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Understanding the Economic and Employment Impact of Having or Not Having a 2nd Runway at London Gatwick Airport for Coastal West Sussex

A Paper for

The Coastal West Sussex Partnership

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October 2014

Executive Summary

In 2015, the Airports Commission will make its recommendations to Government about how it believes forecast aviation capacity constraints in London and the South East should be addressed. Its interim report, published in 2013, identified two options from 52 proposals, one of which involves building a new 3,000m runway south of the existing runway at Gatwick Airport. A further option to build an airport on the Inner Thames Estuary was also considered, but rejected by the Commission on 2 September 2014. In the meantime, the Government, Gatwick Airport Ltd and the Coast to Capital Local Enterprise Partnership are investing in improvements in and around the airport, including redeveloping Gatwick Airport railway station.

All long-term forecasts are subject to significant uncertainty. The future of aviation is highly dependent on environmental and technological change, geopolitics and changing patterns of world trade. Furthermore, the future model of aviation is uncertain. Some commentators believe that it will be dominated by a small number of major Airport Hubs, served by Alliances of Network Carriers. Others believe that the rise of Low Cost Carriers will result in a more extensive range of airports providing point-to-point routes, supported by self-connecting services. There may well be room for both these models, of course.

The Current Position

Gatwick Airport currently handles around 35 million passengers per year and already has a significant impact on the economy. It provides around 23,000 direct jobs and a further 8,000 indirect and induced jobs. This includes around 850 Coastal West Sussex residents who work for Gatwick Airport and an additional 600 indirect and induced jobs that benefit the Coastal West Sussex economy. This contributes around £66m each year to its economy.

Airport connections are known to have additional benefits for international trade, Foreign Direct Investment and tourism and there can be additional ‘spillover’ effects that result from agglomeration and productivity improvements. These ‘catalytic effects’ are difficult to quantify. However, around 165,000 overseas visitors who travel by air come to Coastal West Sussex each year and they spend around £67m annually in the local economy.

The No Runway Option

Without a second runway, there is uncertainty about what the employment and economic impacts might be even though the Airport may handle 50 million passengers per year by 2050. Berkeley Hanover Consulting Ltd estimate that it could result in up to 6,000 fewer direct, indirect and induced jobs and a further loss in catalytic effect jobs in the Gatwick Diamond as Gatwick Airport loses its competitive advantage.

However, a study by RPS/Optimal Economics estimates that Gatwick Airport related-employment could rise to between 36,100 and 37,700 within fourteen districts around Gatwick Airport.[1] This could result in Coastal West Sussex benefitting from an additional 250-300 Gatwick-related jobs, contributing £11m-£14m more each year to the local economy. This could be higher if catalytic effects are taken into account.

Our estimates suggest that there are just over 4,300 overseas visitors to Coastal West Sussex for every one million passengers handled by Gatwick Airport. An increase of 15 million passengers could, therefore, result in around 70,000 more overseas visitors to the area each year, spending an additional £29m in the local economy.

[1] The RPS/Optimal Economics was based on analysis of all Districts that provided at least 1% of direct Gatwick Airport employment. These were: Adur, Arun, Brighton & Hove, Croydon, Crawley, Eastbourne, Horsham, Lewes, Mid Sussex, Mole Valley, Reigate & Banstead, Tandridge, Wealden, and Worthing. These Districts account for around 80% of all Gatwick Airport employees.

Second Runway – Low Scenario (Option 1)[2]

The most conservative estimates suggest that a second runway would result in Gatwick Airport handling 66m passengers per year by 2050. This could result in 43,000 Gatwick related jobs in the study area by 2050 - 6,900 more than the No Runway scenario based on a high productivity assessment. It could result in Coastal West Sussex benefitting from around 550 additional Gatwick related jobs, contributing around £25m more per year to the local economy. Again, this could be doubled if catalytic effects are taken into account.

Assuming the current ratio of local overseas visitors to passengers handled by Gatwick Airport remains constant, this scenario could result in 146,000 more overseas visitors each year to Coastal West Sussex and an additional annual spend of around £60m.

Second Runway – High Scenario (Option 3)

The most ambitious forecasts are for Gatwick Airport to handle 95 million passengers per year. This is 60 million more than the current position and 45 million more than the no runway scenario. Under this option, there could be 59,700 Gatwick Related jobs, 20,000 more than the No Runway scenario. This could result in Coastal West Sussex benefitting from an additional 1,250 Gatwick related jobs, contributing around £57m more to the local economy. Again, this could be doubled if catalytic effects are taken into account.

Assuming the current ratio of local overseas visitors to passengers handled by Gatwick Airport remains constant, this scenario could result in an additional 259,000 overseas visitors each year to Coastal West Sussex and an additional annual spend of around £116m.

Impact Summary Table

	Direct Jobs	All Gatwick Related Jobs	Economic Impact	Overseas Air Visitors[3]	Overseas Air Visitor Spend
Current Position	950	1450	£66m	165,000	£67m
No Runway	1150	1750	£80m	233,000	£96m
Low Scenario	1350	2000	£91m	311,000	£127m
High Scenario	1750	2700	£123m	424,000	£183m

Constraints, Challenges and Opportunities

The employment and economic impact estimates are indicative only. A wide range of variables are likely to affect the level of impact that Gatwick Airport may have on Coastal West Sussex over the medium to long term.

It is beyond the scope of this report to provide recommendations. However, notwithstanding significant change in current aviation trends, there should be more opportunities for Coastal West Sussex associated with Gatwick Airport in the future, whether or not there is a second runway. The scale of the impacts of a second runway are potentially much more significant than if there is no

[2] Note: Following public consultation, this option has been ruled out by Gatwick Airport Ltd, but has been used in this analysis for illustrative purposes.

runway, where there may even be resultant job losses, despite the expected increase in passenger numbers. Expansion should present major opportunities, but it is likely to result in significant infrastructural and human capital challenges. There are also likely to be environmental impacts, but these are beyond the scope of this paper.

The Coastal West Sussex Partnership may wish to consider some of the following issues, in particular.

How can the additional jobs at Gatwick Airport be made more accessible to Coastal West Sussex Residents?

