When the airport closed, Doncaster and Stanstead tried to win the business from Manston, whilst some gains were made, the majority of the business relocated to European hubs as they are more closely located to the final destination, thus reducing overall cost.
- There are few all-cargo operators who would consider locating operations at the airport. Operators will be tied into their networks, in part due to their clients locating their facilities at the main airports (Heathrow and Stanstead). One opportunity could be Cargo Logistics, an off chute of AirBridgeCargo.
- In order to secure freighters movements at the airport, it will be necessary to demonstrate a cost advantage over competitors. This could be through a reduction in the overall Flight Hours required for operations, however the ability to do this is limited given much of the freight is destined for Europe. The ideal origin market for freight, on minimum Flight Hours basis is the USA.
- With regards to Integrators basing operations at Manston, the probability of this is viewed as slim. The Integrators have committed large capital expenses to existing operations at Stanstead and East Midlands, these barriers to exit are substantial and would be difficult to overcome, in particular given Manston's inferior geographical positon within the UK.
- It would be difficult for Manston to compete with East Midland or Stanstead. EMA in particular offers 24/7 cargo operations with customs available 24/7. They have developed economies of scale in both service and cost.
- Further to this, the saturation of regional airports in the UK and Scotland in conjunction with additional wide-body passenger aircraft create difficult trading conditions for a new regional airport.
- Finally, the centre of power within the industry is held by Freight Forwarders, the majority of whom are based at LHR. As the industry is ever increasingly commoditised, Forwarders refuse to divert their business from Heathrow, instead choosing to truck cargo in from the regions to feed the facilities and consolidation business centred there and achieve the necessary economies of scale required to compete.
- The conclusion being that there is virtually no incentive for operators to move operations to Manston, there are alternative UK airports that offer competitive services on reasonable terms. The UK doesn't need another airport for freight that has no USP. If Manston were to be developed it would be essential for it gain a niche market such as becoming an Amazon or Alibaba e-commerce base.

AviaSolutions Meeting with Sir Roger Gale MP – 13th Sept 2016

As part of the stakeholder engagement process AviaSolutions has, at his request, interviewed Sir Roger Gale (MP for North Thanet) to seek his perspective on the commercial viability of and political support for, Manston Airport. The following comments are intended to reflect the substance of the meeting, rather than a verbatim transcript.

- Sir Roger Gale MP ("SRG") stated that Manston Airport and its associated runway are national assets of strategic importance to UK PLC.
- SRG noted that he does not support any particular group wishing to use the asset as an airport and that his interest is in solely in keeping the airport open. He notes, however, that to date RiverOak offers the only sustained and viable interest in operating Manston as an airport. SRG noted that he had seen the outline River Oak business plan which in his view was credible. SRG was not surprised that River Oak did not disclose the plan to AviaSolutions, and was not willing to divulge any of the details for reasons of commercial confidentiality. However, SRG also added that all of RiverOak`s case would be made public when the company submitted its` application for a Development Consent Order to a Planning Inspectorate that was qualified to subject the submission to detailed public scrutiny and inquiry.
- SRG said that it was clear that the intentions of those currently in control of the site were to develop the land for residential and commercial purposes, rather than invest in the airport facilities and expand the air service network.
- SRG provided a brief summary of the historical evolution of the airport, including services by Silver City to Jersey and Clive Bourne, a logistics operator.
- With regards to the development of a railway service to the airport SRG noted the scope to develop the railway is limited by the physical constraints of laying the line and precludes a link directly into the airport. The practical alternative is a Thanet Parkway station, which would initially be linked by a shuttle bus service, and ultimately could be linked by a Gatwick-style monorail.
- SRG is of the view that the primary reason that the airport has not been financially sustainable in the past is the nature of the business model that has been pursued. Previous operators have focussed on developing the passenger business, rather than the freight capacity of the airport, which is the reverse of the model that SRG believes, would be more sustainable.
- SRG noted that UK PLC is losing business to Europe already, with freight being switched from the UK to other European hubs (Frankfurt, Amsterdam, and Paris). SRG also noted that a major courier has expressed an interest in relocating to Manston. He was of the view that the UK has reached maximum capacity for London originating freight services and that excess demand was being lost to other hubs.
- SRG observed that post-Brexit it was going to be vital that the UK develops additional and alternative markets outside the European Union. These greater distances will inevitably mean an increase in the demand for air freight capacity between Britain and the rest of the world if the country is not to lose still more aviation business to mainland Europe.
- In terms of runway capacity, SRG suggested that freighter traffic currently using Heathrow could be relocated to Manston, freeing these slots to facilitate additional passenger services to the Far East. SRG also noted that operators that were forced to re-locate following the closure of Manston were waiting for the airport to reopen and would be keen to return.
- SRG stated that Low Cost Carriers are very interested in operating from the airport, and that if the airport were to re-open, would be very likely to start services at the appropriate time in the airport`s re-development. However, SRG was not willing, for reasons of commercial confidentiality, to disclose the source of this information nor the airline in question.
- SRG was keen to stress the importance of ancillary businesses to the airport's viability, which included aircraft dismantling and engineering firms. SRG also noted the Search & Rescue operations which had recently been permanently located at Lydd. Further options for the airport would include General Aviation (GA) which would be able to access London via Battersea Heliport.
- SRG noted the widespread political support for Manston Airport, including Sir Patrick McLoughlin, the former Transport Minister, The Minister of State for Aviation, John Hayes and David Cameron when Prime Minister. He indicated that that political support at national and local levels was, particularly in the light of the Brexit decision, on-going. SRG also noted that there would not be any need for financial support from Central Government and that the airport should be able to attract sufficient private capital to exist as a standalone business.
- SRG spoke at length on the alternative proposal by Stone Hill Park for the site, noting that that the ability to develop the site for residential and commercial purposes was questionable, with several potential challenges including the likely presence of a war grave, buried low level radio-active waste,

archaeological interests, and issues with the effect upon Thanet`s aquifers all needing to be addressed prior to any redevelopment. He indicated that any alternative development would, prior to change of use, require the same intensive Environmental Impact Assessment as that currently being undertaken by RiverOak for airport purposes. Furthermore, SRG noted that there is limited demand for additional industrial space in the area, that there is already a more than adequate supply of industrial land available in East Kent and that the number of new jobs generated at Discovery Park is, contrary to the claims made by the Leader of Kent County Council, low.

- With regard to a new runway in the South East, Sir Roger indicated that he believed that a runway decision would be made fairly soon but that any actual new runway would not be operational for at least 15 years. It is his belief that, even with a new runway in the London airport system, the Manston Airport remains a viable facility with freight as its primary purpose supported by passenger traffic.

Non-Reply

- The following airlines were sent a request for their positon on Manston airport but chose not to submit a response.
    - Monarch
    - Thomas Cook
    - Tui

10. Appendix B: Condition Report Manston Airport

Introduction

The following section contains our report on the condition of the airport assets, it should not be read as a definitive summary of the asset condition. Our report is based on a visual inspection of the airport on 3 August 2016 under the supervision of the current airport owner's representative.

Terminal Building

Summary

The current facility has an approximate footprint of 1,900m^2 and in general would have been suitable for single and dual aircraft operations simultaneously. On balance we would suggest that the building in its current configuration could be re-instated but that the cost of such modifications may make it more economically viable to demolish it and erect a purpose built low cost facility. In general the basic fabric of the building was intact, although there is evidence of water entering the building via the roof at various locations.

General

We observed that the drop off/pickup area was located adjacent to the front of the terminal building. This is in contravention to current security requirements and would necessitate the offsetting of the drop off pickup area. In-turn, this would require the transforming some land currently allocated to parking. The current site could facilitate this change through lateral expansion of the parking area.

We note that the current configuration of the terminal building, along with the apron, limits lateral expansion. To accommodate significant traffic volume would require a significant change to the current layout.

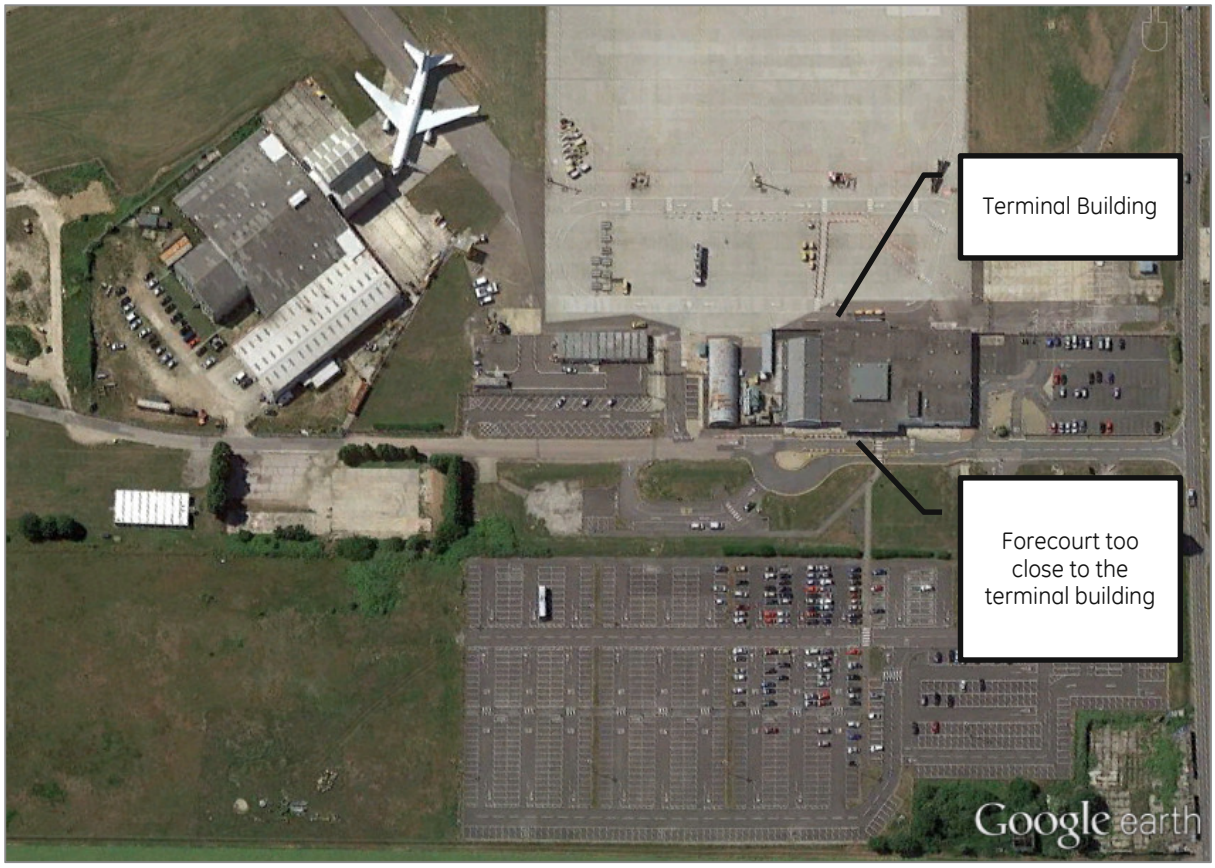


Figure 1: Google Earth image of aircraft maintenance hangar, terminal, parking area and apron (prior to the closure of the airport)

Figure 2: Evidence of water entering terminal building

Figure 3: Main foyer of terminal building from arrivals. Check-in area to the left of the image.

Figure 4: Evidence of water damage in may foyer.

Figure 5: Check in hall (desks removed)

Movement Areas

Apron

Summary

The fabric of the apron appeared to be in relatively good condition with space for up to four simultaneous Code C or two Code E operations.

General

Of note was the significant depth of the apron which accommodated a large GSE storage area at the head of the stand. To become compliant the apron marking would need to be re-established, which is relatively straight forward to accomplish.

Figure 6: Apron as viewed from terminal

Figure 7: Apron Drainage. Some growth of plants which will need to be addressed.

Taxiways

Summary

In general we observed that the taxiways were of relatively good condition with only minor spot repairs required. To re-stablish services appropriate lighting and marking would be required.

Runway

Summary

A visual inspection of the runway indicated that overall it is in very good condition. There is evidence of some vegetation appearing. Discussions with the current owner's representatives identified a surface friction issue. We note that there were plans to address this through surface treatment issues but to our knowledge this work was not carried out.

General

The runway approach and edge lighting has been removed and require re-installing to permit operations. Additionally, the runway has been painted to accommodate 'Operation Stack'. Considerable work is required to remove the current markings from the runway and repaint it with appropriate aviation markings. However, it is our understanding that this work will be completed as part of the current agreement with the Department for Transport.

Figure 8: Runway (Rwy) 29 Threshold

Figure: 9 Large aggregate used for wearing course may be impacting surface friction characteristics

Figure 10: Shoulders of runway are paved. Evidence of plants establishing a presence in cracks

Figure 11: Runway 27 and evidence of plants establishing presence in cracks

Systems

Navigation

Summary

It is our understanding that the Instrument Landing System and supporting systems were sold upon the airport's closure. These systems, including backup power supply, would need to be re-instated.

Figure 12: Radar tower with radar removed

Lighting

Summary

It is our understanding that the approach, runway, taxiway and apron lighting systems and supporting elements were sold upon the airport's closure. These systems including backup power supply would need to be re-instated.

Control Tower

Summary

No appreciable control tower facilities were available to inspect. To facilitate commercial operations it would be necessary to install a new control tower and associated support systems, including appropriate radar systems.

Rescue & Fire Fighting

Summary

The current Fire Station is unsuitable for use. We believe it would require demolishing and the construction of a new Fire and Rescue Station.

Figure 13: Dilapidated Rescue & Fire Fighting Facility

Ancillary Buildings

Maintenance Hangar

Summary

Adjacent to the primary apron is a large aircraft maintenance hangar with a unique addition allowing it to accommodate aircraft larger than what it was originally designed for. It is our understanding that this building is currently under lease by a maintenance company undertaking limited maintenance work. The building fabric appeared to be in reasonable condition.

Figure 14: Maintenance hangar

Figure 15: Interior of maintenance hangar

Figure 16: Bespoke tail enclosure of hangar

Cargo Hangars

Summary

During the visit we undertook a preliminary inspection of several cargo facilities on the airport site. The location of the facilities was ideal for this type of operation, having access to the local road network and the taxiway system. In general the buildings appeared to be in reasonably good condition. We foresee no reason as to why they could not be re-instated as cargo facilities.

Figure 17: First cargo hangar exterior

Figure 18: First cargo hangar interior

Figure 19: Second cargo hangar exterior

Figure 20: Second cargo hangar interior

Re-Establishment Cost Estimate

The following is an estimate of costs associated with re-establishing the required infrastructure to operate commercial services from the airport.

For the avoidance of doubt, these costs do not include the costs associated with any acquisition of the airport site.

Element	Cost Estimate £	Note
Old Terminal Demolition	400,000	Demolition of existing terminal building
Terminal Building	7,500,000	Construction of new modular single story terminal
Approach Road	750,000	Relocation of approach road to accommodate security requirements
Apron Repairs	200,000	Repairs to apron surface
Airport Lighting	3,000,000	Complete airport navigation lighting system
Navigation Systems	2,500,000	ILS/DME/DVOR
Radar	3,500,000	Secondary Radar System
Runway Treatment	1,500,000	Grooving of runway to address low friction characteristics
Cargo Building Repair	400,000	Minor repair to cargo buildings
Power System	2,500,000	Complete power back up system to accommodate CATI ILS approaches
Mobilisation	1,200,000	Ancillary mobilisation costs of re-instating airport operations
Contingency	3,517,500	15% contingency
	£ 26,967,500	

11. Appendix C

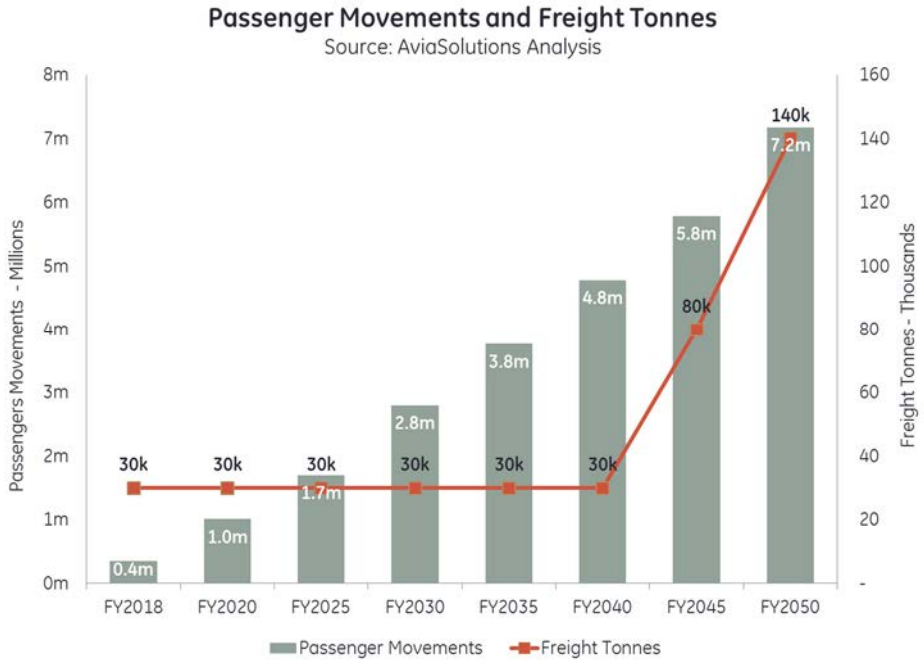
11.1. Outputs for No Runway Development Scenario

In the following paragraphs, we explore the financial viability of the airport based upon there being no new runway in the South East. This scenario takes spill from the London system in addition to a base level of activity generated from the presumed small LCC operation and freighters. Whilst this scenario is the most favourable for Manston airport, as it generates the largest number of passengers and freight, it is perhaps the least likely.

11.1.1. Volume Profile

Passenger movements are forecast to grow at CAGR 19% between FY2018 and FY2030, totalling circa 2.8m passengers by the close of FY2030, growth FY2018 to FY2050 is estimated to be at CAGR of 10%. Freight is not forecast to grow beyond the 30,000 tonnes of the core freighter operations until FY2040, but at that point, freight is assumed to spill from the London Area taking it to some 140,000 tonnes by FY2050.

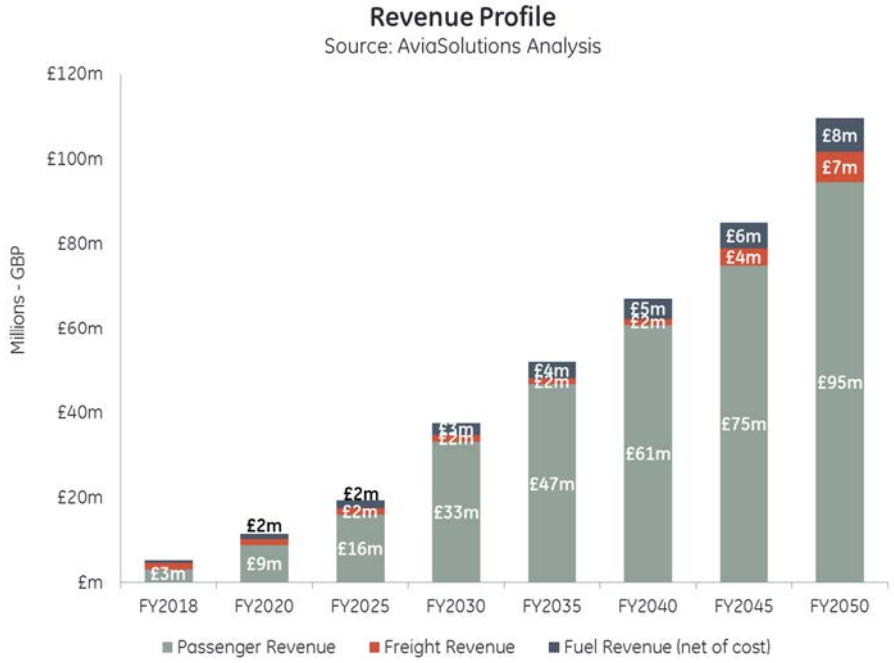
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Passenger Movements	350k	1,010k	1,700k	2,800k	3,770k	4,780k	5,790k	7,180k
Freight Tonnes	30k	30k	30k	30k	30k	30k	80k	140k
Total ATMs	1,100	2,900	6,400	14,100	20,900	28,100	37,200	49,500



11.1.2. Revenue Profile

Revenue generation is forecast to grow at a CAGR of 18% between FY2018 and FY2030, driving revenues to £38m by FY2030, and at a CAGR of 10% between FY2018 and FY2050 to reach total annual revenues of £110m by FY2050. The revenue profile is exponential in nature due to the increasingly constrained London System environment permitting increasing spill to Manston.

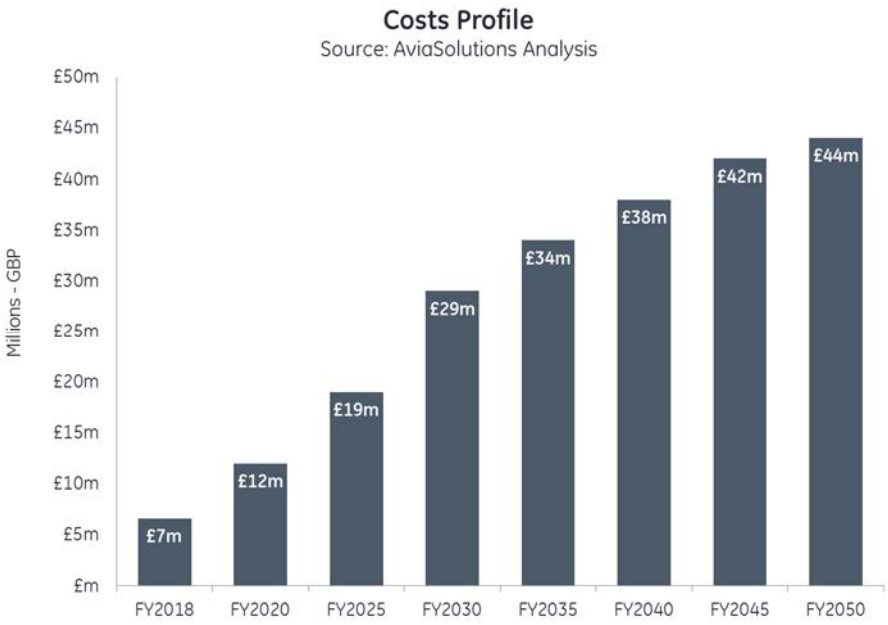
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Revenue	£5m	£12m	£19m	£38m	£52m	£67m	£85m	£110m

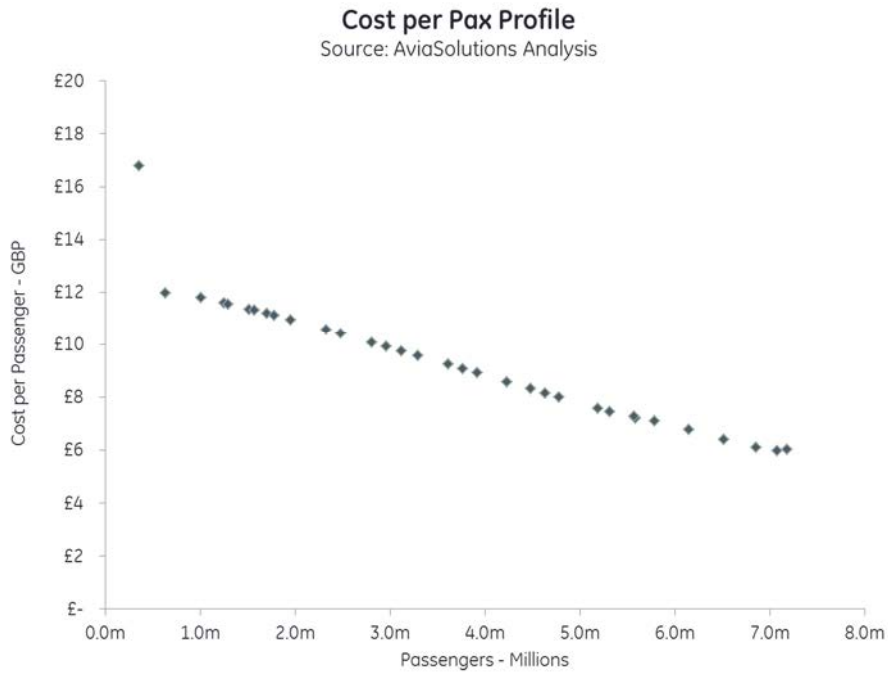


11.1.3. Cost Profile

Total Costs are forecast to grow at 13% per annum on average between FY2018 and FY2030, resulting in total costs of £29m by FY2030, and at 6% per annum between FY2018 and FY2050 to produce total annual costs of £44m by FY2050. Costs are increasing more slowly than revenue, leading to greater margin generation. We consider that as the airport generates increased volumes of traffic, it is able to achieve increasing economies of scale, in particular within its passenger operation. Furthermore, as the passenger volume increases, the non-unit driven costs are distributed over an increased base, thereby reducing the average cost per passenger to the airport, an essential element in increasing margin.

