



## A Second Runway for Gatwick Appendix

# A19

### Commercial Facilities Requirements



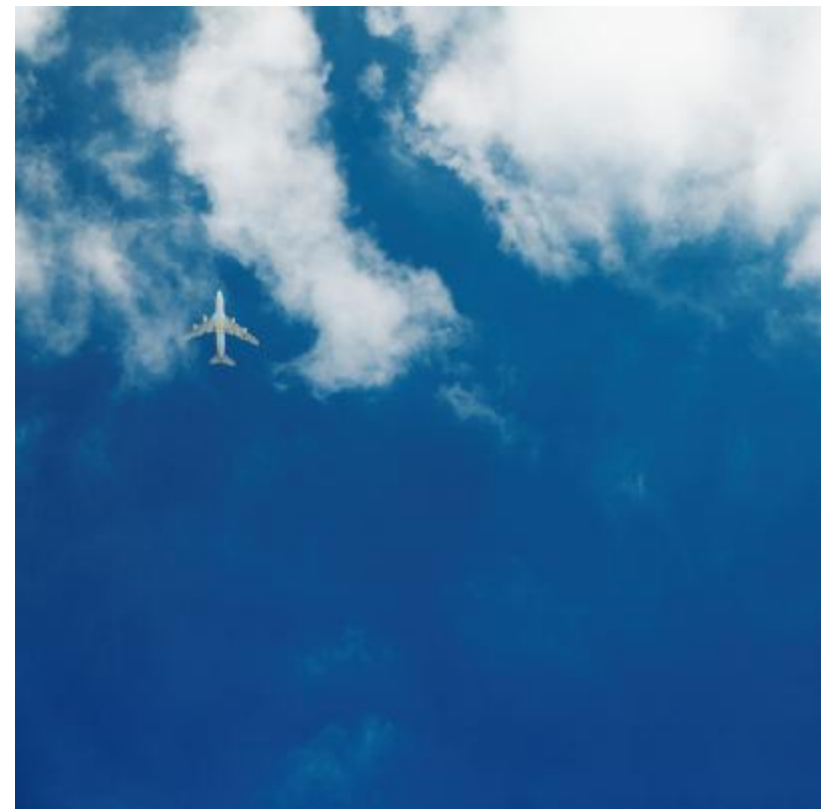


# Gatwick Airport

## Davies Commission Submission

### Second Runway facility requirements

01/05/2014



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Market Assessment

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# Introduction and Methodology

# Introduction

In 2012, the government asked Sir Howard Davies to chair an independent Commission, tasked with identifying and recommending options for maintaining the UK's status as an international hub for aviation. The Davies Commission is examining the scale and timing of any requirement for additional capacity and is identifying how any additional capacity should be met in the short, medium and long term.

Gatwick Airport Limited (GAL) has identified the construction of a second runway to the south of the existing runway as part of the solution for the South East of England's anticipated future runway capacity requirements. Gatwick's response to the Davies Commission proposes the expansion of Gatwick as part of a 'constellation' of three major airports surrounding London. It would be deliverable using existing infrastructure and is expected to create less environmental impact than other key proposals, including Heathrow and Stansted. Gatwick believes this constellation vision is the best solution for passengers, for London, and for the UK.

Deloitte Real Estate (DRE) has been commissioned by GAL to support Gatwick's second phase submission to the Davies Commission. This report follows an initial submission made by GAL to the Davies Commission. It is intended to set out the anticipated future airport-related facility requirements that the expansion of the Airport could generate. The study also sets out the benefits which will result from the development of commercial facilities at the Airport.

GAL is seeking to understand the quantum of facilities that will be required, based upon forecast passenger numbers (provided by GAL) as at 2030, 2040 and 2050. The forecast is based upon a preferred runway design option. Future commercial facilities to be considered include:

- Offices
- Hotels
- Industrial / warehousing & motor transport
- Cargo
- Hangars
- Car rental
- Petrol filling stations/fast food and convenience
- Ground services and ancillary airside

The following sets out the methodology which has been adopted to determine the likely quantum of required airport related facilities. The approach and output is intended to enable efficient airport master planning.

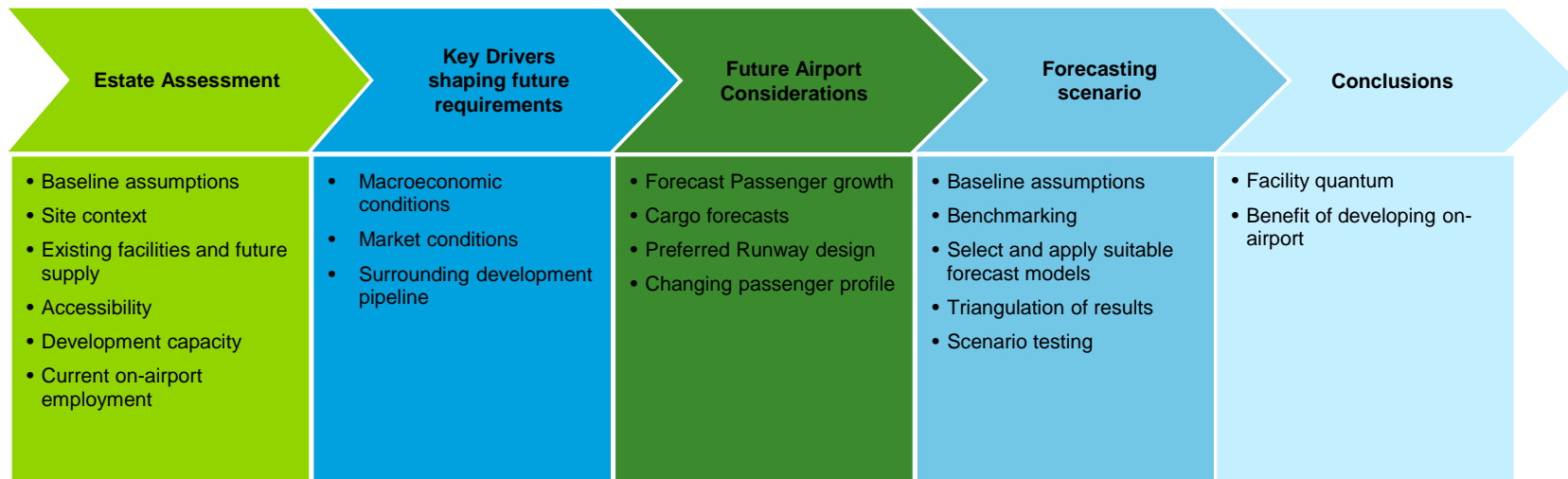
# Methodology

Forecasting future facility requirements is not an exact science as markets, technology and occupier requirements change over time. This can be further complicated by changes in the passenger profile of the Airport and changes to the characteristics of passengers using the Airport.

When seeking to forecast facilities 40 years in the future it is important to apply robust methodologies. The approach seeks to initially set out a review of the existing available supply at the Airport. This baseline assessment enables an analysis of the Airport's current use and how it compares to other similar airports. To do this, we have benchmarked other airports and explored how and why different types of airports have different types of facility requirements.

The nature of an airport and the profile of its passenger base are determined by the markets and destinations which the airport services. We have identified the key characteristics of an airport's use and the resulting impact on required facilities. We then explore the key drivers that are likely to influence the demand for future facilities, such as market conditions and the level of off-airport competition.

To understand the Airport's market position, we have reviewed both the on-airport and off-airport property provision and the level of future supply that will form competition for the Airport. We also consider the rate at which the Airport will grow (both in terms of passengers and the resulting employment numbers on-airport) as a key driver to increasing the demand for facilities. A forecast scenario is then developed applying relevant benchmarks based upon other similar airports.



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# Estate Assessment



# Estate Assessment Survey

## Key facts and figures

### Location

Gatwick Airport is strategically located 29.5 miles (47.5km) south of Central London in West Sussex. The Airport is recognised as generating demand for facilities close to the Airport. This has resulted in the surrounding developments having a high proportion of airport related occupiers and tenants that benefit from the proximity to the Airport and the international connectivity it offers.

### Site

Over time Gatwick has expanded. It initially comprised a single, Southern Terminal and has grown to incorporate the North Terminal. Each Terminal has created a commercial hub. Office and hotel development is concentrated close to the Airport's two terminals as well as other uses that serve the needs of passengers such as car rental facilities.

The railway station also acts as a hub for the South Terminal area. It is located between the South Terminal and passenger car parks and effectively acts as a 'front door' to the Airport estate.

The southern perimeter is occupied by current and former aircraft maintenance facilities and a limited number of industrial buildings. These uses typically have less of a need to be located close to the commercial hubs of each terminal and are sited on lower value land areas.

The North Zone provides land for larger industrial related users such as a concrete batching plant and site offices and yards for airport contractors.

Large scale development capacity is limited due to scarce available expansion land. There is potential however for in-fill development in some areas in the NW zone. However, the current Airport site provides limited land to accommodate additional airport-related facilities.

### Asset overview

Airport related facilities comprise office buildings, cargo, transit sheds and industrial accommodation. Also, passengers require facilities such as hotels and car rental offerings. Other "back of house" type uses such as ancillary facilities and airside support areas are essential to provide accommodation for occupiers that contribute to the on-going operations of the Airport. Many of the Airport's existing offices (excluding Jubilee House) are dated and reaching a stage of economic and functional obsolescence. There is scope to renew and retro-fit much of the existing stock into high quality offices, which may appeal to aviation-related occupiers. However, there is the potential for this to be more costly than a redevelopment / replacement option.

There is currently a lack of high quality office accommodation in and around the surrounding Gatwick area (i.e. off-airport). The market is distinctly two tiered, with a significant surplus supply of low quality stock, for which there is minimal occupier and investor appetite. Similarly there is limited modern industrial accommodation available close to Gatwick.

The Airport currently has limited industrial accommodation that is fit for purpose. Historically, Gatwick has developed limited industrial accommodation due to a lack of suitable available land. As a result, industrial development has occurred in the surrounding estates. Specifically, the facilities in Manor Royal located to the south of the Airport are approximately 33% occupied by airport or transport related occupiers that could potentially benefit from being located on-airport.

Gatwick has one significant cargo building on-airport which is owned by a third party. The building comprises 291,539 sq ft (GEA) and is a single, multi-let building benefitting from landside and airside access. Due to reduced levels of cargo throughput, the building is currently 60% let. However, 6.7% of the building is occupied by non-cargo related users.

Gatwick has only two hangars, which is considered low for an airport of its size including the Virgin Hangar and the British Airways (BA) hangar owned by BA. The Airport is currently close to securing a number of opportunities which would increase the amount of hangarage on-airport. Also, as the Airport develops and provides for a greater number of airlines there may be the potential to develop additional hangarage.

The following provides a review of the existing facilities on-airport. We have undertaken a review of other airports to compare the facility provision at other similar airports, both within the UK and internationally. This benchmarking of the quantum of facilities developed at these airports enables us to consider the applicable benchmarks to apply when we forecast the future facility requirements.

We have included an outline of the broad land categorisation that is used within the Airport's current master plan and existing land ownership boundaries.

# Estate Assessment

## Key facts and figures

The Airport's current draft master plan sets out the existing airport layout which is divided into eight categories. As the table below shows, these include a range of different uses and land take.

Category	Description	Site size
Airfield	Runway, taxiways, safety areas, and the extensive grass areas that surround them	228 ha
Passenger terminals	Including the terminal processor buildings and their adjacent and associated facilities	18 ha
Aprons	Aircraft aprons and the terminal piers through which the majority of passengers enter and leave their aircraft	161 ha
Cargo	Air cargo facility, associated truck dock and landside facilities	11 ha
Maintenance	Aircraft maintenance hangars and associated aircraft aprons	9 ha
Ancillary	Ancillary activities, such as vehicle maintenance depots, flight catering facilities, offices and hotels	27 ha
Surface transport facilities	Roads, car parks and facilities for coaches, taxis and rental cars	145 ha
Landscaping and surface water drainage	Airport boundary, areas of planting or natural vegetation & features associated with surface water drainage	132 ha

Fig 1.01 Source: Deloitte Research

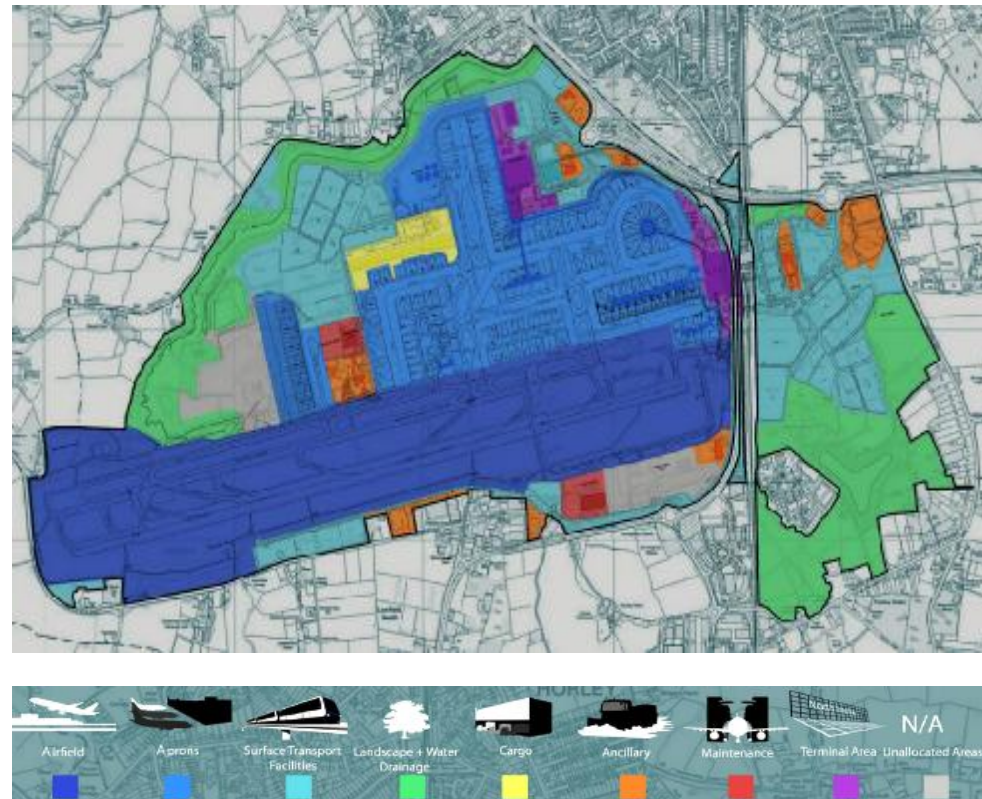


Fig 1.02 Source: GAL Masterplan



# Estate Assessment

## Key facts and figures

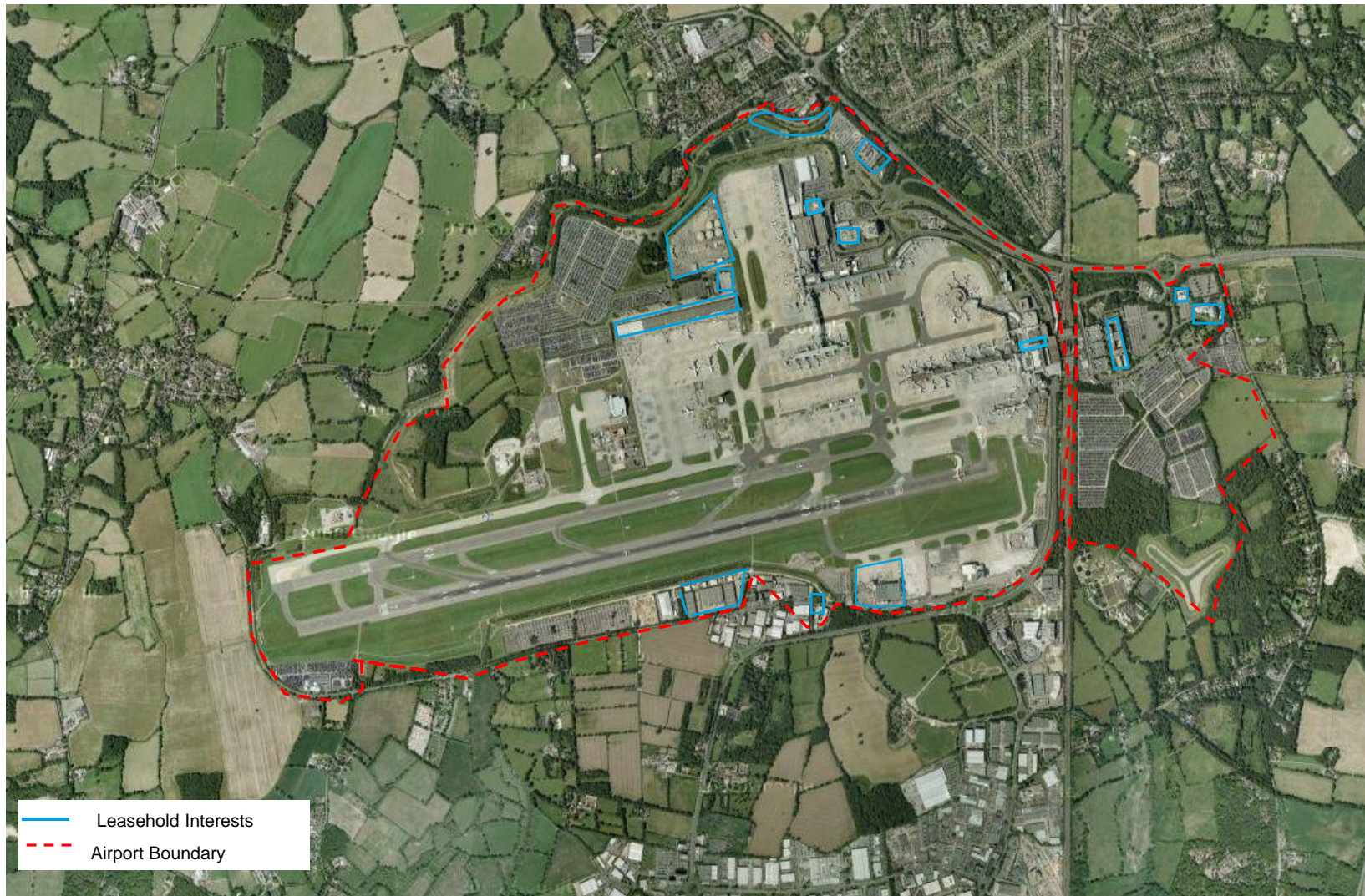


Fig 1.03 Source: Deloitte Research / Google Maps

# Office Supply

The office accommodation comprises a number of buildings located either on the terminal buildings or within walking distance. The occupiers of the offices are all airport related and include GAL staff, airlines, Government agencies, ground handlers and airline service providers. The properties include:

- Ashdown House
- Concorde North and South
- Atlantic House
- Destinations Place
- Jubilee House

Atlantic House is currently being redeveloped. The office provides a link for airline crew and other airside operations staff to be screened and pass through to airside. Jubilee House provides a similar function for staff accessing airside at the North Terminal. Destinations House which is located on the South Terminal is occupied solely by Gatwick Airport by administration and operations staff.

Ashdown House is predominately occupied by Government agencies such as Customs and Excise, Police and Immigration. The building's proximity to the South Terminal and Atlantic House allows for convenient access to airside and terminal operations.

Concorde North and South are located to the south of the Southern Terminal. These are occupied by airlines and airline service providers.

The following is a summary of the buildings, their size, vacancy rate and occupancy by third parties and GAL.

Demise	Area (sq ft)	Area Tenanted (sq ft)	% Tenanted	Area Vacant (sq ft)	% Vacant	Area GAL Occupied (sq ft)	% GAL Occupied
Jubilee House	83,588	67,256	84%	200	0%	4,975	6%
Ashdown House	40,000	33,853	84%	1,153	0%	6,147	16%
Concorde North	45,000	31,050	69%	7,650	17%	6,337	14%
Concorde South	45,000	41,399	92%	0	0%	3,885	8%
Atlantic House*	35,000	0	0%	0	0%	0	0%
Destinations Place	44,731	0	0%	0	0%	44,731	100%
<b>Total</b>	<b>293,319</b>	<b>149,664</b>		<b>9,003</b>		<b>66,075</b>	

\* Currently being redeveloped

Fig 1.04 Source: GAL



Fig 1.05 Source: GAL / Google Maps



# Analysis of Future Office Supply

To determine the airport's future demand for airport-related office accommodation, we have benchmarked the airport's current occupancy against other airport's office provision, based upon passenger numbers at each airport.

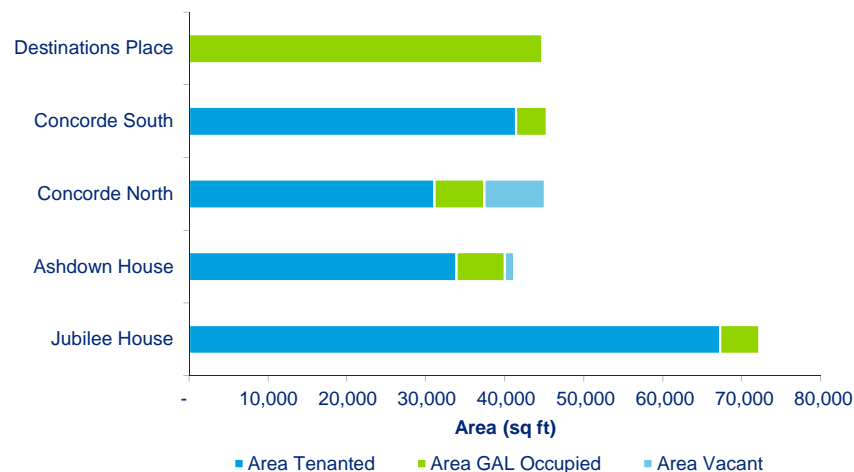


Fig 1.06 Source: GAL

Airport	Pax	Offices (sq ft)	Offices (sq m)	Pax per sq ft	LCC use
Heathrow	69,983,139	707,361	65,716	99	Nil
Munich	38,360,604	452,084	42,000 (adjacent to terminal only)	85	Medium
Paris Charles de Gaulle	61,611,934	1,420,836	132,000	43	Low
Amsterdam	51,035,590	4,284,036	398,000	12	Low
Frankfurt	57,527,251	1,722,226	160,000	33	Low
Manchester	19,654,100	297,310	27,621	66	Medium
Gatwick	34,218,668	297,872	34,485	115	High

Fig 1.07 Source: Deloitte Research

We have benchmarked other national and international airport office provision to determine the likely levels of facilities required. Office requirements can vary considerably between airports. There are a number of factors that will shape the demand for on-airport office requirements including:

- Type of;
- Proximity of airport to city;
- Airport's proximity to surrounding office parks; and
- Level of on-airport rental premium.

Future demand is expected to be driven by a similar demand profile, whilst taking into consideration the growing proportion of long haul that is forecast to use the Airport. We have assumed that there is no significant increase in the amount of off-airport office development accommodation close to the Airport. If however the expansion of the Airport includes land that is currently occupied by off-airport office buildings, such as City Place, the resulting displacement may increase the required development of office accommodation on-airport.

# On-Airport Hotel Supply

The Airport currently has 3,483 hotel bedrooms on the Airport estate. The current redevelopment of Longbridge house will provide an additional 192 bedrooms. We are aware that Norfolk House is being redeveloped into a three star 240 room hotel. By 2014 it is anticipated that together with the expansion of other hotels, on-airport there will be 3,675 bedrooms on-airport.

Hotel	Star Rating	No of Rooms	Distance to Terminal (Miles)
Best Western Gatwick Moat House	3	125	2.5
Courtyard by Marriott Gatwick	3	218	0.5
Hampton Holton	3	192	0
Hilton London Gatwick Airport	4	821	0
Holiday Inn Gatwick	3	210	2
Mercure Gatwick	4	265	2.5
Norfolk House	3	245	0
Premier Inn	Budget	630	0
Premier Inn – Gatwick Airport Central	Budget	220	1.5
Sofitel London Gatwick	4	518	0
Travelodge Gatwick Airport	Budget	185	2.5
Yotel Gatwick Airport	Budget	46	0
<b>Total</b>	<b>-</b>	<b>3,675</b>	<b>-</b>

Fig 1.08 Source: Deloitte Research

Hotel Types by Star Rating (on-airport)

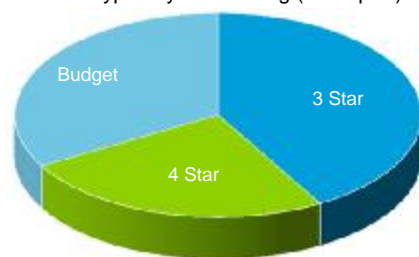


Fig 1.09 Source: Deloitte Research

Major UK Airports	Passenger Numbers (million)	Hotel Rooms	Ratio (Ave. no. passengers per room space)
Amsterdam	51	1,007	50,645
Birmingham	8.9	1,759	5,060
Edinburgh	9.2	245	37,551
Frankfurt	57.5	2,664	21,584
<b>Gatwick (current)</b>	<b>34.2</b>	<b>3,483</b>	<b>9,819</b>
Glasgow	7.2	754	9,549
Heathrow	70	8,340	8,393
Luton	9.6	459	20,915
Manchester	19.7	2,046	9,629
Munich	38.4	646	59,443
Paris Charles de Gaulle	61.6	1,598	38,548
Stansted	17.5	1,173	14,919

Fig 1.10 Source: Deloitte Research

Our view of the future hotel requirements is based upon industry benchmarks and review of other airports. The above table outlines the provision of hotels at other airports in the UK and Europe. When comparing the benchmark to Gatwick, there are a number of considerations which will shape the amount of hotel supply required at an airport including:

- Passenger profile
- Proportion of transfer passengers
- Type of airlines and their schedule (Low Cost Carrier early departure increases demand)
- Proximity and ease of access to the city
- Type of destination (Airports at leisure destinations have lower on-airport hotel demand)
- Level of off-airport competition.

# On-Airport Hotel Supply

## On-Airport Hotel Future Supply

There are four hotel schemes currently with full planning permission that are currently under construction or recently completed. These are:

- A 630-bedroom Premier Inn hotel opened at Gatwick North Terminal in December 2012. The hotel occupies the site previously used as car parking for the Sofitel. The hotel is the largest hotel in the Premier Inn portfolio and one of the largest terminal-linked budget hotels in the UK.
- The 192-bedroom Hampton by Hilton hotel operated by Shiva Hotels Limited is due to open at Gatwick Airport North Terminal. The hotel will be located within Longbridge House, a converted office block linked to the North Terminal.
- The 143-bedroom extension to the Travelodge Gatwick Airport Central hotel located on Povey Cross Road. As part of Travelodge's efforts to increase its presence in the wider Gatwick hotel market, Travelodge acquired the 257-bedroom Mercure Gatwick Airport, which was in need of significant investment. As part of the plans, Travelodge obtained planning permission to increase the total room count to 400 bedrooms by rearranging and converting the public facilities.
- Norfolk House, is being converted into a 245 bedroom hotel. The developer, Bloc, commenced building work in May 2012 and the hotel is due to open in January 2014.

As an airport grows and serves multiple markets such as long haul, sun seekers and LCC, it is important that the types of hotels offered increases. Recent developments at Gatwick in addition to the growth in traditional hotel rooms have seen a wider range including sleeping pods offered by Yotel and Bloc's plans for Norfolk House to offer rooms on an hourly basis.

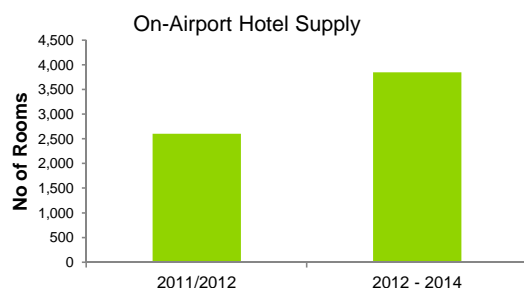


Fig 1.11 Source: Deloitte Research

## Off-Airport Hotel Future Supply

There are an additional 2,812 bedrooms in 12 hotels located within a 5 mile radius of Gatwick. The location of these hotels is indicated below and on the following page. There are also a number of smaller B&B's which we have excluded from our analysis.

Hotel	Star Rating	No of Rooms
Ibis London Gatwick	Budget	141
Premier Inn Gatwick Airport South	Budget	105
Cophorne Gatwick	4	227
Crowne Plaza Gatwick	4	294
Arora International Crawley	4	432
Menzies Chequers Gatwick	4	104
Russ Hill hotel	3	130
Ramada London Gatwick	4	151
Ramada Crawley Gatwick	3	79
Premier Inn Gatwick Crawley East	Budget	82
EXHI Gatwick Crawley	Budget	138
Cophorne Hotel Effingham Gatwick	4	122
Premier inn Gatwick Crawley	3	42
Premier Inn Gatwick Manor Royal	3	204
Premier Inn Gatwick Crawley South	3	48
Britannia Europa Gatwick	3	211
Gatwick George Hotel	3	84
<b>Total</b>		<b>2,594</b>

Fig 1.12 Source: Deloitte Research

However, the on-airport hotels are in a more favourable position to the off-airport competition. Typically passengers prefer to stay closer to the Airport particularly at airports with a high proportion of LCC carriers due to the early departure times as a result of the airlines first rotation. Therefore, on-airport hotels have the potential to competitively price available supply to increase market penetration.

Similar to the yield management that the Airport's car park team undertake, the hotel operators have the potential to drive demand through competitively pricing available supply to bring demand on-airport. This is likely to be to the detriment of off-airport hotel operators.



# Hotel Locations

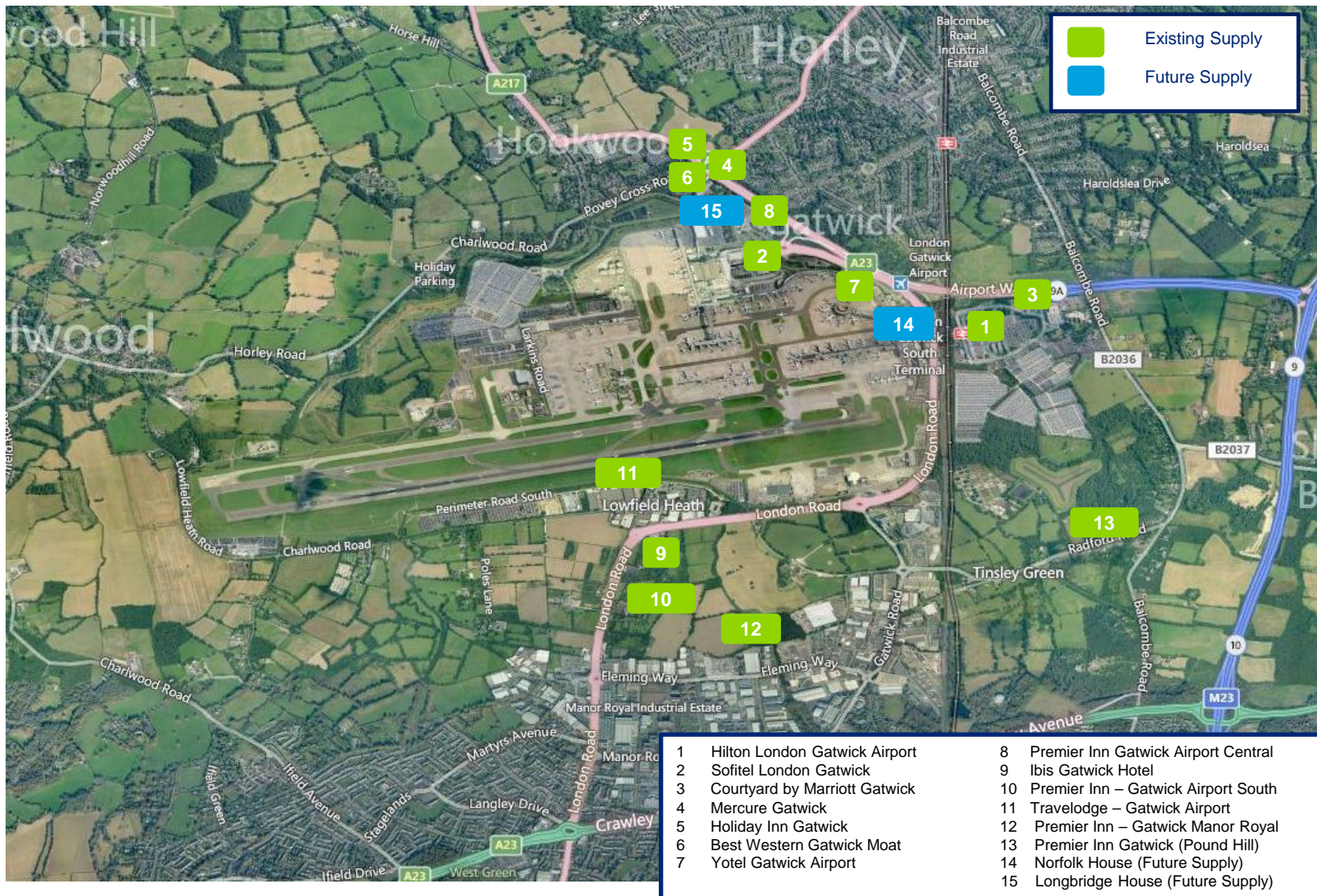


Fig 1.13 Source: Deloitte Research / Google Maps



# Cargo Supply & Demand

In recent years the Airport's increase use by Low Cost Carriers (LCC) has contributed to decreased cargo tonnage passing through the Airport. This together with current economic conditions has seen cargo levels decrease from a peak of 320,000 tonnes in 2000 to 104,000 tonnes in 2010. At its peak the Airport received a significantly greater proportion of long haul flights, particularly trans-Atlantic flights which generated significant cargo throughput. Also, at the time a number of dedicated freighters used the Airport, which contributed to the higher cargo throughput.