- Currently, a little over one in ten people who travel from Coastal West Sussex to Gatwick Airport to work use public transport. Many of the jobs at the airport are in Elementary Occupations, which are often low paid, but journey times can be over an hour and the cost of season tickets is currently over £2,000 per year. If employment at the airport grows in line with its current structure, many of the jobs may still be difficult for many Coastal West Sussex residents, unless access to and from the airport is both more affordable and more efficient.

What road and rail infrastructure needs to be in place to support up to an additional 60 million passengers per year?

- There could be up to 60 million more passengers handled by Gatwick Airport each year by 2050 if there is a second runway and 15 million more even if there is not. Many passengers may use Gatwick Airport as a connecting airport (although fewer will if the point-to-point aviation model assumes greater significance). This is not a transport study. However, it seems likely that the volume of new passengers will require a significant investment in the road and rail network, almost certainly beyond the Brighton line and M23 corridor from London to Brighton.

What needs to be in place to ensure that Coastal West Sussex benefits more from the catalytic effects of Gatwick Airport?

- Airports are known to provide added value to local areas in terms of attracting new business, increasing trade and Foreign Direct Investment, for example. Coastal West Sussex benefits from Gatwick Airport in this way to some extent, but nowhere nearly to the extent as the Gatwick Diamond.

- The Coastal West Sussex Partnership needs to establish how it can do so more if there is a second runway. This means having good access to the Airport, having a strong supply of good quality local labour, and sufficient high quality business accommodation to attract businesses for whom Gatwick Airport is an important factor in location their location decisions.

How can Coastal West Sussex position its visitor economy to benefit from the increase in Gatwick Airport passenger numbers?

- The potential increase in passenger numbers at Gatwick Airport should provide new opportunities for the visitor economy, if the infrastructure is there to support it. This could include more overseas visitors and, perhaps being a ‘stop off’ location for some people arriving or leaving the UK from Gatwick Airport.

- The number of additional visitors is potentially significant with expansion and not insignificant without it, but Coastal West Sussex needs to have the right visitor economy infrastructure to benefit from this. The Adur and Worthing Hotel Futures Study suggests, in some parts of Coastal West Sussex, at least, more could be done to make the area more attractive to both business and leisure visitors.

How Can Coastal West Sussex Attract Displaced Businesses and Off Site Airport Jobs?

- Around 220,000 sq.m of commercial floorspace will be displaced if a second runway is built. Some of these businesses may be incorporated into the new Airport development or in surrounding areas within the Gatwick Diamond. However, some businesses, in particular traditional warehousing and low cost industrial units, will find new build rentals too high and a scarcity of nearby older builds. It could be possible to attract some of these displaced businesses to sites in Coastal West Sussex.

- A second runway would also be expected to result in an increase in off-site Gatwick Airport jobs. It is still unclear what these jobs would be and where they could be located. However, the Coastal West Sussex Partnership could explore the possibility of Gatwick Airport Ltd locating some of its off-site jobs within its area.

Can Local Colleges Secure Agreements with Gatwick Airport Ltd to Develop the Skills that are Needed?

- There is likely to be considerable investment in and around Gatwick Airport whether there is a second runway or not. However, a second runway is expected to cost around £7.8bn according to Gatwick Airport Ltd estimates. This represents a huge investment and, therefore, potentially significant construction opportunities, although the scale and nature of these may not yet be clear. Colleges could develop construction training agreements with Gatwick Airport Ltd and its contractors to ensure that there are significant local employment benefits from future investment in Gatwick Airport.

- The completed development is also likely to provide further employment, with the scale more significant for the second runway options. These jobs may be concentrated in Elementary and Managerial Occupations, if the current pattern of direct Gatwick Airport is maintained. These again, provide opportunities for local colleges to develop training agreements with Gatwick Airport Ltd to help provide staff with the skills that will be needed.

Contents

1. Introduction

This paper sets out estimates of the economic and employment implications of the decision of whether or not to construct a second runway at London Gatwick Airport, with specific reference to Coastal West Sussex and its constituent local authorities, Adur, Worthing and Arun[4].

It has been commissioned by the Coastal West Sussex Partnership and the findings from the study will be used to inform a facilitated discussion about the expansion of Gatwick Airport at a Coastal West Sussex Partnership Board Meeting in September 2014.

The research that has been undertaken to inform this paper is primarily desk based, although a small number of consultation interviews have been undertaken. The documents that have been used to inform the paper include:

- Interim Report (The Airports Commission) 2013
- Gatwick Airport Second Runway – Employment and Housing Technical Report 2014 and Addendum (RPS and Optimal Economics) 2014
- Potential Loss of B1/B2/B8 Commercial Space Due to Proposed Second Runway Options at London Gatwick Airport (Stiles Harold Williams) 2014
- The Surrey Economy: The Impact of Runway Scenarios in the South East – A Synopsis (Berkeley Hanover Consulting)
- Headlines on Current Research on London Gatwick Airport (Berkeley Hanover Consulting)
- The Importance of Aviation Infrastructure to Sustainable Economic Growth (FTI Consulting) 2011

It has drawn heavily on a report by RPS and Optimal Economics, *Gatwick Airport Second Runway – Employment and Housing Technical Report (2014),* which provides employment impact for a range of scenarios.

In addition, origin destination data from the 2011 Census has been used to better understand the extent to which people currently commute from the Coastal West Sussex districts to the Crawley/Gatwick Airport area and the latest Tourism Impact studies for Adur, Arun, Worthing and Chichester have been used to form the basis of visitor impact estimates.

Data that has been used to inform this paper have been drawn directly from previous studies and estimates have been made by modeling these to provide local authority area estimates for Adur, Arun and Worthing. This has not been possible to the same extent for Chichester, where there are no baseline figures in the RPS and Optimal Economics study.

All the data within this document should be viewed as indicative only. Projections over long periods are subject to a high degree of uncertainty and there are added difficulties associated with modeling assumptions. In addition, capacity constraints have not been assessed quantitatively. Instead, these are highlighted qualitatively in a separate section of this paper, which should form the basis of further discussions and, if necessary, analysis.

