Comments on 3 Aviation reports on Manston Airport.
Save Manston Airport association and Lab-Tools Ltd.
Oral, Dr. Beau Webber - 2019-03-18

0.1 - 2019-03-18 - Dr Beau Webber - Oral

1.0 - 2014-08-18 - Comments-on-Falcon-Report-1

1.1 - Falcon - MH Brief - Doc5252739

1.2 - Falcon - Manston Stage 1 Report

2.0 - SMAa - Comments on the Avia Report

2.1 - 2016-08-04 - Avia - Brief-Viability-of-Manston-Airport

2.2 - 2016-10-04 - Avia - Final-Report-for-TDC-Manston-Airport-Viability-Oct2017_2

3.0 - Lab-Tools Ltd - Comments on the York Report - Travel times

3.2 - York Aviation Drive Time Table - 5.2

3.3 - Airport Gate Walking Distances - Daily Mail - 2016-09-27

3.4 - Travel costs – Thanet Professor

3.5 - Additional advantages to Lab-Tools Ltd from a local airport

3.6 - Manton Airport Kent has major travel advantages - v2b

2019-03-18 – Dr. Beau Webber – Manston Airport DCO - Oral

As Chairman of Save Manston Airport association, and Director of nanoscience research company Lab-Tools Ltd. I would like say that I and the members of SMAa strongly support the RiverOak DCO proposal to re-open Manston Airport for aviation.

I want to discuss three reports commissioned to consider Manston Airport's viability :

TDC have spent money on 2 reports on Manston Airport - and seem to have ignored local people's comments given at various Local Plan Consultations.

It is claimed that the Falcon report says Manston is not viable – this is not so – Falcon stipulated three main conditions that were required for Manston to be successful [1.0, 1.1, 1.2, 1.3] –

1) That better roads were built to service Manston – they did not realise the new dual-carriageway A299 was already in place to the airport boundary – TICK
2) That faster rail transport needed to be in place – they did not realise that the new Javelin trains were already serving Ramsgate, and significant funding was in place for a new station a few hundred yards away from the runway – TICK
3) That it would be a few years before new runways at Heathrow or Gatwick were built – TICK

The next report was the Avia Solutions so called FINAL report. This claims to demonstrate that Manston is not viable – this is not so [2.0, 2.1, 2.2] – it starts by making assumptions based on which Manston could not possible be viable. They assume that only £50 million would be available for infrastructure, under which conditions Manston has struggled previously. Were Avia justified in making such an assumption ?

Certainly NOT ! – their report is not self-consistent – In Appendix A they quote an interview with RiverOak, in which RiverOak say they intend to invest £300 million in infrastructure. So why did Avia choose to ignore this figure and pluck a figure of £50 million out of the air ?

Finally, turning to the York report commissioned by SHP. Their comparison of travel difficulties from various locations such as Thanet and Canterbury to major South East airports is a shoddy piece of work. As well as leaving the major international airport Heathrow off their table, of the various relevant factors such as road / rail / walking / connection bus / queue waiting times / Thames crossing queuing times / national and international flight check-in times, parking costs, nights spent in hotels, and planes sitting / taxiing on the tarmac, they only consider road journey times taken from Google Maps. Manston Airport wins by hours when this calculation is done properly, and is far more convenient, particularly for the elderly and those with children, and for businesses who gain 2 working days [3.0, 1.3, 3.2, 3.3, 3.4, 3.5, 3.6].

And finally, I just want to emphasise how strongly I, Lab-Tools and SMAa support the RiverOak education, training and apprenticeship program, which will benefit Thanet and East Kent people greatly. Thank You.

Comments on the Falcon Report 1

Dr Beau Webber

2014-08-18

The Falcon Report 1 suffers from the extremely short time-scale in which they had to prepare it – 7 days. It is based on a considerably earlier report they did for KCC.
The crucial flaws come from the fact that their deductions regarding surface access are based on old Google Earth maps of Thanet, which do not show the latest dual-carriageway upgrades, and they have no knowledge that the HS1 train is already running St. Pancras International to Ashford International to Ramsgate.

The Key conclusions of the Falcon 1 report are the following.

1) **It is fortunate among regional airports in its location in the S.E. so close to London, for, given significant improvement in road and rail links to the capital, it could compete as a London airport.**
2) **The trigger to revival would seem to be**
    a) **a fast rail link to London and**
    b) **the protracted timescale needed to properly address the saturation of the S. E. airports.**

Current reality :

Figure 1.

- As we can see, a new uncongested dual-carriageway road runs right to Manston Airport boundary. This is the meeting-point of the A299/M2 to Central London, the A299 to Ramsgate Port and the A256 to the Discovery Park (on the old Pfizer site) and Dover Port.
- Manston Airport has excellent HS1 high-speed rail links to Ashford International and Central London, to be further upgraded this Autumn. The HS1 station is Ramsgate, 3 miles away, with funding announced by KCC for a new station on the Airport boundary.

The net effect of these, together with the extremely efficient nature of the operations at Manston Airport, which resulted in a 30 minute check-in, leads to the travel-time conclusions shown in info-graphics Fig. 3 & 4.

So we note, regarding point 1), indeed that the stipulated surface links are already in place, and that London is thus already well within the catchment area for Manston Airport. We thus conclude that Manston can be regarded as London Airport. See below for more information.

Figure 2.

Regarding point 2a) :

1) The trigger to revival would seem to be

a) a fast rail link to London

Manston Airport already has excellent HS1 high-speed rail links to Ashford International and Central London, to be further upgraded this Autumn. The HS1 station is Ramsgate, 3 miles away, with funding announced by KCC for a new station on the Airport boundary.

And point 2b) :

b) the protracted timescale needed to properly address the saturation of the S. E. airports.

Well we are stuck with this for maybe decades. Let Manston shoulder the passenger and freight load and take advantage of this situation.

So what are we waiting for ?

Catchment Area :

- Passengers : If you define a catchment area as the region within which you can get to your final destination quicker via Manston Airport than any other airport, then this extends north of all the main railway stations in London and West to the M23. We have documentation and video of actual on-road/virtual flight comparisons.
- Perishable cargo : If you define catchment area as the region within which it reaches is destination in batter condition than any other airport, we note that at Manston, cargo planes land without stacking, full loads are unloaded and on the way to the M25 with aircraft back in the air within 80 minutes. At other airports they would still be sitting uncooled and degrading.

Info-graphic population & travel-time representation.

In these info-graphics, population, postcode location and travel time data is presented for Kent and London, for airports Manston (MSE) and Heathrow (LHR) (for a European flight). Data collected from the web, Spring 2014.

Postcode-location is first plotted for the twelve Kentish districts, each district in a randomly chosen colour. This data gives a first indication of population density across Kent.

Then for the 23 largest Kentish towns and cities, a set of coloured vertical bars are plotted, with a height set by the population of the town or city (taking care to discriminate from districts with the same name). For the cities, the plotted area of the bar is limited to a single central postcode (i.e. CT1 for Canterbury), to avoid cluttering the graph.

The colour of the bar is set by the travel time, plus check-in time, to a selected airport. Finally a set of vertical bars is generated for each of the 13 largest London main-line stations (A-group), coloured in the same manner, (arbitrary height).

These 3D colour maps clearly indicate that both for Kent, and from these main London stations, Manston Airport offers quicker travel than Heathrow, either by car or rail.

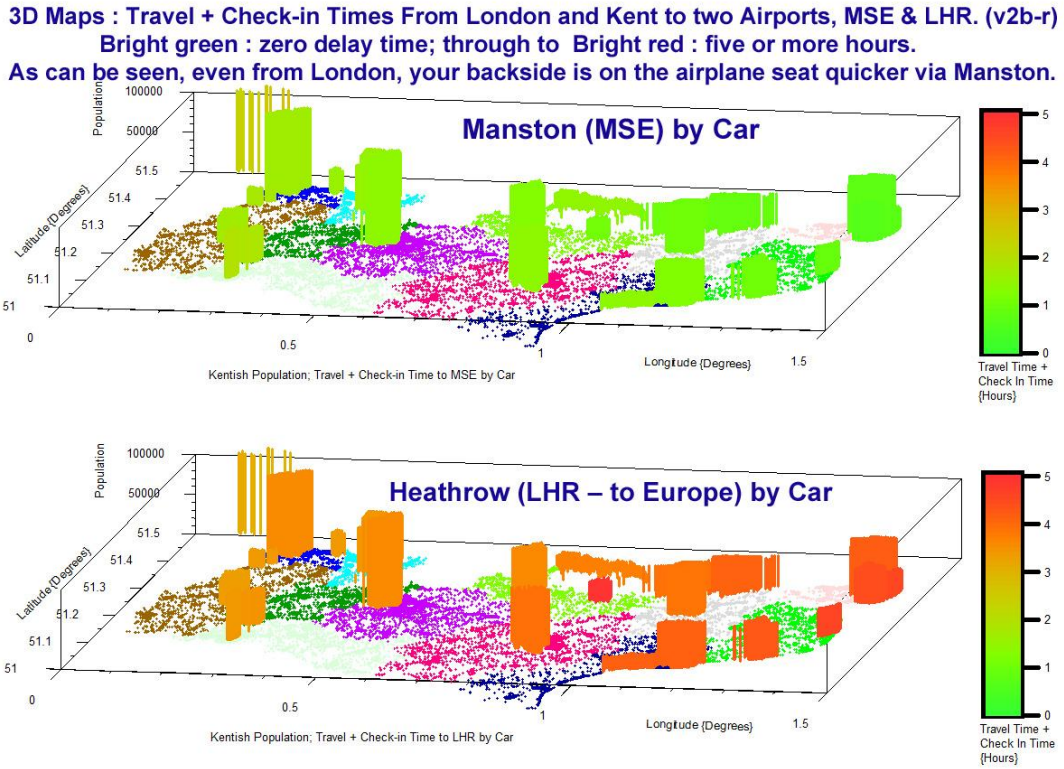


Figure 3.

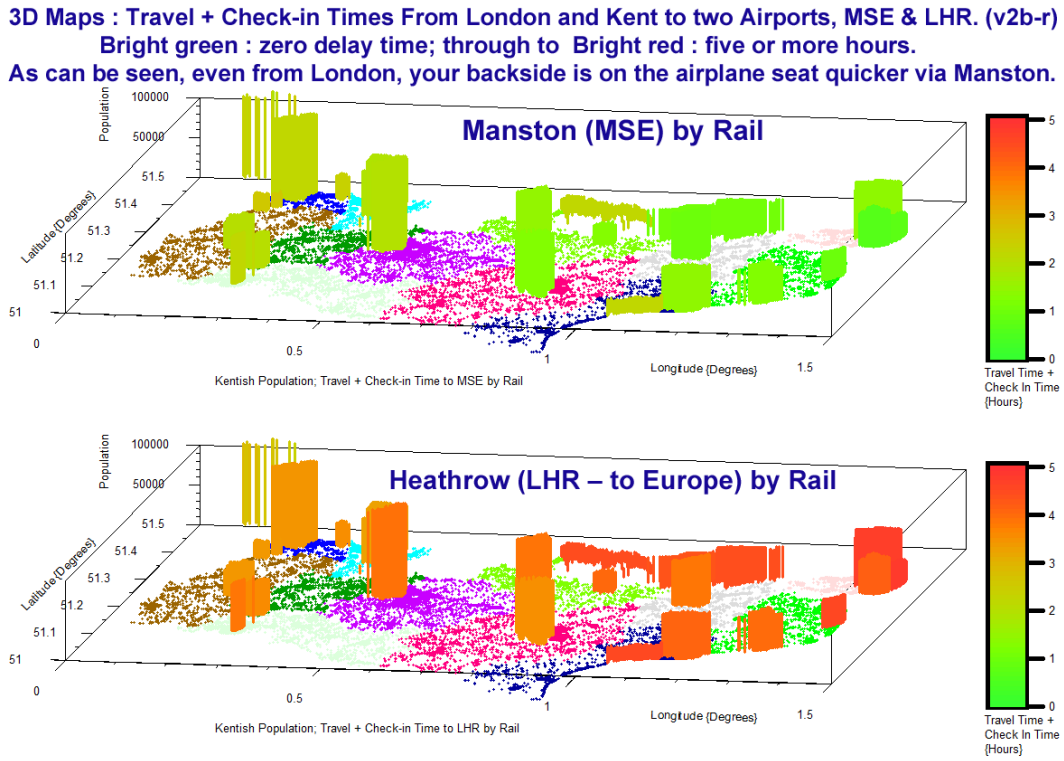
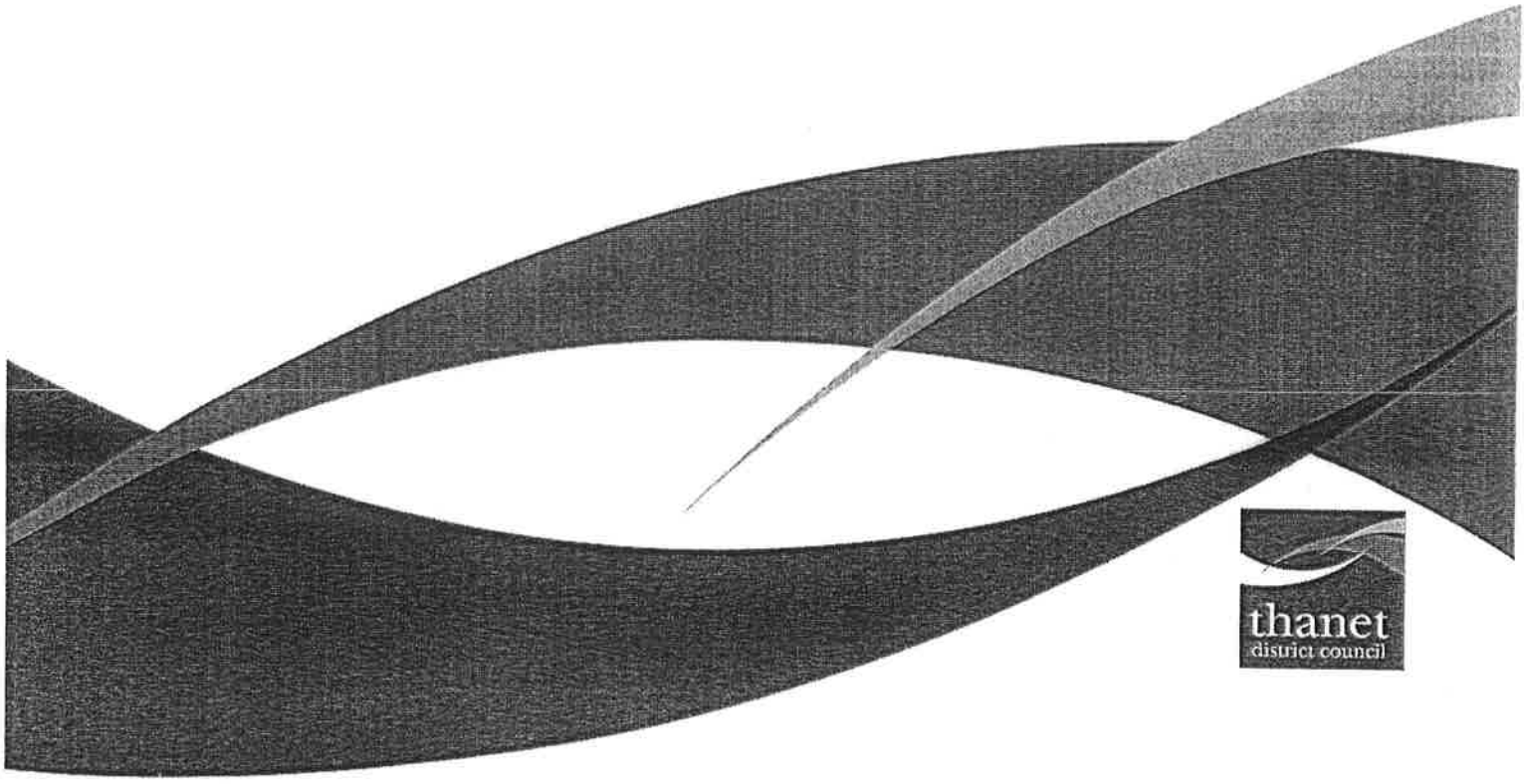


Figure 4.

Thanet District Council

Project Brief

Viability of Manston Airport
June 2014



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Background

Thanet District Council is seeking independent advice on whether Manston Airport has a viable future as an operational airport.

The airport's current owners closed the airport on 15th May 2014. The airport is currently owned by Ann Gloag of Manston Skyport Ltd. This company purchased the airport from the previous owners, Infratil, in December 2013, reportedly for one pound. Infratil had significant growth aspirations for the airport set out in its Airport Master Plan.

Prior to its closure the airport was running mainly freight services. Figures from 2011 indicate that it handled 37,000 passengers and 27,000 tonnes of freight per year. Dutch airline KLM were, up until the announcement regarding its potential closure, running a daily shuttle service to Schipol Airport, Amsterdam. The current terminal is capable of handling up to 700,000 passengers a year, and has an existing runway capable of handling large aircraft.

The current owner is advising the Council that it is not viable to run an airport, and that the airport was losing in the region of £10,000 a day. The current owner has provided the Council with information they have used to determine that the airport is not viable. their assessment of airport viability. A list of document and information available to the consultant is set out in Appendix 1.

It is unclear what the owner's future plans are for the airport and no discussions have taken place with the Council regarding alternative uses.

The Council needs to understand whether an airport would be a viable operation for the site, so that it can fully consider the options for the site, to provide evidence for the Council to support the new Local Plan.

Planning Policy Context

Current Thanet Local Plan 2006

The site is currently safeguarded for use as an airport and ancillary functions. 'Saved' policies from the Thanet Local Plan 2006 support development that would expand and diversify the airport operations, and safeguard particular land for airport related uses.

Aircraft Noise policies also restrict particular development within specific noise contours of the airport.

Emerging New Local Plan

The Council is currently developing a new Local Plan, and consulted on the Issues and Options for the Plan in summer 2013. At that time the airport was operational and the Council was considering how it could promote the asset through the Plan. Options for potential levels of growth have been considered, being informed by an Economic and Employment Assessment carried out by Experian in 2012. Options were also considered regarding a potential policy supporting growth and diversification of the airport subject to safeguarding criteria.

Officers have prepared a Preferred Option draft Local Plan which was ready to be taken through the Council's committee process for agreement to subject it to public consultation in summer 2014. This document included a proposed policy that would support the development of the airport. The

airport formed part of the Plan's overall economic strategy, although limited reliance was being placed upon the airport in terms of actual job growth.

Due to the announcement regarding the closure of the airport, the Plan has been stalled. The airport has a potentially significant impact upon other strategic policies proposed within the Plan, and the Council needs to understand whether there is any potential that an airport can viably operate from Manston, prior to making any decisions regarding its future.

Airport Section 106 Agreement

There is a current Section 106 between the airport owners and the Council, which sets out particular restrictions and requirements.

The agreement was drawn up in September 2000 and deals with protection to local people in terms of the number and direction of aircraft movements, noise, emissions, traffic and avoidance of residential areas etc. Part of this is the requirement to develop a nighttime flying policy.

Manston did not have an official public safety zone.

The Task

The Council requires an independent assessment advising whether or not it is possible to run a viable and economically sustainable airport operation from Manston.

The airport owners have provided the Council with the work they have carried out in assessing whether or not it is possible to run a viable and economically sustainable airport operation from Manston.

The Council requires an independent validation of the technical information and data submitted and an independent review of the position presented by the airport, including an assessment of the suitability of the methodology used and assumptions that have been made.

The work should conclude whether or not it is possible to run a viable and economically sustainable airport operation from Manston, assessing the work that has already been carried out by the current owners, and if considered necessary carrying out an independent assessment of potential options for a viable airport.

The Council requires the work to be split into 2 main stages:

1. Initial evaluation and validation of the airport owner's assessment

2. Independent viability/options study

Commencement to the second stage of the work should be optional, dependent upon the outcome of the first stage, and subject to agreement between the Council and the consultant following completion of the first stage.

Set out below are matters which the Council considers this work should cover, however we require expert advice from the consultant in order to develop a robust methodology for this work.

Work should specifically cover:

- Validation of the underlying costs and key profit drivers
- Validation of assumptions regarding investment needs
- Whether all available opportunities have been taken to identify different aircraft operators capable of being attracted to and capable of operating from the airport – freight and passenger, and including short haul aircraft and private aviation
- Whether all available markets for ancillary airport operations which could take place at the airport have been considered

Work should consider the need for:

- Demand/forecast modeling
- 25 year cash flow of income against costs, under different potential scenarios – using best, mid and worst assumptions

Work should also take account of:

- Current Section 106 agreement
- Relevant plans and strategies
- Governments' current and emerging position regarding aviation
- The potential for a new railway station being built in close proximity to the airport within the next 5-7 years – likely to reduce journey times to London to an hour
- Infrastructure investment required
- Consideration of history of operations at the airport

If it is concluded that there is potential for a viable and economically sustainable airport to operate from Manston the work should also include:

- Commentary on the scale of the viable operation, including activity levels, employment levels, and likely land requirements

Specific Deliverables

The finished work will take the form of two separate succinct and focused reports, one for each stage.

The reports should clearly set out the methodology, assumptions and information used to draw conclusions, and explain how the conclusions were drawn.

The reports should include a non-technical summary. The consultant should also make clear to the Council any uncertainty regarding conclusions or potential risks and shortfalls associated with the work.

It is expected that there will be continuous dialogue between the consultant and Council throughout the work, and the commission should include provision for the following specific meetings with Officers at the Council Offices, Margate:

Stage 1

- Inception meeting
- Meeting with airport to discuss work they have carried out
- Presentation of draft findings and report - including deciding whether there is a need to continue to Stage 2

Stage 2

- Progress meeting
- Presentation of draft report

There may also be a requirement to present the findings of both Stages 1 and 2 to senior management and Members at the Council.

Other requirements

Timetable

The Council has a very tight deadline for the completion of the work, and proposes the following timescales.

Stage 1:

- Inception meeting w/c 23rd or 30th June 2014
- Meeting with airport to discuss work they have carried out
- Completion of work within 3 weeks of inception meeting

Stage 2:

- Ten weeks following agreement to commence stage 2

We would welcome proposals which are able to carry work out in a shorten timescale than set out above.

Quotation Process

Quotations are invited for the work by 12pm on **Monday 16th June 2014**.

It is requested that the quote is accompanied by:

- A timetable detailing project milestones and how the challenging timetable will be met. If it is possible to shorten the timescales or the timetable cannot be met, a proposed alternative timetable should be presented.
- An explanation of proposed methodology including sources of evidence, data and information that will be obtained and assessed in order to carry out the work.
- Identification of any additional information required from the airport owner in addition to that set out in Appendix 1.
- Details of who will be carrying out the work and details of their qualifications and experience, including references.
- A breakdown of costs into each stage and individual elements within each stage, including if relevant any optional extras. This should include a potential range of costs which may result from different timetabling options for the work.
- Confirmation that you will be able to agree to the Council's consultancy agreement, which includes the Council's standard terms and conditions (Appendix 2), or setting out any proposed amendments which you would require.
- Details of any previous experience or work carried out by the consultant in relation to Manston Airport, including the disclosure of any potential conflict of interest.

Experience and competence

The consultants will need to demonstrate that they can effectively manage this work and have the following experience and capabilities:

- In depth knowledge and understanding of the aviation industry
- Proven track record of successfully undertaking airport viability work

- Proven knowledge and experience of working with the necessary stakeholders needed to deliver this work

Selection Criteria

The following matters will be considered in evaluating submissions and selecting consultants:

- Technical merit of the proposals
- Proven experience and competence
- Staff and other resources
- Management and communication
- Ability to meet the tight timetable
- Value for money

Account will also be taken of the significance of any other interest the consultant may have in Manston Airport or Thanet more generally.

Annex 1 – Documents

General background documents available to consultant

Infratil's Masterplan
http://www.manstonairport.com/userfiles/files/planning/KIA%20Master%20Plan%20LR.pdf

S106 Agreement

Thanet Local Plan 2006
http://thanet.gov.uk/your-services/planning-policy/thanets-current-planning-policy/what-is-the-local-plan/

Experian Economic and Employment Assessment 2012
http://thanet.gov.uk/your-services/planning-policy/evidence-base/economy/

Thanet's new Local Plan Issues and Options Consultation
http://thanet.gov.uk/your-services/planning-policy/thanets-new-local-plan/local-plan-issues-and-options-consultation/

Note setting out the history of Manston Airport

Kent International Airport Night time flying policy and supporting documents

Parsons Brinckerhoff Night time flying Independent Assessment

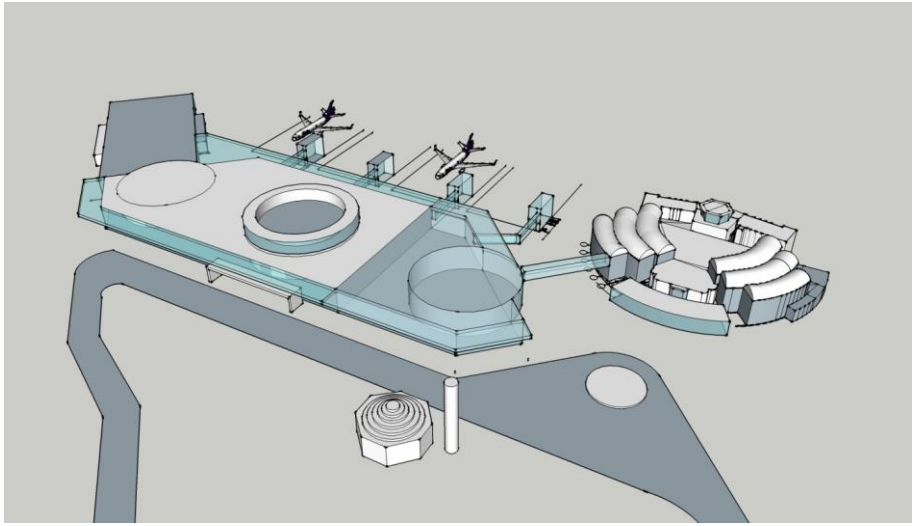
Documents/information provided by current owners

Kent Airport Limited and Kent Facilities Limited Financial Year Ending 31st March 2014 Consolidated Management Accounts, March 2014

Kent Airport Limited Draft Summary Projections 1st April 2014 – 31st March 2017

High Level UK Air Cargo Overview – Freighters, prepared by ILSOLUTIONS December 2013

Manston Core Catchment Analysis - Extract from Passenger Traffic Potential Study



FALCON CONSULTANCY LIMITED

THANET DISTRICT COUNCIL

thanet district council

EXPERT OPINION ON THE PROSPECTS FOR THE VIABLE DEVELOPMENT OF MANSTON AIRPORT

STAGE 1 – INITIAL EVALUATION AND VALIDATION OF THE AIRPORT OWNER'S ASSESSMENT

16 JULY 2014

PREFACE

AIRPORTS

History:

Before considering the future of Manston Airfield, it is worth reflecting for a moment upon the history of regional airports in the UK, their role and the challenges that face them in the short to medium term future.

Unlike most other countries, the early regional airports in this county were constructed, not by a central civil aviation agency but by the councils of the cities they were designed to serve. This is important because, at the time of their inception, there was no national strategic plan for the location of airports. These airports were developed as public facilities, and managed professionally to ensure a safe operational platform for aviation activities.

In those early days of aviation, airports catered for a number of small airlines, private aviators and post office mail carriers. There was no requirement for paved runways and the operational infrastructure required was relative cheap to provide.

World War II delivered a profound change in civil aviation. Surplus military airfields offered an attractive prospect for the development of new additional airports, with the consequence that the UK abounded with airfields/airports that were uneconomically close to each other. An outstanding example of the civil use of a WWII airfield is Manchester Ringway Airport a development that curtailed the growth of purpose-built, nearby Liverpool Airport.

The War also provided a quantum leap in the capabilities and performance of civil aircraft. As a consequence, airport owners had to provide far greater sophistication in airport aeronautical facilities, typically, runways, taxiways, hard standing for aircraft parking and navigation aids such as Radar and ILS.

Ever increasing safety regulation required airports to employ dedicated personnel and costly equipment. The cost of the local councils' ownership of their local airport began to spiral upwards.

The advent of another generation of post war aircraft introduced the jet and brought air travel to the public at large, spawning a demand for the growth of passenger and cargo facilities thus requiring councils to provide ever greater capital expenditure.