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Cost	£7m	£12m	£19m	£29m	£34m	£38m	£42m	£44m

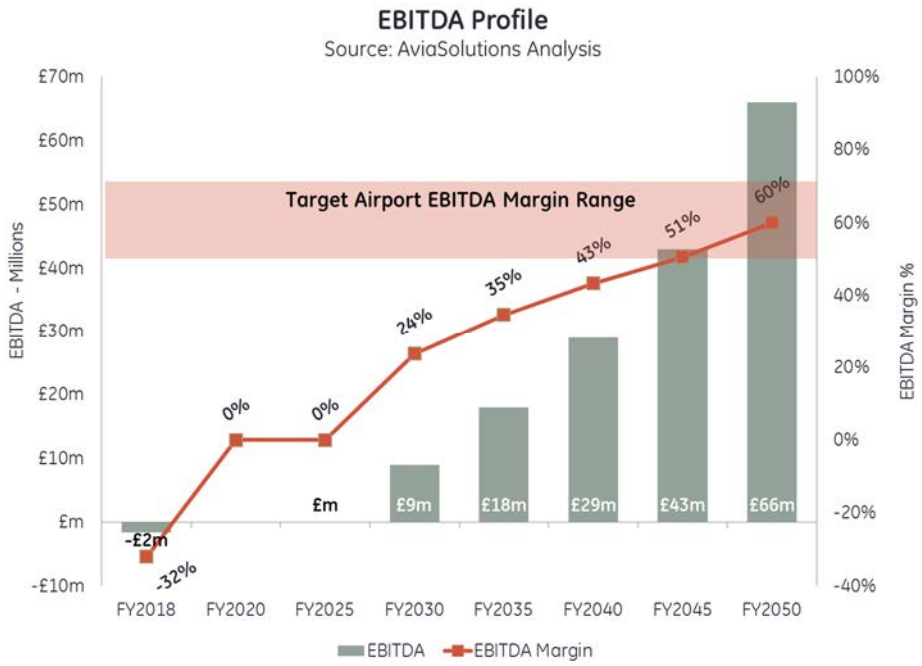




11.1.4. EBITDA Profile

EBITDA is initially forecast to be negative, indicating that the airport would be loss making in the early years at an operational level. It first turns an operating profit in FY2030, generating £9m of operating income and an EBITDA margin of 24%. The EBITDA margin in the long term is forecast to reach 60%, generating £66m of EBITDA in FY2050. This level of EBITDA is much more akin to a typical airport which requires sufficiently high EBITDA margins to cover the ongoing costs and CAPEX of a large asset base.

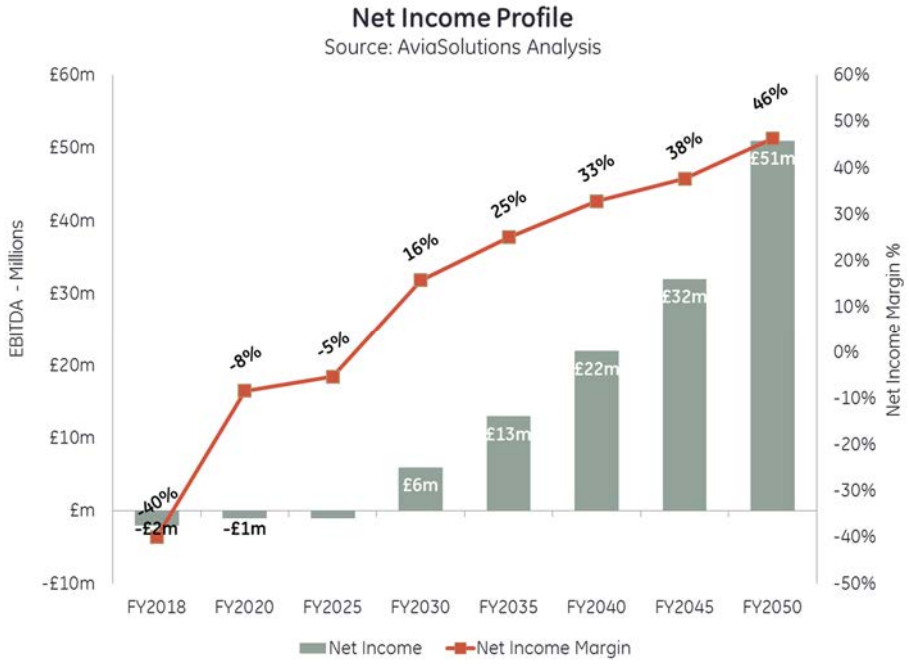
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
EBITDA	-£2m	£m	£m	£9m	£18m	£29m	£43m	£66m
EBITDA Margin	-32%	0%	0%	24%	35%	43%	51%	60%



11.1.5. Net Income Profile

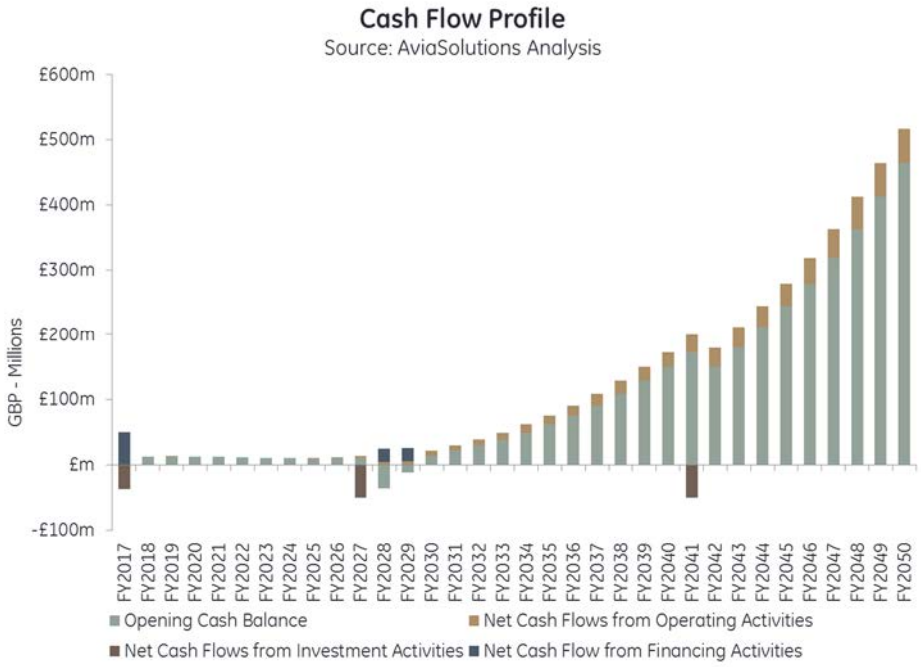
Net income, the profit left after all deductions, is forecast to be negative until FY2025. The first positive results fall circa FY2030 when the airport is expected to generate net income of £6m. This income stream steadily increases through to FY2050 at which point it is expected to be circa £51m per annum.

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Net Income	-£2m	-£1m	-£1m	£6m	£13m	£22m	£32m	£51m
Net Income Margin	-40%	-8%	-5%	16%	25%	33%	38%	46%



11.1.6. Cash Flow

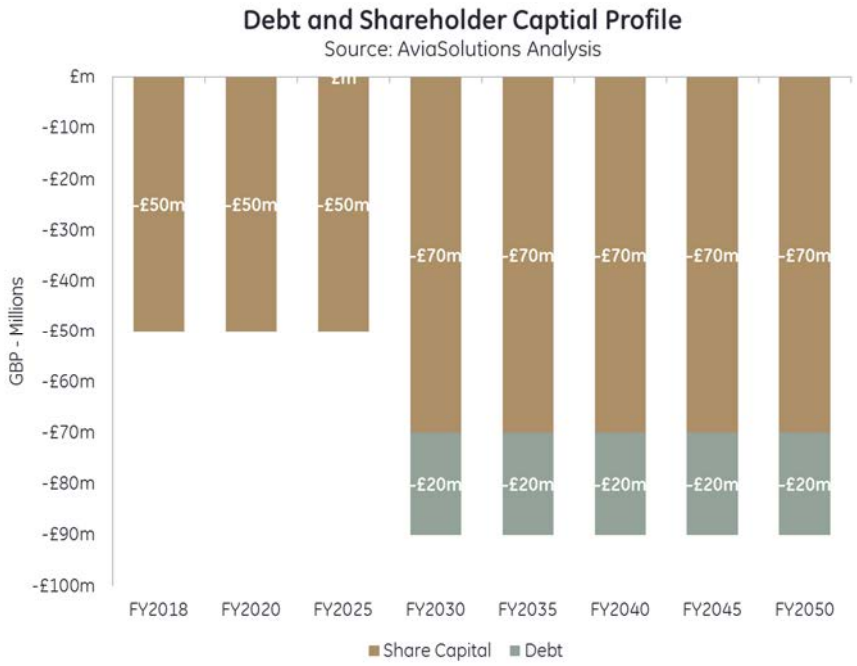
The airport is forecast to develop its cash position with limited additional capital requirements except those required to expand the terminal in FY2027. The position shown below is excludes any dividend payments that the owner may wish to extract from the asset: such payments would reduce its cash position.



11.1.7. Debt and Shareholder Capital

Whilst the exact nature and mixture of debt and shareholder capital would be subject to complex financial optimisation, we have illustrated below a simple capital structure used in the analysis to illustrate the need for additional capital throughout the period. To maintain the business it would be necessary to acquire circa £40m in additional capital around FY2027. For the purposes of modelling this additional capital has been split between debt and equity.

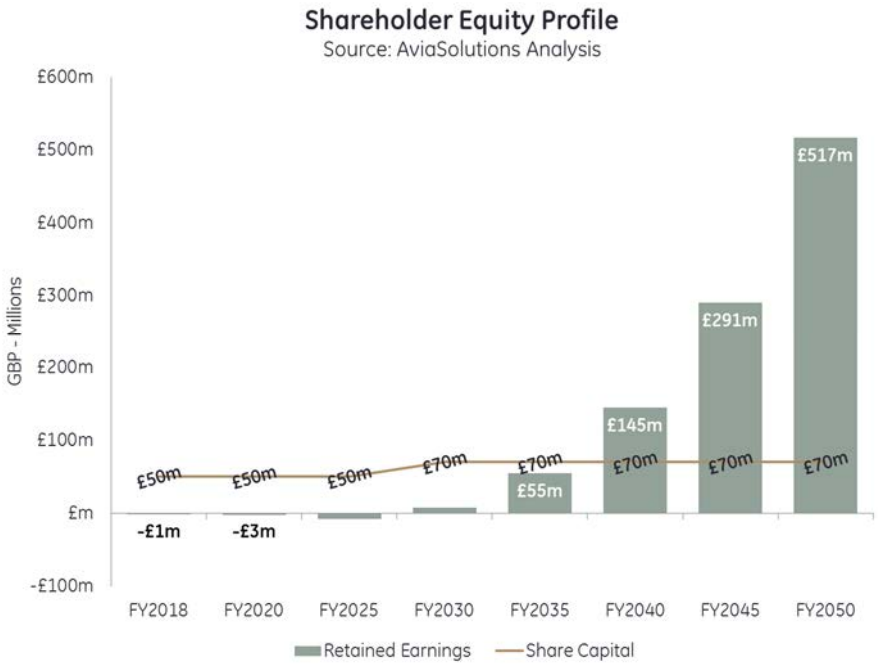
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Debt	£m	£m	£m	£20m	£20m	£20m	£20m	£20m
Share Capital	£50m	£50m	£50m	£70m	£70m	£70m	£70m	£70m



11.1.8. Shareholder Equity

Considering the effects of earnings on shareholder equity, the business does not post positive retained earnings until circa FY2030. This in effect limits the business's ability to pay dividends to shareholders until this point at the earliest.

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Retained Earnings	-£1m	-£3m	-£8m	£8m	£55m	£145m	£291m	£517m
Share Capital	£50m	£50m	£50m	£70m	£70m	£70m	£70m	£70m



11.1.9. Conclusion

Given the parameters of this specific scenario it could be feasible to operate a commercially viable airport on the site. However, the risks in doing so are high and many of the elements that cause the proposal to payback can be reversed (such as a new runway being authorised) and are out of the control of the asset manager.

Whilst we believe an airport on the site may be feasible in this scenario, the probability of there being no new runway in the South East is very low, even if a decision is delayed, it is still expected that a new runway will be required at some point. If Manston were to become an established airport it would need many years to reach a point of maturity where it would be able to withstand a new runway becoming operational. The probability of this occurring, given the Government's current position on runway capacity, is uncertain at best. Therefore we conclude that whilst potentially feasible, this scenario is improbable.

11.2. Outputs for LGW Second Runway Scenario

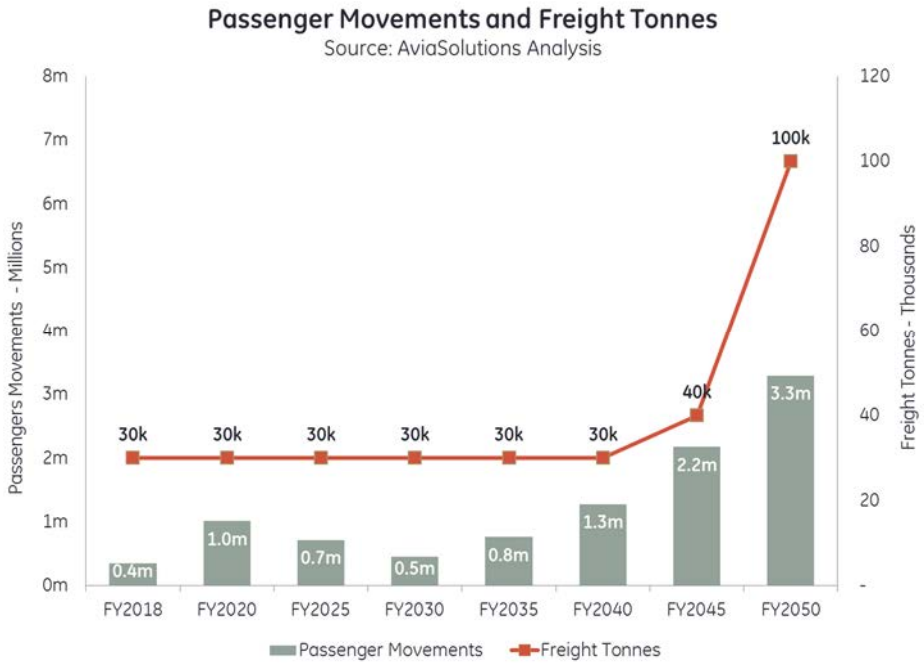
In the following paragraphs, we explore the financial viability of Manston Airport based upon there being a second runway at Gatwick. This was an option short-listed by the Davies Commission and while not finally recommend has a body of support based on its lower environmental impacts and the consequent ability to be delivered earlier (assumed here to be 2025). Manston may have a short initial boost to traffic before the second runway becomes available but then traffic falls before growing again. This scenario takes spill from the London system in addition to a base level of activity generated from the presumed small LCC operation and freighters. This scenario is less favourable for Manston Airport than would be a development at Heathrow.

11.2.1. Volume Profile

Passenger numbers are forecast to grow to more than 1.5 million in 2024, the year before the assumed opening of the second runway, but immediately fall back starting in 2025 and declines to a low of 0.5 million in 2033. From this low point, it grows as a result of the resumption of overflow, reaching 3.5 million passengers in 2050. Overall growth between FY2018 and FY2050 averages 7% per annum.

Freight is not forecast to grow beyond the 30,000 tonnes of the core freighter operations until FY2040, but at that point, freight is assumed to spill from the London Area taking it to some 100,000 tonnes by FY2050.

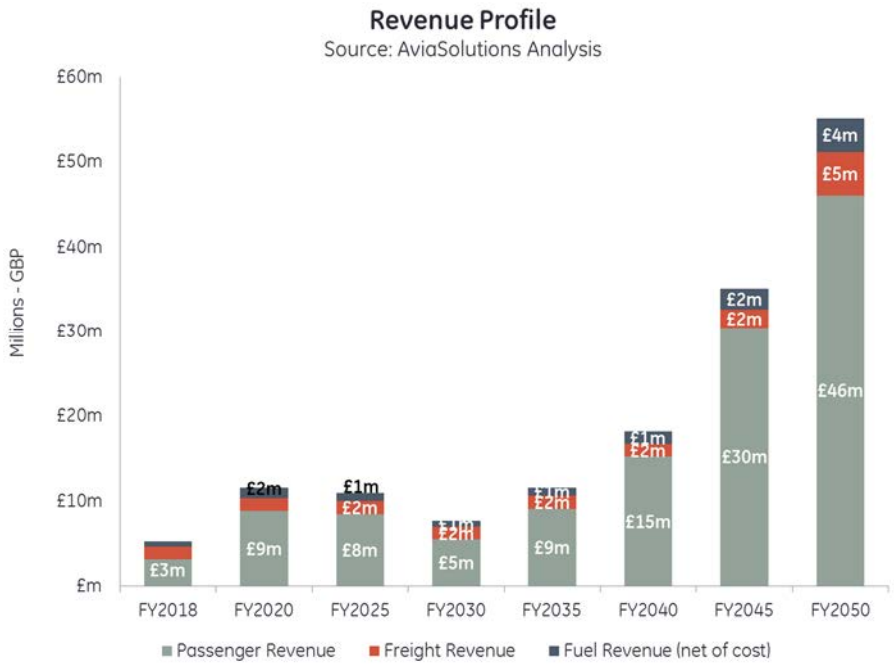
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Passenger Movements	350k	1,010k	710k	450k	760k	1,270k	2,170k	3,290k
Freight Tonnes	30k	30k	30k	30k	30k	30k	40k	100k
Total ATMs	1,100	2,900	5,000	3,200	5,300	8,900	15,900	26,000



11.2.2. Revenue Profile

Revenue generation is forecast to grow at a CAGR of 4% between FY2018 and FY2030, driving revenues to £8m by FY2030, and at a CAGR of 8% between FY2018 and FY2050 to reach total annual revenues of some £55m by FY2050.

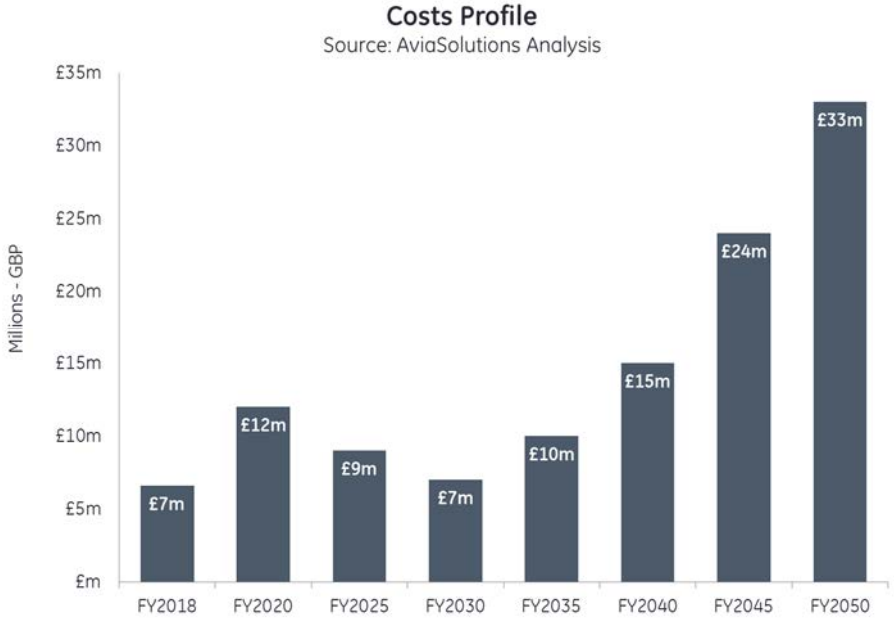
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Revenue	£5m	£12m	£11m	£8m	£12m	£18m	£35m	£55m

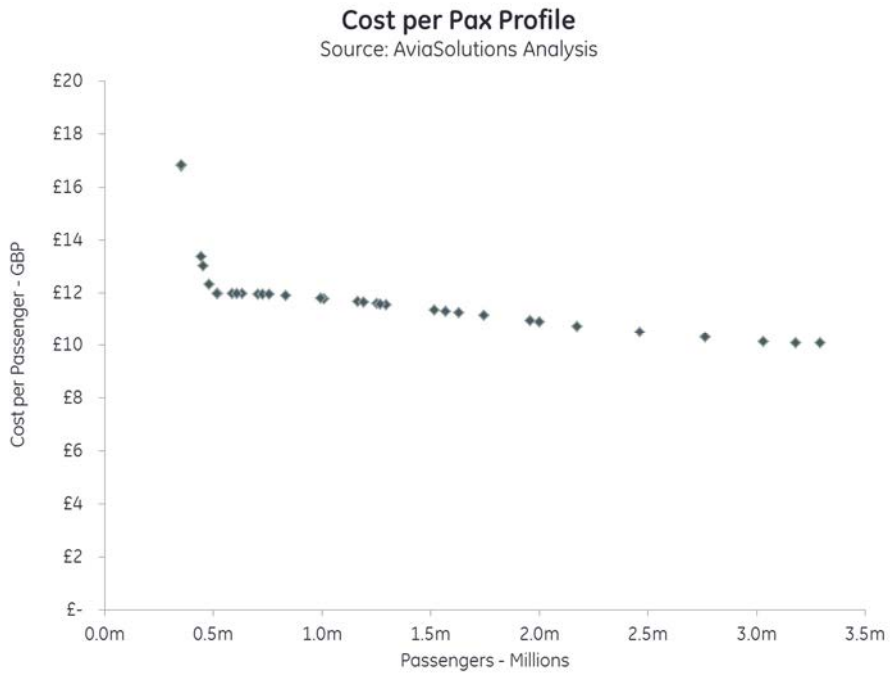


11.2.3. Cost Profile

Total Costs rise prior to the opening of the second runway, but then fall back to £7 million in FY 2030. Thereafter, they increase to nearly £35 million in 2050, representing an average increase between FY2018 and FY2050 of 5% per annum. Cost per passenger falls over the period of the projections.