This paper does not focus on potential environmental impacts of airport expansion. However, according to the Airports Commission Interim Report, the impacts on protected sites, landscape and heritage of Gatwick Airport Ltd's proposals are limited and lower than for many other proposals the Commission received. The number of people affected by noise impacts would be "relatively low" according to its report.

[4] Note: Chichester has been excluded from much of the analysis, as there are no figures for the District in the baseline data that has been provided

The remainder of this paper includes the following sections:

Section 2 sets to the context for the study, by summarising the findings in the Airports Commission's Interim Report that was published in 2013.

Section 3 provides a short socio-economic summary of Coastal West Sussex, with particular reference to employment and business structures and dynamics.

Section 4 summarises the current position in relation to Gatwick Airport related jobs that support the Coastal West Sussex economy.

Section 5 assesses the potential economic and employment impact of Gatwick Airport on Coastal West Sussex without a second runway.

Section 6 considers the potential economic and employment impact of Gatwick Airport with a Second Runway, based on two scenarios.

Section 7 discusses constraints, challenges and opportunities that may need to be considered so that Coastal West Sussex can gain maximum benefit from Gatwick Airport related employment with or without a second runway.

2. Setting the Context

In 2003, a White Paper, *the Future of Air Transport,* recommended that, with environmental conditions, a second runway should be built at Stansted Airport followed by a third at Heathrow Airport. In 2010 a new Government rejected these recommendations. However, in 2012 it established the Airports Commission to investigate the UK's future airport capacity needs. The Commission produced its Interim Report in December 2013 and is due to produce its final report in 2015. This will recommend how additional airport capacity can be met, providing "credible options" for additional runway capacity, including the possibility of a second runway at London Gatwick Airport.

2.1 The Main Drivers of Change in Aviation

Aviation has undergone significant changes in recent decades, largely driven by two major trends:

- The formation of Airline Alliances operating from major aviation hubs; and
- The rapid expansion of the low-cost airline sector.

In addition, technological changes and the emergence of major new markets, particularly in Asia, have opened up international trade further, enabled people to work and undertake business across much larger distances and, arguably, shifted the balance of power in aviation terms eastwards.

Although there is broad consensus that the volume of air travel will increase significantly, there is less agreement as to what the aviation industry will look like in the future. The debate largely centres around the whether it becomes dominated by Airline Alliances operating from a small number of major international airport hubs; or whether there will be an expansion in the number of airports serving a wider range of point-to-point routes.

Liberalisation of the industry has led to consolidation of larger airlines. In Europe these are Lufthansa, Air France-KLM and the International Airlines Group (which includes British Airways). Airlines in these alliances now account for 50% of all passenger seats on flights within Europe, compared with 35% in 2008. At the global level, major airlines have formed alliances, the largest three of which now account for 58% of global airline seat capacity.

These Alliances increasingly operate out of a small number of major airport ‘Hubs’ which are linked to smaller ‘feeder’ airports, providing short haul traffic to and from the Hubs. This ‘Hub’ and ‘Spoke’ model allows maximum scheduling flexibility, but the Hubs need sufficient runway and terminal capacity to enable transfers and connections to be made with minimal delays. Within Europe, the major Hubs are London Heathrow, Madrid Barajas, Amsterdam Schipol, Paris Charles de Gaulle and Frankfurt. Dubai has become an increasingly important airport ‘Hub’, taking advantage of its geographical location and the emergence of eastern economies.

The expansion of low cost airlines has been the other major development. Low Cost Carriers have opened up a wide range of new, mainly short haul destinations, resulting in significant passenger growth at previously under-used airports. However, there is not a neat distinction between the major Network Carriers, and the Low Cost Carriers. The latter increasingly carry business travellers, many operate routes from larger airports and several compete and collaborate with Network Carriers.

The future shape of aviation may depend on the ability of low cost airlines to transfer their model to long haul flights. Currently fuel costs, turnaround time and a greater demand for comfort from passengers have made this difficult. However, this could change in the future, with a wider range point-to-point airports offering ‘self connecting’ services.

Heathrow follows the Hub and Spoke model, providing a high volume of long haul flights and international cargo. Gatwick Airport is primarily a point-to-point airport with a stronger presence of low cost airlines and short haul flights, although it is servicing an increasing number of long haul routes to Asia and to English speaking destinations, such as New York, Los Angeles and Fort Lauderdale.

2.2 Why Additional Capacity is Needed

Passenger demand is increasingly coming from emerging economies, including China, India and Indonesia. However, with Heathrow operating at 98% and Gatwick at 85% capacity, it is becoming difficult for the UK’s airports to respond to this demand. By 2030, Gatwick, Luton and London City Airport are all forecast to reach capacity even under the most conservative scenarios. Heathrow’s total route network is now less extensive other main European hubs and it has fewer connections to Brazil, mainland China and Russia than some of them.

Although Gatwick Airport is primarily a short-haul airport, it has recently attracted airlines operating to Far Eastern destinations, including China, Vietnam and Indonesia. It has also introduced the ‘Gatwick Connect’ service to support travellers using the airport to self-connect between flights. From 2014 it will accommodate the UK’s first low-cost long-haul services.

There is considerable uncertainty about the economic impacts of airport capacity constraints. Changes in aviation are dependent on a wide range of variables that are difficult to predict, including geo-politics, international economics, technology and environmental change. However, the *Airports Commission* estimates that capacity constraints could depress national GDP by between £30-45bn between 2021 and 2080.

It has considered a wide range of options in how best to respond to this. These include making better use of other forms of transport, such as high-speed rail; using Air Passenger Duty to influence passenger behaviour; and redistributing air traffic movements towards regional airports. Its interim report identified two preferred options from 52 proposals:

Gatwick Airport: A new 3,000m runway located south of the existing runway

Heathrow Airport: A new 3,500m runway located north west of the existing airport or extending the existing northern runway westwards, to at least 6,000m and enabling it to be operated as two separate runways: one for departures and one for arrivals.

An option to build an airport on the Inner Thames Estuary was also investigated further, but on 2 September 2014 the Commission decided not to add this to the shortlisted options.

The Commission suggests that expanding capacity at Gatwick Airport could support growth in the point-to-point market. It could also enhance the UK's hub status by attracting one of the major alliances to move from Heathrow and/or by developing new partnerships between short and long-haul airlines operating from the Airport. The total costs of expansion are estimated to be between £7.8bn according to Gatwick Airport Ltd. The Airports Commission believes that the investment could credibly be financed by the strong forecast demand.

