

SD5 Development Strategies

Updated Scheme Design

SD5

Development Strategies

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Executive summary

This document sets out Gatwick's Development Strategies, which address the Airports Commission's (the Commission) objective to define how the additional capacity would be funded and project-managed to ensure successful delivery.

Gatwick's scheme meets the Development Strategies objective by setting out an approach which:

- Is phased to reduce the risk associated with market growth and uncertainty, construction and delivery. The phasing will have minimal additional impacts on the wider community;
- Has a private sector financing strategy which is robust and entirely privately funded, subject to an appropriate regulatory framework. The vast majority of surface access needs for a second runway can be accommodated within already committed road and rail schemes;
- Deliver £79 billion of economic benefits for the UK in aggregate over 60 years in present value terms, plus a further £10 billion to £14 billion of indirect competition impacts, as well as significant benefits for the local community – around £40 billion more than delivered by a third runway at Heathrow, applying the same methodology and consistent assumptions¹;
- Delivers to the local community significant new jobs (22,000 airport related jobs by 2050), and longer term benefits. It also offers the potential to create up to 100,000 jobs in London and the greater South East region. Further, it is better suited to deliver the ambitions of the London Plan by supporting designated opportunity and regeneration areas, thereby reducing overheating areas in and around the M4 corridor; and
- Minimises environmental impacts.

This approach has been developed in conjunction with relevant economic, construction, and financial experts and, as such, gives Gatwick very high confidence that the delivery of a second runway at Gatwick (£7.8 billion) will be at a lower cost than Heathrow (£17 billion, consistent with Heathrow's submission to the Airports Commission), at a lower risk than Heathrow, at a lower cost to the public purse than Heathrow (which requires £4 billion to £6 billion of Government support, as indicated in Heathrow's 2013 submission), while delivering benefits 5 years sooner and generating around £40 billion more economic benefits than Heathrow¹.

A programme of this nature must take account of local issues and concerns, and also demonstrate that the community will significantly benefit from this investment - both in terms of jobs during construction and also through re-generation activity bringing in new businesses attracted by the opportunities that Gatwick will create.

¹ Economic impact assessment figures are presented in 2010 prices.

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Louise Goldsmith, Leader of West Sussex County Council, has stated:

“The county council has voted to support expansion of Gatwick, in principle, because of the huge potential economic benefits for West Sussex. However, we want to work with Gatwick, residents and partners to ensure that any development will take into account the environmental concerns that people rightly have, and include all of the essential infrastructure that a development of this scale would require. We are pleased that Gatwick has agreed to work with us on these issues.”

Gatwick has worked closely with the local community, through extensive engagement during the development of the expansion plans, to determine how best to maximise the economic benefit that this programme will bring as well as to minimise any adverse environmental effects.

Key elements of the strategy:

- Not only will the local economy benefit from jobs and new businesses, it will also benefit from significant improvements in public transport, such as the Thameslink, M25 and M23 upgrades. These plans will provide Gatwick and the local area access from the widest possible catchment area: 3.2 million people live within 30 minutes and 14.8 million within an hour's access of Gatwick – more than Heathrow;

Paul Gresham, Chair of the Gatwick Diamond Initiative has stated:

“The £19.2bn Gatwick Diamond economy has developed over 50 years as a result of the location of London Gatwick airport. International businesses have already chosen the Gatwick Diamond to locate their UK and European headquarters and many more will be attracted as Gatwick grows its routes with a second runway proposal.”

“Thousands of new knowledge sector jobs will be created; transport, housing and town infrastructure developed and UK plc. will benefit. Businesses are telling us that they want, and support, a second runway and that Gatwick Diamond Initiative is delighted to support Gatwick's submission to the Airports Commission.”

- Further, Gatwick is located within 45 minutes' train journey to key London Plan “Opportunity Areas” in South London, where housing and employment growth are welcomed and prioritised in planning and economic policy. It is also located on the main corridor to the coastal economic hub of Brighton and its environs, which have been prioritised for economic growth by the Coast to Capital Local Economic Partnership;
- Beyond the immediate links, Thameslink and Gatwick's road and rail connections mean that the spread of economic benefits extends to other regeneration priority areas, such as Clapham Junction, London Bridge, Victoria, Old Oak Common and Finsbury Park. Improved rail connectivity will also bring connections to economic growth hubs including Kings Cross/St Pancras, Farringdon, Cambridge and Peterborough;
- Investment in bus, cycle and rail will enable Gatwick to achieve the highest use of sustainable modes of transport: it will achieve a 60% public transport mode share for customers and a 50% mode share for staff;

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- The phased approach of construction to match capacity with demand is not only good construction practice to minimise impacts upon both the airport and the surrounding area, it also ensures that the programme is de-risked and financeable in the private sector and affords users the greatest protection from additional airport charge increases;
- Gatwick's forecast reflects an affordable and credible long-term aeronautical charge in the range of £12 to £15 per passenger. This is compared to an estimated charge of around £35 per passenger at Heathrow²; and
- The focus on driving industry-leading sustainability performance and the robust management of noise, carbon and air quality will enable Gatwick to have a significantly lower environmental impact than Heathrow while protecting the quality of life of local communities.

Above all, by taking a collaborative approach with the local community, and through Gatwick's experience of financing, developing and construction, the second runway can be operational by 2025, providing the UK with the capacity it needs 5 years ahead of Heathrow.

² 2014 prices.

1.Introduction

SD5 Development Strategies is one of a suite of documents that form Gatwick's updated scheme design submission to the Commission.

Our Development Strategies demonstrates that the Gatwick plan will:

- Create an extra 22,000 airport-related jobs by 2050;
- Offers the potential to create up to 100,000 jobs through economic growth in London and the greater South East region;
- Have a private sector financing strategy that is robust and does not rely on any additional government funds, subject to an appropriate regulatory framework;
- Be operational by 2025; and
- Involve the local community to maximise the benefit of the plan and minimise any adverse impact.

The Development Strategies draw together the relevant development plans which address the Commission's objective to define how the additional capacity would be funded and project-managed to ensure successful delivery. The relevant module reports are:

- Module 2: Local Economy Impacts;
- Module 3: Business Case;
- Module 4: Cost and Commercial viability;
- Module 5: Delivery.

Meeting the Airports Commission's objectives

The Commission's prescribed subject areas and objectives (from Framework table 4.1) that the Development Strategies should consider are listed below, along with a summary of key elements of our approach to addressing each objective.

Each subject area is then addressed in more detail in the remainder of this document and in the appropriate modules and scheme design elements.

Local economy impacts

Objective: to promote employment and economic growth in the local area and surrounding region.

Key aspects of Gatwick's response are that a second runway at Gatwick will:

- Create an extra 22,000 airport-related jobs by 2050;
- Be accommodated by the local social infrastructure;
- Offers the potential to create up to 100,000 jobs in London and the greater South East region;
- Maximise the take up of employment and commercial opportunities by local people and businesses, through direct engagement with local stakeholders and businesses, with a target of 40% of project procurement through local suppliers;

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- Support regeneration in deprived parts of London and the South-East through targeted engagement with Councils and wider stakeholders in these areas;
- Support training and employment through the Life-Long Employability Programme which will involve new schools based education schemes, an expanded skills development programme, apprenticeships, scholarships and supporting return-to-work, less able and mature sections of population, in particular within deprived communities; and
- Be readily accommodated within, and actively contribute to, the development of local social infrastructure through a series of enhancement measures including the Community Asset initiative.

Local economy impacts

Objective: to produce positive outcomes for local communities and the local economy from any surface access that may be required to support the proposal.

Key aspects of Gatwick's response:

- Gatwick will achieve the highest use of sustainable modes of transport: it will achieve a 60% public transport mode share for customers and a 50% mode share for staff delivered through our Surface Access Strategy and Staff Travel Plan;
- Gatwick's plans accommodate the needs of other transport users: up to 2050 there will be enough road and rail capacity to meet all the needs of the airport, background users and the economic growth generated;
- Gatwick's plans will provide access from the widest possible catchment area: 3.2 million people live within 30 minutes and 14.8 million within an hour of Gatwick – more than any other airport in the UK;
- Local connectivity will be supported by new surface access schemes such as the improved Thameslink and other southern franchise services, and planned improvements to highways, which will increase capacity on the M23 and at the M25 junction 7;
- Improved bus services: services will operate for longer hours, more frequently and go to more destinations; and
- New and improved cycle routes: the realignment of the A23 will deliver a dedicated cycle-way. Cycling and walking upgrades will create 9km additional cycle routes that will also be of better quality than the existing routes.

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Business case

Objective: to make efficient use of public funds, where they are required, and ensure that the benefits of schemes clearly outweigh the costs, taking account of social, environmental and economic costs and benefits.

Key aspects of Gatwick's response:

- A private sector financing strategy that is robust and does not rely on any additional Government funds (beyond funding already committed for existing projects) and protects the Government from the risk of increased exposure arising from cost overruns, delays or traffic falling short of expectations as these risks would be borne wholly within the private sector; and
- Delivering a second runway at Gatwick offers the most cost effective and efficient use of funds to deliver additional capacity as:
 - The capital costs of delivering the second runway are significantly lower than Heathrow;
 - Lower costs will result in cheaper travel for passengers; and
 - The social and environmental impacts are lower for a second runway at Gatwick.

Cost and commercial viability

Objective: to be affordable and financeable, including any public expenditure that may be required and taking account of the needs of airport users.

Key aspects of Gatwick's response:

- An inherently low risk, time-certain, lower cost and affordable capital programme, phased to deliver capacity to match demand, including the opening of the second runway in 2025;
- Does not rely on any additional Government funds;
- A resulting aeronautical tariff of £12 to £15 per passenger, that is commercially sustainable in the context of future aviation traffic trends and substantially lower than Heathrow's charges which will be £35 per passenger³;
- An established and prudent financing structure capable of supporting the required increase in debt underpinned by equity, subject to an appropriate regulatory framework;
- Commercial viability has been stress tested to ensure key risks are manageable within the proposed capital structure; and
- Further work will be needed going forward to better define the risks and allocate these fairly, between users and the airport.

³ 2014 prices.

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Delivery

Objective: to have the equivalent overall capacity of one new runway by 2030.

Key aspects of Gatwick's response:

- Gatwick has a very high degree of confidence (80% probability of success) of delivering an operational second runway by 2025 – 5 years ahead of the Airport Commission's objective; provided the political decision making process is not delayed further;
- A new runway at Gatwick will deliver a minimum of an extra 260,000 air traffic movements per annum. We believe that a third runway at Heathrow would in contrast deliver only 190,000 movements;
- The Delivery Programme has been devised to align built capacity with the forecast demand;
- The Programme does not require complex construction or major tunnelling and re-routing of motorways and other main roads with attendant disruption to both through-traffic and local traffic;
- Gatwick has a much higher likelihood than Heathrow of achieving a Development Consent Order due to pre-existing safeguarding of the site for airport development; and
- Gatwick has extensive experience of delivering large construction programmes and a track record of innovation.

Objective: to actively engage local groups in scheme progression, design and management

Key aspects of Gatwick's response:

- Extensive engagement has already been undertaken with local communities, politicians, passengers, business and the airport's staff on a voluntary basis even before Gatwick has been required to do so in relation to the second runway;
- Gatwick has already established an effective working relationship with a wide-ranging network of stakeholders who will be closely involved in current and future engagement on the second runway;
- Gatwick has undertaken specific engagement on surface access with the local community via a dedicated forum with over 70 member organisations;
- Gatwick has implemented of a Noise Action Plan to measure the airport's performance on noise management and mitigation over the next five years; and
- Gatwick has demonstrated its commitment to tackling environmental impacts by achieving its air quality and carbon emission goals every year.

2. Local economy impacts

An additional runway at Gatwick will support employment and economic growth in the local and surrounding areas through both direct employment at an expanded airport, and through further catalytic effects throughout the Gatwick Diamond and Coast to Capital Local Enterprise Partnership (LEP) as well as more generally in central and south London and the South East.

Objective: to promote employment and economic growth in the local area and surrounding region.

Creating direct employment and economic growth

A second runway at Gatwick is estimated to create an extra 22,000 airport-related jobs by 2050⁴, contributing £1.73 billion per year to the local and regional economy⁴.

Employment at Gatwick is expected to grow in line with an expanded volume of passenger traffic. Continuing with a single runway, with approximately 50 mppa, estimates by RPS suggest that by 2050 Gatwick would employ a total of 37,700.