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Cost	£7m	£12m	£9m	£7m	£10m	£15m	£24m	£33m

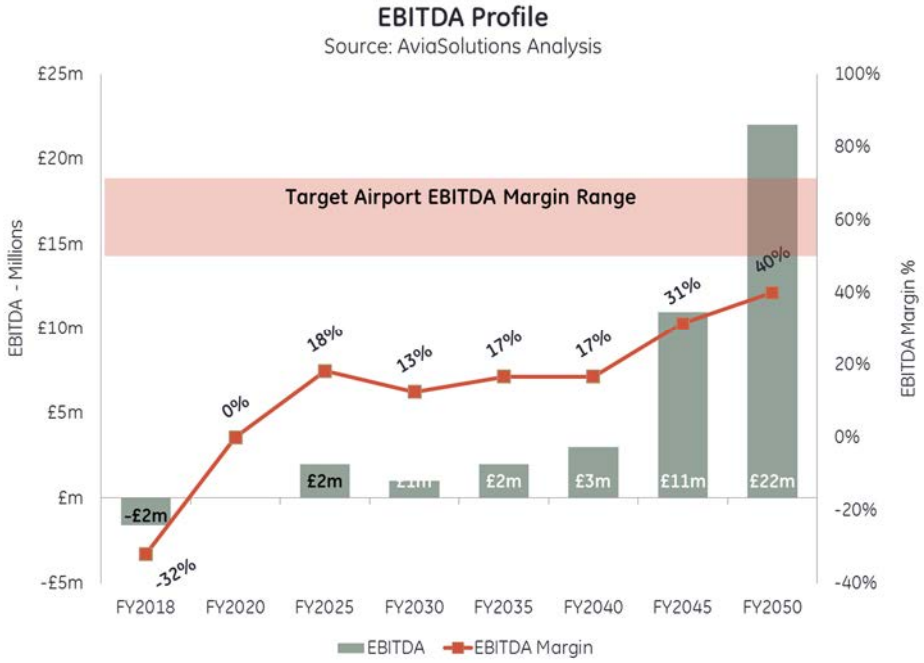




11.2.4. EBITDA Profile

EBITDA is initially forecast to be negative, indicating that the airport would be loss making in the early years at an operational level. It first returns an operating profit in FY2025, generating £2m of operating income and an EBITDA margin of 18%. As the second runway at Gatwick comes on-stream, EBITDA at Manston would stagnate due to the lack of available traffic volumes. The EBITDA margin in the long term is forecast to reach 40%, with an EBITDA of £22m in FY2050. This level of EBITDA is significantly below that which we would typically expect for an airport to be attractive to the investment community.

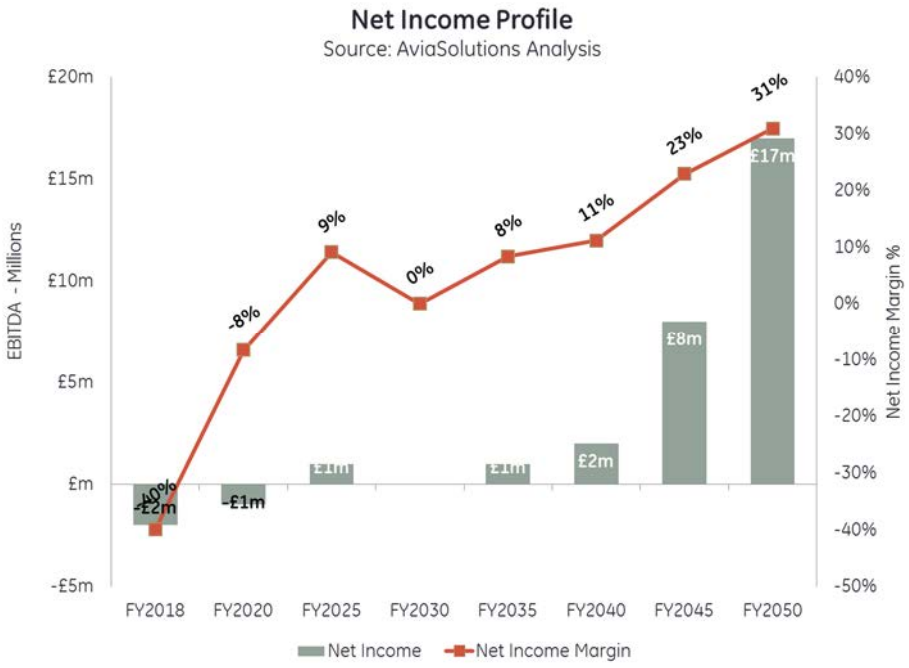
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
EBITDA	-£2m	£m	£2m	£1m	£2m	£3m	£11m	£22m
EBITDA Margin	-32%	0%	18%	13%	17%	17%	31%	40%



11.2.5. Net Income Profile

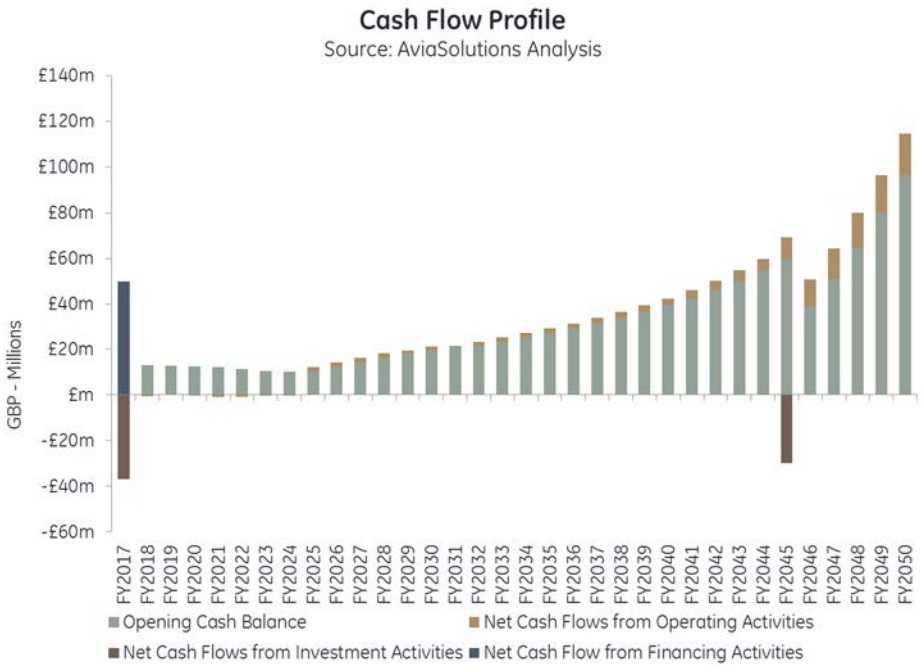
Net income, the profit left after all deductions, is forecast to be negative until after FY2020. The first positive results are generated around FY2025 when the airport is expected to generate net income of £2m, although it falls slightly thereafter as Gatwick's new runway absorbs traffic. The income stream then remains broadly constant for the following 15 years before increasing as capacity becomes constrained once more in the London system. It reaches £17m in FY2050.

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Net Income	-£2m	-£1m	£1m	£m	£1m	£2m	£8m	£17m
Net Income Margin	-40%	-8%	9%	0%	8%	11%	23%	31%



11.2.6. Cash Flow

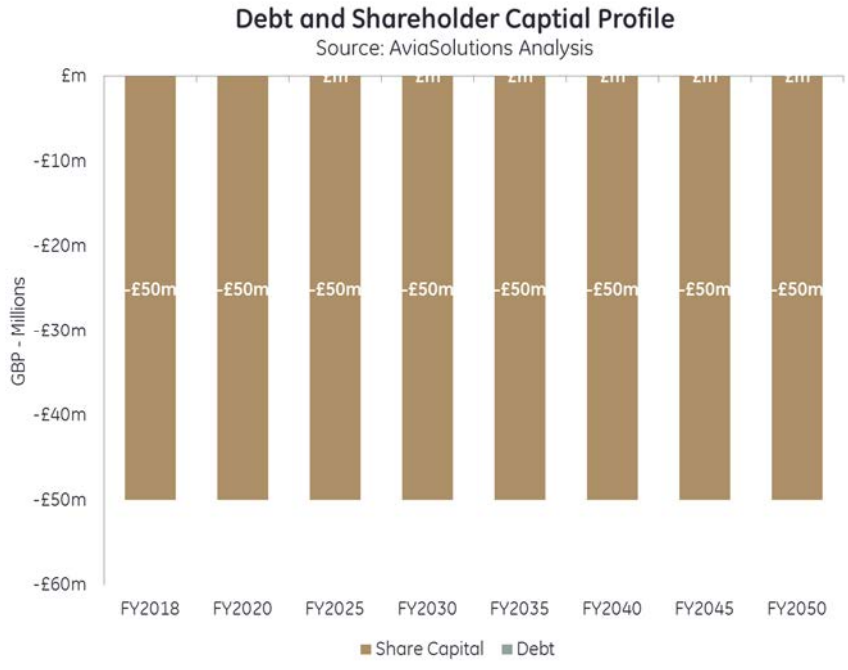
The airport is forecast to develop its cash position with limited additional capital requirements until FY2045 when there would be a requirement to expand the terminal, by which time the company could have built up sufficient cash to be able to finance the CAPEX from reserves. The position shown below excludes any dividend payments that the owner may wish to extract from the asset: such payments would reduce its cash position.



11.2.7. Debt and Shareholder Capital

Whilst the exact nature and mixture of debt and shareholder capital would be subject to complex financial optimisation, we have illustrated below a simple capital structure used in the analysis to illustrate the need for additional capital throughout the period. To maintain the business no further financing would be required. Whilst the business does not generate significant revenues or income, there is little requirement for significant CAPEX investments, thereby eliminating the requirements for additional financing

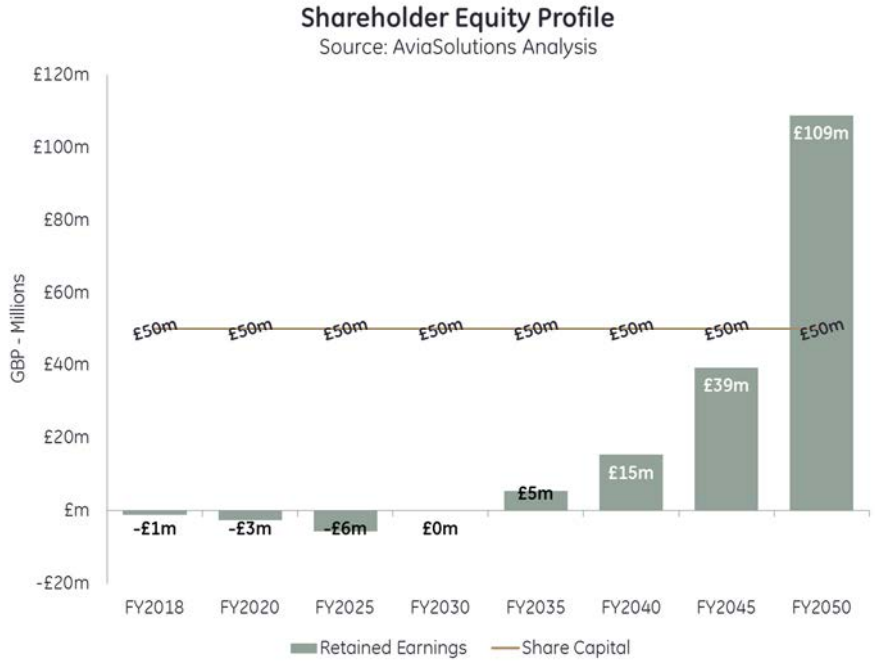
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Debt	£m	£m	£m	£m	£m	£m	£m	£m
Share Capital	£50m	£50m	£50m	£50m	£50m	£50m	£50m	£50m



11.2.8. Shareholder Equity

Considering the effects of earnings on shareholder equity, the business does not post positive retained earnings until nearly FY2035. This in effect limits the business's ability to pay dividends to shareholders until this point at the earliest.

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Retained Earnings	-£1m	-£3m	-£6m	£m	£5m	£15m	£39m	£109m
Share Capital	£50m	£50m	£50m	£50m	£50m	£50m	£50m	£50m



11.2.9. Conclusion

The asset would require significant long term investment but would only generate a marginal return. These returns are also predicated on a large number of external variables over which the owner of Manston Airport has very little influence. It is AviaSolutions' view that based on this scenario there is no viable long term prospect of an economically viable airport being established on the site.

11.3. Outputs for Both Runways Scenario

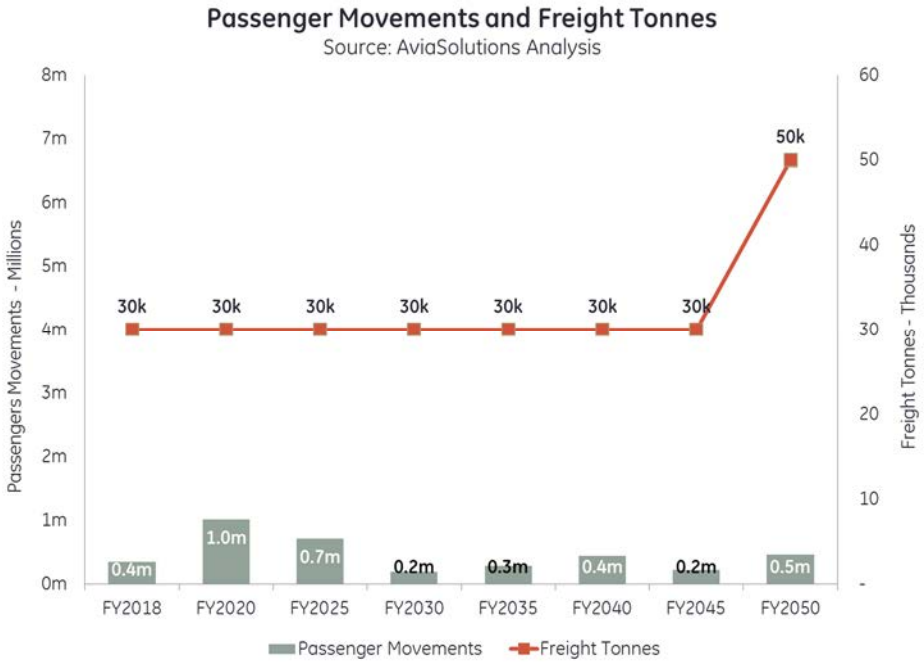
In the following paragraphs, we explore the financial viability of Manston Airport based upon there being two runways constructed in the South East, one at Gatwick and the other at Heathrow. It is clear from this assessment that in the longer term there is forecast to be sufficient demand to require two additional runways. In our assessment, we have assumed that the runway at Gatwick would be opened first, followed later by that at Heathrow. It is though possible that Gatwick might decide to postpone its second runway given its likely loss of traffic Manston would have a short initial boost to traffic before the first of the runways becomes available but then traffic falls and only resumes growth towards the end of the forecasting period. This scenario is the least favourable for Manston Airport.

11.3.1. Volume Profile

Passenger numbers are forecast to grow to more than 1.5 million in 2024, the year before the assumed opening of the first of the runways, but immediately fall back starting in 2025. Passenger traffic remains minimal for the remainder of the forecasting period.

Freight is not forecast to grow beyond the 30,000 tonnes of the core freighter operations until after FY2045, but might reach some 50,000 tonnes by FY2050.

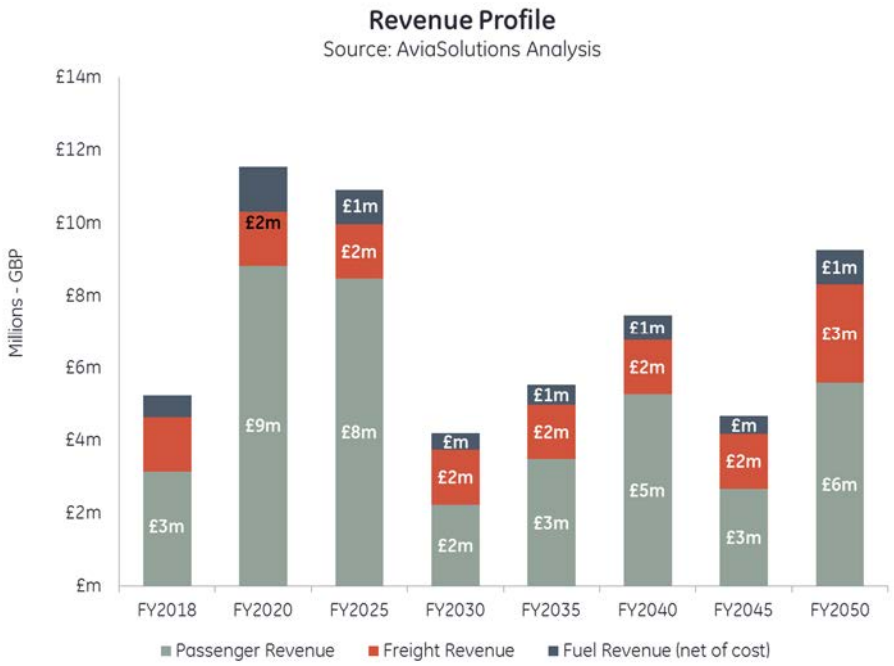
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Passenger Movements	350k	1,010k	710k	190k	290k	440k	220k	460k
Freight Tonnes	30k	30k	30k	30k	30k	30k	30k	50k
Total ATMs	1,100	2,900	5,000	1,300	2,000	3,100	1,600	4,300



11.3.2. Revenue Profile

Revenue generation reflects the lack of traffic volume and peaks in the period up to FY2025.

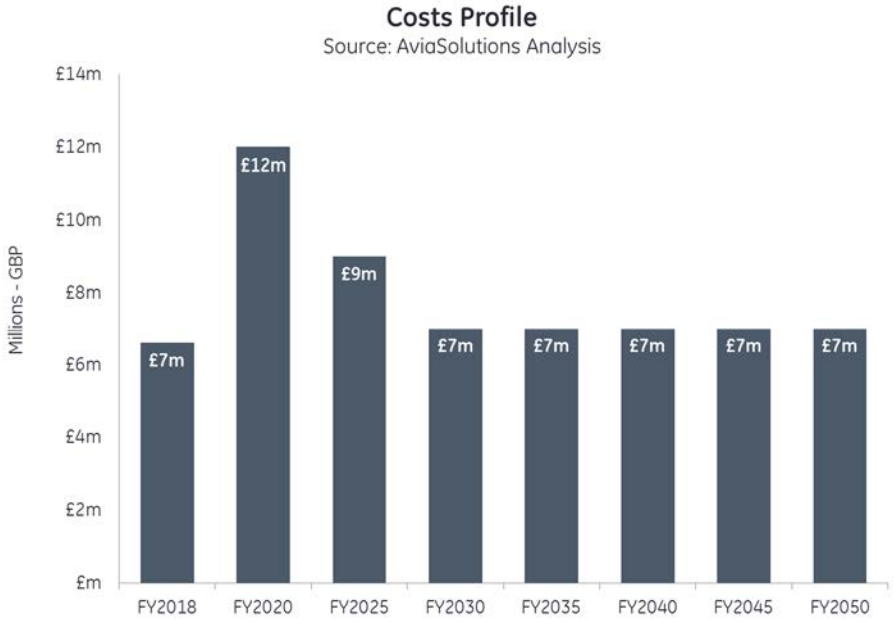
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Revenue	£5m	£12m	£11m	£4m	£6m	£7m	£5m	£9m

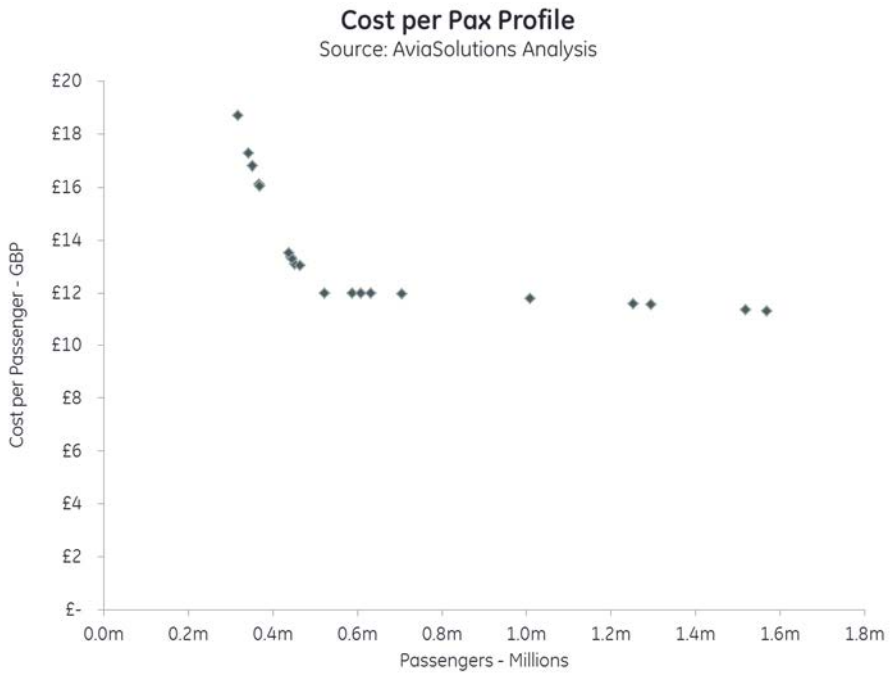


11.3.3. Cost Profile

Total Costs rise a little before the opening of the first of the runways, but then fall back to the core essential fixed costs associated with having the airport open

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Cost	£7m	£12m	£9m	£7m	£7m	£7m	£7m	£7m

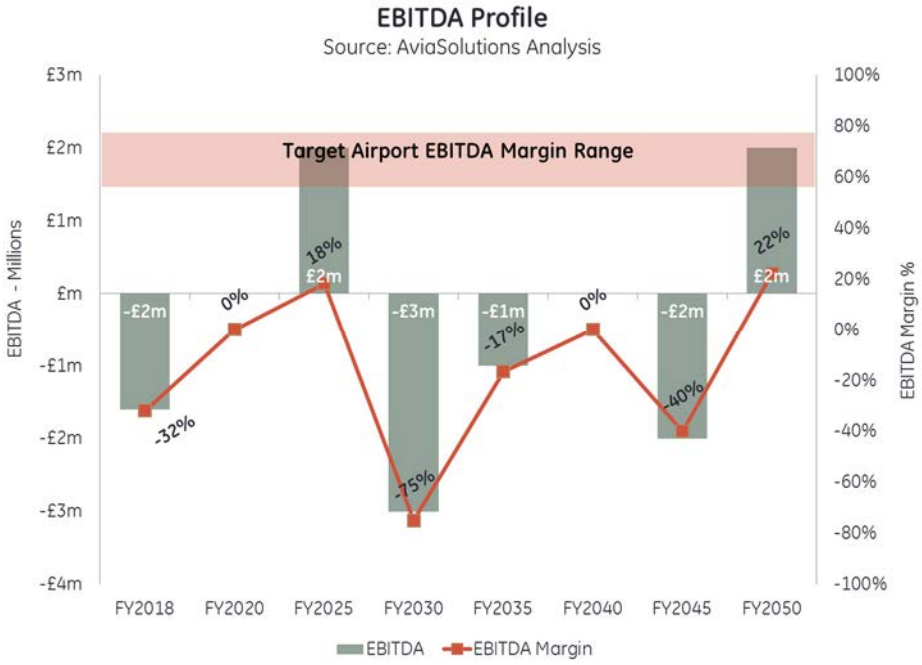




11.3.4. EBITDA Profile

EBITDA is forecast to be negative for the majority of the forecast period, except for the period up to FY2025 and at the very end

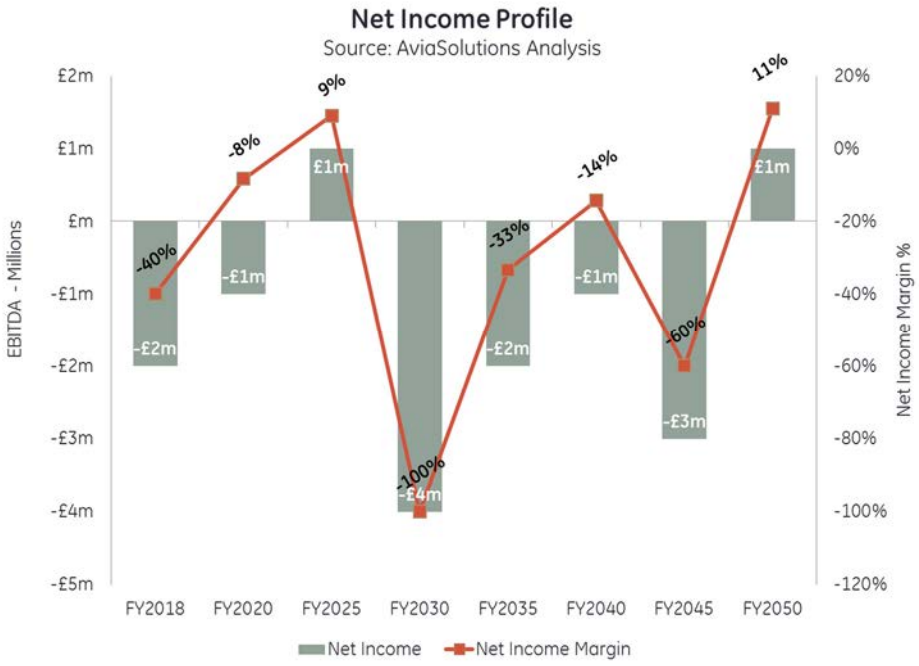
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
EBITDA	-£2m	£m	£2m	-£3m	-£1m	£m	-£2m	£2m
EBITDA Margin	-32%	0%	18%	-75%	-17%	0%	-40%	22%



11.3.5. Net Income Profile

Net income, the profit left after all deductions, is forecast to be negative for almost the entire period.