Meanwhile surface transport links improved across the nation with the construction of the Motorway network and investment in the railways. As each airport sought to compete for a larger share of the "catchment" area of passengers and cargo so the airlines, anxious to focus their resources wisely, began to pick and choose the airport that offered the best surface transport "feed". Some airport's lost where others gained. It could be argued that mainland Britain has too many airports too close together and, ideally, needs one very large airport serving the South East, another perhaps in the North West and these fed by a handful of regional airports no nearer than 1.5 to 2 hours driving from each other

In 1986, the Airport's Act ended the management of airports as public assets and required them to operate as businesses. In the absence of a national airport strategy, airports competed openly with each other and a race began to build the facilities necessary to attract the airlines. Councils faced an impossible task to raise the necessary finance and most turned to various forms of private sector initiates to bridge the gap, including outright sale.

Non-aviation Profit Generation:

Although safety remained the imperative and regulation ensured its compliance, the new breed of airport managers turned their focus to the commercial exploitation of the drawing power of the airport activity and developed a diverse range of non-aeronautical activities yielding higher profits than the aeronautical services they provided. Initially focused merely upon land surplus to the airport's operation, Schiphol Airport, Amsterdam developed the concept into an "Airport City", a business and retail community that is strategically planned and marketed to have synergy with the airport's activities. Today a successful airport seeks to generate approximately half its turnover and considerably more than half its profit from non aviation activities such as real estate development, retailing and rental.

Airlines:

As airports developed so did the airlines. Aircraft grew in capacity and with more seats to fill, airlines reconsidered their commercial strategies. The large legacy airlines such as Air France, Lufthansa, and British Airways took their lead from the US airline industry, developing "hub and spoke" networks. This technique worked on the broad principal that ultimate market efficiency was reached when a third of a load of passengers disembarked at the destination, a third remained on board in transit to the ultimate destination and a third connected to another flight or another airline. Under this philosophy, regional airports were firmly relegated into the role of hub feed airports. The opportunity for them to attract lucrative long hauls flights receded.

The, regional airports responded to the decline in scheduled airline business and found new revenue opportunities by attracting seasonal tour traffic and all freight services.

For a while, regional airports enjoyed a niche role in a new concept of airline operation, the low cost carrier (LCC). The business model of the LCC is to provide a short to medium distance air travel product to the market that had hitherto not afforded to fly by eliminating all unnecessary costs and maximising on the capacity of the aircraft. They chose to base their operations on regional airports where they could negotiate virtually free operating costs with the desperate airport operator, arguing that the airport could generate compensating revenues from car parking and retailing, especially Duty Free. For a while this formula satisfied both airline and airport operator although the airports struggled to generate the investment necessary for upkeep and modernisation.

At the time of writing this introduction, fierce competition between all the airlines is redrawing the map once again and forcing the low cost airlines back towards the larger airports. Ever larger aircraft delivered to the major airlines offer many more seats to be filled from the major airports and the capacity and performance of these aircraft is so great that, for the moment at least, the growth is air cargo can be absorbed in the belly holds of passenger aircraft.

The seasonal tour business too is changing as passengers prefer to book individual inclusive tours on the large airlines from the main airports.

Thus the role of the regional airport has been relegated once again to hub feed.

So far, this overview has dealt with the role of regional airports in serving the airline community. However regional airports may serve a number of aviation roles from which they may generate revenues.

GENERAL AVIATION (GA)

The General Aviation community is diverse, comprising private aviation, corporate aviation, crop spraying, air ambulance, gliding, helicopters, and training.

GA has enjoyed a brief period of growth exploiting the war surplus facilities, hangars and runways; in many cases facilities that far exceeded their needs. However it was not long before the cost of maintaining these facilities exceeded the meagre revenues generated by this segment of the civil aviation market. Inevitably, failing airports had to close and much of the private flying community, operating light aircraft gravitated back to grass runway airfields.

Serving major businesses, corporate aviation has flourished. Large, high performance corporate aircraft have evolved that are generally accommodated at major airports and serviced in FBO (Fixed base Operations) specially designed service facilities. Around London, where the capacity at Heathrow and Gatwick is limited, specialist corporate airports have developed at Farnborough, Fairoaks and Biggin Hill served by the excellent road and rail connections to London that are the imperative for their corporate clients. However even here, the operational constraints are limiting further growth. If Manston could offer a guarantee of long term operation, necessary to support the high levels of investment, an FBO operator might be attracted.

MISCELLANEOUS

Regional airports may also provide the operating facility for other civil aviation activities:

AIRCRAFT MAINTENANCE REPAIR AND OVERHAUL (MRO)

MRO is a highly competitive business where the availability of high skills at low cost is the imperative. The airlines have chosen to look around the world for low MRO costs and are willing to fly the aircraft wherever this can be found. A large investment is required to construct a modern MRO facility and investors must be assured of continuity of airport operation.

SPECIALIST CARGO CHARTERS

Employing “just-in-time” manufacturing principles, some industries charter large cargo aircraft to deliver components from remote suppliers as required. Perishable commodities such as flowers and food stuffs are often transported by air.

Cargo charterers welcome the open availability of regional airports if the transport links are suitable but this invariably requires the airport to provide largely under-utilised equipment and facilities,

PARCEL AND MAIL HUB

A lucrative business for a regional airport, operating a post office hub (generally at night) or a parcel hub involves a large number of aircraft arrivals and departures in a concentrated period of time. However it is best located at airports that do not have community noise issues.

AICRAFT BREAKERS

Aircraft breaking is a specialist business with few participants. A substantial runway is required but the utilisation is extremely low.

CONTENTS

1 KEY OBSERVATIONS

1.1 Overview:

	Key Observations	Comment
1	The airport is a major (sunk) capital asset. Nevertheless it has lacked the investment needed to develop it for today's airport role, especially for the development of key transport links to London.	The closure and surrender of the CAA licence is unfortunate as is the disposal of equipment, but can be turned to an advantage. Until a positive and realistic business plan has been developed, investment is visible through construction, and the fast rail link is near completion, that airport should remain closed. .
2	The site offers ample opportunity for considerable aviation and commercial development (with other land available for acquisition).	A Business Plan must set out the phased development of the airport in respect of both operational facilities and commercial infrastructure, so that the full synergies of both may be realised.
3	It is located in the S.E. where airport capacity is a major issue.	The issue of capacity saturation and the need for additional runway capacity in the S.E. should be exploited as the core business opportunity.
4	Although there are plans for additional runways in the S.E., the reality is that a new runway is years away.	Whatever the political decisions arising from the Davies Commission, the planning process will take at least 10 years and the benefit of one new runway may be short lived thereafter. Manston could play a significant role in providing the required capacity even if only in the short term.
5	Many regional airports have to supplement their aviation revenues through a visionary strategy of real estate development, Manston is no exception.	Air operators and investors in airport real estate must be assured that the airport will remain operational for at least 20 years, thus the real estate business must be integral to the aviation business
6	Neither Infratil nor Kent Airport Limited have offered a clear strategic option to develop the airport (with financial projections)in partnership with the Council,	Either the airport is written off or a long term business plan to profit is developed in financeable phases and with full council and national political support.
7	The airport has never sustained growth. Now, the doubts surrounding Manston's survival have become a self fulfilling prophesy.	No business plan with a credible investment plan of less than 20 years is likely to define the commitment necessary to rebuild confidence. Phase 1 investment required could be in the order of £100m with no guarantees of success. Political support will be required to attract investors and PR work will be needed to convince the airlines.

This Report was commissioned following the unexpected closure of the airport by its owners, Kent International Airport Limited

The Report was compiled by the FCL in only 7 working days following contract signing. Further research is therefore essential to prove and develop the comments contained herein.

2 EXECUTIVE SUMMARY

Kent Airport Limited and Thanet Council have provided FCL with sufficient data to understand the key issues and opinions that have led to the airport's closure. Kent Airport Limited declined to provide the full range of information requested, restricting it to that which they considered relevant. For this reason, the FCL Team have initiated our own research in advance of Stage 2.

2.1 Present State

Kent Airport Limited is selling off crucial airport equipment and facilities, rendering the airport inoperable. Any proposal to reopen the airport with existing facilities would need to consider, whether to purchase new or second hand replacement equipment.

The general appearance of redundancy and the reputation of failure will conspire to frustrate any promotion of the airport to prospective operators.

2.2 The Role the Airport

Airports play various roles in the civil aviation industry mix. For example, Heathrow is clearly:

- A capital city gateway airport,
- A hub for global air passenger traffic connectivity,
- A major cargo airport,
- A huge retail facility
- A large real estate business.

(It is important to note that highly successful airports attract adjacent commercial land values equivalent to city centres. Under the airport ownership and properly managed and developed in synergy with the aviation activity, the profits from an airport real estate portfolio help to sustain the airport's investment planning.)

2.3 Manston as a UK Regional Airport

Manston has always been perceived as a Regional Airport.

Kent Airport Limited is right to identify the negative marketing features of the airport's location as a regional airport. The airport is not well located to serve as a travel interchange serving the wider UK.

Regional Airports provide an operational service to most segments of the civil aviation operation, typically regional airlines, corporate aircraft, flying training, private flying and so on.

The primary segment is commercial air transport (the airlines). However, this business is rarely profitable as airports struggle to resist the downward pressure on airport charges as the airlines seek to offer lower fares.

Cargo generates very little revenue for an airport and is invariably unprofitable.

Much of the revenue from FBO's comes from the sale of fuel and the provision of aircraft maintenance.

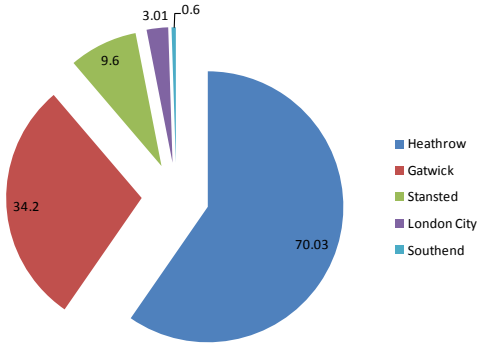
Regional Airports need the profits from rentals, retail, car parking and real estate to bridge the profit gap of the aviation activities.

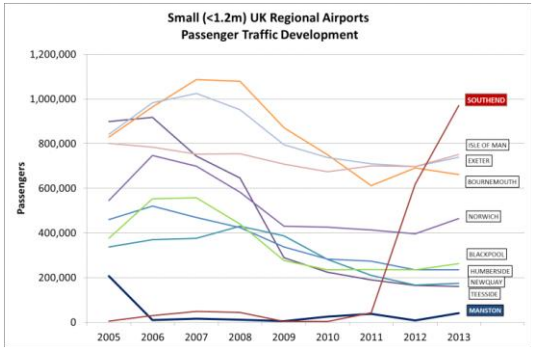
Schiphol Airport Amsterdam invented the concept of the Airport City, the development of specialised retail and business community located at the airport with synergy between the airport activity and the focused development of the real estate.

MANSTONS ROLE AS A UK CIVIL AIRPORT		
ROLE	**ATTAINMENT**	**REASON**
Regional Airport	Repeatedly failed to sustain scheduled airline services and attract other profitable aviation activities.	• Poor UK network location • Poor surface transport links • Limited UK catchment area
Cargo Airport	Proven record of success in attracting all-freight air carriers.	• Ideal operating facilities • Ease of access.
London Corporate FBO	Failed to attract a share of the London Corporate market.	• Lack of quality facilities and • Poor surface transport links Farnborough to Canary Wharf 45 miles / 1.14 hrs Manston the Canary Wharf 72 miles 1.25 hrs
London Satellite Airport	Failed to compete with other satellite airports.	• Lack of quality facilities and • Poor surface transport links
Airport "City" Business Park	Failed to develop a viable estate portfolio.	• Failure to sustain activity growth • Lack of vision • Lack of infrastructure.
NOTE 1:	*Where airports are close to their capacity, they are able to sustain published aviation tariffs. The activity drives up real estate values and the throughput generates retail revenues. Such airports generate substantial profits.*	
NOTE 2:	*Manston Airport was up for sale for some time. That there was no interest reflects its poor business reputation, (it has never made a profit in all the years since the RAF moved out) and the general industry perception that it is not in an ideal location. It has failed to fulfil its perceived role as a regional airport.*	

London Air Passenger Market – 2011

Total market: 134,997,486





2.4 Manston Airport's Passenger Market

Kent Airport Limited had commissioned a professional passenger market assessment (DF Aviation Consultancy) however this stopped short of a demand forecast. Although we were told of the contacts made with airlines, no minutes of meeting were available.

FCL agrees that as a regional airport, Manston has no natural sustainable passenger market. The practical experience of the airport's operation demonstrates that its catchment area and its propensity to travel is insufficient to generate for the airlines enough traffic on one route to sustain a twice daily operation, the minimum required to risk launching a service.

The Infratil Masterplan for Manston does not provide a sound basis to initiate a refurbishment plan nor does it convey an attractive proposition for investors and potential users of the airport. It is not surprising therefore those airlines have shown little faith in its realisation.

Nevertheless, the airport is s approximately and hour's surface travel from London. As saturation of runway capacity in the S.E. moves towards reality and decisions to build new runways seems years away, Manston's location should enable it to compete for a market share as a London airport.

Southend Airport on the opposite bank of the Thames, has demonstrated that a share of this huge and lucrative market can be captured with adequate facilities and a travel time to London competitive with other London Airports (Luton, Stansted, Gatwick and so on).

FCL's research has discovered a submission by Infratil to the Davies Commission, this has yet to be analysed.

2.5 Cargo

Kent Airport Limited had commissioned a professional cargo market assessment (ILS Solutions) this also stopped short of a demand forecast. The assessment pointed towards a contact list and a price based marketing strategy but we are unaware of follow up.

The construction of an international component assembly plant (e.g. car plant) on nearby land would dramatically stimulate the cargo throughput.

IMPORTANT:

The Davies Commission is due to decide whether or not to shortlist a Thames Estuary option for new airport capacity for London, and will then undertake formal consultation on the shortlisted options.

Manston is not shortlisted.

2.6 Business Planning

Kent Airport Limited is right to identify the ongoing evolution of the airline industry as new aircraft enter service with ever more impressive performance capabilities. It is true that these developments detract from Manston's immediate market opportunity, in the short term.

Kent Airport Limited's negative operating financial projections are reasonable, based on past performance but it must be noted that an analysis of the accounts of some major airports would show a similar shortcoming. The pressure on the air travel and air cargo industry to reduce tariffs against a background of high fuel costs places inevitable pressure upon them to drive down their operating costs especially all costs associated with the time the aircraft is on the ground, including airport charges. Airport operating revenues are under pressure and must be compensated by exploiting the aviation activity base to attract other revenue generating activities.

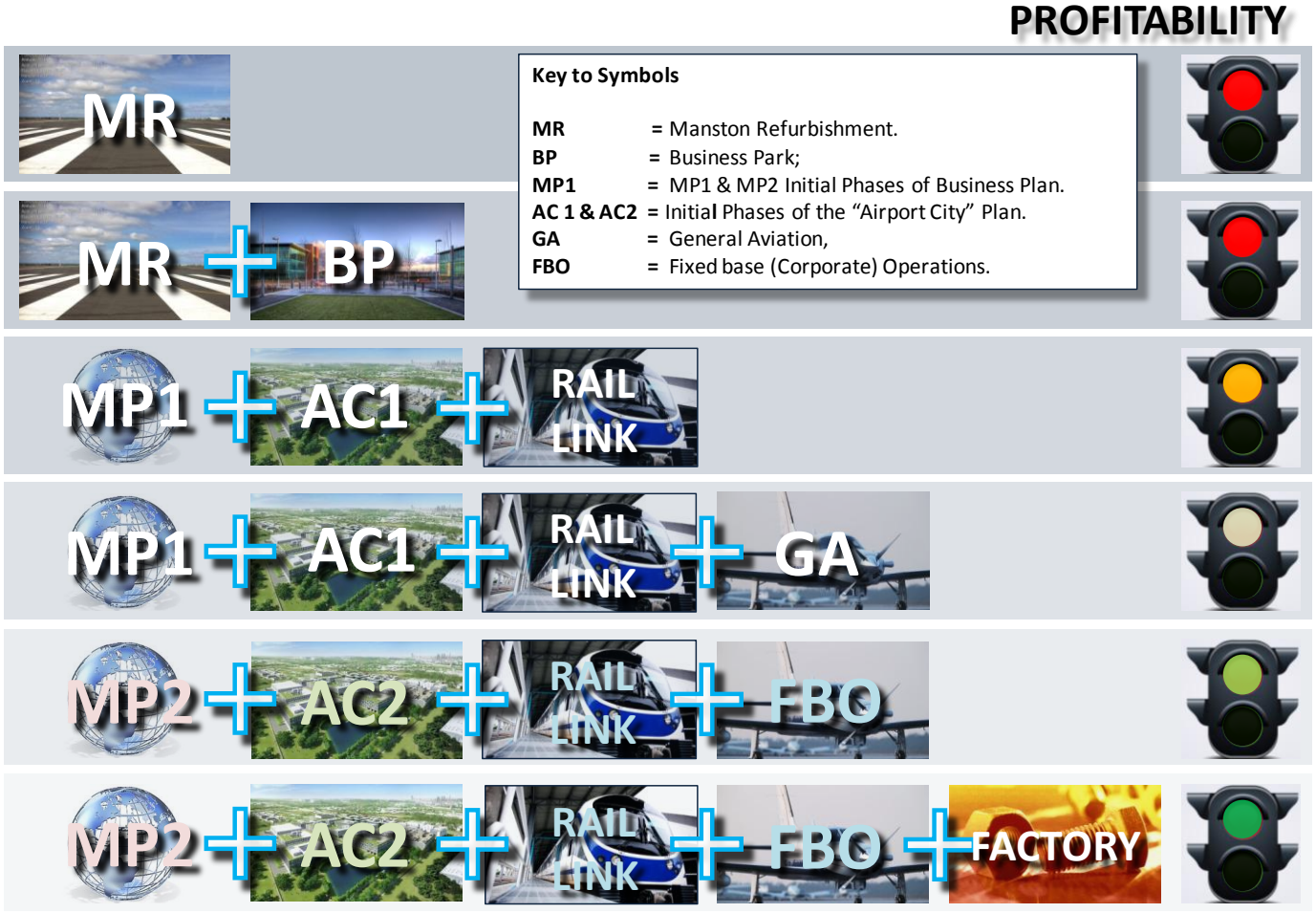
Kent Airport Limited did not provide a comprehensive Business Plan to support their decision to close the airport. The decision would appear to have been made on the basis of past performance and short term projections without the support of a credible long term (minimum 20 years) investment plan, a key component of a detailed Business Plan (developed logically from a demand forecast through a capacity plan, phased master plan, CAPEX/OPEX projections to financial projections for the full planning term).

FCL's observations of Manston Airport at the end of Stage 1 are:

- It is not unique among the UK's regional airports in failing to secure a scale of aviation activities that will cover the cost of its aviation related operation.
- It is fortunate among regional airports in its location in the S.E. so close to London, for, given significant improvement in road and rail links to the capital, it could compete as a London airport.
- The trigger to revival would seem to be a fast rail link to London and the protracted timescale needed to properly address the saturation of the S. E. airports.
- The promotion of any revival will depend upon a credible investment plan and initial construction that encompasses the trigger (above) and provides airline user friendly facilities.
- The success of Manston revival must be proved through a 20 year business plan with financial projections based on the assumption that the trigger will be realised.
- More work must be done to engage the airlines' views on a Manston Business Plan that offers a 20 year commitment.

2.7 The Road to Sustained Profitability

The chart below offers FCL's view of the path to profitability. Note that, even with an associated business park, the airport is unlikely to succeed and, in our opinion, will generate substantial operating losses. However, through phased planning and investment aimed at capturing a share of the London traffic, the airport could move into profit. A nearby international component assembly plant (e.g. car factory) would add further value.



3 CONCLUSIONS AND RECOMMENDATIONS

3.1 THANET DISTRICT COUNCIL'S OBJECTIVES & SUMMARY OF CONCLUSIONS

Stage 1 – The Brief

THANET COUNCIL'S OBJECTIVES	FCL'S CONCLUSIONS
Validation of the underlying costs and profit drivers.	We have had insufficient financial detail and insufficient time to probe Kent Airport Limited's financial figures. However, in our view, the order of costs as presented are in line with the operation as it was before closure.
Validation of assumptions regarding investment needs.	We are unable to validate the assumptions many of which are now rendered irrelevant by the airport's closure and the sale of assets.
Take a view on whether all available opportunities have been taken to identify different aircraft operators capable of being attracted to and capable of operating from the airport – freight and passenger, and including short haul aircraft and private aviation.	In our view Kent Airport Limited rightly commissioned professional reviews of the commercial passenger and cargo operator markets but these offered no projections of demand. We have no evidence that the reviews were subjected to detailed scrutiny or followed up with sound commercial propositions to identified target airlines. In our opinion, overtures by Kent Airport Limited to airlines to introduce air services to Manston were unlikely to succeed without the tangible evidence of substantial investment necessary to convince them of the medium term sustainability of their operations.
Take a view on whether all available markets for ancillary airport operations which could take place at the airport have been considered.	In our view, Kent Airport Limited has identified all the aviation related activities that are typical of regional airport but we have no evidence that these markets have been assessed and projected into a comprehensive Business Plan.

3.2 Recommendations

The FCL Team are not convinced that enough has been done to develop a visionary strategy and Business Plan for Manston. Therefore, FCL recommends that Thanet District Council should take the following next steps:

1. Revisit the Stage 2 ToRs and instruct FCL, typically:
    a. Develop a high level Vision of the maximum planning potential of the airport, identifying any further potential land acquisitions necessary to fully realise the potential.
    b. Develop a high level, 20 year, Business Plan, commencing from the opening of the rail link, that integrates five business models:
        1)Manston as a London Airport,
        2)Manston as a multi-purpose Regional Airport,
        3)Manston as a Cargo Airport,
        4)Manston as a Corporate FBO (Corporate aircraft service centre),
        5)Manston as a sophisticate Airport City (Real estate).
    c. In partnership with the Council, undertake a first-cut review of the environmental issues of major development.
    d. In partnership with the Council, define an aero-political strategy to promote Manston as a London airport.
    e. In partnership with the Council, define a framework "Airport City" strategy.
    f. In partnership with the Council, develop an investment strategy
2. Open discussions to establish the earliest construction of the rail link,
3. Open discussions to facilitate a Phase 1 "Airport City" business park including the relaxation of Planning restrictions / Processes,
4. Instruct FCL to engage an expert to establish the cost of replacing the equipment essential to resume operations,
5. Open discussions on investment funding,
6. Open discussions with Government on the S.E. Runway issue.

Meanwhile there is no commercial justification for reopening and marketing the airport in the same configuration as it was upon closure. It should remain closed but arrangements put in hand for the low level maintenance of key facilities.

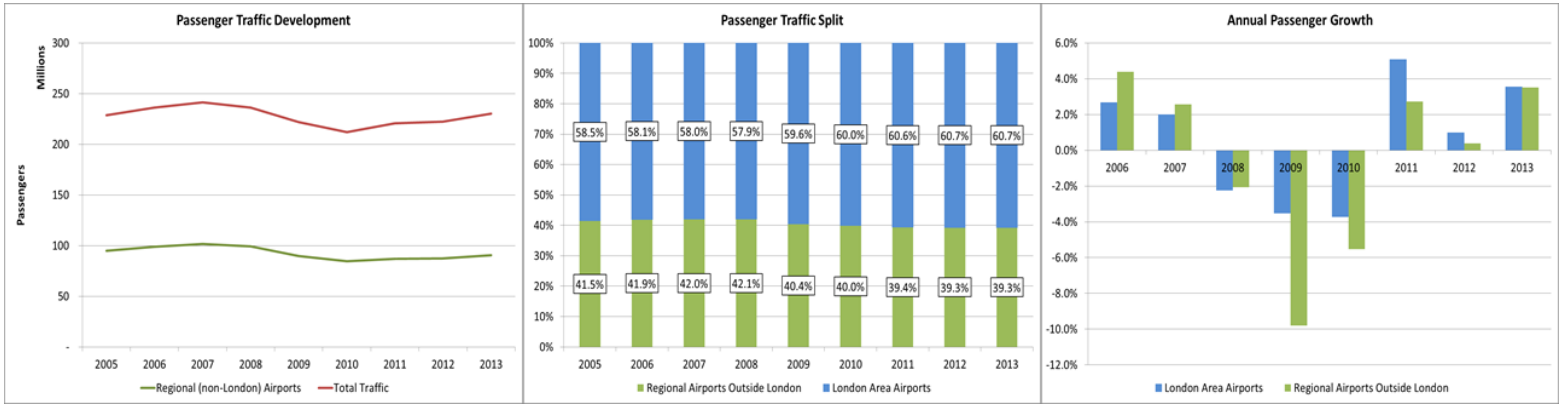
4 UK DEMAND FOR REGIONAL AIRPORTS

4.1 Passengers

In 2013 there were 230.1 million passengers using airports within the United Kingdom. Those airports serving the London Area including Heathrow, Gatwick, Stansted, Luton, Southend and Manston dominate total activity accounting for 139.7m passengers. The rest (loosely termed Regional or non-London Area airports) accounted for 90.4m passengers. The split of traffic has been steadily increasing in favour of London Area airports rising from 58.5% in 2005 to 60.7% in 2013.

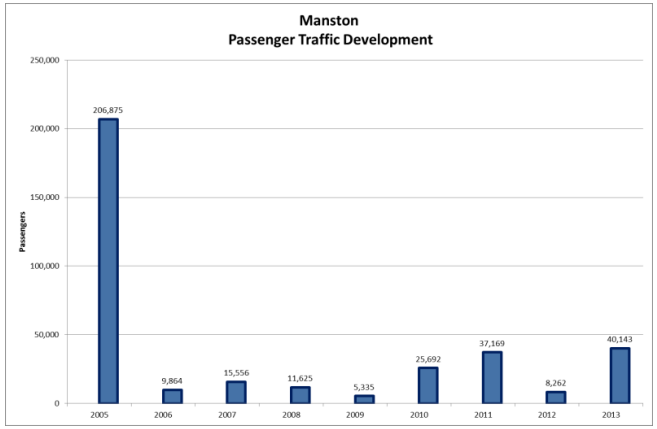
Since 2005 and throughout the recession in the UK the overall development of passenger traffic has hardly changed, rising only by 0.08% (CAGR) over the period. This masks the fact that traffic at regional airports has actually declined 0.53% compared with a rise of 0.49% for those in the London Area over the period. Furthermore, whilst growth rates at regional airports in 2006 and 2007 were ahead of those in the London Area, since then rates have been lower with the impact of the recession hitting traffic development in the regions far more severely than that in the London Area. In 2013 however growth at regional airports was (3.5%) almost the same as the London Area (3.54%).

Figure 1 UK Airport Market 2005-2013 Source CAA



Passenger traffic development at Manston during this period (2005-2013) has been small apart from during 2005 when a low cost carrier EUJet briefly set up a base at the airport only to collapse and cease operations in July of that year. In the period prior to closure announcement, the arrival of the Dutch carrier KLM, providing services directly to Amsterdam, appeared to herald the beginnings of a new dawn at the airport.

Figure 2 Passenger Traffic at Manston 2005-2013



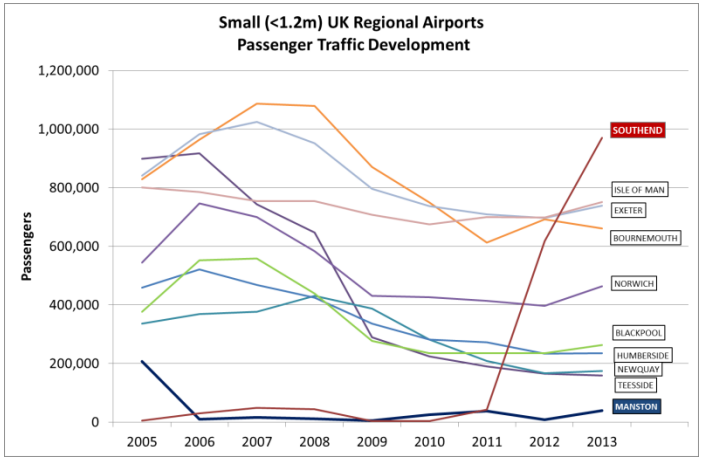
Generally speaking traffic development at the airport has been lower than might be expected for a smaller airport in the UK, especially when compared to other airports at similar coastal locations such as Blackpool, Humberside and Newquay. They all tend to have low traffic flows, yet even they have seen greater flows than Manston. Indeed there are examples at coastal locations such as Exeter and Bournemouth that can support larger traffic volumes. It therefore remains a mystery why a major piece of aviation infrastructure at a coastal location in the UK cannot support greater volumes than at Manston.