The increase from airport related employment is expected to be able to be accommodated within the Gatwick sub-region

Capacity for an additional 115,000 dwellings has already been identified based on local authority assessments of their strategic housing land supply. The planned average annual development rates amount to just over an additional 5,500 dwellings per year.

Supporting additional employment through catalytic effects

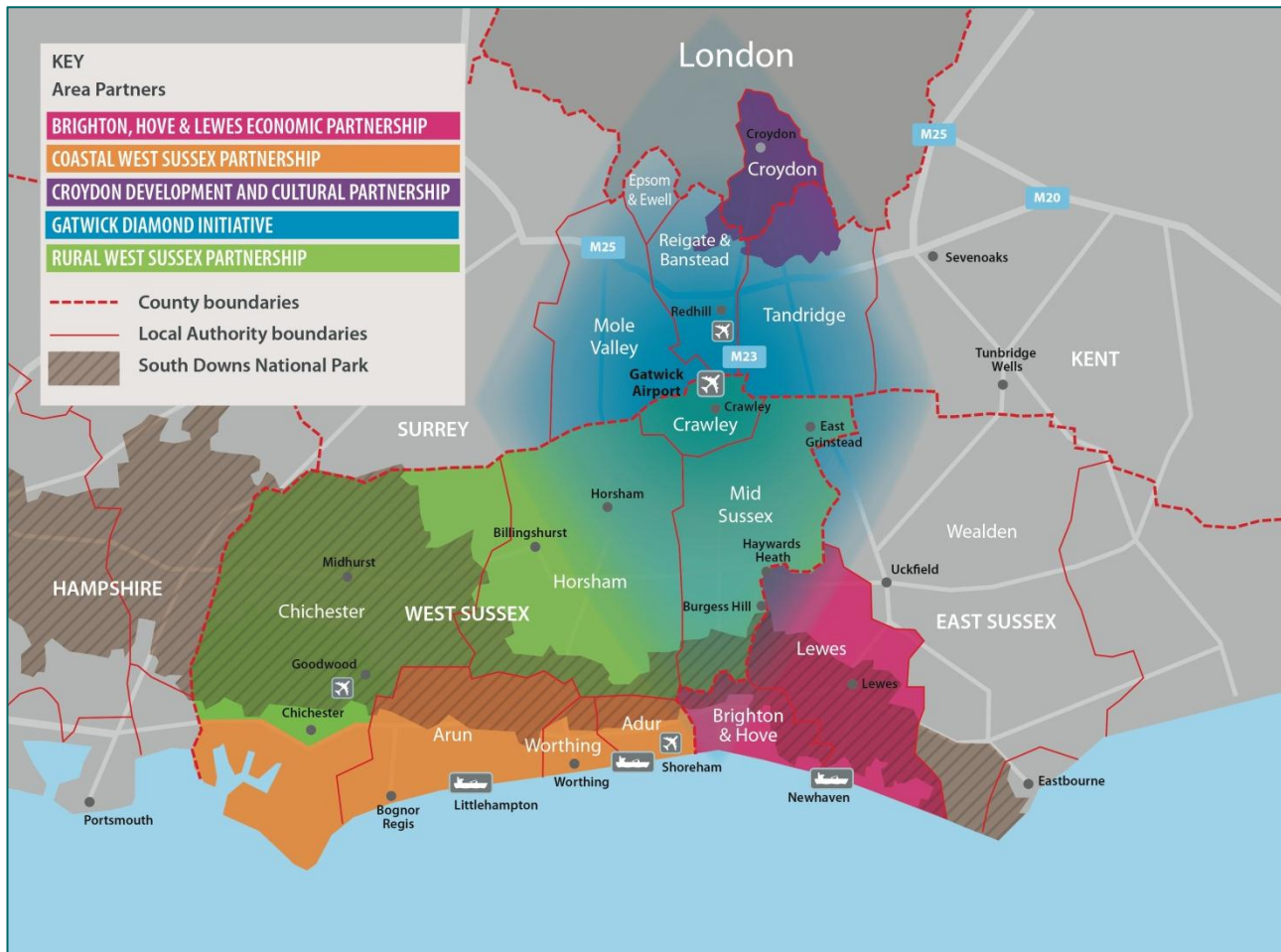
A second runway at Gatwick is expected to have further catalytic impacts on the local economy by attracting new business to the Coast to Capital Local Enterprise Partnership (LEP) (consisting of Brighton and Hove, London Borough of Croydon, Gatwick Diamond, Lewes and West Sussex) as well as Central and south London, generating clusters of air-travel intensive and high productivity businesses.

⁴ RPS, Optimal Economics, Arup (2014), 'Gatwick Airport runway 2: regional and local economic impacts and opportunities for regeneration'.

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FIGURE 1: COAST TO CAPITAL LEP INCLUDING GATWICK DIAMOND

(SOURCE: WWW.COAST2CAPITAL.ORG.UK)



Activities using aviation account for 32.5% of total UK employment. Since 2009, the air intensive sectors have been the principal drivers for employment growth in UK and the South East.

Gatwick is the only other airport in the UK with the potential mass of traffic and depth of local economy needed to replicate the effects already observed around Heathrow⁵.

Therefore implementing a second runway at Gatwick will assist in delivering the vision of enhanced economic development along the Brighton-Croydon corridor, and assisting in the delivery of strategies such as the Gatwick Diamond Strategic Statement and the Coast to Capital Local Enterprise Partnership Strategy for Growth.

⁵ Local economy impacts.

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The Coast to Capital LEP, which has representatives from a cross-section of businesses, local authorities and universities in the region, has declared bold ambitions for growth and is confident that the area can deliver “exceptional growth and productivity gains to deliver economic performance to rival the best in Europe and the rest of the World”⁶.

By 2035, the Coast to Capital Local Enterprise Partnership’s goal (not taking account of the second runway) is for ambitious net private sector employment growth. The priority sectors for growth and inward investment have been identified as health and life sciences; creative digital and information technology; advanced engineering; financial and business services; and environmental technologies. The majority of these sectors will benefit from the increased connectivity that an expanded Gatwick will provide.

Supporting economic growth in areas of need

A second runway at Gatwick can support economic regeneration objectives within the wider area around Gatwick, especially in some of the relatively deprived parts of London and the South-East including parts of south-east London (such as Croydon, Lewisham, Lambeth, Bexley), Essex, Kent Thames Gateway sub-regions and the Sussex coastal towns especially around Brighton where economic regeneration is targeted⁷.

There is already a strong drive to encourage regeneration and economic growth in the London-Gatwick-South Coast corridor, as demonstrated by the work carried out by both the Gatwick Diamond Initiative and the Coast to Capital LEP, and expansion at Gatwick will have a very important role to play in making extra jobs available to those in the less advantaged areas to the north and south of the airport.

The local authorities of Adur, Arun, Bromley and Croydon contain areas which are relatively deprived and are designated as Areas of Need. These areas are already important sources of labour for Gatwick and are well placed to gain from employment growth at the airport⁸. Of the other Areas of Need, all are within 45 minutes of the Airport, with Croydon and Bromley within 30 minutes of the Airport⁹.

Of the “Top 20” most deprived authorities in London and the South East:

- Fifteen are currently within a one hour travel time of Gatwick, with eleven within 45 minutes of the Airport; and
- Three authorities (Brighton and Hove, Eastbourne and Worthing)¹⁰ cover areas which are already supplying at least 1% of the Gatwick workforce.

Hence, there is considerable scope for the majority of the most deprived areas in London and the South East to benefit from the employment opportunities offered by the expansion of Gatwick.

⁶ [http://www.coast2capital.org.uk/images/Coast to Capital SEP FINAL for March v11 without Annexes rev2.pdf](http://www.coast2capital.org.uk/images/Coast_to_Capital_SEP_FINAL_for_March_v11_without_Annexes_rev2.pdf) page 19.

⁷ Local economy impacts.

⁸ Local economy impacts.

⁹ Local economy impacts.

¹⁰ Local economy impacts.

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Providing commitments to ensure benefits are achieved by those that need them most

Gatwick currently operates apprenticeship schemes in engineering (with the Central Sussex College in Crawley). It also undertakes work awareness visits for students engaged on travel/ tourism courses at Hastings College; participation in Careers Fairs and Customer Services¹¹. Gatwick has however recognised that the scale of the second runway development means these activities can be enhanced considerably, Gatwick therefore proposes a Life-Long Employability Strategy.

In partnership with local Councils, educational and skills development organisations, Gatwick is building upon its existing initiatives with colleges to develop an industry leading skills development and employment programme which will provide a framework for engaging all sections of the community. This will involve new schools based education schemes, an expanded skills development programme, apprenticeships, scholarships and supporting return-to-work, and less able and mature sections of population.

Particular focus will be given to expanding existing partnership working with organisations in socio-economically deprived areas, to maximise the potential for upskilling and engaging the long-term unemployed and economically inactive. Gatwick is committed to maximising opportunities for local up-take of employment and business contract opportunities and engagement with local businesses will complement the work of the Programme and wider initiatives in this context.

Expansion provides Gatwick with the opportunity to further leverage the benefits it can create to local and regional sustainable economic growth generally, and specifically to targeted regeneration and socio-economically deprived areas within our catchment area.

Minimising impact on other airports

Gatwick with two runways will result in a better served London airports market than a Heathrow with three runways, based on modelling by ICF SH&E¹². Heathrow will continue to grow, albeit to lower levels of traffic than if it is expanded and the business clustering already around Heathrow, should therefore be protected. The other London airports are all also expected to grow over the next several decades, as demand increases.

Delivering economic benefits of surface access developments

Objective: to produce positive outcomes for local communities and the local economy from any surface access that may be required to support the proposal.

Gatwick has developed a comprehensive Airport Surface Access Strategy (ASAS) setting out Gatwick's vision to:

- Achieve the highest use of sustainable modes of transport: the aim is to achieve a 60% public transport mode share for passengers and a 50% mode share for staff;
- Accommodate the needs of other transport users: up to 2050 there will enough road and rail capacity to serve the airport, background users and the economic growth generated. Both Network Rail and the Highways Agency support this analysis; and

¹¹ Local economy impacts.

¹² London traffic report.

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- Provide access from the widest possible catchment area: 3.2m people live within 30 minutes and 14.8m within an hour of Gatwick – better than any other airport in the UK.

Supporting positive outcomes for local communities and the local economy is a key part of this vision.

This strategy has been robustly tested against the worst case scenarios (busiest airport day against busiest commuter hour in the busiest month) to validate their viability.

Local connectivity will be supported by already committed and planned surface access schemes by Government such as:

- Near tripling the capacity of the rail system between 2012 and 2030 through near doubling the frequency of trains, with longer trains and extending the reach of the rail network to serve over 1,000 stations directly; and
- Planned and committed airport quality public transport: new trains, longer trains, better stations.

In addition to this Gatwick will fund the following:

- A new state-of-the-art regional transport hub – The Gatwick Gateway;
- Double the capacity of key road junctions to access the airport;
- Provide a Local Highway Development Fund; and
- Support transport operators to increasing the number of new bus and coach services serving more destinations and more frequently.

Providing additional local benefits

The local community uses Gatwick to connect their journeys by all modes of transport so as to access jobs, services and leisure activities across the South East. These plans will enhance this benefit further and help drive direct, indirect and induced economic growth, improve quality of life and support sustainable travel.

Gatwick rail station is already used by 1 million local passengers a year and the new Gatwick Gateway transport interchange will deliver a range of new travel options for people across the region.

Local bus services are popular with staff, commuters and the community alike. Already, users have benefitted from longer hours, better information and more frequent services. The further extension of the Fastway programme of high quality bus services by Gatwick will take this further still, roughly doubling the 400 bus services of today. This will benefit from the newly introduced low floor and inclusive bus fleet with the added benefit of free 4G Wi-Fi. The local community will therefore gain from improved access, from more services that operate for longer hours, more frequently and go to more destinations. In this way the plan for more coach and bus services will meet the needs of airport users, the region and local residents.

The realignment of the A23 will deliver a dedicated cycle-way. This and other road changes that will be made will mean less congestion, improved resilience and a better more simple road system for local car users. Cycling and walking upgrades will create 9km additional better cycle routes, and will benefit airport users, local commuters and leisure users.