	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Net Income	-£2m	-£1m	£1m	-£4m	-£2m	-£1m	-£3m	£1m
Net Income Margin	-40%	-8%	9%	-100%	-33%	-14%	-60%	11%

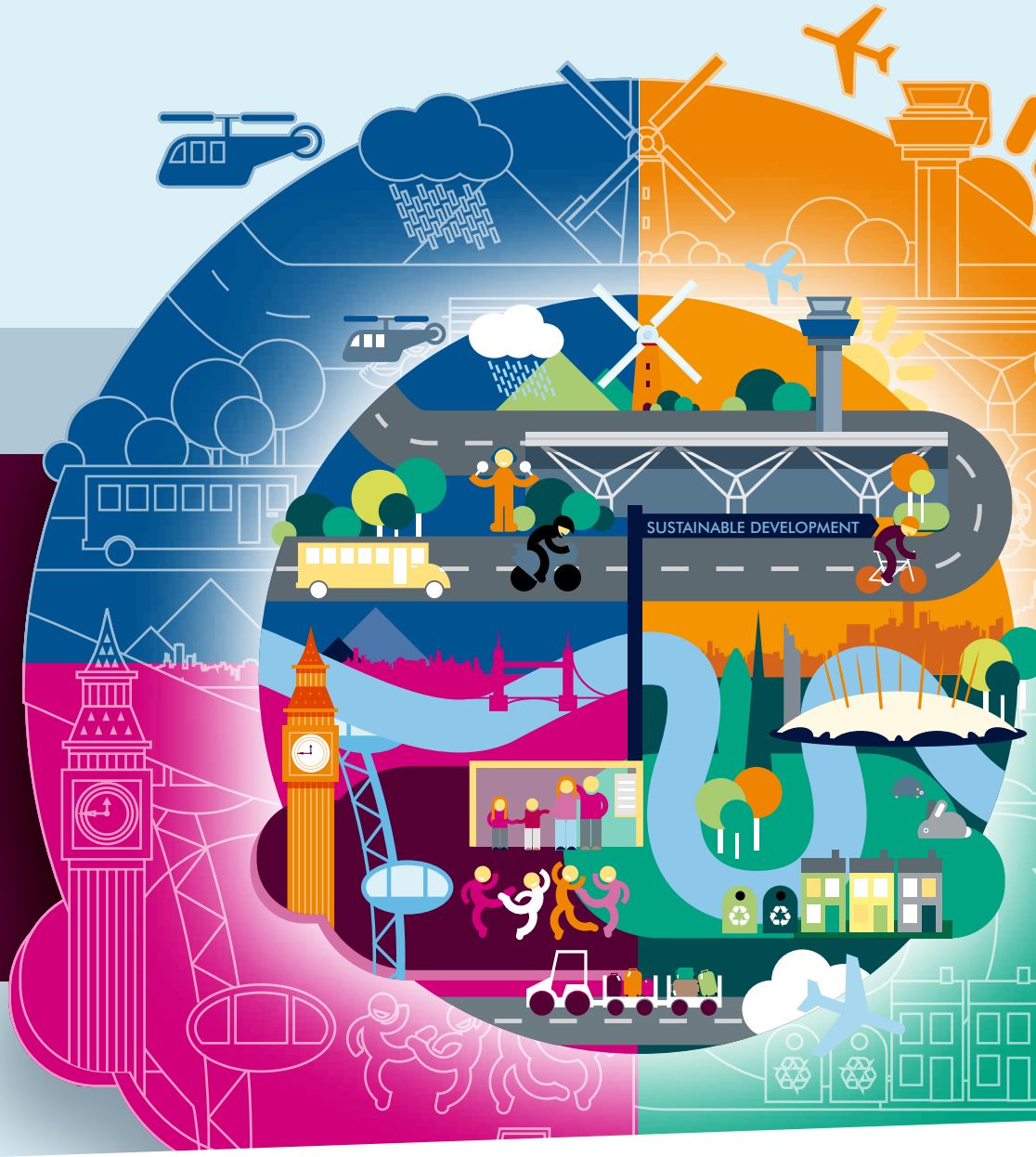


11.3.6. Conclusion

If two runways were to be constructed in the South East, then it is clear that there is no realistic prospect of long term viability for a re-opened Manton Airport. The potential profits in the period to FY2025 would not be adequate to justify the costs of acquiring and re-commissioning the airport, and prospects thereafter would be exceptionally poor.

SUMMARY

SUSTAINABLE DEVELOPMENT PLAN 2015



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PART OF M.A.G

FOREWORD by Andrew Harrison – Managing Director

Stansted is a great airport with a really bright future. Our airport is the primary airport for the East of England; serving as the key gateway for the region and also for London. We have an opportunity to support economic growth, provide better connections to the world, create employment and help attract visitors and investment. It is important to us that we build long term relationships with our local community, our partners and stakeholders.

We have ambitious plans for Stansted. Following M.A.G's acquisition of the airport in 2013, we set our sights on competing with the London airports. We want to create an airport that airlines and passengers enjoy using, as well as an asset which the communities we serve can be proud of. We've made good progress; traffic is now growing rapidly again after a prolonged period of decline and now handles 20million passengers a year. In the years ahead, a reinvigorated Stansted will continue to be one of the fastest growing airports in the UK, and with our existing runway we can serve more than double the number of passengers we are serving today.

The airport's growth will be of enormous value to the region and the UK as it strives to develop international connectivity to support increased demand, trade and investment. Stansted sits at the heart of the London-Stansted-Cambridge corridor, one of the most exciting economic regions in the world – generating over £160 billion for the UK economy. We have an important part to play in supporting London's continued growth to the east, providing airport capacity and employment opportunities to help drive this development.

Our potential for growth and ability to exploit the capacity of our single runway provides context to the long term national runway debate. The Government appointed the Airports Commission in 2012 to advise it on how to maintain the UK's leading position in the global aviation market. The Commission's Interim Report, published in December 2013, recognised the importance of Stansted in providing capacity to meet increased demand for air travel, particularly as London's other airports become ever more constrained. The Airports Commission has also identified Stansted as an important long term option for new runway capacity. This reflects the long term economic potential of Stansted's catchment, and the continuing increase in the desire to travel

The Commission's Final Report, due later in 2015, will recommend to the new Government what steps should be taken to ensure that existing airport capacity makes the biggest possible contribution to meeting demand. To help the Commission address these issues, we prepared a draft Sustainable Development Plan (SDP), setting out how Stansted will grow to the capacity of its existing single runway, along with an assessment of the associated benefits and impacts. We consulted on the draft between June and November 2014.

We are grateful for the interest shown in the draft plan. The comments we received have helped to shape this final version, and resulted in a better plan. We are committing to new methods of reporting environmental impacts; we are increasing our apprenticeship opportunities and the funding of community initiatives; and re-affirming our commitment to a partnership approach towards unlocking the economic and infrastructure capacity of the region.

OUR AIRPORT

FOREWORD by Andrew Harrison – Managing Director

Our Plan provides a framework for sustainable growth of the airport on its single runway. So, it does not just concern itself with capacity and land use, it also sets out our approach to:

- supporting and unlocking the potential for economic growth in the region;
- delivering the jobs and education opportunities that that will bring;
- improving our transport links;
- meeting the demand for travel from business and leisure passengers in our catchment; and
- managing the impacts of a growing airport, influencing our industry and bringing positive benefits to local communities.

Given the scale of change we have seen in the aviation industry over the last twenty years, it is difficult to predict how it will evolve over the next twenty; this is why we have set out our commitments and approach in this way. It is clear however, that Stansted is entering a new era. I give my commitment that we will be open in our approach to the future and we'll share and consult on detailed matters at the appropriate time. It is important to me that we bring a partnership approach to our relations with neighbours, service partners and the wide range of local stakeholders who we affect or have shared objectives.

ANDREW HARRISON
Managing Director, Stansted Airport

OUR AIRPORT

INTRODUCTION

M.A.G acquired Stansted at the end of February 2013, with a clear vision for the future. Stansted is a superb, modern airport with room to grow, excellent facilities and excellent on-time performance. We were confident that we could build on these strengths by improving customer service and attracting new airlines and passengers, and by doing so, make Stansted the best airport in London, measured in terms of customer service and value to airlines.

Our strategy for Stansted is based on four key principles:

- Building on positive airline relationships;
- World class facilities and service;
- Improving our competitive position; and
- Taking a long term view.

We knew that we needed to move quickly to make Stansted strong and competitive and to start delivering benefits for airlines, passengers and the local community as quickly as possible. Since February 2013, we have made good progress in implementing our plan, including:

- reversal of the long-term decline in Stansted's traffic that started back in 2008;
- agreement of new long term growth deals with airlines;
- new routes and frequencies to meet the needs of local people and business;
- completion of the first phase of an £80 million plan to transform the terminal;
- creation of new partnerships locally and nationally to develop a shared vision for the airport and the region;
- buy-in from our service partners; and
- setting the agenda for delivering significant improvements to our rail services.

These are just the beginning of our plans. We are confident that our approach to operating and developing Stansted, based on delivering excellent customer service and value to airlines, will succeed in a market where airports across the UK and Europe are competing to attract new business. We will build on our experience and relationships to attract new airlines and develop profitable new routes, and we will work with long-haul carriers, full service carriers and our existing low cost airlines to secure growth.

Despite strong and growing demand for air travel from our region, CAA survey data shows that the majority of people travelling by air from within Stansted's catchment do so from other London airports. Having to travel from another airport often adds cost and time to a journey, and can be much less convenient for passengers. Looking ahead, we are aiming to attract a greater share of passengers from central London, from key marginal areas around London, and from our own local catchment area where there is significant scope to improve the range of services that Stansted offers. The East of England is attractive to inward investors and visitors and we aim to encourage this by working hard to improve our network of air and rail services.

INTRODUCTION

THE OPPORTUNITY FOR GROWTH AT STANSTED

From 2007, Stansted's throughput fell from 23.7 million passengers per annum (mppa) to 17.4mppa in 2012. This decline was driven by a number of factors including the recession, protracted uncertainty over the airport's ownership, disputes between BAA and major airlines and stronger competition from other airports. This has left Stansted with significant spare capacity and in a unique position among London airports. The airport is well positioned to make a significant contribution to meeting growth in passenger demand in London and the South East over the next 15 years.

PLANNING FOR THE FUTURE

In September 2012, the Government established the Airports Commission, led by Sir Howard Davies, to make recommendations on the steps needed to maintain the UK's global hub status. The Commission published its Interim Report in December 2013, setting out amongst other things a series of recommendations on short and medium term measures to optimise the use of existing airport capacity. The Commission recognised the important role that Stansted was likely to play in meeting demand in the period before any new runway capacity could be delivered.

The Commission is due to publish its Final Report to Government later in 2015. The Final Report is likely to contain further recommendations to Government on the steps that should be taken to ensure that existing airport capacity makes the biggest possible contribution to meeting demand. We are keen to ensure that the Commission's recommendations are informed by up-to-date assessments of the capacity of Stansted's single runway. In turn, this will help the Government develop a new airports policy for the UK.

To assist in this process, this Sustainable Development Plan (SDP) sets out how Stansted can grow to the capacity of its existing single runway, along with an assessment of the benefits and impacts of using that capacity. The consultation on the draft document demonstrated widespread support for growth, and also flagged areas of local concern, especially about noise. We have listened to the responses from the consultation and used these to shape the final version of the SDP.

Looking further ahead, we recognise the value that local communities and stakeholders attach to having a clear view of our long term plans. Over the long term, sustained growth in economic activity in Stansted's catchment will generate a substantial increase in demand for air travel. Stansted represents a significant asset in this respect because its single runway has considerable spare capacity to accommodate additional demand.

OUR AIRPORT

INTRODUCTION

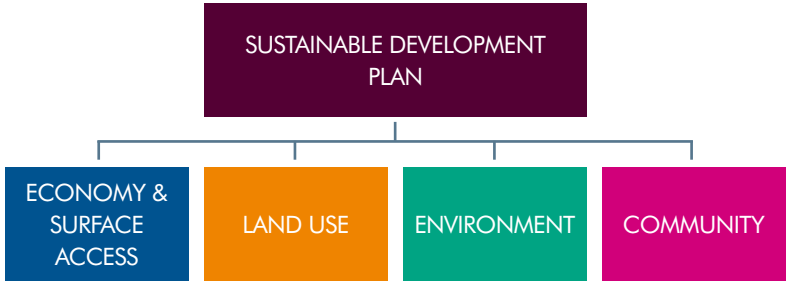
The Airports Commission has identified Stansted as an important long term option for additional runway capacity. At the appropriate time, Government policy will need to consider the case for the development of additional runway capacity.

This document is focused solely on the development of Stansted up to the capacity of its existing runway. It does not address issues relating to the development of additional runway capacity. It does provide a framework for Stansted's sustainable growth by identifying M.A.G's approach to community engagement and managing the airport's impacts. Our guiding principles in preparing the SDP have been to:

- support Stansted in becoming the best London airport;
- proactively plan for growth to make best use of existing capacity;
- support prosperity and economic growth in the region;
- actively manage and contain environmental impacts;
- be active and supportive partners in the local community; and
- maintain Stansted's position as the best in the UK for public transport.

We have also been guided by the Government's advice to airports on the preparation of 'Airport Master Plans'[1]. Our approach to preparing the Stansted SDP is broader than that advice.

Alongside this summary, we have prepared four detailed plans that set out our approach to the Economy and Surface Access, Land Use, Environment and Community. These plans set out in greater detail how we will approach future opportunities and deal with the principal issues that we face in making full use of the existing capacity. Together they comprise our 2015 Sustainable Development Plan.



The remainder of this document summarises the consultation process and responses to the draft SDP and then the contents of the individual plans to provide an overview of the final SDP as a whole.

In preparing this SDP we have chosen to make it concise, readable and aimed at the widest audience. We have not included a large amount of technical detail or analysis in the document, although we will continue to share this additional material with stakeholders as part of our commitment to partnership working and continuous engagement.

[1] CAviation Policy Framework (March 2013) Department for Transport.

CONSULTATION ON THE DRAFT SDP

It was important that the development of the SDP was subject to input from our external partners and the local community. Over several months from June to early November 2014, including a 10-week public consultation exercise (2 September to 7 November 2014) we consulted widely on a draft version of the Plan.

We consulted with local authorities, political stakeholders, business groups and other interested parties at the local, sub-regional and regional level by undertaking 35 formal and informal briefings, presentations and meetings during the consultation period. This included briefings for the Stansted MPs forum, and personal briefings for six MPs and three MEPs.

We held several discussions with the Stansted Airport Consultative Committee (STACC) including an "issues" workshop and a pre-briefing on the draft SDP prior to its public launch.

Crucial to the public consultation exercise were ten Outreach events held in the afternoons and evenings across the local area covering the key local communities of Bishop's Stortford, Harlow, Hatfield Broad Oak, Thaxted, Great Dunmow, Braintree, Saffron Walden, Takeley and Stansted Mountfitchet. These events were widely advertised in local newspapers to maximise awareness of the SDP and the opportunity to discuss issues with airport representatives. An exhibition was in place at the airport throughout the public consultation phase.

In total, 180 stakeholders visited our public consultation events, with the two events held at Bishop's Stortford being the most popular. The events provided an opportunity for residents and local stakeholders to drop-in and view the SDP documents, maps and exhibition boards, and discuss the proposals and SDP content with airport staff. At each event hard copies of the document were available to view and take-away, and iPads were also available to view electronic copies of the documents.

We were keen to collect feedback directly from people attending the events, and we developed a consultation questionnaire covering the core themes of the draft plan. We asked people attending the events to provide their responses using the iPads provided, and also encouraged people to provide more general feedback about Stansted.

A total of 146 iPad surveys were completed. We have received 62 written responses to the consultation from a range of local authorities, local interest groups, businesses, local residents and political stakeholders.

Following the formal close of the public consultation period in early November, we have continued to engage with a range of stakeholders on the issues raised by the draft SDP.

The consultation responses and the comments of those who attended the Outreach events were generally positive in support of growth to the maximum capacity of the single runway within our current airport boundary.

OUR AIRPORT

CONSULTATION ON THE DRAFT SDP

Understandably, there were detailed points about the likely impacts of increased aircraft movements and in particular night noise. Concerns over congestion on local roads and quality of rail services were also commonly expressed.

Importantly, there was wide ranging support for our Economy and Surface Access Plan and our Community Plan. Our targets of improving rail connectivity to London and Cambridge and our focus on educational attainment and employment opportunities in the communities served by the airport were welcomed.

The majority of local authorities and stakeholders recognised Stansted's important contribution to the local and regional economy. Many responses supported our efforts to broaden the range of airlines and routes; our positive approach to partnership working; our community outreach programme; the renewed investment in airport facilities; and a positive change in management culture under M.A.G's ownership.

Details of the consultation process and its outcomes are contained within a separate document, the "SDP Consultation Review". This report covers the process, the responses and how we have dealt with the comments received. We are grateful to all those who have helped shape our SDP.

STANSTED AIRPORT

Stansted is London's third largest airport and currently handles 20mppa. The airport serves around 160 destinations across 30 countries, providing London and the East of England with international connectivity, predominantly to short haul European and North African destinations.

Stansted is firmly positioned as a market leader for low-cost short haul travel. We have been recognised globally as the World's Best Low-Cost Airport in the SKYTRAX World Airport Awards for the last four years.

The airport is a key international gateway for the UK and it is an important point of entry for non-UK residents arriving by air. Over half of passengers using Stansted are foreign nationals either on business, visiting friends and family or on holiday in the UK. Stansted is also located at the centre of a thriving economic corridor, positioned between London and Cambridge, amongst clusters of high growth industries and surrounded by growing population centres.

The airport has the highest volume of dedicated freighter traffic among the London airports: over 230,000 tonnes of cargo were transported through the airport in 2014 which helped connect the economy of London and the region with the global marketplace.

We have the ability to grow the use of our single runway through more efficient utilisation of runway slot capacity across the day and throughout the year. We have planning permission to grow to 35mppa and 243,500 passenger air transport movements and 20,500 cargo air transport movements per annum.

In the next ten years, we forecast that the airport will be approaching its current planning cap of 35mppa. This level of throughput can be accommodated with our existing infrastructure or new infrastructure for which we already have planning permission. Beyond that, we estimate that the airport could grow to handle in the region of 40-45mppa within the current boundaries and physical constraints, as a result of improvements to the way in which we operate and use our facilities. The exact capacity will be a product of our route network, aircraft size, the spread of traffic through the day and year and the capacity drivers described in our Land Use Plan.

There is also potential for the cargo goods volume at the airport to increase, potentially doubling the current throughput of cargo on dedicated aircraft to around 400,000 tonnes per annum.

This SDP sets out how we intend to develop Stansted so that it operates in the most efficient way to achieve its full single runway capability. We also set out the assumptions on Stansted's market potential and the air traffic forecasts we have used for the purposes of guiding the development of the SDP. These provide an appropriate reference point for assessing development requirements and the consequences of growth rather than a firm guide to the future rate of growth at Stansted. The SDP also sets out our analysis of the effects on local people, on the environment, and the need for new facilities associated with full use of the runway.

ECONOMY

Stansted Airport is an important catalyst for growth and productivity in the East of England and North and East London. Our aim is to maximise our contribution to the economy; support local growth and maintain a fair and sustainable relationship with our supply chain and business partners.

Stansted already makes a significant contribution to the economic vitality of the East of England region and its wider catchment. As the airport grows towards the full use of the single runway, the scale of this contribution will grow significantly, not only in terms of the direct value of the economic activity at and around the airport, but also through the wider economic benefits associated with improved international connectivity. In increasing and diversifying our network of routes and airlines, we can play a key role in supporting the growth and development of the regional economy, helping to attract investment and sustain employment.

Stansted is the largest single-site employer in the East of England, employing over 10,000 people across 190 companies on site. This highlights its importance to the regional economy; and to Essex in particular where over half of the people working at the airport live. Stansted generates around £770 million in GVA, of which a substantial proportion is derived directly from activities associated with aviation and air transport. Other important sectors include construction, retail and hospitality, services and 'other' transport activities.

We project that the growth of Stansted to 35mppa (the current planning cap) by 2025 would be worth £1.7 billion to the UK economy in present value terms, through the impact at Stansted alone, compared to business as usual. Beyond that, further growth of the airport up to 45mppa by 2030[1] would be worth £4.6 billion to the UK economy and generate an extra 10,000 jobs.

We take a responsible and a considerate attitude to being an integral part of the communities we serve and we also take pride in making a positive contribution to regional prosperity and economic development.

We have put in place a proactive education and employment programme that is designed to raise standards, create more opportunities for local people and support the skills, education and aspirations of the airport's future workforce. The Stansted Airport Employment and Skills Academy opened in March 2008 and helps those looking for employment at the airport.