Open skies policy resulted in a number of US airlines transferring operations to Heathrow which resulted in reduced cargo tonnage. The reduced cargo tonnage has led to an under-utilisation of the Airport's cargo transit sheds. On-airport there is one transit shed which is owned by Segro under a long ground lease which pays GAL a nominal rental. The 27,085 sq metre cargo building has a vacancy rate of 40% reflecting c. 16,169 sq metres of vacant space.

The Airport's route development to Asia and the forecast growth in long haul is likely to generate additional cargo tonnage for the Airport. However, it is currently not expected to increase to the historical levels the Airport has previously experienced.

Airport	Total Cargo Area (sq m) estimate	Area Occupied (sq m)	Area Occupied (sq ft)	Tonnage (2012)	Tonnes per sq m
Amsterdam	525,000	525,000	5,651,048	1,483,448	2.83
Frankfurt	52,000	52,000	559,723	500,000	9.62
<b>Gatwick Airport</b>	<b>27,085</b>	<b>16,169</b>	<b>136,652</b>	<b>97,567</b>	<b>6.03</b>
Heathrow Airport	174,193	174,193	1,874,996	1,464,390	8.41
Newark Liberty	117,358	117,358	1,263,230	741,277	6.32
New York - JFK	687,965	687,965	7,405,186	2,318,834	3.37
Paris Charles de Gaulle	500,000	500,000	5,381,950	2,150,000	4.30
Paris Orly International	36,500	36,500	392,882	300,000	8.22
Stansted Airport	41,441	41,441	446,067	214,160	5.17

Fig 1.14 Source: Deloitte Research

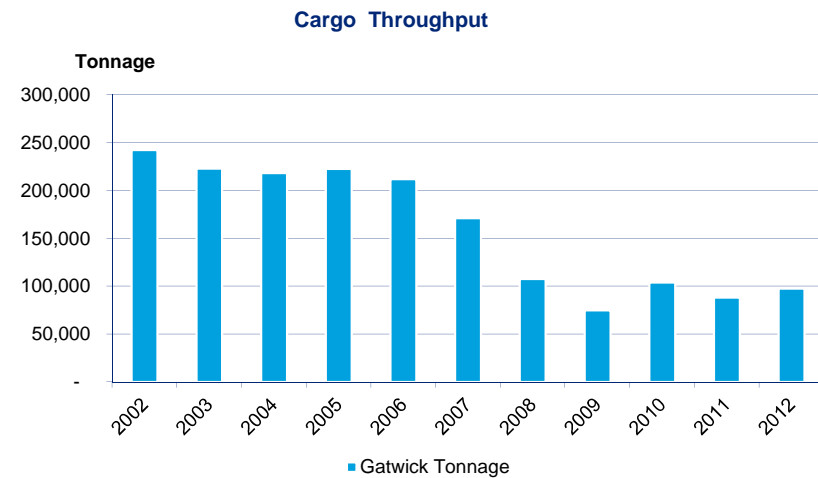


Fig 1.15 Source: CAA

# Cargo Supply & Demand

The above table outlines the provision of cargo/ transit sheds at other airports and their cargo throughput. A number of factors that will shape the demand for cargo and transit sheds including:

- Type of cargo;
- Proportion of transit sheds and cargo sheds
- Provision of a Border Inspection Post; and
- Proximity to off-airport industrial parks.

It is important to differentiate between transit sheds and cargo sheds. Looking at the above, table Heathrow and Gatwick reflect airports with a high proportion of transit sheds. As a result the cargo benchmark (tonnage per square metre) is high at 7- 9 tonnes per metre. Manchester and EMA have been successful in attracting a large proportion of the region's logistics providers to establish operations on-airport. These airports have a higher proportion of cargo sheds, which reduces the overall benchmark.

The cargo shed occupies a site which may be required for the future expansion of the North Terminal. Acquisition may be a consideration dependent upon which terminal expansion option is pursued by GAL.



Fig 1.16 Source: GAL / Google Maps



Fig 1.17 Source: SEGRO letting brochure

# Market Analysis – Industrial - Supply

The total existing industrial accommodation at Gatwick (on-airport) is 191,647 sq ft. There is limited vacancy at the airport. this excludes the ramp accommodation located within the ramp level of the terminals and the temporary accommodation in the north west zone.

Gatwick industrial building comprise dated motor vehicle workshops in the north zone and the Northgate building near the northern terminal which is currently used by contractors, to the south various workshops and small workshops are located along the southern perimeter read.

On-airport industrial occupiers predominately comprise airline and airport contractors. A significant proportion of these require a facility on-airport. However, many airport service providers base their operations in Manor Royal where rents are between 15– 25% less than comparable industrial buildings on-airport. As a result of the substantial rental savings offered off-airport, only those occupiers who undertake operations that have a time sensitive function to airport customers base their operations on-airport.

Demise	Area (sq ft)	Area Tenanted (inc GAL) (sq ft)	% Tenanted	Area Vacant (sq ft)	% Vacant	Area GAL Occupied (sq ft)	% GAL Occupied
Building 583 D	7,013	7,013	100%	0	0%	0	0%
Ex-Dunlop Building	5,587	5,587	100%	0	0%	0	0%
MT Snowbase	20,647	20,674	100%	0	0%	0	0%
TBU3	13,764	0	0%	13,764	0%	0	0%
Building 583 A	5,117	5,117	100%	0	0%	0	0%
Destinations Place	1,034	1,034	100%	0	0%	1,034	100%
583B	6,293	6,293	100%	0	0%	2,144	34%
583C	6,293	6,293	100%	0	0%	5,951	95%
Forecourt South Terminal portacabin	743	743	100%	0	0%	743	100%
AOSU	7,236	7,236	100%	0	0%	7,236	100%
AGL	5,613	5,613	100%	0	0%	5,613	100%
Building 702	14,917	14,917	100%	0	0%	14,917	100%
Building 701	6,648	6,648	100%	0	0%	6,648	100%
View Point	21,935	21,935	100%	0	0%	2,780	13%
MT Building	68,807	68,807	100%	0	0%	27,523	40%
Atlantic House	7,500	7,500	100%	0	0%	0	0%
<b>Total</b>	<b>199,147</b>	<b>185,410</b>	<b>-</b>	<b>13,764</b>	<b>-</b>	<b>74,589</b>	<b>-</b>

Fig 1.18 Source: GAL



# Industrial Locations

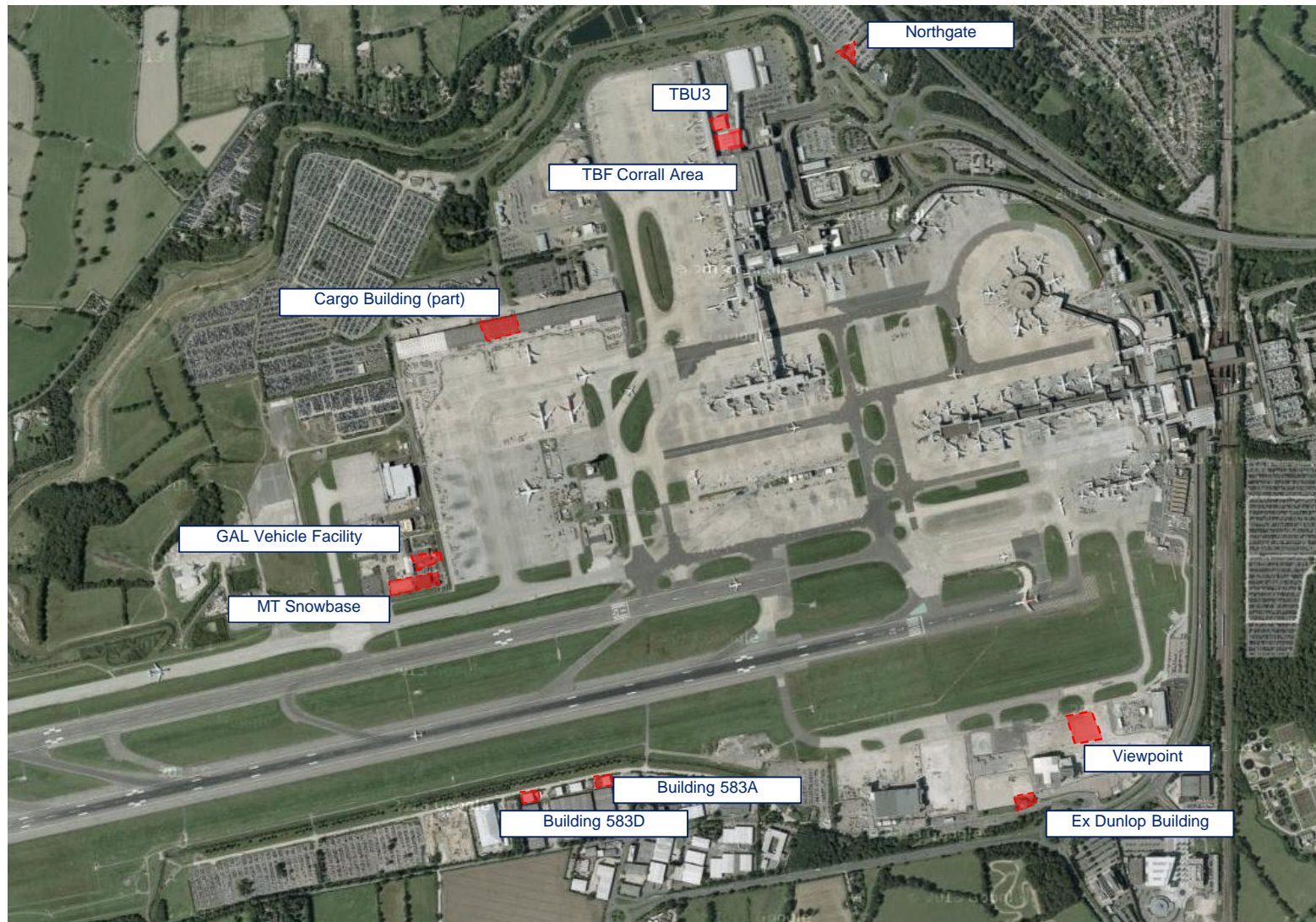


Fig 1.19 Source: GAL / Google Maps

# Market Analysis – Hangar

The Airport currently has three hangars. The remaining BA hangar (located on BA 's ground lease) and the Virgin hangar are used for the maintenance, repair, and overhaul of aircraft. Hangar 1 is used by BA for ground support. BA is expected to surrender this lease in 2013 and demolish the building. This hangar is therefore assumed not to form part of the industrial accommodation on-airport.

Our review of hangars at UK airports has concluded that there is little correlation between passenger growth and hangar demand. Analysis can be skewed by the development of Maintenance Repair and Overhaul (MRO) facilities or large numbers of private hangars.

## Gatwick Airport

Building	Total Area (sq m)	Area Occupied (sq m)	Site Area (Acres)
Hangar 6	7,850	7,850	11.9
Virgin Hangar	8,643	8,643	8.2
<b>Total</b>	<b>16,493</b>	<b>16,493</b>	<b>20.1</b>

Fig 1.20 Source: GAL

Airport	Hangarage estimate	Site Area	Pax 2012 (Million)	Pax per sq ft
Manchester	42,247	16	19.7	466
Luton	54,869	20	9.6	175
Stansted	43,800	17	17.5	400
Newcastle	28,000	-	4.4	157
<b>Gatwick Airport</b>	<b>17,605</b>	<b>13.5</b>	<b>34.2</b>	<b>1943</b>

Fig 1.21 Source: Deloitte Research

In recent years there has been a trend for increasing amounts of major maintenance, repair and overhaul (MRO) to be carried out in the UK. This “on-shoring” of services is as a result of inflation and wage growth in the far east where a large proportion aircraft maintenance has historically been undertaken. Also, airlines are looking at the total cost of major aircraft works including the amount of “down time” that increases flying their aircraft to these regions. Also, the far east's growth in aircraft deliveries has outpaced the development of skills in the regions. The demand for new hangars in the UK has largely been attributable to these factors

We are aware of a number of “live” opportunities to develop hangars in the south east of England. We are also aware GAL has had recent discussions with a number of parties interested in developing hangars at the Airport.

Considering the cost of leasing land at Gatwick and the Airports' landing charges being higher relative to alternative lower costs airports such as Biggin Hill or Southend, it is more likely demand will be from MRO operators serving the Gatwick airline market than from operators seek to develop hangars on-airport for the storage of aircraft.

The Airport has the benefit of a site that has been set aside in the Airport's master plan, parallel to the runway to the north of the Airport. This site is ideally located for this use, remote of other commercial and passenger operations and in close proximity to available taxiways.



# Hangar Locations



Fig 1.22 Source: GAL / Google Maps

# Market Analysis - Car Rental

## Car parking capacity requirements

The demand for car rental differs between airports and is dependent upon a range of influencing factors. These include:

- Passenger profile including proportion of inbound v outbound and percentage of transfer passengers (greater inbound increasing car rental demand)
- Availability of public transport (transport modal split)
- Catchment's car ownership
- Level of off-airport car rental competition
- Travel pattern (summer peaks or consistent demand)

To forecast future demand we have compared the Airport against other UK airport's car rental capacity. To determine an appropriate future demand benchmark we have considered how the Airport compares to the other benchmarked airports when considering the above mentioned demand factors.

We anticipate that Gatwick's international growth and increased proportion of inbound traffic will result in a higher growth in demand for car rental. However, due to the wider variations between airports and the characteristics outlined above we consider there is to be weak correlation between passenger numbers and the size of the car rental facilities. That said as inbound passengers grow at the Airport demand for car rental will increase.

In the past 3-5 years, airports have moved towards providing consolidated car rental facilities. These typically provide for more efficient uses of airport land and have reduced operational cost for the car rental operators. In 2009 Edinburgh developed a 12,464 sq ft building occupying a site of 3.08 acres . The balance of the site includes a wash down facility and parking for approximately 400 cars. The facility is fully let to 8 car rental operators.

Gatwick's existing car rental facilities located to the east of the South Terminal are old and dated and nearing the end of their useful life. The Airport's "Beyond Q5" capital budget identifies the opportunity to develop a consolidated car rental facility. We would anticipate demand for a similar consolidated car rental facility. Typically airports seek to co-locate car rental facilities remote from the terminal area. We would anticipate that a new location would be identified that was equi-distant between the three anticipated terminals.

Airport	Passenger Numbers (millions)	% of Private Transport Use	Car Rental Site Area (acres)
Gatwick	34.2	57.6%	5.50
Heathrow	70.0	58.9%	10.25
Stansted	17.5	50.9%	5.02
Birmingham	8.9	79.2%	6.50
Manchester	19.7	85.6%	6.50
Edinburgh	9.4	64.0%	3.08

Figure1.23 Source: CAA and Deloitte Research



Fig 1.24 Edinburgh Airport Master plan

# Market Analysis – Petrol Filling Stations Incorporating Convenience Stores

## Airport petrol stations

Petrol stations are typically found at the major exit points of airports. Generally well located airport petrol stations trade well attributable to the captive market of both passengers and on-site employees which they serve.

Demand comes from passengers existing the airports but is also dependent upon location, and the amount of off-airport market they also serve. Within the Airport, petrol stations are better situated on the road exiting the Airport as demand is greater. Passengers are more inclined to “top up” their car after their holiday or a business trip than on the way to the Airport due to time pressures and increased stress levels. Also, departing airport passenger are inclined to also make use of the convenience/ retail offering purchasing essential supplies (milk, bread etc.) after being away for a period of time.