Of particular interest to Manston is the development of traffic at Southend Airport. For many years the airport handled low passenger volumes until in 2008 it was purchased by the Stobart Group and major investments followed. These included a newly terminal building, control tower and an extended runway. However the most significant development was a new station built within walking distance of

the terminal enabling access to regular rail services to central London in under an hour.

EasyJet began operating services opening a base at the airport in April 2012 and a rapid increase in passenger numbers followed; from 42,439 in 2011 to 969,950 in 2013. In the first four months of 2014 traffic had risen by a further 40%.

Figure 3 Passenger Traffic at Smaller UK Airports 2005-2013



This is relevant to Manston because Southend has shown that where access to the London area conurbation can be achieved swiftly and seamlessly the potential for airport passenger expansion can be rapid. Traffic development is not simply a function of local catchment area but of accessibility.

This model holds considerable potential for the Thanet region because it enables the airport facility at Manston to move towards achieving a critical operating mass in a realistic time frame. If it could be replicated on the site the scale of traffic flow would generate activity to justify the levels of investment likely. This need not be necessarily measured simply in cash-flow terms for the airport operating

account but more importantly from the regional perspective at the job creation and economic regeneration levels.

The key question is which carrier would respond to this development of the airport and its access in order to develop traffic at the airport. An extensive review of potential candidates undertaken by previous consultants concluded that EasyJet, Ryanair and Jet2 are likely targets although a further potential target could be the Low Cost-long haul operator Norwegian.

The airport owners made the following comment when asked about contact with airlines:

"….we spoke with a number of airlines. No passenger airlines with any current activities had any interest to start operations at the airport (albeit Ryanair had had an interest that went away just prior to Christmas)"
Alistair Welch July 2014

This response from the airlines is not unsurprising given that the fundamental issue of access to London area conurbation has not yet been addressed by any investment proposal at the airport. Indeed it seems probable that the airport's history of consistently failed passenger operations and marginal airline activity would undoubtedly dissuade most carriers. It is interesting to note however the flicker of hope - which came and went - from Ryanair, demonstrates that even without access resolution, traffic expansion could be possible.

There is therefore a challenging period ahead where the issue of reduced journey time to the London area conurbation needs to be radically addressed. Even the proposed Thanet Parkway station would require some additional mode of transport to connect passengers from the terminal to the station. A solution is necessary that minimises journey time to the capital. This is a critical issue since there are so many alternative airport choices that the traveller to and from the London conurbation can decide upon.

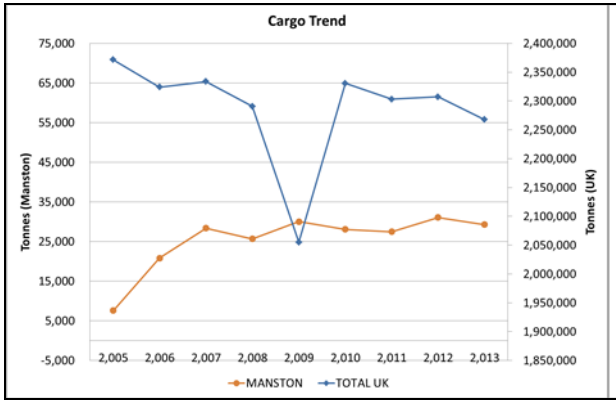
However if an improved access could be resolved the future potential of the airport could soon be realised.

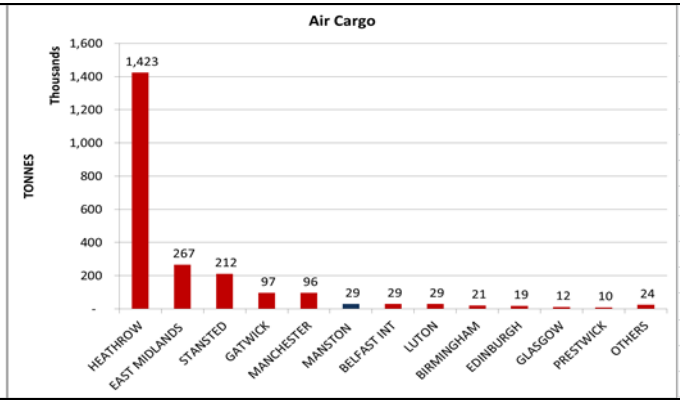
4.2 Cargo

4.2.1 UK Background

Manston is the sixth largest airport for air cargo in the UK representing an important and often overlooked aspect of the operation at the airport. In 2013 cargo reached 29,306 Tonnes. This was down 6% on the previous year in a market that was down 1.7% throughout the UK on the year previously. Almost all (99.9%) of the cargo at Manston was carried on dedicated cargo aircraft.

Figure 4 Cargo Trend; Largest Cargo Airports in UK; Proportion Cargo Carried by Aircraft Type Source CAA





	Passenger Aircraft	Cargo Aircraft
HEATHROW	95.12%	4.88%
EAST MIDLANDS	0.01%	99.99%
STANSTED	2.16%	97.84%
GATWICK	99.99%	0.01%
MANCHESTER	85.01%	14.99%
MANSTON	**0.03%**	**99.97%**
BELFAST INT	0.36%	99.64%
LUTON	3.41%	96.59%
BIRMINGHAM	72.48%	27.52%
EDINBURGH	1.77%	98.23%
GLASGOW	93.38%	6.62%
PRESTWICK	0.28%	99.72%
OTHERS	42.90%	57.10%

By comparison London Heathrow, the largest cargo airport in the UK handling over 1.423million Tonnes in 2013, handled only 5% on dedicated cargo aircraft with the balance carried in the under-belly of passenger aircraft. This was true also of Gatwick which handled almost no cargo on dedicated freighters with most its cargo conveyed on passenger aircraft.

East Midlands is the UKs most important dedicated cargo airport with nearly all its 267,000T carried on cargo aircraft. It is an important base for Royal Mail as a major overnight mail hub as does DHL, Fedex, TNT and UPS express cargo operators A significant factor in the success of the airport is its close proximity to an excellent motorway network which ensures that 90% of the land mass of England and Wales is within a four hours truck journey from the airport.

In addition twenty four hour operations also make the airport friendly for freighter operations. Despite all these advantages East Midlands airport cargo throughput has only grown by 5.6% in the past nine years..

Airport competition in the UK is naturally centred on London Heathrow and it is estimated that approximately 85% of the UK forwarding industry is based with a 10 mile radius of the airport.

Manston airport also faces competition from five airports in Europe with excellent motorway links to the south east of England. Frankfurt (699km), Amsterdam (483km), Brussels (319km), Paris (377km) and Liege (403km) all have excellent cargo hub capability with fast motorway connections across Europe and to the UK.

4.2.2 Cargo Trends

In general airfreight business has had a turbulent period since 2010. The economic downturn and the fall in demand from China and Asia has significantly altered the key economic drivers of the cargo business. There is been very little growth in airfreight from Asia since the peak in April 2010. This has been exacerbated by the increase in aviation fuel since 2009. The current Fuel Price Index is 559 which has stabilised in the past year but the price of aviation fuel is still high at USD120/bbl.

Over recent months airfreight markets have maintained the 2013 year-end improvements but there has been no further increase in growth. Stronger economic growth has not generated the

expansion in economic trade as it has done in the past, as production has been on-shored due to a variety of factors.

Airlines are replacing their passenger aircraft with more fuel efficient aircraft at an increasing pace. Wide bodied twin aisle passenger aircraft deliveries are expected to grow by 19% this year which will effectively increase belly hold capacity worldwide by 8% allowing more and more cargo to be conveyed in the free under-belly cargo holds of passenger aircraft.

Capacity is growing at a far faster pace than demand for airfreight and as sea freight yields are falling there is also a shift from airfreight to sea freight.

The climate for cargo-only aircraft operations could not be much worse. This has led to decisions by many major airlines to move out of freighter aircraft or to down size their fleets significantly. Current developments in the carrier market include:

- Japanese Airlines (JAL) which have moved away from freighter aircraft in 2013 as have
- British Airways in May 2014.
- MK Airlines a UK Cargo Airline ceased operations in 2010. (It previously operated produce freighters into Manston).
- Eva Air of Taiwan is reviewing its freighter operations.
- Lufthansa is reshaping and reducing its freighter fleet
- Air France/KLM are actively reviewing their fleets and there are indications that a sale of Martinair the wholly owned subsidiary of KLM is about to be sold.
- Cathay Pacific has ordered more freighters but these are being delivered into the desert for storage. Cathay Pacific has also cancelled freighter operations to Manchester after many years and restructured its freighter operations.

By contrast the only airlines currently increasing their freighter fleets are the four Middle East carriers, Emirates, Etihad, Qatar Airways and Saudia Airways Cargo. In Asia Korean Air still operate and extensive freighter fleet but it has no operations into the UK.

In conclusion dedicated freighter operations are not finished but trade flows coupled with strong demand need to be in place to make such operations viable in the next few years.

4.2.3 Cargo Opportunities

Although the current climate for cargo operations is not positive especially for "all cargo operations" there are still cargo airlines who successfully manage niche opportunities.

CAL of Israel is one example of a profitable cargo only airline. UN and other relief charity organisations could use Manston as a centre for their operations. The UK is the second largest contributor in the world to disaster relief flights. A flexible low cost operation is required by the major relief organisations.

The slot position at Stansted is tighter than it was under previous ownership as the success of Ryanair and Easy Jet is beginning to put pressure on slots at Stansted. Manston could be a south east alternative to "cargo only operations" out of Stansted.

Perishable and Equine freighter charters have been operated successfully in the past and with a strong marketing effort is possible that these activities could be restarted as there was a proven track record of fast and efficient operations of these two specialised activities.

In addition the produce charters activity could be augment by industry investment if packaging and distribution on airport activity.

TAG Farnborough,

Recently voted International FBO of the Year by readers of Aviation International News magazine for the sixth consecutive time,

Invested more than £100 million (US$160.7 million) over the last 10 years to improve the airport's facilities and infrastructure.

The airport now features an award-winning main terminal, control tower, on-site radar and two three-bay hangars, providing over 240,000ft2 of hangarage space, and further planned developments include re-designing one of the airport's departure lounges, with the introduction of a bar and new seating areas.

www.farnboroughairport.co.uk/

4.3 General Aviation (GA) /Corporate

General Aviation is defined according by UK CAA to encompass aircraft ranging from micro-lights and amateur-built aircraft, through balloons, airships and gliders, to piston twins and single-engine turbine aeroplanes up to 5700kg Max Take-Off Mass (MTOM), and single-pilot helicopters up to 3175kg (MTOM).

GA provides significant economic benefits for the UK of around £1.4 billion per annum and has a large direct and indirect employment base. The sector delivers vital services, including search and rescue, mail delivery, life-saving (organ) transport, law enforcement, aerial survey and environmental protection flights, as well as underpinning the training of future pilots, ground-based aircraft engineers and technicians.

Business and general aviation connects many UK and international destinations that do not have, and are unlikely to develop, scheduled air services or other direct transport links. GA aerodromes can also complement commercial air transport and provide increased connectivity at important hubs such as London. These links are particularly important for

local businesses. According to a recent study ninety-six per cent of city pairs served by business aviation in Europe have no scheduled air connection.[1]

The UK Government is keen that, while recognising that at congested airports this may not be always be appropriate, it encourages airport operators to ensure that GA aircraft are able to continue to enjoy equitable access to their airports.

There is evidence however that GA activity is declining and that this is not just a result of economic recession. Excessive regulation, increasing costs and taxation are all perceived to be contributing factors.

The number of annual private pilot's licence applications has fallen dramatically from 4500 in 1991 to around 2500 in 2012. There have also been recent declines in the number of hours flown by fixed-wing light aircraft: estimates[2] suggest 7% fewer hours flown in 2012 than 2003.

Overall revenue generated from GA is limited in scope and tends not to factor as a major contributor to airport economic activity. The range of competitor airports for Manston

[1] The Role of Business Aviation in the European Economy, Oxford Economics, October 2012

[2] DfT GA Challenge Panel Interim Report – January 2014

Business Aviation

London Biggin Hill Airport is just 12 miles from Canary Wharf and 15 from Central London, and it has three full service FBO's to cater for all the different wants and needs of the business aviation user.

- *Around sixty based business jets ranging from small four seat citations to ultra long range Gulfstream, Global, and Falcon jets*
- *Convenient opening hours.*
- *Maintenance and hangarage facilities for most types of business jet.*
- *The Airport is a Port of Entry with full border control facilities during all opening hours.*
- *No runway slots required.*
- *Very user friendly airport.*
- *Close to the centre of London and in the heart of the South East of England.*

where serious high yielding corporate aviation activity takes place include Lydd, Luton, Biggin Hill and Farnborough. In several instances there are significant investments by Fixed Based Operators present at these airports.

On balance therefore the likelihood that the continuation of GA at Manston will be a reason to prompt the retention of the airport is slim. However there is no doubt that GA is a valuable contributor to airport activity for training and recreational purposes and it would seem likely that the airport would be used by GA when open.

5 PRESENT STATE OF THE AIRPORT

At the time of closure to aircraft movements the airport was operating in a safe and secure manner. The state of the airport's operating surfaces can therefore be considered as being adequate. However essential aeronautical equipment has been disposed of leaving the airport inoperative. As with any facility that becomes unused deterioration will now occur as routine maintenance and heating is withdrawn. The airport was briefly visited on the 2nd July and the following opinions formed:-

5.1 Main Runway

The main runway is 2752m x 61m on a heading of 28 / 10. Originally constructed during WW2 it replaced the grass runways that had served the RFC, and then the RAF, since 1915. It has seen several re-surfacing operations, concluding with an asphalt overlay in 1999 (undertaken by the PSA) and then a slurry-seal type coat in 2013 (as advised by the current owners). The runway is therefore in pristine condition and should require only minor maintenance during the next 5 to 10 years.

Terminal Building – The passenger terminal was opened by The Duchess of York in 1989 with flights then operating to Yugoslavia and Spain. The building is set out on a single level with all the usual processes (check-in / baggage reclaim etc) well arranged. Some areas may require re-decoration but the overall impression is that the building is well maintained and more than adequate for the processing of up to, say, 750,000 passengers per annum. The running cost of the building may be high as a building of the late 1980's will not have the same thermal insulation values as a modern structure. Some elements of the building (e.g. electrical installations / flat roof covering) may need renewal in the short term; this opinion is based upon the 25 year design life often used at that time.

5.2 Hangers

There are a number of aircraft hangers, and similar small sheds, on the site. These were not inspected in detail but we were advised that they are all generally water-tight and fit for purpose. It is also understood that these hanger buildings do not contain any specialist aircraft maintenance or servicing equipment.

5.3 Cargo Building

The Cargo building, including a cold store and pallet conveyor, has not been extensively used as the majority of cargo handling was undertaken on the apron, direct from the aircraft to the lorry. There was one water leak noted, possibly from a blocked roof gutter, which will require attention. The cold store and pallet conveyor has had very little, if any, use and so is in very good condition.

5.4 Equine Facility

The equine building was not inspected but we were advised that it is only a few years old and had only handled about 10 horses since it was opened. It is therefore reasonable to assume this facility is also sound.

5.5 Aircraft Parking aprons and taxiways

There are 2 aprons, one for passenger and one for cargo aircraft. Both are formed of concrete and both are in good condition. The passenger aircraft stands nearest to the terminal building are on a significant slope, but remote, level, stands are available close by.

5.6 Car and Vehicle parking

There is ample car and vehicle parking adjacent to the terminal. Local information is that the car parks have never been congested. Some minor repairs are required to the car park surface and the general area could benefit from attention to the soft and hard landscaping.

5.7 Air Traffic Control Tower and Fire Fighting and Rescue centre

These buildings were not inspected but from a distant view they both appeared sound.

To conclude the facilities of the airport are in a generally good condition and are at least equal, or better, than some other regional airports in the UK. The airport equipment was also seen to be in a generally reasonable condition but we understand that items are now being offered for sale.

AIRPORT PLANNING

6.1 The Infratil Masterplan

Kent Airport Limited do not appear to have prepared an airport masterplan but refer to the Kent International Airport, Manston – Master Plan November 2009 – developed by their predecessors, Infratil Airports Europe Ltd.

The following comments refer to the global zoning strategy of the airport estate as illustrated in that plan, the illustrations of which are contained in Pages 58 to 60 of the relevant document. :

(a) The overall site zoning policy does not seek to optimise the operational land footprint in order to maximise other commercial activities within the current airport boundaries.

(b) The Master Plan advocates future investment in separate Cargo and Passenger aprons, which may not present the optimal solution in terms of capital and life time costs, operational flexibility as well as consolidated servicing and staffing requirements.

(c) The proposed Passenger Terminal development, on the eastern and western flanks of the passenger apron is likely to frustrate the potential future expansion of the apron pavement and limit its flexibility to accommodate a broader potential future fleet mix.

(d) The proposed alternate location of fuel storage facilities immediate to the Threshold 28 runway strip safeguarding area places the hazardous installation in close proximity to the position of greatest accidental risk at the airport.

(e) The Master Plan has failed to fully capitalize on the potential ground transportation resources and links in the immediate vicinity of the airport boundaries

(f) The Master Plan did not explore additional land acquisition opportunities within the context of related commercial activities.

6.2 Planning Options

In view of the above it is recommended that the airport is subject to a rigorous capacity and operational zoning strategy review. Such a study shall address the following key issues:

(a) Current and potential future ground transportation modal interface conditions. Stimulation of commercial opportunities through enhanced transportation links

(b) Definition of the optimal sustainable operational airfield footprint envelope commensurate with the potential unconstrained capacity of the single existing runway and the projected aircraft mix. (Saturation Capacity Plan)

The definition of a high level Airport Saturation Plan will provide a strategic framework tool and decision matrix which can then be used to test and validate the following granular development aspects:

a) Identification of operational land use requirements specific to target market sectors and their technical requirements reconciled with the demand forecast targets.

b) Definition of the footprint(s) of residual land resources within the current airfield boundaries available for other aviation-related and general commercial activities.

c) Illustration of short, intermediate and long term enabling tactical development initiatives to release maximum commercial land area in line with (d) above.

d) Delivery of environmentally sensitive and sustainable solutions using leading edge and emerging technologies.

e) Preparation of CAPEX aligned with any investment requirements to achieve those targets identified under headings (c) to (f) as outlined above.

Appendix – A to this report provides a range of generic illustrations consistent with the advocated planning deliverables.

At this stage of the study such illustrations are not aligned with any specific operational or commercial targets or business strategies. They are, however, representative of a holistic approach to Airport Planning with a view to optimising the use and value of the existing available land and technical resources of the airport estate.

7 INDEX OF DOCUMENTS PROVIDED BY THANET DISTRICT COUNCIL AND KENT INTERNATIONAL AIRPORT LIMITED

TITLE	SUBJECT	PROVIDED BY
Project Brief –	Viability of Manston Airport, June 2014	Thanet District Council
No document Name	Kent International Briefing Notes	2 July 2014
Kent International Airport and Kent facilities Limited	Management Accounts Financial year ending 31 March 2014	Thanet District Council
Manston Market Assessment	Market evaluation prepared by DF Aviation Consulting Limited	Thanet District Council
High Level Air Cargo Overview - Freighters	ILS Solutions High Level Market Overview	Thanet District Council
Kent International Airport, Manston – Master Plan	Infratil Airports Europe Ltd. Masterplan November 2009 –	
Thanet Economic and Employment Assessment December 2012	County demographics	Thanet District Council
Thanet Local Development Framework Employment Land Review 2010	Development Planning	Thanet District Council
Thanet Employment Topic Paper May 2013		Thanet District Council

In addition to these documents, FCL accessed the Infratil submission to the Davies Commission.

8 SIGNIFICANT EXTRACTS FROM THANET REPORTS:

Thanet Economic and Employment Assessment – Report 2012

Thanet benefits from a regionally significant airport and a major cross channel port, both of which have identified growth potential. If Manston Airport can achieve its ambitious growth plans, this could result in 2,000 additional jobs and up to 420 additional induced jobs as a result of the impact on the wider supply chain. We must however be cautious in interpreting these figures, as despite some promising developments, the airport faces a number of challenges.

The majority of manufacturing sectors have continued to decline during this time, as has agriculture forestry and fishing.

It is however clear that whilst across the UK around 5 per cent of businesses have the potential to export, in Thanet this figure is half (2.5%). This can be partly explained by foreign ownership figures which are lower than the UK average although given the presence of Ramsgate Port and Manston Airport provided easy access to overseas markets we might expect this figure to be higher.

If Manston Airport can achieve its ambitious growth plans, this could result in 2,000 additional jobs and up to 420 additional induced jobs as a result of the impact on the wider supply chain.

Employment Land Review 2010

In line with Government guidance, the Council wishes to ensure that its strategy, land allocations and policies provide for choice, flexibility and competition, and are sustainable and based upon a realistic assessment of the needs of local business and market reality. Thanet's economy is one the key themes in the Council's Corporate Plan, with the main priorities to attract inward investment and support indigenous companies, attracting more jobs to the area and helping those who are unemployed. **Note: This policy may be at variance with a priority to attract commerce to the airport.**

There are very few major employers in Thanet, with over 65% of businesses employing between 1-4 people. Out of a total of 4,000 firms, only 100 firms employ more than 100 people. (Figure 10). The largest companies in the district include Thorley Taverns, Cummins, Piper Windows, Thanet Earth and Tescos.

Government and European Funding

2.39 Thanet benefits from having Assisted Area Status. Through the Grants for Business Investment (GBI) scheme the aim is to assist businesses to increase productivity by funding capital investment in equipment and technology. It is for businesses looking to expand, modernise, rationalise, diversify and increase productivity in order to maintain or establish sustainable growth and provide skilled jobs. Thanet is a Tier 2 area where any size of business can access the grant, with a possible 15% more funding available than a Tier 3 area. It is important that the District maximises the potential of its Area Assisted Status in order to promote inward investment and support the growth of indigenous companies to achieve economic development. 2.40 Under the

European Structural Fund Thanet has Objective 2 Status which enables the district to benefit from the European Competitiveness Grants through a bidding process and qualifies for Interreg Funding which is dependent on having partners in two other European Regions outside of the UK.

Regional Spatial Strategy: South East Plan *Policy EKA5: The Gateway Role* recognises that the growth of gateways should be supported as catalysts for economic development. Kent International Airport should become a catalyst for economic development and growth as a major passenger terminal, and the large land reserves within and adjacent to this should remain available for ancillary and related activity.

Thanet District Council's Corporate Plan; 3.47 **An integrated transport hub:**
- work with KIA to agree a masterplan for the airport
- develop a sustainable business plan to enable the Port of Ramsgate to be successful
- Work with the transport authorities to develop a plan to improve public transport links in Thanet
- work with partners to maximise benefits of the high speed rail link

Policies EC2, EC4 and EC5 relate to the Kent International Airport (KIA) at Manston, and the surrounding land. The policies support the growth of KIA which has significant potential to encourage the economic regeneration of Thanet, and East Kent as a whole. Policy EC4 relates to the land north of the runway (the Northern Grass), and is restricted for airside development purposes; for activities that have an operational requirement for direct access to aircraft and therefore dependent on a location immediately adjacent to the runway or capable of direct access to it via taxiways. This allocation, whilst restricted, does provide additional employment land for the district, as well as supporting the development of the airport. Planning permission was granted for a large hanger for aircraft painting, but this has now expired, and a freight building for a Border Inspection Point to facilitate the movement of fresh produce has been built. The only other airside development currently present has been established at the airport for a number of years.

Supporting the Growth of Kent International Airport (KIA)
The future growth of the airport to one of regional significance is supported as a preferred option for providing economic prosperity in the District, which continues the view of the existing Local Plan. One of the currently preferred options supports the recommendations set out in the Draft Airport Masterplan. These recommendations include the release of the Northern Land, which is currently protected for airside development, for general employment purposes.

Thanet Employment Topic Paper May 2013
Facilitating further growth at the Airport and Ramsgate Port could unlock further opportunities. Current export levels from Thanet are low and there could be growth potential in this area given the close proximity of Thanet to Europe coupled with transport links. There is also the potential for growth given knock on effects from the airport in terms of the supply chain. Facilitating further growth at the Airport and Ramsgate Port could unlock further opportunities. Current export levels from Thanet are low and there could be growth potential in this area given the close proximity of Thanet to Europe coupled with transport links. There is also the potential for growth given knock on effects from the airport in terms of the supply chain.

9 GLOSSARY OF TERMS

TERM	EXPLANATION	TERM	EXPLANATION
AODB	Airport Operational Data Base	PSA	Present State Analysis
CAPEX	Capital Expenditure	PSR	Present State Report
CCTV	Closed Circuit Television	"Quick Fix"	A period of concentrated effort to rectify minor deficiencies
CUTE	Common User Terminal Equipment		
FCL	Falcon Consultancy Limited	RFFS	The Fire and Rescue Service
FBO	Fixed Base Operation (Corporate Aviation)	SLA	Service Level Agreements (typically between MSE and Customs/Passport Control)
FIDIC	Fédération Internationale Des Ingénieurs-Conseils		
FIDS	Flight Information Display Systems	VOR/DME	Aeronautical Navigation Equipment (*Visual Omni Directional Range & Distance Measuring Equipment*)
HR	Human Resources		
ILS	Aeronautical Navigation Equipment *(Instrument Landing System*)		
MRO	Aircraft Maintenance repair and Overhaul Base		
MARS	Multiple Aircraft Ramp System		
OLS	Obstacle Limitation Surface		
OPEX	Operating Expenditure		
AIRPORT CODES			
AMS	Amsterdam Airport Schiphol	**MSE**	**Kent International Airport**
BOH	Bournemouth	SEN	Southend Airport
JER	Jersey	SOU	Southampton
LCY	London City	STN	London Stansted
LGW	London Gatwick		
LHR	London Heathrow		

10 APPENDIX A – CAPACITY PLAN

Save Manson Airport association comments on the Avia Report, with Reference to

Stone Hill Park Limited - TR020002/TR020002-003137 – REP2-025 :
Deadline 1 Submisison - Written summary of oral submissions put at Examination events in January 2019

6 Need

6.1 …. "The Azimuth forecasts are directly refuted on behalf of SHP by York Aviation and Altitude Aviation and (independently) in the reports prepared for Thanet District Council by AviaSolutions." [1,3]

Stonehill Park state that AviaSolutions concluded 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*" (paragraph 2.5) [4].

Thus Stone Hill Park appear to be claiming that the AviaSolutions report shows that Manson can not be a successful airport.
This is not so : The AviaSolutions report start from a financial assumption that only £50 million will be invested in the airport infrastructure. It is no surprise, based on this, that they then conclude that, with this funding, Manston could not possibly be viable. [1] This "conclusion" follows directly from their initial assumption.

However RiverOak clearly believe that Manston needs £300 million invested in infrastructure to be successful. [1,3]

Did AviaSolutions know this ? YES !
In their Appendix A p49, AviaSolutions quote RiverOak : [3]

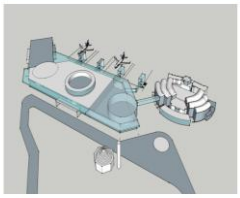
"The total investment that RiverOak would seek to make is in the region of £300m over the course of a 12 year period."

So why, in this '"FINAL" version of their report for Thanet District Council [2,3], did they choose to ignore this vital fact of RiverOak's intended investment ?

What conclusion would they have reached if they had started from the RiverOak figure of £300 million invested in the Manston Airport infrastructure ? [1]

References :

[1] 1.0 - SMAa - Comments on the Avia Report - Deadline 3.pdf
[2] 1.1 - 2016-08-04 - Avia - Brief-Viability-of-Manston-Airport.pdf
[3] 1.2 - 2016-10-04 - Avia - Final-Report-for-TDC-Manston-Airport-Viability-Oct2017_2.pdf
[4] REP3-025 : TR020002-003137-Stonehill Park Limited - Written Representation.pdf



FALCON CONSULTANCY LIMITED

THANET DISTRICT COUNCIL

EXPERT OPINION ON THE PROSPECTS FOR THE VIABLE DEVELOPMENT OF MANSTON AIRPORT

STAGE 1 – INITIAL EVALUATION AND VALIDATION OF THE AIRPORT OWNER'S ASSESSMENT

16 JULY 2014

Thanet District Council

Consultant Brief

Viability of Manston Airport
June 2016

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Background

Thanet District Council is seeking independent advice on whether Manston Airport has a viable future as an operational airport.