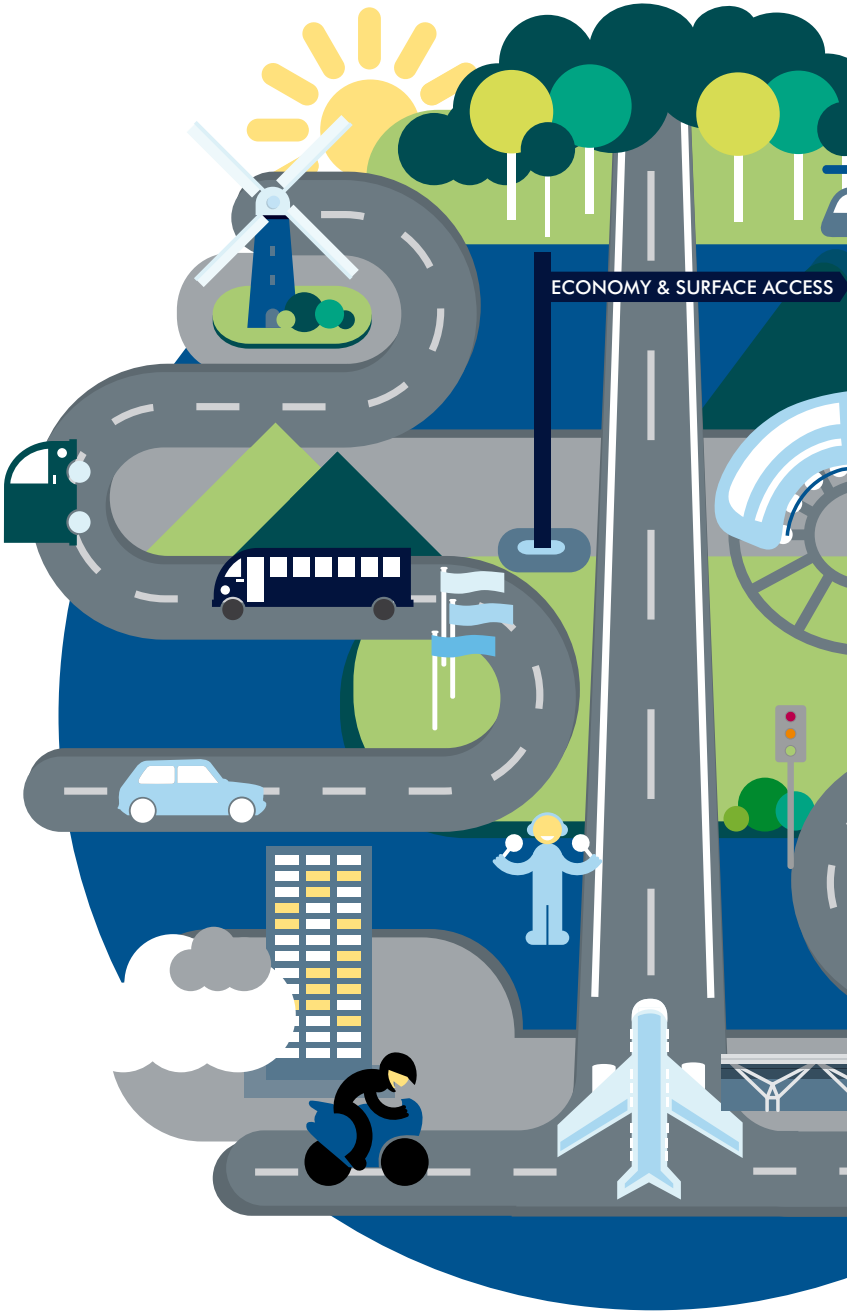
A well connected airport improves the economic attractiveness of the region as a place to live, work, visit and do business. We are committed to ensuring that Stansted is effectively marketed to passengers and airlines, so that the airport's potential is maximised. We will work in partnership with the local Chambers of Commerce and the small-medium enterprise community to foster long term economic growth and inward investment in the region. In turn, this will generate wider benefits for the local and regional economies.

[1] 45mppa used for assessment purposes. Single runway capacity lies between 40 and 45mppa.

ECONOMY

Enhanced connectivity to Stansted will be a key factor in driving economic regeneration and productivity in some local areas around the airport. Employment opportunities at the airport are important for regeneration areas such as those south and east of the airport, particularly along the Upper Lea Valley and the A120 corridor.

We will strengthen our partnership work with local authorities and Local Enterprise Partnerships (LEPs), as well as regional bodies such as the London-Stansted-Cambridge Consortium and Haven Gateway Partnership, to attract funding for infrastructure to drive growth and job creation into the East of England. Our partnership with the business and tourism community will help attract inward investment and visitors to the region. As well as continuing expansion of our short haul direct route network, we will focus especially on attracting long haul and full service airlines to provide direct services to the Middle East and USA, as well as connectivity to other long haul destinations.



SURFACE ACCESS

Stansted Airport is a leading UK airport for public transport use and is a pioneer in developing sustainable employee travel. The skill, imagination and innovative approach applied to developing public transport accessibility with our partners, has been recognised by a series of awards at international, european and national level.

We are committed to building on this platform to deliver high quality and reliable transport infrastructure with sustainable travel choices for both passengers and employees. Improved access is a key element in our plans to attract more airlines and passengers and to bring economic benefits to the area. It is also central to giving companies based at the airport access to the widest possible pool of labour and to ensure that local residents have access to jobs.

Our previous Surface Access Plan in 2010 set the following targets for the period to 2015:

- To achieve and sustain a 43% use by air passengers of public transport by the time the airport reaches 35mppa; and
- To achieve and sustain a target of not more than 70% of all employees who drive to work alone by the time the airport reaches 35mppa.

Data for 2013 shows that we have outperformed the targets set in 2010.

Through a collaborative approach, led by the airport's Transport Forum, Stansted has been highly successful in expanding its rail, coach and bus services over the last decade. It is among the best performing airports in the UK and Europe for the percentage of trips by public transport. The latest CAA survey (2013) confirms the continuing increase in the use of public transport by air passengers, with 51% using bus, coach and rail services.

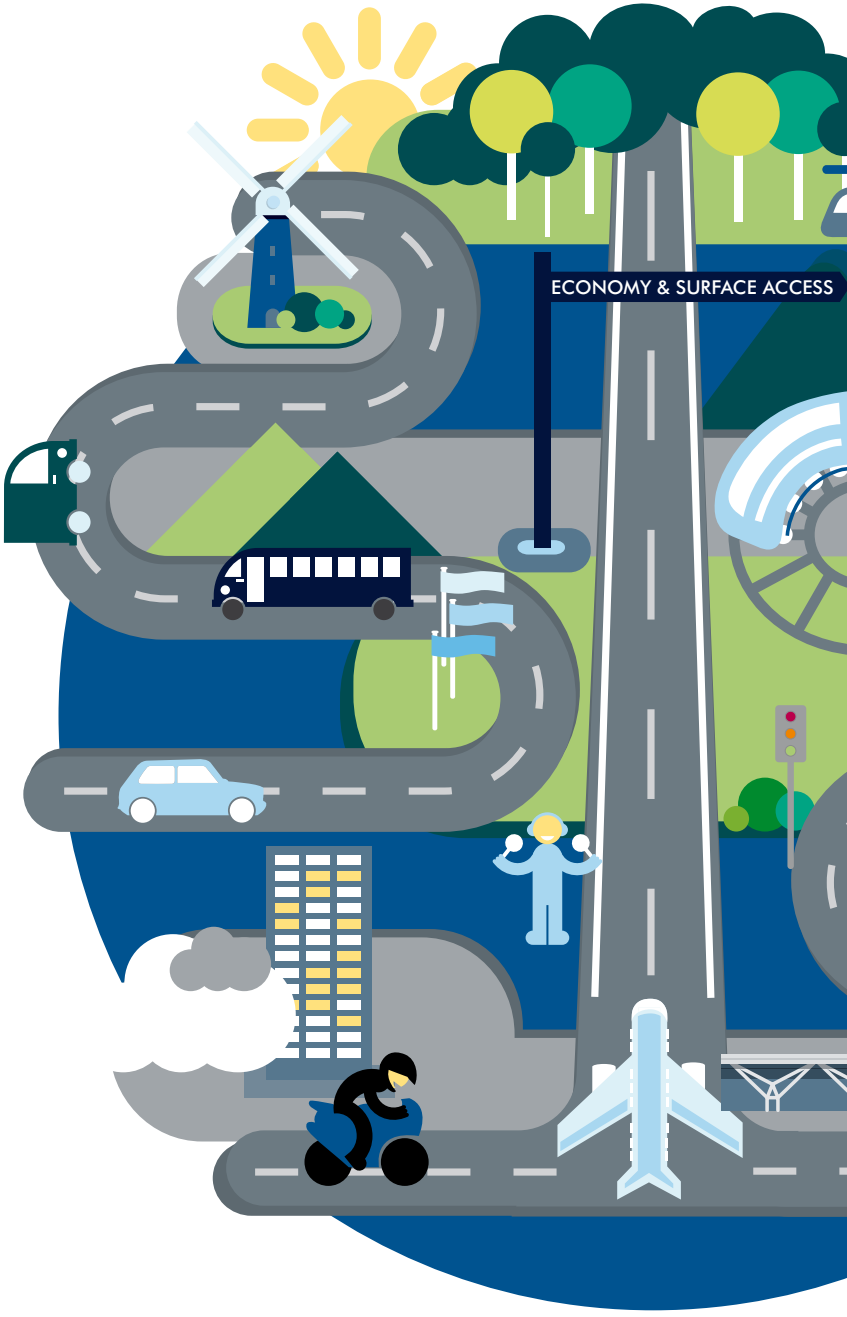
As passenger numbers increase, we will work to ensure there is a commensurate increase in public transport use. To achieve this, we will focus on a number of key issues:

- the increasing levels of congestion on the strategic road network around the airport; which have the potential to impact on the journey time and reliability of coach services, especially to London; and
- the need to enhance the quality of rail access to Stansted from London, Cambridge and other key markets, particularly in terms of reduced journey times and value for money, to maximise the potential of rail to meet the needs of passengers and staff; and the need to encourage more passengers from our local catchment area to use public transport; where current coach and rail services either don't exist or are limited in scope and frequency.

SURFACE ACCESS

The Airports Commission and Government both recognise that improved surface access is crucial to making best use of London's existing airport capacity. As Stansted is the only major airport around London with spare capacity, quicker and more reliable rail access is a key priority. This will not only benefit air passengers, but also the wider economy in the London-Stansted-Cambridge corridor and those people using the line for commuting to and from London. We will continue to work with regional partners to make the case for a sustained programme of investment and improvements along the West Anglia rail corridor.

Overall, our targets are to maintain at least 50% mode share of public transport to the end of 2019; to grow rail mode share from 22% to 25% by the end of 2019; and to reduce single car occupancy for staff travel to no more than 65% by end of 2019.



LAND USE

We will make the best and most efficient use of our land; providing a safe, efficient and commercial operation to allow our business and those of our tenants and partners to develop and grow.

International airports are large and complex sites, with a wide range of buildings and facilities to meet the needs of passengers, airlines and service providers. Stansted benefits from being an extensive, modern and well planned airport. It was originally designed to accommodate steady and progressive development. This means much of the core infrastructure is already in place – a runway, terminal, cargo centre and road and rail system. Supporting facilities, such as maintenance hangars, hotels and car parks have been developed as the airport has grown.

The Land Use Plan identifies the land, uses and facilities required to support the airport up to the capacity of its single runway, which we assess to be between 40 and 45 million passengers a year. Our current planning permissions limit our growth to 35 million passengers. We believe the additional throughput can be handled within the constraints and limits of our planning permission and without major new facilities. Importantly, our development requirements can be met within the existing airport boundary and in line with planning policies for the region.

These factors make Stansted unique among the major South East airports. Our current site has the capability to handle a doubling of traffic. By comparison, Heathrow and Gatwick are virtually full, and have limited scope to grow without building new runways and terminals.

The basic layout of the Stansted site will remain as it is today. Within each land use zone we expect to see change, investment, redevelopment and improvement as the needs of passengers and service partners continue to evolve and new opportunities arise. At the same time, we will manage and contain our environmental impact – ensuring that we retain the strong landscape setting that helps mitigate impacts on local communities and protects the wider landscape.

Our runway and airfield are modern and fully capable of handling all types of aircraft. Minor additions to the taxiway system may be needed in order to achieve maximum runway capacity. Space has been reserved to add additional aircraft stands – both for passenger aircraft (adjacent to the terminal and served by new piers) and for cargo aircraft (around an extended freight terminal).

During 2015 we will complete our £80 million programme to transform the passenger terminal. This includes a new, much larger security area and a redesigned airside departure lounge, with expanded retail and catering areas. This will provide additional capacity and a much improved passenger experience. The terminal is designed in a modular form; with space reserved to add one or two bays to the east and west.

The terminal area is the most intensively used part of the site, containing our major transport facilities (bus, coach and rail station) and short stay car parking. Additional office and hotel accommodation is planned for this area, within easy reach of the terminal and public transport. As an example of this kind of development, we expect a new hotel to open in 2016 following the start of construction later in 2015.

LAND USE

Away from the terminal area, there is room to expand the existing maintenance, cargo and support activities (e.g. car hire and roadside facilities). On the north side of the runway is where the airport originally developed. This is an area ripe for change and in need of investment and redevelopment; with an inefficient layout and some old and out-dated buildings and facilities. It will remain home to our modern general aviation facilities and some essential operational uses. However, there is around 18 hectares of land that can be used to meet economic and employment need for the local district. We are preparing a more detailed master plan for this area.

We expect our long stay car parking areas to remain in their current location – around Southgate and off Bury Lodge Lane. We will need to increase the capacity on site; in line with our transport strategy of providing enough space on site to meet demand and reducing the amount of 'kiss and fly' and taxi use. These generate a higher number of road trips than either public transport use or parking on site.

ENVIRONMENT

We recognise that the operation and development of our airport has environmental impacts ranging from a global level to those experienced more locally in relation to aircraft noise, local air quality and landscape. We are committed to reducing our impact on the environment and balancing the impact on local communities with our operations as a commercial airport operator.

Successful environmental management incorporates every area, so as well as reducing carbon emissions and noise impacts, we also work hard to manage and control our impacts relating to water, waste, ecology and land use.

In order to achieve this, we will:

- develop and grow our business in a managed and sustainable manner optimising the economic and social benefits of the airport, whilst limiting the impact on the environment;
- work across all business areas to engage the combined skills and energy of all our employees;
- facilitate a constructive and open dialogue with all stakeholders, including local communities;
- maintain an environmental management system that targets key areas and audits and monitors performance in a challenging and critical way; and
- comply with the requirements of environmental legislation and other requirements at all times and to prevent pollution and reduce our contribution to climate change.

To manage the impact of climate change we will aim to make our airport operations carbon neutral. To achieve this we are working together with our on-airport business partners to reduce the airport's energy consumption. We will prioritise and increase our take-up of renewable fuels as part of our drive to reduce the airport's carbon emissions.

Air quality continues to be an important issue for communities around airports. Our analysis shows that air quality standards will be met in the areas around the airport as we grow to the full use of the runway. We will continue to take measures to minimise emissions that impact on local air quality and also ensure that concentrations of pollutants continue to be below the relevant national thresholds. To help reduce emissions we are improving air quality assessment and monitoring, influencing airlines to cut emissions from aircraft, and reducing emissions generated by ground vehicles.

For those living closest to the airport and its flight paths, aircraft noise can be intrusive and disruptive. Night noise is a particular concern and we will continue to mitigate and manage this to limit the harm to local communities. Our analysis shows that future noise impacts will remain well below the limits previously established as part of the planning permission for Stansted to grow to 35 mppa. We will work with partners including community groups, airlines, air traffic control and Government to seek to understand and minimise the impact of all aspects of noise and drive forward change where possible. Our aim and commitment is to provide transparent reporting of air noise impact as well as to manage, mitigate, and reduce where possible, the number of people affected by noise as a result of our operations.

ENVIRONMENT

We manage waste in accordance with the principles of the waste hierarchy, which is to reduce waste generation, re-use, recycle, recover, and then as a last resort to dispose of waste to landfill. We have set ambitious targets of sending zero waste to landfill and recycling 70% of waste by 2020.

We are committed to improving our water efficiency and preventing pollution and will continue to look for opportunities to reduce our water use and to encourage other on-site companies to do the same.

The airport is surrounded by a number of ecologically diverse habitats including the medieval Hatfield Forest. Within the constraints imposed by the normal operation of the airport, we promote the development of rich and varied habitats, seeking to integrate the airport within its rural setting and promoting access to the airport site.

COMMUNITY

By building enduring relationships with our local communities, we will seek to understand the issues that are important to them, to understand how our operations affect them and to use our combined skills and resources to work together for our mutual benefit.

Airport operations have both positive and negative impacts on the communities around the airport. The Community Plan sets out where we propose to focus our engagement with local communities so that we contribute to the social and economic well-being of those living around Stansted. As part of the plan we will continue our proactive approach to working with our neighbours so that we can better understand their needs and their concerns. Following discussions with key stakeholders, we have highlighted five priority areas for our community plan:

- Education and employment;
- Investing in the community;
- Community and local business engagement;
- Employee engagement; and
- Managing local impacts.

Engaging with young people, particularly those living in areas close to the airport, is a vital part of our work. We want to encourage and inspire young people to think about what the airport does, why it does it, and the career opportunities that are available to them now and in the future.

With this in mind we are creating a new education centre which will open in spring 2015, designed to provide a flexible and inspirational learning environment for children and young adults. We also plan to develop further our work experience programme and improve the on-site Employment and Skills Academy to be an even more valuable resource to help raise standards, improve skills and help young jobseekers into employment.

Community and business engagement is also vital to our success. As Stansted grows, we commit to broadening and deepening our outreach in the local community through regular information events, community support and employee volunteering, while at the same time ensuring we play an active role in supporting the local businesses community to grow and flourish.

Finally, we recognise the critical importance of managing our impacts on the community. Stansted is the third biggest airport in London and aircraft noise is the key concern for our neighbours. To help mitigate some of those concerns we propose a wide ranging review of our sound insulation schemes while at the same time ensuring we have a robust complaints procedure in place.

CONCLUSION

Our SDP sets out our sustainable framework for how Stansted will develop to the capacity of its single runway, which we believe is in the range of 40-45mppa. This information will help inform the Government and Airports Commission in their development of a new airport policy.

Based on the content of this SDP, we will be seeking policy support for the growth of Stansted to the capacity of the single runway. This plan will also inform local councils and other stakeholders of our plans to assist them in their own strategy formulation and plan making.

Stansted has planning permission to grow to a passenger throughput of 35mppa. As part of this permission, there is a package of commitments relating to the airport's impacts, including aircraft noise, air quality and surface access. M.A.G remains committed to honouring these conditions.

We recognise that growing to the capacity of the runway represents a significant increase in throughput compared with the current level of 20mppa. We see the value in providing local communities and other stakeholders with a clear view of what this level of growth will entail, in terms of airport infrastructure, environmental and economic impacts, surface access requirements and community engagement.

The analysis contained in this Plan shows how growth to the capacity of the single runway can be contained within the current, well defined airport boundaries by making better use of our existing core infrastructure.

Importantly, our analysis shows that growth up to the full capacity of the runway can also be contained within the existing environmental limits agreed as part of the 35mppa planning permission. For example, modelling of future noise impacts shows that growth up to the full use of the runway can be accommodated within the existing contour cap.

Our Plan also shows how the road infrastructure and rail services serving the airport would need to develop to support the airport's growth to the capacity of its runway. The SDP sets out how the value of Stansted's economic contribution will rise, and its increasingly important role in the successful delivery of local and regional economy growth objectives. We have also set out how we propose to develop our engagement with the local community to ensure the benefits of growth are felt by those living around the airport.

The existing planning permission continues to provide the appropriate framework for Stansted's growth to 35mppa, and there is no immediate need for us to seek a lifting of the current planning cap to enable growth beyond that level. At the appropriate time, we will seek an increase in the level of the cap so that we can make maximum use of the capacity provided by the existing runway.

The key issue for the airport is to seek an increase in the level of the cap in good time so that we can provide clarity and confidence to passengers, airlines and other stakeholders about the airport's ability to grow beyond 35mppa.

The headroom in the current planning conditions provides some flexibility over when we need to initiate this process, and we will maintain an active dialogue with key stakeholders over the timing and form of any such planning application.

HOW TO CONTACT US

The Sustainable Development Plan is an important document for us as it sets out what our aspirations are for development to the full capacity of the single runway at Stansted. There are many stakeholders who have an interest in the airport and the views and comments from Government, local authorities, neighbours, the business community and customers are an important part of the planning process.

We are committed to being open in sharing our vision for Stansted and the local area. Our plan reflects local views and ideas that were expressed during consultation on the draft version. We will continue to engage; to report our performance and review our plans in the light of changing circumstances. We expect to review and update this SDP at least every five years in line with current Government advice on airport master plans.

To obtain copies of the Sustainable Development Plan or contact us about its content:

Visit: **www.stanstedairport.com/developmentplan**

Write: **London Stansted Airport Ltd**
Enterprise House
Bassingbourn Road
Stansted Airport
ESSEX
CM24 1QW

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WHY LIVING NEAR AN AIRPORT COULD BE BAD FOR YOUR HEALTH

2

Studies reveal link between areas with high noise pollution and an increased risk of heart disease and stroke among residents

Charlie Cooper |
@charliecooper8 |
Tuesday 8 October 2013 23:30 |
|

Anyone who has ever lived under a flight path will tell you that the constant din of jet engines is more than enough to raise your blood pressure.

Click image above to enlarge graphic

But now researchers are warning for the first time that there may be a real health risk associated with aircraft noise. Two studies, published today in the British Medical Journal, found evidence that people living in areas with high levels of noise pollution from passing aeroplanes had a higher risk of heart disease and stroke.

The first study compared Civil Aviation Authority data on aircraft sound levels with hospital admissions and mortality rates for 3.6 million people living near Heathrow Airport, in areas where aircraft noise exceeded 50 decibels – the level of normal conversation in a quiet room.

Researchers from Imperial College London and King's College London found that the risks of cardiovascular disease were greater for those living in neighbourhoods with highest noise levels and closest to the airport, such as Slough and Hounslow. Around 72,000 people living in the noisiest areas had a 10 to 20 per cent greater risk than people living in the quietest areas, researchers estimated.

A second investigation carried out in the US looked at heart disease among 6 million people living close to 89 airports. More than two per cent of hospitalisations for cardiovascular diseases could be attributed to aircraft noise, the researchers from the Harvard School for Public Health and the Boston University School of Public Health said.

Previous studies have suggested a link between a noisy environment and high blood pressure.

Loud noise can lead to short-term increases in blood pressure, and sustained exposure could lead to more long-term risk. Scientists also proposed that night-time aircraft noise could be disturbing people’s sleep, which is another risk factor for heart disease.

Although health leaders in the UK stopped short of confirming a causal link between aircraft noise and heart problems, the studies show a strong association, which they said should be taken into account in future plans to expand airport capacity.

A passenger jet flies over houses near Heathrow airport (Getty)

The findings come just days after the chairman of the Airports Commission Sir Howard Davies, the man tasked with solving the problem of the South East of England's airport capacity, said that he would consider adding a third runway at Heathrow and a second runway at Gatwick.

Professor Paul Elliott, from the Centre for Environment and Health said: "The issue here is particularly with areas with the highest levels of aircraft noise. How can you design your future airports and airport capacity [while] trying to keep the exposure to the population below those highest levels? That's [a question] the policymakers have to take into account. They're already well aware of the annoyance levels. What we're adding into the mix is that there may also be an effect on risk of heart disease."

The Heathrow study covered 12 London boroughs and nine districts outside London. The study area was divided into 12,110 zones with a population of around 300 people each. Data on the noise levels for each small area in 2001, provided by the Civil Aviation Authority, was compared with information from the Office for National Statistics and the Department of Health on hospital admissions and deaths from cardiovascular disease between 2001 and 2005.

The results were adjusted to account for other heart disease risk factors, such as social deprivation and air pollution – although the area-based analysis made separating risks associated with factors such as smoking and ethnicity difficult.

In an editorial for the BMJ, Stephen Stansfeld, professor of psychiatry at Barts and London School of Medicine, said that the results “imply that the siting of airports and consequent exposure to aircraft noise may have direct effects on the health of the surrounding population. Planners need to take this into account when expanding airports in heavily populated areas or planning new airports,” he said.

Matt Gorman, Heathrow’s director of sustainability, said that the airport was already taking “significant steps” to reduce noise pollution by charging airlines more for louder aircraft and offering insulation and double glazing to local residents.

“Together these measures have meant that the number of people affected by noise has fallen by 90 per cent since the 1970s, despite the number of flights almost doubling. We are committed to ensuring this reduction continues,” he said.

A spokesman for the Airports Commission said: “We are aware of this report and will consider its findings. Environmental impacts, including levels of noise, are within the scope of our considerations and are something we are already looking at.”

Case study: ‘I can hear a plane every 90 seconds’

Margaret Thorburn, 59, lives in Osterley, London, under the Heathrow flight path

"These findings are alarming. Yet they reinforce what many of us living here have suspected for a long time. I have lived in Osterley for 30 years and have been diagnosed with high blood pressure.

“What people don’t realise is that it’s not just the sound of the aircraft – but how you have to adapt your entire audio environment. Everything in the house has to be louder to block out the noise; while your subconcious thought patterns are continuously interrupted.

