



MANSTON AIRPORT: A NATIONAL AND REGIONAL AVIATION ASSET

VOLUME IV
The economic and social impacts
of airport operations

MAY 2017

Prepared for:

RiverOak Strategic Partners

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Authorship and acknowledgements:

This report has been produced by Dr Sally Dixon, an independent aviation and business research consultant. The author wishes to thank all those who contributed to the research. However, the views expressed herein are those of the author only and are based upon independent research by her.

Executive Summary

This report has been produced in conjunction with three other volumes that provide an overview of why the redevelopment of Manston Airport is important to Thanet, East Kent and the southeast region. This fourth volume looks at the economic impacts of Manston Airport and the forecasts for air freight and passenger traffic that are provided in Volume III. As such, the forecast level of freight and passenger movements has been used as a base from which to predict the impacts on the economy.

The local economy

Kent, known as the Garden of England, performs below the South East average. However, economic performance varies across the County, with some areas, particularly West Kent much more affluent than others, skewing the overall picture. Indeed, the gap between East Kent and Medway (both part of the Thames Estuary region) and the more affluent Mid- and West Kent is increasing. Thanet, in particular, has many issues associated with deprivation and ranks as the most deprived area of Kent and one of its wards, Cliftonville West, is ranked 4th out of 32,844 Lower Super Output Areas (LSOAs) in England. Thanet performs consistently behind the rest of Kent with lower wages, lower productivity, higher unemployment and low participation in Higher Education.

Kent County Council wants to address disadvantage and aim to deliver critical infrastructure that will create the conditions for economic growth across Kent, raise aspirations, and encourage businesses to invest in the County. The creation of the Thames Estuary 2050 Growth Commission and the inclusion of Thanet should serve to boost productivity, attract and retain skilled workers, and capitalise on major infrastructure works.

Thanet District Council is also working to transform the local economy and has an ambitious vision for the future of Thanet. This includes increasing participation in work, workforce skills, productivity, wages, and ultimately GVA and GPD in Thanet. Airports are renowned for their impact on local and regional economies and no other asset is likely to be able to provide the jobs and other economic benefits a fully operational Manston Airport can bring.

In terms of aviation, Kent County Council's strategy for airports was to oppose the construction of a new Thames Estuary Airport and also the second runway at Gatwick, preferring to maximise use of existing airport infrastructure. The reopening of Manston Airport appears to fit with Kent County Council's strategy. Operations at Manston Airport can provide the impetus for the improved internationalisation of Kent businesses, particularly if an enterprise zone is linked to the airport to leverage the benefits of exporting.

Job creation

The importance of air freight operations to the creation of jobs and to increasing economic and social prosperity has been demonstrated frequently around the world. The socio-economic impacts of an airport's operations include direct, indirect, induced and catalytic effects and there are a number of formulae that can be used to calculate these impacts.

This report describes how the number of jobs created by airport operations at Manston has been forecast. Direct on-site jobs are predicted to be 2,150 by year 5, of which 697 posts are forecast to be created by the airport operator. The direct employment figure will rise with increasing freight tonnage and passenger numbers, which are detailed in

the report. By the end of year 5, the indirect and catalytic jobs forecast to result from the operation at Manston Airport are 4,515 and 8,601 respectively, and 8,970 and 17,085 by the end of year 20. The total figure for jobs created by the operations of Manston Airport is forecast at around 30,000. These figures represent a wide range of long-term opportunities for aspiring local school leavers, college graduates, and those at all stages of their careers.

Construction jobs required in the redevelopment of Manston Airport are shown separately since these are impermanent positions. Before RiverOak reopens Manston Airport, a total of eight freight stands and three passenger stands for aircraft will be constructed as well as warehousing and fuel storage to meet the forecast demand. Further construction will take place in years 4, 10, and 15 (see Volume III for details). The redevelopment project across the 15-year timeframe is forecast to require 1,475 people working years. From this figure, the number of construction workers required is forecast to be between 600 and 700. There are also likely to be additional jobs created for off-site work by local construction companies.

Other socio-economic benefits

Most modern economies rely on the economic impact made by airport operations. In addition to job creation, there are numerous other benefits including:

- Training and education: Working with Higher Education (HE) and Further Education (FE), RiverOak can leverage opportunities associated with the Manston Airport's operation.
- Raising the aspirations of young people: Manston Airport can stimulate the desire to continue in education and training, encouraging young people to improve their life chances and realise their full potential.
- Connectivity: Increased connectivity improves the GDP of a region and Manston Airport would dramatically improve the connectivity of the area, which is even more essential with the advent of the UK's exit from the EU.
- Attracting inward investment: The presence of an airport supports inward investment and business location decisions.
- Tourism: Passenger services will support both inbound and outbound tourism.
- Generating wealth: GDP figures based on the airport's impact have been calculated together with the tax revenues the projected job creation is likely to produce.

Conclusion

This report shows that the reopening of Manston Airport is very much in the public interest. In addition to the considerable number of direct, indirect, induced and catalytic jobs created, other socio-economic impacts that can only accrue from an airport's operation will benefit the area. The extent of these benefits adds further weight to the assertion that there is a clear need for the reopening of Manston Airport.

Definitions and abbreviations

ACI	Airports Council International
Air freight	The carriage of goods by aircraft
Cargo	The term cargo and freight are used interchangeably in this report and refer to goods carried by road, sea or air
CPO	Compulsory Purchase Order
DCO	Development Consent Order
EU	European Union
FDI	Foreign Direct Investment
FE	Further Education
Freight	The term freight and cargo are used interchangeably in this report and refer to goods carried by road, sea or air
GDP	Gross Domestic Product
GVA	Gross Value Added
HE	Higher Education
HGV	Heavy Good Vehicle
ICT	Information and communications technology
IMD	Index of Multiple Deprivation
JIT	Just-in-time, a manufacturing system that allows materials or components to be delivered just as they are required in the manufacturing process, thereby minimising storage costs
KCC	Kent County Council
MRO	Maintenance, Repair and Overhaul of aircraft and aircraft parts
NEET	Not in education, employment or training
SME	Small and Medium-sized Enterprise
STEM	Science, technology, engineering and mathematics
TDC	Thanet District Council
UK	United Kingdom

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1 Introduction

1.1 Background and rationale

1.1.1 RiverOak Strategic Partners Ltd (RSP) has a vision to revive Manston Airport as a successful freight-focused airport with supplementary passenger operations. A Development Consent Order (DCO) will be sought by RiverOak to secure the rights and consents necessary for the airport's development as required by the Planning Act 2008. This means that, at the end of a process overseen by HM Government's Planning Inspectorate, the Secretary of State at the Department for Transport will decide whether RiverOak's application should be granted.

1.1.2 This report is the fourth in a series of documents that make the case for Manston Airport to return to full operation. These reports cover:

Volume I	The need for airport capacity in the South East of the UK and the potential role of Manston Airport as part of the UK's airport network
Volume II	The findings from a qualitative study that identifies the push and pull attractors of Manston Airport and details the opportunities and the sectoral and geographical markets the research uncovered
Volume III	The forecast for air freight and passenger traffic for Manston Airport over the first twenty years of operation
Volume IV	This report, which describes the socio-economic impacts of the operation of Manston Airport as described by the forecast in the third volume of this body of work

1.2 Aim and objectives

1.2.1 As a key part of the process of gaining the necessary permissions to acquire and reopen Manston as an airport, the aim of this report is to define the impact on the local and regional economies of Thanet, East Kent, and the wider Thames Estuary area. There are a number of objectives set out for this work and in particular the results will:

- Provide a forecast for the jobs created on the airport site and in the wider economy
- Set out the total jobs that are expected to be created by the airport operator
- Describe the potential economic and social impacts of Manston Airport
- Inform the statutory consultation by ensuring stakeholders have the necessary information to assess the public benefit of an operational Manston
- Continue to gain support from industry stakeholders
- Open dialogue with academic institutions from HE and FE
- Provide the information required to support the DCO application

1.3 Report structure

1.3.1 The report is structured as follows: First the local economies of Thanet and East Kent are described. Next, the socio-economic impacts of an airport's operations are detailed together with a description of how these impacts are forecast. The employment forecasts for Manston follow and include direct, indirect/induced and catalytic jobs as well as those created by the airport operator. The training and education opportunities associated with the airport's operation are next discussed. The penultimate section describes the other socio-economic impacts of the airport before concluding with a summary of the impacts of the airport that are in the public interest.

2 The local economy

2.0.1 This section describes the economies of Kent, East Kent and Thanet, providing a context by which to envision the potential impacts of operations at Manston Airport. Estimates of the possible impacts are set against the forecasts for freight and passenger traffic provided in Volume III of this series of reports.

2.1 The Kent economy

2.1.1 Kent, the 'Garden of England', has a land area of 1,368 square miles with 85% classed as green space, and over 350 miles of coastline. Figure 1 shows outline of the County, which extends from just inside the M25 to the north, Margate to the east, the Romney Marshes in the south, and Tunbridge Wells and Sevenoaks to the west. Including the unitary authority of Medway, Kent has a total population of 1,801,200 (KCC, 2016) and a workforce of around 951,000 (Oxford Economics, 2016).

Figure 1 Map of the County of Kent



Source: Google Maps

2.1.2 The County ranks 100 out of 152 county and unitary authorities in the English Indices of Deprivation 2015 (ID2015). This puts Kent towards the bottom third of the counties in England. Kent's economy is based around small and medium-sized businesses. Table 1 illustrates Kent's relative economic performance in the UK. It should be noted that some areas of Kent, particularly the west of the County including towns such as Tunbridge Wells and Sevenoaks, are much more affluent than East Kent, skewing the overall picture.