The airport closed in May 2014. The airport site is currently owned by Stone Hill Park, although it is understood that there are a number of other landowners, including the Ministry of Defence.

Prior to its closure the airport was running mainly freight services. Figures from 2011 indicate that it handled 37,000 passengers and 27,000 tonnes of freight per year. Dutch airline KLM were, up until the announcement regarding its potential closure, running a daily shuttle service to Schipol Airport, Amsterdam. The current terminal is capable of handling up to 700,000 passengers a year, and has an existing runway capable of handling large aircraft.

The current owners have recently submitted a planning application for mixed-use development on the site, comprising 2,500 dwellings, employment floorspace to support the creation of up to 4,000 jobs, and a range of leisure and sports activities.

Discussions are also underway between RiverOak Investments and the Planning Inspectorate (PINS), regarding a possible application to PINS for a Development Consent Order (DCO) for the upgrade and reopening of Manston Airport primarily as a cargo airport, with some passenger services, with a capacity of at least 12,000 air cargo movements per year.

The Council is currently preparing a Local Plan for the district for the period until 2031.

The Council needs to understand whether an airport would be a viable operation for the site and whether there would be a reasonable prospect of that occurring within the period of the Local Plan (i.e. to 2031), so that it can fully consider the options for the site. The Council requires robust evidence to support the new Local Plan; and to inform the Council's position in relation to the planning application and the proposed Development Consent Order.

Planning Policy Context

Current Thanet Local Plan 2006

The site is allocated in the 2006 Local Plan for use as an airport and ancillary functions. 'Saved' policies from the Thanet Local Plan 2006 support development that would expand and diversify the airport operations, and safeguard particular land for airport related uses.

Aircraft noise policies also restrict particular development within specific noise contours of the airport.

Emerging New Local Plan (to 2031)

The Preferred Option Local Plan was published in January 2015. Draft Policy SP05 states that:

> The site of Manston Airport and the adjoining area will be designated as an "Opportunity Area" for the purposes of preparing the Manston Airport Area Action Plan Development Plan Document. The Manston Airport AAP will explore through the development plan process the future development options for the site of the airport and the adjoining area. A consideration of the AAP should be the retention, development and expansion of the airport and aviation operations where supported by a feasibility study and a viable Business Plan, while exploring alternative options for the future development of the area for mixed-use development.

While the Manston Airport Area Action Plan is being prepared and until adopted by the Council as a development plan for the Manston Airport area, the following policy for the Manston Airport will apply.

Proposals at the airport, that would support the development, expansion and diversification of Manston Airport, will be permitted subject to all of the following requirements.

1) That there be demonstrable compliance by the applicants with the terms of the current agreement under section 106 of the Town and Country Planning Act 1990 as amended or subsequent equivalent legislation.

2) That new built development is to be designed to minimise visual impact on the open landscape of the central island. Particular attention must be given to roofscape for the purposes of minimising the mass of the buildings at the skyline when viewed from the south.

3) The provision of an appropriate landscaping scheme, to be designed and implemented as an integral part of the development.

4) That any application for development for the purpose of increasing aircraft movements in the air or on the ground, auxiliary power or engine testing, be supported by an assessment of cumulative noise impact and the effectiveness of mitigation measures to be implemented in order to minimise pollution and disturbance. The acceptability of proposals will be judged in relation to any identified and cumulative noise impact, the effectiveness of mitigation and the social and economic benefits of the proposals.

5) The provision of an air quality assessment in compliance with the Air Quality Management Plan to demonstrate that the development will not lead to a harmful deterioration in air quality. Permission will not be given for development that would result in national air quality objectives being exceeded.

6) That any new development which would generate significant surface traffic must meet requirements for surface travel demand.

7) That it must be demonstrated both that new development cannot contaminate groundwater sources and that appropriate mitigation measures will be incorporated in the development to prevent contamination.

8) There will be no significant harm to Thanet's SSSI/SAC/SPA/Ramsar sites. A Habitats Regulations Assessment will be required.

However, in order to provide a clear direction for the development of future Local Plan policy, the Council is seeking the advice set out in this Brief.

Airport Section 106 Agreement

There is a current Section 106 Agreement relating to the operation of the airport, which sets out particular restrictions and requirements.

The agreement was drawn up in September 2000 and deals with protection to local people in terms of the number and direction of aircraft movements, noise, emissions, traffic and avoidance of residential areas etc. Part of this is the requirement to develop a nighttime flying policy.

Manston Airport did not have an official public safety zone.

The Task

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.

This should be based on a clear understanding of the nature of international air travel and transport and the way in which it is likely to develop over the next 15-20 years; the economics of airport operations; and the national and international context for the Manston Airport site.

The work should conclude whether or not it is possible to run a viable and economically sustainable airport operation from Manston, assessing the work that has been carried out previously, and carrying out an independent assessment of potential options for a viable airport.

The previous work to be considered should include:

- The findings of the Davis Airports Commission, as applicable;
- House of Commons Transport Select Committee report on smaller airports;
- Documents relating to the process of seeking an indemnity partner for the Airport;
- Previous Council decisions in relation to a potential CPO partnership with RiverOak;
- The previous Falcon Consulting report;
- Conclusions of the “soft market” testing undertaken by the Council in January 2016;
- Representations made to the draft Local plan in respect of Manston Airport;
- The Existing Use statement submitted by GVA Planning as part of the planning application to redevelop the site as a mixed-use development, and any other relevant information submitted as part of that application;
- Any relevant publicly available information in relation to a potential Development Control Order for the site; and
- Any other material that the Consultants consider is relevant to the assessment.

Set out below are matters which the Council considers this work should cover. However, we require expert advice from the consultant in order to develop a robust methodology for this work.

Work should specifically cover:

- The national and international aviation market context for, and the economic potential for, a range of Airport activities at the site, in particular freight and passenger operations, and including short haul aircraft and private aviation
- An assessment of all available markets for ancillary airport operations which could take place at the airport
- An assessment of the suitability of the location of the Airport in relation to the above factors

Work should consider the need for:

- Demand/forecast modeling
- 25 year cash flow of income against costs, under different potential scenarios – using best, mid and worst assumptions
- Other relevant operational/financial information

Work should also take account of:

- Current Section 106 agreement

- Relevant plans and strategies
- Governments' current and emerging position regarding aviation
- The potential for a new railway station being built in close proximity to the airport within the next 5-7 years – likely to reduce journey times to London to an hour
- Infrastructure investment required
- Consideration of history of operations at the airport

If it is concluded that there is potential for a viable and economically sustainable airport to operate from Manston, the work should also include commentary on the scale of the viable operation, including activity levels, employment levels, and likely land requirements.

Specific Deliverables

The finished work will take the form of a single report, setting out the methodology and findings of the study, and a clear recommendation on which the Council can place reliance for future planning and other decisions.

The report should clearly set out the methodology, assumptions and information used to draw conclusions, and explain how the conclusions were drawn.

The work should assess all relevant factors including the possible role of enabling development (of a scale and type that would be acceptable in planning terms, and could itself be delivered within the period of the Local Plan), if it would assist the establishment of a viable Airport operation. The precise extent of this element of work would be discussed at the inception meeting and kept under review with Thanet DC depending on initial findings.

The report should include a non-technical summary. The consultant should also make clear to the Council any uncertainty regarding conclusions or potential risks and shortfalls associated with the work.

It is expected that there will be continuous dialogue between the consultant and Council throughout the work. However, the commission should include provision for the following specific meetings with Officers at the Council Offices, Margate:

- Inception meeting
- Progress meeting
- Presentation of draft report

There may also be a requirement to present the findings to senior management and Members at the Council.

<u>The report must be capable of robust defence by the Consultants at any subsequent Planning Appeal or Local Plan Examination, or through the Development Consent Order process.</u>

The quotation should include hourly/daily rates for members of the Project Team that would be involved in the or in giving evidence at the Local Plan Examination or other hearings.

Other requirements

Timetable

The Council has a very tight deadline for the completion of the work, and proposes the following timescales.

- Inception meeting w/c 4th July 2016.
- Completion of work within 6 weeks of inception meeting.

We would welcome proposals which are able to carry work out in a shorter timescale than set out above.

Quotation Process

Quotations are invited for the work by **5pm on Thursday 23rd June 2016.** Quotations should be submitted by e-mail to local.plans@thanet.gov.uk.

It is requested that the quote is accompanied by:

- A timetable detailing project milestones and how the timetable will be met. If it is possible to shorten the timescales, or the timetable cannot be met, a proposed alternative timetable should be presented.

- An explanation of proposed methodology including sources of evidence, data and information that will be obtained and assessed in order to carry out the work.

- Details of who will be carrying out the work and details of their qualifications and experience, including references.

- A breakdown of costs into individual elements, including if relevant any optional extras. This should include a potential range of costs which may result from different timetabling options for the work.

- Confirmation that you will be able to agree to the Council's consultancy agreement, which includes the Council's standard terms and conditions (Appendix 2), or setting out any proposed amendments which you would require.

- Details of any previous experience or work carried out by the consultant in relation to Manston Airport, including the disclosure of any potential conflict of interest.

Experience and competence

The consultants will need to demonstrate that they can effectively manage this work and have the following experience and capabilities:

- In depth knowledge and understanding of the aviation industry
- Proven track record of successfully undertaking airport viability work
- Proven knowledge and experience of working with the necessary stakeholders needed to deliver this work

Selection Criteria

The following matters will be considered in evaluating submissions and selecting consultants:

- Technical merit of the proposals
- Proven experience and competence
- Staff and other resources
- Management and communication
- Ability to meet the tight timetable
- Value for money

If the Consultants are aware of any other significant interest they hold in relation to Manston Airport or Thanet more generally, this should be declared as part of the quotation.

Annex 1 – Documents

General background documents available to consultant

S106 Agreement

Thanet Local Plan 2006
https://www.thanet.gov.uk/your-services/planning-policy/thanets-current-planning-policy/thanet-local-plan-2006/

Experian Economic and Employment Assessment 2012
http://thanet.gov.uk/your-services/planning-policy/evidence-base/economy/

Thanet's Local Plan Preferred Option Consultation 2015
https://consult.thanet.gov.uk/consult.ti/TPODLP/consultationHome

Davies Airport Commission report
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/440316/airports-commission-final-report.pdf

House of Commons Transport Select Committee report on smaller airports
http://www.publications.parliament.uk/pa/cm201415/cmselect/cmtran/713/713.pdf

Kent International Airport Night time flying policy and supporting documents

Parsons Brinckerhoff Night time flying Independent Assessment

Annex 2 – Terms and conditions

1. Definitions
2. Duration
3. The Consultant's obligations
4. Insurance
5. Payment
6. Conflict of Interest
7. Confidential information
8. Conditions
9. Termination
10. Assignment
11. General

This Agreement is dated 20

Between:

1 THANET DISTRICT COUNCIL of P.O.Box 9 Cecil Street Margate Kent CT9 1XZ ('the Council'); and
2 [name and address/registered office of Consultant] ('the Consultant')

Background

(A) The Council wishes to engage the Consultant to provide the Services described in Schedule 1 hereto. The Consultant offers consultancy services in relation to such services and has considerable skill, knowledge and experience in this field.
(B) In reliance upon that skill, knowledge and experience the Council wishes to engage the Consultant to provide the Services and the Consultant has agreed to accept the engagement on the terms and conditions set out below.

It is agreed as follows:

1. Definitions

1.1 In this Agreement the following expressions shall have the following meanings unless the context requires otherwise:

The Commencement Date, the date specified in Schedule 1.

Confidential Information means all information whatsoever relating to the business of the Council carried on from time to time.

Documents means all records, reports, documents and other materials whatsoever originated in any medium by the Council or by the Consultant on behalf of the Council pursuant to this Agreement and any other property of the Council, including all submitted designs, concepts, graphic devices, logos, page/screen layouts, borders and backgrounds, navigational devices produced in the course of the supply of the Services.

Fixed Period means the period specified in Schedule 1 commencing on and from the Commencement Date.

Services means the services to be provided by the Consultant more particularly described in Schedule 1 and in the Detailed Specification of Work contained or referred to in said Schedule.

Third Party Intellectual Property Rights means all intellectual property rights owned by a third party including without limitation patents, trade marks or trade names, service marks, designs, design rights, know-how and copyrights (in each case whether registered or not).

1.2 Headings in this Agreement are only for convenience and shall not affect its construction.

1.3 Where appropriate words denoting a singular shall include the plural and vice versa.

2. Duration

2.1 The Consultant agrees to provide the Services to the Council from the Commencement Date for the Fixed Period subject always to the provisions for earlier termination contained elsewhere in this Agreement.

3. The Consultant's Obligations

3.1 The Consultant will provide the Services with reasonable skill and care to the reasonable satisfaction of the Council and in accordance with the terms of this Agreement (including Special Conditions (if any) set out in Schedule 1). The Consultant will at all times devote such time, attention and abilities to the Council's business as may be necessary for the proper provision of the Services.

3.2 The Consultant will at all times act in the best interests of the Council and will in all aspects diligently and faithfully observe all reasonable directions of the Council. The Consultant will provide the Services and take

all reasonable steps to comply with any timetable or other targets for progress or delivery or completion of the Services agreed in writing between the parties.

3.3 The Consultant shall keep detailed records of all work undertaken by it in relation to the provision of the Services to the Council and at the Council's request shall make such records available for inspection by the Council or its agent

3.4 The Council will rely on the Consultant's skill expertise and experience in the provision of the Services and also upon the accuracy of all representations made and advice given by the Consultant in connection with the Services provided hereunder and the Consultant hereby agrees to indemnify and keep indemnified the Council against all loss damage costs professional and other expenses whatsoever incurred by the Council whether direct or consequential (including but without limitation any economic loss or other loss turnover profits business or goodwill) as a result of such reliance.

3.5 The Consultant accepts liability for death or personal injury or damage to property howsoever resulting from the Consultant's negligence where such negligence occurs in the course of providing the Services to the Council hereunder or for any purpose related to this Agreement and the Consultant hereby agrees to indemnify and keep indemnified the Council against any and all liability loss damage costs and expense of whatsoever nature incurred or suffered by the Council or by any third party arising from any and all claims or proceedings which seek to recover loss and damage to property caused by any act or omission of the Consultant, its employees, agents or sub-contractors.

3.6 The Consultant warrants that:

3.6.1 The Consultant has full power to enter into this Agreement.

3.6.2 There is no legal bar which prevents the Consultant from performing the Services.

3.6.3 So far as the Consultant is aware no third party intends to prevent or hinder the Consultant from performing the Services.

3.6.4 All work produced by the Consultant in the provision of the Services will be original and will not contain any obscene or defamatory matter or contravene any statute and that the performance of the Services will not in any way be a violation or infringement of any Third Party Intellectual Property Rights or any existing agreement with a third party provided that this warranty shall not extend to use of specific materials required by the Council such as, but not limited to, texts, logos, images, sounds and mechanisms underlying the provision of the Services, where such materials have been provided by the Council and used in accordance with the Council's instructions ("Council Materials") and provided further that the Consultant will notify the Council in writing if the Consultant believes that use of any Council Materials is likely to constitute such a violation or infringement.

3.6.5 If any part of the Services is performed negligently or in breach of the provisions of this Agreement then, at the reasonable request of the Council, the Consultant will re-perform the relevant part of the Services at no cost to the Council

3.7 Where the Consultant considers it necessary to use the services of a third party for whatever reason the Consultant shall (except in matters of a minor and obvious nature) first obtain the consent in writing of the Council.

3.8 The Consultant agrees to make available to the Chief Executive (or such person(s) as the Chief Executive may delegate) of the Council such reasonable facilities as the Chief Executive may require in order that the Chief Executive may evaluate and assess the progress of the Services.

3.9 The Consultant acknowledges that material failure to meet the requirements of any specification set out in Schedule 1 after having been given a reasonable opportunity to correct, will entitle the Council to reject such part of the Services and, at the Council's discretion, to terminate this Agreement, in which case the Council shall not be liable to pay the fee provided for in clause 4 provided that the Council shall be required to pay a reasonable amount for the work or the services performed. Such reasonable amount to be determined primarily on the basis of functionality and utility of Services provided at that time. Termination shall be without prejudice to the Council's accrued rights and the Council shall have no liability whatsoever to the Consultant arising out of such termination.

3.10 The Consultant hereby waives its moral rights to be identified as the author of any item provided as part of the Services and undertakes that it will not assert any moral right in respect of any such work and will procure that no other party asserts such right.

3.11 Where a date for delivery is set out in Schedule 1 for any work to be provided as part of the Services, that work must be delivered to the Council by the specified date and time shall be of the essence in relation to such delivery. Failure to comply with the delivery date or any later date as shall be agreed by the Council will entitle the Council to terminate the Agreement
immediately without prejudice to its accrued rights and to recover any sum already paid to the Consultant provided that the Council shall have no claim under this clause where such delay is beyond the reasonable control of either party. In the event of termination of the Agreement under this clause 3.11, the Consultant shall not be entitled to payment of the fee specified in clause 5 and shall have no claim whatsoever against the Council arising out of this contract or its termination.

3.12 Immediately on commencing work at the Location specified in Schedule 1 (if any) or any other agreed location, the Consultant shall acquaint itself with the specific rules governing the activities and conduct of people authorised to enter such premises (eg. security, safety, etc.) Without prejudice to the generality of the foregoing the Council shall use reasonable endeavours to inform the Consultant of such rules in cases where a Location is owned and/or managed by the Council

4. Insurance

4.1 The Consultant shall maintain professional indemnity insurance with insurers authorised to trade in the European Union and having a place of business in the UK, with a limit of indemnity not less than £2,000,000 in respect of each and every claim or series of claims arising out of one originating cause, provided that such insurance continues to be offered by such insurers on commercially reasonable terms to consultants of a similar size and financial standing to the Consultant. The insurance referred to in this sub-clause shall be maintained from the date of this Agreement and for a period expiring at least 6 years after the earlier of the termination of this Agreement and the completion of the Services undertaken by the Consultant.

4.2 Throughout the duration of this Agreement the Consultant shall maintain public liability insurance with an insurance company approved by the Council with a limit of indemnity not less than £5,000,000 and employer's liability insurance with a limit of indemnity not less than £10,000,000

4.3 When reasonably requested by the Council, the Consultant shall produce an insurance verification document confirming that the insurances aforesaid are being maintained.

5. Payment

5.1 In consideration of the provision of the Services provided to the Council by the Consultant pursuant to this Agreement the Council will pay the Consultant the Fee referred to in Schedule 1.

5.2 Every 30 days from the Commencement Date detailed in Schedule 1 the Consultant will send to the Council all completed weekly work sheets that have been checked and approved by the Council, together with the Consultant's invoice bearing the official order number provided by the Council;

5.3 The Council is obligated to make the payments promptly for all days properly worked by the Consultant and approved by the Client on weekly work sheets referred to above and invoiced every 30 days in arrears by the Consultant. The Council will not be liable to pay for any days worked that have not been approved by the Client;

5.4 If an approved invoice is received, payment will then be made within 30 days via BACS.

5.5 The Council will take full responsibility for meeting the cost of any travel and accommodation expenses incurred as a result of the Consultant, at the express written request of the Council, performing his or her duties away from the specified Location detailed in schedule 1. The Consultant shall agree the amount of such expenses in writing with the Council who shall fully reimburse the Consultant directly all reasonable expenses as appropriate.

6. Conflict of Interest

6.1 The Consultant shall ensure that there is no conflict of interest as to be likely to prejudice his independence and objectivity in performing the Contract and undertakes that upon becoming aware of any such conflict of interest during the performance of the Contract (whether the conflict existed before the award of the Contract or arises during its performance) he shall immediately notify the Council in writing of the same, giving particulars of its nature and the circumstances in which it exists or arises and shall furnish such further information as the Council may reasonably require.

6.2 Where the Council is of the opinion that the conflict of interest notified to it under Clause 6.1 above is capable of being avoided or removed, the Council may require the Consultant to take such steps as will, in its opinion, avoid, or as the case may be, remove the conflict and:

6.2.1 if the Consultant fails to comply with the Council's requirements in this respect; or

6.2.2 if, in the opinion of the Council, compliance does not avoid or remove the conflict,

the Council may determine the Contract and recover from the Consultant the amount of any loss resulting from such determination.

6.3 Where the Council is of the opinion that the conflict of interest which existed at the time of the award of the Contract could have been discovered with the application by the Consultant of due diligence and ought to have been disclosed as required by the tender documents pertaining to it, the Council may determine the Contract immediately for breach of a fundamental condition and, without prejudice to any other rights, recover from the Consultant the amount of any loss resulting from such determination.

6.4 In the event that the Consultant enters into any sub-contract in connection with this contract it shall impose obligations on its sub-contractors in terms substantially similar to those imposed on it pursuant to the preceding sub-clauses and shall provide evidence of its compliance to the Council upon written request.

7. Confidential Information

7.1 The Consultant acknowledges that Confidential Information will be provided by the Council to the Consultant in relation to or in connection with this Agreement and the Services. The Consultant shall not disclose any Confidential Information to anyone other than the employees agents or representatives of the Council.

7.2 The obligations of clause 7.1 shall not apply to any information which:

7.2.1 was known or in the possession of the Consultant before it was provided to the Consultant by the Council;

7.2.2 is, or becomes, publicly available through no fault of the Consultant;

7.2.3 is provided to the Consultant without restriction on disclosure by a third party, who did not breach any confidentiality obligations by making such a disclosure; or

7.2.4 was developed by the Consultant (or on its behalf) who had no direct access to or use or knowledge of the Confidential Information supplied by the Council;

7.2.5 is required to be disclosed by order of a court of competent jurisdiction.

8. Conditions

8.1 Nothing in this Agreement shall be interpreted as meaning that the Consultant is an employee of the Council, and therefore shall not be entitled to any pension, bonus or other fringe benefits from the Council.

8.2 The Consultant agrees to work under this Agreement as a self employed person and is therefore excluded from the provisions of the Working Time Regulations including entitlement to paid holiday or leave from the Council.

8.3 Where the Consultant is a bona fide self-employed person he/she shall be solely responsible for making all his/her own returns and deductions with regard to tax and national insurance in respect of his/her remuneration hereunder and the Consultant agrees to indemnify the Council in respect of any and all claims that may be made by the relevant authorities against the Council in this regard. Where the Consultant is not a bone fide self-employed person, invoices must quote the Consultants NI number. In this instance NI and Income Tax at standard rate will be deducted by the Council before payment is made. Should the Consultant's personal tax liability be at a higher rate he/she will then be responsible for notifying the Inland Revenue accordingly.

9. Termination

9.1 Either party may terminate this Agreement forthwith by notice in writing if the other party is in breach of this Agreement and shall have failed to remedy the breach within (28) days of the receipt of a request in writing from the party not in breach to remedy the breach such request indicating that failure to remedy the breach may result in termination of this Agreement.

9.1.1 Without limitation the Council may by notice in writing immediately terminate this Agreement if:

9.1.2 the Consultant has a bankruptcy order made against him/her or has entered into any composition or arrangement (whether formal or informal) with his/her creditors

9.1.3 the Consultant shall be guilty of serious misconduct which without limitation shall include the commission of any act of fraud or dishonesty (whether or not connected with the Services).

9.1.4 the Consultant shall be guilty of incompetence and/or gross or persistent negligence in respect of his/her obligations hereunder

9.1.5 the Consultant fails or refuses after written warning to carry out duties properly required of him/her hereunder

9.1.6 the Consultant is not performing the Services to the reasonable satisfaction of the Council

9.1.7 the Consultant shall have been prevented by illness, injury or otherwise from providing the Services thereby causing an unacceptable delay in the completion of the work.

9.2 The Council shall have the right to engage another consultant to complete any Services on which the Consultant was working at the time of termination for whatever reason.

9.3 Termination of this Agreement howsoever arising will be without prejudice to the rights and duties of the parties arising in any way out of this Agreement prior to termination and without limitation all the clauses in this Agreement which expressly or impliedly have effect after termination will continue to be enforced notwithstanding termination.

9.4 On expiry or sooner termination of this Agreement the Consultant undertakes

9.4.1 to deliver up to the Council all Documents and other correspondence, computer discs and property belonging to the Council which is in the Consultant’s possession and/or under its control;

9.4.2 to immediately cease working at the agreed location(s)

10. Prevention of Assignment

10.1 The Consultant shall be prohibited from transferring assigning sub-letting or sub-contracting, directly or indirectly, to any person or persons whatsoever, the whole or any portion of this contract without the prior written permission of the Council. No sub-contracting shall relieve the Consultant from the obligations of this contract or from the obligation to actively supervise the Services during their progress. All actions taken by an approved sub-contractor in connection with the carrying out of any work under this contract will be deemed to be the actions of the Consultant

10.2 The Council will be entitled to assign the benefit and/or delegate the burden of this Agreement.

11. General

11.1 Relationship

Each of the parties is an independent contractor and nothing contained in this Agreement shall be construed to imply that there is any relationship between the parties of partnership or of principal/agent or of employer/employee nor are the parties hereby engaging in a joint venture and accordingly neither of the parties shall have any right or authority to act on behalf of the other nor to bind the other by contract or otherwise, unless expressly permitted by the terms of this Agreement.

11.2 No waiver

Failure to exercise or delay in exercising on the part of either party any right, power or privilege of that party under this Agreement shall not in any circumstances operate as a waiver thereof nor prejudice either party's rights to take subsequent action.

11.3 Entire Agreement

This Agreement sets forth the entire agreement between the parties with respect to the subject matter herein and supersedes and replaces all prior communications, representations, warranties, stipulations, undertakings and agreements whether oral or written between parties.

11.4 Notices

Any notice required to be given to the Council hereunder will be deemed well served if delivered personally or sent by registered post or recorded delivery post to the Council's principal place of business for the time being and notice required to be served on the Consultant will be well served if delivered to him/her personally or sent by registered post or recorded delivery post to his/her usual or last known place of abode. Any notice if posted will be deemed to have been served 48 hours after the date on which it was posted.

11.5 Binding Agreement

This Agreement shall be binding upon and shall inure to the benefit of the successors of the parties hereto and the assigns of the Council.

11.6 Variation

No variation to this Agreement shall be effective unless in writing signed by the duly authorised representatives of both of the parties.

11.7 Law and jurisdiction

The formation, construction, performance, validity and all aspects whatsoever of this Agreement shall be governed by English Law and the parties hereby agree to submit to the non-exclusive jurisdiction of the English Courts.

11.8 Ownership of Rights

Parties agree that the ownership of and sole rights to all inventions designs patents copyrights systems and the like and all interests therein prepared by the Consultant for the Council under this Agreement shall be vested in the Council from the outset.

11.9 Bribery, Fraud & Corruption

The Council may cancel the contract and recover from the Consultant the amount of any loss resulting from such cancellation if the Consultant shall have offered or given or agreed to give any person any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any action in relation to the obtaining or execution of this contract or any other contract with the Council or for showing or forbearing to show favour or disfavour to any person in relation to this contract or any other contract with the Council or if the like acts shall have been done by any person employed by it

or acting on its behalf (whether with or without the knowledge of the Consultant) or if in relation to any contract with the Council the Consultant or any person employed by it or acting on its behalf shall have committed any offence under the Bribery Act 2010 or shall have given any fee or reward the receipt of which is an offence under Section 117(2) of the Local Government Act 1972.

11.10 Health & Safety and Equal Opportunities

Without prejudice to any other term or condition of the contract the Consultant shall comply in all respects with the provisions of any statute, statutory instrument, rule or regulation in force from time to time relating to:

- health and safety issues relevant or applicable to the goods, works and/or services to be provided to the Council hereunder and shall bear the penalty for any contravention of the standard provisions relating to safety; and/or
- Equal opportunities. In particular, the Council requires the Consultant to be committed to a policy of treating all its employees and job applicants equally. No employee or potential employee shall receive less favourable treatment or consideration on the grounds of race colour religion or belief nationality ethnic or national origins sexual orientation gender re-assignment age disability marital status or part-time status or be disadvantaged by any conditions of employment that cannot be justified as reasonably necessary on operational grounds.