“Over the years I have no doubt this has taken its toll on my anxiety levels.

“For all you hear about more advanced and quieter planes, the frequency of take-offs and landings are more than I ever remember. It’s not unusual for my day to be interrupted every 90 seconds. At the age of 59, I may well consider moving. But there are many of us that simply don’t have that option.”

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Public Health England

Protecting and improving the nation's health

Thanet

District

This profile was published on 3 July 2018

Local Authority Health Profile 2018

This profile gives a picture of people's health in Thanet. It is designed to help local government and health services understand their community's needs, so that they can work together to improve people's health and reduce health inequalities.

Health in summary

The health of people in Thanet is varied compared with the England average. Thanet is one of the 20% most deprived districts/unitary authorities in England and about 23% (5,900) of children live in low income families. Life expectancy for both men and women is lower than the England average.

Health inequalities

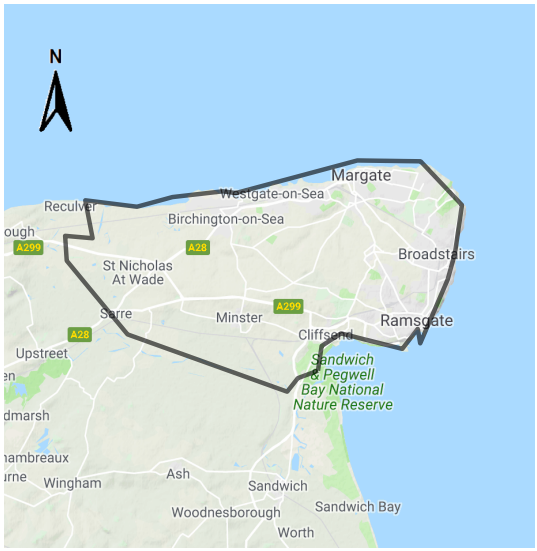
Life expectancy is 9.5 years lower for men and 9.8 years lower for women in the most deprived areas of Thanet than in the least deprived areas.**

Child health

In Year 6, 21.2% (317) of children are classified as obese. The rate of alcohol-specific hospital stays among those under 18 is 44*. This represents 13 stays per year. Levels of teenage pregnancy, GCSE attainment and smoking at time of delivery are worse than the England average.

Adult health

The rate of alcohol-related harm hospital stays is 590*, better than the average for England. This represents 824 stays per year. The rate of self-harm hospital stays is 209*. This represents 275 stays per year. Estimated levels of adult smoking are worse than the England average. Estimated levels of adult physical activity are better than the England average. The rate of people killed and seriously injured on roads is worse than average. Rates of sexually transmitted infections and TB are better than average.



For more information on priorities in this area, see:

- www.thanetccg.nhs.uk
- www.kpho.org.uk

Visit www.healthprofiles.info for more area profiles, more information and interactive maps and tools.

Local Authority Health Profiles are Official Statistics and are produced based on the three pillars of the Code of Practice for Statistics: Trustworthiness, Quality and Value.

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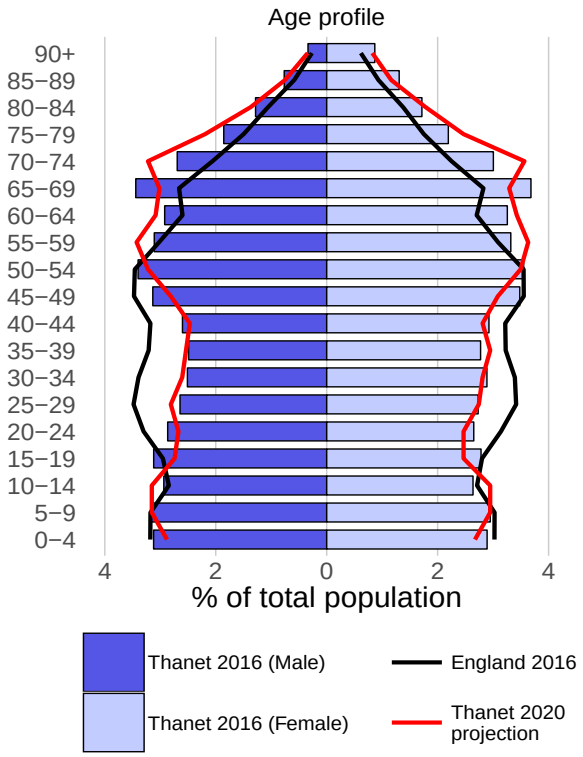
* rate per 100,000 population

** see page 3

Population



Understanding the sociodemographic profile of an area is important when planning services. Different population groups may have different health and social care needs and are likely to interact with services in different ways.

	Thanet (persons)	England (persons)
Population (2016)*	141	55,268
Projected population (2020)*	146	56,705
% population aged under 18	21.2%	21.3%
% population aged 65+	23.1%	17.9%
% people from an ethnic minority group	2.1%	13.6%

* thousands

Source:
Populations: Office for National Statistics licensed under the Open Government Licence
Ethnic minority groups: Annual Population Survey, October 2015 to September 2016

Deprivation

The level of deprivation in an area can be used to identify those communities who may be in the greatest need of services. These maps and charts show the Index of Multiple Deprivation 2015 (IMD 2015).

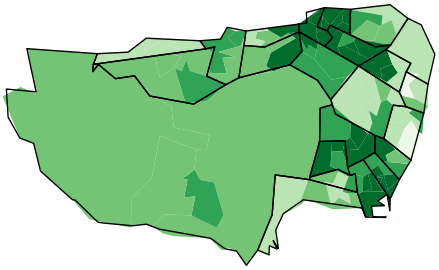
National

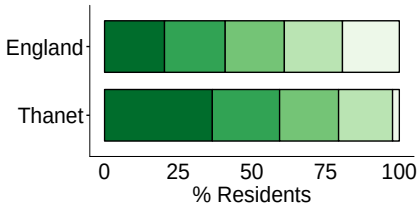
The first of the two maps shows differences in deprivation in this area based on national comparisons, using national quintiles (fifths) of IMD 2015, shown by lower super output area. The darkest coloured areas are some of the most deprived neighbourhoods in England.

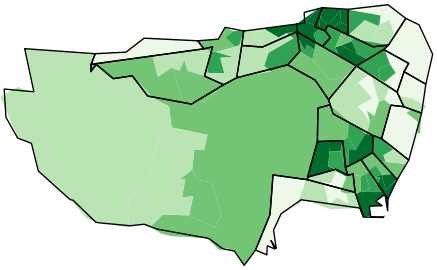
The chart shows the percentage of the population who live in areas at each level of deprivation.

Local

The second map shows the differences in deprivation based on local quintiles (fifths) of IMD 2015 for this area.







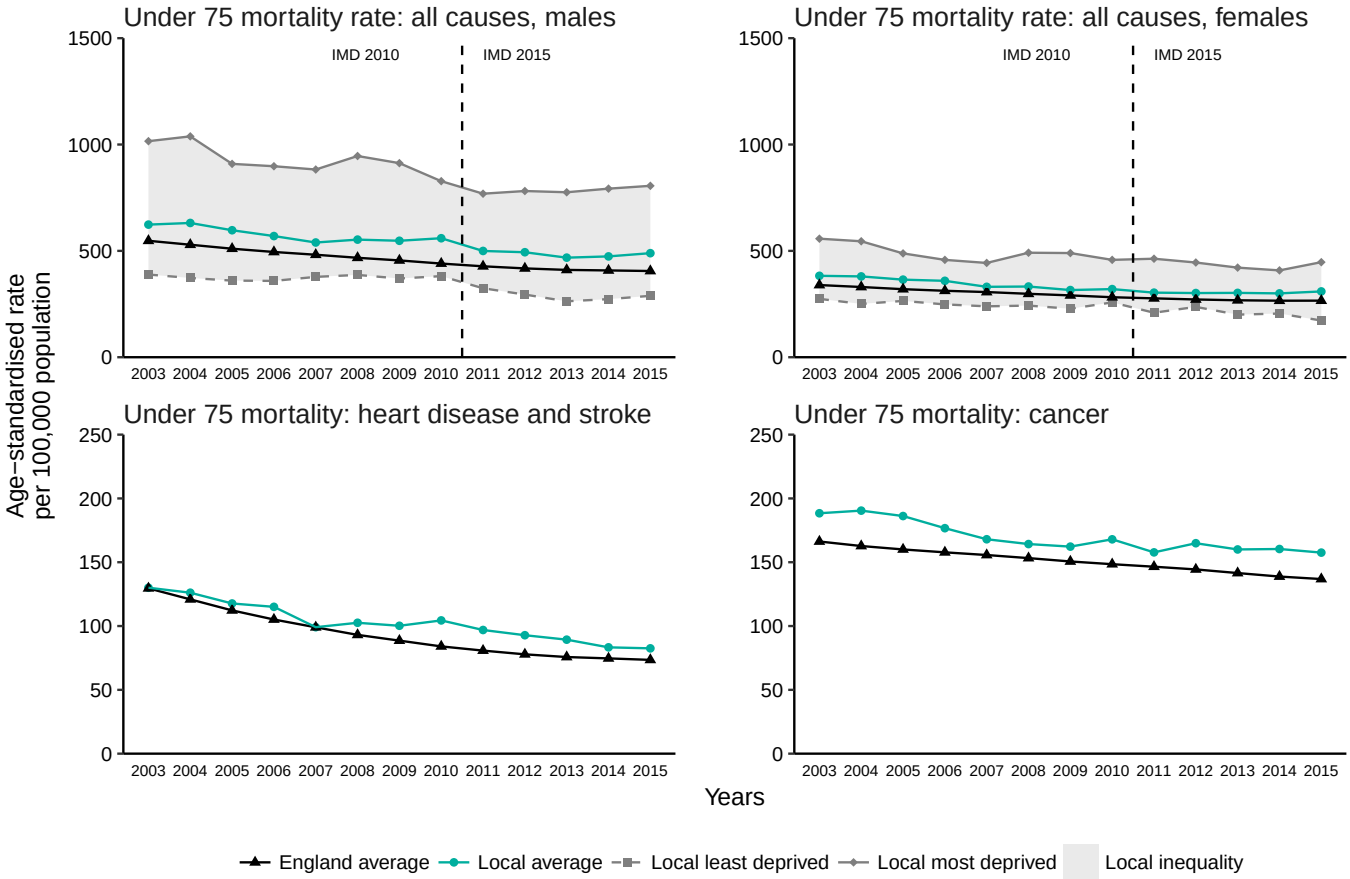
Lines represent electoral wards (2017). Quintiles shown for 2011 based lower super output areas (LSOAs). Contains OS data © Crown copyright and database rights 2018. Contains public sector information licensed under the Open Government Licence v3.0

Health inequalities: life expectancy

The charts show life expectancy for males and females within this local authority for 2014-16. The local authority is divided into local deciles (tenths) by deprivation (IMD 2015). The life expectancy gap is the difference between the top and bottom of the inequality slope. This represents the range in years of life expectancy from most to least deprived within this area. If there was no inequality in life expectancy the line would be horizontal.

Trends over time: under 75 mortality

These charts provide a comparison of the trends in death rates in people under 75 between this area and England. For deaths from all causes, they also show the trends in the most deprived and least deprived local quintiles (fifths) of this area.



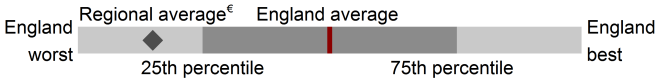
Data from 2010-12 onwards have been revised to use IMD 2015 to define local deprivation quintiles (fifths), all prior time points use IMD 2010. In doing this, areas are grouped into deprivation quintiles using the Index of Multiple Deprivation which most closely aligns with the time period of the data. This provides a more accurate way of examining changes over time by deprivation.

Data points are the midpoints of three year averages of annual rates, for example 2005 represents the period 2004 to 2006. Where data are missing for local least or most deprived, the value could not be calculated as the number of cases is too small.

Health summary for Thanet

The chart below shows how the health of people in this area compares with the rest of England. This area's value for each indicator is shown as a circle. The England average is shown by the red line, which is always at the centre of the chart. The range of results for all local areas in England is shown as a grey bar. A red circle means that this area is significantly worse than England for that indicator. However, a green circle may still indicate an important public health problem.

- Significantly worse than England average
- Not significantly different from England average
- Significantly better than England average
- Not compared



	Indicator names	Period	Local count	Local value	Eng value	Eng worst	Eng best
Life expectancy and causes of death	1 Life expectancy at birth (Male)	2014 – 16	n/a	77.8	79.5	74.2	83.7
	2 Life expectancy at birth (Female)	2014 – 16	n/a	82.1	83.1	79.4	86.8
	3 Under 75 mortality rate: all causes	2014 – 16	1,615	395.6	333.8	545.7	215.2
	4 Under 75 mortality rate: cardiovascular	2014 – 16	339	82.5	73.5	141.3	42.3
	5 Under 75 mortality rate: cancer	2014 – 16	658	157.5	136.8	195.3	99.1
	6 Suicide rate	2014 – 16	58	16.0	9.9	18.3	4.6
Injuries and ill health	7 Killed and seriously injured on roads	2014 – 16	200	47.7	39.7	110.4	13.5
	8 Hospital stays for self−harm	2016/17	275	208.5	185.3	578.9	50.6
	9 Hip fractures in older people (aged 65+)	2016/17	189	562.1	575.0	854.2	364.7
	10 Cancer diagnosed at early stage	2016	402	55.1	52.6	39.3	61.9
	11 Diabetes diagnoses (aged 17+)	2017	n/a	76.9	77.1	54.3	96.3
	12 Dementia diagnoses (aged 65+)	2017	1,323	63.2	67.9	45.1	90.8
Behavioural risk factors	13 Alcohol−specific hospital stays (under 18s)	2014/15 – 16/17	39	43.6	34.2	100.0	6.5
	14 Alcohol−related harm hospital stays	2016/17	824	589.7	636.4	1,151.1	388.2
	15 Smoking prevalence in adults (aged 18+)	2017	26,277	23.7	14.9	24.8	4.6
	16 Physically active adults (aged 19+)	2016/17	n/a	72.0	66.0	53.3	78.8
	17 Excess weight in adults (aged 18+)	2016/17	n/a	66.1	61.3	74.9	40.5
Child health	18 Under 18 conceptions	2016	63	26.9	18.8	36.7	3.3
	19 Smoking status at time of delivery	2016/17	299	19.7	10.7	28.1	2.3
	20 Breastfeeding initiation	2016/17	1,041	72.5	74.5	37.9	96.7
	21 Infant mortality rate	2014 – 16	23	4.8	3.9	7.9	0.0
	22 Obese children (aged 10−11)	2016/17	317	21.2	20.0	29.2	8.8
Inequalities	23 Deprivation score (IMD 2015)	2015	n/a	31.6	21.8	42.0	5.0
	24 Smoking prevalence: routine and manual occupations	2017	n/a	42.3	25.7	48.7	5.1
Wider determinants of health	25 Children in low income families (under 16s)	2015	5,940	23.1	16.8	30.5	5.7
	26 GCSEs achieved	2015/16	737	47.5	57.8	44.8	78.7
	27 Employment rate (aged 16−64)	2016/17	58,600	71.9	74.4	59.8	88.5
	28 Statutory homelessness	2016/17	256	4.1	0.8		
	29 Violent crime (violence offences)	2016/17	4,930	35.3	20.0	42.2	5.7
Health protection	30 Excess winter deaths	Aug 2013 – Jul 2016	365	23.1	17.9	30.3	6.3
	31 New sexually transmitted infections	2017	521	624.7	793.8	3,215.3	266.6
	32 New cases of tuberculosis	2014 – 16	29	6.9	10.9	69.0	0.0

For full details on each indicator, see the definitions tab of the Health Profiles online tool: www.healthprofiles.info

Indicator value types
1, 2 Life expectancy - Years 3, 4, 5 Directly age-standardised rate per 100,000 population aged under 75 6 Directly age-standardised rate per 100,000 population aged 10 and over 7 Crude rate per 100,000 population 8 Directly age-standardised rate per 100,000 population 9 Directly age-standardised rate per 100,000 population aged 65 and over 10 Proportion - % of cancers diagnosed at stage 1 or 2 11 Proportion - % recorded diagnosis of diabetes as a proportion of the estimated number with diabetes 12 Proportion - % recorded diagnosis of dementia as a proportion of the estimated number with dementia 13 Crude rate per 100,000 population aged under 18 14 Directly age-standardised rate per 100,000 population 15, 16, 17 Proportion - % 18 Crude rate per 1,000 females aged 15 to 17 19, 20 Proportion - % 21 Crude rate per 1,000 live births 22 Proportion - % 23 Index of Multiple Deprivation (IMD) 2015 score 24, 25 Proportion - % 26 Proportion - % 5 A*-C including English & Maths 27 Proportion - % 28 Crude rate per 1,000 households 29 Crude rate per 1,000 population 30 Ratio of excess winter deaths to average of non-winter deaths (%) 31 Crude rate per 100,000 population aged 15 to 64 (excluding Chlamydia) 32 Crude rate per 100,000 population

€"Regional" refers to the former government regions.

If 25% or more of areas have no data then the England range is not displayed.

Please send any enquiries to healthprofiles@phe.gov.uk

Airport jobs: false hopes, cruel hoax

Brendon Sewill

Brendon Sewill has an economics degree from Cambridge. He has been an adviser in the Treasury, and to the British Bankers Association, a member of the Council of the National Trust, a member of the CPRE national executive, and a vice president of the British Trust for Conservation Volunteers. Having lived all his life near Gatwick he developed an interest in the impact of aviation on the environment, and is chairman of the Gatwick Area Conservation Campaign.

In 2003, on behalf of a number of environmental groups, he persuaded the government to rerun their computer forecasts on the assumption that by 2030 air travel would be paying the same rate of tax as car travel. The dramatic results of this exercise were set out in *The Hidden Cost of Flying* (AEF, 2003), in which he also calculated the value of the tax concessions for aviation at £9 billion a year, a figure that has gained wide acceptance.

In *Fly now, grieve later* (AEF, 2005) he summarised the concerns about the impact of air travel on climate change, and explored the political and practical problems in making airlines pay sensible rates of tax.

Colleagues from other environmental groups have encouraged him to write this booklet, and he would like to thank all those who have contributed much helpful information.

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EXECUTIVE SUMMARY

1. **With the current recession, when thousands are losing their jobs, any promise of more jobs is welcome. Airports and airlines for their own commercial reasons tend, however, to exaggerate the number of jobs that will be created by airport expansion.**

2. **Claims that airports create 'indirect', 'induced' and 'catalytic' jobs are based on dubious statistical concepts.**

3. **Between 1998 and 2004, despite a 30% rise in air passengers, the total employment attributed to airports and airlines actually went down.**

4. **Master Plans produced by each airport are inconsistent, and their employment forecasts are little better than guesses – designed to influence local councillors and planners.**

5. **The Airport Operators Association has forecast that by 2030 an increase of 104 % in the number of passengers passing through UK airports will produce a 21% increase in jobs at airports.**

6. **UK residents took 41.5 million more return flights for leisure in 2005 than foreigners came here for leisure. The aviation tourism deficit is costing the UK about 900,000 jobs as a result of people spending their money abroad instead of here.**

7. **Aviation – direct employment at airports and by airlines – provides under 200,000 jobs in the UK. Thus at present air travel is costing the UK roughly a net 700,000 jobs.**

8. **That is not a moral judgement that people ought to spend their holidays in Britain, merely a statistical fact that flying abroad creates jobs elsewhere, not in this country.**

9. **As a result of the Government's plans for the growth in aviation, the situation is due to get worse. By 2030 the UK tourism deficit in terms of return trips by air passengers is forecast to double, to 88.5 million.**

10. **The growth in air travel is likely to lead to a net loss of a further 860,000 UK jobs by 2030. This loss of jobs will affect every part of the UK.**

INTRODUCTION

Like 'sex', the word 'jobs' makes an excellent tabloid headline: short, sharp and emotive. It stirs deep folk memories of the poor law and the workhouse, and of the mass unemployment of the 1920's and 1930's. Being without a job, with a prospect of hardship, anxiety and loss of self-respect, is still the dread of almost every family of working age. With the current recession, when thousands are losing their jobs, and millions fear that they may do so, any promise of more jobs is welcome.

Thus the suggestion that a new or expanded airport will create more jobs is a sure way to attract support from the public and a fair wind from the planners. Naturally airport companies and airlines make the most of this. Yet because they have a commercial interest in magnifying the number of new jobs, their figures need careful examination. False hopes can prove a cruel hoax.

TOTAL EMPLOYMENT IN AVIATION

There are no official statistics showing the number of people employed in the aviation industry. Undeterred by the lack of hard facts, the Air Transport White Paper (2003) supported the Government's plans for airport expansion with the claim: "The aviation industry itself makes an important contribution to our economy. It directly supports around 200,000 jobs, and indirectly up to three times as many." These figures were based on a report commissioned and paid for by the aviation industry from a consultancy firm, Oxford Economic Forecasting (OEF).[1]

The definition of aviation used by OEF included airline and airport operations, passengers and freight services, aircraft maintenance, air traffic control, and on-site retail and catering, but excluded aircraft manufacture. Since there are no official statistics, OEF stated that they 'put together these statistics from a number of sources.' Their conclusion was that in 1998 the aviation industry in the UK generated around 180,000 jobs (full-time equivalents).

The Department for Transport (DfT) produced a Progress Report in December 2006, and made a similar claim. 'The aviation industry makes a significant contribution to employment and investment in the UK economy. It is itself a substantial employer, providing around 200,000 jobs directly and [somewhat more cautiously] many more indirectly.'

This statement was based on a further report by OEF produced in October 2006.[2] Using figures supplied by the Airport Operators Association, OEF found that the aviation industry directly employed 186,000 people in 2004.[3] That is the latest figure which is available.

EMPLOYMENT CATEGORIES

Discussion about employment in aviation is usually carried out in terms of different categories. The exact definitions vary from one study to another but are broadly as follows:

Direct on-airport: All jobs within the airport boundary, including hotels, catering and retail.

Direct off-airport: Employees outside the airport working directly for airport and airline companies; for example, airline offices where these are located outside the airport.

Indirect: Jobs in firms which supply goods and services to the aviation industry. OEF quote jobs in the energy sector generated because of airline purchases of aircraft fuel; in the aerospace industry because of airline purchases of aircraft equipment; construction workers at airports; and

the workers required to manufacture the goods sold in airport retail outlets.[4]

Induced: Jobs created when aviation employees (direct and indirect) spend their income. For example, when an airline pilot buys a loaf of bread he is helping to create employment for bakers.

Travel agents: OEF (but not other studies) also added employment in travel agents on the grounds that travel agents mainly sell holidays by air.

Catalytic: Jobs in firms attracted to the area as a result of the transport links created by the airport. Since these firms will normally be relocating from other parts of the UK, there is little effect on total national employment.

The two OEF studies gave the figures for each category (excluding catalytic) in 1998 and 2004 as follows:

	1998	**2004**
Direct airport jobs	180,000	186,000
Indirect jobs	200,000	167,000
Induced jobs	94,000	88,000
Travel agents	75,000	82,000
Total	549,000	523,000

The significant thing about this table is that it shows that in six years when the number of passengers passing through UK airports rose by 30%, the number of direct jobs at airports only went up 3%. Moreover during these years, **the total level of employment attributed to aviation actually went down.**

In every document produced by the aviation industry, or by the Department for Transport on their behalf, these categories of employment are trotted out as if they are indisputable truths. They are used to back up claims that airport expansion creates many jobs 'in the wider area.' Yet each of the concepts is distinctly dubious.

Mini-hoax?

The figures for 1998 above appeared to be the basis for the White Paper statement "The aviation industry ... directly supports around 200,000 jobs, and indirectly up to three times as many". At first sight that sentence seems to suggest that the number employed indirectly is *three* times the number employed directly. But the table above shows that the number employed indirectly, including induced and travel agents, is actually *twice* the number employed directly.