## Gatwick petrol filling stations

Gatwick has two petrol stations on-airport, one located at the exit of the south terminal and another located on the exit road leaving the North Terminal. Also located close to the Airport is two additional petrol filling stations

Petrol Station	Description	Total Area (sq m)
North Terminal Petrol Filling Station	8 pumps and a convenience store	4,047
South Terminal Petrol Filling Station	10 pumps and a small convenience store	3,133
Texaco Petrol Filling Station	Co-operative convenience store and car wash	2,600
Esso Petrol Filling Station	small convenience store	2,200
<b>Total</b>		<b>11,980</b>

Fig 1.25 Source: GAL and Deloitte Research

Petrol Station	Number of Petrol Stations	Passenger Numbers (million)
Heathrow Airport	8	70.0
Manchester Airport	2	19.7
Frankfurt Airport	2	57.5
Schiphol Amsterdam Airport	5	51.0

Fig 1.26 Source: Deloitte Research

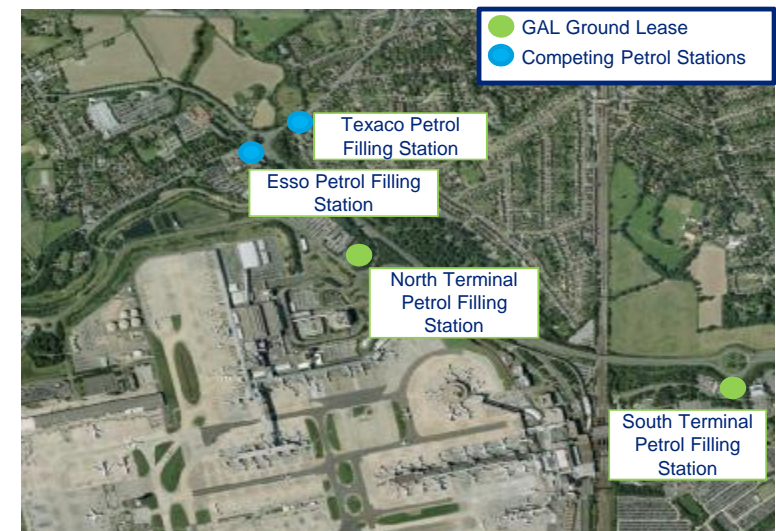


Fig 1.27 Source: GAL / Google Maps



# Market Analysis – Fast Food Restaurants

Fast food restaurants are also typically found at the major exit points of airports. Well located restaurants typically trade well due to the captive market of both passengers and on-site employees.

To increase the commercial appeal, fast food restaurants require a location that provides ease of access to passing traffic. Good exposure to off-airport arterial roads will also increase commercial viability.

Fast Food Restaurant	Description	Total Area (acres)
McDonald's drive through	A single storey building of approximately 1,759 sq ft, located on the easterly exit of the Airport	0.50
South Terminal Drive Through Site	Proposed fast food restaurant adjacent to the existing McDonald's.	1.47
North Terminal Drive Through Site	Proposed fast food restaurant adjacent to the existing Shell Garage.	1.00

Fig 1.28 Source: GAL

Fast Food & Convenience	Fast Food Numbers	Passenger Numbers (million)
Heathrow Airport	4	70.0
Manchester Airport	1	19.7
Frankfurt Airport	2	57.5
Munich Airport	3	38.4

Fig 1.29 Source: Deloitte Research



Fig 1.30 Source: GAL / Google Maps

# Market Analysis – Ground Services and Ancillary Airside

## Ground services and ancillary support areas

Areas used for Airside operations accommodate a broad range of occupiers for a variety of airport related functions. These can include:

- Ground handlers - storage of tugs, dollies, buses, trucks and cars
- Airlines – storage of aircraft stairs, push- back tractors, de-icing equipment, stand by generators, water tanks, specialist access lifts, belt loaders, tow bars
- Common areas - cargo bins

Airports seek to licence areas for individual airport users to store their equipment, in order to enable good estate management. However, this can be challenging as a result of operators preferred storage locations and the sharing of equipment.

Areas required to store time critical equipment to ensure the efficient turnaround of aircraft are close to the aerobridges and piers. These are typically occupied by stairs baggage loaders, tugs and standby generators. Other areas used for the longer term storage of cargo bins are typically found in more remote areas of the Airport.

The proportion of remote gates at an airport (i.e. those gates not served by aero bridges) will determine the amount of airside bus car parking areas. We would anticipate that a bus park will be required for each terminal, considering the anticipated distance between the proposed third terminal and the existing North and South Terminals.

The following are areas occupied airside for ancillary and ground service operators.

Demise	Area (acres)
Open Store (1)	0.66
Open Store (2)	0.30
Open Store (3)	0.29
Open Store (4)	0.25
Open Store (5)	0.85
Open Store (6)	0.25
Airfield Operations	0.53
Stillage Sites	0.58
Coach Park and De-Icing	1.10
BA Stillage/Tug& Dolly Site	0.98
BA De-Icing	0.37
<b>Total</b>	<b>6.17</b>

Fig 1.31 Source: GAL

# Ground Services & Ancillary Airside Locations



Fig 1.32 Source: Deloitte Research / Google Maps



# Employment

As a part of the baseline assessment we have sort to understand better the current employment numbers based on-airport. This understanding of the existing on-airport employment numbers provides insight into how on-airport facilities are currently being occupied and by whom. As a secondary basis of calculating forecast future facilities will employ a cross check which considers employment utilisation of facilities. This calculates the forecast employment numbers and forecast facilities to determine future employment utilisation (square metres per employees) as a cross check to the current utilisation.

Gatwick Airport is one of the most significant employers in the sub-region commonly referred to as the Gatwick Diamond. In 2012 Gatwick undertook an Employment and Travel Survey of employers and employees. The study determined that 21,000 staff are employed on the Gatwick Estate. Based upon a similar survey undertaken in 2008, this represents a 7% decline from 22,711. In the same time period, passenger numbers increased from 34,162,014 to 34,218,668.

There are a number of potential reasons as to why employment numbers have declined by 7% whilst passenger numbers have stayed broadly the same including:

- Employees productivity has increased, resulting in more being done by less people;
- Changes in how people work (working from home, greater use of technology), although we note that only 12% of the workforce have the type of job where this level of flexibility would be possible.

There is also the potential that a greater proportion of airport related work is being undertaken off-airport.

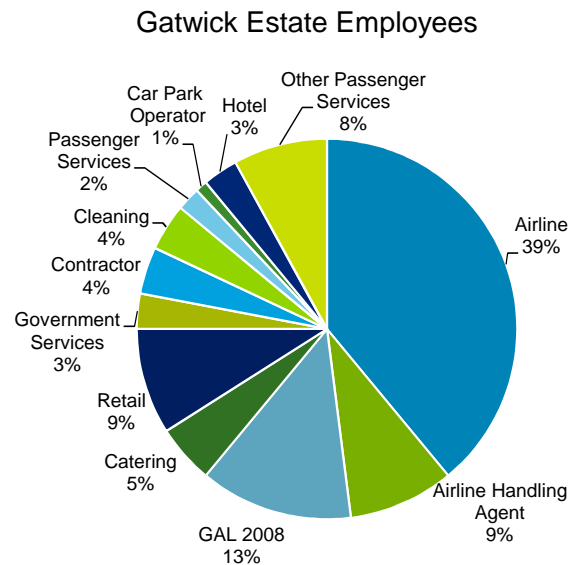


Fig 1.33 Source: Deloitte Research



Fig 1.34 Source: GAL Master plan

# Employment

The Employment and Travel Survey undertaken by Gatwick Airport established the following:

- The total number of companies with staff who report to work at Gatwick is 230 compared with 200 in 2008;
- There has been an increase in staff employed in professional and management roles since 2008 with 13% of staff now employed in these types of occupation. Fewer staff are employed by airlines and handling agents;
- The vast majority of Gatwick employees work shifts, although this has decreased from 88% to 84% since 2008. Many more staff now work a 4 day shift pattern than previously;
- There has been an increase in the proportion of employees earning relatively low incomes with an estimated 25% of permanent employees earning less than £13,000 a year in 2012. This is 5% more employees when compared with 2008;
- Gatwick employs an older workforce than was previously the case at the time of the last survey. Now, more than a third of employees are over 45. The workforce is also predominantly male (63%) and this proportion has gone up since 2008. The majority of employees are white (86%) and this has also increased;
- More than one third of the workforce at Gatwick live in Crawley; 7% in Horley, and 6% each in Brighton and Horsham. More than half of all employees are from these towns.

The findings of the report highlight that approximately 50% of Gatwick's employees live within 10 miles of Gatwick and two thirds travel to work via car.

Although there is a limited data set (only being able to compare 2008 and 2012) the survey highlights how the workforce and the types of companies based at the Airport is changing. Specifically, there is an increasing number of professional and management roles. Also, that airlines and ground handlers have reduced their workforce. We believe this may be as a result of margin pressures and an overall increase in efficiencies from these Airport users.

Based upon discussion with Management and discussions with industry stakeholders it is widely considered that the current employment numbers represent an efficient use of resources.

In addition, the growth of the Airport is expected to generate increased employment on the Gatwick Estate. This growing workforce will increase the demand for facilities. As a cross check to our forecasting scenario we have considered the growth of employment and the increase in facility requirements based upon average airport workspace requirements.

Place of Employment	Use Class	2012
South Terminal	Office	37%
North Terminal	Office	19%
Concorde House	Office	15%
Jubilee House	Office	11%
Atlantic House	Office	3%
Schlumberger House	Office	2%
Ashdown House	Office	1%
World Cargo Centre (transit sheds)	Cargo	1%
Maintenance Area	Hangar	1%
Control Tower (inc Control Tower Road)	Operational	1%
Fuel Farm (Povey Cross)	Operational	1%
Airfield Ops	Operational	1%
Other	Other	7%

Fig 1.35 Source: Deloitte Research

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## Key Drivers shaping future facility requirements

# Airport Profile

## Impact of airlines on accommodation requirements

### Introduction

The key drivers that will shape Gatwick's future facility requirements will be driven by the type of airport Gatwick currently is and how it grows. This is as a result of the types of airlines that use the Airport and the destinations they serve. As a result it is important to understand the Airport's airlines, their passengers, and the Airport's passenger profile.

Gatwick is the UK's second busiest airport, with an increase of 1.7% passengers between 2012 and 2011. It offers more travel destinations than any other London-airport servicing the catchment of London and the South East. In the past year, over 3.2 million passengers travelled to European and North African destinations. One of Gatwick's strengths is its range of airline services and routes. The Airport is now served by more than 70 regularly operating airlines travelling to over 199 destinations. This is higher than Heathrow's offering.

The types of airlines operating from an airport and the number and type of routes offered will impact the amount of accommodation and type of facilities they require. An airline with greater number of aircraft based at an airport are more likely to need greater amounts of accommodation. Such accommodation may include office space, lounges, staff training facilities and maintenance.

Typically legacy carriers such as British Airways and Virgin Atlantic are larger users of airport accommodation as a result of providing a wider range of services and amenities to their passengers and staff. Conversely Low Cost Carriers (LCCs) minimise their on-airport facilities preferring to locate back of office functions and crew report off-airport at locations with lower rentals. Also, the type of facilities LCCs require are fewer as less services are provided to passengers. However, this is changing, Easyjet is now serving larger numbers of business travellers who demand appropriate amenities

Airline	% of total	Airline	% of total
EasyJet	38%	Ryanair	5%
British Airways	14%	Norwegian Air	3%
Thomsonfly	9%	Aer Lingus	2%
Monarch	6%	Emirates	2%
Thomas Cook	6%	Other	9%
Virgin Atlantic	5%		

Figure 2.01 : Source: GAL Master plan



Figure 2.02: Source: GAL Master plan

### Airline Profile (2012)

EasyJet now serves more than 100 routes from Gatwick, the airline's largest base, where its 14 million passengers per annum accounted for 38% of the Airport's yearly total in 2012/2013. This includes more than two million business travellers, putting EasyJet firmly ahead of Gatwick's next largest airline, British Airways, whose 4.5 million passengers accounted for 14% of the total passenger traffic.

The majority of passengers are typically short-haul routes to destinations in the UK and Europe, although a number of long-haul destinations such as Orlando, Dubai and Sharm El Sheikh are among Gatwick's busiest long haul services.

# Route Development

## Changing profile of airlines and routes

Forecast passenger growth in the South East of the UK is anticipated to put existing runway capacity under increasing pressure. The construction of a second runway at Gatwick will alleviate some of this pressure and enable the Airport to increase the number of destinations it serves.

Already Gatwick is seeking to attract more long-haul flights which typically generate greater facility requirements. Attracting new airlines is dependent upon the following:

- § Catchment;
- § Capacity (slot availability);
- § Connectivity (destination and surface access)
- § Airport charges;
- § Alternative airports; and
- § Perceived profile of the Airport

Gatwick has an attractive catchment being located in an affluent area where people have a high propensity to travel. It is widely considered to be Europe's strongest catchment area with over 15 million people residing within 1 hour drive. Also 44% of Gatwick's catchment is in the highest socio economic group AB1.

The CAA reports that despite the current economic uncertainty in the UK and Europe, growth elsewhere in the world is forecast to stimulate significant growth in demand for aviation over the next 20 years. While London is well connected now, capacity constraints will increasingly shape network configuration by reinforcing the trend towards focusing on the most profitable, high-yield routes.

Gatwick has capacity in non-peak periods and can therefore attract airlines that want to expand into London.

Gatwick provides the largest number of destinations of any London airport, including extensive domestic and European connections available on a wide range of airlines. The Airport provides connections to all of the top 10 domestic destinations from London, having a 41% market share and provides twice as many destinations as LHR.

Gatwick Slot Availability (Departures)

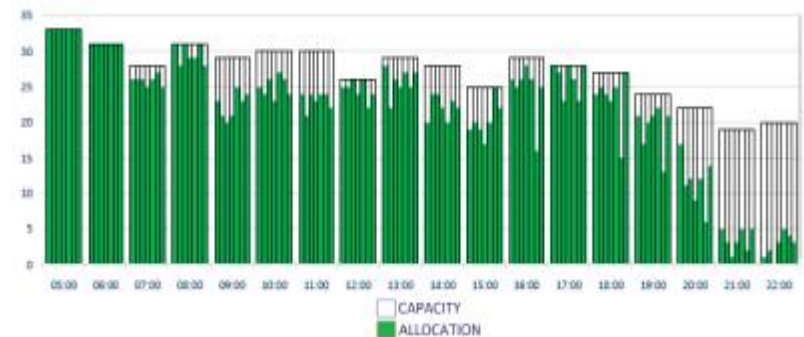


Figure 2.03 : Source: GAL Master plan

Heathrow Slot Availability (Departures)

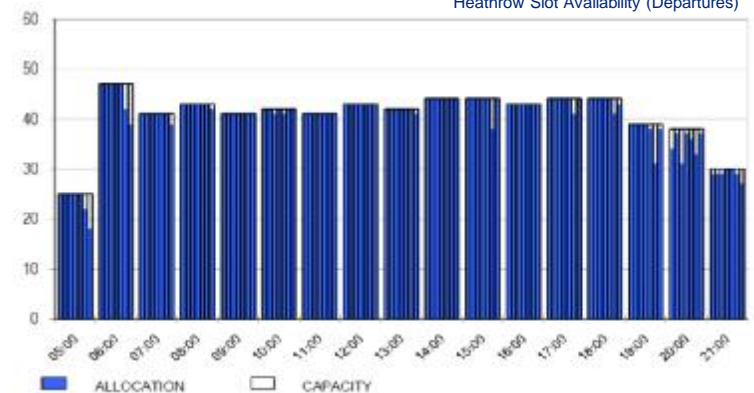


Figure 2.04 : Source: GAL Master plan



# Route Development

## Changing profile of airlines and routes

### Profile

The type of destinations and the Airport's existing airlines will shape the profile of the Airport. That profile may then in turn influence the decision making of other airlines or businesses to locate there.

The perception of Gatwick as a purely leisure airport is changing. GAL has invested heavily in its infrastructure and facilities to significantly improve passenger experience. The market perception is now that Gatwick is considered more "business travel friendly" and has appropriate facilities to support long-haul flights. As a greater number of long haul destinations are served by the Airport the passenger profile is expected to change and so to the facilities they demand.

To develop business travel from the Airport the right destinations and appropriate frequency need to be offered by the airlines. Associated business facilities and surface connectivity are also essential.

Passengers are the focus for airlines and the quality of facilities and infrastructure to support their business is therefore key. This requires an Airport to be able to meet the airlines' requirements. Ideally this requires airports to always have available facilities as airlines commence operations from an airport. This typically leads to a natural level of available supply in an airport's property portfolio.