The Commission has also made a number of recommendations that it believes will improve the efficiency of Gatwick Airport, with or without a second runway. These include:

- Redeveloping Gatwick Airport Railway Station to make it more accessible to users with luggage and building a new concourse and ticket hall with enhanced access to platforms.
- Improving the Gatwick Express Rolling Stock, so it is more suitable for airport users;
- Introducing Paperless Ticketing Facilities for journeys to and from Gatwick Airport station;
- Enhancing the Brighton Main Line, including increasing capacity and improving reliability; and
- Developing a Forward Route Strategy focusing on connections between the M25, M23 and the airport.

Some of these recommendations are being taken forward by Government departments, Gatwick Airport Ltd and the Coast to Capital Local Enterprise Partnership: £50m Government funding has been secured to support the redevelopment of Gatwick Airport Railway Station as part of Coast to Capital LEP's Growth Deal, for example.

3. The Coastal West Sussex Economy – A Summary

The Airports Commission recognises that the area "immediately surrounding the airport" is relatively affluent and that a second runway at Gatwick would be "unlikely to promote significant regeneration". However, it recognises that there are potential economic and employment benefits in the region. Given that the Coastal West Sussex economy is weaker than that of the Gatwick Diamond area, it may have capacity to secure some of the regeneration and employment benefits associated with Gatwick Airport.

Private sector employment accounts for only 80% of all Coastal West Sussex jobs, compared with 89% in the Gatwick Diamond. Indeed, only three other Districts/Boroughs[5] in the South East of England have a lower proportion of private sector employment than Worthing. Although there are signs of private sector job growth, this has barely compensated for recent job losses in the public sector and the employment growth has, so far, been entirely in part-time work.

Nearly half of local employees work Retail/Wholesale, Accommodation & Food Service or Health & Social Work. All these sectors that have a high proportion of part-time and flexible employment and some have significant seasonal and temporary work. Only one District/Borough in the South East (Rother) has lower average annual earnings than Arun District, whilst workplace earnings in

[5] Hastings, Medway and Maidstone

Chichester and Adur are also noticeably low, perhaps reflecting the sectoral pattern of local employment.

Unemployment, worklessness and low skills are also more significant local challenges in parts of Coastal West Sussex than in many other parts of the county. Nearly half (49%) of local working age residents do not have a qualification above Level 2 and in some wards in Adur and Arun, the figure exceeds 60%. More than 40,000 working age people in Coastal West Sussex are either unemployed or economically inactive and more than half the working age residents are out of work in a number of local wards.

Despite this, Coastal West Sussex has strengths that could support a stronger local economy: The eastern Districts are increasingly connected to Brighton & Hove, one of the UK's stronger performing local economies, through the Greater Brighton Economic Board; its attractive coastline and relatively good connections to London and Gatwick Airport, provide it with opportunities to develop a stronger visitor economy and to be more attractive to businesses; its population growth is being largely driven by working age and, therefore, potentially economically active people; and it has sector strengths in horticulture, advanced manufacturing, marine and environmental technologies, social care and the creative industries.

The Coastal West Sussex Partnership's strategy, *Sustaining Growth Through Partnerships,* focuses on strengthening local supply chains; developing skills to support business growth; improving the supply of commercial property; strengthening the transport and communications infrastructure; and making the area attractive to businesses and investors.

The West Sussex Independent Economic Commission is unequivocal in its recommendation to West Sussex County Council to promote the benefits of Gatwick Airport expansion, suggesting that there are "significant job creation and supply chain opportunities" associated with it. It also recommends that the County Council should develop an improved visitor economy for West Sussex.

How Coastal West Sussex positions itself in relation to Gatwick Airport over the next few years could be important in determining whether it fully benefits from Gatwick Airport with or without a second runway.

4. The Current Impact of Gatwick Airport

4.1 Gatwick Airport Related Jobs

The RPS and Optimal Economics study provides details of current employment associated with Gatwick Airport, drawn from the Gatwick Diamond area and other Districts/Boroughs where at least 1% of the workforce was in Gatwick Airport related employment in 2012[6].

It suggests that there are 31,100 Gatwick Airport related jobs taken by people who live within the Study Area. Of these, 21,000 (67%) are based at the airport; 2,200 (7%) are located off the airport; there are 1,900 indirect jobs[7] (6%) and 6,000 induced[8] jobs (19%). Arun provides 1.5% of the Airport's employees, and Worthing and Adur provide 1.3% each. Chichester provides fewer than 1% of Gatwick Airport's employees, so there is no comparable baseline[9].

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[6] There are fourteen districts in the report's Study Area: Adur, Arun, Worthing, Brighton & Hove, Lewes, Wealden, Eastbourne, Horsham, Mid Sussex, Crawley, Tandridge, Reigate & Banstead, Croydon, Mole Valley

[7] **Indirect jobs** are those created by airport businesses that purchase goods and services from local suppliers, who in turn may purchase further goods and services from local suppliers.

[8] **Induced jobs** are those that are created by the expenditure by people who work directly or indirectly on or off the airport.

[9] Census 2011 Origin-Destination data suggests that around 135 Gatwick Employees live in Chichester District

A further report by Berkeley Hanover Consulting[10] shows that a significant loss in cargo traffic from Gatwick Airport and its replacement by Low Cost Carriers has had a dampening effect on employment. The number of on-airport jobs has fallen from around 1,000 to 600 per Million Passengers per Annum (mppa) and there has been a shift towards lower skilled employment with a consequent real terms fall in take home pay of on-airport staff.

No attempt was made to estimate the catalytic effects of the airport – i.e the additional effects that the airport may have in attracting new businesses to the area because of the connectivity and other commercial benefits that it brings. However, according to Berkeley Hanover Consulting, the catalytic effects of Gatwick Airport could be around two catalytic jobs for every one direct, indirect and induced airport job.