11.11. Freedom of Information Act 2000:

"FOI Legislation" means the Freedom of Information Act 2000, all regulations made under it and the Environmental Information Regulations 2004 and any amendment or re-enactment of any of them; and any guidance issued by the Information Commissioner, the Ministry of Justice or the department for Environment Food and Rural Affairs (including in each case its successors or assigns) in relation to such legislation;

"Information" has the meaning given under Section 84 of the Freedom of Information Act 2000. "Information Request" means a request for any Information under the FOI Legislation. The Consultant acknowledges that the Council:

- is subject to the FOI Legislation and agrees to assist and co-operate with the Council (at the Consultant's expense) to enable the Council to comply with its obligations under the FOI Legislation; and

- may be obliged under the FOI Legislation to disclose Information without consulting or obtaining consent from the Consultant.

The Consultant shall and shall procure that its sub-contractors (if any) shall:

- transfer to the Council's authorised officer each Information Request relevant to the Contract or the Services that it or they (as the case may be) receive as soon as practicable and in any event within two working days of receiving such Information Request; and

- in relation to Information held by the Consultant or in its possession or power, provide the Council with details about and/or copies of all such Information that the Council requests and such details and/or copies shall be provided within five working days of a request from the Council (or such other period as the Council may reasonably specify), and in such forms as the Council may reasonably specify.

The Council shall be responsible for determining at its absolute discretion whether Information is exempt information under the FOI Legislation and for determining what Information will be disclosed in response to an Information Request in accordance with the FOI Legislation. In no event shall the Consultant respond directly to an Information Request unless expressly authorised to do so by the Council. The Consultant shall ensure that all Information produced in the course of this contract or relating to this contract is retained for disclosure and shall permit the Council to inspect such records as requested from time to time.

11.12 Priority of terms

The terms of this Agreement and its schedule will apply to and govern the engagement of the Consultant and (save as may be agreed in writing by the Council) shall prevail over the Consultant's standard terms and conditions. In the event of any conflict between a term of this Agreement and a provision in the Schedule, the Schedule shall prevail.

11.13 Force majeure

Neither party shall have any liability under or be deemed to be in breach of this Agreement for any delays or failures in performance of this Agreement which result from circumstances beyond the reasonable control of that party. The party affected by such circumstances shall promptly notify the other party in writing when such circumstances cause a delay or failure in performance and when they cease to do so. If such circumstances continue for a continuous period of more than four months either party may terminate this Agreement by written notice to the other party.

11.14 Severence

If any provision of this Agreement is prohibited by law or judged by a court to be unlawful, void or unenforceable, the provision shall to the extent required be severed from this Agreement and rendered ineffective as far as possible without modifying the remaining provisions of this Agreement, and shall not in any way affect any other circumstances of or the validity or enforcement of this Agreement.

11.15 Announcements

No party shall issue or make any public announcement or disclose any information regarding this Agreement unless prior to same it furnishes the other party with a copy of such announcement or information and obtains the approval of such person to its terms. However, no party shall be prohibited from issuing or making any such public announcement or disclosing such information if it is necessary to do so to comply with any applicable law.

11.16 Third Parties

For the purposes of the Contracts (Rights Of Third Parties) Act 1999 this Agreement is not intended to and does not give any person who is not a party to it any right to enforce any of its terms.

Schedule 1

The Commencement Date:

The Fee: £
[set out payment terms & frequency, eg. Daily rate, fixed fee etc.]

The Fixed Period (start and end dates):

Brief Description of Services:

Special Conditions (if applicable):

1. **DATA SHARING -** The Consultant is aware of the Council's Data Quality Framework and acknowledges the expectations placed upon all service providers that provide data to the Council. A copy of the Council's current Data Quality Framework may be viewed at www.thanet.gov.uk
Throughout the contract term (including any extended period(s)) the Consultant shall have and maintain procedures in place to ensure that any data it provides to the Council is accurate and reliable and shall ensure that said procedures include validation checks where appropriate.
The Consultant hereby agrees to provide data to the Council within timescales as required by the Council and acknowledges that the Council may from time to time require it to assist auditors and/or performance officers in the review of the systems and processes used by the Consultant in the production of data to the Council.

Detailed Specification of Work including any schedule of deliverables:
(please attach as a separate sheet if necessary):

Location:

SIGNED by ……

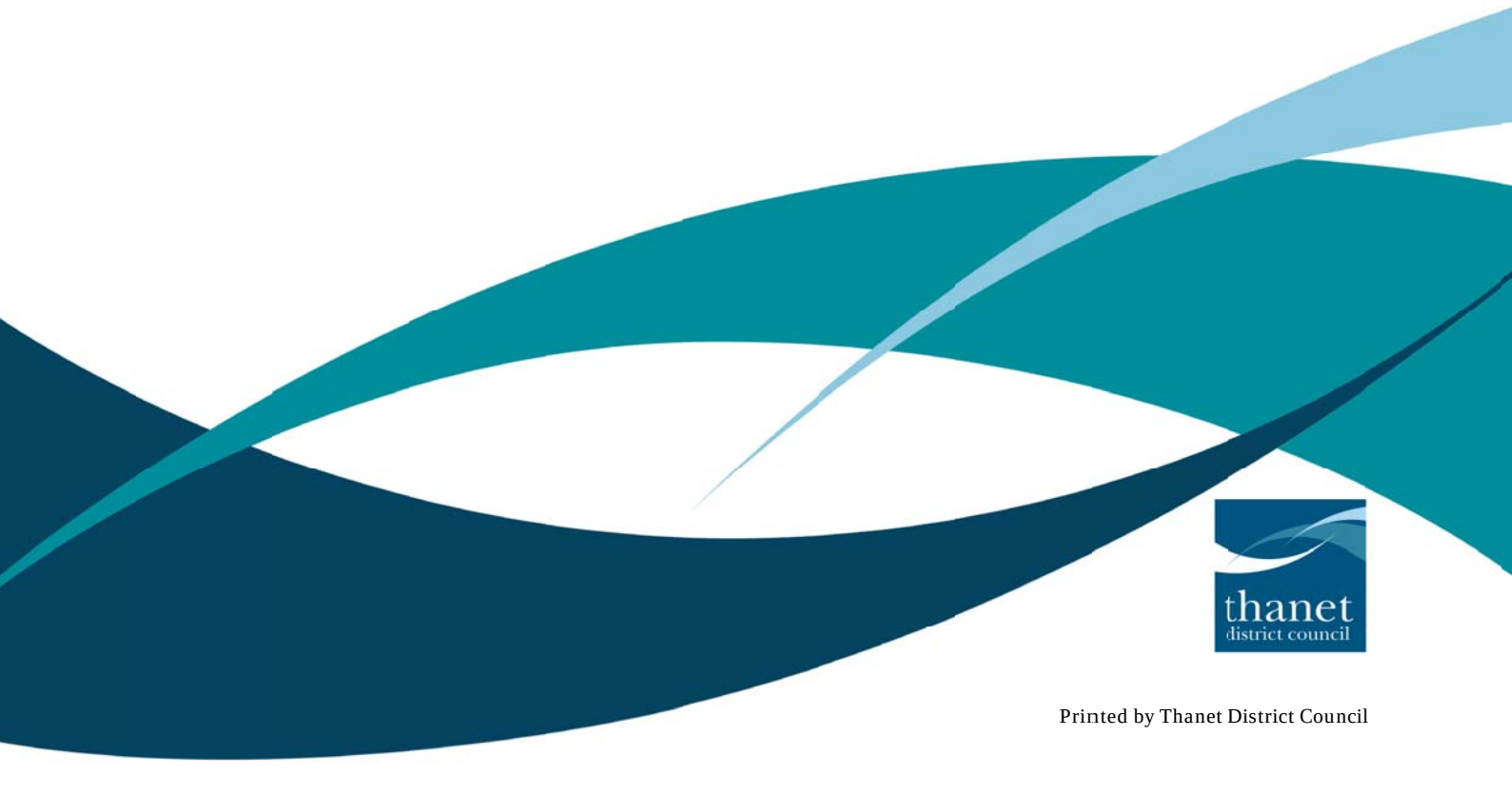
(print name)……..

Position……
For and on behalf of Thanet District Council

SIGNED by ……..

(print name)……..

Position……
For and on behalf of the Consultant



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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

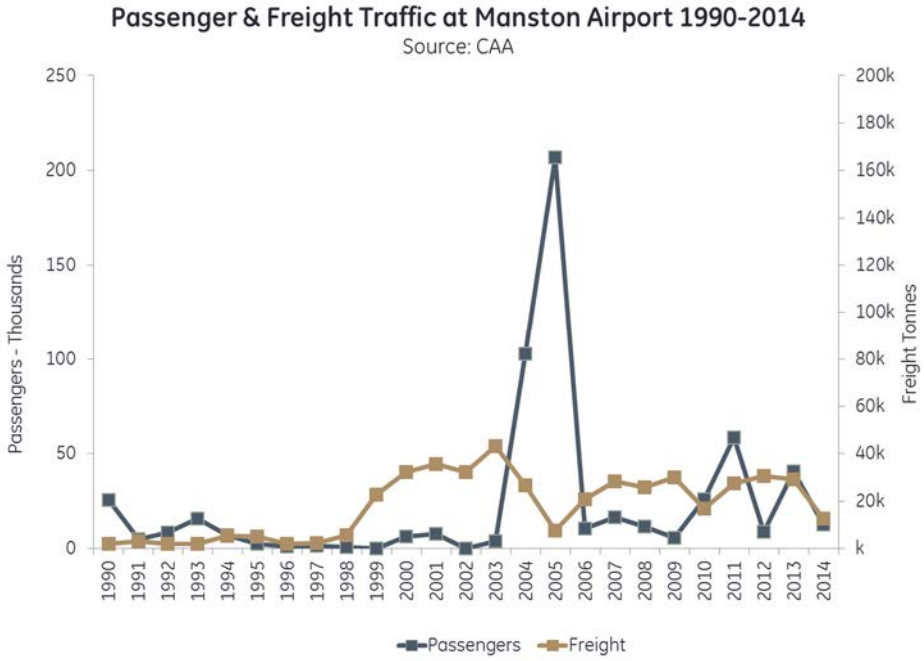
3.3. Commercial Activity at Manston Airport

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:

> 'I*t 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.

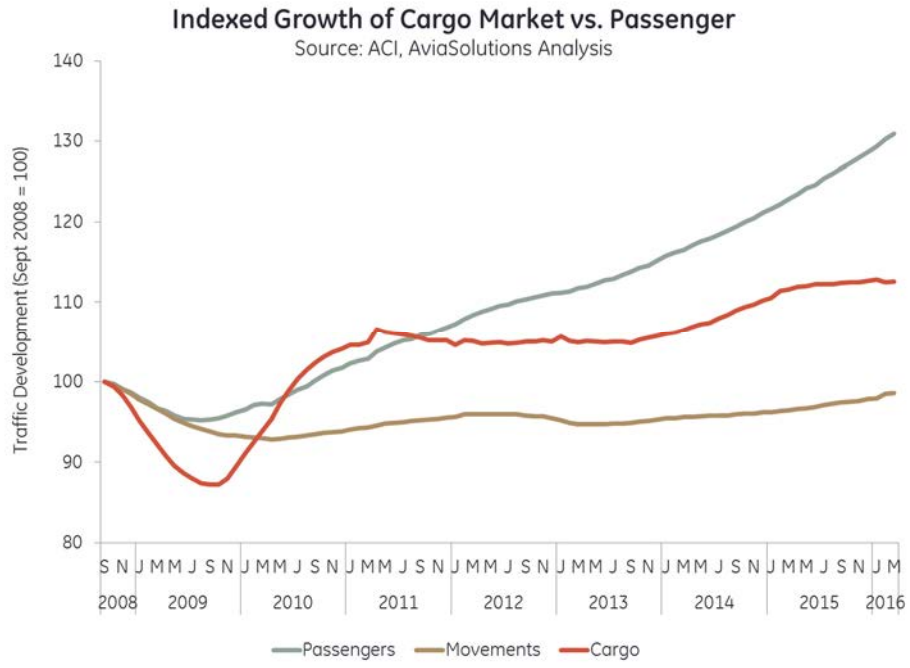
6. Cargo Analysis

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.

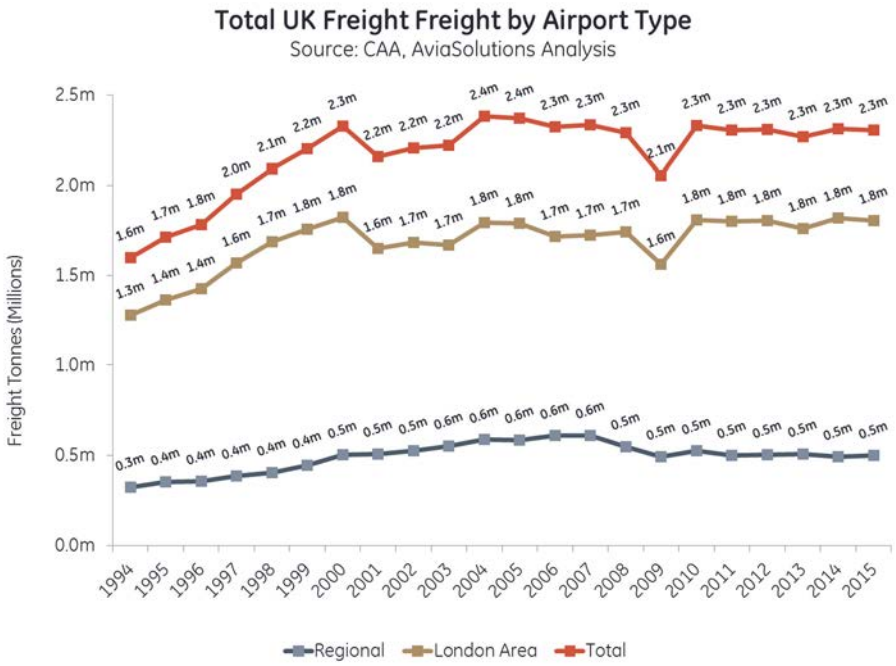
6.2. Overall Cargo Market

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.

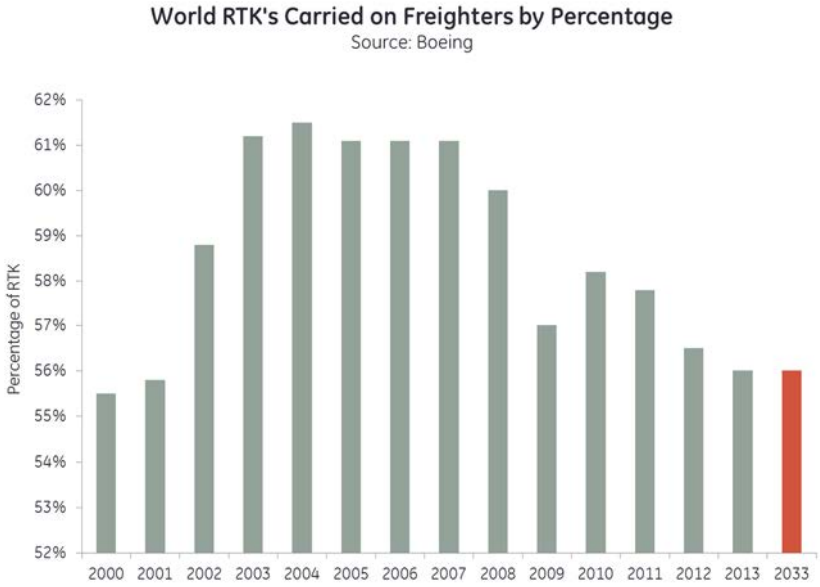
As passenger demand increases additional belly-hold capacity will enter the market. This capacity growth is unhooked from the demand scenario for belly-hold cargo and can result in excess capacity in the market. As a result airlines will often sell this belly-hold capacity using a marginal cost pricing 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

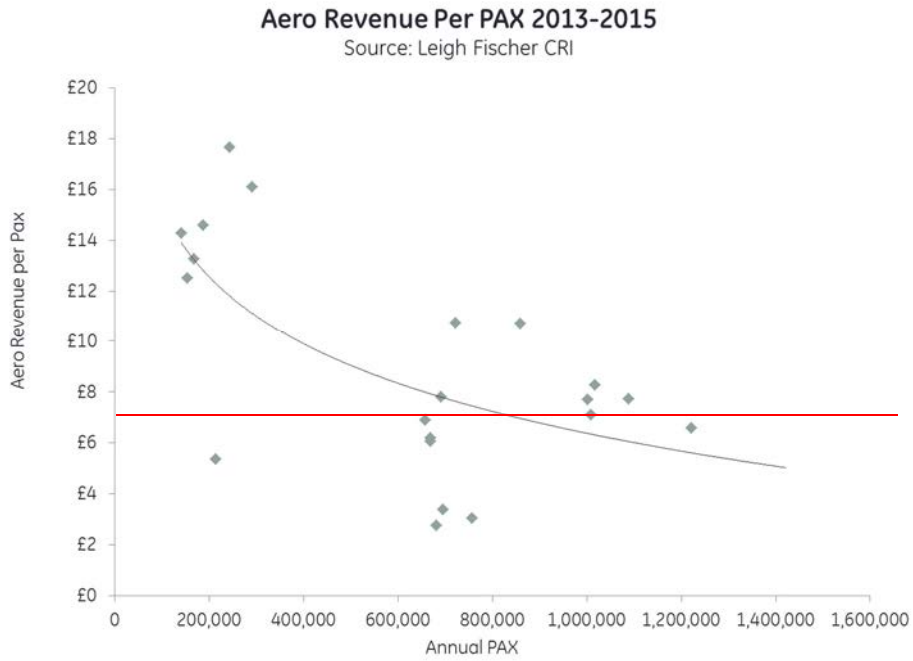
Aeronautical Revenue per Passenger

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

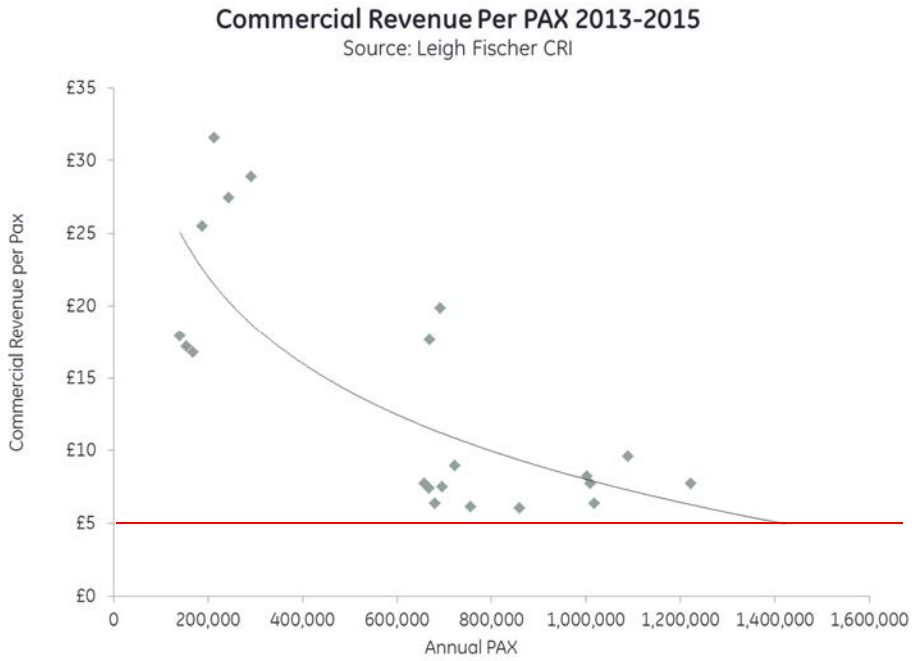
Commercial revenue is generated from passenger-facing services at the airport. One of the main sources of revenue are the airport concessions to operators of the retail shops (including duty free), food and beverage (F&B) outlets, car rental and currency exchange services. The operator will typically 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.

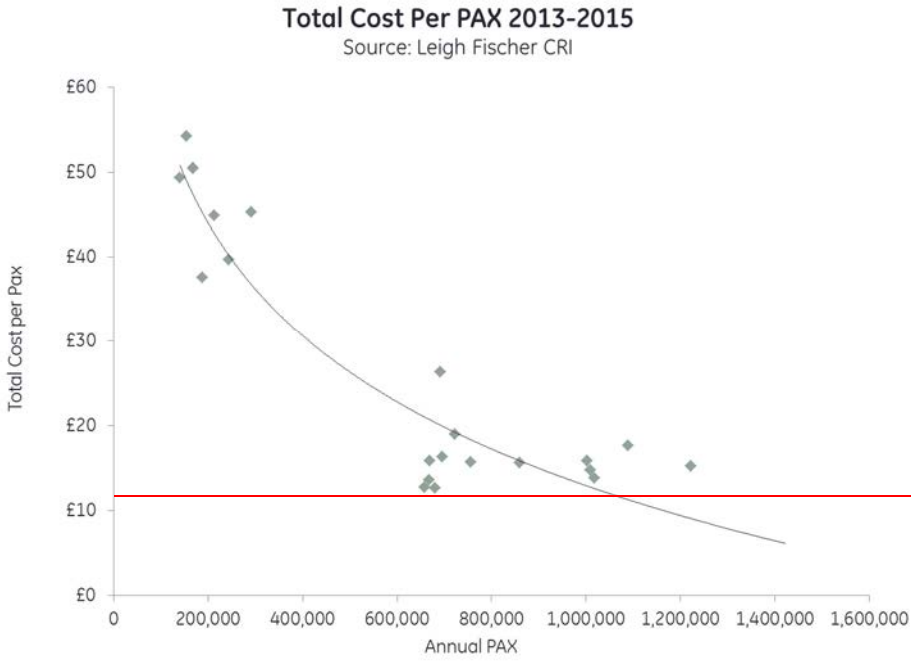
Aviation Fuel

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

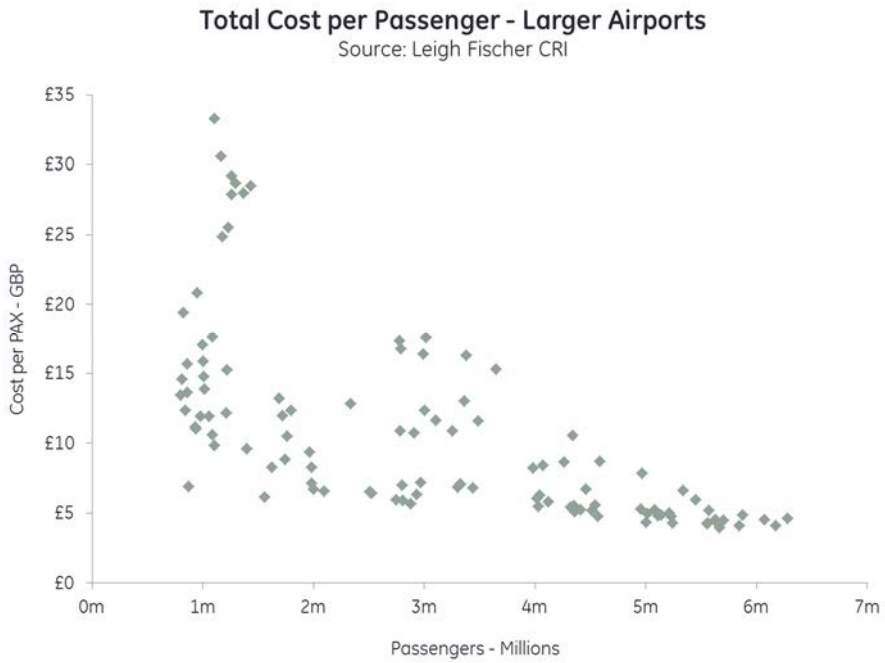
Airports with very low throughput have a high cost of operation per passenger: the fixed cost of airport operations can only be distributed across a low volume. Within a limited range, the marginal operating cost of an additional passenger is zero, but the marginal revenue of an additional passenger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

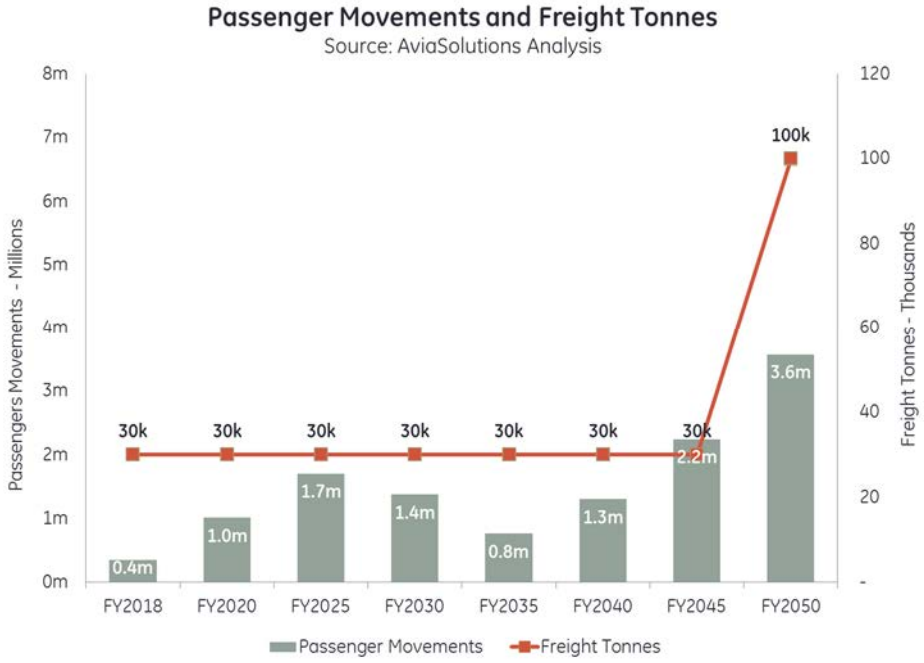
In the following paragraphs we explore the financial viability of Manston Airport based upon there being a third runway at Heathrow. This is the option which was recommended by the Davies Commission and therefore may be presumed to be the most likely outcome. However, the likelihood is that a runway 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.

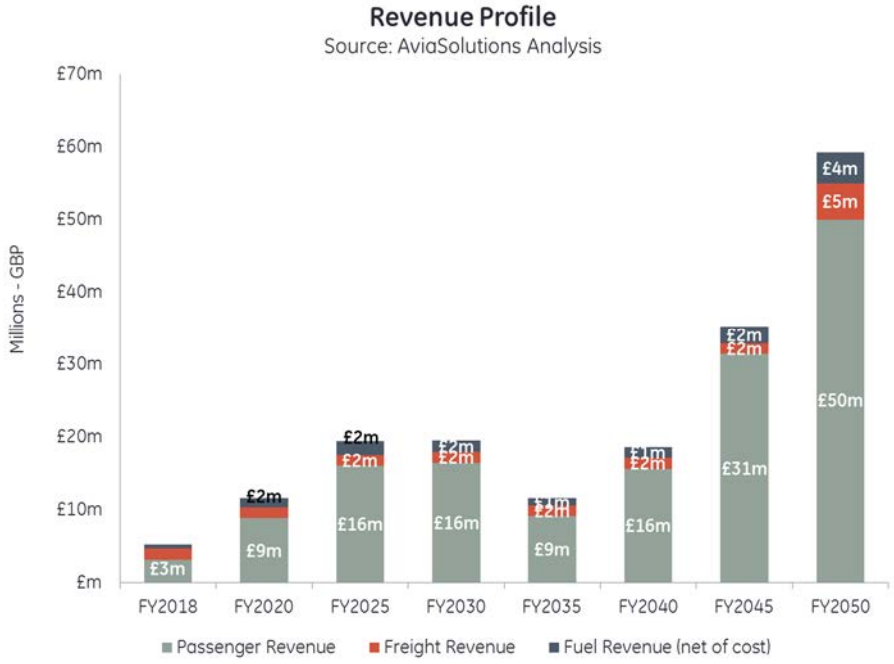
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Passenger Movements	350k	1,010k	1,700k	1,370k	760k	1,300k	2,240k	3,570k
Freight Tonnes	30k	30k	30k	30k	30k	30k	30k	100k
Total ATMs	1,100	2,900	6,400	9,600	5,300	9,200	15,800	28,000



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.