### Recent Airline Development at Gatwick

GAL's management has focused on improving the facilities and public perception of the Airport. This together with the recent change in landing charges, offering free landings in off peak times has resulted in the Airport securing a number of new airlines offering a range of new routes. Many of these are Asian airlines – Vietnam, Korean Air, – reflect the areas of global economic growth and passenger growth. In addition, the timing of the available slots are ideal for Asian outbound and inbound flights. The Airport would appear to have overcome a credibility "hump" and as a result of these recent commitments other airlines are expected to announce the commencement of operations. It is also important to note the high growth rates of these newer airlines, the economies they service and the potential future demand this entails.

The amount of commercial space taken by these airlines at the Airport is minimal. However as Alliances such as Star Alliance or StarTeam establish themselves and achieve a critical mass we would expect to see additional facilities being required.

As Gatwick moves towards serving greater numbers of Asian markets and other long haul destinations the number of airlines operating from the Airport will grow as will existing airlines as their operations increase.

Brand is important to airlines and they like to maintain their own identity in the space they occupy. Airlines sign up for slots per season, i.e. on a 6-monthly basis. The lease terms for accommodation therefore need to match this. Whilst this provides flexibility for the airlines it means security of income for Gatwick is limited.

### Outlook

The Global airline industry is gradually recovering. However, the trading conditions between regions and airlines differs. Similarly, the performance of the three airports in the south east of the UK differs significantly. Heathrow experienced minor decreases in passenger numbers throughout the economic downturn. Passenger decline was greater at Stansted and Gatwick, however Gatwick has improved significantly to be in line with historical throughput numbers. Stansted's performance and passenger numbers have continued to decline whilst the other two south east airport have improved. Based upon discussions with management, even in these testing times Gatwick has grown passenger numbers but faces continuing challenges with airlines reducing services from the Airport and a number of airlines in financial problems.

Gatwick continues to promote itself and is confident more airlines will be secured. In particular, with increasing traffic to Asia it is hoped that US airlines will be attracted once the economy recovers. As more airlines are attracted this will start to create behaviours that reinforce Gatwick as London's airport of choice.

Gatwick's forecast passenger growth which is outlined in the following section of this report highlights how the passenger profile will change as a result of an increase in long haul destinations being served from the Airport.

However, passenger growth and profile are not the only drivers that will shape the types and quantum of facilities required at the Airport

# Macroeconomic conditions

In addition to the factors previously outlined, the following are key drivers that we also consider will shape future facility requirements including:

- Macroeconomic conditions;
- Market conditions;
- Surrounding development pipeline;

The study period for the assessment of future facility requirements extends from 2013 to 2050. Macroeconomic forecasting is at best limited to the immediate future and is therefore challenging when considering this time horizon. Of relevance is the current macroeconomic outlook drawing on a consensus of differing views to be applied to our forecasting model. Included in Appendix B is a summary of the current macroeconomic outlook that we have considered. We have assumed that throughout the study period there will not be a significant economic correction, boom or recession. The likelihood of neither of these economic events occurring throughout such an extended time frame is unlikely.

Considering the cyclical nature of the global economics there is a higher probability that we may witness all three again between now and 2050. However, accurately timing the peaks and troughs of the economic cycle is impossible. As a result we have assumed a constant overall growth in line with Bank of England long term GDP growth forecasts, which are reflected in figure 2.05. These however only forecast to 2016. The long term real (excluding nominal growth) average GDP growth between 1948 and 2010 was 2.4%. We have assumed this growth rate would continue and therefore there is no explicit assumption of a reduced utilisation of existing stock, neither on-airport nor in the surrounding local markets.

*"Cities have been responsible for 78pc of the UK's economic growth over the last ten years"*

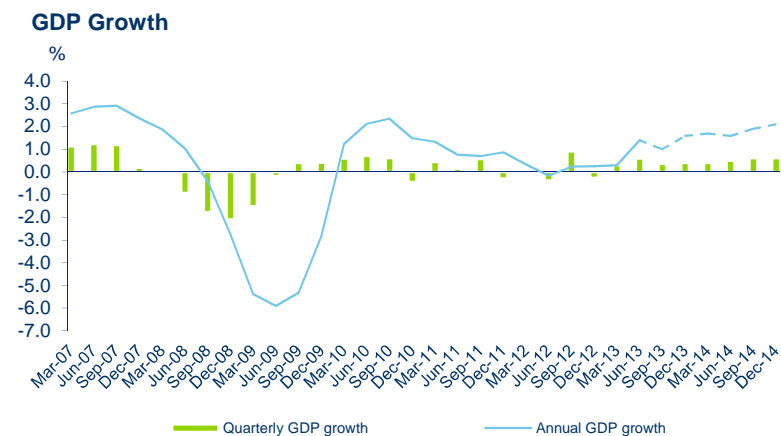


Fig 2.05 Source: Deloitte Research



Fig 2.06 Source: Deloitte Research

# Property market conditions

## Market Conditions

The announcement that UK GDP grew by a first estimate of 0.6% over Q2 2013 came as welcome news after growth of just 0.2% over 2012 as a whole. Deloitte's CFO Survey Q3 2013 suggests that optimism has risen for the fifth consecutive quarter with CFO's seeing fewer risks in the global economy and greater opportunities for expansion. This sits alongside an increase in optimism regarding companies' own prospects and indications that credit is both cheaper and more easily available.

Outside the London and south east market there continues to be weakness in occupier demand and a reluctance to commit to additional space. The recent improvement in consumer confidence and improvement in economic fundamentals is still to translate into growth in demand for employment accommodation. The local markets surrounding the Airport particularly, Crawley, and Horley are typified by secondary office and industrial accommodation. Broadly the market is characterised by older style buildings and the market for these properties has continued to experience challenging occupier demand and limited investor demand.

Due to the long time horizon associated with the study period and the cyclical nature of the property market, the current market conditions will have limited impact on the long term demand for additional facility requirements. A review of each market including office, industrial, hotels, petrol filling stations is included in Appendix B.

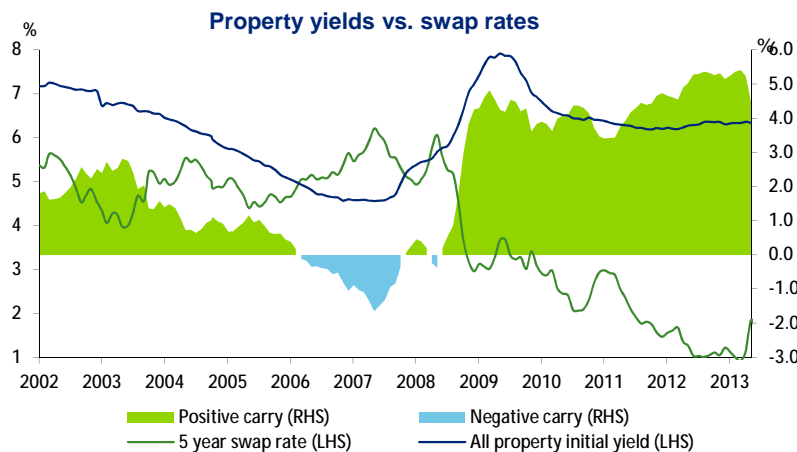


Figure 2.07 : Source: Deloitte Research

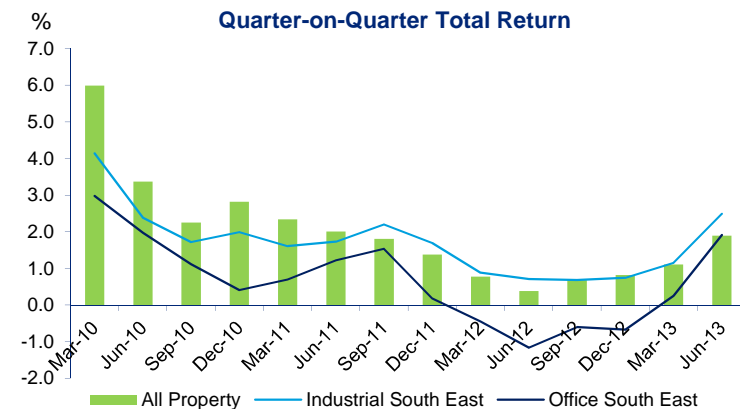


Figure 2.08 : Source: IPD

# Development Pipeline

## Development Pipeline

### Offices

Total office stock in Crawley is estimated at 4.9m sq ft, the majority of which is concentrated in Manor Royal. Development has fallen away during the downturn – the only scheme to complete since 2009 was the speculative 30,200 sq ft St John's House in the town centre which completed in early 2012. We estimate that the total proposed office accommodation in development pipeline is 2.9m sq ft, however the vast majority of this space is in the pre-application stage.

Availability rose in mid-2013 to a total of approximately 770,000 sq ft which represents a vacancy rate of 15.8%. However, the majority of available units are poor second hand units with the prime office accommodation in city place now fully let.

### Industrial

There has been no new speculative development in Crawley for 12 years and therefore the majority of the available space is of older, poorer quality stock, much of which is unlikely to be fit for modern occupiers running logistics related operations. We estimate that the total industrial stock is approximately 9.1m sq ft and that a further 2.7m sq ft of industrial accommodation is currently in various stages of the development pipeline.

It is estimated that the current vacancy rates are between 2-3% (a total of around 300,000 sq ft currently on the market) which represents a decrease from 5% in 2012. This demonstrates the continued take up over recent months, with no new supply coming on line. In addition the availability is predominantly all second hand space, some of which is refurbished. However a large part is still under tenant control and considered to be of limited quality.

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## Future Airport Consideration

# Preferred Option



GAL have identified a preferred option for how the new runways could be configured and operated. This will give rise to implications for the future facilities required to support the expansion.

## Option : Independent Mixed Mode

The Option comprises a second runway positioned 1,035m apart from the existing runway. This makes it possible to operate the two runways in 'independent mixed mode' enabling flexibility and capacity to be maximised.

It is estimated that capacity could amount to 95 movements per hour. This would equate to some 95mppa.

The runway separation and additional facilities to support the greater capacity would require land-take to be increased further.

Figure 3.01: Source: GAL submission to the Airports Commission

# Introduction

## Passenger Numbers

		2013	2030	2040	2050
Forecast	PAX	34,000,000	65,000,000	83,000,000	95,000,000
	Movements	240,000	405,000	496,000	560,000

Figure 3.02: Source: GAL

We have been provided with forecast passenger numbers for the preferred scenario (Option).

This forecast is based on the design of the Option, reflecting the separation of the runways and the operations constraints this entails, together with the forecast air traffic demand for London and the South East over the next 40 years and the growth Gatwick will secure.

We have used the forecast to form the basis of our analysis of future facility requirements, including the timing of phasing and quantum of space required to meet anticipated demand.

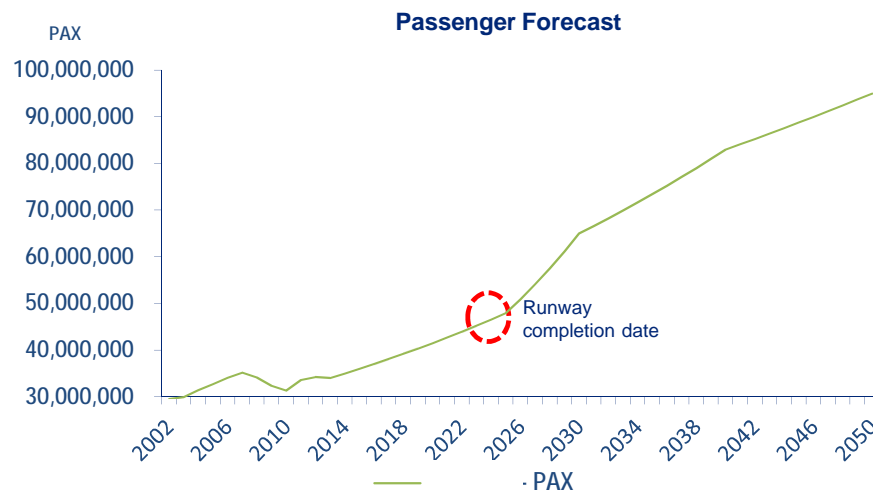


Figure 3.03: Source: GAL

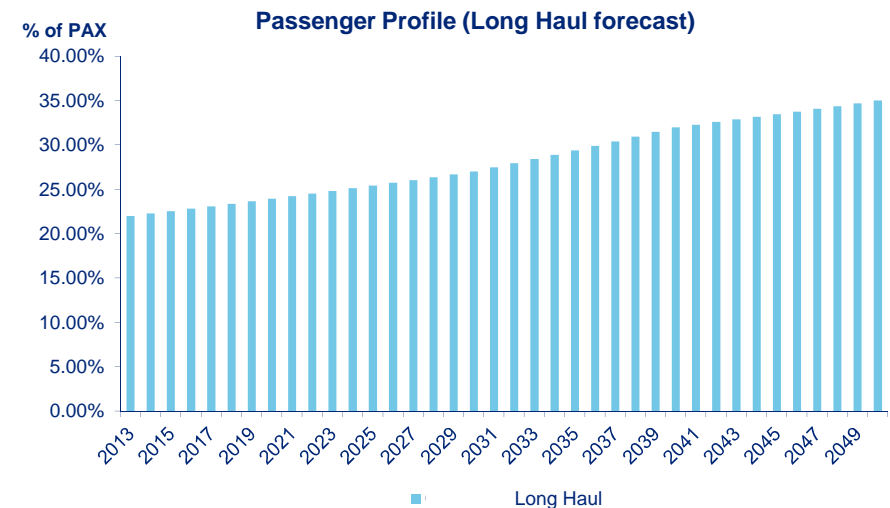


Figure 3.04: Source: GAL

# Forecast Scenario

## Cargo

We have been provided with cargo forecasts until 2050. Gatwick's cargo volumes are forecast to grow to over 1,070,000 tonnes by 2050. This is over nine times bigger than 2012 but still significantly smaller than LHR today.

Over 95% of cargo tonnage is provided by the long haul markets (outside EU).

		2012	2030	3040	2050
Forecast	Freight (Tonnes)	101,000	520,000	841,000	1,070,000

Figure 3.05: Source: GAL

## Employment

We have been provided with forecast employment figures until 2050. This has been estimated based on historical efficiencies and expected future efficiencies relative to the appropriate demand drivers (e.g. passenger volumes, number of flights).

Although total airport traffic volumes are forecast to increase by over 100%, the total number of employees are not forecast to increase by the same proportion due to efficiency gains.

		2013	2030	2040	2050
Forecast	Employment	21,025	29,685	35,210	39,943

Figure 3.07: Source: GAL

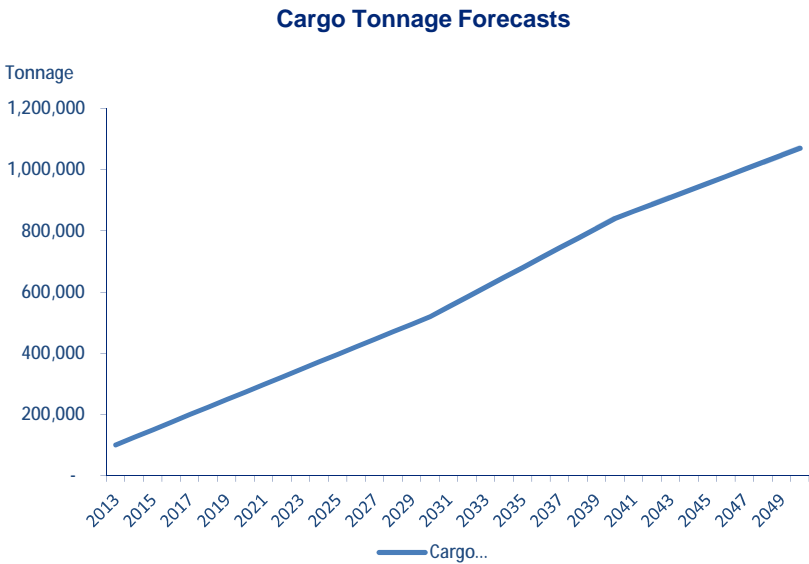


Figure 3.06: Source: GAL

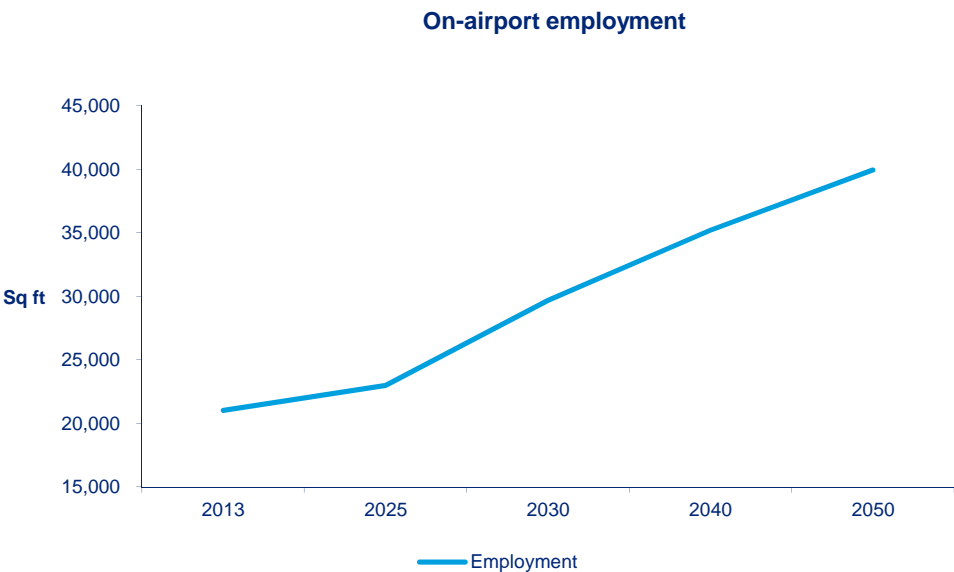


Figure 3.08: Source: GAL



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## Forecast Scenario

# Forecast Scenario

## Baseline assumptions

The forecasting of future facility requirements is not an exact science. There are a number of material factors that will shape the future requirement and the quantum required. An assessment of the key drivers and constraints likely to shape the future floor space requirements is set out in the previous sections.