The phrase would be true if it is construed as meaning that the total number employed, directly *and* indirectly, is three times the number employed directly. Let us hope that the civil servants who drafted the White Paper were deficient in their grammar, not in their mathematical honesty.

Direct employment includes a substantial number of jobs in airport shops. Airport shops do not provide much extra employment; they mainly take business away from the High Street. Indeed buying goods at an airport is basically illogical: it is cumbersome to carry shopping on and off an aircraft. The only reason why most people shop is that, due to possible delays in reaching the airport, and long check-in times, many people arrive several hours before their flight and are corralled with little else to do; and because of the lure of duty and tax free goods - an unjustified

subsidy for aviation. It could be argued that jobs in airport shops should be included in the statistics of retail employment, not under aviation.

Indirect employment has a certain validity as a statistical concept but has the fatal flaw that it means double-counting people employed in other industries. For example, it is stated that it includes jobs in producing aircraft fuel: thus it may include some workers on the North Sea oil rigs. Since these people are also included in the statistics of workers in the oil industry, there is obvious double-counting.

The inclusion of construction workers is incorrect: Government guidance says that they should be classified under 'construction', and not be included in the industry for which they may be undertaking a project.[5]

If every other industry used the same technique the number of people employed in British industry would far exceed the total population.

The definition of indirect employment also leads to some rather far-fetched results. It is said to include the workers who produce the goods sold in airport shops: thus it includes, for example, the Scottish distillery workers who produce the whisky sold in airport duty-free shops.

Travel agents do depend largely on selling holidays by air. But with the increasing trend to buy flights and book hotels on the internet, travel agent employment is likely to decline. Again there is double counting: travel agents are also included in the statistics of employment in the tourist industry.

Induced employment could be a valid concept if applied to public works designed to relieve serious unemployment. John Maynard Keynes in 1936 used the concept of the multiplier to explain how providing extra employment could trickle down through the economy. Yet as he acknowledged, this theory was mainly applicable to a situation of mass unemployment. "It is obvious that the employment of a given number of men on public works will ... have a much larger effect on aggregate employment at a time when there is severe unemployment, than it will have later on when full employment is approached."[6]

Moreover, many of the induced jobs are not created in the local area: the baker who bakes the pilot's loaf may be local but the man on the oil rig certainly is not. To the extent that a sizeable proportion of expenditure by every family these days is on goods produced abroad, the induced jobs will not even be created in the UK.

According to OEF and other airport studies, induced employment includes jobs due to purchases by both direct and indirect airport employees, again leading to some far-fetched results. Thus it includes not only the bakers who provide the bread for the airline pilots but also the bakers who provide bread for the oil rig workers and the distillery workers. When the man on the oil rig takes a holiday in Cornwall, the hotel staff (or at least a proportion of them) are counted as part of aviation employment. When the distillery worker buys some kippers for his family supper, some of the fishermen who caught the herrings are counted as being employed in aviation!

There is no reason why the process should not go on indefinitely. Why not also take into account that when the fishermen spends some of their income on cabbages that creates jobs for farmers, and when the farmers buy newspapers that helps to create jobs for journalists, and when the journalists fly abroad that creates jobs in aviation, and so on ad infinitum.

FORECASTS OF FUTURE EMPLOYMENT

The DfT forecast that the number of passengers passing through UK airports will increase from 228 million in 2005 to 450 million in 2030.[7] There

are, however, no official forecasts of what this might mean in terms of employment.

Perhaps that is not surprising. The future of aviation is almost impossible to predict. Even the passenger figures are subject to huge uncertainties.[8] They depend on the assumptions that:

- after the current recession, growth returns to its previous trend;
- the price of oil remains below $78 per barrel in real terms until 2030;
- there is no increase in tax on air travel to raise revenue;
- any tax imposed for climate change reasons (or the cost of emissions trading permits) will be exceptionally low;
- the growth in aviation is not affected by the recent decision to aim for an 80% cut in CO2 emissions by 2050.

Taking the next step, to translate the number of passengers into the number of employees is fraught with further uncertainty.

For many years there was a rough rule of thumb that every million passengers per annum require a thousand airport and airline (direct) employees. That rule roughly held good for the level of employment at the time of the Air Transport White Paper. In 2003 there were roughly 200 million passengers and 200,000 employees.

It would be rash, however, to predict that every *extra* million passengers will require an *extra* thousand employees. In 2005 the Airport Operators Association commissioned York Aviation to study future employment trends.[9] Their conclusion was that direct airport employment would increase from 185,900 in 2004 to 225,200 in 2030 assuming full expansion of all airports as in the Air Transport White Paper. A forecast increase of 237 million passengers (104 %) in the number of passengers was only expected to produce a 39,300 (21%) increase in jobs. The ratio of extra jobs to extra passengers is only 166, far below 1,000.

Even that may be over optimistic. It has not happened in the past. As previously noted, a 30% rise in UK passenger numbers only produced a 3% rise in employment. The same is true abroad. At Frankfurt airport, flight movements increased 78% between 1978 and 1996, yet employment only rose by 0.6% over the same period.[10]

Promises by airports and airlines that expansion will mean more jobs may not be borne out in the real world. There are a number of changes which will tend to reduce the number of people employed at airports. The low cost airlines have shown how it is possible to make drastic cuts in

Treasury hoaxed

Explaining why he had dropped his proposal to replace air passenger duty by a tax per plane, the Chancellor in his Pre-Budget Report in November 2008 stated that: '*The Government recognises the contribution that the aviation industry makes to the UK economy: providing around 200,000 jobs directly in the industry, employing up to 500,000 people in the supply chain, …'* A footnote explained that this statement was based on the 2006 OEF report.

When it was pointed out to the Treasury that the OEF report showed that the number of jobs 'in the supply train' (i.e. indirect jobs) was 167,000 not 'up to 500,000', their only reply was to put the blame onto the Department for Transport for supplying the information.

staff, with fewer staff at the airport, fewer staff on board and a higher proportion of aircraft seats filled. Although the figures may not be exactly comparable, Ryanair handles over 10,000 passengers for each member of staff whereas British Airways handle under 800.[11] If competition forces the traditional airlines to adopt the low cost model there will be a fall in airport employment.

What is not so generally realised is that there is a parallel move to 'low cost airports' with tickets bought on the internet; check-in done electronically, and baggage handling increasingly automated, so that the same number of airport staff can handle far more passengers. Heathrow Terminal 5 was designed as a self-service terminal - with as many as nine out of ten passengers having no need to contact members of staff until they reach boarding gates.

NEW RUNWAYS 'VITAL FOR JOBS'

by Vincent Moss, Political Editor

Sunday Mirror, 11 January 2009

Airline bosses have warned that 500,000 new jobs would be lost unless the Government backs a major expansion of Britain's airports...

The future may see a move to an even more simplified type of airport. Baggage will be checked-in at the car park, passengers will go straight to the gate room with the security checks carried out just before boarding. That is the Ryanair model, and it is the reason why they complain that at Stansted BAA are planning to build a 'Taj Mahal' terminal.

ARE MORE JOBS A GOOD THING?

Since 'jobs' is such an emotive headline, it seems almost like sacrilege to ask if more jobs in aviation actually benefit the nation. In a recession, more jobs in almost any industry, even jobs digging useless holes in the ground, are welcome.

In more normal times, however, when there is reasonably full employment, if the public have a fixed amount of money to spend, then more jobs in aviation will mean fewer jobs in other industries. This was the point made in a study by Berkeley Hanover Consulting.[12] It has also been acknowledged (sotto voce) by OEF.[13] So more pilots and more air hostesses, more baggage handlers and more air traffic controllers would mean fewer doctors, fewer nurses, fewer teachers, fewer waste collectors, fewer shop assistants, fewer people behind the bar in the pub. That is fine, and good economics, if it reflects real consumer preferences about how they wish to spend their money. And if the prices of the various services reflect their true cost, without any subsidy.

Economic growth, or real wealth per head, is created by increasing efficiency. This means reducing the number of jobs for a given output, not increasing them. More jobs in aviation will only add to economic growth if they replace less productive jobs elsewhere. But many jobs in aviation, such as baggage handling or aircraft cleaning, are relatively unskilled. And they are all subsidised.

Aviation pays no fuel tax and no VAT. It benefits from duty-free sales at airports and from artificially low landing fees. Although it pays air passenger duty this is comparatively low compared to the fuel tax and VAT reliefs. The net tax subsidy received by air travel as compared to car travel is around £9 billion a year.[14]

This means that, on average, the tax subsidy per (direct) job in the aviation industry is £50,000 a year; or £1,000 a week; or £25 an hour.

Any industry could promise to provide more jobs if it received that level of subsidy.

Once upon a time jobs in aviation seemed romantic: brave pilots; seductive air hostesses; far-flung destinations; all the buzz of being at the forefront of technological innovation. Now we have learned how polluting the industry is, however, employment in aviation seems less glamorous. In 2005 UK aviation produced 37.9 million tons of CO2, forecast to rise to 59.9 million tons in 2030 even after taking into account more efficient aircraft.[15] On average at present each aviation worker is responsible for over 200 tons of CO2 per year, or the equivalent of around 400 tons if radiative forcing is taken into account.

Each job in aviation is thus about twenty times more damaging to the climate than the average job in the rest of industry (energy supply, business and transport).[16]

MORE LOCAL JOBS?

It is now time to switch from the national to the local picture. Again there are no official statistics for the number of people employed at each airport. The Airport Operators Association and OEF have produced the following table, albeit by now somewhat out-of -date.[17]

Employment in the Aviation Industry, 2004

Airport	Passengers (Million)	Direct employment
Aberdeen	2.64	2,716
Belfast City	2.13	807
Birmingham	8.86	9,071
Bristol	4.65	4,747
Cardiff	1.89	1,932
East Midlands	4.38	4,512
Edinburgh	8.02	2,300
Gatwick	31.47	23,761
Glasgow	8.58	5,442
Heathrow	67.34	68,427
Luton	7.54	7,756
Manchester	21.25	18,000
Newcastle	4.72	4,855
Stansted	20.91	10,592
Other Airports	20.63	21,116
Total	**214.98**	**185,900**

Funny thing is that some of the figures in this table appear to be too high. One might think that the Airport Operators Association would know how many people are employed at each airport, but not so. The Bristol Airport Master Plan compiled by Bristol Airport shows that the number directly employed in 2005 as 2,284, not 4,747. The Birmingham Master Plan shows the total, including some indirect employment, as 7,500 in 2006, not 9,071.

On other occasions airports exaggerate the number of jobs they provide. For example, the East Midlands Airport employee survey claimed 7,089 employees in 2004, compared to the figure of 4,512 shown in the above table. The explanation is thought to lie in the inclusion of non-airport companies located in the airport business park.

Whenever a new airport is proposed, or when plans are announced for the expansion of an existing airport, the airport company invariably claims that it will create more jobs for the local area. These forecasts tend to be optimistic and should be treated with caution.

When Manchester Airport announced in 1991 that it wanted to build a second runway, the Chairman of the Airport company claimed that this would create 50,000 new jobs.[18] A subsequent report, presented by the Airport to the public inquiry, revised the figure to 18,000 new jobs. This figure included indirect and induced employment, and employment in firms which would be attracted to the Manchester area. It also included jobs created by inward tourism - without taking account of outward tourism. The media continued to use the 50,000 figure, and indeed it was repeated by the airport chief executive in 1997 after planning permission was granted.[19]

In the real world, the runway was built, and opened in 2001. The total number of jobs at the airport in 2006 was 4,000 more than ten years previously. Even adding indirect and induced employment at the usually quoted ratios, the increase would be around 6,400. It is obvious that the figure of 50,000 extra jobs was a flight of fancy.

The Air Transport White Paper encouraged the growth of most airports in the UK. It also indicated that each airport should produce a master plan. The Department for Transport has, however, now admitted that Master Plans tend to be over optimistic about future passenger numbers. They explain that their forecasts for total UK passenger numbers are lower than the sum total of all the master plans because each airport tends to be over optimistic.[20]

Master Plans do not last forever. Luton Airport published their draft master plan in October 2005, and withdrew it in July 2007, cancelling the previously planned new runway.

Master Plan psychology

Master plans are produced by the airport owners, and are an expression of their hopes for the future. If they were called 'What We Would Like To Happen In Order To Maximise Our Profits' they would be treated with appropriate scepticism. In normal parlance they would be called 'airport plans'. But the addition of the word 'master' implies that all else must be subservient to them. And the fact that they are usually written in capital letters, like God, subtly implies that they are omnipotent and omniscient. Local planning authorities bow. When the Master Plans also contain forecasts of more jobs, the planners genuflect.

Indeed the Government has made master plan genuflection compulsory by amending the planning system so that regional plans and local plans have to take 'Master Plans' into account.

Forecasting the future number of passengers, and the future number of jobs, at each airport is largely guesswork. Individual circumstances, the balance of scheduled versus charter flights, the importance of low cost airlines and the scope for creating jobs well away from the region (e.g. British Airways engine maintenance in Cardiff and software support in Bangalore, India) all make these numbers unreliable.

The ratio of 1,000 extra jobs per 1 million extra passengers is sometimes too low, sometimes much too high At Exeter in 2005 there were 1,359 jobs per million passengers, predicted to fall to 1,029 in 2030. At Bristol the ratio was 439 jobs per million passengers, predicted to rise (yes, rise) to 454 by 2030; at Edinburgh the ratio is forecast to rise from 376 at present to 391 in 2030. All three airports look to be in the running for awards for inefficiency!

At Luton some councillors were quoting the 1,000 jobs per million passengers until it was pointed out to them that the growth in jobs at the airport in the ten years to 2006, based on the local council's annual employment survey, had been around 100 jobs per million passengers.

> Announcing the go-ahead for the third runway at Heathrow, Transport Secretary Geoffrey Hoon said**:** *"Heathrow airport supports over 100,000 British jobs. A third runway is forecast to create up to 8,000 new on-site jobs by 2030 and will provide further employment benefits to the surrounding area."* (January 2009)

The explanation for variations in employment forecasts may be that the forecasts are tailored to what will best impress the public and the planners. For example, the Heathrow 2005 Interim Master Plan[21] recorded 68,400 direct on-airport jobs, a ratio of 1,021 jobs per million passengers. However, the Terminal 5 Inspector had concluded that the maximum the area could support was 61,500 jobs. So the Master Plan predicted that, even if by 2015 passenger numbers grew by 40%, the number of jobs would fall by 10%. Very convenient!

The fear that increasing efficiency will lead to a loss of jobs is a potent weapon in the hands of airport proponents. When existing jobs are at risk, all the airport workers must inevitably vote for expansion. The Government consultation document *Adding Capacity at Heathrow Airport* suggested that by 2030, with the airport operating as at present the number employed at the airport would have fallen to 52,400 but that - if a new runway and new terminal were to be built - the number would be 60,400.

Fear of a loss of jobs through new technology is not a good reason to promote otherwise unjustified expansion. If it were, we would now have a large number of people employed as charcoal-burners, fletchers, wheelwrights, ostlers and postillions.

There appears to be a tendency for airport owners to pitch their guesses high in areas where they reckon that extra jobs would be welcome to the local population and to the local councils; and to pitch their guesses low where extra jobs would be less popular. At Gatwick, which has for fifty years had a high level of employment, extra jobs are seen as causing problems for local firms. There is strong opposition to the in-migration of labour which creates a demand for additional housing in an area where the protection of the countryside has a high priority. Surprise, surprise, the Gatwick Interim Master Plan (October 2006) showed no extra jobs being created between 1997 and 2015 despite a forecast increase in passengers from 25 to 40 million. [22]

The Gatwick Master Plan contains details of a possible additional runway designed to double the size of the airport, making it larger than

Heathrow today. Yet it contains none of the usual hyperbole about the extra employment that would be created. BAA know only too well that local councillors would be appalled at the prospect of building still more houses, more offices and more factories in the Surrey and Sussex countryside.

Every Master Plan, except Gatwick's, contains high flown rhetoric about the number of jobs created in the wider community, by indirect, induced or catalytic employment. The Aberdeen Master Plan claims that 2,800 jobs at the airport support 9,000 other jobs across Scotland. Birmingham claims that 'Taking account of additional indirect and induced impacts, in 2006, it is estimated that the Airport supported around 10,490 full time equivalent jobs in the West Midlands Region.' Heathrow, with 70,000 employees, 'supports over 100,000 further jobs right across the UK.'

As we have seen, the concepts of indirect and induced employment are distinctly dubious at national level; they become even more dubious at a local level.

Local indirect employment

To recap, indirect employment is defined as jobs in firms which supply services to the airport. Clearly there will be some local firms connected to the airport, for example local hotels or off-airport car parking. Airport construction workers may be local but temporary. Many indirect jobs will, however, be in other parts of the UK, or abroad, although in respectable job statistics these are not included. Aircraft fuel will provide jobs in the North Sea or in Saudi Arabia; and purchases of aircraft equipment may come from Airbus in Toulouse or from Boeing in Seattle. Airport shops are not noted for selling local produce.

In the SERAS studies conducted for the Department for Transport in the run-up to the 2003 White Paper, consultants Halcrow listed various previous studies which had worked out indirect employment ratios, that is the number of local indirect jobs for each direct airport job. The figures varied between 0.2 for Newcastle and 0.45 for Stansted. The average was 0.3.[23] But all these studies had been commissioned by aviation lobbying organisations.

> *It is true that investment creates employment. But jobs are used to justify anything and everything. If recession strikes, the political value of any scheme which boosts them will rise. Projects which in more prosperous times might have been rejected by planners or ministers will suddenly find favour. Anyone who stands in their way - however daft the schemes may be - will be walloped as an antisocial Luddite.*
>
> *But the big question is asked very rarely in the press: how reliable are these promises? Whenever a new defence contract or superstore or road or airport is announced, newspapers and broadcasters repeat the employment figures without questioning them. They rarely return to the story to discover whether the claims were true.*
>
> George Monbiot, *The Guardian*, 1 April 2008

Local induced employment

We have seen already that induced employment is a concept which leads to some far-fetched results. That is even more so on a local level. When the airline pilot buys his bread there is a fair chance that the baker to whom he gives employment will be situated in the local area. But practically everything else he buys in the

supermarket will have come from all over the UK, indeed all over the world. When he buys a banana he will be providing induced aviation employment in the West Indies.

In 1995 the Treasury suggested a figure of 0.2 for the regional induced employment ratio.[24] The Halcrow study for SERAS found a range of values, varying from 0.2 at Birmingham Airport to 0.5 at Stansted, the variation being due to the use of different definitions. The average was 0.3 although this calculation was not included in the final version of the SERAS consultation paper as even the DfT admitted that the number was difficult to calculate accurately.

DO AIRPORTS ATTRACT FIRMS TO THE AREA?

Airport companies love to talk about catalytic employment. It is a long, arcane and erudite word - and therefore must be true. It means that airports act as a catalyst (as in a chemical reaction) and attract firms to the vicinity. Catalytic employment is a beggar-my-neighbour concept. Any firms attracted to the area will have come from some other area, which will thus lose jobs. It is also somewhat old-fashioned: electronic communications and teleconferencing mean that air travel is less vital for business operations.

A key academic study of this subject, although applying mainly to road transport, was carried out for the Department for Transport by Professor Ronald W. McQuaid and colleagues at the Transport Research Institute at Napier University, Edinburgh.[25] They found that:

"There is a wide body of knowledge stretching back to the 19th Century outlining the theoretical transport-related drivers of business location, …. This initial review indicates that transport is a factor in business location decisions but is neither the only, nor the most important factor. There are cases where the linkages between transport investment in isolation and industrial location appear to be weak, or indirect. …."

"The evidence suggests that transport is a necessary, but not sufficient condition in determining business location. Other factors such as a skilled and/or cost of workforce, the quality of the local environment and cost of premises have been shown to be equally, if not more important when considered in isolation. Research has also shown that climate, business environment and government assistance may be magnets for business location…. transportation costs are typically found to be only a very small proportion of firms' total costs - usually less than 5%. As such, any improvements to the transport infrastructure is likely to yield small cost savings and gains to firms."

The South West Regional Development Agency commissioned the consultants EKOS to undertake an economic assessment of South West Regional Airports. Their report, published in December 2007, found that "The relationship between high growth sectors in the region and air travel appears to be weak. Air travel may not necessarily be a prerequisite for economic growth"

A 1998 survey of Economic Development Officers in local authorities concluded that the availability of workforce skills and suitable development sites were of equal or greater importance than transport in terms of attracting inward investment. [26]

Aviation proponents quote a number of business surveys which put good communications, or proximity to an airport, as an important reason for their choice of location. One of the most often quoted is the 'European Cities Monitor' conducted annually by the commercial real estate agents Cushman & Wakefield.[27] For example, the DfT in their consultation on the expansion of Heathrow stated: *A survey of 500 of*

Nearly ten times as many UK businesses support the idea of a fast rail link from London to the North than support expanding Heathrow.

Only 4% of British businesses polled believe they will benefit from expanding Heathrow. 95% said it would make little or no difference. In contrast, 23% of businesses believe they will be helped by a new high-speed rail line to the North, as proposed by David Cameron.

Woodnewton Associates. 5 December 2008.
www.woodnewtonassociates.co.uk

Europe's top companies found that 52% of companies considered transport links a vital factor in deciding where to locate their business; and 58% identified good access to markets, customer or clients as essential. A footnote shows this to be a quote from a BAA document: 'The Economic Benefit of Heathrow' which in turn quoted the European Cities Monitor.

This was based on a survey of 500 senior executives across Europe. 53 % (52 % in 2007) did indeed include 'transport links with other cities and internationally among the factors they considered essential in choosing a location. But it was only fourth in the list of important factors, and closer examination shows that 'links with other cities' included trains and motorways!

Looking at UK companies only, a Cushman and Wakefield survey of 200 executives (presumably part of the same survey) asked what factors were most important in deciding their choice of location. 'Transport links internationally' was only mentioned by 30 % (22% in 2007).[28] Seven other factors were considered more important. This survey is not quoted by the aviation proponents.

OMIS is a leading independent consultancy specialising in business location and corporate relocation, which has for over a decade conducted surveys of CEOs and senior executives of major companies located in the biggest cities across the country. The latest survey of over 5,000 business leaders was carried out between August and November 2005 and the results released in March 2006. It showed little correlation between major cities' air services and their attractiveness to business. Manchester, Glasgow and Leeds were all put higher than London. The previous survey, in 2003, put Leeds (with only a small airport) as the most attractive location for business.[29]

The major Japanese investments in the UK, in car assembly plants at Sunderland, Swindon and Derby, and in electronic and electrical consumer goods in South Wales, prove that the quality of airport facilities/air links are not the most important consideration in relation to inward investment decisions. None of these locations (with the possible exception of Swindon) is anywhere near an airport which offers services to Japan.

The aviation industry, and indeed the Air Transport White Paper, make a great play with the importance of inward investment. The point has been answered by Professor John Whitelegg:

Data for the UK as a whole show that the amounts of money invested by UK companies abroad is higher than that invested by overseas businesses in the UK. If there is a link between the enhanced accessibility provided by international air services (as the aviation industry claim) then it works to the disadvantage of the UK and supports a net outflow of resources. Put very simply potential jobs in the UK are sacrificed for the benefits of investing abroad. Whilst we would not wish to claim that this job loss and net outflow of funds should be "laid at the door" of aviation we also wish to question the logic of the opposite assertion from the industry itself. Inward

investment cannot be claimed as a benefit of airports or aviation. If it is claimed then equal weight has to be given to the debit side of the balance sheet.