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Supporting sustainable travel by our employees

The airport currently operates an Airport-Wide Staff Travel Plan (ATP)¹³ which requires the production of an action plan to facilitate and promote sustainable travel to/from work. This action plan includes elements on business travel, car sharing, public transport options, and cycling and walking, and securing the active participation of other airport companies in the promotion of the ATP to their employees. It involves carrying out regular monitoring to determine the effectiveness of the various initiatives that comprise the ATP, including periodic staff surveys at intervals no greater than every five years.

The ATP will be developed alongside plans for an expanded airport in order to continue the successful initiatives which benefit airport employees. As a real incentive to existing staff and to assist with the attraction of new staff, we will continue the Airport Employee Travel Scheme whereby transport operators offer discounted fares to airport staff.

Gatwick is also committed to accelerating the deployment of hybrid/electric /bio-fuels vehicles for staff use, as well as wider operations.

¹³ Local economy impacts.

3. Business case

Objective: to make efficient use of public funds, where they are required, and ensure that the benefits of schemes clearly outweigh the costs, taking account of social, environmental and economic costs and benefits.

This Gatwick option requires no additional public funds¹⁴

Delivering a second runway at Gatwick offers the most cost effective and efficient use of funds to deliver additional capacity as:

- The costs for and construction risks of a second runway at Gatwick are significantly lower than they would be for a third runway at Heathrow;
- The incremental economic benefits are estimated to be greater for a second runway at Gatwick; and
- The social and environmental impacts are lower for a second runway at Gatwick.

The costs of delivering the Gatwick second runway are estimated to be £7.8 billion to deliver a capacity of 95mppa, significantly lower than the estimated £17 billion required by Heathrow, as stated in its submission to the Airports Commission. This will provide more capacity at a lower cost to the taxpayer (Heathrow indicated a requirement for approximately £4 billion to £6 billion of Government subsidies in its 2013 submission to the Airports Commission). The total estimated cost of the Gatwick option, includes all of the necessary surface access schemes, widens the gap with Heathrow even further.

FIGURE 2: PHASE CONSTRUCTION COST AND CAPACITY

| Phase | Phase completion | Capital cost (2014 prices) | Total capacity (mppa) | Capacity increment (mppa) |
|----------------|------------------|----------------------------|-----------------------|---------------------------|
| Runway Opening | 2025 | £2.1bn | 63 | +18m |
| 1 | 2030 | £2.6bn | 73 | +10m |
| 2 | 2035 | £1.1bn | 82 | +9m |
| 3 | 2040 | £2.0bn | 95 | +13m |
| Total | | £7.8bn | | |

Source: Gatwick financial model

Lower overall costs will translate to better overall value to, and cheaper travel for, passengers as Gatwick provides a more economically efficient option to deliver greater capacity as compared with Heathrow.

¹⁴ Upgrade of Gatwick Station and M25/M23 Junctions are already defined in the UK Government's National Infrastructure Plan.

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The incremental economic benefits of delivering a second runway at Gatwick are estimated to be greater than for a third runway at Heathrow

Independent analysis conducted by Oxera/PA Consulting estimates the economic benefits of a second runway at Gatwick within a London system with 2 runways at both Gatwick and Heathrow ("2+2") of £79.4 billion over 60 years. This is caused by lower fares, lower capital costs, an opening date 5 years earlier and greater competition.

The total benefit of £79.4 billion exceeds those for a third runway Heathrow (in a 3+1 system) by around £30 billion, increasing to around £40 billion when the effects of indirect competition are included¹⁵, as shown in the figure below.

FIGURE 3: PRESENT VALUE OF BENEFITS TO THE UK 2020 TO 2080¹⁵

| (£ billion, 2010 prices) | Gatwick R2 | Heathrow NW |
|--|-------------|-------------|
| Environment (noise and air quality) | -0.2 | -1.3 |
| Greenhouse gases | -13.4 | -9.1 |
| Economic efficiency (inc direct competition) | 50.5 | 28.6 |
| Public accounts (tax receipts, less subsidy) | 14.8 | 11.3 |
| PV of benefits (subtotal) | 51.7 | 29.5 |
| Wider economic benefits (secondary benefits for economy) | 27.7 | 21.4 |
| PV of benefits | 79.4 | 50.8 |
| Indirect competition benefits | 10 to 14 | - |
| PV of benefits (inc. indirect competition benefits) | c.90 | c.50 |

Source: Oxera/PA Consulting

This table above shows that a new runway at Gatwick would deliver £79 billion of economic benefits for the UK in aggregate over 60 years in present value terms, plus a further £10 billion to £14 billion of indirect competition impacts.

£79.4 billion¹⁶ of benefits includes:

- £10 billion to £14 billion of benefits from direct competition resulting in lower fares, wider participation in the aviation industry, and greater levels of innovation from both airports and airlines;
- The wider cost of environmental impacts, which is significantly lower for Gatwick (£0.2 billion), compared with Heathrow (£1.3 billion), excluding greenhouse gases. Based on preliminary information, expansion at Heathrow would result in approximately 190,000 people being affected by noise (an increase of approximately 50,000 from the Do Minimum), while expansion at Gatwick would affect only c. 14,000 (an increase of approximately 11,000 from the Do Minimum);

¹⁵ Economic impact assessment figures are presented in 2010 prices.

¹⁶ All monetary values are calculated over a 60-year appraisal period from 2021 to 2080, discounted the social discount rate of 3.5% for the first 30 years and 3.0% afterwards and presented in 2010 prices.

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- The impact of extra traffic at Gatwick, which increases greenhouse gases and their monetised impacts (£13.4 billion at Gatwick, while the Heathrow figure is £9.1 billion);
- The revenue generated for the Exchequer, which is expected to be £15 billion of additional of direct and indirect tax revenue at Gatwick, compared with £11 billion for a new runway at Heathrow; and
- £28 billion of wider economic benefits (i.e. those that are additional to the benefits to users and providers of aviation services) to the UK economy compared with £21 billion for a third runway at Heathrow. This value is considerably lower than some other benefits that have been attributed to the expansion of airport capacity by some other studies¹⁷, principally because we have sought to avoid double counting any of the costs or benefits of additional airport capacity.

In addition, the benefits from increased competition are likely to disperse throughout the London airport system, benefiting all passengers, even on routes where there is no direct competition. Indirect competition effect, as a result of the greater intensity of competition from Gatwick versus Heathrow expansion, could be as much as £10 billion to £14 billion, effectively doubling the direct competitive impact.

Overall, this drives the benefits from Gatwick to be around £40 billion higher than Heathrow's benefits.

Due to the significantly larger population within the local vicinity of Heathrow, the total effects of aircraft noise are much higher for the Heathrow option when compared against Gatwick

Gatwick's location (and the alignment of the existing runway) with aircraft arrival and departure routes mostly over countryside, means that, unlike Heathrow, Gatwick affects relatively small numbers of people. For example, based on the 57dBA Leq noise metric only 3,200 people around Gatwick are currently affected by aircraft noise. In comparison, at Heathrow, the number is 240,000. Gatwick's current 'exposure' effect is therefore only 2% of Heathrow's.

Heathrow claim that the number of people affected by noise is falling. It is clear, however, that a third runway with an additional 260,000 aircraft landing and taking-off will produce more noise than a two-runway Heathrow without the additional take-offs and landings. The present measures to describe noise nuisance are considered to understate the true impact of noise at Heathrow. Many people are still significantly affected by noise outside the 57 leq contour. If the contour is expanded, the position is even more dramatic. For Gatwick in 2012 there were only 11,300 people within the 55 Lden contour whereas there were 725,000 within the same contour at Heathrow, over 60 times as many. The fundamental issue is to identify the difference in noise between a three-runway and a two-runway Heathrow as, given the overflying of London, it is clear that many more people will be affected. Gatwick has supplied the relevant information for its expansion, but Heathrow has so far failed to do so.

¹⁷ See, for example, Frontier Economics (2012), 'One hub or none: the case for a single UK hub airport', November 2012.

4. Cost and commercial viability

Objective: to be affordable and financeable, including any public expenditure that may be required and taking account of the needs of airport users.

Gatwick offers an affordable, privately financed approach to deliver the second runway and associated passenger infrastructure, while having a private sector financing strategy that is robust and does not rely on any additional government funds.

This conclusion is founded on three core elements:

1. An inherently lower risk and lower cost capital programme, phased to deliver capacity to match demand, including the opening of the second runway in 2025;
2. A resulting aeronautical tariff that is commercially sustainable in the context of future aviation traffic trends; and
3. An established and prudent financing structure capable of supporting the required increase in investment grade rated senior debt, underpinned by equity.

Gatwick offers a robust, lower capital cost approach to deliver the second runway

Gatwick benefits from having a straightforward masterplan concept that relies on simple engineering solutions with the majority of new airfield infrastructure being constructed independently of existing operations, allowing a high level of confidence in capital cost forecasts.

Cost risk and contingency

Robust analysis by Turner and Townsend, supported by Bechtel, has been undertaken to estimate the capital expenditure required to build the runway and the associated cost risks. This analysis has been cross checked against Gatwick's data from over £1 billion of successfully delivered infrastructure projects and independent consultant benchmarks. 80% of the estimated costs have come from benchmark data. This level of benchmark information provides a high level of support and cost surety to the estimate.

A comprehensive Quantitative Cost Risk Analysis (QCRA) has also been undertaken to estimate a suitable level of contingency which should be included within the total forecast.

The approach to calculate the level of contingency involves calculating an allowance for both:

- Estimating uncertainty: the uncertainty included within the cost estimate for underlying component parts of the scheme. This is assessed by providing three-point estimates for a range of inputs; and
- Risks: the uncertainty due to known risks occurring and providing additional costs to the schedule. This is assessed by estimating a likelihood and impact of each individual risk.

This analysis identifies a P80 level of confidence in achieving our programme timelines and supports a P50 level of confidence for our total cost which at this stage of design development, reflects the relative simplicity of the Gatwick construction plan and does not rely on risky engineering solutions.

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Additionally there is minimal reliance on 3rd party works (e.g. Highways Agency, Network Rail) as the scheme does not require any unplanned major works to road or rail. Hence, the risk of cost increases due to delays caused by third parties are minimised.

De-risked masterplan scheme as result of phasing

The programme is modular and flexible in design, allowing the phasing of delivery to match closely evolving demand, and design specification to meet the evolving demands of airline models. Phasing also helps to reduce the overall complexity of the scheme by reducing the number of project interdependencies. The first phase of the programme, which includes the opening of the new runway by 2025, requires only a £2.1 billion investment (out of a total of £7.8 billion)¹⁸. This ensures the key aviation demand is met at the earliest opportunity, while reducing the financing pressures at the most pivotal point and moderating charges paid by airport users.

The scheme and phasing are explained in more detail in section 5 below.


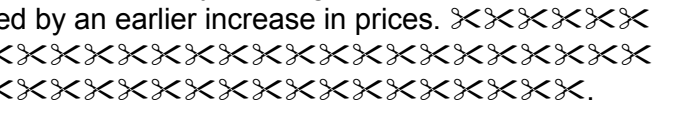
Gatwick's financial forecasts reflect credible and achievable airline charges

Long term airline charges

Aeronautical charges at Gatwick required to deliver the scheme are estimated to rise to a range of £12 to £15¹⁸ in the long-term compared with £9¹⁹ today. This competitive pricing is possible due to the scheme's low cost, low delivery risks and optimally phased delivery programme. In setting this price, Gatwick is also mindful of the need to deliver an affordable price, while ensuring debt obligations can be comfortably met and achieving an acceptable return for shareholders.

At this stage, there is by necessity still some risk in estimating elements of the project. In particular, these relate to construction, market-related traffic and price risks, as well as the regulatory, political and planning uncertainties. The risk profile and allocation of risk need further discussion and analysis and therefore we feel that it is appropriate to present a range of prices to reflect these uncertainties. However, we have modelled these risks and uncertainties and are confident on our price range, and we would expect to refine this range as the risks become better understood.

Airline charges profile

Currently, Gatwick is proposing relatively modest price increases in order to transition from today's price of £9 to the long-term price of £12 to £15. . This price profile seeks to balance a number of different viewpoints. From an economic perspective, it would be expected that market prices rise in the short-term as capacity becomes constrained ahead of the new runway opening. Further, the airport's immediate financing needs might be better served by an earlier increase in prices. .

¹⁸ 2014 prices.