The recommendations of the Davies Commission and resulting expansion of the South East's airports is likely to have a material impact on how Gatwick Airport is developed. Additional capacity through the construction of additional runway(s) at both or either Heathrow or Stansted is likely to result in changing the forecast passenger growth. It may also influence the destinations and function of Gatwick Airport and then by default the passenger profile. If for example Heathrow is not expanded there is the potential for a greater proportion of long hauls to be served by Gatwick and as a result, the potential for a greater proportion of transfer passengers.

To calculate the future requirements there are a number of base assumptions that have been employed to minimise the number of variables. The study is based upon the following set of base assumptions:

- Gatwick will form part of a constellation of airports serving the London market
- No additional runway capacity will be developed in the South East
- Gatwick Airport's current Passenger profile to remain constant between 2013 and 2050 and therefore the following will remain constant:
  - Point to point and transfer mix;
  - Transport modal split;
  - Proportion of inbound v outbound;
- Passenger forecasts are based on GAL outputs.
- Cargo throughout is forecasts are based on GAL outputs.
- On-airport job growth is based upon advice received from ICF SH&E.
- The proportion of airport related users occupying off-airport facilities is expected to remain constant.
- New required facilities will be incremental demand, i.e we have not taken into account the displacement of existing developments as a result of airport expansion (e.g. City Place)

# Methodology

Demand for key airport-related uses is driven by airport activity – i.e. passenger numbers and changes in routes / airlines. The existing amount and quality of space provided has been benchmarked against other airport's facility provision to determine further demand for additional space which is expected to be required as a result of passenger growth. The following uses have been studied and the detailed appraisal identifying future required quantum is set out in the following pages:

- Airport-related offices;
- Cargo;
- Hangars;
- Industrial;
- Car Parking (retail and staff );
- Hotels; and
- Ancillary Ground Support and Airside .

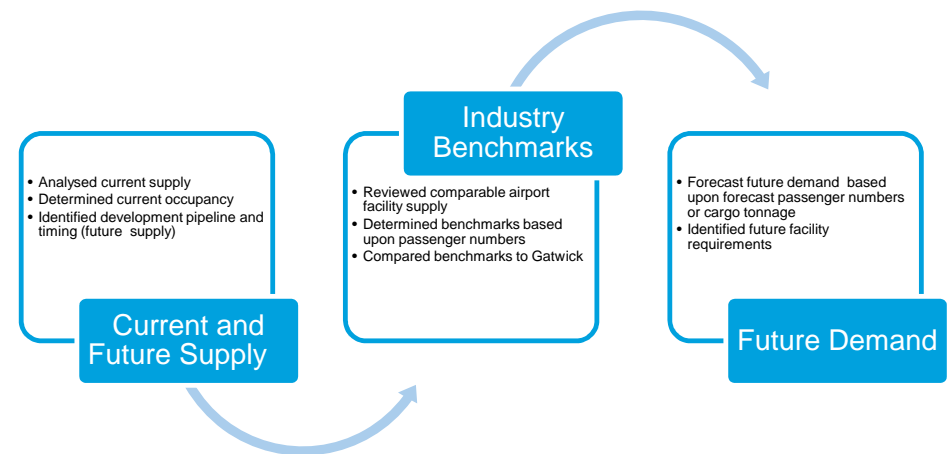
In analysing the opportunities for each of these markets we have undertaken the following process:

Forecasting has been based upon applying benchmarks on a straight line basis i.e. a consistent benchmark applied for the length of the study. This risks not taking into account how the Airport and its users are likely to change over time. The Airport's forecast long haul growth is likely to change the quantum of required facilities. However, there is also the need to take into consideration airport occupiers increasing their efficient use of space. This is likely to reduce their facility requirements.

To cross check our forecast scenario we have considered the Airport's forecast employee growth on the Gatwick Estate.

Gatwick's Employee Survey provides the number of employees, their type of employment and their place of work. This information provides an indication of the current workspace utilisation per employee per type of employment (office, industrial) . The outputs from our benchmark scenario forecasts are cross checked against the future employment numbers to ensure the workspace utilisation is broadly similar.

The following sets out the quantum of required accommodation per type and the anticipated delivery or the required facilities over time.



# Forecast– Airport-related Offices

Office Outputs		2013	2030	2040	2050
Forecast	Forecast PAX Numbers	34,000,000	65,000,000	83,000,000	95,000,000
	Forecast Office Demand (per sq ft)	261,538	403,643	469,784	493,482
	Employment forecast	18,502	24,853	29,680	32,900
	Employment Density (per sq ft)	14.1	16.2	15.8	15.0

Figure 4.01: Source: GAL and Deloitte Research

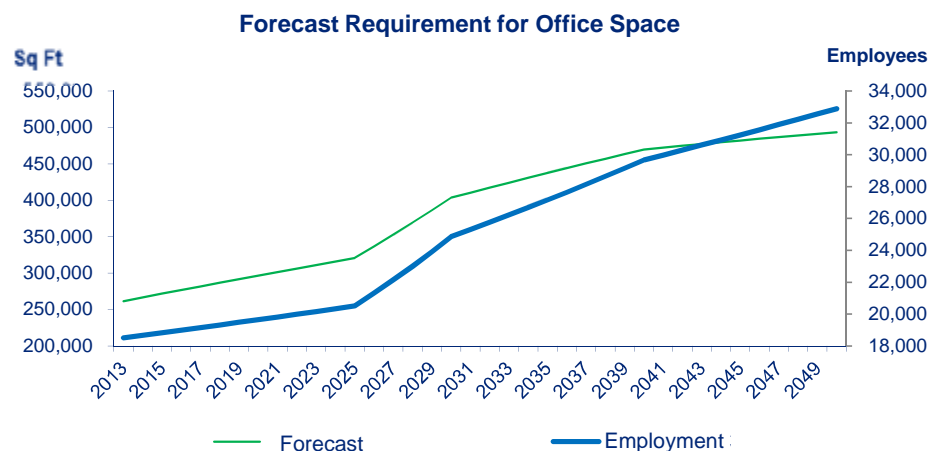


Fig 4.02 Source: Deloitte Research

To forecast Gatwick's future office accommodation requirements we have considered the supporting benchmarks of the other airport's office provision. We have then compared the previously mentioned variable factors which shape an airports requirement and compared those to Gatwick. This includes the relatively high proportion of LCC airlines and the Airport's proximity to competing office accommodation. We are of the view that our benchmark of 130 – 140 passengers per sq ft of office accommodation is applicable to determine future office requirement at the Airport. This benchmark range also recognises the current on-airport demand and level of vacancy with the existing portfolio.

Applying this to GAL's forecast passenger numbers we estimate that there is no need for additional office space until after 2020. At this time demand will exceed the current available supply. However, the remaining useful life of the existing office buildings and the high level of obsolesce requires consideration to be given to how best to provide for current and future requirements. Most of the existing office will require replacement in the next 10 -15 years. There still remains an oversupply of available office accommodation on-airport of approximately 40,000 sqft. As a result we do not anticipate additional office accommodation for airport related users being required for another 7-8 years.

In addition, the construction of the second runway will require land which currently incorporates the City Place office development to the south east of the Airport. This together with other required land that incorporates office development will displace occupiers of approximately 1,000,000 sq ft of offices. The displacement of these occupiers has the potential to significantly increase the requirement for additional offices by a similar amount.

Airport related office development will ideally be situated in close proximity to both the existing and future terminals. These are likely to attract a premium as airport related occupiers seek to be located in close proximity to key operational areas and are willing to pay a rental premium. Other non-airport related occupiers are likely to be more attracted to offices situated on sites that provide ease of access to the South Terminal's railway station and sites with good exposure and ease of access to the arterial roads at the entrance and exits of the Airport estate.

# Forecast - Airport-related Office



Future Office Requirements	
Forecast	
Existing Supply (sq ft)	293,319
Forecast Future Supply (sq ft)	200,000
Total Supply (2050) (sq ft)	493,319
No. of Office Buildings	5

Phasing of Delivery			
Forecast			
Years	Date Required	Delivery (sq ft)	Total (sq ft)
7	2020	40,000	40,000
13	2026	40,000	80,000
16	2029	40,000	120,000
19	2032	40,000	160,000
25	2038	40,000	200,000

Fig 4.04 Source: Deloitte Research



# Forecast– Hotels

Outputs					
		2013	2030	2040	2050
Forecast	Forecast PAX Numbers	34,000,000	65,000,000	83,000,000	95,000,000
	Forecast Hotel Demand (rooms)	2,957	5,217	6,783	7,565

Fig 4.05 Source: GAL and Deloitte Research

To forecast Gatwick's future hotel requirements we have considered the supporting benchmarks of other airport's hotel provision. We have then compared the previously mentioned variable factors which shape an airport's requirement and compared those to Gatwick. This includes the relatively high proportion of LCC airlines and the amount of off-airport hotel competition. Based upon our analysis we are of the view that Gatwick's profile is similar to Munich and Manchester Airports. Therefore we consider a benchmark of 11,000 – 12,000 passengers per hotel room to be an appropriate benchmark to be applied to determine future hotel demand at the Airport.

Based on our benchmark range of passengers per bedroom and the forecasted passenger numbers there is likely to be future demand for a hotel in 2020. However, this assumes that off-airport supply does not increase at a greater rate than on-airport rooms.

Based upon this benchmark range by 2014 there will be an oversupply of 365 bed rooms. However, as on-airport hotels are located in preferable locations compared to off-airport competition, we would expect that through yield management market penetration could be increased to fill the available supply. This would however reduce the rev par of the on-airport hotels. A number of factors may bring forward the demand for an additional hotel on-airport including:

- Proposed off-airport development does not occur
- Increased early departures
- Increased transfer passengers
- Increased market penetration though improved yield management

In addition, the construction of the second runway will incorporate land which has five existing hotels totalling 566 bedrooms. The required demolition of these hotels will bring forward the hotel requirements. We would anticipate this would be post 2021. The Airport should seek to provide available land so as to be able to increase the requirement (set out in figure 4.05) by an additional 328 bedrooms assuming the Airport's current market share.

Airport hotels benefit from proximity to terminal areas. We would recommend land being safeguarded adjacent to the new terminal for 4-5\* hotels that provide direct terminal access. Also, land be set aside within walking distance from the new terminal for 3\* hotels. Considering the likely demand for budget hotels we would suggest land for these hotels be remote of the terminal and located on the Airport's new southern perimeter.



Fig 4.06 Source: Deloitte Research

# Forecast - Hotels

(Rooms)

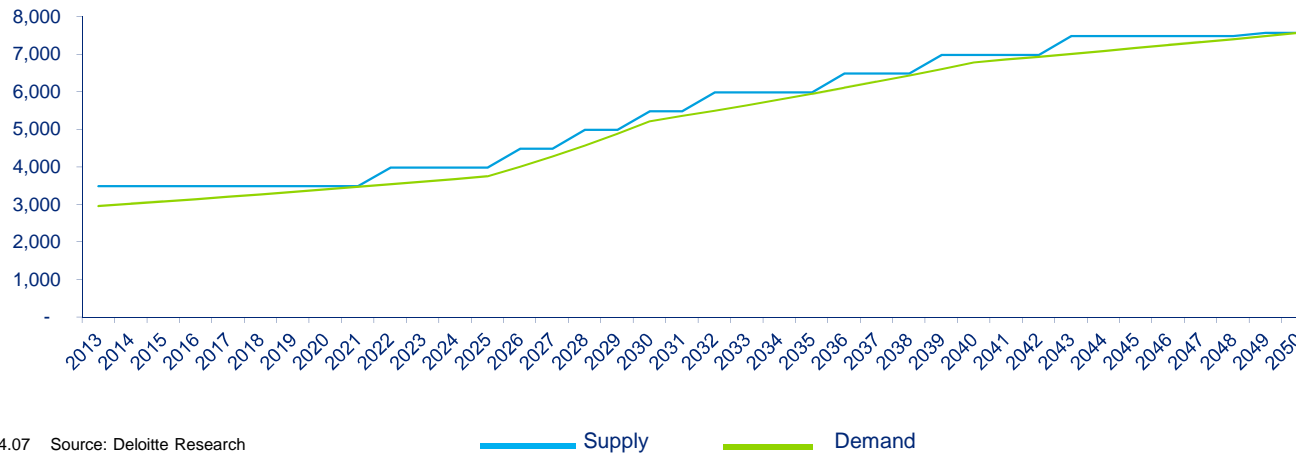


Fig 4.07 Source: Deloitte Research

Future Hangar Requirements	
Forecast	
Existing Supply (rooms)	3,483
Forecast Future Supply (rooms)	4,082
Total Supply (2050) (rooms)	7,565
No. of Hotels	9

Phasing of Delivery			
Forecast			
Years	Date Required	Delivery (rooms)	Total (rooms)
9	2022	500	500
13	2026	500	1,000
15	2028	500	1,500
17	2030	500	2,000
19	2032	500	2,500
23	2036	500	3,000
26	2039	500	3,500
30	2043	500	4,000
36	2049	82	4,082

Fig 4.08 Source: Deloitte Research

# Forecast - Airport-related Cargo facilities

		Outputs			
		2013	2030	2040	2050
Forecast	Forecast Freight (Tonnes)	101,000	520,000	841,000	1,070,000
	Forecast Cargo Demand (sq ft)	135,488	531,072	807,429	995,454

Fig 4.09 Source: GAL and Deloitte Research

To forecast Gatwick's future cargo requirements we have considered the supporting benchmarks of other airport's cargo provision. It is also important to note the distinction between cargo transit sheds and airport cargo warehouses. Our forecasts are based upon transit sheds only. Therefore, less reliance has been placed upon the benchmarks of airports such as Manchester and East Midland.

The forecast of cargo tonnage reflects the growth of the Airport's long haul networks. Currently the Airport's existing transit shed have availability to accommodate the immediate future growth in cargo throughput. Material growth in cargo does not occur until after the second runway is constructed. After 2025, cargo growth accelerates which results in the forecast delivery of an additional 703,000 sq ft.

There are a number of considerations for the potential location the future transit sheds. Principally the location of the future cargo aprons will determine the location of the transit sheds. This would ideally be located adjacent to the existing transit sheds. However, this area may be required for future terminal expansion.

The forecasts in figure 4.09 only estimate the Airport's future transit sheds requirements. International airports typically have a significant element of cargo warehousing on-airport which serve as distribution facilities for the surrounding market. The future development of new and existing airports commonly incorporates provision for logistic hubs to leverage the connectivity the airport provides and meet occupier demand. Logistic companies benefit from establishing distribution hubs, at or close to airports. Due to Gatwick's limited available land, meeting this demand has not been possible. Historically, as the Airport grew the demand for cargo warehousing has been met by the expansion of Manor Royal.

