

Gatwick Runway Options Consultation

Report of Consultation July 2014

YOUR LONDON AIRPORT

Gatwick



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Our vision

Gatwick can deliver a second runway by 2025 at no cost to the taxpayer.

Expansion at Gatwick will deliver balanced growth for London and the South East.

Greater competition between airports will mean better service and cheaper fares for passengers. We will offer great connections across the UK, good transport links and a new airport designed for smooth and enjoyable journeys.

We recognise that whilst aviation brings great benefits to passengers, and to the national and local economy, it also has impacts, on the local community in particular. If Gatwick is selected for development of an additional runway, we will work closely with the local community and other key bodies to help ensure we continue to minimise these impacts.

Our runway options consultation

In April and May 2014 we held a public consultation into our options for a second runway.

Interest in the consultation was high. Over 23,000 people visited the consultation website, over 6,000 people attended the 17 public exhibitions, and more than 7,717 consultation responses were submitted.

Ipsos MORI has analysed the consultation responses and has produced an independent report, available from www.gatwickairport. com/consultation, which provides detailed independent analysis of every response received to the consultation, and informs this Report of Consultation.

The purpose of this Report of Consultation is to:

- provide an overview of the consultation process, purpose and context;
- explain our decision on our preferred runway option and the rationale for choosing it;

- describe the changes we have made to our preferred scheme as a result of this consultation, including providing more detail on how we will mitigate the impacts of development:
- set out Gatwick's response to common themes which, whilst not directly linked to the selection of runway option, or refinement of our scheme, were raised frequently by respondents to the consultation.

Section 2 of this document provides details of the background and context for the consultation.

The themes and comments we respond to in this report are based on the key findings of the consultation. Inevitably with a consultation of this scale, there were numerous other comments which cannot be responded to individually. However these can all be found in the appendices of the Ipsos MORI report.

Our preferred runway option

Of those respondents who stated a preference for a runway option, the majority supported Option 3.

We explained in our consultation document that Option 3 was our provisionally preferred runway option and we stated that we would use the responses to this consultation to help us reach a firm view on the option we prefer.

We therefore confirm that Option 3 is our preferred runway option. Section 3 of this document further explains our reasoning and rationale for this decision.

Option 3 consists of a new 3,400m runway positioned 1,045m south of and parallel to the existing runway. The new runway is positioned at a sufficient distance from the existing runway to enable the independent operation of the runways. The method of runway operation for Option 3 would be mixed mode, meaning that both runways would be used for arrivals and departures.

In addition to retention of the existing north and south terminals, Option 3 would see construction of an additional new terminal in the midfield. By 2050 over half the terminal capacity would be provided in this location.

The layout of Option 3 is shown on Plan A at the back of this report.

Changes to our scheme

Where we have been able to do so, we have incorporated specific requests for modifications to our scheme, including modifications to boundaries.

This has included careful review of boundary realignments and road diversions.

We have identified three locations where we have been able to make amendments to the master plan in this way, including:

- modifying the proposed road and river diversion at the south west boundary of the airport, near Ifield Court;
- altering the alignment of the A23 diversion to the south of the airport to avoid certain commercial premises;
- altering the alignment of the Balcombe Road diversion to the east of the airport to avoid a Grade II listed building.

Where specific concerns have been raised in relation to potential impacts of development, we have provided further detail, and in certain cases made specific additional provision, to address these concerns.

We have provided more details on these changes and additional mitigation measures within Section 4 of this document.

Common themes

Respondents completing open questions on the response form, which required a written response, generally used this to express concerns and highlight specific issues.

The most common themes raised by respondents can be grouped, as follows:

Noise and flight paths

- Community impacts, including impact on homes and local infrastructure provision
- Surface access, including impacts on road traffic congestion
- Air quality
- The environment, including wildlife and ecology
- · Woodland, including ancient woodland
- Green space / open countryside
- Land take, including the impact on local businesses
- Flood risk

We have responded to each of these points in Section 5 of this document.