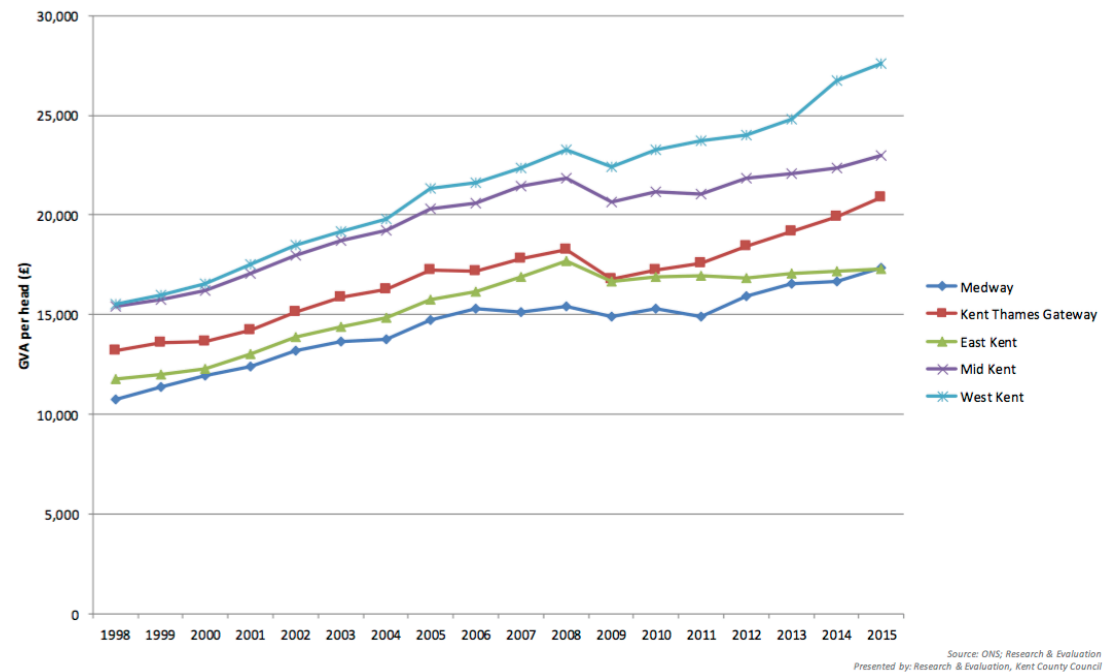
Table 1 Kent competitiveness indicators

Performance Indicator	Kent	UK	Date
Gross Value Added per head	£18,994	£24,091	2013
Gross median weekly earnings	£541.50	£520.80	2014
Economic activity	78.6%	77.4%	2015
NVQ 4 or above – working age	32.4%	36.0%	2014
Claimant unemployment rate	1.3%	1.7%	2015

Source: Kent County Council *et al*, 2015, p. 5

2.1.3 Figure 2 compares the GVA per head of population for the Kent areas including Medway (shown separately since it is a Unitary Authority), East, Mid-, and West Kent and the Kent Thames Gateway areas. The figure clearly shows that Medway and East Kent lag behind the rest of the County with the gap between East Kent and Mid- and West Kent widening over time.

Figure 2 GVA per head in Kent and Medway by area to 2015



Source: KCC, 2017b, p. 5

Kent's vision for the future

2.1.4 The Vision for Kent 2012-2022 (Kent Forum, 2012) outlines three main ambitions for the County:

1. To grow the economy: For Kent to be open for business with a growing and successful economy and jobs for all.
2. To tackle disadvantage: For Kent to be a county of opportunity, where aspiration rather than dependency is supported and quality of life is high for everyone.
3. To put citizens in control: For power and influence to be in the hands of local people so they are able to take responsibility for themselves, their families, and their communities.

2.1.5 These ambitions match with the operation of a successful airport in the County. Indeed, within the first of these visions - growing the economy - the Kent Forum identified their top three commitments. At this level of detail it is clear that a fully operational Manston Airport is entirely consistent with the commitments made by the leaders of the 14 Local Authorities in Kent who make up the Kent Forum. These commitments are:

1. To deliver the critical infrastructure that will create the conditions for economic growth across Kent. This means:
 - Providing access to high speed broadband that encourages economic growth in our rural areas

- Improving the strategic road networks within the county, and also those linking Kent to the rest of the UK
 - Maximising the opportunities of high speed rail and Kent's airports and ports that will reduce journey times to London and improve Kent's connectivity with London, UK and Europe
 - Improvements in integrated public transport that gives access to employment and improved workforce mobility without burdening our road networks
2. To raise the career aspirations of Kent's residents, from early years through to adulthood, and to meet those increased aspirations with a range of learning opportunities, apprenticeships and internships that meet future business need.
3. To be business friendly and the county of choice for inward investment and expansion by:
- Providing sector-specific support for business, particularly in areas of potential growth
 - Sell Kent as the place to do business, emphasising and enhancing its gateway location and natural assets
 - Offer inducements (financial and other) for inward investment and expansion
 - Maximise the amount that public sector partners procure from Kent companies and that use Kent workforce
 - Minimising the bureaucracy placed on business and champion the removal of unnecessary regulation (Kent Forum, 2012, pp. 4-5)

Kent's strategy for airports

2.1.6 Several documents outline Kent's strategy for airports. As detailed above, the Vision for Kent 2012-2022 (Kent Forum, 2012) includes maximising the opportunities of Kent's airports to improve Kent's connectivity. In their response to the Airports Commission consultation, Kent County Council declared the following:

*"We have engaged with the work of the Airports Commission and robustly oppose proposals for a new airport in the Thames Estuary and a second runway at Gatwick. As an alternative, Kent County Council supports better use of existing airports, including regional airports, improved surface access to airports by rail, and expansion of existing airport infrastructure (with the exception of a second runway at Gatwick, which it opposes) in order to meet the UK's aviation needs."*¹

2.1.7 Kent has two main airports within the County; Manston and Lydd. Rochester Airport with its grass runways is located in the Unitary Authority of Medway, and Biggin Hill resides within the London Borough of Bromley. Kent has a number of airfields including Headcorn, Maypole, and Farthing Corner. Only Manston and Lydd airports are capable of commercial services. Unlike Manston, Lydd is constrained by a short runway (1505 metres), considerable approach issues (including MOD Hythe firing range and proximity of Dungeness Power Station), a rural location and relatively poor surface transport connectivity. Also, whilst the majority support for Manston Airport continues, between 2010 and 2014, expansion at Lydd attracted considerable criticism from stakeholders including Natural England, the RSPB, the Campaign to Protect Rural England, and local residents.

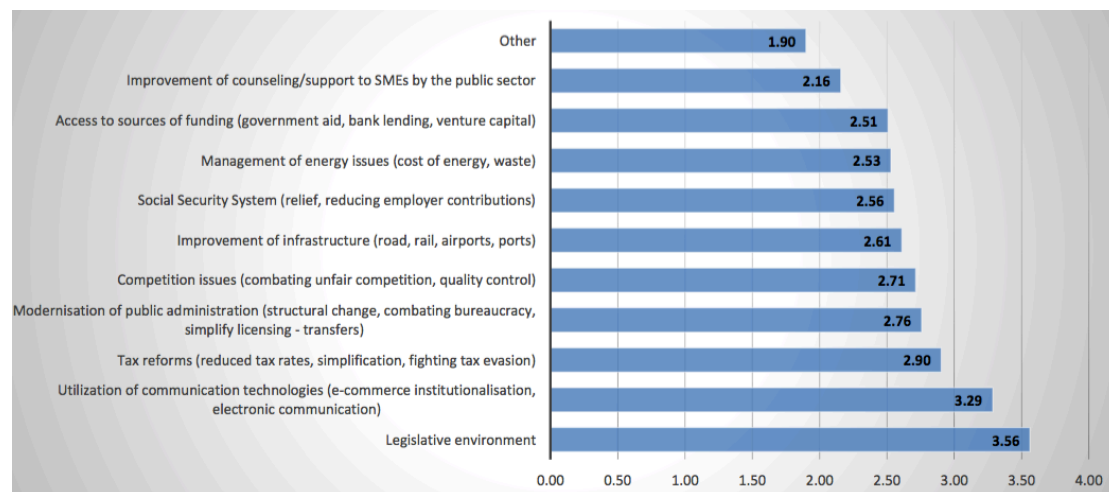
¹ <http://www.kent.gov.uk/about-the-council/strategies-and-policies/transport-and-highways-policies/aviation/aviation-strategy>

Internationalisation of Kent businesses

2.1.8 A study by Dr Fragkiskos Filippaios (2017), Reader in International Business at Kent Business School, commissioned by Kent County Council, provides useful insights into the internationalisation of Kent businesses. 35% of Kent businesses export their products, with manufacturing, professional sciences, and information technology sectors having a significant number of firms that rely heavily on exports.

2.1.9 Dr Filippaios' study found that of those who do export, 85% export to the EU, 43% to the US and 21% to the UAE. 25% of the businesses in the study import, most of whom also export, with only 14% importing only. Key import markets are the EU at 72%, the US at 42% and China at 36%. The dominance of the EU for both imports and exports and uncertainty of the post Brexit regulatory environment are a cause for concern for UK businesses.

Figure 3 External factors influencing company development



Source: Filippaios, 2017, p. 15

2.1.10 Key external factors that facilitate international trade include the legislative environment and reduction of bureaucracy. However, Dr. Filippaios' research showed that companies would prefer the government to take the role of facilitator rather than supporter as they make efforts to internationalise. Dr Filippaios describes the horizontal axis as indicating the strength of the factor, scored from one (low) to five (high), as identified by companies participating in the survey.

2.1.11 Of particular note is that Kent businesses mentioned improvements to infrastructure including airports as shown in Figure 3. In terms of support mechanisms, the research found that:

- A substantial number of support mechanisms exist, often without any significant coordination. Federation of Small Businesses, Institute of Directors and Kent Invicta Chamber of Commerce are the most recognisable ones by Kent SMEs (small and medium sized enterprises) but UK Trade and Investment (Department for International trade) and Gov.Uk emerge also as significant support mechanisms specifically for exporters.
- Despite the relatively high awareness there is little use of these support mechanisms. The diversity of mechanisms creates confusion for SMEs that do

not wish to spend substantial time in searching for the most appropriate support.

- In terms of effectiveness the general support mechanisms tend to score high in the wider population but for exporters more specialised mechanisms, such as UK Export Finance, Export Britain and Federation of Small Businesses are considered very effective. (Kent SME Internationalisation Study 2016/2017, Summary of Findings)

2.1.12 Whilst businesses in the region need to take responsibility for their excellence and ability to compete internationally, it is important to develop an international profile of the region as an attractive place for businesses and people to locate. Resumed and vastly improved operations at Manston Airport can provide the impetus for internationalisation, particularly if an enterprise zone is linked to the airport to leverage the benefits of exporting.

2.2 The East Kent economy

2.2.1 The term 'East Kent' is frequently used to describe an area to the southeast of the UK. However, there seems to be no formal definition of the area, with some including the Medway towns and the Isle of Sheppey. Recently, there have been moves to merge the local authorities in East Kent into a single district authority. These authorities included Canterbury, Thanet, Dover, Shepway and Ashford, corresponding approximately to the Diocese of Canterbury. However, Ashford pulled out of the plan in January 2017 and Shepway voted to reject the plan in March 2017.

2.2.2 For the purposes of this study, East Kent includes the city of Canterbury, the Isle of Thanet, and the towns of Deal, Dover, Faversham, Herne Bay, Sandwich and Whitstable as shown in orange in Figure 4. The area includes numerous historic sites including Canterbury Cathedral.