¹⁹ Net aeronautical yield for Financial Year Ending 31st March 2014

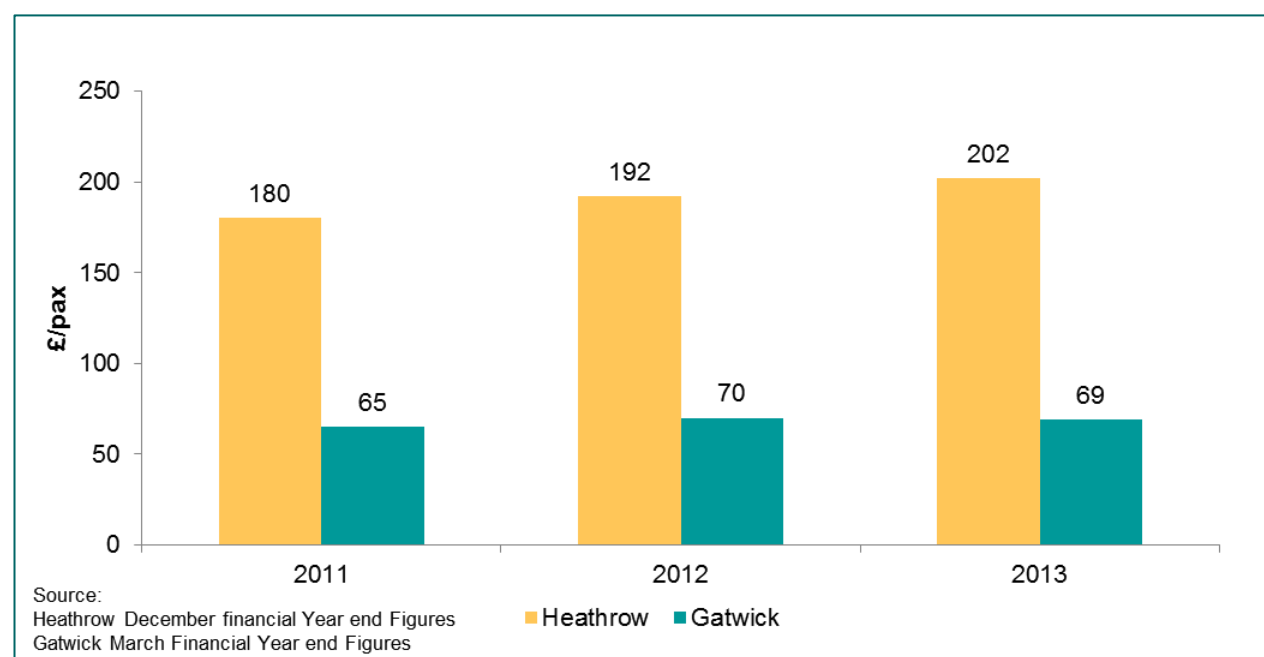
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The proposed price level ensures the scheme can be financed during the key pinch point years prior to opening, and immediately thereafter when new traffic volumes develop at an early stage in their build-up. The proposed price level specifically addresses the Senior Interest Cover ratio, which starts to decline as a result of interest costs rising ahead of new operating cash flows - from our analysis this is evidently a greater constraint than the leverage ratio Senior Net Debt to Asset Base.

This means that Gatwick generates a lower return in the short term and is reliant on recovering this shortfall in the long-term to ensure an adequate overall return. The price path is therefore conditional and critically dependent on appropriate mechanisms being put in place to mitigate sufficiently any long term regulatory and Government risks - giving sufficient certainty to the private sector financing of the longer term price profile.

Prices in the context of the market

Currently, airport charges at Gatwick are relatively low, due to its operational efficiencies, in comparison to most other major European airports, while charges at Heathrow are amongst the highest in the world. This by-and-large reflects the relative level of invested capital (e.g. as measured by the RAB) per passenger at these airports; at Gatwick this currently stands at £69 per passenger as compared to £202 per passenger at Heathrow, reflecting the latter's many years of inefficient investment. Heathrow's RAB is larger than Gatwick's but this in no way should be seen a source of financing advantage - it is, in fact, quite the opposite. The Heathrow RAB is a dead weight as it necessitates inflated prices to be charged to users, particularly since this existing RAB is already mortgaged to lenders - Heathrow is carrying debt of circa £157 per passenger through its three-tier debt structure.

FIGURE 4: HEATHROW AND GATWICK RAB PER PASSENGER²⁰

²⁰ Heathrow and Gatwick financial accounts.

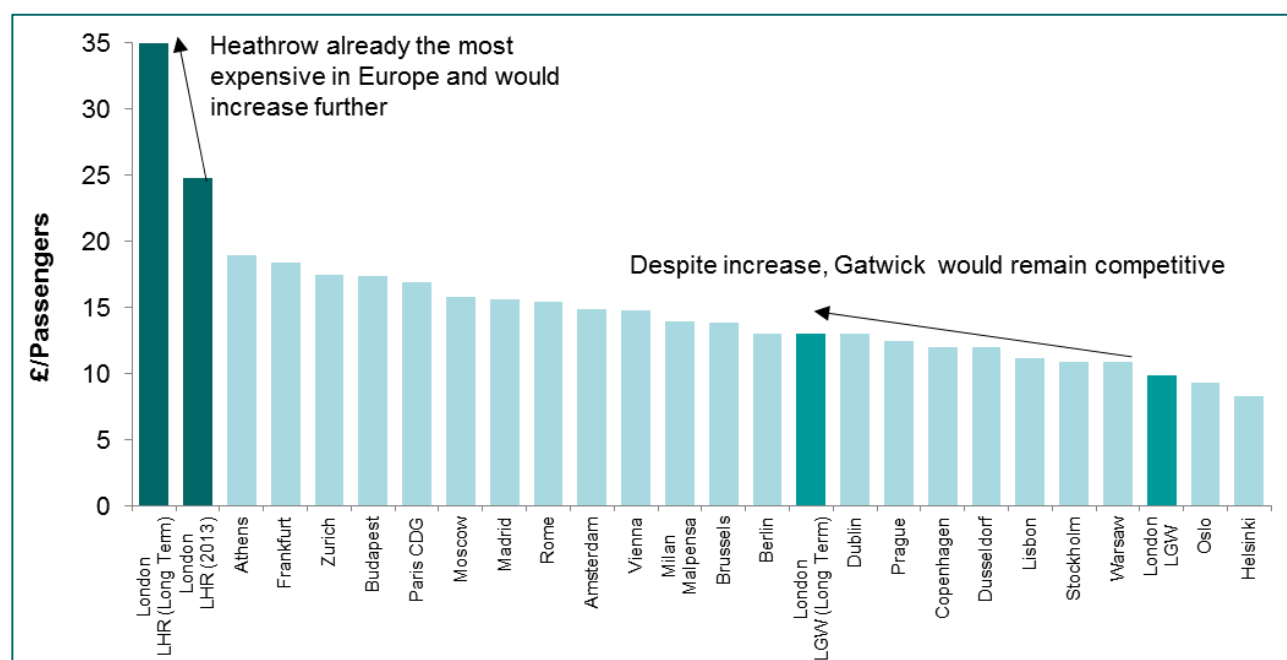
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Gatwick's core business plan traffic and tariff assumptions have been validated²¹ in the context of the evolving London aviation market. The charges Gatwick would need to levy to finance the second runway would remain lower than many other major European airports, such as Schiphol, Zurich, and Vienna and would be sustainable within the context of future aviation trends.

This relatively low tariff will support the continued growth of short haul European traffic (predicted to be 62% of total UK traffic in 2030). Even with a new runway, Gatwick charges would still be much lower than the £22 per passenger currently charged by Heathrow using its existing two runways.

In stark contrast, Heathrow's aeronautical price per passenger if it were to build a new runway is estimated to rise from £22 today to circa £35 in the long term. To put this into context this would make Heathrow - already amongst the highest cost airports in the world - more than double the price of even the most expensive other major European airports, such as Frankfurt, Paris CDG, Vienna and Zurich. This will place Heathrow at a significant commercial disadvantage, particularly in the more contestable and price sensitive transfer market which Heathrow contends is central to its business model.

FIGURE 5: EUROPEAN AIRPORT CHARGES²²



²¹ London traffic report.

²² Current charges based on LeighFisher methodology from its 2013 Review of Airport charges.

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Prospective debt and equity investors in Heathrow and ratings agencies would need to convince themselves that significant demand exists at a price point of c.£35 per passenger in a market where LCC's are the dominant force, and that users of Heathrow would be prepared to pay this price on over 100 million passengers by 2040. If Heathrow were not able to charge this price then there would be significant pressure on its funding ratios, making its financeability challenging.

Gatwick has a well-established and prudent financing structure and a clear strategy to raise the necessary finance for a second runway

Gatwick's analysis indicates that the £7.8 billion capital cost of a second runway would be financed through 70% debt and 30% equity, comprised of retained and reinvested surplus cash flows and new equity injections. We consider that the debt markets and shareholders can provide this without any additional Government support, subject to an appropriate regulatory framework being put in place.

Gatwick has a strong track record of raising debt finance

The track record of recent debt issues by Gatwick, the airport sector and, more widely, UK infrastructure supports this statement. In 2013, UK infrastructure raised £7 billion in bond financing. More specifically, Gatwick's last five public bonds attracted bids from 120 bond investors in 15 countries. £1.2 billion worth of orders was received from investors and Gatwick has raised £1.2 billion in the sterling bond markets to date. Gatwick also has the option to fund from the global capital markets to optimise the funding mix, as well as utilise new funding such as the European Investment Bank (EIB) who have approached Gatwick to offer their financial support. Gatwick has a strong credit rating (BBB+) with the major credit rating agencies (Fitch / Standard & Poor's) which it can build upon to deliver additional debt financing.

Gatwick's existing shareholders are specialists in infrastructure investment and are all unlevered funds. They are therefore well placed to meet the existing equity funding requirement of 30%, part of which will come from new equity and part through foregoing dividends. In contrast, Heathrow would require 70% of debt and 30% of equity assuming the same debt to equity proportions as Gatwick. Heathrow is much more highly leveraged than Gatwick and therefore has little buffer for covenant breach. Being on the edge of their metrics, as well as already having a three tier debt structure, will make financing any new runway more difficult.

Gatwick has developed a robust financial model to estimate future costs and revenues

A fully integrated financial model has been built to support the financial analysis of the second runway project. The debt finance modelling and assumptions have been reviewed by RBS.

A detailed set of the input assumptions and 'three statement' outputs are contained in the Financial Model Appendix. It is important to note that the outputs only represent one scenario, 2040.

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Projections have been stress tested

RBS has reviewed the viability of Gatwick's financing case through a series of 'stress-tests'. This has involved creating an indicative ratings case by analysing previous and current ratings advice on Gatwick, while also looking at comparable projects. The indicative case with conservative assumptions reflects a lower traffic sensitivity, while at the same time also increasing the capital and cost of debt assumptions – all consistent with previous analysis Fitch and S&P have historically applied.

This analysis determined that under these ‘stress’ conditions Gatwick is able to maintain investment grade metrics. Gatwick also stays comfortably outside the lock-up levels within the Financial Covenant documentation.

Commercial viability and the role of Government

Gatwick does not rely on any additional Government funds to make its R2 project viable, nor any other form of additional Government support such as:

- A subsidy from the Government, such as the £4 billion to £6 billion subsidy indicated by Heathrow in its 2013 submission;
- A construction risk guarantee from the Government such as being contemplated in support of the Thames Tideway Project; or
- A market price guarantee from the Government such as being contemplated in support of the Hinckley Point Project.

In any event, the provision of such guarantees or support would arguably create an effective subsidy that will distort the competitive markets between airports in the UK and within the European Union, and distort competition between different airlines operating in the same market albeit out of different airports ✂✂.

Further, such support might constitute illegal State Aid. Heathrow propose that £4 billion to £6 billion of the costs of the third runway and its associated terminal and apron infrastructure might be more appropriately funded by Government as well as anticipating some form of Government guaranteed loan scheme to cover market risk and a potential business rate levy. While we have no further detail of these proposals, any such assistance would constitute a distortion of competition and unlawful State Aid. The European Commission in its White Paper “Roadmap to a Single Transport Area” emphasised that the elimination of unjustified subsidies and free and undistorted competition are an essential part of the effort to align market choices with sustainability needs. Further the Commission’s recently published Guidelines on State Aid to airports and airlines (2014/C99/03) stipulate that aid granted to airports will only be considered compatible with the internal market where such aid can bring about a material improvement that the market itself cannot deliver. The Guidelines go on to provide that aid to airports with over 5 mppa will only be permitted under very exceptional circumstances characterised by a clear market failure. Gatwick’s proposal evidences the market can deliver the UK’s required additional capacity, privately funded with no Government subsidy.