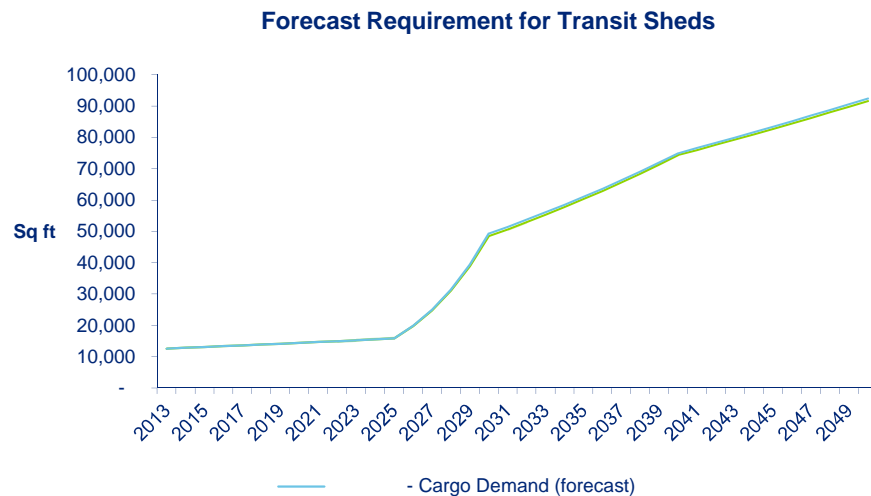


Fig 4.10 Source: Deloitte Research

# Forecast - Airport-related Cargo facilities

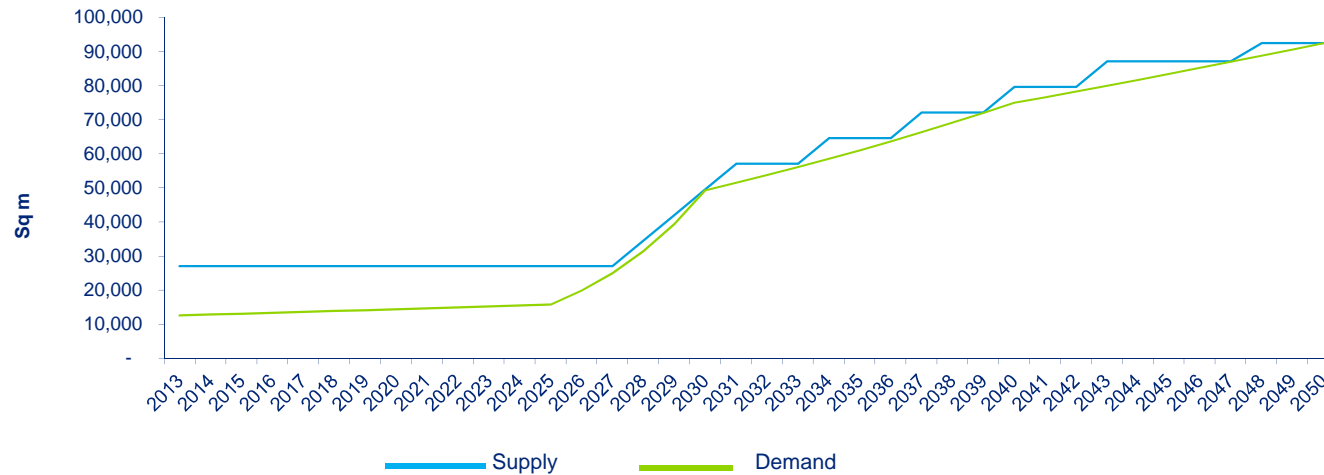


Fig 4.11 Source: Deloitte Research

Future Cargo Requirements	
Forecast	
Existing Supply (sq ft)	291,539
Forecast Future Supply (sq ft)	703,915
Total Supply (2050) (sq ft)	995,454
No. of Hangar Buildings	9

Phasing of Delivery			
Forecast			
Years	Date Required	Delivery (sq ft)	Total (sq ft)
15	2028	80,750	80,729
16	2029	80,750	161,459
17	2030	80,750	242,188
18	2031	80,750	322,917
21	2034	80,750	403,646
24	2037	80,750	484,376
27	2040	80,750	565,105
30	2043	80,750	645,834
35	2048	58,081	703,915

Fig 4.12 Source: Deloitte Research

# Forecast - Airport-related Industrial Facilities

		Outputs			
		2013	2030	2040	2050
Forecast	Forecast PAX Numbers	34,000,000	65,000,000	83,000,000	95,000,000
	Forecast Industrial Demand (sq ft)	226,667	358,076	424,044	449,193

Fig 4.13 Source: GAL and Deloitte Research

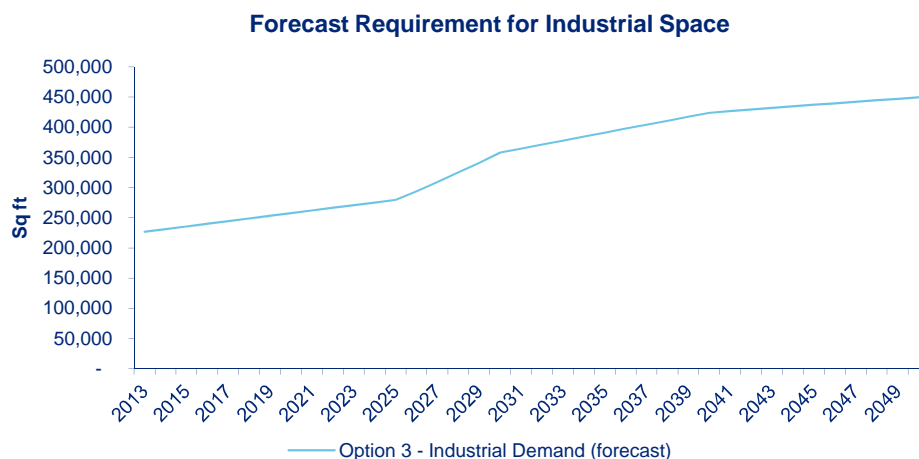


Fig 4.14 Source: Deloitte Research

Comparatively, Gatwick has a very low amount of industrial accommodation compared to other UK airports. This can be attributable to the close proximity of Manor Royal, which has a significant proportion of airport-related industrial occupiers. As a result we have analysed the local industrial market conditions in order to arrive at our benchmarks and the related commentary is included in Appendix B.

There is limited available industrial accommodation that is fit for purpose on-airport. A large proportion of the industrial accommodation on airport is nearing the end of its useful economic and physical life. The life expectancy for buildings does vary depending on the maintenance and refurbishment in each case. However, the majority of buildings are not fit for purpose and it is worth considering whether these buildings should be redeveloped in the next few years.

The Airport's recent construction of the Viewpoint building is more in line with modern industrial facilities required on-airport. The significant demand for this building supports the need for additional fit for purpose industrial accommodation.

The expansion of the Airport will provide the opportunity to develop additional fit for purpose industrial accommodation and bring a proportion of industrial uses, currently occupying 33% of Manor Royal, on-airport. The Airport's ability to develop cost effective fit for purpose accommodation close to key areas of operation will determine the proportion of the market they can bring on-airport.

We currently are of the view that there is latent demand for approximately 30,000 sq ft of industrial accommodation.

Based upon the growth forecast we anticipate approximately 258,000 sq ft of industrial accommodation will be required on-airport between 2014 – 2050.

The construction of the second runway will also displace approximately 3,000,000 sq ft of industrial accommodation in Manor Royal and land to the south of the Airport's current boundary. Based upon surrounding areas being occupied by approximately 30% airport and transport related users, this displacement will create demand for potentially 1,000,000 sq ft of industrial accommodation.

On-airport industrial accommodation typically occupies low value land, for example the North Zone and the southern perimeter road. We would suggest the further development of the North Zone as well and infill sites between the South Terminal and the future terminal to the south as ideal for future industrial land areas.



# Forecast - Airport-related Industrial Facilities

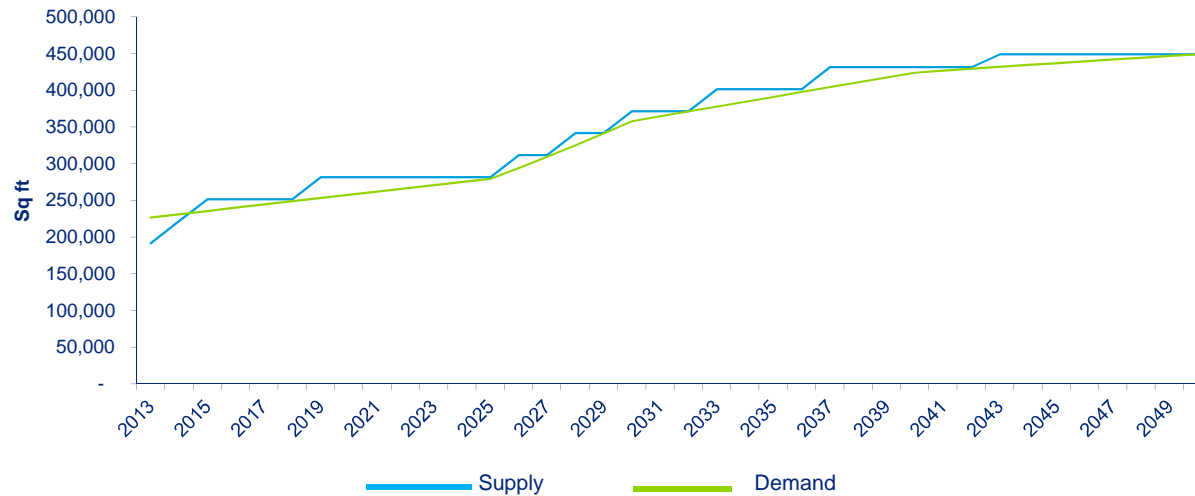


Fig 4.15 Source: Deloitte Research

Future Hangar Requirements	
Forecast	
Existing Supply (sq ft)	191,647
Forecast Future Supply (sq ft)	257,546
Total Supply (2050) (sq ft)	449,193
No. of Industrial Buildings	9

Phasing of Delivery			
Forecast			
Years	Date Required	Delivery (sq ft)	Total (sq ft)
1	2014	30,000	30,000
2	2015	30,000	60,000
6	2019	30,000	90,000
13	2026	30,000	120,000
15	2028	30,000	150,000
17	2030	30,000	180,000
20	2033	30,000	210,000
24	2037	30,000	240,000
30	2043	17,546	257,546

Fig 4.16 Source: Deloitte Research

# Forecast - Hangar Facilities

		Outputs			
		2013	2030	2040	2050
Forecast	Forecast PAX Numbers	34,000,000	65,000,000	83,000,000	95,000,000
	Forecast Hangar Demand (sq ft)	304,977	538,195	699,654	780,383

Fig 4.17 Source: GAL and Deloitte Research

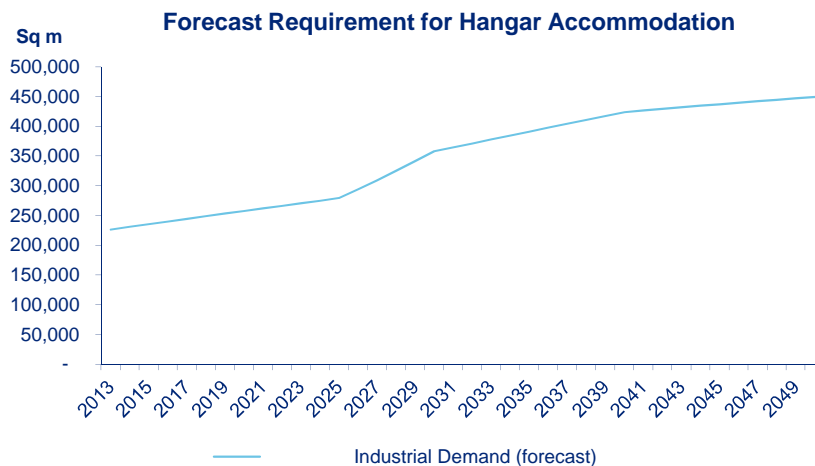


Fig 4.18 Source: Deloitte Research

Our review of hangars at UK and international airports has concluded that there is little correlation between passenger growth and hangar demand. Analysis can be skewed by the development of Maintenance Repair and Overhaul (MRO) facilities or large numbers of private hangars. As a key factor that will shape the amount of hangarage is the quantum of aircrafts based at an airport. This is particularly relevant when considering national carriers. Point to point airports with less based aircraft tend to have less hangars, whilst hub-airports typically being a home base for national carriers have a significantly greater demand for hangar facilities.

There are a number of key considerations that will shape the demand for hangarage at Gatwick including:

- Number of based aircraft
- Number of airlines
- Growth in UK MRO market

There are broadly two types of hangars which have very different specification requirements. Hangars are either required for the storage of aircraft which are low specification or alternatively hangars for MRO. These hangars are typically high specification with a high proportion of tenant fit out. Hangar development is typically very "lumpy" with large developments being undertaken on a pre-let basis.

Whilst unable to draw upon benchmarks to establish a forecast demand for hangarage at the Airport, the current level of enquires directly to management together with our knowledge of the current level of market activity nationally indicates a strong likelihood of development in the short to medium term. We are of the opinion that there is adequate demand to assume the development of two new maintenance hangars in two stages. We would recommend GAL continues to pursue this opportunity. In the medium term we anticipate an additional five hangars would be required whilst recognising negotiations for new hangar development typically takes a number of years as a result of the significant investment required by both parties.

The expansion of the North Zone adjacent to and opposite the existing Virgin hangar are ideal locations for additional hangars. These sites are remote from commercial operations and benefit from existing taxiways and aprons.

# Forecast - Hangar Facilities



Future Hangar Requirements	
Forecast	
Existing Supply (sq ft)	177,529
Forecast Future Supply (sq ft)	640,452
Total Supply (2050) (sq ft)	817,981
No. of Hangar Buildings	7

Phasing of Delivery			
Forecast			
Years	Date Required	Delivery (sq ft)	Total (sq ft)
3	2016	91,500	91,493
4	2017	91,500	182,986
9	2022	91,500	274,479
15	2028	91,500	365,973
18	2031	91,500	457,466
24	2037	91,500	548,959
31	2044	91,500	640,452

Fig 4.20 Source: Deloitte Research

# Forecast - Car Rental Facilities

		2013	2030	2040	2050
Forecast	Pax –	34,000,000	65,000,000	83,000,000	95,000,000
	Car Rental area (acres)	5.5	8	8	8

Fig 4.21 Source: GAL and Deloitte Research

Our forecasts assume that the Airport develops a consolidated car rental facilities in the next 2-3 years. This is based upon the Airport's current Capital plan to develop a facility in the next quinquennium.

Factors that are likely to shape the demand for land areas dedicated to car rental storage including car rental facilities includes:

1. Proportion of inbound v outbound passengers;
2. Number of terminals;
3. Proximity between terminals and their car rental facilities;
4. Linkages between the terminals; and
5. the establishment of off-airport back up facilities.

The timing of the first additional car rental facility is likely to coincide with the opening of a third terminal. Our forecast assumptions are based upon Gatwick constructing a new terminal in 2025 and the terminal requiring a new car rental facility. These dedicated areas are required for the temporary storage of car and should be located within an appropriate walking distance to the terminal. Also, car rental desks should be provided within the terminal located in close proximity to the passengers exit from Customs or in a highly visible area close to the terminals exits.

# Forecast - Petrol Filling Stations Incorporating Convenience Stores

		2013	2030	2040	2050
Forecast	Pax	34,000,000	65,000,000	83,000,000	95,000,000
	Forecasted Number of Petrol Stations	2	3	4	4

Fig 4.22 Source: GAL and Deloitte Research

There is limited correlation between the size of the Airport and the number of petrol stations. We would anticipate that one petrol station per major airport exit which serves a terminal area as being required. Factors that are likely to shape the demand for petrol stations or at least increase total fuel throughput to include:

- Location and proximity of competing petrol stations
- Location of airport and proximity to major arterial roads
- Amount of non-airport related passing traffic
- Passenger profile including inbound v outbound and transfer passengers

Our forecast assumptions are based upon Gatwick continuing to provide 50% of the immediate areas supply of petrol stations. Also that the additional required petrol stations will be similar to the existing format of station incorporating a significant element retail in the form of a large format convenience store.

The timing of the first additional petrol filling station is likely to coincide with the opening of another major access point, leading to a third terminal.



# Forecast - Fast Food Restaurants

		2013	2030	2040	2050
Forecast	Pax	34,000,000	65,000,000	83,000,000	95,000,000
	Forecasted Number of fast food restaurants	4	5	6	6

Fig 4.23 Source: GAL and Deloitte Research

We are aware that a number of potential developers have approached the Airport to construct two new fast food restaurants at the Airport. Specifically a major fast food operator are seeking to lease the site adjacent to the South Terminal service station and another popular fast food restaurant chain are seeking to lease a site adjacent to the North Terminal petrol station. This demonstrates latent demand for two new sites.