Figure 4 Map of East Kent



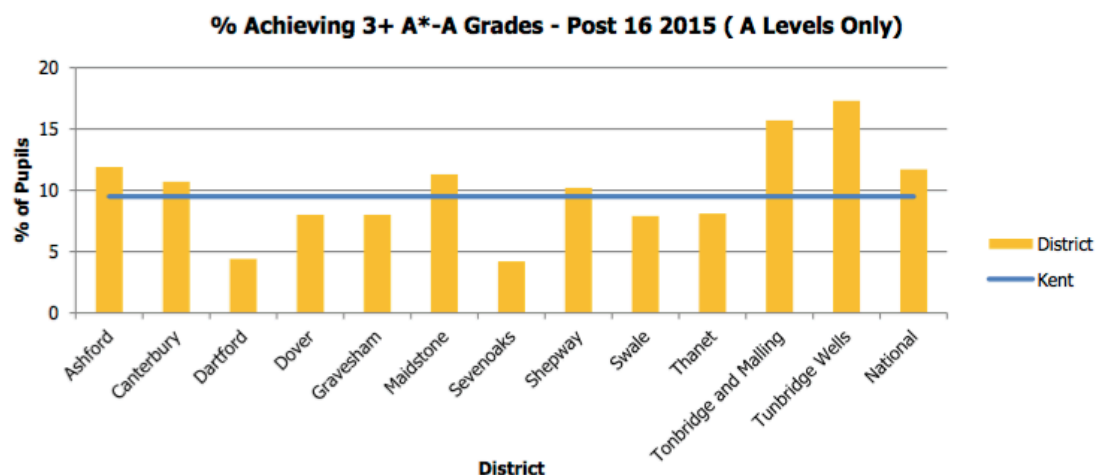
2.2.3 The 2011 Census shows that Local Authorities in the east of Kent have a total number of persons as follows:

- Ashford 117,956
- Canterbury 151,145
- Dover 111,674
- Shepway 107,969
- Swale 135,835
- Thanet 134,186

2.2.4 Whilst Kent has an average unemployment rate (March 2017) of 1.7%, East Kent and specifically Dover, Shepway, Swale and Thanet have higher rates at respectively 2.3%, 2.3%, 2.4% and 3.6%. Rates are particularly high for young people between the ages of 18 and 24. Whilst Kent ranks within the 50% least deprived of all counties and unitary authorities in England, East Kent fares less well. Indeed, Thanet continues to rank as the most deprived local authority in Kent, and Ashford and Swale have experienced the largest increase in deprivation relative to other areas (KCC, 2015).

2.2.5 In terms of post-16 educational attainment, specifically the percentage achieving three or more A*-A grades at A Level, whilst Canterbury ranks above the Kent average, Dover, Swale and Thanet are considerably below. All areas in East Kent except Ashford are below the national level. The post-16 attainment for 2015 is shown by area and district in Figure 5. It should be noted that the Sevenoaks figure would exclude those students who took the International Baccalaureate (IB).

Figure 5 Post-16 attainment by area and district for 2015



Source: http://www.kelsi.org.uk/_data/assets/pdf_file/0005/57911/Final-Booklet-2016.pdf

2.3 The Thanet economy

2.3.1 Thanet, the most easterly part of Kent, was once an island separated from the rest of the County by the Wantsum Channel. The Channel was originally around two miles wide but has narrowed to a stream over the millennia. Thanet includes the towns of Broadstairs, Margate and Ramsgate as shown in Figure 6.

2.3.2 Thanet has good rail and road connections: The high-speed rail link, HS1, passes through Canterbury and Ashford en route to St Pancras taking about one hour and 15 minutes. This train passes close to the Manston site. There is also a route via the coastal and Medway towns to St Pancras taking about one hour and 40 minutes. There is also a service from Thanet via the coastal towns, Chatham and north Kent to London Victoria,

which takes around two hours. Road access to the M2 is via the Thanet Way, which is a dual carriageway.

Figure 6 *Map of Thanet*



Source: Google Maps

2.3.3 Thanet benefits from a number of blue flag beaches and historic landmarks. The area is noted for its connections to Charles Dickens and JMW Turner, who is the namesake of the Turner Contemporary gallery on the sea wall in Margate. Thanet has an out-of-town shopping and entertainment centre at Westwood Cross near Broadstairs.

2.3.4 The 2011 Census from the Office for National Statistics shows that Thanet has a population of 134,186. By 2020, this figure is predicted to be around 140,000 with a workforce of 79,100 (Oxford Economics, 2016).

Deprivation and unemployment

2.3.5 The Isle of Thanet has particular problems associated with deprivation including relatively high unemployment, low wages and low participation in HE. As described previously, Thanet continues to rank as the most deprived local authority in Kent (KCC, 2015). Indeed, figures published by the Department of Communities and Local Government ranked Thanet as the 28th (out of 326) most deprived area in England in 2015, the second poorest local authority area in the South East, and the poorest in Kent.

2.3.6 Thanet's ranking has deteriorated from 49th to 28th since 2010, showing a worsening of its deprivation relative to other areas in England. These figures are based on the Index of Multiple Deprivation (IMD), which include income; employment; health and disability; education, skills and training; barriers to housing and services; living environment; and crime. Within Thanet, the Cliftonville West ward is ranked 4th out of 32,844 Lower Super Output Areas (LSOAs) in England placing it within England's most deprived 1%. In terms of LSOAs, Margate Central ranks 21st.

2.3.7 Unemployment in Thanet is higher than the other East Kent districts, Kent as a whole and the South East, as shown in Table 2. The employment rate is lower in Thanet than in the South East and Great Britain. For the year to March 2016, figures from the Annual Population Survey shows that Thanet's employment rate was 54.5% compared to 62.4% in the South East and 60.0% in Great Britain.

Table 2 Comparative unemployment in Thanet

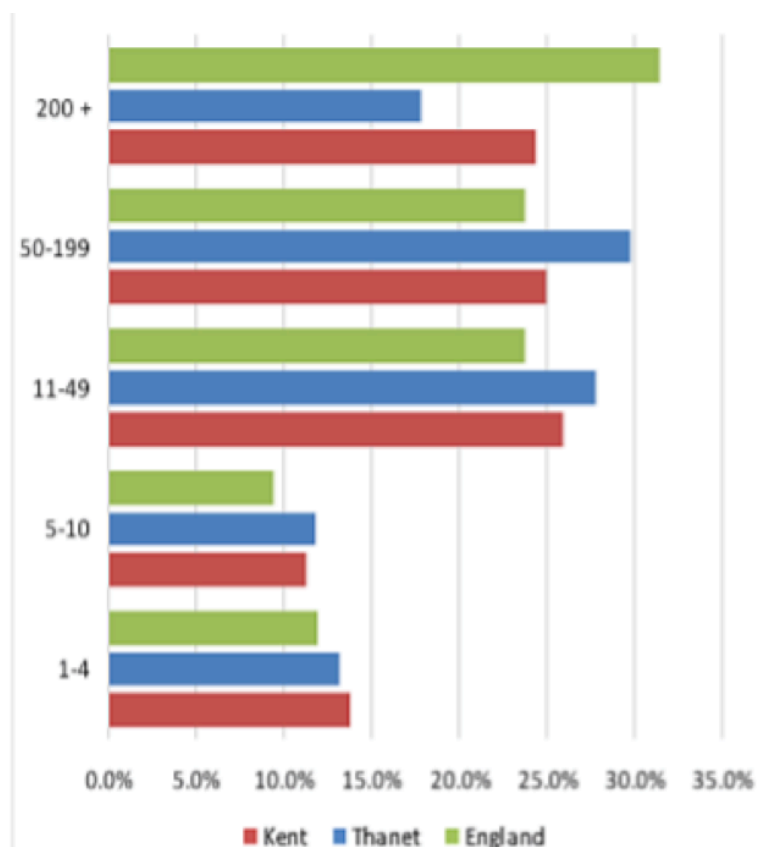
	March 2017		Since Feb 2017	Since March 2016
	Unemployed	% of workforce	%	%
Thanet District	2,920	3.6%	+1.6%	+4.1%
Dover District	1,555	2.3%	+4.4%	+13.5%
Canterbury	1,350	1.3%	+0.4%	+8.4%
Shepway	1,480	2.3%	+2.4%	+6.1%
Kent	16,085	1.7%	+2.6%	+6.9%
Great Britain	789,470	2.0%	+2.2%	+3.3%

Source: KCC, 2017a

Employment and productivity

2.3.8 Thanet has fewer large firms (employing more than 200 people) than Kent and England. Indeed, the Thanet economy is dominated by small firms (TDC, 2016, p. 8) as shown in Figure 7.

Figure 7 Employment by size of firm



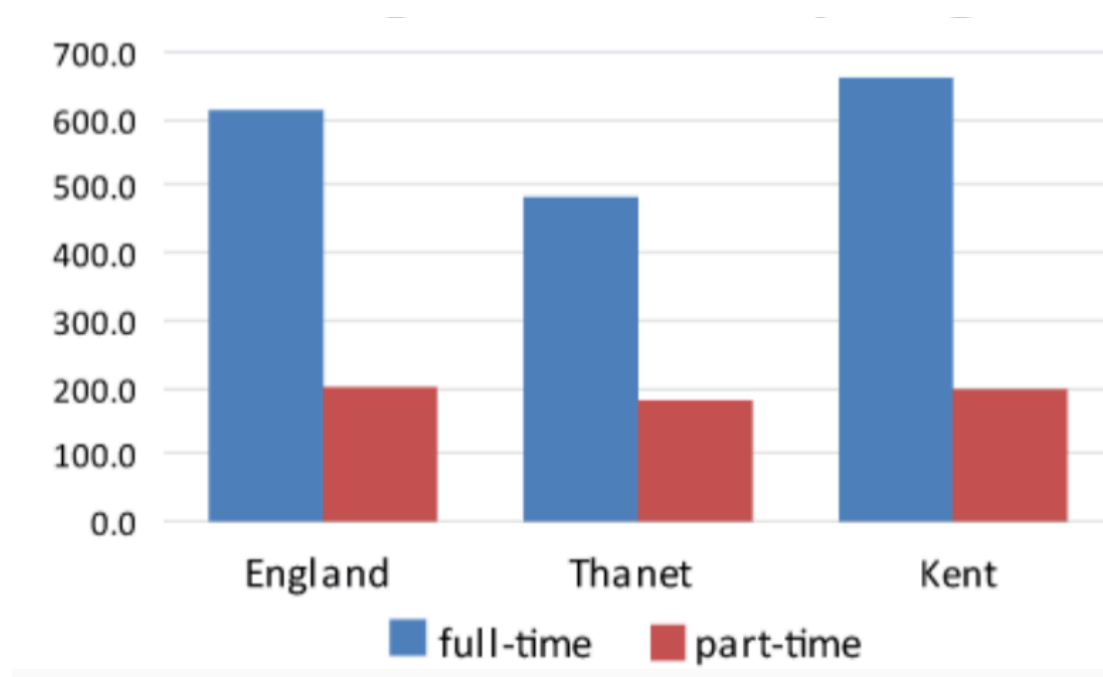
Source: Thanet District Council, undated, p. 7

2.3.9 Productivity in Thanet is around 80% that of the Kent average and will need to grow at 3.5% per annum until 2031 to reach this county average (TDC, 2016, p. 16). The link between productivity and wages means that organisations will have to step up their

productivity if wage levels are to rise sufficiently to increase the quality of life within the District. Indeed, in 2016, GVA per capita in Thanet was only 63% of the County average and closing this gap will necessitate growth at a rate of 5.2% per annum to 2031 (TDC, 2016, p. 16).