For Gatwick, given the long term nature of the project and the fact that equity will be under-recovering in the early years, what will be required is not State-Aid, but rather long-term assurance from the Government and regulator as to the limits on future regulatory or political intervention which might impact debt financeability or long term equity returns, as described below.

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Key business risks of runway expansion

Apart from planning and political risks, there are three key business risks associated with any generic runway expansion:

- Construction risk, relating to the timely and on budget completion of the expansion;
- Market risk, relating primarily to market changes, the level of traffic and airport charges, and hence the level of revenue generated; and
- Regulatory risk, relating primarily to the impact of future regulatory (or Governmental) intervention, particularly given that legitimate financial returns on the significant and upfront investment can only be realised over multiple decades.

Clearly, such risks need to be assessed alongside the risk that the runway needs initial political support to allow for planning to be obtained. We believe that Gatwick provides the more acceptable option to mitigate for such risks. However, we need to rely upon Government support at the outset to commit to the development.

Construction risk

As noted elsewhere in this paper, Gatwick's R2 Project is an inherently low risk and lower cost capital programme, phased to deliver capacity increments in line with emerging passenger demand.

The greatest commercial/financing exposure is in the year before the new runway is opened, given the scale of cumulative capital investment but with no incremental revenue being generated at that point. In this context, Gatwick's low cost, well assessed and straightforward civil engineering programme which enables the rapid opening of the new runway is a particular advantage. This compares to the need, on the part of Heathrow, to complete a high cost, highly complex civil engineering programme, that cannot by its nature be fully risk assessed prior to commencement, and opens many years later.

Beyond the initial phase, subsequent expansion stages do face some degree of construction risk, but from a financing perspective this risk is somewhat mitigated given incremental revenues from earlier expansion phases are already flowing and through appropriate phasing of the capacity increments in line with emerging passenger demand.

Given the work Gatwick has undertaken on these costs, Gatwick is not looking for Government to underpin this risk.

Market risk

There are two distinct forms of market risk that are pertinent to airport capacity expansion:

- There is uncertainty on how the aviation market will develop in the future and therefore what type of infrastructure should be provided; and
- There are market-related traffic and price risks that exist under any of these future states.

The former is to a large extent addressed by Gatwick's phased and flexible design scheme. We address the latter in this section.

SD5 Development Strategies

Having sunk significant capital into the expansion of the runway at Gatwick, financial investors will seek a suitable return on this investment. Achievement of this return is subject to a number of risks, but it is the uncertainties attaching to revenues, in particular aeronautical revenues, that are most significant. This revenue stream is naturally exposed to traffic and price risks associated with operating in a competitive market - although there may be those (but certainly not Gatwick) that contend Gatwick does not compete with Heathrow today, this is not a contention that could ever hold with the addition of extra runway capacity in the South-East (as recognised by the CAA in its Q6 review of economic regulation for Gatwick).

Financial investors are capable of assessing the market risks associated with traffic and price in a competitive market and, given the strength of Gatwick's proposition (as illustrated, for example, in relation to the expected level of airport charges relative to the market), there is no need for the Government to underpin this risk for Gatwick R2. We believe that such support would only be needed by an airport if the investment it proposed were out of step with the market it is seeking to serve, either in terms of the capacity provided relative to traffic levels or the aggregate level investment costs it is seeking to recover through airport charges.

In these circumstances, neither can the imposition of cost-based price regulation support such inappropriate levels of investment, as is well illustrated in the case of Stansted - it did not matter what level of charges were "permitted" by RAB-based price regulation, the market being served was not willing to bear this cost and traffic declined accordingly even though Stansted was pricing beneath its cap. Conversely, airlines have now committed to grow traffic volumes at Stansted in response to market-related pricing. Cost-based price regulation might work for utilities serving genuinely captive end markets - e.g. electricity distribution or water supply - but does not apply in evidently more competitive markets such as an expanded London airport market, based around an expanded Gatwick.

In commercially functioning markets, we would expect infrastructure providers to mitigate the market traffic and price risks through long-term contractual arrangements with users. Such an approach also benefits users in that smoother transitions between current and long-term prices can be negotiated in exchange for the users commitment to use the infrastructure in the future - the short-term "spot" price for the infrastructure could be otherwise volatile in the lead-up to and beyond the delivery of the infrastructure expansion. Mid- to long-term contracts can deliver the required level of certainty to both infrastructure providers and users, supplemented where appropriate by short-term "spot" transactions.

In Gatwick we see this in operation already through the Contracts and Commitments framework proposed by Gatwick at the last regulatory review and supported by the CAA (with the underpinning of a licence and monitoring regime). Most of the larger airlines have now entered or are entering into mid-term (7 year) contracts, while others have not and operate year-to-year under the short-term airport tariff. There are examples from around the world of such long term arrangements being entered into between airlines and airports and we firmly believe that long-term contracts can be entered into with major airlines to support the development of the second runway at Gatwick. We believe that this is a framework which could work to support the new runway at Gatwick and propose to develop this approach further in close consultation with the Airports Commission and the CAA.

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Regulatory risks

As noted previously, having sunk significant capital into the expansion of the runway, financial investors will seek a realistic return on this investment, accepting that this can only be realised over an extended period of time. In addition, if financial investors bear the construction risk and market traffic and price risk, this will be done on the clear expectation that they will benefit from upside risks associated with outperformance of the business in terms of capital management, traffic, pricing, operational performance, etc. However, given the history of regulatory intervention in the airport sector (reinforced through the Civil Aviation Act 2012) and the front end-loading of the capital investment, the airport will be uniquely exposed to regulatory or political risk - intervention might seek to limit legitimate returns through changes in the political or regulatory landscape, long after the investment is sunk and after a period of planned lower returns.

To reduce the risks of regulatory intervention, we believe investors will need assurance as to the potential for such future regulatory actions. This must extend for a significant period of time given the investment horizons being considered for the R2 Project.

Under the Civil Aviation Act 2012, the CAA is not restricted to implementing a five-year price control for airports - it can take a much longer view. However, it is also clear that the licence within which such a decision is encapsulated may be subject to modification in the future by the CAA. The CAA has indicated previously that it cannot fetter its actions in the future in meeting its statutory duties. This is a matter a number of regulators have sought to address in the past, but the outcome has been far from consistent. It may be necessary for the Government to provide assurances (through contract, statute, or other means) to financial investors as to the scope for future regulatory intervention. This will no doubt need to be an area for further consideration by the Commission, and Gatwick plans to participate in shaping the form and nature of any such assurances.

5. Delivery

Objective: to have the equivalent overall capacity of one new runway by 2030.

Gatwick has a very high degree of confidence in delivering an operational second runway by 2025.

The programme schedule shows the new runway opening in 2025, with new terminal infrastructure following in 2030. Independent risk modelling developed by Turner and Townsend shows that Gatwick has a high degree of certainty in these delivery dates, with the probabilistic model identifying an 80% level of confidence in achieving the proposed timelines.

Gatwick has developed a robust, phased delivery programme

To establish the delivery programme Gatwick has structured the approach into the three key phases:

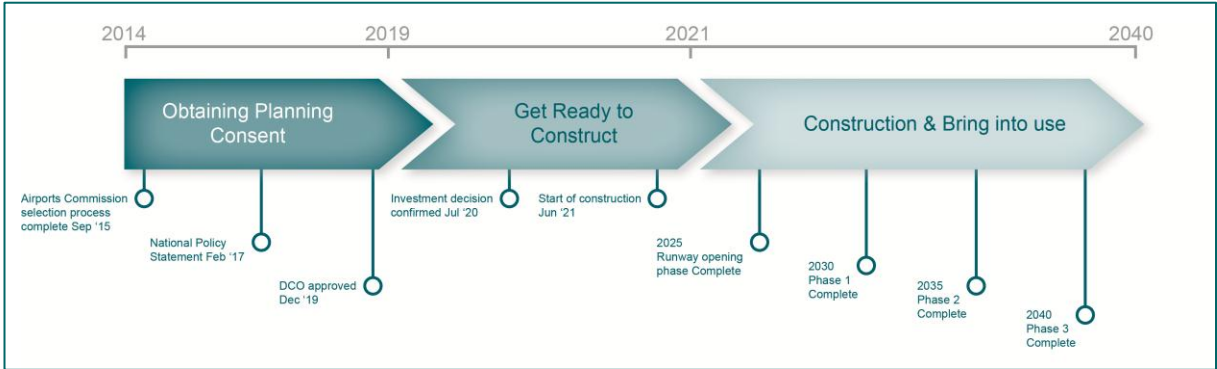
- Stage 1 - Obtain Planning Consent – this stage covers the time from the Completion of the Airports Commission report in September 2015 to the award of a Development Consent Order (DCO). This includes; Government response to Airports Commission Report, development of a National Policy Statement and obtaining DCO;
- Stage 2 - Get ready to construct – this stage covers the time from award of a DCO to start of construction works. This includes; site possession, ecology, archaeology, decanting, initial site clearance and site utility diversions;
- Stage 3 – Construct & bring into use – the construction and bringing into use of the facilities will be phased to align with passenger demand.

Stage 3 has four main delivery phases:

- Runway Opening 2025;
- Phase 1 – Opens 2030;
- Phase 2 – Opens 2035; and
- Phase 3 – Opens 2040.

SD5 Development Strategies

FIGURE 6: DELIVERY PROGRAMME



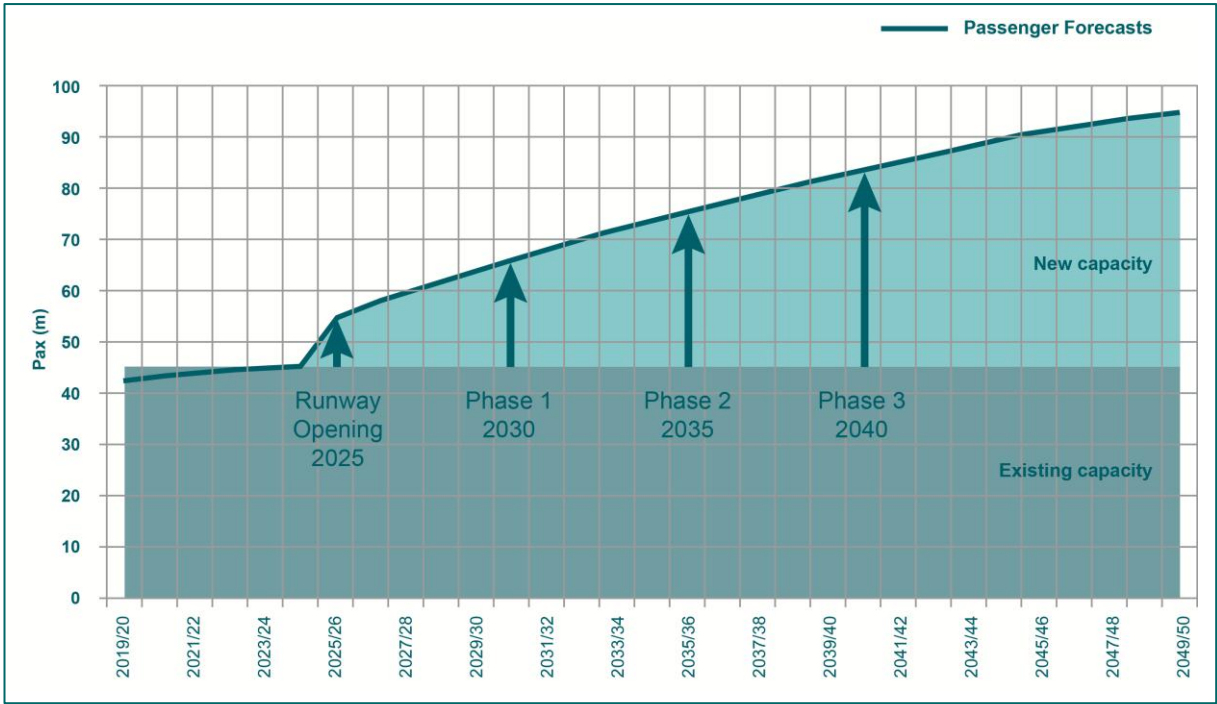
Each of the phases has a critical path with defined activities and considered durations. A quantitative schedule risk analysis has been completed on each phase to identify the risks to delivery and to model certainty of delivery.