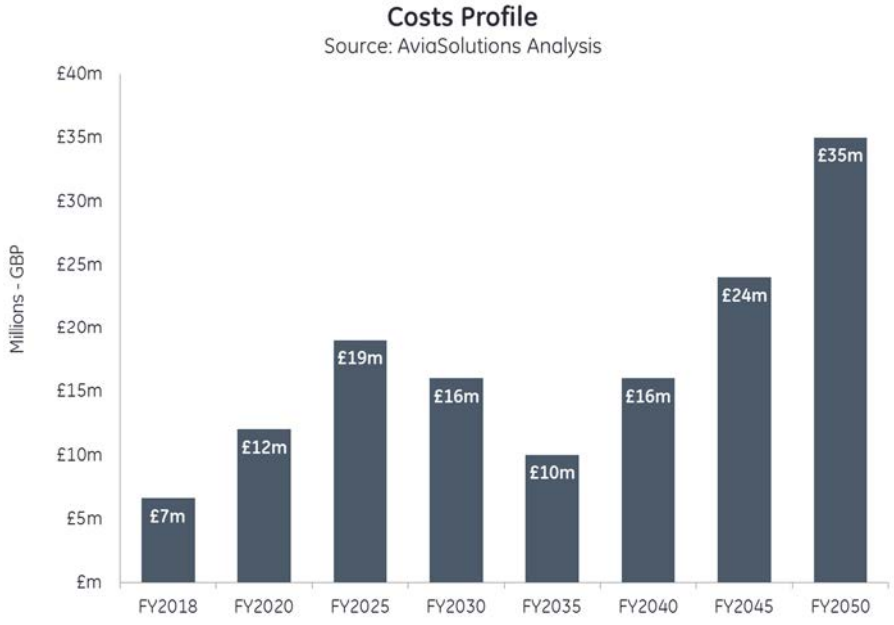
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Revenue	£5m	£12m	£19m	£19m	£12m	£19m	£35m	£59m

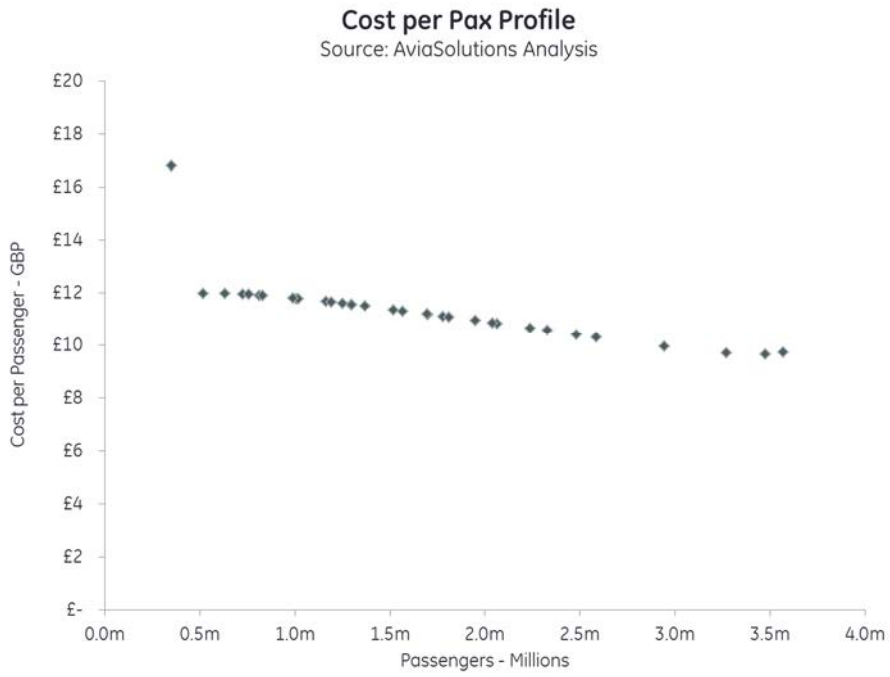


7.3.3. Cost Profile

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

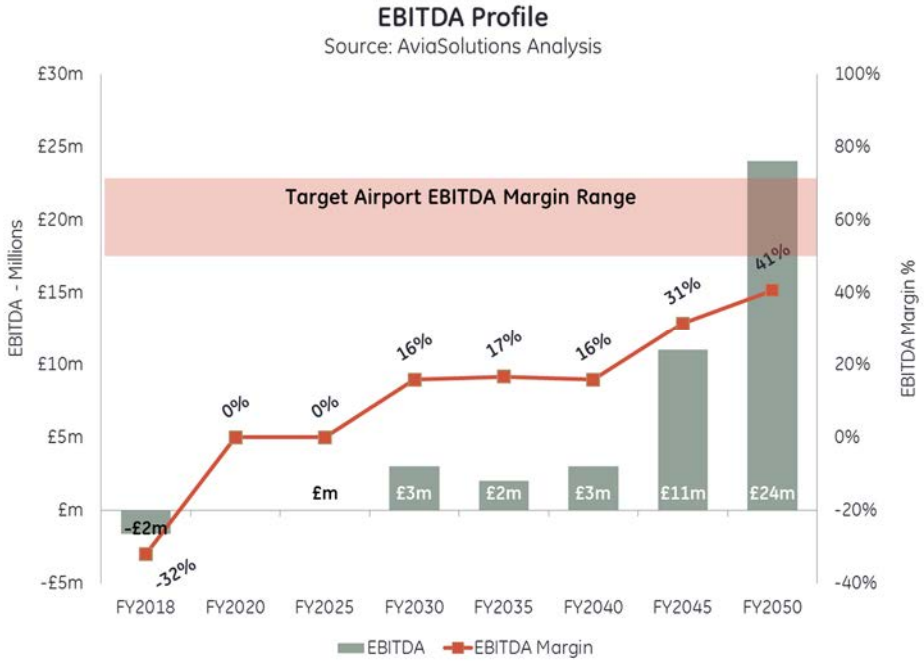




7.3.4. EBITDA Profile

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.

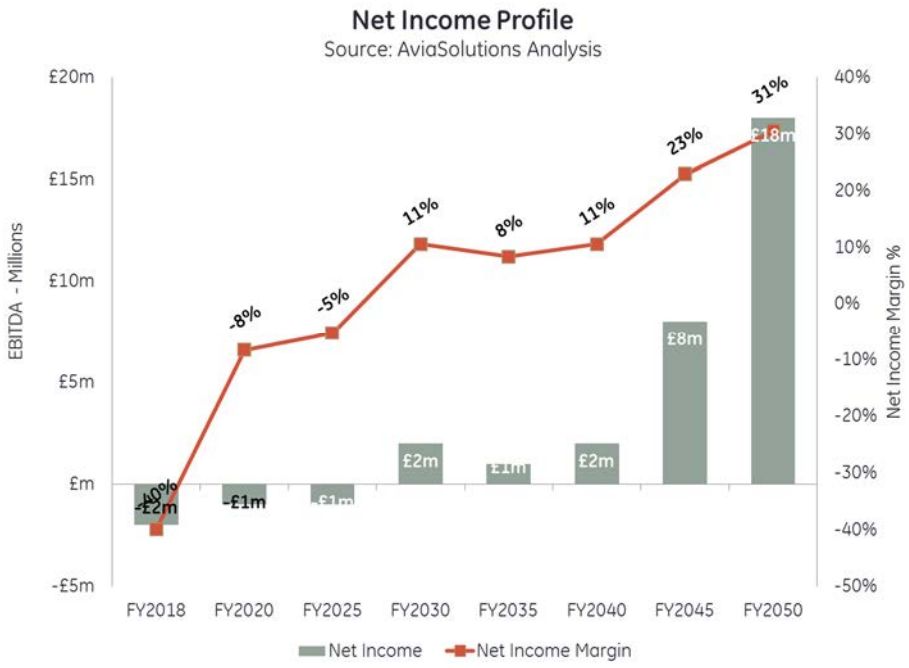
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
EBITDA	-£2m	£m	£m	£3m	£2m	£3m	£11m	£24m
EBITDA Margin	-32%	0%	0%	16%	17%	16%	31%	41%



7.3.5. Net Income Profile

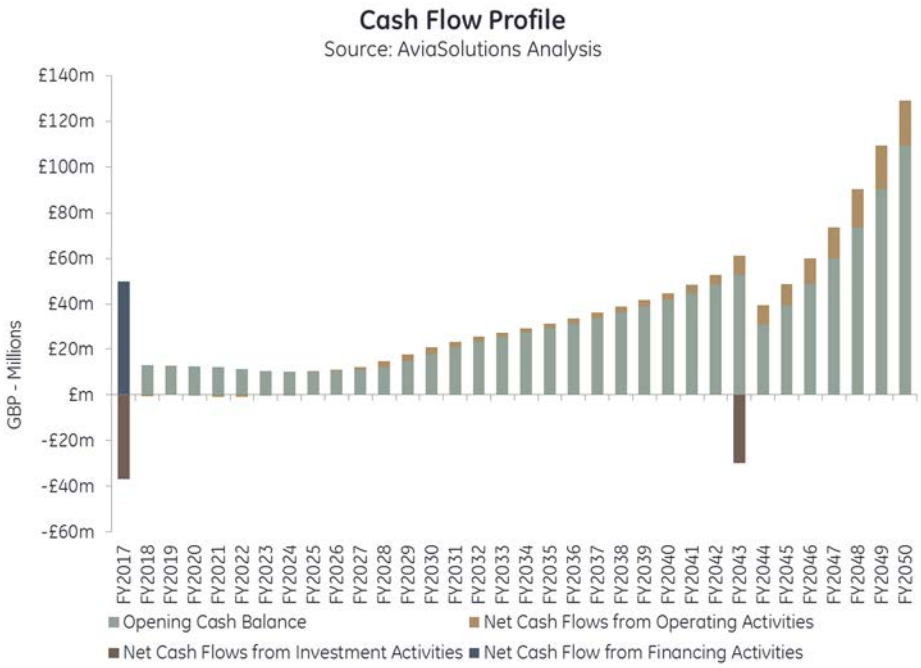
Net income, the profit after deductions, is forecast to be negative until FY2025. The first positive results are generated around FY2030 when the airport is expected to generate net income of £2m. The income stream remains constant for the following 15 years before increasing as capacity becomes constrained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

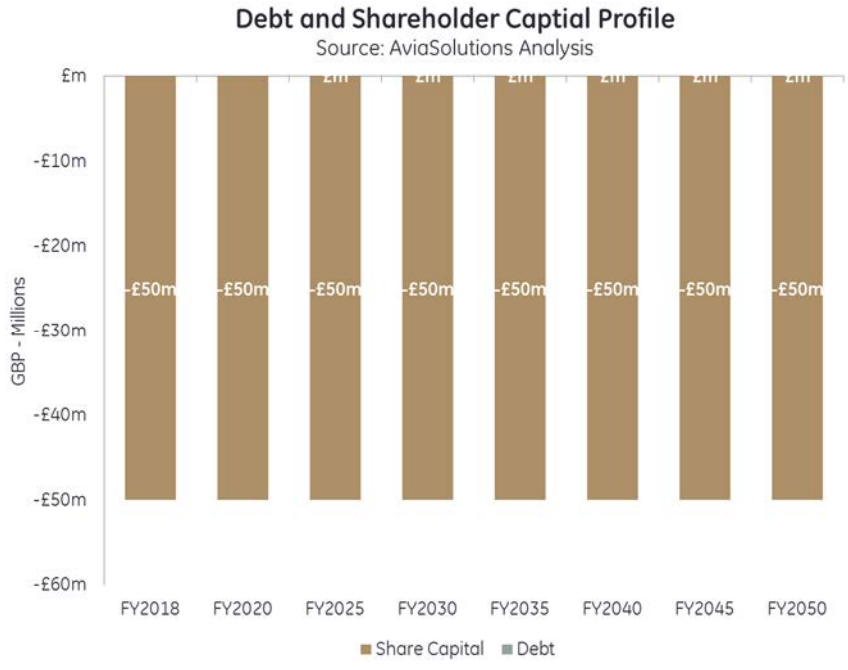
The airport is forecast to develop its cash position with limited additional capital requirements until FY2042 when there would be a requirement to expand the terminal. We have assumed that although demand would exceed terminal capacity in the late 2020s, new terminal capacity would not be provided in 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

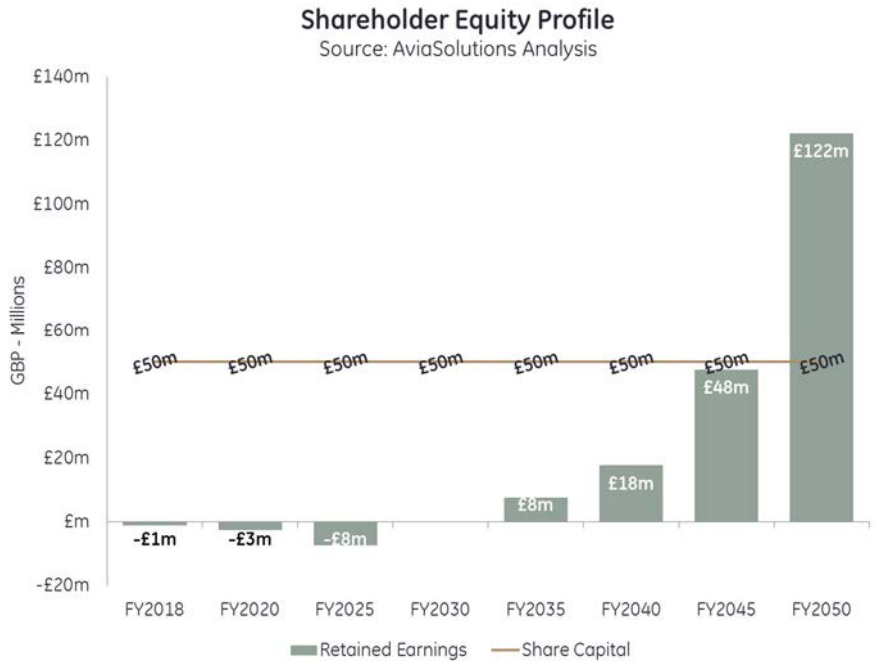
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Debt	£m	£m	£m	£m	£m	£m	£m	£m
Share Capital	£50m	£50m	£50m	£50m	£50m	£50m	£50m	£50m



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.

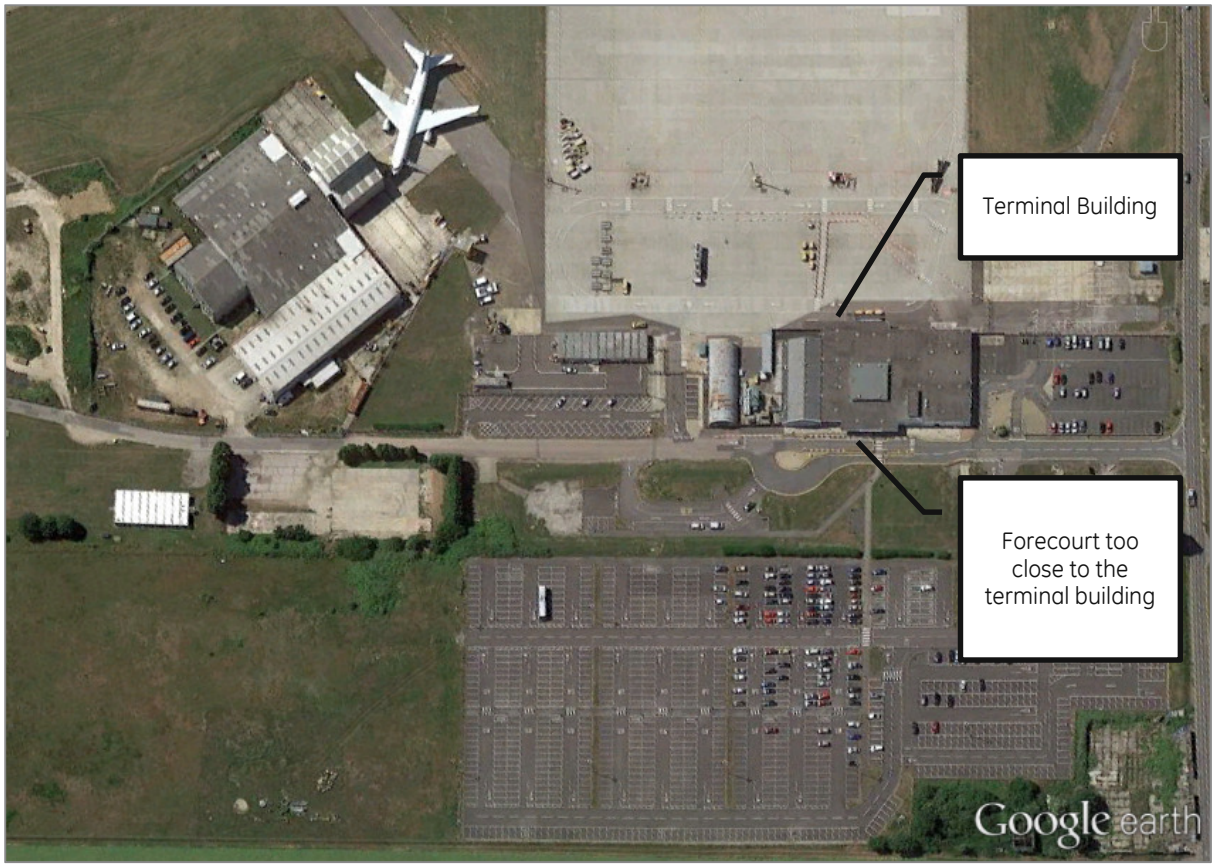


Figure 1: Google Earth image of aircraft maintenance hangar, terminal, parking area and apron (prior to the closure of the airport)

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

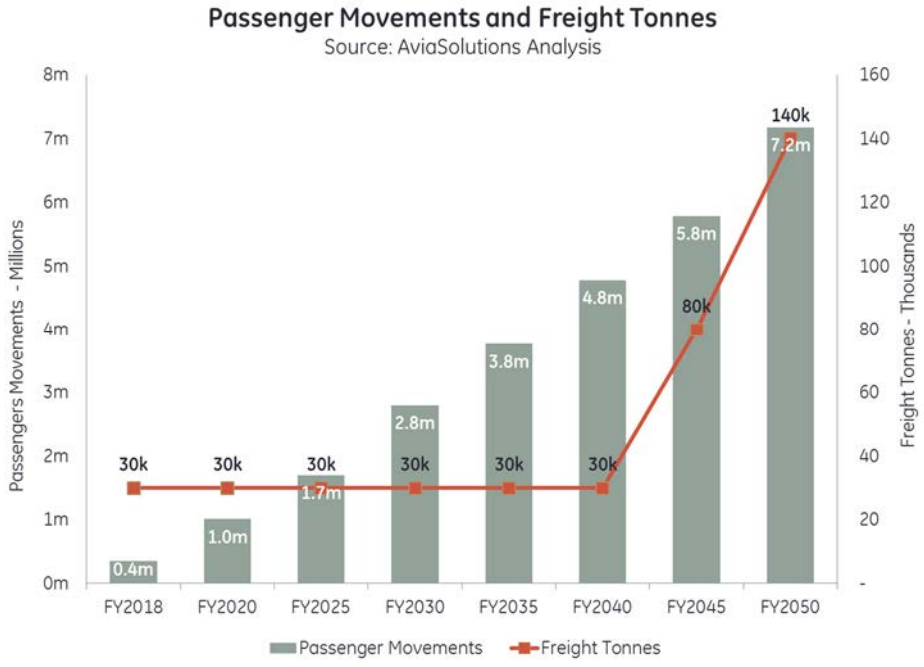
11.1. Outputs for No Runway Development Scenario

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.

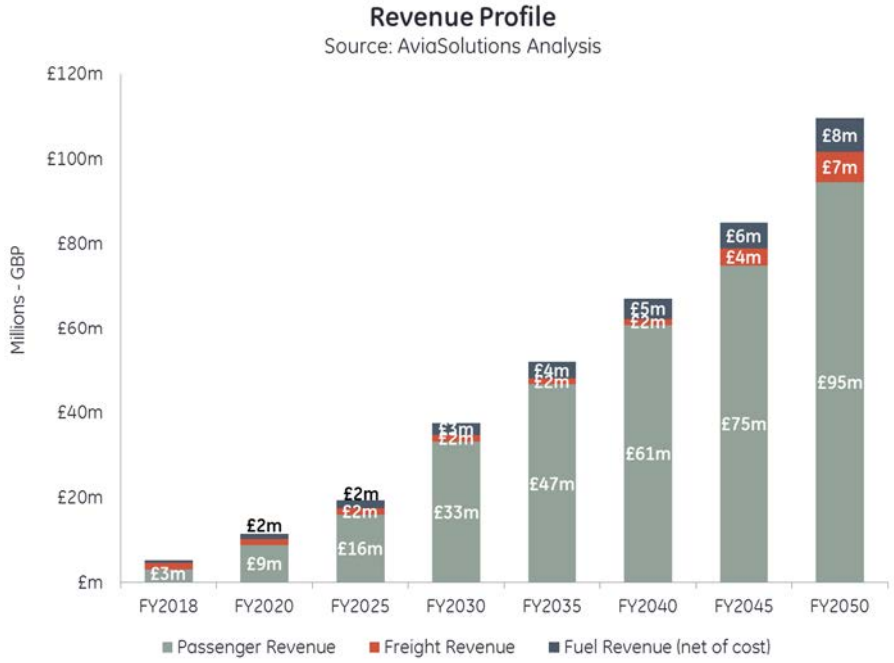
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Passenger Movements	350k	1,010k	1,700k	2,800k	3,770k	4,780k	5,790k	7,180k
Freight Tonnes	30k	30k	30k	30k	30k	30k	80k	140k
Total ATMs	1,100	2,900	6,400	14,100	20,900	28,100	37,200	49,500



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.

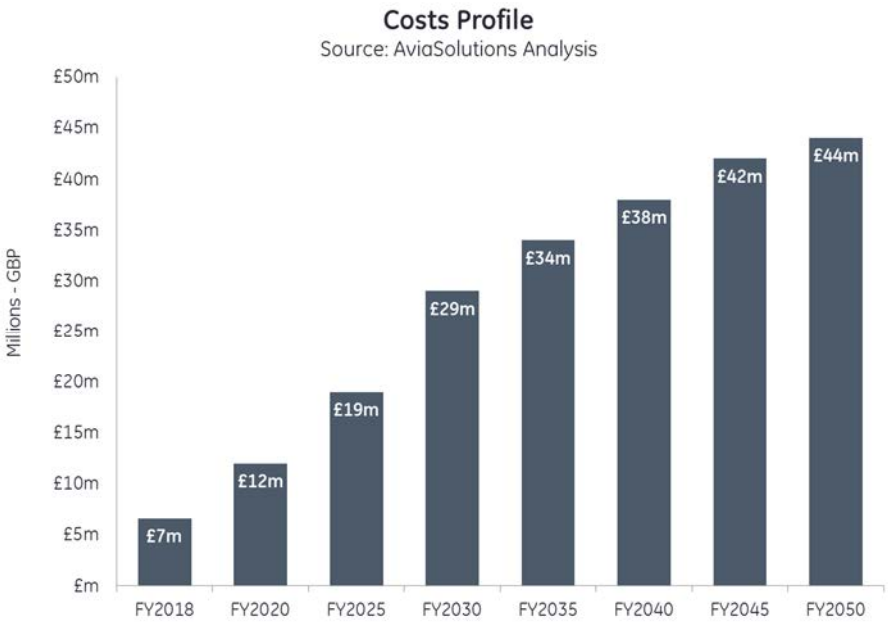
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Revenue	£5m	£12m	£19m	£38m	£52m	£67m	£85m	£110m

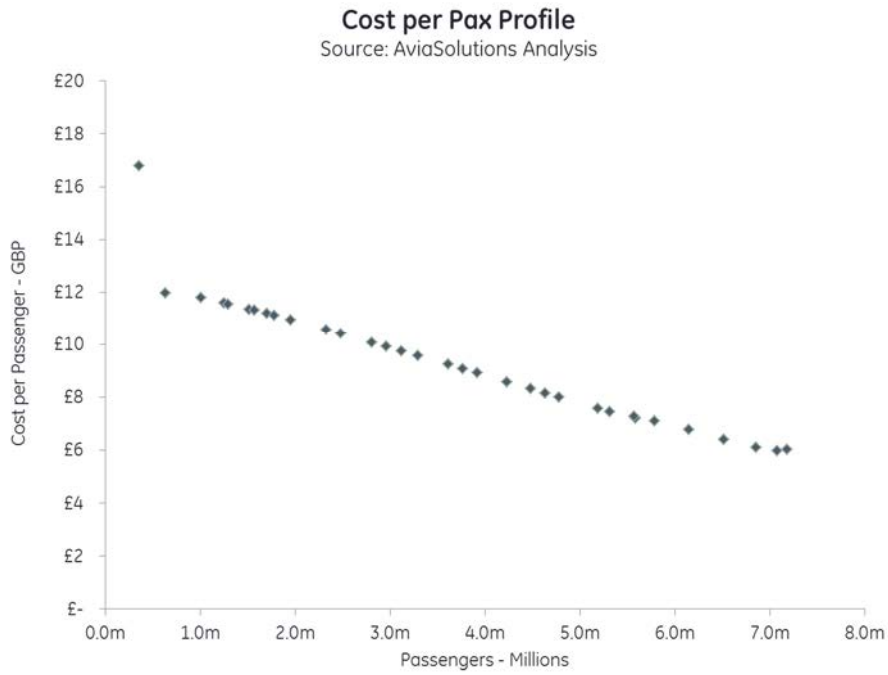


11.1.3. Cost Profile

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

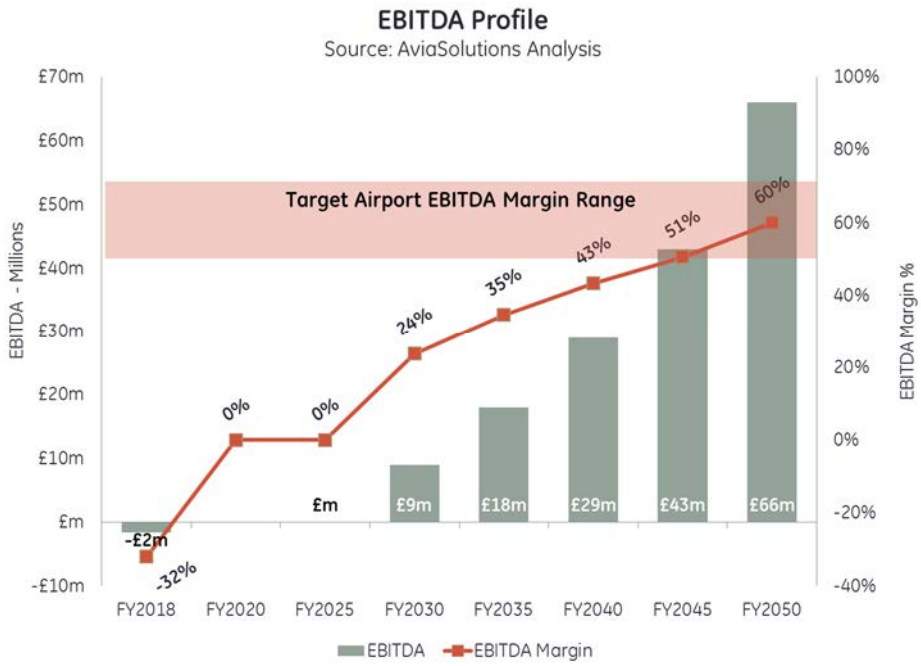




11.1.4. EBITDA Profile

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.