2.3.10 Wages in Thanet are lower than both the England and Kent averages for both full-time and part-time workers as shown in Figure 8.

Figure 8 Average gross weekly wage in Kent and Thanet



Source: Thanet District Council, undated, p. 6

Economic growth strategy for Thanet

2.3.11 The Draft Economic Growth Strategy for Thanet (TDC, 2016) describes the local economy:

“Thanet has a distinctive local economy with substantial opportunities for sustainable and high quality economic growth. Particularly with HS1 in place, Thanet now has significant locational advantages deriving from its proximity to both London and continental Europe. It has outstanding cultural assets, epitomised particularly through the Turner Contemporary. It has a very high quality natural environment, especially its coastline.

Looking ahead, there is real potential linked to the port and historic marina at Ramsgate and emerging opportunities in the fields of advanced manufacturing, agri-tech and the creative sector. While there are some challenges – relating particularly to the creation of jobs locally and workforce skills – the opportunities are real ones, particularly in the wider context of significant planned housing and population growth.” (TDC, 2016, p. 1)

2.3.12 However, Thanet continues to face many challenges as the Council says in its Economic Growth Strategy (TDC, 2016):

“The skills profile could be strengthened; too many jobs are “low wage” and part time in character; and the number of jobs within the District needs to grow. There is also a need to diversify the business base so it is less reliant on ‘public sector’ type roles (36% in health, education and public administration).

However, Thanet is full of ambition and confidence. A great deal has been achieved over recent years and much more can be accomplished through the delivery of a forward looking and focused Economic Growth Strategy.”

2.3.13 Thanet has benefited from EU funding under a number of programmes including the European Regional Development Fund. Access to this funding for deprived areas will be lost when the UK exits the EU, rendering Thanet more reliant on private sector investment to ensure the creation of high quality jobs. The reopening of Manston Airport would provide economic growth for Thanet and the UK in activities currently and increasingly being diverted to airports in mainland Europe. An operational Manston Airport would provide jobs in an area of high unemployment, with knock-on educational, training, and social benefits.

The Thames Estuary 2050 Growth Commission

2.3.14 In the 2016 budget, the Chancellor of Exchequer announced a new Thames Estuary 2050 Growth Commission. Unlike its predecessor, the Thames Gateway project, which excluded East Kent, this initiative includes 40-miles of the Thames Estuary from Canary Wharf to Southend on the north side and Thanet on the south as shown in Figure 9. The Thames Estuary region has a population of more than three million people and in Kent covers the areas of Canterbury, Dartford, Gravesham, Medway, Swale and Thanet.

Figure 9 **Map of the Thames Estuary 2050 area**



Source: <https://www.gov.uk/government/news/lord-heseltine-thames-estuary-plan-to-unleash-growth-for-decades-to-come>

2.3.15 The aim of the Commission is to boost productivity, attract and retain skilled workers, and capitalise on major infrastructure works. In his budget statement, The Chancellor of the Exchequer said:

“The Commission will develop an ambitious vision and delivery plan for North Kent, South Essex and East London up to 2050. This will focus on supporting

the development of high productivity clusters in specific locations. It will examine how the area can develop, attract and retain skilled workers. It will also look at how to make the most of opportunities from planned infrastructure such as the Lower Thames Crossing. It will report back in Autumn Statement 2017 with a clear and affordable delivery plan for achieving this vision.” (HM Treasury, 2016, para 6.21)

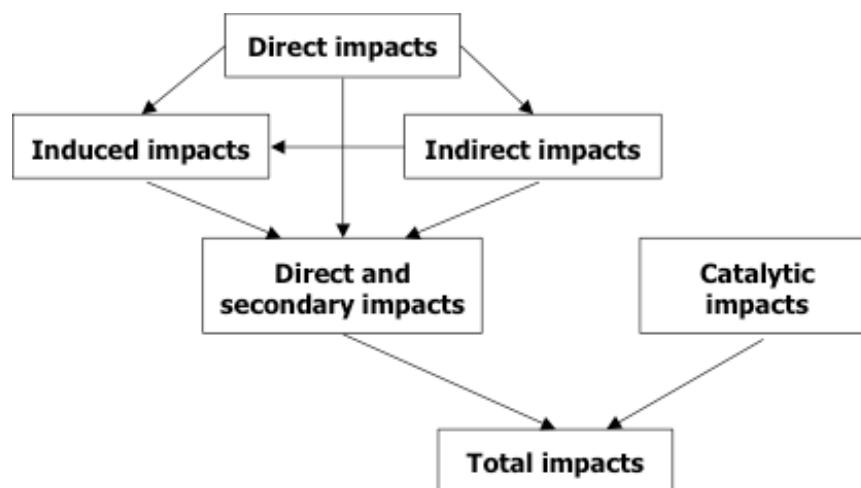
3 The economic and social impacts of airports

3.0.1 This section describes the impact airports make on their local, regional and national economies. These are usually measured in terms of employment, income, and contribution to GDP.

3.1 Types of impact made by airports

3.1.1 There are four types of impact that airports make on economies. These are direct, indirect and induced (secondary impacts), and catalytic, as shown Figure 10.

Figure 10 *The economic impact of airports*



Source: Graham, 2001, p. 185

3.1.2 **Direct** impacts are those associated with the operation and management of activities at the airport. This includes the impact made by the airport operator as well as other airport-related businesses located elsewhere on or near the airport site. These other businesses include airlines, general aviation, handling agents, airport security, immigration and customs, retail and food concessions, aircraft maintenance, and a range of other activities at the airport.

3.1.3 **Indirect** impacts are the impacts made by the supply chain and includes organisations such as wholesalers providing food for in-flight catering, aviation fuel supply, travel agents, cleaning and maintenance contractors, construction, and accounting and legal services.

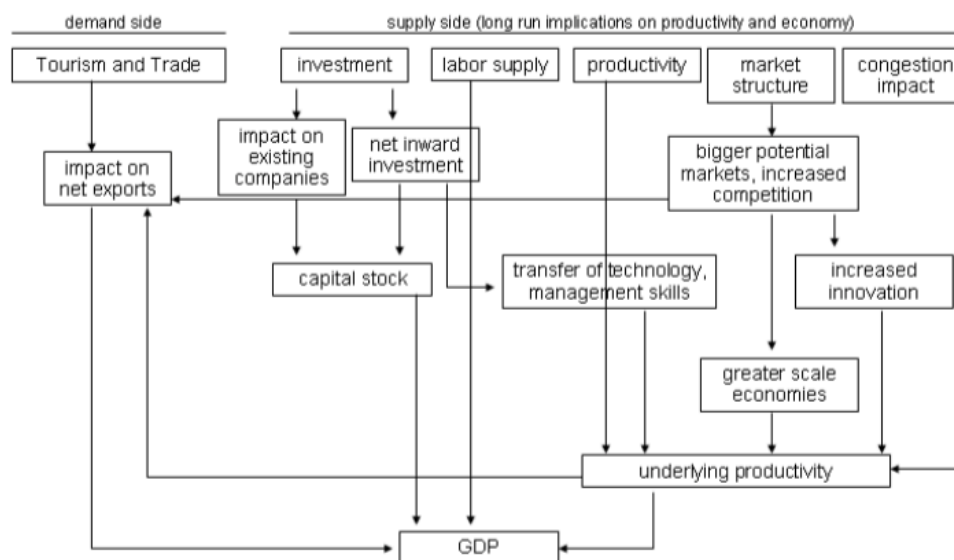
3.1.4 The **Induced** category covers the impacts created directly or indirectly as a result of those connected to the airport spending their income in the local or national economy. Induced impacts therefore include the operations of a wide range of organisations such as retail, entertainment, hospitality, childcare, health care, building and home renovations for example.

3.1.5 **Catalytic** impacts, also known as Wider Economic Benefits, are associated with the aviation sector. Air transportation facilitates employment and economic development in the local and national economy. For example, air transport contributes to tourism and therefore impacts tourist spending in the economy. Air transport also impacts trade, facilitating the import and export of goods by air and therefore their manufacture and distribution, as well as productivity. Air transport also positively

impacts location and business decisions by other organisations and stimulates innovation, thereby having a long run impact on productivity and GDP.

3.1.6 The catalytic effects of air transportation, as shown in Figure 11, include the impact on the supply chain through the creation of larger potential markets and increased competition, technology transfer, increased innovation, and upskilling of the workforce. For freight-focused airports, inbound air cargo provides businesses that rely on fast delivery (such as airlines, oil rig maintenance, etc.) with a reliable transportation mode for high-value equipment, machinery and spare parts. Air transportation also supports Just-in-Time practices, particularly for high value to weight goods with short product lifecycles (Ishutkina, 2009) such as electronic equipment. Businesses involved with perishable goods of all types, including not just electronic components but agricultural products such as flowers, fruit and some vegetables, are enabled by their use of air transportation.