Factors that are likely to shape the demand for fast food restaurants include:

- Location and proximity of competing fast food restaurants
- Location of airport and proximity to major arterial roads
- Amount of non-airport related passing traffic
- Proportion of PAX using private cars

Like petrol stations the number of main entry points to the Airport will drive the location of fast food outlets, which are typically sited adjacent to petrol stations. The number of terminals may also have a bearing on outlet numbers.

In the event that agreements are made for the two previously mentioned opportunities, we anticipate further demand for an additional 2-3 fast food sites. Again we would anticipate the requirement for the first outlet to coincide with the opening of a new access point to the new terminal.

# Forecast - Ground Services and Ancillary Airside

		2013	2030	2040	2050
Forecast	Pax	34,000,000	65,000,000	83,000,000	95,000,000
	GSE areas (acres)	6.17	10.88	14.15	15.78

Fig 4.24 Source: GAL and Deloitte Research

Existing land currently dedicated to third party use for the storage of ground support equipment (GSE) and ancillary equipment has been limited to land leased and not areas either licenced or used on a temporary basis. Also we have excluded airside areas used by airlines for the storage of equipment close to the aerobridges. As a result, our forecasts should be considered in the context of other planned airside operational areas and the availability of apron and land for the storage of equipment. Another key driver for land areas will be determined by the Airport's policy on ULD storage and how well the airside is managed. Strict policies around the storage will increase demand for dedicated ULD areas. Also if the Airport invests in multi racked ULD facilities with lower the requirements for land to be set aside for ULD storage.

Another contributing factor that can shape demand for GSE storage is the location of airside workshops. If workshop areas are remote from areas of operations, typically, airlines and engineering service providers with require storage areas closer to the aircrafts and key areas of operations. The following is a high level indication of the anticipated future land areas requirements.

# Re-provision considerations

The size of Gatwick Airport, being 1,665 acres ( 674 hectares), is relatively small when compared to other similar airports with passengers of 30m – 45m per annum. As a result of the site being relatively constrained, the Airport has been required to prioritise land for operational facility requirements and direct airport related facilities. As a result, available land surrounding Gatwick has been taken up by developers that have constructed facilities to meet the demands of other airport related occupiers that provide services to the Airport or benefit in some way from proximity to the Airport. Of particular note is Manor Royal, which has grown as passenger numbers have increased at the Airport.

Manor Royal comprises 593 acres, of which approximately 18% is used for office accommodation, 77% is manufacturing and industrial land use and a smaller but important proportion of land is used for non-B classes including retail, car dealerships and servicing, leisure and hotels. Based upon Deloitte research we estimate that approximately 30% of all occupiers are directly related to Gatwick Airport being aviation and or transport related.

City Place has also been developed to the south east of the Airport. It was initially developed by the former owners of the Airport and currently comprises approximately 9 acres of office park. The four office buildings comprise 300,000 sq ft and are occupied by a range of tenants including Nestle, BDO, Santander and Chapman Freeborn. Tenants cite City Place's proximity to the Airport as a contributing factor to their decision to base their operations within the Estate.

The construction of the second runway could potentially require the acquisition of approximately 2,588 acres of land to the south of the Airport. This could potentially result in the displacement of approximately 35% of Manor Royal's land area and the whole of City Place. In total, there is estimated to be a further 3,000,000 sq ft of industrial and 1,000,000 sq ft of office accommodation within the wider area that is expected to be acquired for the second runway. Within this area, we also estimate that approximately five hotels will need to be acquired, comprising circa 566 rooms.

Existing high level estimates suggest that circa 30% of the facilities that are located within the affected area would require a location that is in relative proximity to the Airport. In the absence of significant office and industrial supply in the surrounding regions, it is likely that GAL would need to consider re-provision of industrial and office accommodation as part of the 2<sup>nd</sup> runway proposals. Such an approach would demonstrate a 'solution'- based attitude towards mitigating the local impacts of the 2<sup>nd</sup> runway. It is also likely to generate greater political support and reduce opposition from local occupiers. On-site re-provision may also provide operational benefits for the airport, where tenants form part of the airport supply chain. In addition, re-provision through the creation of an airport investment asset may also be more economically beneficial for the airport than sinking CPO costs into off-airport relocations.

Re-provision of a proportion of the existing accommodation would clearly be a significant undertaking, but it provides the opportunity for the Airport to consider new and innovative development structures, whilst solving a potential problem that would result from a major acquisition of land to the south of the Airport. Ever more global airports are expected to safeguard development land for airport related occupiers, due to the commercial appeal and the synergies that co-location at an airport provides. Additional benefits of on-airport development include reduced environmental impact and enhanced commercial returns. These issues are outlined further in the following page and should be given further consideration in the future planning of the Airport.

# Benefits of on-airport development

The Airport estate is a complex environment. Ideally, planning the development or expansion of the Airport estate would seek to develop all required facilities on-airport in proximity to the areas of operation. The positioning of the required facilities should be planned to optimise the estate layout, co-locating facilities and occupiers that provide synergies and efficiencies. The development of airport related facilities being located on-airport is critical for an airport to be efficient and meet the expectations of airport stakeholders. Also, on-airport development has a number of benefits which include:

- Reducing environmental impact;
- Creating operational efficiencies;
- Enhancing commercial return; and
- Increased commercial development.

## Minimising environmental impact

The development of airport related facilities being located off-airport would result in a greater environmental impact than on-airport development. Any adverse impact to the environment that is (ideally) avoidable is expected to result in greater resistance from the Local Planning Authority (LPA).

Airport related users occupying off-airport facilities will generate increased trip generation on the road network surrounding the Airport. This would increase congestion on the roads and provide an adverse impact to the environment which could be avoided if located on-airport. The efficient siting of facilities on-airport in proximity to the users areas of operation will reduce this trip generation.

## Commercial Benefit

The development of on-airport facilities creates commercial benefit for the Airport. If facilities are not provided on-airport to serve the demand created by the Airport's expansion, developers and property investors will meet this demand by locating the facilities immediately off-airport. Typically, this is in as closer proximity to the Airport operations as is commercially viable, resulting in a lost opportunity for the Airport.

Facilities developed on-airport in proximity to areas of operations create efficiencies for airport users. This operational benefit translates into a premium being paid for on-airport facilities. As a result a rental premium is typically found for on-airport accommodation when compared to comparable off-airport facilities. This premium typically diminishes the further away from the operational location. As a result developers are motivated to create facilities as close to the Airport as possible.

Also, our research indicates that occupancy levels and lease retention rates are higher for real estate assets located on-airport. As a result airport related assets attract a premium from investors. On a like for like basis we would expect to see on-airport assets trading at a premium to comparable off-airport assets. This provides the Airport with the opportunity to capitalise on the captive market of occupier demand, develop facilities and achieve asset price premiums. The potential commercial returns which can be derived from these commercial initiatives can enhance the Airport's ability to re-invest proceeds into the Airport operations or return to shareholders.

# Benefits of on-airport development

There are a number of examples of development occurring immediately off-airport as a result of Airports either not developing facilities to meet the demand or due to limited availability of land or funding (e.g. Orly Airport forms part of the Paris constellation of airports).

## Create operational efficiencies

Airport occupiers require proximity to areas of operations. The development of facilities close to the terminal, airside access points, and the customers they service is critical. The complexity of airport operations and the “just in time” requirements of airlines and cargo operators requires facilities be provided on-airport.

Airports are competitive markets which require operations and the interaction of stakeholders to be located in close proximity. Operationally it is essential for airport related facilities required by airport stakeholders to be located as close as practically possible to key operational areas. Also, the co-location of facilities which are complementary is essential. For example, cargo transit shed should be located in proximity to cargo aprons. Access for articulated lorries should be via dedicated roads which are separated from roads frequented by passenger accessing car parks and the terminals.

## Increased commercial development

The co-location of complementary businesses on-airport has the potential to increase the viability of additional development. This catalytic effect of airport related development is likely to deliver critical mass and increase the viability of service providers' on-airport. This improves the services available to employees and increases job satisfaction and productivity. Bringing together clusters of complementary service providers enables the development of, for example restaurants, medical facilities, hair dressers and dry cleaners. This can also result in additional environmental benefits reducing staff trips off-airport.

In addition, being in control of the development of the estate in which the Airport's users are based, provides the opportunity to have a positive impact on the estates environment. It will also promote and facilitate the creation of an airport community with common goals and priorities through an alignment of objectives and initiatives for the Airport's estate and its community.



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## Appendix A

### Forecast Scenario GEA & Forecourt/Site Areas

# Future Forecast Scenario

	Forecast	
	GEA	Site/Forecourt Area (Acres)
<b>Office Requirements</b>		
Existing Supply (sq ft)	363,243	N/A
Forecast Future Supply (2050)	247,880	N/A
Total Supply (2050) (sq ft)	611,123	N/A
No. of Hangar Buildings (2050)	6	N/A
<b>Hotel Requirements</b>		
Existing Supply (sq ft)	1,480,275	N/A
Forecast Future Supply (2050)	1,734,942	7.0
Total Supply (2050) (sq ft)	3,215,217	N/A
No. of Hangar Buildings (2050)	9	N/A
<b>Cargo Requirements</b>		
Existing Supply (sq ft)	291,539	19.12
Forecast Future Supply (2050)	703,915	46.17
Total Supply (2050) (sq ft)	995,454	65.29
No. of Hangar Buildings (2050)	9	9
<b>Industrial Requirements</b>		
Existing Supply (sq ft)	201,733	11.58
Forecast Future Supply (2050)	252,858	15.56
Total Supply (2050) (sq ft)	454,592	27.14
No. of Hangar Buildings (2050)	9	9
<b>Hangar Requirements</b>		
Existing Supply (sq ft)	177,529	10.19
Forecast Future Supply (2050)	640,452	36.76
Total Supply (2050) (sq ft)	817,981	46.95
No. of Hangar Buildings (2050)	7	7

Fig 6.01 Source: GAL and Deloitte Research

NIA = 15% deduction from GIA

GIA = 5% deduction from GEA

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## Appendix B

### Market Commentary

# Market Commentary

## UK Economy

Official data shows that the UK economic recovery has gathered momentum during the second and third quarters with GDP expanding by 0.6%, a sign that the UK economy is moving in the right direction. Recent surveys have reported a rise in business confidence, a sharp increase in service sector growth and more optimism surrounding the UK housing market.

The minutes from Mark Carney's first Monetary Policy Committee meeting indicate that interest rates are to be held at 0.5% and it is unlikely that interest rates will rise later this year. The level of quantitative easing will also remain unchanged at £375 billion. The base rate has now been held at 0.5% for over four years and the first rise in interest rates is now not expected until summer 2015.

The fall in the value of sterling since the start of this year, while providing a boost to exporters, has also meant that inflation is unlikely to fall as fast as previously predicted. CPI rose from 2.7% in May to 2.9% in June, which was a 14 month high. The latest monthly comparison of independent forecasts compiled by HM Treasury expects CPI only to fall to 2.5% by Q4 2013, and just fractionally lower by Q4 2014.

Total employment is forecast to continue to expand, from 29.5 million people in 2012, according to the OBR, to 30.1 million by 2015, and this is matched by a stable unemployment rate which has been hovering around 4.8% on the claimant count measure for the last year.

GDP Growth

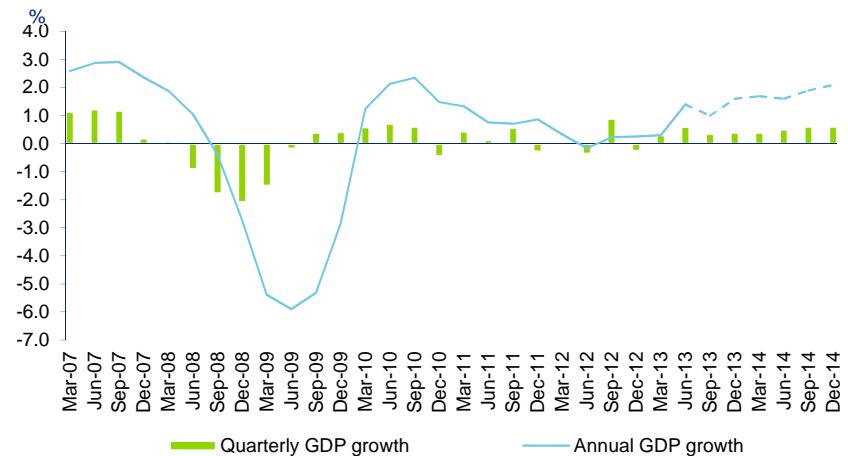


Fig 7.01 Source: IPD and Deloitte Research

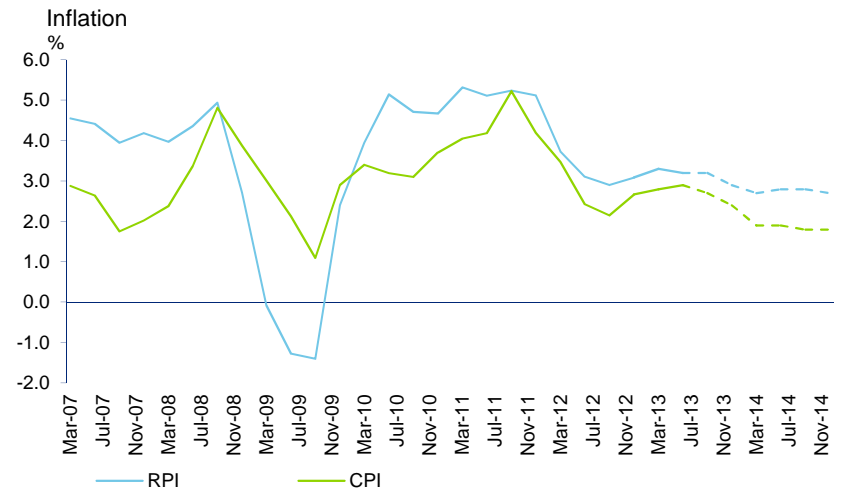


Fig 7.02 Source: IPD and Deloitte Research

# Market Commentary

## Commercial Property Market

During the first quarter of 2013, all property total returns were up 1.1% from the 0.8%, delivered in the last quarter of 2012. Property equities returned 1.2%, narrowly edging direct commercial property, while equities had a strong quarter, returning 9.7% (MSCI UK). Bonds returned 1.0% (JP Morgan UK 7-10 year).

UK property values rose for the second consecutive month in June as sentiment improved around the nascent UK economic recovery. According to the IPD UK June Property Index, capital values increased by 0.2%, as the fractional growth that emerged in May gained a little momentum. Total returns rose to 0.8%, the highest monthly return since March 2011.

IPD data shows that UK property returns remained steady in July, at 0.8%, driven by income returns of 0.6%. Fig 5.04 shows the IPD all property total return over the past twelve months, which stood at 1.9% as at June 2013.

London has remained the main driver of property values, with the majority of regional assets still seeing a decline in capital values. However, as confidence has returned to the market over the last few months, these regional declines have slowed.

The improvements seen around the UK have been in part due to improving occupier demand. Where there has been demand from tenants for space, valuers have upgraded their outlook. IPD June 2013 figures indicate that all property headline rental growth rose 0.1%, for the first time since May 2011.

Property yields vs. swap rates

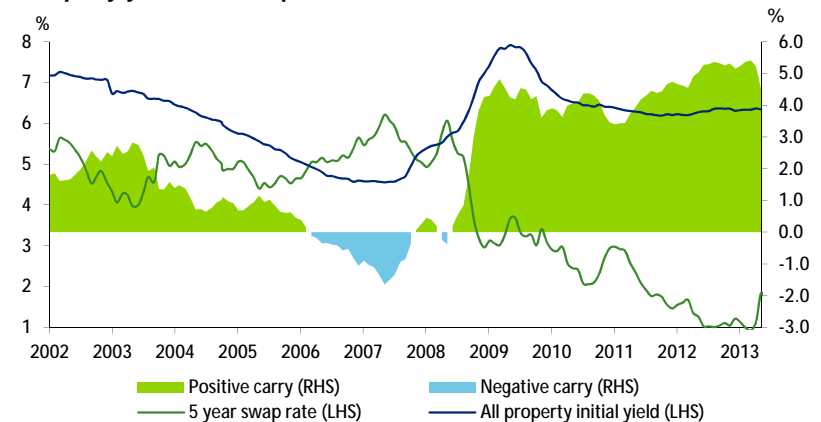


Fig 7.03 Source: Deloitte Research



Fig 7.04 Source: IPD



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