The high levels of confidence in delivery at this stage of the process are driven by the benefits of having a safeguarded site to build within and no major existing infrastructure to reconfigure. Construction of the majority of the new facilities are in a landside site, hence not impacting the existing airport operations which, equally, will not impact the construction activities.

Gatwick proposes to phase delivery to align to future demand

The delivery programme has been devised to align built capacity with the forecast demand as shown below. To achieve this Gatwick has adopted a phased approach to demand sensitive elements of the master plan, in particular terminals, piers and surface access, and stand capacity.

FIGURE 7: CAPACITY RELEASE BY PHASE



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Managing transition into operation

The airfield will be brought into use while maximising the current terminal capacity, with subsequent phased construction of terminals and piers allowing the careful control of the transition into operation. This allows the existing airport operation to continue without significant impact from the construction of new capacity.

An Airport Operational Readiness plan will be produced for each of the phases of construction activity to ensure the new facilities are fully complete with all required documentation, fit for purpose and that staff, contractors and concessionaires are fully trained before the new facilities are brought into operation.

The programme will be managed in accordance with Turner and Townsend and Bechtel's Construction Delivery and Transition Report which, among other things, describes the Project Implementation Plan. Overall governance arrangements will be reviewed so as to ensure that Gatwick's Executive Management and main Board have adequate oversight of both the management of the programme and the day to day management of the business.

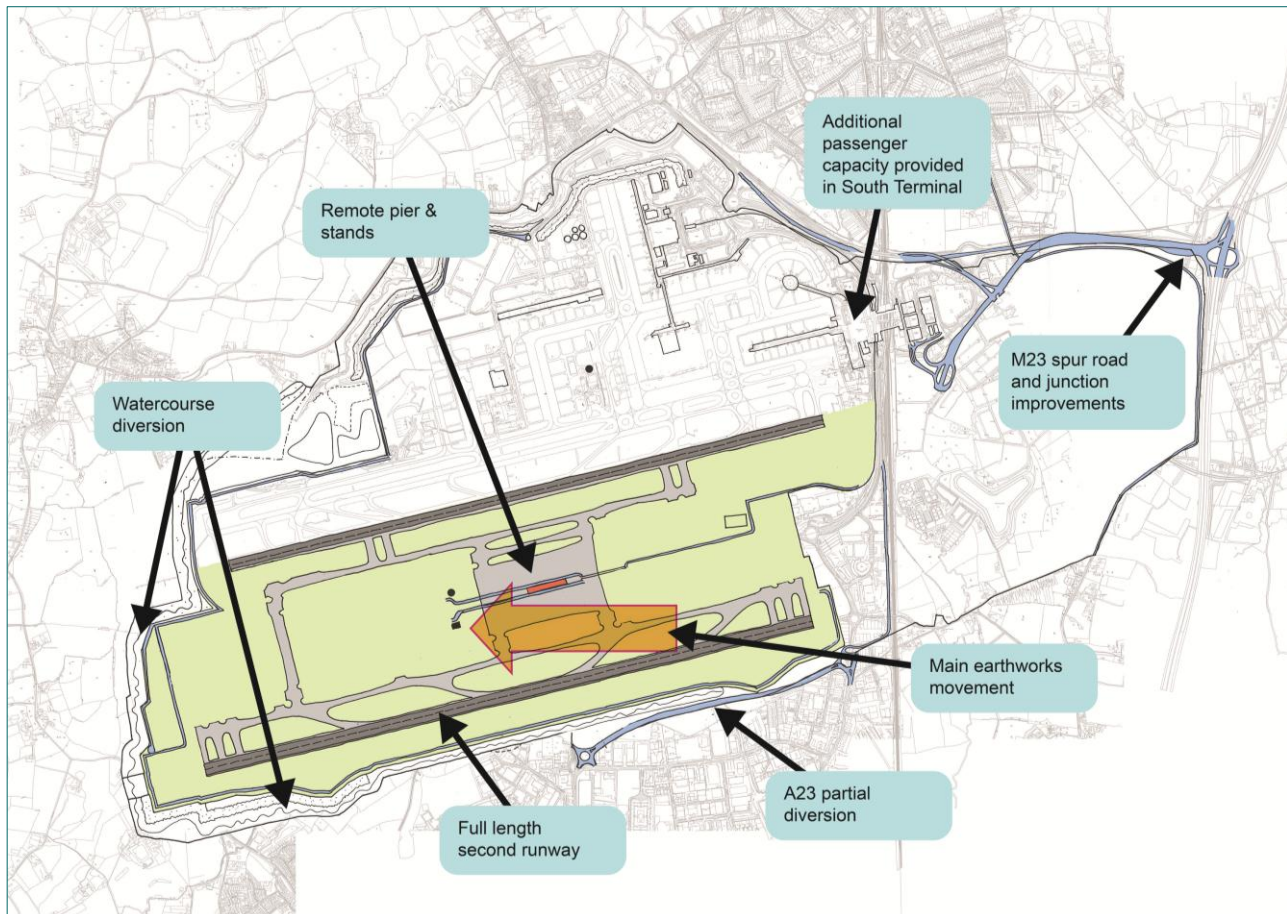
The key stages of the plan are described on the following pages.

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Runway opening phase

The objective of this phase is to have a second runway operational by 2025. The main scope involves watercourse diversions and diverting the A23 south west of the London to Brighton railway line. This enables the main earthworks to complete, followed by the construction of the runway and the remote pier. The main works in this phase are illustrated below.

FIGURE 8: RUNWAY OPENING PHASE

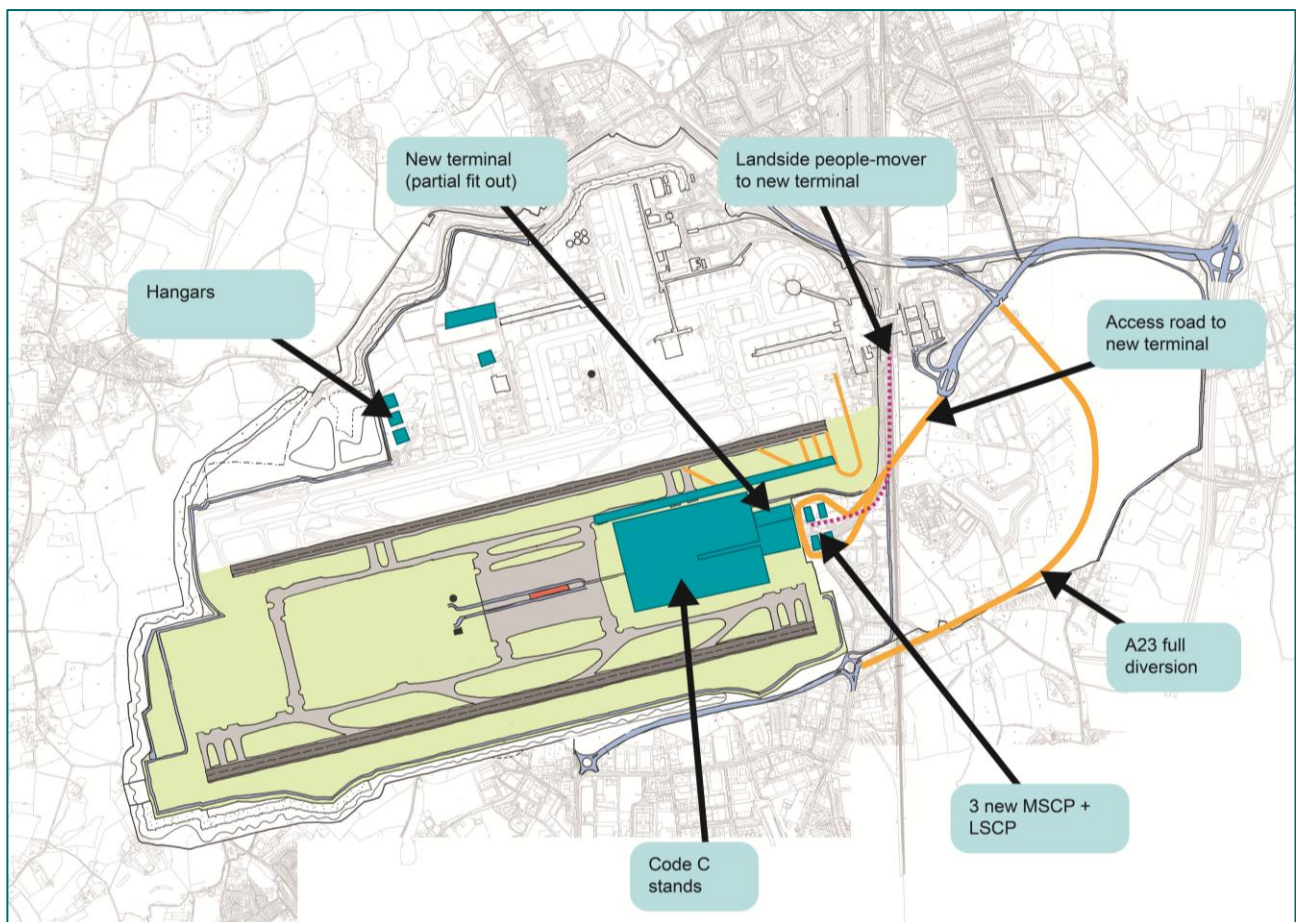


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Phase 1

Phase 1 construction is driven by the requirement to meet 2030 passenger demand. The first section of the new terminal and contact pier are constructed after the civil works for the airside Automated People Mover (APM). A23 diversion to the new permanent alignment allows the landside APM to be built in this phase. The main scope is illustrated below.

FIGURE 9: PHASE 1 CONSTRUCTION

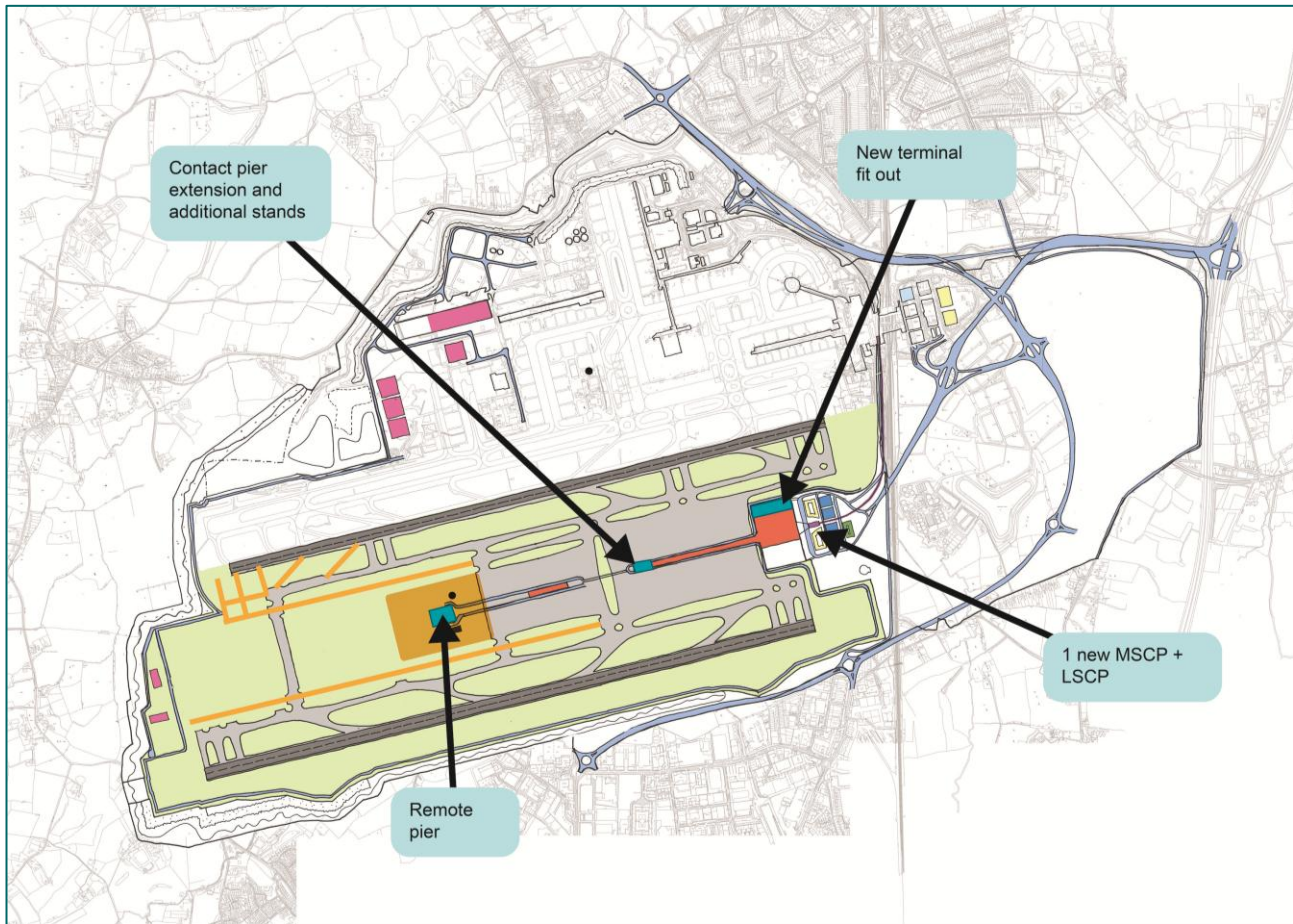


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Phase 2

Phase 2 construction is driven by the requirement to meet 2035 passenger demand. The main scope for the phase is completion of fitout of the new terminal and construction of the remote pier. The main scope for phase 2 is illustrated in the figure below.