Figure 11 Economic catalytic impacts of air transport



Source: Ishutkina, 2009, p. 40

3.2 Connectivity

3.2.1 The Airports Council International (ACI) draws attention to the growing link between connectivity and economic growth. They say:

*“Alongside the virtual connectivity afforded by the internet and the digital revolution, **aviation is the prime and unsurpassed enabler that connects the people, places and products of the real world.** This means that trade, tourism, foreign investment and increased productivity are all closely related to the level of air connectivity. (ACI, 2015, p. 1, bold from the original).*

3.2.2 Indeed, and of particular relevance to the UK post Brexit, ACI continues:

For Europe, air connectivity is of an even greater strategic relevance. The past decades have seen a gradual shift occurring in the global economy, with new economic powerhouses moving the pillars of trade eastwards. Europe will not be able to avoid this shift, but we can still ensure that we remain closely connected to the new potential sources of prosperity.” (ibid, p. 1)

3.2.3 Many studies have shown how airports specifically impact on their local, regional and national economies. For example, Intervistas found a 10% increase in a country's air connectivity to be associated with a 0.5% increase in GDP per capita (Intervistas, 2015, p. XIII). Steer Davies Gleave report the multiplier effect of airports on GVA to be 3.66, meaning that a £1 increase in aviation GVA translates to £3.66 in GVA for the UK economy (Steer Davies Gleave, 2010, p. 105).

3.3 Location and investment decisions

3.3.1 The presence of an airport encourages large employers to locate nearby. Bel and Fageda (2008) found a 10% increase in the supply of air services at an airport was associated with a 4% increase in the number of large firms headquartered nearby. Arndt *et al* (2009) found air connectivity to be one of the four most important factors affecting location decisions. IATA (2006) report that 30% of Chinese firms changed investment decisions due to constraints on air services.

3.3.2 Airports are also linked to increases in business investment and Foreign Direct Investment (FDI). Cooper and Smith (2005, p. 36) found that a 10% increase in air transportation usage increases business investment by 1.6%. PWC (2013) found that a 1% increase in international seat capacity was associated with a 0.47% increase in FDI inbound and a 0.19% increase in FDI outbound and that a 10% change in the growth rate of seat capacity in the UK leads to approximately a 1% change in the growth rate of the UK's GDP.

3.3.3 Indeed, the economic impact made by airports is a vital component of modern economies. However, an airport's relationship with the economy in which it operates is interdependent and an airport's activity depends on economic factors in that economy. Indeed, air travel is driven by a number of factors including:

- GDP, disposable income, and living standards;
- Reducing air travel costs;
- Globalisation; and
- Deregulation

4 Calculating jobs created by airport activities

4.0.1 This section describes macro and micro level methods for forecasting the number of jobs created by airport operations.

4.1 Macro level forecasts

4.1.1 The formulae used for macro level forecasts for airport job creation are derived by amalgamating figures from numerous airport examples. As such, they can also be described as ‘top down’ forecasts since they are not specific to a particular airport but are the result of observing airports in a wide area (such as the UK, Europe, or globally). By contrast, a ‘bottom up’ approach would consider an individual airport and derive a forecast specifically for that example. Both approaches have been used in this report.

4.1.2 The most widely used macro-level estimate for direct jobs created at airports is the formula one million passengers or 100,000 tonnes of freight corresponds to 950 jobs (Thanet District Council, 2013, p. 2). Other studies use somewhat different multipliers. For example, an ACI European study (2015) shows that 1,200 direct jobs are created for the first one million passengers and 0.95 jobs per 1,000 extra passengers thereafter. Intervistas found that for large airports, each additional one million passengers created 865 extra jobs (Intervistas, 2015, p. 71).

4.1.3 A study by Steer Davis Gleave (2015) for the EU Commission, which encompassed airports across Europe, found the ratio between direct employment and passengers to be one job per 1,240 passengers. However, the Steer Davis Gleave (2015) study notes that smaller airports are less efficient than larger airports in terms of the ratio between passengers and employment. This is because there are minimum levels of employment needed to provide a complete airport service and economies of scale are not realised to the same extent as they are with large airports. This may mean that the forecast employment figures for Manston could be higher than those calculated by their ratio.

4.1.4 A review of the ‘East Midlands Airport Sustainable Development Plan: Economy and surface access’ found that for 309,000 tonnes of cargo and 4.5 million passengers (East Midlands Airport, 2015, p. 2), 6,730 people (*ibid*, p. 5) were employed on the airport site. This is a ratio of one million passengers or 100,000 tonnes of freight to 887 direct jobs.

4.1.5 York Aviation, in a study for the Airports Council International (ACI) in 2004 provides estimates for indirect and induced jobs. They say:

“On the basis of the evidence we estimate that, on average, for every 1,000 on-site jobs supported by European airports there are around 2,100 indirect/induced jobs supported sub-regionally. Given that there are 950 on-site jobs created per million passengers, once we factor in the direct, indirect and induced jobs, we concluded that for every million passengers (workload units), European airports support around:

- *2,950 jobs nationally;*
- *2,000 jobs regionally; or*
- *1,425 jobs sub-regionally.”* (York Aviation, 2004, p. 9)

4.1.6 The ACI European study (2015) study confirms that for every million passengers (workload units), European airports create around 2,100 indirect and induced jobs nationally.

4.1.7 In terms of catalytic impacts, ICAO (2000, p. 2) suggests that:

“In the global economy, every \$100 of output produced and every 100 jobs generated by air transport trigger additional demand of some \$325 and 610 jobs in other industries.”

4.2 Macro level calculations for Manston Airport

4.2.1 To summarise, the following estimates of the relationship between direct employment and one million passengers/100,000 tonnes of freight moved through airports has been shown to be:

- 1,200 jobs (ACI-Europe, 2015)
- 950 jobs (Thanet District Council, 2013, York Aviation, 2004)
- 887 jobs (East Midlands Airport)
- 865 jobs at large airports (Intervistas, 2015)
- 806 jobs (Steer Davis Gleave, 2015)

4.2.2 These figures are wide ranging; between 806 and 1,200. Given the East Midlands figure is a ratio for a UK airport with a freight focus, this figure has been used to estimate direct jobs for Manston Airport.

4.2.3 The indirect/induced and catalytic jobs derive from the work by ACI Europe and ICAO. In summary, the calculations used to estimate the number of direct, indirect/induced, and catalytic jobs at Manston Airport are:

- 887 direct jobs per one million passengers or 100,000 tonnes of freight (East Midlands Airport figures)
- 2,100 indirect/induced jobs for every 1,000 direct jobs (ACI Europe, 2015)
- 4,000 catalytic jobs (6,100 less 2,100) per 1,000 direct jobs (ICAO, 2000)

4.2.4 Table 3 in Section 5.1 shows the results of using these calculations as estimates for the potential job creation at Manston.

4.3 Micro level forecasting of airport operator jobs at Manston Airport

4.3.1 As previously described, the employment created by the operation of an airport include direct, indirect, induced and catalytic jobs. Direct jobs include employment by the airport operator, airlines, general aviation, handling agents, airport security, immigration and customs, retail and food concessions, and aircraft maintenance.

4.3.2 Those jobs where the employee is in the direct employ of the airport operator are only a proportion of total direct jobs that will result from operations at Manston Airport. Indeed, in Europe, direct jobs at airports generally breakdown as follows (Intervistas, 2015, p. 27 – percentage does not add to 100 due to rounding):

- | | |
|--------------------------------------------|-----|
| • Airlines | 28% |
| • Ground handling | 14% |
| • Airport and Air Traffic Control | 14% |
| • Retail and other in-terminal services | 6% |
| • Airport security and passenger screening | 6% |

- Customs, immigration and government jobs 5%
- Ground transport 5%
- Food and beverage 8%
- Maintenance, Repair and Overhaul (MRO) 6%
- Other 7%

4.3.3 However, in order to provide a forecast specific to Manston, a bottom up calculation or micro level evaluation has been made by Viscount Aviation. These figures are for jobs where the employee is in the direct employ of the airport operator and form part of the total direct jobs shown in Table 3. The airport operator employee figures have been calculated based on previous experience with similar operations at Manston and other airports. They have not been extrapolated from the figures shown in Table 3.

4.3.4 The number of jobs the Manston Airport operator is forecast to employ are shown in Table 4 in Section 5.2 by job function for years one to twenty.

5 Employment forecasts

5.0.1 The causality between air traffic and economic development is well established and the previous section has indicated the extent to which airports are employment generators. For example, in written evidence to the Transport Select Committee (AS 70), the Royal Town Planning Institute says:

“Airports are hugely important to the areas in which they are located, for example Heathrow Airport is a major employment generator in outer west London and is integral to the local economy. Similarly smaller regional airports can also be vital to local economies.” (1.2)

5.1 Forecast job creation resulting from operations at Manston Airport

5.1.1 Table 3 shows the result of applying the forecast calculations defined previously in Section 4.2. The table shows the freight tonnage and passenger numbers that were used in the calculation (see Volume III for further information), from the first to twentieth years of operation. The table defines jobs as direct, indirect/induced, and catalytic, as previously described in Section 3.1.

Table 3 Forecast job creation

	Freight tonnage	Passenger numbers	Direct jobs	Indirect/induced jobs	Catalytic jobs	Total job creation
Y1	0	0	116	0	0	116
Y2	96,553	0	856	1,798	0	2,655
Y3	108,553	662,768	1,551	3,257	6,203	11,010
Y4	167,092	679,868	2,085	4,379	8,341	14,805
Y5	173,741	686,672	2,150	4,515	8,601	15,266
Y6	181,436	965,295	2,466	5,178	9,862	17,505
Y7	192,908	975,591	2,576	5,411	10,306	18,293
Y8	200,673	975,591	2,645	5,555	10,581	18,782
Y9	203,245	975,591	2,668	5,603	10,673	18,944
Y10	212,351	975,591	2,749	5,773	10,996	19,517
Y11	222,377	1,011,587	2,870	6,027	11,479	20,375
Y12	234,508	1,049,022	3,011	6,322	12,042	21,375
Y13	244,690	1,087,954	3,135	6,584	12,542	22,261
Y14	256,989	1,128,444	3,280	6,889	13,122	23,291
Y15	270,579	1,170,553	3,438	7,220	13,753	24,412
Y16	283,904	1,214,347	3,595	7,550	14,381	25,527
Y17	296,594	1,259,892	3,748	7,871	14,993	26,613
Y18	312,344	1,307,259	3,930	8,253	15,720	27,903
Y19	324,838	1,356,521	4,085	8,578	16,338	29,000
Y20	340,758	1,407,753	4,271	8,970	17,085	30,326

5.1.2 In addition to the calculations applied, a forecast of 116 direct jobs has been included in Year 1. The actual employment figure will be in the region of 464 in the fourth quarter of the year and has been annualised. This figure indicates employment by the airport operator in advance of commencement of operations. This is expected to

take place towards the end of the year to allow for the recruitment process and training to take place before the start of operations. In order to remain conservative, the forecast postpones the creation of any catalytic jobs until year 3 of the operation to allow the impact of the airport to take effect.

5.1.3 The figures shown in this section outline, using a macro level method, the estimated overall number of direct jobs created by the presence of an operational airport at Manston. The following section considers the proportion of employment created by the airport operator only and uses the micro level method described.