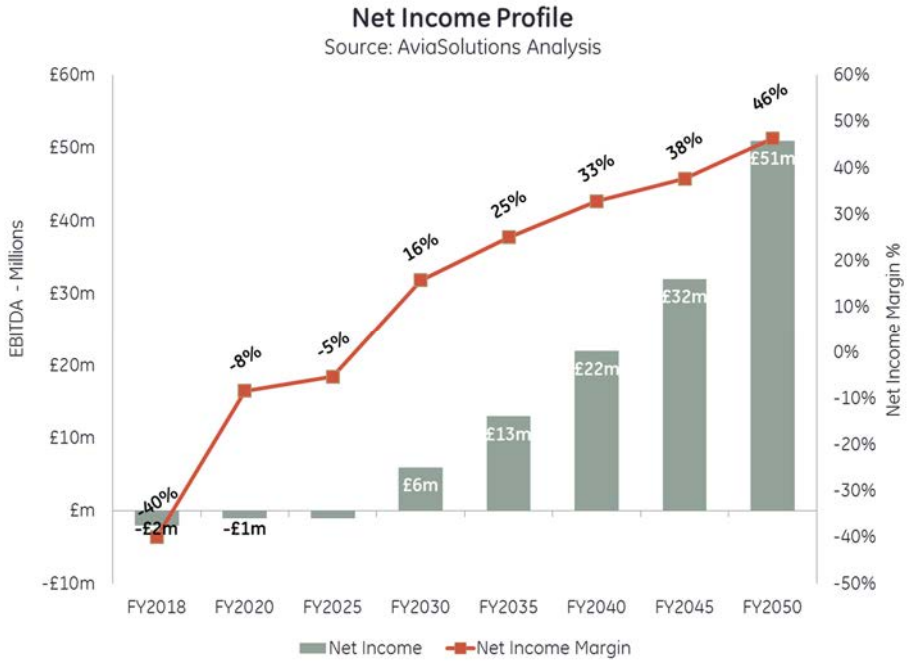
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
EBITDA	-£2m	£m	£m	£9m	£18m	£29m	£43m	£66m
EBITDA Margin	-32%	0%	0%	24%	35%	43%	51%	60%



11.1.5. Net Income Profile

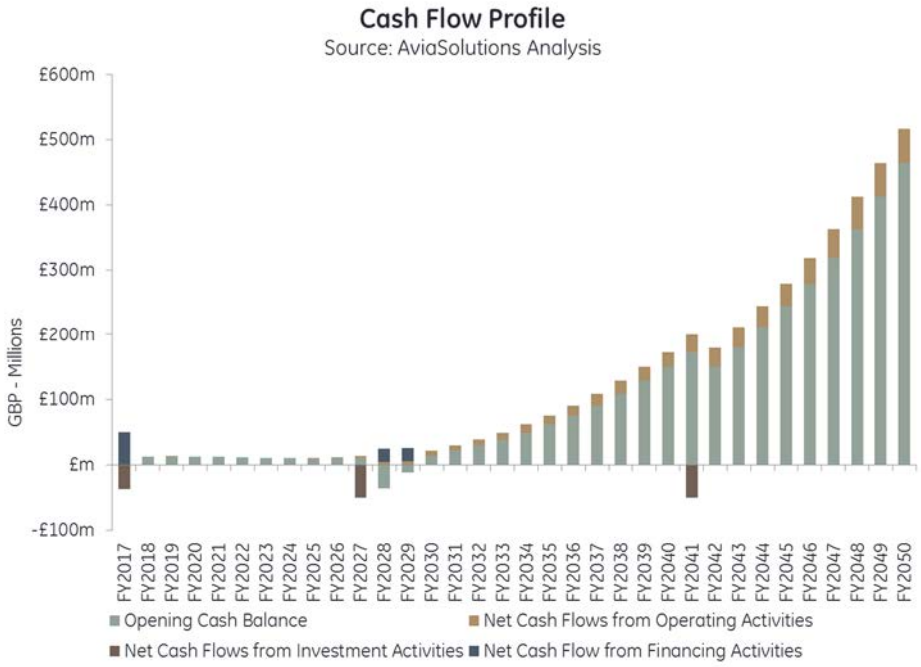
Net income, the profit left after all deductions, is forecast to be negative until FY2025. The first positive results fall circa FY2030 when the airport is expected to generate net income of £6m. This income stream steadily increases through to FY2050 at which point it is expected to be circa £51m per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

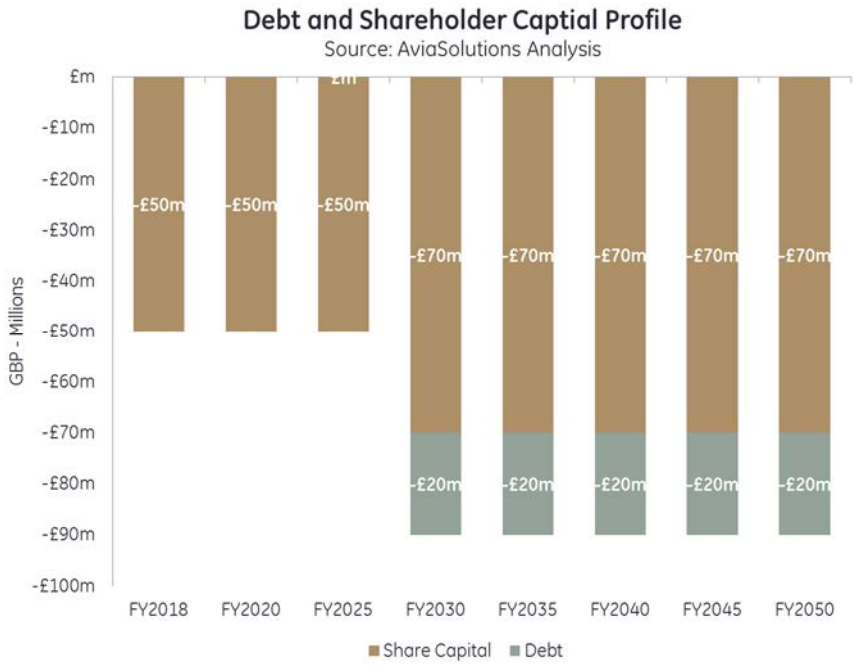
The airport is forecast to develop its cash position with limited additional capital requirements except those required to expand the terminal in FY2027. The position shown below is excludes any dividend payments that the owner may wish to extract from the asset: such payments would reduce its cash position.



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.

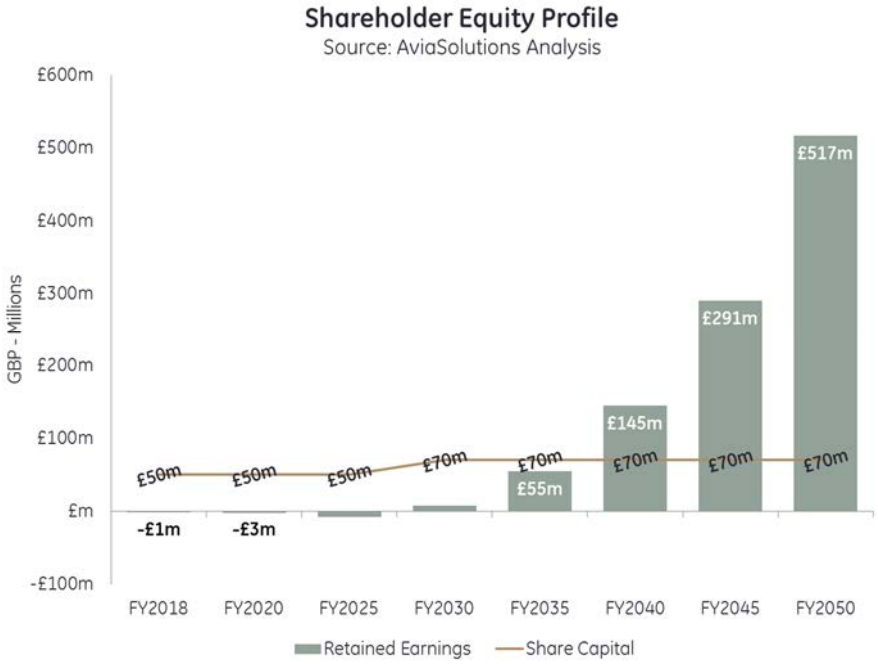
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Debt	£m	£m	£m	£20m	£20m	£20m	£20m	£20m
Share Capital	£50m	£50m	£50m	£70m	£70m	£70m	£70m	£70m



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

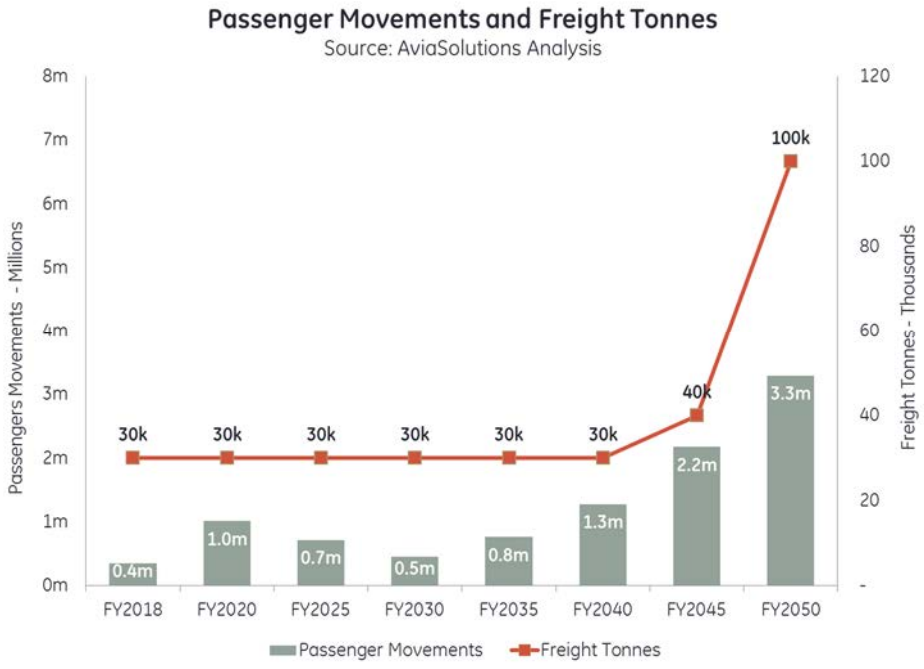
In the following paragraphs, we explore the financial viability of Manston Airport based upon there being a second runway at Gatwick. This was an option short-listed by the Davies Commission and while not finally recommend has a body of support based on its lower environmental impacts and the consequent 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.

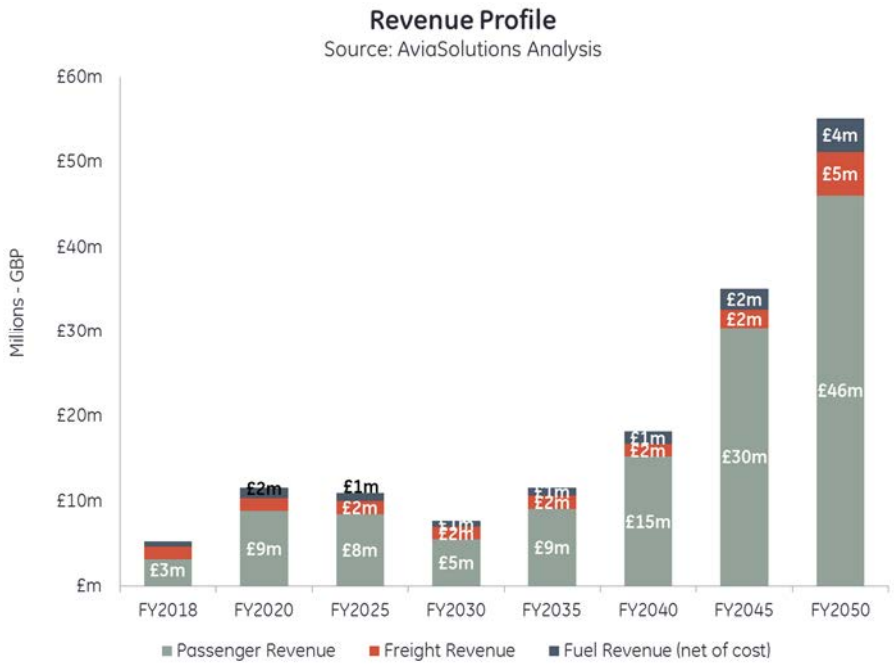
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Passenger Movements	350k	1,010k	710k	450k	760k	1,270k	2,170k	3,290k
Freight Tonnes	30k	30k	30k	30k	30k	30k	40k	100k
Total ATMs	1,100	2,900	5,000	3,200	5,300	8,900	15,900	26,000



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.

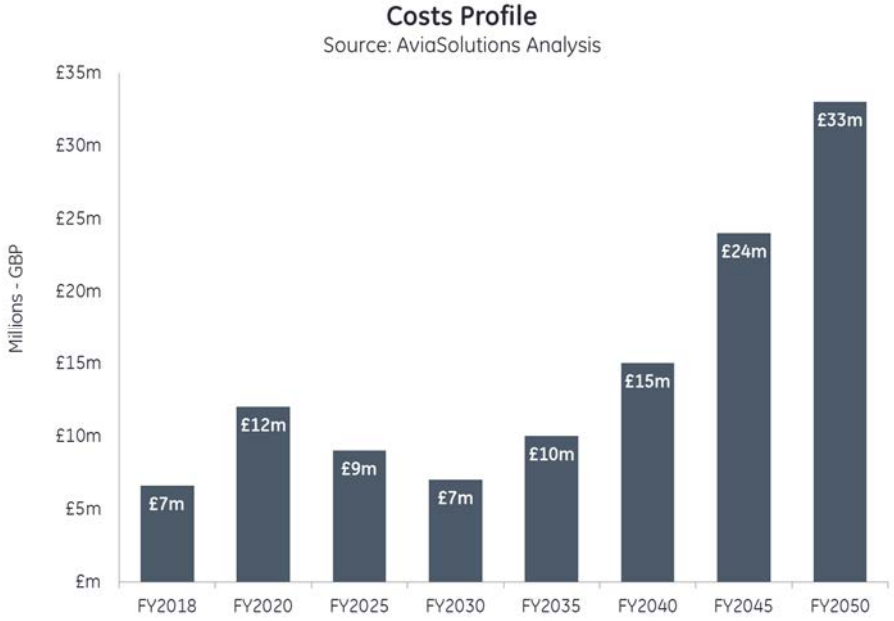
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Revenue	£5m	£12m	£11m	£8m	£12m	£18m	£35m	£55m

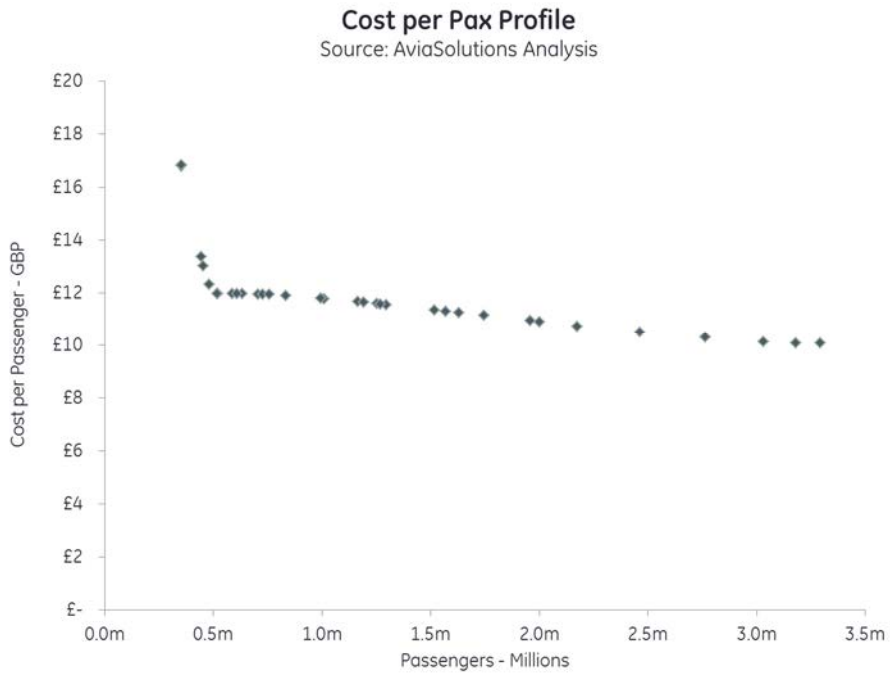


11.2.3. Cost Profile

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

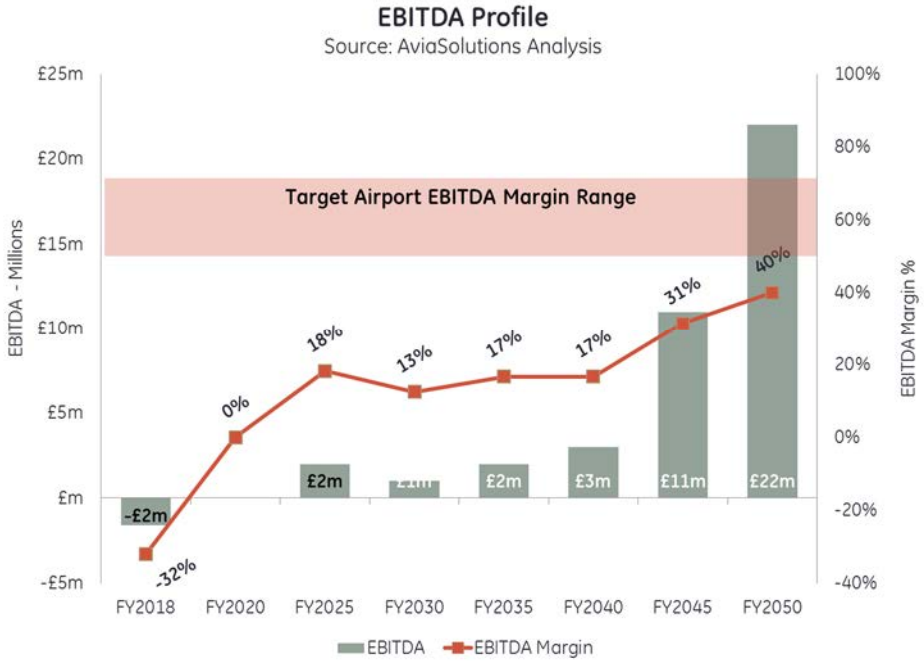




11.2.4. EBITDA Profile

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.

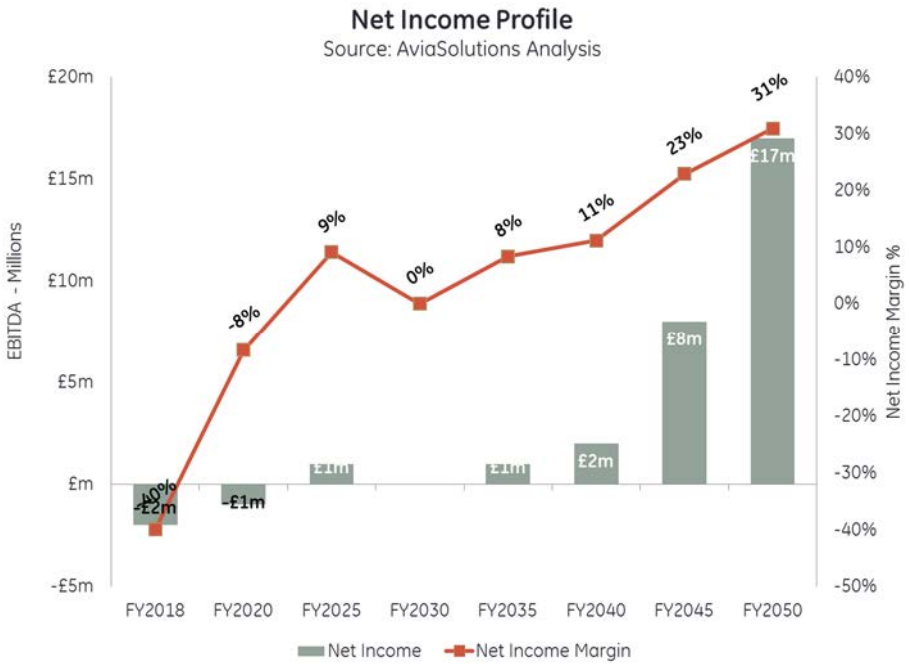
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
EBITDA	-£2m	£m	£2m	£1m	£2m	£3m	£11m	£22m
EBITDA Margin	-32%	0%	18%	13%	17%	17%	31%	40%



11.2.5. Net Income Profile

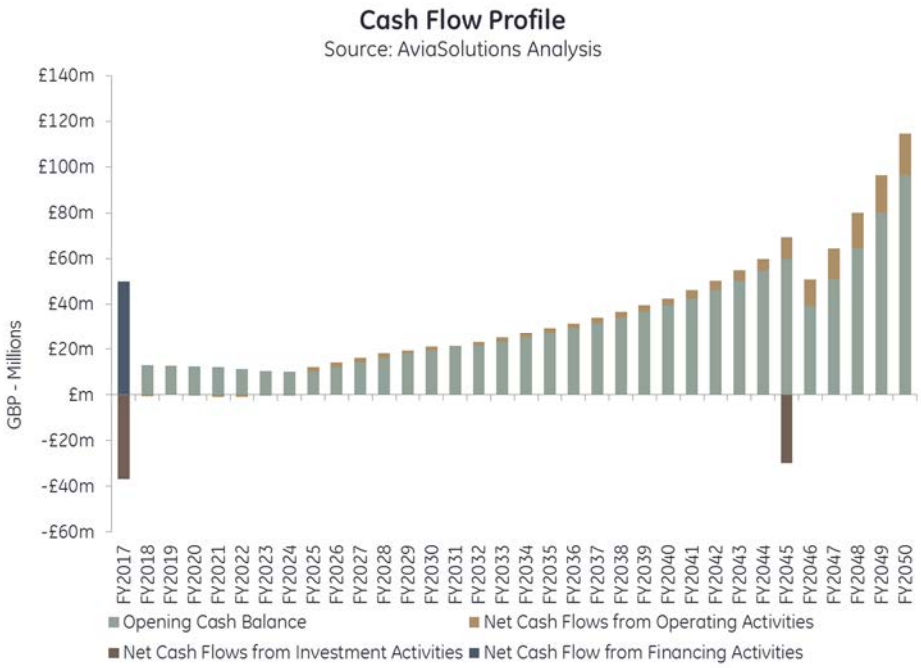
Net income, the profit left after all deductions, is forecast to be negative until after FY2020. The first positive results are generated around FY2025 when the airport is expected to generate net income of £2m, although it falls slightly thereafter as Gatwick's new runway absorbs traffic. The income 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

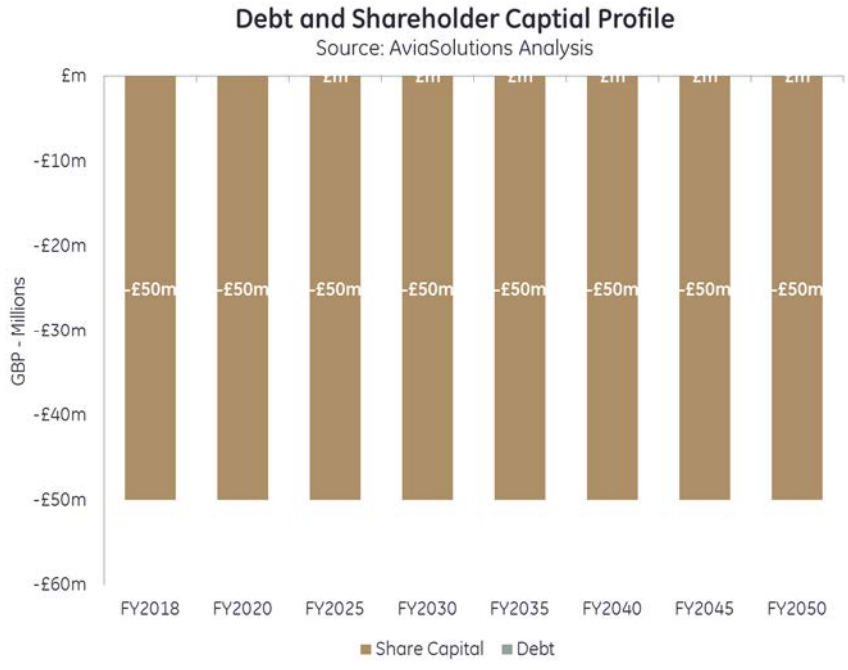
The airport is forecast to develop its cash position with limited additional capital requirements until FY2045 when there would be a requirement to expand the terminal, by which time the company could have built up sufficient cash to be able to finance the CAPEX from reserves. The position shown below 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

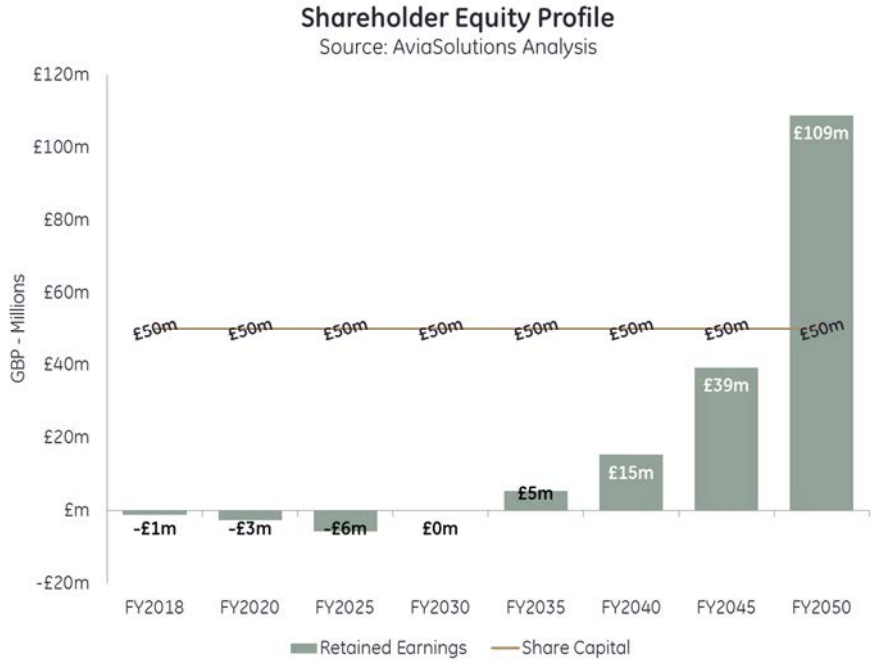
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Debt	£m	£m	£m	£m	£m	£m	£m	£m
Share Capital	£50m	£50m	£50m	£50m	£50m	£50m	£50m	£50m



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

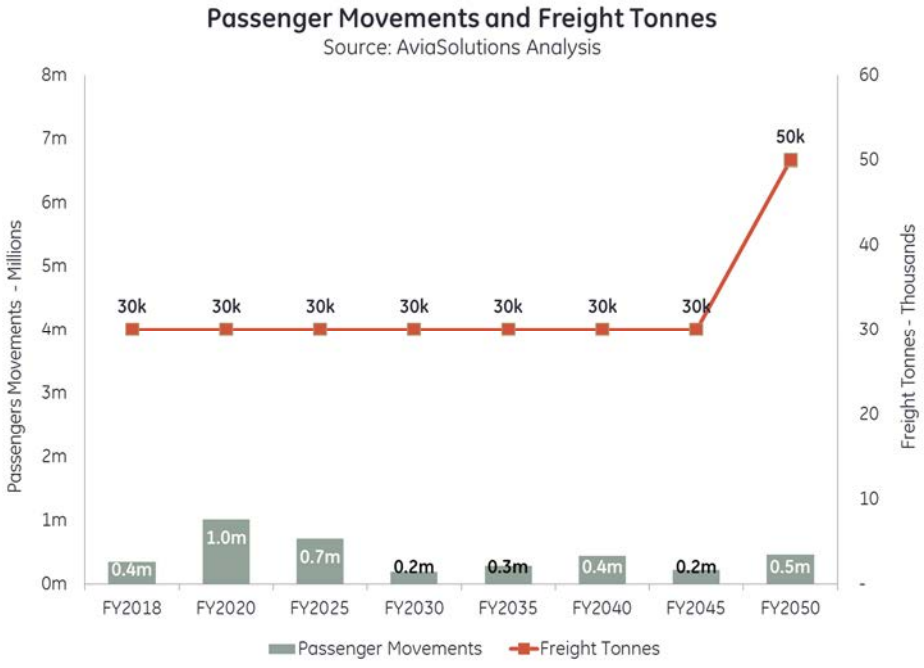
In the following paragraphs, we explore the financial viability of Manston Airport based upon there being two runways constructed in the South East, one at Gatwick and the other at Heathrow. It is clear from this assessment that in the longer term there is forecast to be sufficient demand to require 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.