Figure 4.1 shows how this translates into actual jobs for the Coastal West Sussex area. It shows the estimates for on-airport, off-airport, indirect and induced jobs. It applies same methodology as set out in the RPS/Optimal Economics report. The indirect jobs are estimated as the jobs in the CWS Districts as a percentage of all jobs in the combined fourteen districts in their Study Area. The induced jobs have been derived as a 1.2 multiplier of the direct and indirect jobs. Chichester has not been included in the analysis, as there are no baseline figures to work from.

Figure 1: Gatwick Airport Related Jobs

	On Airport	Off Airport	indirect	Induced	TOTAL
ALL	21,000	2,200	1,900	6,000	31,100
Adur	270	30	40	70	410
Arun	320	30	100	90	540
Worthing	270	30	110	80	490
Total CWS Jobs	860	90	250	240	1,450

Based on this methodology, around 1,450 Gatwick Airport related jobs, including 950 direct Gatwick Airport jobs, benefit Coastal West Sussex. The presence of an Airport is widely acknowledged to have wider economic benefits, including international trade, Foreign Direct Investment and tourism. However, the nature and scale of these is unclear.

Although the Berkeley Hanover report estimates that there could be around two additional catalytic effect jobs for each direct, indirect and induced job associated with an airport, this may be too high for Coastal West Sussex, given its distance from Gatwick Airport. However, even if there was one additional job for each direct, indirect and induced job, a further 1,450 jobs could be attributable to the catalytic effects of the Airport.

This means the economic contribution of Gatwick Airport to the Coastal West Sussex economy could be around £66m, based on average output per worker in West Sussex (£45,398). This could rise to around £132m, if catalytic effect jobs are included. Clearly, this assumes that, on average, people employed in Gatwick Airport related activity produce the same level of output as the average West Sussex worker. It also assumes that the jobs are full-time equivalent, which may not be case. However, the exclusion of Chichester from all these calculations may go some way in compensating for any over estimate.

4.2 Tourism Impacts

Tourism impacts merit further consideration. The latest available Tourism impact figures[11] show

[10] Aviation Capacity and the Surrey Economy Berkeley Hanover Consulting
[11] The latest figures are 2012 for Adur and Worthing; 2011 for Arun and 2009 for Chichester. Given that the latest available figures for Chichester are 2009, this may be a slight under-estimate.

that there are around 196,000 overseas visitors to Coastal West Sussex and that they spend just over £80m in the local economy. Nationally, 84% of overseas visitor spend is attributable to people who arrived by air[12]. If overseas visitors arriving by air spend the same as overseas visitors arriving by other means, then around 165,000 overseas visitors to Coastal West Sussex arriving by air contribute around £67m to the local economy, an average of £409.00 per visitor. Figure 2 shows a breakdown of these figures by District within Coastal West Sussex.

Figure 2: Annual Overseas Visitors to Coastal West Sussex

	All Overseas Visitors		Overseas Visitors Arriving by Air		
	Visitors	**Spend**	**Visitors**	**Spend**	**Average Spend**
Adur	16,500	£6,000,000	14,000	£5,000,000	£340.00
Arun	59,000	£24,000,000	50,000	£20,000,000	£403.00
Chichester	76,000	£34,000,000	64,000	£28,000,000	£446.00
Worthing	45,000	£17,000,000	38,000	£14,000,000	£382.00
Coastal West Sussex	**196,000**	**£80,000,000**	**165,000**	**£67,000,000**	**£409.00**

There is no way of knowing how many of these visitors arrive in the UK via Gatwick Airport. However, it is possible to provide a ball-park estimate of the number of overseas visitors to Coastal West Sussex per million Gatwick Airport passengers[13]. This is shown in the table below.

Figure 3: CWS Visitors per Million Gatwick Airport Passengers

	Visits per Million Gatwick Passengers
Adur	392
Arun	1,416
Chichester	1,816
Worthing	1,079
Coastal West Sussex	**4,311**

This shows that just over 4,300 overseas visitors visit Coastal West Sussex for every one million passengers that are handled by Gatwick Airport. Chichester has the highest number of visitors per million passengers, followed by Arun.

5. The Baseline Position - No Second Runway

5.1 Gatwick Related Jobs

Passenger movement is expected to increase from 35mppa to 50mppa by 2050 even if no second runway is built. This will be delivered through existing capacity and efficiency. The growing role of Low Cost Carriers allows a larger throughput of passengers.

However, the loss of cargo and changes in how passengers book and board flights means that the job impacts are not as great as might have previously been expected. Indeed, Berkeley Hanover Consulting estimate that there would be a loss in Gatwick Airport related jobs if there is no second runway. They believe that there would be a further decline in aviation cargo and there could be a loss of up to 6,000 direct, indirect and induced jobs. Furthermore, according to Berkeley Hanover Consulting some existing companies in the Gatwick Diamond would relocate as Gatwick Airport lost its competitive advantage, reducing its catalytic effect benefits.

[12] Office for National Statistics International Passenger Survey 2012
[13] Note: this is based on current estimates of 35 million passenger per year passing through Gatwick Airport

Nevertheless, RPS/Optimal Economics estimate that without a second runway, Gatwick related employment within the study area is forecast to increase to between 36,100 (high productivity scenario) and 37,700 (low productivity scenario) by 2050.

The table below provides the estimated impacts on the Coastal West Sussex economy, applying the same proportions and assumptions set out in the baseline scenario in Section 3. It uses the low productivity scenario.

Figure 4: Gatwick Airport Related Employment Impacts of No Second Runway by 2050

	PERCENT	On Airport	Off Airport	indirect	Induced	TOTAL
ALL	100	25,500	2,700	2,300	7,300	37,700
Adur	1.3	350	35	50	80	500
Arun	1.5	400	50	100	100	650
Worthing	1.3	350	50	150	100	600
Total CWS Jobs	4.1	1,050	100	300	290	1,750
Additional CWS Jobs	4.1	200	<50	50	50	300

Assuming no second runway is built, the total number of Gatwick related employment benefits to Coastal West Sussex area could be around 1,750 and 3,500 including catalytic effects.

This means there could be up to an additional 300 Gatwick related employment impacts to Coastal West Sussex by 2050. If catalytic effects are applied, there could be an additional 600 additional jobs. This assumes no capacity constraints in the immediate area around Gatwick Airport, where the labour market tends to be tighter. If the additional jobs are unable to be filled locally, there may be a need to import additional labour from beyond the Gatwick Diamond area, so the employment benefits to Coastal West Sussex could be higher.