5.2 Forecast number and type of jobs by the airport operator

5.2.1 Table 4 shows the estimated number of jobs at Manston Airport by job function (calculated as described in Section 4.3. Job opportunities in the direct employ of the airport operator will include a wide range of positions including:

- Passenger services (pax)
- Freight services (Frei't)
- Air Traffic Services (ATS)
- Rescue and Fire Fighting Services (RFFS)
- Airport operations (Ops)
- Maintenance (Maint)
- Motor Transport (MT)
- Site and freight security (Sec)
- Administration (Adm)

Table 4 Estimated job creation by the Manston Airport operator by function

	Pax	Frei't	ATS	RFFS	Ops	Maint	MT	Sec	Adm	Total
Y1	0	49	6	14	6	8	8	11	14	116
Y2	0	196	25	57	24	31	31	45	14	423
Y3	99	215	25	57	29	38	38	55	15	571
Y4	102	302	25	57	31	41	41	59	15	673
Y5	103	322	25	57	32	41	41	60	16	697
Y6	145	256	25	57	33	43	43	62	16	680
Y7	146	288	25	57	33	43	43	63	16	714
Y8	146	307	25	57	33	43	43	63	16	733
Y9	146	357	25	57	34	44	44	64	16	787
Y10	146	331	25	57	34	44	44	64	16	761
Y11	152	347	25	57	34	44	44	64	16	783
Y12	157	361	25	57	34	45	45	65	16	805
Y13	163	376	25	57	35	45	45	66	16	828
Y14	169	391	25	57	35	46	46	67	16	852
Y15	176	413	25	57	36	46	46	68	16	883
Y16	182	430	25	57	36	47	47	68	16	908
Y17	189	447	25	57	36	47	47	69	16	933
Y18	196	469	25	57	37	48	48	70	17	967
Y19	203	488	25	57	37	48	48	71	17	994
Y20	211	507	25	57	38	49	49	71	17	1,024

Source: Figures calculated by Viscount Aviation, March 2017

5.2.2 The figures include an estimate of recruitment ahead of operations commencing in Year 2. The headcount for Year 1 is an annualised figure and the forecast is for four times the number shown, all employed in the fourth quarter only. The headings shown in Table 4 refer to jobs including:

5.2.3 In terms of shift numbers, an assumption has been made that 35% of the total number of staff on the airport's payroll would be on duty during peak daily operations. Most operational staff would be rostered in 12-hour shifts once airport operations commence. Shift changes would be likely to be at 07.00 and 19.00 hours. In terms of the daily staffing pattern, shifts would generally be four days on and three off, then three on and four off, allowing for an average 42-hour working week.

5.3 Construction jobs

5.3.1 It should be noted that the forecasts shown in Table 3 and Table 4 do not include construction jobs required to redevelop the airport. RiverOak's plans are for eight freight stands and three passenger stands for aircraft to be constructed prior to commencement of operations. Warehousing and fuel storage will also be constructed to meet the forecast demand. Further construction work will take place in years 4, 10, and 15 (see Volume III for details) as the number of aircraft movements increase. As with house building, these types of construction jobs are not permanent and as such have not been included in the previous forecasts but are shown here separately.

5.3.2 In order to predict the number of construction jobs required to meet the redevelopment specifications, comparisons with similar projects (i.e. with an annual turnover of between £30 to £40 million per annum) have been made. The forecast derived from these comparisons for the four construction phases, has been calculated by the RPS Group² on behalf of RiverOak, and is as follows:

- | | |
|----------------------------------------------------------------|-------|
| • Average number of workers on site at any time | 210 |
| • Peak time is likely to be three times the average figure | 630 |
| • Total equivalent people working years over the whole project | 1,475 |

5.3.3 It should be noted that the redevelopment project has been planned in four discontinuous phases. Therefore, construction jobs will be recreated at each phase, in years 4, 10 and 15, which are likely to be 2024, 2030 and 2035. The total on-site construction figure of between 600 and 700 jobs, as shown above, does not include the effect on the local supply chain or the number of jobs created off-site by local construction companies.

5.4 Other direct jobs

5.4.1 In the case of Manston Airport, it is expected that TG Aviation will return to the site, bringing a total of around 21 full-time, part-time and freelance/consultancy jobs. These roles include engineering, flying instruction and administration. Before having to leave Manston, TG Aviation were expanding the engineering side of their business, building on a great reputation built up over many years. However, the company has raised concerns about the availability of local qualified engineers, vital if they are to be able to grow the company. They believe an engineering training facility at Manston would address this problem.

5.4.2 RiverOak expect to attract a major aircraft recycling operation to Manston and this would increase the employment opportunities on-site. Airbus has around 7,000

² <http://www.rpsgroup.com>

aircraft in operation and Boeing 12,000 including both commercial passenger airliners and freighters³. Aircraft have around 25 years of use before being taken out of service, generally due to excessive operational costs, high fuel consumption, legislative demands requiring expensive technology upgrades, and difficulties in obtaining spare parts. Figures suggest that around 14,000 aircraft are due to retire in the next 20 years⁴.

5.4.3 As discussed in Volume III of this series of reports, an estimate of 10 aircraft per year are forecast to be recycled at Manston. Not only will this put a considerable amount into the local economy, it is also likely to create a significant number of jobs, particularly in engineering.

5.4.4 Additionally there is the opportunity to locate a Maintenance, Repair and Overhaul (MRO) facility at Manston. MRO services are carried out on civil and military aircraft with airlines generating around 68% of MRO providers' revenue⁵. Almost \$100 billion is spent on aircraft MRO annually with Europe taking 28% of the market (Strair, 2005). The industry continues to expand, stimulated by demand for passenger transport. Aircraft fleets are also ageing due to reduced orders during the financial crisis, and older aircraft generally require higher levels of MRO services. A successful MRO operation at Manston would generate a number of skilled job opportunities.

5.4.5 Should the government decide to give Manston Enterprise Zone status (see TDC, 2016, p. 9), it is likely that business would be stimulated in the area, creating more employment opportunities.

5.4.6 Micro level forecasts for direct employment other than by the airport operator have not been made. These figures form part of the macro level forecasts and are shown here to provide Manston-specific indications of the types of employment that might be generated.

³ http://cordis.europa.eu/result/rcn/164345_es.html

⁴ http://ec.europa.eu/environment/life/publications/lifepublications/flippingbook/jobs_skills/files/assets/basic-html/page14.html

⁵ <https://www.ibisworld.co.uk/market-research/aircraft-repair-maintenance-overhaul.html>

6 Training and education

6.0.1 One of the key challenges identified in the Thanet Economic Growth Strategy (TDC, 2016, p. 7) is the need to invest in workforce skills. As such, it will be imperative for local government to work with the airport operator to ensure local people are given the skills, training, and education necessary for them to fulfil their potential and take advantage of the employment opportunities at the airport and in the supply chain. As a study by York Aviation says:

“Airports are major centres of employment generating a demand for a wide range of skills. This means that airports can contribute significantly to the training and skill development of the labour force of their catchment areas.”
(York Aviation, 2004, p. 28)

6.1 Skills shortages

6.1.1 For many years there has been discussion about skills shortages in the UK workforce and the significant impact this makes on business. Between 2013 and 2015, the number of skill-shortage vacancies rose by 43%⁶. This was particularly noticeable in the field of engineering⁷. Additionally, poor careers advice in the UK is causing students to drop out of school, college and apprenticeships⁸.

6.1.2 In terms of the EU's strategy for aviation, the Commission says:

“It is [also] crucial to maintain leadership in aviation through a highly educated, qualified and experienced workforce. Partnerships between research, universities and industry on education will facilitate the movement of experts between these sectors, which at the end would be very beneficial for the development of the European aviation sector.”

New skills and competences, some of which are not yet broadly available, such as those of drone specialists and flight data analysts will have to be developed. Training should be given priority. In this respect, the European Aviation Safety Agency Virtual Academy will further develop a true European network of aviation training institutes. (European Commission, 2015)

6.1.3 In Thanet, the working age population:

“is less well qualified than across Kent and the South East as a whole. Of its population aged 16-64, 10% have no qualifications, figures, which are lower than Kent and the South East. The proportion of the Thanet working age population holding each respective qualification level is lower than the two other comparator areas. This situation is most acute for the highest qualification level: NVQ4+.” (TDC, 2016, p. A-2)

6.1.4 The vision for Thanet is to improve workforce skills so that productivity, employment rates and wages grow in line with those of Kent generally (TDC, 2016, p.

⁶ Employer Skills Survey 2015, p. 4 available from:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/499047/UKESS_Summary_report_-_for_web.pdf

⁷ <http://www.huffingtonpost.co.uk/news/skills-shortage/>

⁸ <http://www.bbc.co.uk/news/education-31061905> and
<http://www.huffingtonpost.co.uk/news/skills-shortage/>

16). In particular, the proportion of the working aged population qualified to at least degree level, currently 10% lower in Thanet than the County-wide figure, will need to increase.

6.2 Further and Higher Education in East Kent

6.2.1 FE and HE make huge impacts on the lives of individuals by improving life chances and opportunities, the economy through skills, innovation and stimulating inward investment, and to society generally by increasing knowledge, social mobility and cohesion. Numerous studies attest to the contribution of the education sector to economic activity, GDP and employment opportunities. For example, Canterbury City Council (2015, p. 54) estimates the economic impact of the University of Kent and Canterbury Christ Church University at over £1.1billion per annum. Indeed, universities employ one in every eight of the Canterbury district's employees (Canterbury City Council, 2016, p. 28).

6.2.2 Other providers in the area include:

- East Kent College
- Canterbury College
- Hadlow College
- Hilderstone College, English Studies Centre, Broadstairs
- The University for the Creative Arts

6.2.3 Whilst both FE and HE are not part of the statutory education system, FE colleges generally offer a range of academic, vocational, technical and professional courses. Students can enrol in an FE college from the age of 16 years. FE colleges generally offer programmes at every level from entry-level courses that do not require specific GCSE grades as entry requirements through to higher-level qualifications such as HNC/HND and even some degree courses. HE Universities provide degree and post graduate courses for students from 18 years old.