FIGURE 10: PHASE 2 CONSTRUCTION

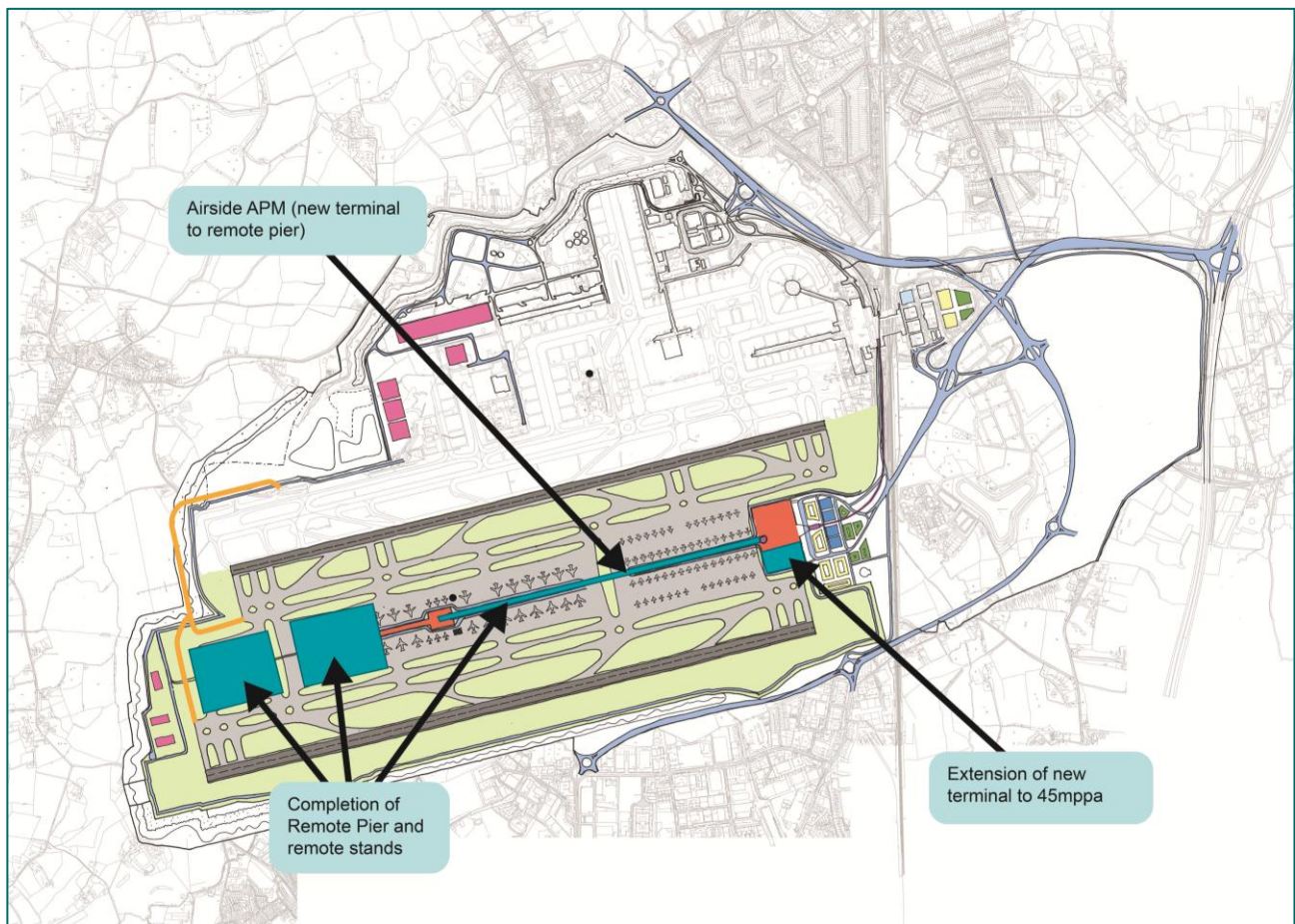


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Phase 3

Phase 3 construction is driven the requirement to meet 2040 passenger demand. The main scope is on completing the airside APM and extension of the remote pier. The main scope for Phase 3 is illustrated below.

FIGURE 11: PHASE 3 CONSTRUCTION



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Gatwick has a robust programme delivery methodology

Gatwick has the programme governance and expertise in place to oversee this construction and implementation. Gatwick undertakes significant construction activity as part of its ongoing capital investment programme with approximately £200 million of investment each year. Independent review of Gatwick's construction capability found that "Gatwick has delivered a high degree of certainty in terms of the delivery of the capital investment programme – in terms of quality of work, and programme of delivery". Therefore Gatwick is very well able to manage a programme of this size.

Gatwick has assessed key risks and developed mitigations

Gatwick has a high degree of confidence that it can open the new runway by 2025. The key risks to this are:

- Achieving the dates for the issue of the Airports Commission report, and the subsequent incorporation of its recommendation into the National Policy Statement;
 - Mitigated by the depth of Gatwick's analysis showing the substantive benefits of this case;
- Obtaining the DCO;
 - Mitigated by the work with the local community and councils, the extant policy agreement, and the low number of homes and industries affected;
- Managing the land and property acquisition in time to support construction activity;
 - Mitigated by Gatwick pre-operational work and through drawing from expertise on other similar programmes.

Mitigating schedule delays

The risk approach taken has taken account of the possible delays which could be encountered during the process of obtaining land and of completing environmental assessments. With no landfill sites and minimal contamination within the site footprint environmental mitigation can be focussed on the relocation and re-provision of habitat, protected species and biodiversity. Additionally there is minimal reliance on third party works (e.g. Highways Agency, Network Rail) as the scheme does not require any unplanned major works to road or rail hence cost increases due to delays caused by third parties is minimised.

As the project is generally constructed in a landside environment there is flexibility to reschedule non critical path activities (majority of airfield works) to accommodate any delays which arise due to land purchase or environmental mitigation.

It should be noted that a risk averse position has been taken when considering concurrent working between the stages. All activities for each stage are completed before the next commences – this is particularly important to understand when looking at obtaining planning consent (Stage 1), getting ready to construct (Stage 2). Only minor enabling works are assumed to take place prior to the DCO being in place hence this offers potential mitigation of delays to the DCO process by the purchase of critical areas of land early.

Once planning consent is in place the compulsory purchase of land/ property can commence, with design development and procurement running in parallel. Land purchase will be phased to meet the programme demands, allowing pre construction activities to be focussed in the most critical areas.

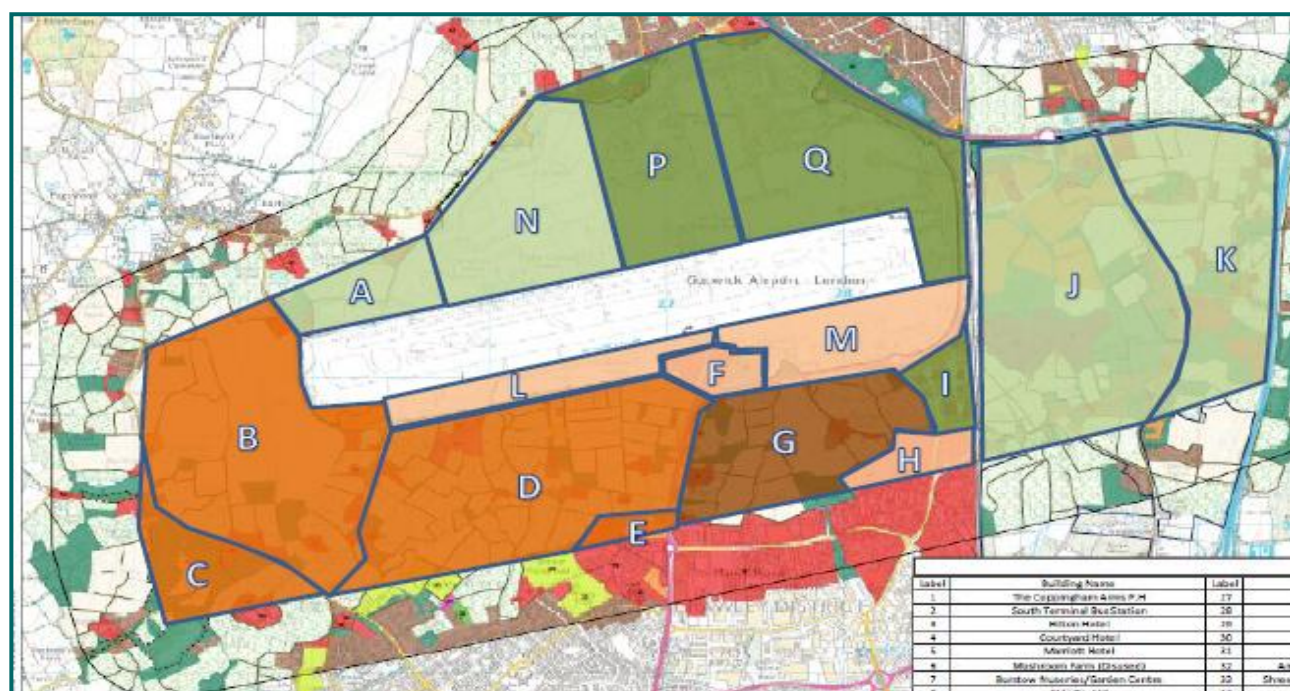
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With the land/property available, the focus turns to the pre-construction activities required to enable effective start on site of main construction works:

- habitat and archaeological evaluation and mitigations;
- asbestos survey and clearance;
- decants, demolition and existing hard standing removal;
- site preparation including; removal of redundant service, vegetation, finalise site clearance;
- pre-construction earthworks; and
- utility diversion.

These preconstruction activities can be prioritised based on the required availability of specific areas for construction. The figure below indicates a heat map of areas which are required early for construction. Area G is required for the diversion of the A23, the main earthworks and Crawter's Brook diversion. Areas B, C, D and E are required for the diversion of River Mole and Crawter's Brook.

FIGURE 12: CONSTRUCTION AND LAND PRIORITIES



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Development Strategies – Construction, key dependencies

With the construction of the new second runway at Gatwick being located within a safeguarded area, the key dependencies on external bodies are limited and manageable, (if the Statutory Authorities are excluded) once the DCO has been received. The development takes place in mainly rural land, with a relatively small number of residential properties and some small commercial businesses many of which are servicing the airport.

The key areas that the Gatwick will manage are:

- Ensuring that the Thames Water Treatment plant remains in operation (there is no need to relocate);
- Obtaining possessions from Network Rail to construct two road bridges. These have been planned early in the construction sequence to manage any delays, but also so the bridges can be used for construction access;
- Major highway diversions are limited to the A23 and the Balcombe Road, which are all surface roads without any requirement for tunnelling;
- Alterations to the motorway network are limited to the Junction 9 of the M23 and again these do not require any tunnelling;
- Diversion of Crawters Brook and the River Mole will require Environment Agency agreement, but will be using a similar approach to the channel design as has already been constructed around the NW corner of the airfield. These diversions are of shorter distance and simpler than the diversions which will be required at Heathrow;
- Agreement to relocate any protected species (i.e. great crested newts) will be required from Natural England. Gatwick has experience of relocating protected species from recent work on the Pollution Lagoon and the Flood Alleviation projects;
- The programme footprint contains only small amounts of contaminated land and no known landfill sites so the need for any land remediation will be minimal and maintainable within the site boundary;
- The safeguarded area doesn't contain any major commercial operations which will be needed to be relocated. In comparison with Heathrow, which will need to move the incinerator and medical waste treatment plants at Colnbrook; and
- Agreement will be needed to re-locate the UKBF Detention Centre located south of the existing airport. Heathrow will also need to relocate the Harmondsworth Detention Centre.