Assuming output per worker is the same as for West Sussex as a whole, this could mean an additional impact of £14m to the Coastal West Sussex economy and £28m, if catalytic effects are included.

5.2 Potential Tourism Impacts

The total additional number of passengers handled by Gatwick Airport is forecast to increase from 35 million per year to 50 million per year by 2050. The table below shows what this could mean for Coastal West Sussex if the ratio of overseas air visitors to Gatwick Airport passengers remained the same.

Figure 5: Additional Visitors and Visitor Spend

	Additional Visitors	Additional Spend
Adur	+6,000	+£2,000,000
Arun	+21,000	+£8,500,000
Chichester	+27,000	+£12,000,000
Worthing	+16,000	+£6,000,000
Coastal West Sussex	**+70,000**	**+£29,000,000**

On this basis, there could be an additional 70,000 overseas visitors to Coastal West Sussex who arrive by air by 2050. They could spend a further £29m in the local economy, with nearly half of this being spent in Chichester. This takes no account of potential capacity constraints, including visitor accommodation and other infrastructure issues, which may inhibit such growth.

6. Second Runway Impacts

6.1 Potential Gatwick Related Jobs

The RPS/Optimal Economics report, *Gatwick Airport Second Runway – Employment and Housing Technical Report* sets out potential impacts based on the following passenger traffic by 2050

- Option 1 - 66 mppa
- Option 2 - 82 mppa
- Option 3 - 87 mppa.

An addendum to the report, published in June 2014, increased the upper estimate to 95mppa. Gatwick Airport Ltd's preferred option is Option 3, with the potential for 95mppa. This would include a new 3,400m runway positioned 1,045m south of and parallel to the existing runway. Any impacts need to be set against the baseline of the forecast increase in passenger numbers and associated employment without a second runway. This means that the maximum increase in passengers by 2050 is estimated as 45m per year above the no runway option.

For the purposes of this report, we have based our estimates for the Coastal West Sussex economy on Option 1 (high productivity) and Option 3 (low productivity) in order to provide high and low scenarios

Option 1: 66 Million Passengers Per Annum

Under Option 1, RPS/Optimal Economics estimate that Gatwick related employment will increase by 6,900 (high productivity) and over and above the jobs created by non-expansion. This means that there could be around 43,000 Gatwick related jobs by 2050.

The table below shows the total number of Gatwick related jobs that could support the Coastal West Sussex economy. It uses exactly the same proportions and assumptions that have been applied in previous sections of this report, both in terms of the ratios of direct and indirect employment and the share of induced jobs that could accrue to Coastal West Sussex (excluding Chichester).

Figure 6: Gatwick Airport Related Employment Impacts of Option 1 (High Productivity) by 2050

OPTION 1	PERCENT	On Airport	Off Airport	indirect	Induced	TOTAL
ALL	100	29,000	3,000	2,600	8,300	43,000
Adur	1.3	400	50	50	100	600
Arun	1.5	450	50	150	150	750
Worthing	1.3	400	50	150	100	700
TOTAL CWS	**4.1**	1,250	150	350	350	2,000
Additional CWS Jobs		**+350**	**+50**	**+100**	**+100**	**+550**
Difference from No Runway Option		**+200**	**+<50**	**+50**	**+50**	**+300**

Based on this methodology, if the airport operated at high productivity and had 66mppa, Gatwick Airport could contribute around 2,000 jobs to the Coastal West Sussex economy. This is 550 more than current estimates and around 300 more than if there was no second runway. There could be a further 600 more jobs than the no runway option based on a catalytic effect ratio of 1:1.

The gross economic impact of Option 1 (high productivity) could be around +£25m per year and around +£11m per year more than the non-expansion option. These figures could be doubled if catalytic effects are included. This takes no account of investment costs, which should be offset against the impacts, or capacity constraints.

Option 3 (Addendum) 95 Million Passengers Per Annum (Low Productivity)

Option 3, is the highest employment generating Option presented by RPS/Optimal Economics. They estimate that Gatwick related employment in the Study Area could increase by 22,000 over and above the non-expansion option under the low productivity scenario. This means there could be around 59,700 Gatwick related jobs in the Study Area by 2050.

The table below shows the total number of Gatwick related jobs that would support the Coastal West Sussex economy under this scenario. It uses exactly the same proportions and assumptions that have been applied in previous sections of this report, both in terms of the ratios of direct and indirect employment and the share of induced jobs that could accrue to Coastal West Sussex (excluding Chichester).

Figure 7: Gatwick Airport Related Employment Impacts of Option 3 (Low Productivity) by 2050

OPTION 3	PERCENT	On Airport	Off Airport	Indirect	Induced	TOTAL
ALL	100	39,200	4,100	3,600	11,200	59,700
Adur	1.3	500	50	100	150	800
Arun	1.5	600	50	200	150	1,000
Worthing	1.3	500	50	200	150	900
TOTAL CWS	**4.1**	**1,600**	**150**	**450**	**450**	**2,700**
Additional CWS Jobs		**+750**	**+100**	**+200**	**+200**	**+1,250**
Difference from No Runway Option		**+600**	**+50**	**+150**	**+150**	**+950**

Based on this methodology, if the airport operated at low productivity and had 95mppa, Gatwick Airport could contribute around 2,700 jobs to the Coastal West Sussex economy. This is 1,250 more than current estimates and around 950 more than if there was no second runway. There could be a further 2,700 jobs based on a catalytic effect ratio of 1:1.

The gross economic impact of Option 3 (low productivity) could be around +£57m, based on current prices and around +£43m more than the non-expansion option. These figures could be doubled if catalytic effects are included. This takes no account of investment costs, which would need to be offset against the impacts, or capacity constraints.

6.2 Potential Tourism Impacts

Option 1 assumes that the number of passengers per year using Gatwick Airport will increase from 35 million to 66 million by 2050,

The table below shows what this could mean for additional annual visitor numbers and potential additional annual spend, using today’s prices and applying the formula outlined in section 4.1 of this paper. The table also shows an estimate of the additional impact, over and above that which could be delivered without a second runway.