6.2.4 In Thanet, the workforce has fewer vocational qualifications than the averages for the South East and England at levels two, three and four, leading to significantly lower rates of pay (Williamson, 2013, p. 5). It seems that whilst Thanet students do well at A level, they are less likely than students from Kent generally to move on to HE. As Kent County Council's Skills and Employability Service points out, *"the average points per student for Kent selective schools is 890 and the average percentage who go to selective universities is 35%. In comparison, one Thanet selective school had average exam points per student of 955 and the percentage moving to selective universities 24%."* (Williamson, 2013, p. 16)

6.2.5 Thanet has had a university in the district since Canterbury Christ Church University formally opened its Broadstairs campus in 2000. Many students both local and from further afield have gained their degrees studying in Thanet. The University is now proposing a Kent and Medway Engineering, Design, Growth and Enterprise Hub (KM EDGE). The proposed partnership model would bring university and local enterprise together to support engineering, science and technology careers across the region. The presence of the airport could contribute to this partnership, providing a wide range of opportunities to students.

6.2.6 Manston Airport, operating to the levels forecast in Volume III of this series of reports, could do much to raise the aspirations of young people, key to addressing low participation levels in HE. Only by inspiring educational progression will students

improve their life chances and realise their full potential. In this way, a better-educated workforce will help to realise the full economic and social potential of East Kent and the wider Thames Estuary area.

6.3 A Manston Airport Training Facility

6.3.1 RiverOak's vision is for a vibrant freight-focused airport, employing local, well-trained people and supporting local, regional and national businesses. In order to meet this challenge, it is essential local people are trained and educated in line with the needs of the opportunities arising. However, the opportunity exists for a much more comprehensive vision of a facility designed to bring together the aerospace industry with academia (universities, colleges and potentially schools), in line with UK and European government policy. As such, RiverOak are keen to establish an aviation facility close to or on the Manston Airport site. This facility will allow the airport's employers to work with HE and FE providers and to link to other initiatives, particularly around science, technology, engineering and mathematics (STEM).

6.3.2 The concept for establishing an aviation facility at the airport is to bring together the UK aerospace industry, government and academia, providing a focus through which to develop effective and sustainable channels of communication. The aim would be to ensure the structures and provision of education, training, and life-long learning support the needs of the aerospace industry. This would move the industry forward and address concerns over innovation and skills shortages. Indeed, there is a requirement for the industry to adopt best practice in learning, people management and continuous professional development whilst also promoting itself so that it will attract and retain the highest calibre talent.

6.3.3 On behalf of previous owners of Manston Airport, the author developed and funded a highly successful BSc Business Studies with Airport Operations degree at the Broadstairs Campus of Canterbury Christ Church University. The success of this degree lay in the ability of the course to attract local students from first generation university families. These highly motivated students were attracted by the involvement of the airport with their local HE provider. The course acted as a pilot for a dedicated Manston facility, which will help match the need for skills by industry with provision by HE, FE and training institutions in the area.

6.3.4 An aviation training and education facility at Manston would provide the South East, particularly the Thames Estuary development area, with a Centre of Excellence in a globally attractive field. A Centre of Excellence is a shared facility that provides leadership, best practice, research, support and training for, in this case, the field of aviation. This inspirational location, close to a vibrant airport, and the ability to study near home should attract young people from across the area. The purpose of the Manston facility would be to:

1. Harness local enthusiasm for the airport and use this to encourage people to enter FE and HE as well as a wide range of other training opportunities.
2. Match education and training provision with the needs of the aerospace industry.
3. Raise the profile of the area as a vibrant, growing and innovative economy with industry and with central Government.
4. Support businesses within the area by providing access to academia and training providers.
5. Help to attract inward investment by increasing the attractiveness of the area through the upskilling of the local and regional workforce.

7 Other socio-economic impacts

7.0.1 In addition to the jobs created and the training and education opportunities described in the previous section, this section describes the social and economic impacts of airports, and applies these to Manston.

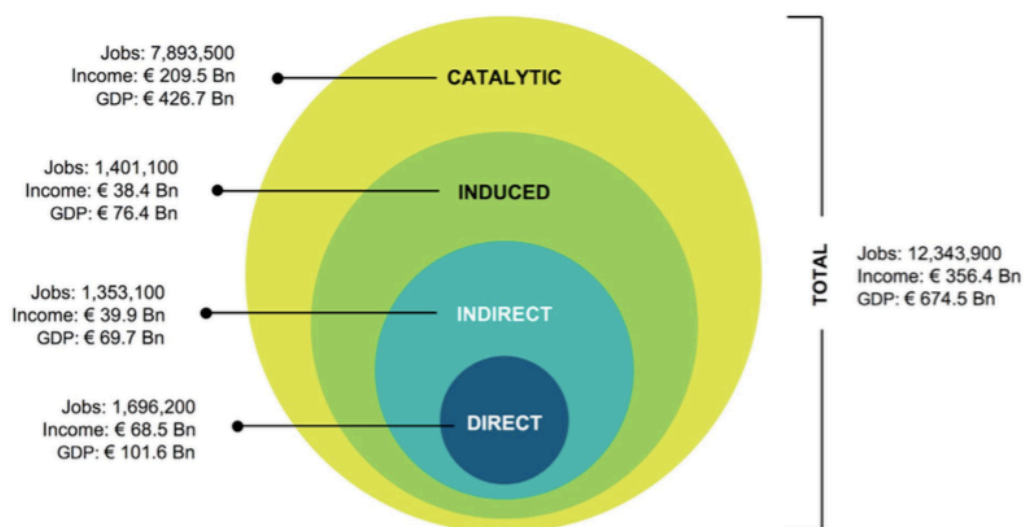
7.1 Gross Domestic Product

7.1.1 GDP is a monetary measure of the state of a country or region's economy. In the UK, the Office for National Statistics calculates GDP from output (the value of goods and services produced in the economy), expenditure (the value of purchases made), and income (profits and wages). The OECD states that:

*"Gross domestic product is an aggregate measure of production equal to the sum of the gross values added of all resident institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs). The sum of the final uses of goods and services (all uses except intermediate consumption) measured in purchasers' prices, less the value of imports of goods and services, or the sum of primary incomes distributed by resident producer units."*⁹

7.1.2 Figure 12 shows the impact on the economy of Europe's airports.

Figure 12 Economic impact of European airports



Source: Intervistas, 2015, p. VI

7.1.3 Based on Intervistas figures shown in Figure 11, GDP from direct, indirect, induced, and catalytic effects are calculated as follows:

Direct:	1,696,200 jobs equate to €101.6 billion in GDP One job = €59,899/£50,315
Indirect:	1,353,100 jobs equate to €69.7 billion in GDP One job = €51,511/£43,270
Induced:	1,401,100 jobs equate to €76.4 billion in GDP

⁹ <https://stats.oecd.org/glossary/detail.asp?ID=1163>

One job = €54,529/£45,804
Catalytic: 7,893,500 jobs equate to €426.7 billion in GDP
One job = €54,057/£45,408

The conversion from Euros to Sterling has been calculated at €1 to £0.84.

7.1.4 These figures have been applied to the forecast provided for Manston Airport, as shown in Table 5. Since the calculation used for indirect and induced jobs was combined, the lower figure of €51,511 per job in these categories has been used. As Table 5 shows, the effect of an operational airport at Manston has a considerable impact on GDP. Indeed, by year 20 of operation, the total GDP from direct, indirect, induced, and catalytic impacts is forecast to be in the region of £1.4 billion.

7.1.5 In addition to GDP, GVA, a measure of the contribution to the economy of producers, industries or sectors, is a key indicator of the state of the whole economy. The difference between the two measures is that GVA does not include taxes and subsidies as shown by the following formula that links GVA and GDP:

$$\text{GVA} + \text{taxes on products} - \text{subsidies on products} = \text{GDP}$$

7.1.6 For this calculation, the term GDP is used by Intervistas to refer to the contribution to GDP provided by the airport industry (Intervistas, 2015). It should be noted that the Intervistas work covered European airports and therefore the figures are not UK-specific. However, the UK is second only to Germany in terms of direct employment at airports in Europe.

Table 5 Manston GDP calculation

	Direct		Indirect/ induced		Catalytic		Total
	Jobs	GDP (millions)	Jobs	GDP (millions)	Jobs	GDP (millions)	GDP (millions)
Y1	116	£5.8	0	£0	0	£0	£5.8
Y2	856	£43.1	1,798	£77.8	0	£0	£120.9
Y3	1,551	£78.0	3,257	£140.9	6,203	£281.7	£500.6
Y4	2,085	£104.9	4,379	£189.5	8,341	£378.7	£673.1
Y5	2,150	£108.2	4,515	£195.4	8,601	£390.6	£694.1
Y6	2,466	£124.1	5,178	£224.0	9,862	£447.8	£795.9
Y7	2,576	£129.6	5,411	£234.1	10,306	£468.0	£831.7
Y8	2,645	£133.1	5,555	£240.4	10,581	£480.5	£853.9
Y9	2,668	£134.2	5,603	£242.4	10,673	£484.6	£861.3
Y10	2,749	£138.3	5,773	£249.8	10,996	£499.3	£887.4
Y11	2,870	£144.4	6,027	£260.8	11,479	£521.2	£926.4
Y12	3,011	£151.5	6,322	£273.5	12,042	£546.8	£971.9
Y13	3,135	£157.7	6,584	£284.9	12,542	£569.5	£1,012.1
Y14	3,280	£165.0	6,889	£298.1	13,122	£595.8	£1,059.0
Y15	3,438	£173.0	7,220	£312.4	13,753	£624.5	£1,109.9
Y16	3,595	£180.9	7,550	£326.7	14,381	£653.0	£1,160.6
Y17	3,748	£188.6	7,871	£340.6	14,993	£680.8	£1,210.0
Y18	3,930	£197.7	8,253	£357.1	15,720	£713.8	£1,268.7
Y19	4,085	£205.5	8,578	£371.2	16,338	£741.9	£1,318.6
Y20	4,271	£214.9	8,970	£388.1	17,085	£775.8	£1,378.8

7.1.7 Thanet's Economic Growth Strategy (TDC, 2016, p. 16) includes ambitious targets for GVA per job and per capita. Their figures show a considerable difference between Thanet and Kent for these measures of productivity and wealth. In order to achieve the Council's vision, the growth rate required to match the Kent average by 2031 would be 3.5% per annum for GVA per job (productivity) and 5.2% per annum for GVA per capita (wealth). These figures are almost double the growth rate based on what TDC call 'business as usual assumptions' for productivity and approaching three times that for wealth. Without a major employer, whose operation generates considerable indirect, induced and catalytic impacts on the Thanet economy, the vision described by the Council will be difficult to achieve.

7.1.8 In addition to GVA per job and per capita, additional jobs in the economy give rise to tax income for government. The tax-to-GDP ratio compares GDP to the amount of tax able to be collected by the Government. The OECD's annual Revenue Statistics report¹⁰ found that the tax-to-GDP ratio for the United Kingdom in 2015 was 32.5%. Therefore, applying this ratio to the figures shown in Table 5, provides an estimate of the tax revenues generated by the operation of Manston Airport through direct, indirect, induced and catalytic job creation. These are shown in Table 6.