Minimising disruption during construction

The mitigation strategies response provides Gatwick's approach to the Airports Commission's objective to limit detrimental and enhance positive impacts on the environment and on local communities. Clearly the construction activity is a potential cause of disruption however given the fact that Gatwick's construction will be largely contained within the airport boundary it will have much less disruption than Heathrow's plans which include major M25 modifications and road closures. As construction will mainly be carried out within the confines of the project boundary on safeguarded land to the south of the existing runway this will greatly reduce any disruption caused to the local area and local community.

SD5 Development Strategies

Local impact

Local disruption will be mitigated via a number of actions, including:

- Offline road diversions which can be delivered away from the existing road and will only impact traffic flows when the new cut ins are made. Road diversions are not complicated realignments, are within the safeguarded area and do not require specialist engineering e.g. tunnelling;
- New road bridges over rail tracks will be completed during possession hours to minimise disruption to the railway;
- Reuse of all excavated material within the project footprint reducing the vehicle movements on local roads;
- Ground noise during construction will be managed using a best practice 'Code of Construction Practice' ensuring work is carried out using the least noisy methods, i.e. bored piling instead of compression hammer. Noise barriers will also be erected around the construction works as required for the different activities; and
- Air Quality during construction will be managed using a best practice 'Code of Construction Practice' to control locations of stockpiles, damping down of dusty surfaces including haul roads and effective positioning of barriers.

Later sections in this document show how Gatwick will engage with the local community to consult and inform them prior to and during the construction phase to minimise any impacts and also to give the local community the information they need to allow them to plan for any contingencies.

Operational impact

The majority of construction activities will be carried out on a Landside site reducing the impact on the security posts and the requirement for escorted vehicles and personnel. Construction of the new terminal and piers can be carried out so as to not affect the operation of the two runways.

As the new project is constructed to the south of the existing airfield operations can continue unaffected. Connections to the existing taxiway and runway will be made outside of normal operating hours.

Safeguarding land prevents development from reducing the capability of a second runway. Consequently, there are very few significant obstacles and risks associated with developing this land thereby making the runway proposals an extremely viable and 'prepared' option in land use terms.

The safeguarding provision also means that a Gatwick option is effectively built into policy at all relevant levels, and can be achieved with a minimum of disruption to existing high value environmental and heritage designated sites. Further, in many instances, the mitigation to impacts of the second runway will not only reduce their harm but it will also bring significant extra benefits e.g. around surface access to the airport for travellers and staff. The need to divert the River Mole represents a significant community and ecological benefit in terms of opening up the watercourse which is currently in culvert under the existing runway and creating a better aquatic habitat in addition to reducing flood risk.

SD5 Development Strategies

Objective: to actively engage local groups in scheme progression, design and management.

Gatwick recognises the significant role it plays in the lives of many people living near the airport, either directly as a result of the airport's operation, or indirectly as a result of the benefits the airport brings to the wider region. That is why Gatwick believes it is so important that the local community, and their representatives are able to have a voice and engage with the airport on issues that are important to them, and why we have already engaged in a detailed local consultation on our plans.

Gatwick's Engagement Strategy Appendix outlines the already extensive engagement Gatwick has undertaken to date with local communities, politicians, passengers, business and the airport's staff. It also outlines how Gatwick will consult and engage with its stakeholders on the proposed second runway – not only during the Commission's process, but beyond that in the pre-application stage through to the construction, delivery and operation of a two runway airport.

Gatwick currently undertakes extensive engagement with stakeholders

Gatwick has committed in recent years to open engagement with all of its stakeholders on strategic decisions relating to the future of the airport. The airport has also sought to work constructively with special interest groups around specific environmental and operational issues, such as surface access, noise and biodiversity.

As a result of these efforts, Gatwick has already established an effective working relationship with a wide-ranging network of stakeholders who will be closely involved in current and future engagement on the second runway. In many cases, these relationships have been formalised through dedicated forums, working groups and consultative bodies.

The principal forum for Gatwick's engagement with the local community and businesses is the Gatwick Consultation Committee (GATCOM). Established in 1956, this statutory body continues to advise the airport's senior management team on the issues that are of greatest interest or concern to local communities, passengers, businesses and other airport users. The group meets four times a year, consists of 28 appointed representatives, and is open to the public.

To augment the work of GATCOM and delivery for the Second Runway Sustainability Strategy, Gatwick is committed to developing an External Stakeholder Review Group, comprising representatives from key industry, social, economic and environmental organisations to assist Gatwick in progressing delivery of the Sustainability Strategy and driving forward improvements in performance.

SD5 Development Strategies

Gatwick has created targeted forums to address particular stakeholders' needs

Gatwick has developed forums to address the impacts of a number of specific issues relating to the airport. These are summarised below.

Surface transport impacts

Gatwick's Surface Access Strategy has been informed by the work of the Gatwick Area Transport Forum. Established in 1998 to focus on surface access issues relating to the airport, the forum involves over 70 organisations including local authorities, transport operators, airport companies and other interested parties. In partnership with the Forum, Gatwick produced a draft Surface Access Strategy in 2012, which was adopted following consultation with the public.

Noise impacts

Gatwick understands how important noise is to its stakeholders. Following extensive engagement with statutory consultees, local authorities and nearby residents, Gatwick published a Noise Action Plan in 2010, putting in place a number of indicators to measure the airport's performance on noise management and mitigation over the next five years. Gatwick also initiated its annual noise seminar in 2012, which enables stakeholders and the public to speak directly with representatives of Gatwick on noise policy.

A core part of Gatwick's mitigation strategy has been the noise insulation scheme. Gatwick has always placed importance on engaging with local residents, politicians and environmental groups about noise insulation and mitigation, and on future measures that will be put in place should permission for a second runway be granted. The consultation Gatwick has already undertaken, as well as the future plans the airport has in this area, underlines the importance that Gatwick attaches to addressing this environmental issue and acting as a responsible neighbour.

Air quality impacts

Gatwick has shown that it supports the concept of a partnership approach for tackling air quality management and carbon emissions and continues to work with key organisations such as Reigate and Banstead Borough Council on this basis. Once a year, Reigate and Banstead Borough Council publishes an annual performance report, which is made available to the public. Gatwick has achieved its air quality and carbon emissions' goals every year since the performance report was published with overall an overall reduction of 14.6% since 2008.

Biodiversity impacts

Gatwick recognises the importance of protecting and promoting natural habitats and biodiversity in and around Gatwick. Gatwick actively supports and sponsors the Gatwick Greenspace Partnership, which forms part of the Sussex Wildlife Trust and manages 200 sq. km of countryside in the area. The partnership has helped the airport to develop indicators to evaluate its performance on managing and maintaining biodiversity that can be tracked on an annual basis to quantify the overall health of the natural habitats and biodiversity in and around the airport.

Gatwick regularly engages with local businesses

Gatwick has actively engaged with local business communities through the Gatwick Diamond Initiative and Gatwick Diamond Business. These organisations regularly meet and enable Gatwick to have a direct dialogue with national, regional and local businesses who contribute to the £2 billion generated by Gatwick's operations each year.

SD5 Development Strategies

Gatwick actively engages with local authority stakeholders

Gatwick is actively engaging with all relevant local authorities (LAs) in regard to proposals for future runway capacity at Gatwick. Gatwick has achieved this through two different groups: The Gatwick Joint Local Authorities (GJLA) and Gatwick Diamond Local Authorities. The purpose of this engagement has been to share information and keep the LAs informed of progress; to share study approaches and methodologies Gatwick uses, and seek agreement on how economic, environmental and social matters are identified and will be mitigated; discuss plans for consultation and engagement; and to identify possible areas of common ground.

In November 2013, West Sussex County Council's Cabinet Member for Highways and Transport created the Airport Capacity Task and Finish Group consisting of four members to assist his work on the issue of airport capacity in the local context following the County Council's endorsement in principle of support for expansion at Gatwick. Gatwick believes it is vital to continue to engage with the Airport Capacity Task and Finish Group on the airport's expansion proposals.

Gatwick continues to engage with those who will be immediately affected by a second runway

Following the Air Transport White Paper in 2003, which led to the safeguarding of land for a future second runway, Gatwick consulted with local people (residents, businesses, campaign groups, local councils and MPs) on the best way to protect the value of properties in the area where land would be required for any new runway development. This consultation took place between September 2004 and January 2005.

To guarantee the value of eligible properties now and in the coming years, as well as the details of the financial assistance which Gatwick would offer if the airport takes a second runway project forward, Gatwick has developed two voluntary schemes: the Property Market Support Bond and the Home Owner Support Scheme. These schemes remain in place today, and give local property owners the reassurance that they will be protected financially if a second runway goes ahead.

Gatwick has created an Engagement Charter which sets out how the airport will engage with existing owners and occupiers of land that will be affected by Gatwick's proposal for a second runway. This Engagement Charter has been designed to provide engagement by GAL that is appropriate, regular and consistent while ensuring that any impact the second runway proposal might have on local property markets is mitigated in both the short and longer term.

Gatwick understands that the communities around the airport will have many questions about what a second runway would mean for them and Gatwick wants to provide an opportunity for local residents to influence its submission to the Commission, including the detail of the options as well as providing them with all the relevant information to allow them to reach a firm decision on which option they prefer. For this reason, Gatwick has undertaken a comprehensive six-week public consultation programme on Gatwick's three runway options, beginning 4 April and closing 16 May 2014. Outputs from this will be used to inform further enhancements to the scheme design.

SD5 Development Strategies

Gatwick has a future engagement strategy to support a successful planning application

In the event that the Government supports the principle of a second runway at Gatwick, Gatwick anticipates bringing forward a Development Consent Order (DCO) application under the Planning Act 2008 as amended by the Localism Act 2011.

As part of that process, Gatwick would undertake an extensive and robust programme of public engagement above and beyond that required by the Planning Act. This would seek to:

- Comply with formal consultation guidelines as prescribed in Sections 42 and 47 of the Planning Act 2008;
- Inform and consult with the local community, statutory consultees and other interested parties on the project;
- Gain feedback from these communities and stakeholders, including any queries or concerns that they might have;
- Shape the form and design of the DCO application, Environmental Impact Assessment and development scheme accordingly;
- Identify any issues and impacts that should be considered along with suggestions for any necessary mitigation and potential enhancement measures;
- Prior to and during construction, we will continue to engage with the business community to ensure that they maximise the commercial opportunities associated with the construction and operation of the second runway; and
- As part of the Sustainable Construction Strategy, during construction, we will ensure that the community is kept regularly informed on the progress taking place on site and when the build programme reaches key milestones. We will achieve this via a dedicated website, webcam, video updates, social media interaction, educational visits, newsletters and communication via the local and national press.

We will continue to engage local stakeholders and amenity groups once the second runway becomes operational, including through the GJLA and Gatwick Diamond. Following the successful completion of a second runway at the airport, Gatwick will continue to engage with local residents, campaign groups, MPs and local businesses about its operations. It is vital that these groups continue to gain maximum advantage from the airport's growth. Gatwick also wants to maintain its reputation as a responsible neighbour to its local communities and demonstrate best practice in its stewardship of the environment.

Gatwick will also continue to work with its airlines, operators and wider industry to drive forward enhanced sustainability performance through:

- Exploring the opportunity for establishing a Sustainability Partnership with representatives from the airlines and operators at Gatwick to identify further opportunities for collaborative working. This would coordinate and build upon existing working relationships;
- Working with retailers to establish a Responsible Retailers Forum. The aim of the Forum would be exchange best practice approaches and work closer together to address key environmental performance goals such as sustainable resource use. The potential also exists for the Forum to link into the Life-Long Employability programme, to capitalise upon training and employment opportunities, in particular, for local communities.

The second runway for Gatwick represents an exciting opportunity for the UK to expand its airport capacity in an economically beneficial and sustainable manner, and Gatwick wants all stakeholders to have a share in its future.