Figure 8: Additional Visitors and Visitor Spend - Option 1

Option 1	Difference from 2014		Difference from No Runway	
	Additional Visitors	**Additional Spend**	**Additional Visitors**	**Additional Spend**
Adur	+12,000	+£4,000,000	+6,000	+£2,000,000
Arun	+44,000	+£18,000,000	+23,000	+£9,000,000
Chichester	+56,000	+£25,000,000	+29,000	+£13,000,000
Worthing	+33,000	+£13,000,000	+17,000	+£6,500,000
Coastal West Sussex	**+146,000**	**+£60,000,000**	**+75,000**	**+£31,000,000**

On this basis, the number of overseas visitors to Coastal West Sussex who arrive by air could increase by 146,000 by 2050. This is almost double the current number of overseas visitors to the area and they could spend a further +£60m in the local economy. Again, this takes no account of potential capacity constraints, including visitor accommodation and other infrastructure issues, which may inhibit such growth and it assumes the current ratio of visitors to Gatwick Airport air passengers remains the same.

Option 1 could result in 75,000 more visitors to Coastal West Sussex and around £31m more overseas visitor expenditure than the no second runway scenario.

Option 3 (addendum) provides increasing the number of passengers to 95 million per year from the current 35 million. This is 2.7 times the number of passengers that currently use Gatwick Airport each year. It may be unrealistic to expect the ratio of visitors to Gatwick Airport passengers to remain the same in this scenario, but for consistency, this assumption has been retained. The table also shows an estimate of the additional impact, over and above that which could be delivered without a second runway.

Figure 9: Additional Visitors and Visitor Spend - Option 3

Option 3	Difference from 2014		Difference from No Runway	
	Additional Visitors	**Additional Spend**	**Additional Visitors**	**Additional Spend**
Adur	+23,500	+£8,000,000	+17,600	+£6,000,000
Arun	+85,000	+£34,000,000	+64,000	+£26,000,000
Chichester	+109,000	+£48,500,000	+82,000	+£36,500,000
Worthing	+65,000	+£25,000,000	+48,500	+£18,500,000
Coastal West Sussex	**+259,000**	**+£116,000,000**	**+212,000**	**+£87,000,000**

On this basis, the number of overseas visitors to Coastal West Sussex who arrive by air could increase by 259,000 to reach 424,000 by 2050 and they could spend £173m in the local economy, £116m more than they currently spend. Option 3 could result in 212,000 more visitors to Coastal West Sussex and around £87m more overseas visitor expenditure each year than the no second runway scenario.

This substantial level of increase may be unlikely. The growth in visitor numbers to Coastal West Sussex may not mirror the overall growth in Gatwick Airport passenger numbers and it may simply not be possible to develop the visitor and other infrastructure that is needed to support such an increase.

7. Constraints, Challenges and Opportunities

The forecasts set out above have applied the same methodology as was used by RPS/Optimal Economics for their wider study into the economic and employment impacts of Gatwick Airport expansion. However, these are unconstrained estimates. Both human capital and physical and digital infrastructure issues are likely to impact on the distribution of jobs and the ability of residents to access Gatwick related employment.

7.1 Uncertainty about the Impact of Non-Expansion

There appears to be uncertainty about the economic and employment impacts of the non-expansion option. There is agreement that there is likely to be an increase in passenger numbers, but it is not clear whether this will result in an increase or a fall in employment. The increase in passengers per job created, the steady loss of cargo and the potential loss of competitive advantage could result in an overall loss in airport related employment, according to some analysts.

However, other analysts believe that the increase in passenger volume will offset the potential losses in employment related to aviation cargo and there will continue to be an increase in Gatwick related employment by 2050.

7.2 Commercial Floorspace and Business Relocation

Stiles, Harold Williams have undertaken a study on behalf of the Gatwick Diamond Initiative and Crawley Borough Council to investigate the potential commercial accommodation that would be lost as a result of expansion. They conclude that up to 220,000 sq.m of commercial floorspace would be lost if Option 3 (87 mppa) were to proceed. Most of this (143,780 sq.m) is warehouse/workshop space (B2/B8), with a relatively low employment density. However, this still leaves 76,200 sq.m of B1 office space that would be lost.

If all the B2/B8 commercial floorspace was low density warehousing, with an employment:floorspace ratio of 80 sq.m per job and the B1 office space was 'General Office' accommodation with an employment:floorspace of 12 sq.m per job, this would mean around 8,000 jobs may need to be re-housed in other accommodation. Obviously, much of this may be incorporated into the overall Gatwick Airport development and it is likely that most alternative accommodation will be sought around their existing locations.

However, this may present an opportunity for Coastal West Sussex to promote its commercial premises to displaced businesses, which may find new build rentals around the airport too high..

7.3 Transport and Access

There needs to be sufficient labour capacity for the additional jobs that would be created at Gatwick Airport with or without a second runway. The RPS/Optimal Economics study estimates that there could be a labour supply shortfall of around 26,300 in the Gatwick Diamond area, but a labour surplus of 188,000 in the wider study area by 2050/51. However, it rightly stresses caution about over-interpreting forecasts over such a long timeframe.

There are many ways in which labour supply issues can be addressed. These include:

- Attracting more out-commuters to work locally;
- Increasing the supply of local housing; and
- Attracting more in-commuters from other areas, where there is a surplus of labour.

From the Coastal West Sussex perspective, Gatwick Airport provides potential new employment opportunities whether there is a second runway or not, particularly if the right infrastructure is in place. Compared with Gatwick Diamond, Coastal West Sussex has a relatively low employment rate, so there is some labour market capacity. Furthermore, sub national population projections suggest that there could be around 11,000 more working age people in 2037 in Coastal West Sussex. A flatline projection to 2050/51 would suggest 16,000 more working age residents than in 2014.

However, transport connections to and from Gatwick Airport need to be good and the jobs that are created need to be of sufficient quality to make the commute worthwhile. Higher skilled and higher paid workers tend to travel further to work than people in lower skilled and lower paid jobs. Given the trend towards lower skilled jobs at Airports, the proportion of jobs that could realistically be filled by people from Coastal West Sussex may be limited, unless there are cost and time effective measures to support this.