Table 6 Tax-to-GDP

	GDP (millions)	Tax (millions)
Y1	£5.8	£1.9
Y2	£120.9	£39.3
Y3	£500.6	£162.7
Y4	£673.1	£218.8
Y5	£694.1	£225.6
Y6	£795.9	£258.7
Y7	£831.7	£270.3
Y8	£853.9	£277.5
Y9	£861.3	£279.9
Y10	£887.4	£288.4
Y11	£926.4	£301.1
Y12	£971.9	£315.9
Y13	£1,012.1	£328.9
Y14	£1,059.0	£344.2
Y15	£1,109.9	£360.7
Y16	£1,160.6	£377.2
Y17	£1,210.0	£393.2
Y18	£1,268.7	£412.3
Y19	£1,318.6	£428.5
Y20	£1,378.8	£448.1

7.2 Tourism

7.2.1 Thanet and East Kent have a wealth of tourist attractions that can be leveraged by the presence of an active airport at Manston. As well as the coastline, beaches, villages and countryside, Thanet's attractions include:

¹⁰ <https://www.oecd.org/tax/tax-policy/revenue-statistics-united-kingdom.pdf>

- Dreamland
- Charles Dickens-related attractions
- Historic Manston
- Hornby visitor centre
- James Bond- related attractions
- Port of Ramsgate
- The Turner Contemporary Gallery
- Sailing events

7.2.2 Despite Thanet's obvious attractions, the number of day visits to the district fell below those of other East Kent areas. Thanet recorded 3.4 million day visits with associated spend of £119.4 million in 2015, lower than Canterbury, Shepway, Dover and Ashford. As a total of day visits to Kent, Thanet accounted for just 6% in 2015 (Destination Research, 2016). In terms of overnight stays, Thanet received 351,000 trips by UK-based visitors and a further 143,000 by overseas visitors. This accounted for 11% of the total staying visits in Kent. Table 7 shows the comparisons across East Kent.

Table 7 Visitors to East Kent

	Day trips		Staying nights domestic		Staying nights overseas	
	Number (millions)	Spend (millions)	Trips ('000)	Spend (millions)	Trips ('000)	Spend (millions)
Ashford	3.9	£133.9	771	£44	457	£28
Canterbury	6.6	£215.2	1,438	£77	1,233	£69
Dover	3.9	£116.0	976	£64	479	£25
Shepway	4.1	£122.9	1,004	£62	394	£20
Thanet	3.4	£119.4	993	£54	1,066	£68

Source: Compiled from Destination Research, 2016

7.2.3 There is no doubt that tourism can contribute considerably to local economies. For example, visitors to the Canterbury district were estimated to contribute £446,709,000 in terms of economic impact in 2013 and to have supported 8,526 jobs (Canterbury City Council, 2015, p. 37). In Thanet, tourism supported 4,405 full-time equivalent jobs in 2015, an increase of 22% on 2013, and tourists spent £250 million during their visit (Destination Research, 2016, pp. 17-19).

7.2.4 In addition to the type of tourism shown above, East Kent benefits from 'long-term tourism' including language school students and pilgrims. In 2013, language schools contributed £33.6 million to the Thanet economy, supporting 905 jobs and accounting for almost half a million visitor-nights¹¹. Canterbury Cathedral attracts around 900,000 visitors per year¹² and the Divine Retreat in Ramsgate also attracts considerable numbers of staying visitors. These long-term visits would be more readily facilitated and encouraged through the operation of passenger services at Manston Airport.

7.3 Connectivity

7.3.1 Connectivity is the extent to which a location is connected to desired destinations including whether connections are direct or indirect, travel times, the

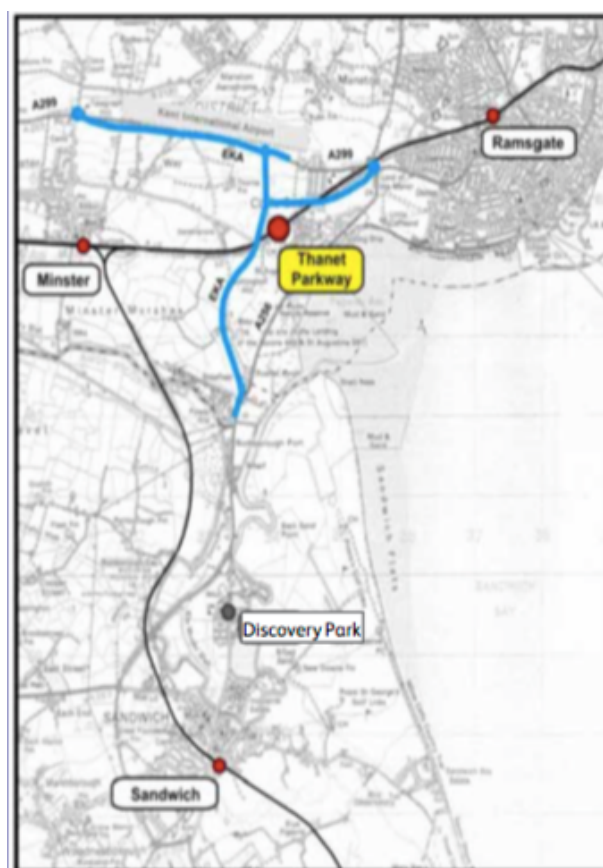
¹¹ <https://www.thanet.gov.uk/the-thanet-magazine/news-articles/2015/january/language-schools-contribute-336-million-pounds-to-thanet-economy/>

¹² <http://www.alva.org.uk/details.cfm?p=423>

frequency and reliability of services, quality and costs. Connectivity is vital to UK business and has been for many centuries. As an island nation, the UK's geographic location necessitates excellent connectivity in order for businesses to be able to export and import. Connectivity also acts as a stimulus to inward investment including Foreign Direct Investment, tourism, and firms' location decisions.

7.3.2 The Draft Economic Growth Strategy for Thanet (2016) describes the importance of improved connectivity to the local economy. Access to London from Thanet has historically been slow but, with the advent of HS1, travel times have reduced to around one hour and 15 minutes to St Pancras station. Of course, Thanet has access to the continental Europe via the Channel crossings at both Dover and Cheriton/Folkestone. The proposed Thanet Parkway Railway Station, one kilometre from the airport runway as shown in Figure 13, would provide access to central London in less than one hour (TDC, 2016, p. 4).

Figure 13 **Thanet Parkway Station**



Source: Kent County Council in Network Rail, 2017, p. 73

7.3.3 In terms of Thanet's connectivity with airports (excluding Manston), Network Rail says that:

"Passengers travelling from Kent can connect to services calling at Gatwick Airport at Redhill from Tonbridge. This service was extended to Gatwick Airport in the past, but it was discontinued owing to low usage levels. National Express operated a coach service from Ashford to Gatwick Airport, but this has also been withdrawn. Though the level of connectivity from Kent is lower than that from central London, the analysis undertaken as part of the Kent Area

Route Study has concluded that there is no specific connectivity gap between Kent and Gatwick Airport.” (Network Rail, 2017, 4.7.3, p. 50)

7.3.4 East Kent benefits from a major port at Dover. The Port of Dover is the busiest passenger port in the world, handling more than 12 million passengers, over two million cars and 87,000 coaches, and more than two and a half million HGVs in 2016¹³. Eurotunnel also connects East Kent with France and handled 1.6 million HGVs, 1,797 rail freight trains, 2.6 million cars, 53,600 coaches, and more than 10 million passengers in 2016¹⁴.

7.3.5 Brexit means that Britain now has to negotiate Free Trade Agreements (FTA) with the EU. It is possible that higher tariffs and non-tariff barriers will affect trade between the UK and the EU and increase time taken to cross borders between the UK and EU countries. This will particularly affect the Channel crossings where increased security checks and ensuring tariffs are paid where necessary may cause congestion and delays. Operation Stack¹⁵ has demonstrated the impact on the surrounding area and has caused considerable problems for transporters of perishable goods. Businesses may decide to switch from trucking to air freight and Manston Airport would provide the much needed capacity in the South East.

7.3.6 A 10% increase in connectivity in air transport is associated with an increase in GDP per capita of 0.5% (Intervistas (2015, p. xiii). An international airport at Manston with both freight and passenger services, will increase the connectivity between Thanet, East Kent and much of the South East to the rest of the world.

¹³ <http://www.doverport.co.uk/about/performance/>

¹⁴ <http://www.eurotunnelgroup.com/uk/eurotunnel-group/operations/traffic-figures/>

¹⁵ Operation Stack is the procedure used by Kent Police and the Port of Dover when services across the Channel are disrupted. Lorries are parked ('stacked') on the M20 motorway. Other vehicles are diverted onto the A20 causing congestion on local roads.

8 Conclusions

8.0.1 This report has described the socio-economic benefits deriving from the operation of Manston Airport to the level forecast in Volume III of this series of reports. Thanet has particular problems associated with deprivation including relatively high unemployment, low wages and low participation in HE. The presence of a vibrant airport in Thanet would help address these issues and be a great asset to the economy. As such, support from local MPs for this multimillion-pound inward investment has been unwavering.

8.0.2 The freight and passenger figures provided in Volume III allowed a forecast for the number of jobs created directly, indirectly/induced, and catalytically to be calculated. These figures show direct employment in year 5 of around 2,150 people, rising to nearly 4,300 by the twentieth year, based on East Midlands Airport figures. When all impacts on job creation are taken into account, using the formulae detailed in Section 4.2, an estimated total of just over 15,000 jobs will be added to the wider UK economy by the fifth year of operation, increasing to approximately 30,000 by year 20.

8.0.3 This level of employment must be supported by training and development, and RiverOak plans to work with all relevant organisations to ensure local people benefit from the opportunities that an airport will bring. Raising the aspirations of young people in Thanet is essential if the district's vision is to be realised, particularly in encouraging progression to degree level education. RiverOak will work with local providers to ensure every opportunity is leveraged from the operation of the airport. In particular, RiverOak are keen to promote the establishment of an aviation training and education facility in partnership with HE and FE providers.

8.0.4 Additional benefits include improving connectivity and supporting the internationalisation of local and regional businesses. A vibrant, successful airport will increase local, regional and national GVA, encourage businesses to locate in the area, attract Foreign Direct Investment, and support the work of the Thames Estuary 2050 project.

8.0.5 It is clear from the findings detailed in this report that the benefits of an operational airport at Manston would be in the public interest. Airports are an essential element of modern economies and are uniquely able to leverage a wide range of socio-economic benefits for their local and regional communities.

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