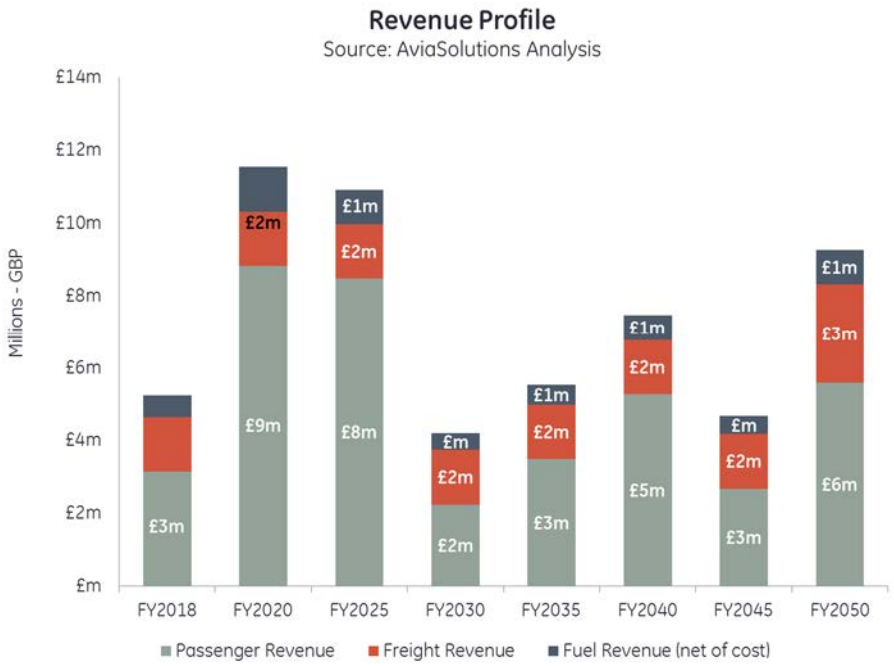
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Passenger Movements	350k	1,010k	710k	190k	290k	440k	220k	460k
Freight Tonnes	30k	30k	30k	30k	30k	30k	30k	50k
Total ATMs	1,100	2,900	5,000	1,300	2,000	3,100	1,600	4,300



11.3.2. Revenue Profile

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

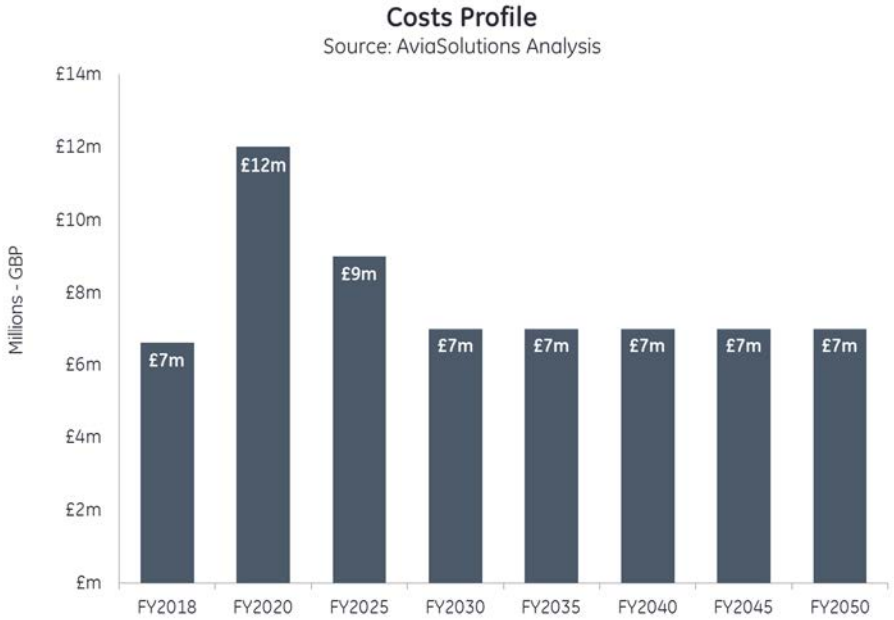
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
Total Revenue	£5m	£12m	£11m	£4m	£6m	£7m	£5m	£9m

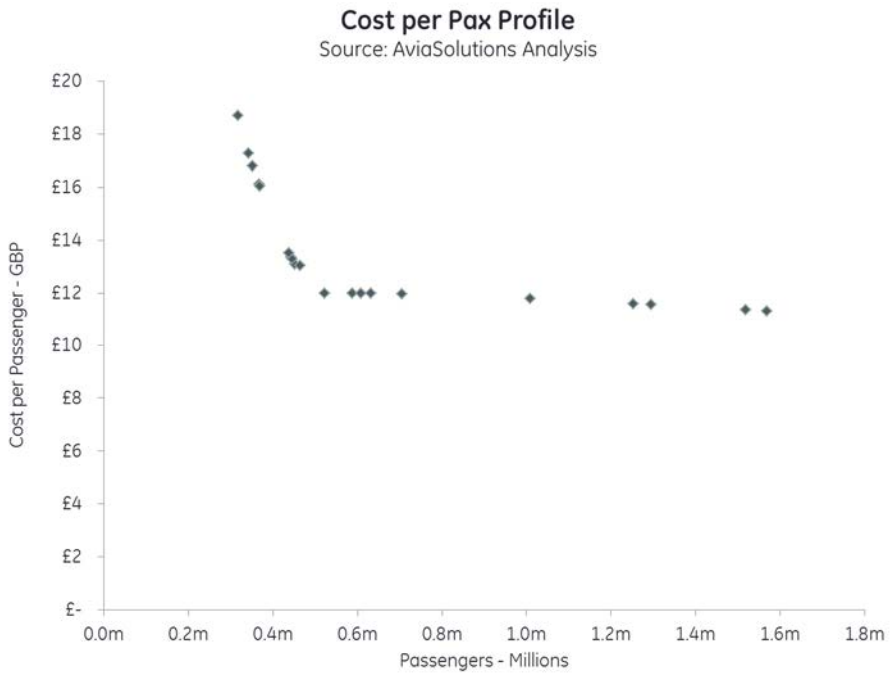


11.3.3. Cost Profile

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

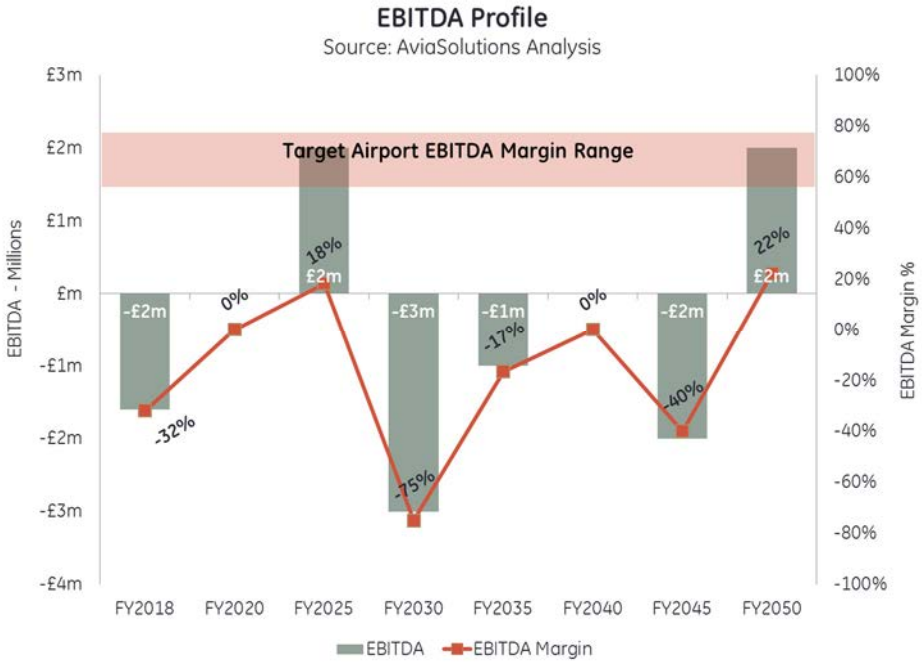




11.3.4. EBITDA Profile

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

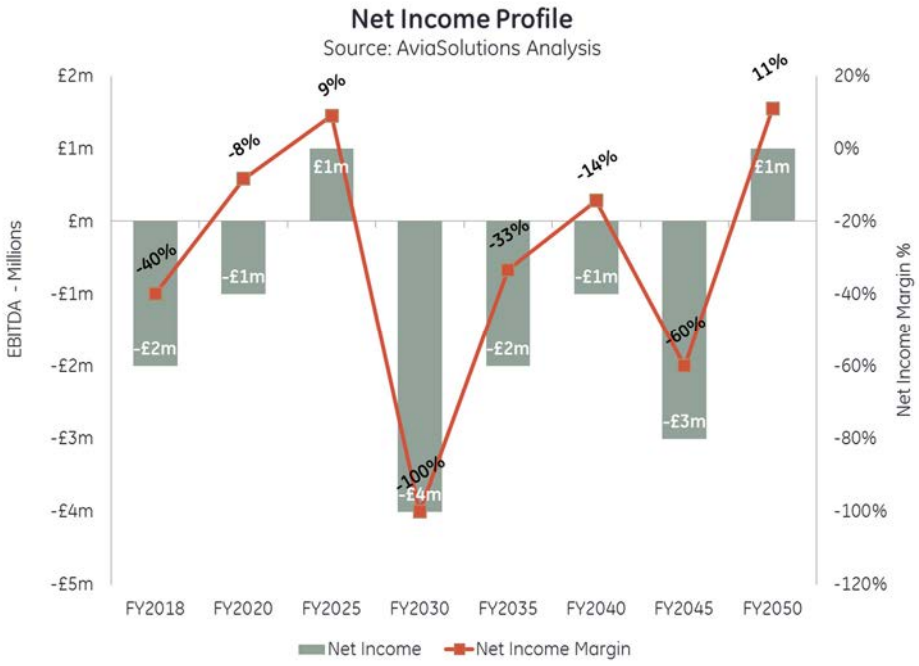
	FY2018	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050
EBITDA	-£2m	£m	£2m	-£3m	-£1m	£m	-£2m	£2m
EBITDA Margin	-32%	0%	18%	-75%	-17%	0%	-40%	22%



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.

- Comments on the York Report - Travel times

Lab-Tools Ltd. 2019-03-08

Is this extract from York Aviation's table [1,2] the quality of their advice ?

Table 1 :

ASSESSMENT OF THE NEED AND JUSTIFICATION FOR THE DEVELOPMENT OF MANSTON AIRPORT

Table 5.2: Drive Time to Competitor Airports from Kent Districts				
District	Manston Airport	London Gatwick	London Stansted	Southend Airport
Thanet	14	91	111	108
Canterbury	30	65	85	85

As a Thanet based Small to Medium Enterprise (SME) that had 8 flights (directors and visitors) booked via Manston when the closure was announced, we find these figures totally unrealistic, and we just hope that it does not lead to people missing their flights !

To evaluate total travel times and costs from home or work to the various airports, there are a range of factors to consider :

Yes certainly, road or rail travel times (see below) are significant, but there is also the cost of parking to trade against the additional 30 minutes to one hour for parking and coach wait and transit time. Then followed by the walk from drop-off point to the check-in desk, with all bags, typically another 15 minutes, and waits at check-in can vary from 10 minutes to 45 minutes.

To that one then has to add 2 hours for check in, or 3 hours check in required for an International flight, followed by about a 1 mile walk [3], not easy for the elderly or those with children :

Table 2 :

HOW FAR DO YOU HAVE TO WALK THROUGH AIRPORTS?

Maximum distances from check in or special assistance desks to gates at the larger UK airports

London Stansted - 3,822ft (1,165m)

London Luton - 2,952ft (900m)

Manchester - 2,697ft (822m)

London Gatwick - 2,559ft (780m)

Glasgow - 2,461ft (750m)

Edinburgh - 695m (2280ft)

Birmingham - 1,739ft (530m)

That is a total of about 6 ½ hours for an international flight – or say about 5 hours for a flight to Europe or in the UK, from Gatwick. Please see Tables 3a and Table 3b below.

To contrast with this :
Manston Airport was about 5 to 15 minutes from most of Thanet, check in was 30 minutes, with less than 10 minutes total walk from car to plane – a total time from front-door to backside on plane seat of less than one hour.

"Manston" to South East Airport road travel times :

For Arrival time 12 Noon on a weekday :

Google Map road travel times to the South East airports from "Thanet" – fairly optimistic, does not include an hourly 15 minutes for a driver safety rest / pee stop, and only a fool would set off from Thanet to Heathrow with only about 2 hours in hand – 3 hours can often be risky, depending on time of day, and colleagues have missed their flight after a 5 hour journey.

Thanet to Heathrow

1 h 40 min - 2 h 10 min (99.6 miles) – 130 minutes + 15 minutes
via M25

Thanet to Gatwick

1 h 25 min - 1 h 50 min (78.8 miles) – 110 minutes + 15 minutes
via Thanet Way/A299

Thanet to Stansted

1 h 40 min - 2 h 20 min (96.2 miles) – 140 minutes + 15 minutes
via M2

Thanet to Southend

1 h 30 min - 2 h 10 min (83.4 miles) – 130 minutes + 15 minutes
via M2

Thanet to Manston

6 min (1.9 miles)
via Woodchurch Rd and Manston Rd/B2050

Most Thanet people avoid flying from Stansted or Southend like the plague, because of the lottery of the Thames Crossings, unless they incur the additional time and expense of an overnight stay.

Table 3a :

Thanet to Heathrow (International Flight) :

Journey Stage	**Time {minutes}**
Drive	130
Safety Stop	15
Parking, bus wait and transit	30
Walk to Check-in	15
Wait at Check-in	20
Required check in before flight time	180
Total time leave door to flight time	**390 = 6.5 Hours**

Table 3b :

Thanet to Gatwick (National or European Flight) :

Journey Stage	**Time {minutes}**
Drive	110
Safety Stop	15
Parking, bus wait and transit	30
Walk to Check-in	15
Wait at Check-in	20
Required check in before flight time	120
Total time leave door to flight time	**310 = 5 Hours 10 minutes**

To contrast with these :
Manston Airport is about 5 to 15 minutes from most of Thanet, check in was 30 minutes, with less than 10 minutes total walk from car to plane – a total time from front-door to backside on plane seat of **less than one hour**.

"Canterbury" to South East Airport road travel times :

For Arrival time 12 Noon on a weekday :

Google Map road travel times in Tables 3a and 3b to the South East airports from Canterbury CT1, CT2 and CT3 districts reduce the above times by about 20 to 45 minutes.
For CT1, CT2, CT3 to Manston the times become about 20 to 40 minutes, in agreement with York Aviation times.

Also calculating the current figures from the Houses of Parliament to these airports still vindicate Sir Roger Gale's statement in 2014 :
"…from central London to a backside on a plane taking off, Manston will actually be closer than Heathrow." - Sir Roger Gale, adjournment debate, 29 April 2014.

What has since changed, other than the M25 becoming more congested, is that now one should strictly calculate up until "wheels leave runway", due to the extended plane taxiing and queuing at Heathrow and Gatwick.

However even these comparisons are not the whole story – one has to consider the extra cost of the longer journeys – A return taxi from Thanet can often be cost effective versus the cost of on-airport parking (as assumed in above tables 3a, 3b), for longer duration work or holiday flights – Thanet to Heathrow return taxi for a single person is currently about £260. Often flights are at unreasonable early or late times, requiring overnight hotel accommodation at one or both ends of the flight. These costs add considerably to the total cost of a holiday, or business flight, and can be very significant additional costs for a Small to Medium Enterprise (SME), as can the additional cost of two lost working days [4,5].

These calculations were also performed for a range of East Kent locations in 2014 [6], and the main thing that has changed since then is that the M25 and M23 have become much more congested, and more susceptible to slow lanes and complete closures.

[1] REP3-025 : TR020002-003137-Stonehill Park Limited - Written Representation.pdf - Table 5.2, PDF page 349

[2] 3.2 - York Aviation Drive Time Table - 5.2.png

[3] 3.3 - Airport Gate Walking Distances - Daily Mail - 2016-09-27.pdf
http://www.dailymail.co.uk/news/article-3809255/Elderly-air-passengers-missing-flights-forced-walk-MILE-departure-gates.html#ixzz4LTlmGqKp

[4] 3.4 - Travel costs – Thanet Professor.pdf -
Additional travel costs of about £12,500 over the four years since Manston closed.

[5] 3.5 - Additional advantages to Lab-Tools Ltd from a local airport.pdf

[6] 3.6 - Manton Airport Kent has major travel advantages.pdf

Table 5.2: Drive Time to Competitor Airports from Kent Districts				
District	Manston Airport	London Gatwick	London Stansted	Southend Airport
Thanet	14	91	111	108
Canterbury	30	65	85	85
Dover	35	70	104	105
Swale	40	50	70	65
Shepway	45	65	90	90
Maidstone	45	40	60	60
Ashford	50	55	80	80
Medway	50	45	60	60
Gravesham	55	40	45	50
Dartford	60	35	45	45
Tonbridge & Malling	65	30	80	60
Sevenoaks	65	30	60	55
Tunbridge Wells	75	40	70	90
Source: York Aviation/Google Maps				

HOW FAR DO YOU HAVE TO WALK THROUGH AIRPORTS?
Maximum distances from check in or special assistance desks to gates at the larger UK airports
London Stansted - 3,822ft (1,165m)
London Luton - 2,952ft (900m)
Manchester - 2,697ft (822m)
London Gatwick - 2,559ft (780m)
Glasgow - 2,461ft (750m)
Edinburgh - 695m (2280ft)
Birmingham - 1,739ft (530m)

Walk times to Gate - Daily Mail - 2016-09-27.png

http://www.dailymail.co.uk/news/article-3809255/Elderly-air-passengers-missing-flights-forced-walk-MILE-departure-gates.html#ixzz4LTlmGqKp

Michael Grantham

Moderator · January 9 at 8:22 PM

In my submission to PINS I said it had cost me thousands of pounds since Manston closed in extra travel cost and time travelling to different airports instead of flying from my local airport. I have just actually calculated the total cost and I arrive at £12,500 over the four years since it closed. I think that is conservative as I reckon I missed some flights.

The point is if it cost just me, a one man business, that kind of money, what did it cost East Kent for all its businesses that were forced to travel from other airports? What about all the families that had to fly for their holidays from other places? I rather suspect the cost to the local economy runs into millions!

Additional advantages to Lab-Tools Ltd from a local airport

1) Travelling via Manston Airport rather than Heathrow saves 2 working days and hundreds of pounds in additional expenses, per business trip, a significant expense for a micro-SME, multiple times per year.

2) With Manston Airport, customers near any major airport in Europe could fly KLM to be at the Lab-Tools nano-science laboratories, and be drinking coffee discussing projects at the lab by mid-morning.

3) When the Manston Airport closure was announced, Directors and Visitors to the laboratories had a total of 8 international flights booked via Manston, not all of which were able to take place.

5) Lab-Tools is highly dependent on next-day and other rapid forms of sample, component and tool delivery. It is indeed remarkable how rapidly these arrive, even from the West coast of the USA. However one or more transit days (and sometimes working days) are lost by not having a freight airport with good capacity in the South East of the UK, ad it is hoped that a re-opened Manston will assist with this.

Manton Airport Kent has major travel advantages.

"…from central London to a backside on a plane taking off, Manston will actually be closer than Heathrow." - Sir Roger Gale, adjournment debate, 29 April 2014.

3D Maps : Travel + Check-in Times to two Airports, MSE & LHR.

From London & Kentish Cities and larger Towns. v2b

www.Lab-Tools.com

As further evidence in support of Sir Roger Gale's speech in the House of Commons, the following data has been collated for current connection times, and displayed as 3D maps, with bright green representing zero delay time through to bright red representing five or more hours required for travel and check-in.

In this draft document, population, postcode location and travel time data is presented for Kent and London, for airports Manston (MSE) and Heathrow (LHR) (for a European flight).

Postcode-location is first plotted for the twelve Kentish districts, each district in a randomly chosen colour. This data gives a first indication of population density across Kent.

Then for the 23 largest Kentish towns and cities, a set of coloured vertical bars are plotted, with a height set by the population of the town or city (taking care to discriminate from districts with the same name). For the cities, the plotted area of the bar is limited to a single central postcode (i.e. CT1 for Canterbury), to avoid cluttering the graph.

The colour of the bar is set by the travel time, plus check-in time, to a selected airport. (A plotted colour-scale is now added.)

Finally a set of vertical bars is generated for each of the 13 largest London main-line stations (A-group), coloured in the same manner. Arbitrary height.

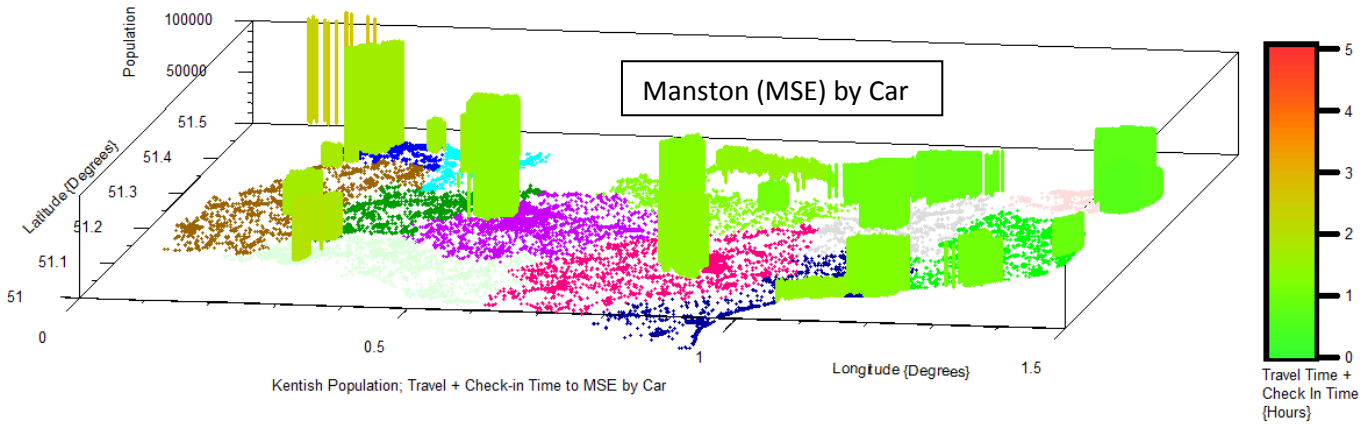
These 3D colour maps clearly indicate that both for Kent, and from these main London stations, Manston Airport offers quicker travel than Heathrow, either by car or rail.

Data for a similar map for East Sussex is currently being collated by other members of the "Save Manston Airport" group, and for travel via other London airports.

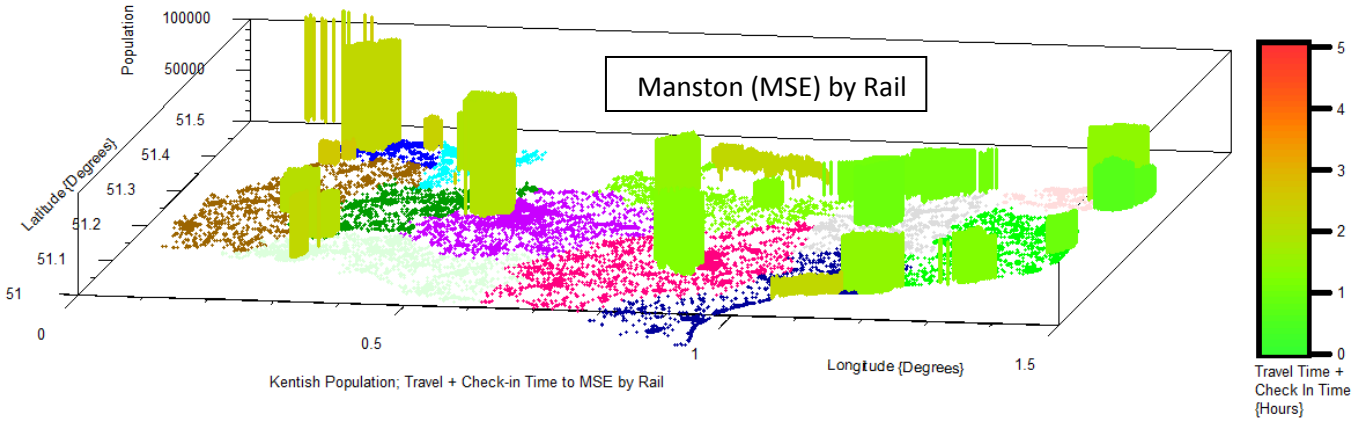
Population-postcode data is derived from the 2011 census, mostly via http://www.citypopulation.de/php/uk-england-southeastengland.php .
London station data from https://en.wikipedia.org/wiki/List_of_London_railway_stations .
Travel times (car and rail) from http://www.transportdirect.info/ , measured in the middle of the day.

3D Maps : Travel + Check-in Times to two Airports, MSE & LHR. v2b

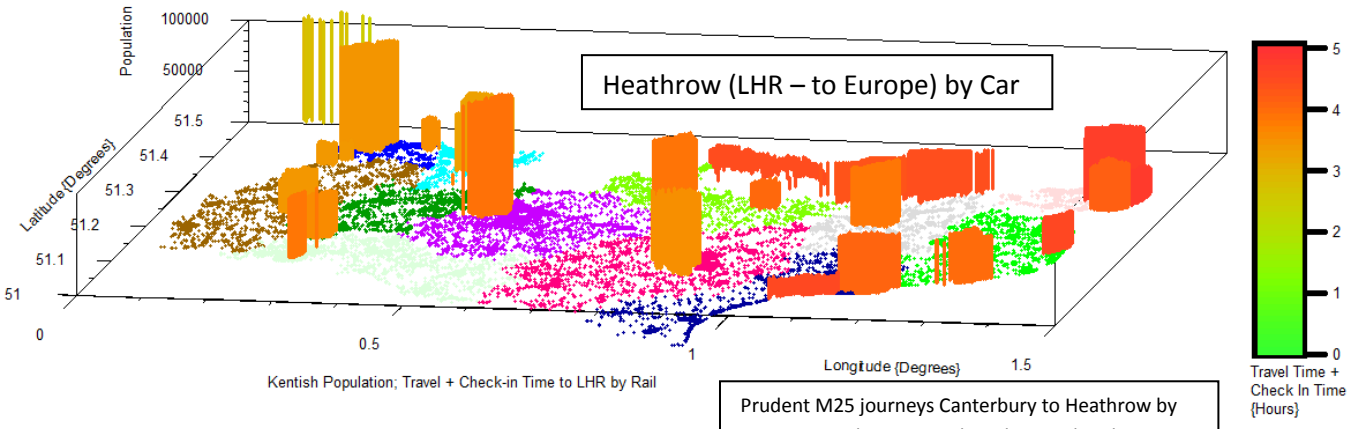
Bright green : zero delay time**; Bright red :** five or more hours.



Kentish Population; Travel + Check-in Time to MSE by Car

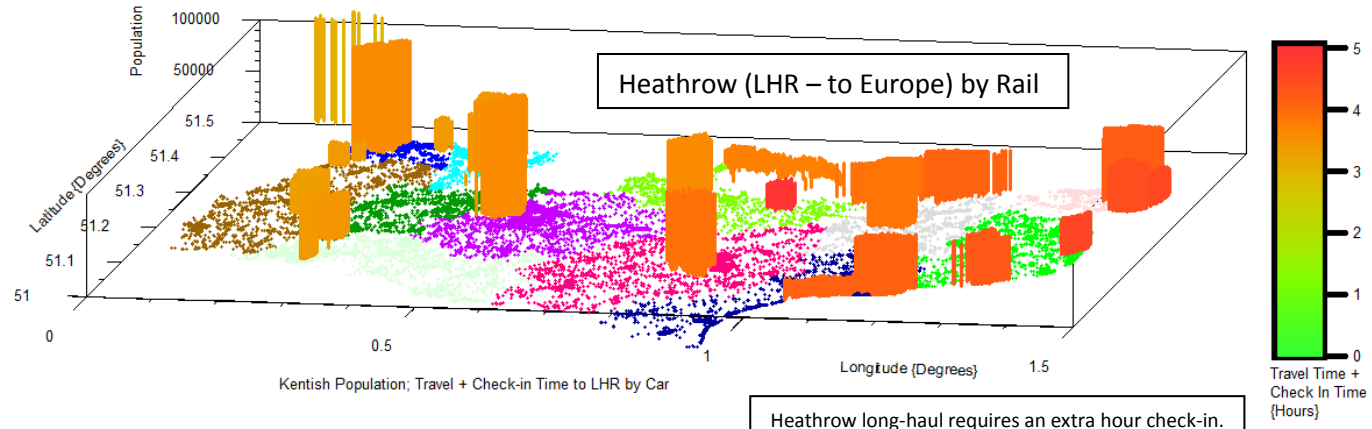


Kentish Population; Travel + Check-in Time to MSE by Rail



Kentish Population; Travel + Check-in Time to LHR by Rail

Prudent M25 journeys Canterbury to Heathrow by car require 1 hour more than this graph indicates.



Kentish Population; Travel + Check-in Time to LHR by Car

Heathrow long-haul requires an extra hour check-in.