Gatwick Airport is only 35-45 miles from the major centres in Coastal West Sussex and Origin-Destination data from the 2011 Census shows that 82% of people who commute to Gatwick Airport use a car and only 12% use public transport. Even in relatively light traffic, road journey times are around 40 minutes from Shoreham and 75 minutes form Bognor Regis and although trains are quite regular, journeys can take well over an hour from some parts of Coastal West Sussex and season tickets cost over £2,100. These factors combined demonstrate the difficulties that many Coastal West Sussex residents may have in accessing opportunities at Gatwick Airport.

Given the scale of potential additional passenger movements resulting from a second runway, it is inconceivable that this would not include major improvements in road and rail access to and from the Airport. It is not yet clear what the nature of these would be, but from a Coastal West Sussex perspective, this could include a significant improvements in the A27 coastal road, and a wider range of efficient road an rail access routes linking the Coastal West Sussex districts to Gatwick Airport and London.

7.4 Off Airport Jobs and Catalytic Effects

Off-Airport Jobs

Currently around 2,200 of employees working in Gatwick Airport roles. It is likely that most of these work in close proximity to the airport. Although the ratio of employees to passengers is expected to continue to fall, the expected increase in passenger volume could result in around 4,000 direct airport jobs being located away from the airport.

The nature of these and the extent to which they would have to be located in the immediate proximity of the Airport is unclear. However, this merits further discussion with employers at the airport, to establish the conditions that would need to be met for some of these jobs to be located in the Coastal West Sussex Districts.

Catalytic Effects

The nature and scale of catalytic effects of airport expansion are unclear. Some estimates suggest that these could provide around double the total number of jobs generated by direct, indirect and induced jobs. It is not clear how wide the geographical coverage is, however.

Given their economic profiles, it is reasonable to conclude that the catalytic effects of the Airport are much lower for Coastal West Sussex than for the Gatwick Diamond. Indeed, the Greater Brighton & West Sussex Business Survey (2014) found that businesses in all districts in Coastal West Sussex were significantly less likely to believe that Gatwick Airport was a positive aspect of their location than other districts in the study area and only 13% of Chichester businesses believed this to be the case.

The challenge for Coastal West Sussex is to establish how its economy can secure greater benefits from Gatwick Airport than is currently the case, regardless of whether or not there is a second runway.

Transport improvements are already being made, but the scale of change that a second runway could deliver would almost certainly result in a significant investment in local transport infrastructure to accommodate the increase in passenger volume. This could help widen the economic influence of Gatwick Airport considerably over the longer term. However, Coastal West Sussex would need to ensure that it also had the right business infrastructure to benefit from this, so that the benefits do not all go to other, better-equipped areas that are currently also on the fringes of the Airport's influence.

7.5 Skills Supply and Job Mix

Gatwick Airport Ltd has not yet undertaken a detailed analysis of the potential skill requirements of airport expansion, which are likely to include significant construction employment during the building period and additional long-term jobs upon completion.

However, there are estimates of the current workforce, which are shown in the table below. The column to the right shows the estimated number of direct employees from Coastal West Sussex districts, assuming 4.1% of workers in all occupational areas are from those districts[14].

Figure 10: Distribution of Employment at Gatwick Airport by Occupation

	Share	ALL Employees	CWS Employees
Managers & Senior Officials	25	5900	240
Professional Occupations	7	1700	70
Associate Professional & Technical Occupations	10	2300	90
Administrative, Clerical and Secretarial Occupations	1	200	10
Skilled Trade Occupations	5	1200	50
Personal Service Occupations	11	2600	110
Sales and Customer Service Occupations	4	900	40
Process, Plant & Machine Operatives	13	3000	120
Elementary Occupations	24	5600	230
ALL	100	23,300	950

Source: Estimated from date provided to Gatwick Airport by Optimal Economics (Gatwick Employment Survey 2012)

There is a significant bifurcation in employment at Gatwick Airport, with a high proportion of people working as Managers and Senior Officials (25%) and in Elementary Occupations (24%). This is a different profile from the jobs in Coastal West Sussex, where people are much more likely to be working in Administrative & Clerical, Professional, Associate Professional & Technical and Sales & Customer Service Occupations.

The distribution of jobs may well not remain the same over the longer term. However, if it does, then airport expansion could result in significant numbers of new entry-level jobs and jobs requiring people with management and leadership skills, in particular.

[14] Note: This is likely to over-estimate the number of CWS residents employed in lower level occupations and over-estimate the number working in higher level occupations, given that people in higher level occupations are more likely to travel further to work than those in employed in lower level occupations.

Whether it is realistic for Coastal West Sussex residents to fill entry-level jobs is unclear, given that many are likely to be fairly low paid. However, there may be scope for Northbrook and Chichester Colleges to develop agreements with Gatwick Airport Ltd to provide skills training to support employment growth at the airport, perhaps particularly around Management and Leadership where there may be the strongest demand.

7.6 The Visitor Economy

The analysis in the previous section suggests that airport expansion could lead to significant potential impacts of the visitor economy. Additional visitor numbers are possible even if there is no second runway, but potentially more substantial with one, if the infrastructure is in place to support it.

The Adur and Worthing Hotel Futures study suggests that in the short term, leisure break and overseas tourist demand in the districts is likely to be relatively slow; that, currently, leisure break demand for hotels is primarily from people who are looking for a base for visiting Brighton; and demand for visitor accommodation is still highly seasonal and price competitive.

The study makes a number of recommendations aimed at proactively supporting the development of the hotel and visitor accommodation sector. These include developing the night-time economy, developing the corporate market locally, improving and extending visitor accommodation products, and improving visitor facilities, particularly those linked to the coast.

The over-riding message for these districts, at least, seems to be to develop a more attractive offer in order to help stimulate demand for higher value business and leisure visitors. Whether the Coastal West Sussex visitor economy currently benefits as much as it could from its proximity to Gatwick Airport is questionable. However, even without a second runway, the number of additional passengers handled by Gatwick Airport is forecast to increase substantially over the next thirty years. With a second runway, Gatwick Airport could handle up to 95 million passengers per year by 2050, 60 million more than it currently handles.