The balance sheet shows a substantial net deficit ... approximately £38 billion each year.[30]

This net deficit has a direct equivalence in job losses. If we accept that the cost of creating a job in the UK is approximately £23,000 (National Audit Office, 1999) then this outflow represents a job loss of 1.65 million each year for 5 years.... This job loss is facilitated by the development of air services and the aviation industry.[31]

BOGUS SURVEYS

The Department for Transport, in their 2006 Progress Report on the Air Transport White Paper, stated that: 'According to the latest research by Oxford Economic Forecasting, access to air services is an important factor for 25 per cent of companies across the whole economy in influencing where they locate their operations within the UK. Access to these services also affects the decisions by 10 per cent of companies as to whether to invest in the UK at all.'

According to the OEF report, "Questionnaires were sent out by OEF to around 6,000 companies and 165 replies were received."[32] Any respectable polling organisation would regard this 2.75% rate of response as exceptionally low and wide open to bias. The poor response means that where OEF and DfT refer to 10% of companies, they are relying on the forms returned - a mere 10% of 165. 16 companies out of 6,000.

The letter sent out to the 6,000 firms explained that: "Oxford Economic Forecasting is conducting this survey on behalf of the CBI, the Department for Transport, a consortium of airlines and airports, and VisitBritain in order to assess the contribution of air services to the UK economy and the competitiveness of UK business. The results of the survey will be presented to the Government to inform the 2006 Progress Report on its White Paper on airports policy." With that powerful introduction it is extremely significant that 5,835 companies did not bother to reply. The conclusion could well be the opposite to that drawn by OEF and the DfT – that over 97% of companies do not consider that air services are sufficiently important to spend ten minutes filling in a questionnaire.

Another bogus survey was contained in a report by York Aviation commissioned by the City of London Corporation in 2008. Based on a survey of London businesses the report argued that air travel is important to the City. But in fact only 44 firms responded, accounting for 38,000 business journeys a year. That is, about 0.1 per cent of Heathrow business journeys.

At Prestwick, SQW Consulting recently produced a study[33] for the South Ayrshire Council and Scottish Enterprise that claimed that 66% of companies used the airport for business trips. Over 1,000 questionnaires had been posted and the survey was sent by email to all members of the Chamber of Commerce. Only 174 replies were received. But, of course, they were the ones most likely to return the questionnaire. If it were to be assumed that all the firms who did not bother to respond were not interested in the airport, then the proportion of firms who used the airport was well under 10%.

THE TWO WAY ROAD

In 1999 the Government Special Advisory Committee on Trunk Road Assessment (SACTRA) reported that: "There is no guarantee that transport improvements will benefit the local or regional economy at only one end of the route - roads operate in two directions, and in some circumstances the benefits will accrue to other, competing, regions."[34]

Sally Cairns of the University of Oxford Environmental Change Institute has commented: "It seems plausible that the two-way road argument could also prove to be relevant for an expansion of UK air capacity."[35] Thus a local firm may be happily supplying goods to a local area but when a local airport is developed it may become possible to supply the area more cheaply by air from somewhere where they can be mass produced.

The argument for airport expansion is, however, usually made in terms of improving communications for businessmen. But that is also a two-way road. The expansion of UK airports with an increased range of destinations is likely to facilitate UK businessmen travelling abroad to set up factories or call centres in countries such as China and India, thus leading to a loss of UK jobs.

It is easy for the managers of, let us say, a biscuit-making business in Furthershire, to believe that the opening of a new airport or the expansion of an existing airport will enable them more easily to travel the world extolling the virtues of Furthershire Biscuits. And make it easier for buyers from abroad to travel to Furthershire, sample the delights of its climate and cuisine, and place large orders for Furthershire Biscuits. The local councillors who all their lives have eaten little but Furthershire Biscuits are, of course, delighted to grant any necessary planning permissions.

What is less easy to envisage, but in the real world just as likely, is that the airport will enable marketing executives from biscuit making companies in France, Germany, Italy or wherever, to fly in, size up the market, and run the old established Furthershire Biscuits Ltd out of business. Like roads, flights go in both directions.

Where an airport only serves a small town it is unlikely to be able to support a wide range of routes. Doncaster Council thought that the creation of the new Robin Hood Airport would bring prosperity and jobs to Doncaster. But in fact it offers scheduled services to 16 destinations, only two of which are daily (to Belfast and Dublin). Eight are to obvious tourist resorts (such as Tenerife) which are unlikely to be used for business purposes. Four of the routes are to Poland, and it is not difficult to guess that these are mainly catering for migrant workers, the exact opposite of the intention of creating jobs for local residents.

Thus it is possible to have a long runway, and to give the local airport a grand name, but still have few flights which are any use to business people. Another example is Manston aerodrome, now re-named Kent International Airport, which apart from charter flights only has a service to Majorca which departs every Friday during the summer, a service to Jersey every Saturday in the summer, and a service to Gran Canaria which departs every Tuesday but only in August. But hope springs eternal. The Manston Master Plan, published in October 2008 predicts a throughput of 6 million passengers a year by 2033 (sic) with employment rising to 7,500.

THE TOURISM EMPLOYMENT DEFICIT

The fact that so many more Brits fly abroad for their holidays than foreigners come here, means a huge loss of jobs in this country. Every part of the country is adversely affected. The UK currently runs a tourism deficit of £19 billion a year.[36] That includes tourists arriving or departing by train or ferry: the tourism deficit due to aviation is around £17 billion a year.

The average pay of people employed in the UK tourist industry is £19,000 a year.[37] It can thus be deduced that the **aviation tourism deficit is equivalent to a loss of roughly 900,000 jobs in the UK.**

A practical businessman might argue that creating a new job involves not only paying the worker concerned but also a roughly similar sum in overheads, such as premises and equipment. Yet providing the premises and the equipment can also be translated into extra jobs, so we come back to the loss of approximately 900,000 jobs. That is on the assumption – a statistical concept, not a likely situation – that if people did not fly abroad, they would spend the same amount taking holidays in the UK.

To repeat, this is a statistical exercise, not a moral judgement. It is not necessary to say that people 'ought' to take holidays in this country. Nor would it be correct to say that environmentalists are kill-joys who want no-one to have a holiday in the sun. But if the jobs created by aviation are to be counted, then the jobs lost by aviation must also be included.

If, to use a different example, people want to eat more bananas and fewer English apples, there is nothing wrong in that. It merely means a slight change in the exchange rate so the UK has to sell more widgets or financial derivatives in order to pay for the extra bananas. In terms of jobs it is merely a statistical issue of how many jobs are lost in the apple orchards here and how many are created in the banana plantations abroad. The banana merchants, unlike the aviation lobbyists, do not try to argue that buying more bananas creates more jobs in the UK.

Two 'moral' issues do arise. One is in relation to the impact of the ever increasing number of tourist flights on climate change. The other is that the number of Brits going abroad, and the trend towards short breaks abroad, is largely caused by the large fiscal subsidy given to aviation by the exemption from fuel duty and VAT (only partially balanced by the air passenger duty). But these issues are not relevant to a discussion of jobs.

The official forecast of the number of tourists coming in and going out, now and in future years, is given in the official air passenger forecasts published in January 2009.[38] Data from the key table is reproduced on the following page. It is assumed that new runways will be built at Heathrow and at Stansted, but 'constrained' means that airport growth is limited to the proposals in the Air Transport White Paper. These figures show the number of passengers passing through airports, so it is necessary to divide by two to get the number of return trips.

A number of points emerge from this table:

- The right hand column shows that in 2005 there were 83 million more UK leisure flights than foreign leisure flights. Thus Brits had 41.5 million more holidays abroad than foreigners came here for pleasure.
- As a result of the Government's plans for the growth in aviation, the situation is due to get worse. In 2015 the UK tourism deficit in terms of numbers of return air passengers is forecast to be 60 million, and by 2030 it will have grown to 88.5 million. (These figures are significantly worse than forecast in November 2007).
- At Heathrow, leisure passengers at present outnumber business passengers by 30 million to 19 million. By 2030, with another runway, the number of business passengers is forecast to rise to 40 million but the number of leisure passengers is forecast to rise to 59 million, with outward bound British tourists outnumbering incoming tourists almost three to one.
- Gatwick maintains its reputation as a bucket-and-spade airport, with six times as many leisure passengers as business passengers. Brits going abroad outnumber foreign tourists coming in by four to one.
- Stansted is also mainly leisure, not business. At present the Stansted tourism deficit in terms of the number of return air passengers is 3 million. Building a second runway would increase the forecast deficit to 8.5 million return passengers. Stansted expansion would, on the same basis of calculation as above, cause the loss of 120,000 UK jobs as a result of people spending their money abroad instead of in the UK[39]: far, far more than any growth in aviation jobs at an enlarged airport.

CONSTRAINED TERMINAL PASSENGERS BY JOURNEY PURPOSE AND YEAR								
2005	**Heathrow**		**Gatwick**		**Stansted**		**National**	
UK Business	12	24%	3	11%	3	14%	40	20%
UK Leisure	19	40%	20	68%	11	55%	116	57%
Foreign Business	7	15%	1	4%	1	7%	15	7%
Foreign Leisure	11	22%	5	17%	5	25%	33	16%
International-International Transfer	18		3		1		22	
Total	66		33		10		225	
2015	**Heathrow**		**Gatwick**		**Stansted**		**National**	
UK Business	15	26%	4	11%	5	14%	57	20%
UK Leisure	24	43%	22	66%	19	55%	162	58%
Foreign Business	8	14%	2	5%	2	7%	20	7%
Foreign Leisure	10	17%	6	18%	8	25%	42	15%
International-International Transfer	21		3		2		26	
Total	78		37		36		308	
2030	**Heathrow**		**Gatwick**		**Stansted**		**National**	
UK Business	26	26%	4	11%	7	13%	91	22%
UK Leisure	44	44%	26	68%	30	56%	234	56%
Foreign Business	14	15%	2	4%	3	6%	32	8%
Foreign Leisure	15	15%	7	17%	13	25%	57	14%
International-International Transfer	34		2		3		39	
Total	133		40		56		452	

DOUBLING THE EMPLOYMENT DEFICIT

The Government's policy of encouraging the doubling of air travel by 2030, will double the aviation tourism deficit, and could mean the loss of a further 900,000 UK jobs in leisure and recreation.

Against this would need to be set any increase in aviation employment. As mentioned earlier, the Airport Operators Association commissioned a study by York Aviation which found that doubling the number of passengers by 2030 could be achieved with a 39,000 increase in direct airport employment.

Thus the Government policy is likely to lead to a net loss of a further 860,000 UK jobs by 2030, as a result of people spending their money abroad rather than in this country. That is an average loss of 3,500 jobs per month - every month - year in and year out.

Air travel may be a great benefit to the UK in that it enables the British public to travel the world, and to enjoy the sun. Or it may be a great disaster in that it is causing ever increasing climate change damage. But what it does not do is to provide more jobs in this country.

More jobs in Alicante, Antigua and Athens; more jobs in Bangkok, Cancun and Corfu; more jobs in Faro, Ibiza, Larnaca and Orlando; more jobs in Palma, Phuket, and Prague. But fewer jobs in Britain.

HOAX BY THE AVIATION LOBBY

The aviation lobby group Flying Matters put out a press release on 3 December 2008, clearly designed to influence the decision on Heathrow expansion.

It was headed: "***Stopping new runways would cost half a million new jobs".*** The text stated that: "*International visitors to the UK from around the world are set to more than double from 32 million last year to 82 million by 2030... The forecast growth in international visitors ... is expected to generate an additional half a million jobs by 2030."*

These figures appear exaggerated, partly because they include visits by train and ferry. The Department for Transport official forecast (as shown in the table on page 19) is that international business and leisure visits by air will increase from 24 million in 2005 to 44.5 million in 2030.

More important, to count incoming tourists without counting outgoing tourists must be statistical rubbish. The correct procedure should be to look at the net tourist deficit.

By admitting the connection between air travel, tourism and jobs the aviation industry has vindicated the approach taken in this study.

ANNEX: THE REGIONAL IMPACT

The seminal work on the cost of regional tourism deficits was done by Friends of the Earth, and published in August 2005.[40] Their conclusions are shown in column A of the table below.

NET LOSS OF JOBS DUE TO TOURISM DEFICIT

Region	Tourism deficit 2005 (£ million)	Tourism jobs lost 2005	Jobs at airports 2004	Net loss of jobs, rounded
	A	B	C	D
North East	- 761	40,000	4,100	36,000
North West	- 2,212	116,000	21,800	94,000
York/ Humber	- 1,610	85,000	2,100	83,000
East Midlands	- 1,339	70,000	6,500	64,000
West Midlands	- 1,680	88,000	7,200	81,000
East of England	- 1,913	101,000	20,000	81,000
London and South East	- 2,335	124,000	96,800	27,000
South West	- 1,240	65,000	6,800	58,000
Wales	- 756	40,000	1,800	38,000
Scotland	- 1,291	68,000	12,400	56,000
N. Ireland	- 114	6,000	5,300	1,000
TOTAL	- 15,251	803,000	184,800	620,000

On the same basis that the average pay in the UK tourist industry is £19,000, column B shows the number of tourism jobs which are at present lost to each region as a result of air travel.

The column C shows the direct employment at UK airports in each region, as reported by the Airport Operators Association.[41] Indirect, induced and catalytic employment are excluded: if they were to be included for airports, they would also need to be included for the UK tourist industry (and the UK tourist industry, if it had a lobby anything like as powerful as the aviation industry, would be busy totting up the number of indirect and induced jobs it provides).

Column D (B minus C) shows the net loss of jobs which is suffered at present by each region as a result of aviation. The totals are lower than the figures given on previous pages as this table applies to earlier years.

For every region the aviation tourism deficit causes a substantial net loss of jobs. Far more jobs are created in the hotels, cafes, golf courses etc in Spain, Italy, Greece, Florida etc - and thus lost here - than are provided by UK airports and airlines.

If the Government were to succeed in its aim of more than doubling air traffic by 2030, the situation would get worse. As shown earlier, the aviation tourism deficit would double. Assuming the increase in air travel were to be spread equally over all regions, the number of jobs lost in each region would double.

Column E in the table overleaf shows the extra leisure and recreation jobs that would be lost as a result of the doubling of air travel by 2030. Since doubling means adding the same again, column E is the same as column B above.

It is then necessary to estimate the extra airport jobs that would be created in each region by a doubling of air traffic. If it is assumed that the 21% increase in direct airport employment, as suggested by the Airport Operators Association, occurs proportionately in each region, it is simple

to derive column F as 21% of the figures in column C.

Thus we reach column G, a rough estimate of the net loss of jobs in each region that can be expected as a result of the policy of doubling the amount of air travel.

FUTURE NET LOSS OF JOBS DUE TO INCREASED TOURISM DEFICIT

Region	**Extra tourism jobs lost to region by 2030**	**Extra direct airport jobs created by 2030**	**Net loss of jobs by 2030, rounded**
	E	F	G
North East	40,000	860	39,000
North West	116,000	4,580	111,000
York/Humber	85,000	440	85,000
East Midlands	70,000	1,370	69,000
West Midlands	88,000	1,510	86,000
East of England	101,000	4,200	97,000
London and South East	124,000	20,330	104,000
South West	65,000	1,430	64,000
Wales	40,000	380	40,000
Scotland	68,000	2,600	65,000
N. Ireland	6,000	1,110	5,000

NOTES

[1] *The Contribution of the Aviation Industry to the UK Economy*. Oxford Economic Forecasting, November 1999. For an analysis of how far the DfT relied on this report see *Alexander's Ragtime Band.* AirportWatch, 2007

[2] *The Economic Contribution of the Aviation Industry in the UK*. Oxford Economic Forecasting, 2006 www.aoa.org.uk/publications/OEF_Report.pdf

[3] The AOA figures were based on a report by York Aviation on the Economic and Social Impact of Airports, September 2005. www.aoa.org.uk/publications/Economic_Impact_Report.doc

[4] As note 1.

[5] EGRUP guidance www.webtag.org.uk/archive/msapart1/11.htm

[6] *The General Theory of Employment, Interest and Money*. John Maynard Keynes, 1936

[7] *UK Air Passenger Demand and CO2 Forecasts.* DfT, January 2009. The figure of 450 million is after taking into account the higher rates of air passenger duty announced in November 2008. www.dft.gov.uk/pgr/aviation/atf/co2forecasts09/co2forecasts09.pdf

[8] *Fallible Forecasts.* AirportWatch, 2008

[9] *Economic and Social Impact of Airports*. September 2005. www.aoa.org.uk/publications/Economic_Impact_Report.doc

[10] Birmingham Friends of the Earth

[11] Derived from figures given in their annual reports

[12] *The Impacts of Future Aviation Growth in the UK*. Berkeley Hanover Consulting, 2000

[13] As note 1.

[14] *The Hidden Cost of Flying*. Sewill, 2003. The Treasury have accepted that the absence of fuel tax and VAT amount to £10 billion a year. Response to Emissions Cost Assessment Consultation. www.dft.gov.uk/pgr/aviation/environmentalissues/aviationemissionscostassess/costassesssresponconsul.pdf

[15] As note 7.

[16] www.defra.gov.uk/environment/statistics/globatmos/gagccukem.htm

[17] As note 2.

[18] www.gmpte.com/upload/library/met_south.pdf

[19] Press report 16 January 1997

[20] As note 7. See page 55.

[21] www.baa.com/assets//B2CPortal/Static%20Files/LHRInterimMasterPlan.pdf

[22] www.gatwickairport.com/assets/B2CPortal/Static%20Files/lgw_interim_masterplan.pdf

[23] *South East and East of England Regional Air Services Study: Stage Two Appraisals Findings Report: Airport Employment Forecasting*. DTLR, 2002

[24] *Framework for the Evaluation of Regeneration Projects and Programmes*. HM Treasury, 1995

[25] *The Importance of Transport in Business Location Decisions*. 2004 www.dft.gov.uk/pgr/scienceresearch/social/theimportanceoftransportinbu1933?page=1

[26] *Transport Links and the Economy*. Automobile Association and Confederation of British Industry, 1998

[27] *European Cities Monitor*. Cushman and Wakefield, 2008. www.cushwake.com/cwglobal/jsp/kcRegisterLogin.jsp?documentURL=/cwglobal/docviewer/2008_European_Cities_Monitor.pdf?id=c20100017p&repositoryKey=CoreRepository&itemDesc=document&cid=c17500010p&crep=Core&cdesc=binaryPubContent&Country=GLOBAL&Language=EN

[28] UK Cities Monitor 2008 (see note 27)

[29] OMIS, 2006. Britain's Best Cities 2005-2006.

[30] United Nations Conference on Trade and Development (UNCTAD), World Investment 2002, Transnational Corporations and Export Competitiveness. September 2002.

[31] *The Economics of Aviation: a North West England perspective*. John Whitelegg, April 2003

[32] As note 1.

[33] www.sqw.co.uk/file_download/129

[34] Stationery Office.

[35] Predict and Decide. 2006

[36] www.tourismalliance.com/attach.pl/204/240/TA%20Aviation%20Duty%20Submission.pdf

[37] Gross pay of employees in hotels, restaurants, recreational, cultural and sporting. ONS. 2008

[38] UK Air Passenger Demand and CO2 Forecasts. Page 134. DfT. January 2009. www.dft.gov.uk/pgr/aviation/atf/co2forecasts09/co2forecasts09.pdf

[39] 5.5 million divided by 41.5 million multiplied by 900,000.

[40] *Why airport expansion is bad for regional economies*. Friends of the Earth, 2005 www.foe.co.uk/resource/briefings/regional_tourism_deficit.pdf

[41] As note 9.

KENT
GARDEN of ENGLAND
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Press release

Wednesday 9th January

Kent's tourism economy flourishes as visitor numbers rise to 65 million

Kent's visitor economy has increased 7% and topped **£3.8 billion** for the first time ever, after welcoming a record 65 million visitors in 2017.

Independent research commissioned by Visit Kent has revealed that 64,970,000 visitors came to The Garden of England in 2017, and the county remains the third most visited destination outside of London for foreign visitors.

Overseas overnight visits to the county increased by 4% with an 8% increase in the number of nights stayed, and a 10% increase in the resulting value.

Across the county, visitor spending figures in Kent continue to rise compared to 2015, with the highest ever numbers reported for spending in the county from both day and overnight visits.

Tourism jobs have also increased by 6.8% to 76,828, and now account for 11% of total employment across the county.

Chief executive of Visit Kent, Deirdre Wells OBE said: "Tourism is the UK's fastest growing service sector and these figures demonstrate the contribution which our vital industry makes to the economy of Kent. With our stunning countryside, world-class heritage, and delicious locally sourced food and drink, it is no surprise that visitors' numbers are increasing. The collective efforts of tourism businesses across the county have paid dividends and this partnership will be critical in ensuring that this growth continues during a challenging year ahead."

Using the industry-respected Cambridge Economic Impact Model, this new research measured the volume and value of tourism in the county in 2017, and the impact of visits and visitor expenditure on the local economy.

Canterbury had the highest number of trips (7.8 million) and the highest visitor spend (£392 million) in the county. Canterbury's tourism employment now accounts for 16% of the district's total employment.

Thanet saw the highest increase in day visitor numbers in the county, rising by 9.9% to 3.7 million. Over £319 million was spent in the area as a result of tourism, an increase of 9.2% on 2015. Thanet's tourism employment now accounts for an impressive 19% of the district's total employment.

Other district highlights included a 10.1% increase in the value of day trips in Tonbridge and Malling, a 9% rise in the number of day trips to Sevenoaks, and a 4.2% rise in tourism employment in Dover meaning that tourism jobs now account for 17% of the district's overall employment.

There was a leap in the value of day trips for Ashford (5.6%), Medway (6.7%) and Maidstone (11.2%), while Folkestone & Hythe and Tunbridge Wells saw increases in the average length of stay for overnight trips (2.4% and 3.1% respectively). The total value of tourism for Swale enjoyed a 3.9% increase, rising to £237 million.

Since 2006, the value of Kent's tourism industry has risen by 33%.

Leader of Kent County Council, Paul Carter, said "The results from the 2017 survey commissioned by Visit Kent clearly show that the visitor economy is increasingly important to the county's future prosperity".

Deirdre added: "These figures demonstrate that, wherever you are based in Kent, tourism can bring growth, prosperity and jobs to your community. Our challenge going forward will be to turn more of our day visits into overnight stays and short breaks, bringing even further growth to the county."

For more information about Kent, please visit www.visitkent.co.uk

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For further media information on Visit Kent, please contact In-house PR Consultant Katy Towse on katy.towse@visitkent.co.uk or Brand Manager Lana Crouch on lana.crouch@visitkent.co.uk or call 01227 812914.

For images of Kent, go to http://www.flickr.com/photos/visitkent/

Notes to Editors

About Visit Kent

Visit Kent Ltd is the Destination Management Organisation for Kent (the Garden of England), welcoming 65million visitors a year, championing the county's £3.8 billion tourism industry and supporting more than 77,000 jobs.

It is recognised as one of the country's leading DMOs, targeting UK and overseas markets to raise Kent's profile as a premier destination, improving quality and skills within the industry, and growing investment in tourism. Visit Kent is a public/private sector partnership supported by Kent County Council, Medway Council, district and borough councils, and the leading sector tourism businesses in Kent.

For further information visit www.visitkent.co.uk (consumer) or www.visitkentbusiness.co.uk (business), or tweet @visitkent.

About The Cambridge Economic Impact Model

The figures were derived using the Cambridge Economic Impact Model undertaken by Sergi Jarques at Destination Research on behalf of Visit Kent. The Cambridge Economic Impact Model is an industry respected tool for measuring the economic impact of tourism in a given area. It utilises information from national tourism surveys and regional/local data (e.g. accommodation stock, inbound trips) of the level of tourism activity within a given local area.

Please note that all figures in the research reports have been rounded, therefore there might be marginal discrepancies in subtotals and totals.

Is it estimated that 6,023 actual jobs are supported by Bluewater, raising the total employment in that area to 9,765, or 16% of all employment in Dartford. Whilst it contributes to Kent's visitor economy, the shopping and retail nature of the destination must be taken into consideration.