Comments in support of development of a second runway at Gatwick focused on the following themes:

- Additional passenger capacity
- Economic benefit, particularly regional and national
- Positive impact on competition between London airports
- Public transport improvements, particularly to the rail station and to rail services
- Job creation

Our community pledges

Through our ongoing engagement with local authorities, local business groups and statutory stakeholders, we already had a good understanding of the key issues of concern in the local area. We used this knowledge to help inform our submission to the Commission, particularly within our mitigation strategy.

By undertaking this consultation, we have also been able to hear directly from local residents, businesses and other stakeholders on what is most important to them when considering the development of a second runway at Gatwick. This has been invaluable in helping us confirm which issues are most

important, and to identify new areas that we may need to explore further.

As a first step, we are launching a series of pledges for the local community, which responds to the issues that have been identified to us through our ongoing engagement, and via our consultation. Some of these have already been published, and formed part of our submission to the Commission, and some of them are new.

- 1. We have carefully considered the concerns of local home owners whose homes would be affected. A Property Market Support Bond fund of £131m will offer owners whose homes we need to purchase 25% above market value for their properties, significantly above what Gatwick is statutorily required to offer home owners. This pledge will also apply to home owners already eligible under our existing Property Market Support Bond. We will revise the details of this scheme to take account of the additional compensation level.
- 2. In addition there is a £14m Home Owners Support Scheme to support owners of properties which, if development went ahead, would be newly exposed to medium-to-high levels of noise (66dBA LAeq). The voluntary scheme means that people will not have to wait until any new development has opened for any support or assistance against the risk of blight, as they would usually have to if Gatwick only fulfilled its legal obligations.
- 3. We pledge £3.75m to help create 2,500 new apprenticeships for local young people. This is one part of our Life Long Employability Programme, which will aim to engage and up-skill all working age sections of the community to position them to capitalise upon employment and career development opportunities anywhere in the region.

- 4. We pledge £46.5m to help local authorities deliver essential community infrastructure, associated with any new house-building that arises as a result of expansion at Gatwick.
- We will establish a new Engagement Charter setting out how we will work with local landowners and businesses if they are impacted by development of a second runway.
- We will establish a Community Flood Risk Forum to provide ongoing communication and dialogue with our local communities on this critical issue.
- 7. We will develop local partnerships which can target investment in identified regeneration priority areas; bringing together local procurement; skills and development agencies to capitalise upon local uptake of employment opportunities.
- 8. We will continue our support of the existing Gatwick Community Trust, and establish a new Community Foundation to build on the work of the Community Trust, to support sustainable development in our communities, with funding directly linked to growth in passenger numbers at the airport.
- 9. We commit to supporting further road improvement through the introduction of a £10m Local Highway Development Fund should we build a second runway. Local authorities would use the fund to help improve the local road network where Gatwick is one of a number of contributors to traffic.
- 10. Gatwick's unique Council Tax Initiative would see those homes most affected by noise from a second runway receiving annual compensation equivalent to Band A Council Tax (currently £1,000) if and when the runway becomes operational.
- 11. We will extend our existing Noise Insulation Grants Scheme to cover the equivalent area for the second runway.

Gatwick has recently announced a significantly expanded noise insulation scheme which is one of the most innovative at any airport in Europe. The noise threshold for the scheme has been reduced, with the boundary line drawn flexibly to ensure entire streets and communities are included. The boundary has also been extended along the flight paths by 15km to both the east and west of the airport. Eligible homes can apply for up to £3,000 towards double glazing for their windows and doors and loft insulation. Over 40% more homes are now eligible than under the old scheme. This scheme would be extended to cover the equivalent area for the second runway should this be built. Again we would draw the boundary line for this scheme flexibly to ensure entire streets and communities were included.

Our May submission to the Airports Commission

The Airports Commission's timetable required additional information on Gatwick's Option 3 (the option shortlisted by the Commission) to be submitted on 14 May 2014, in line with their published Appraisal Framework. This timetable was confirmed after we had committed to our programme for delivering our consultation in April and May 2014.

The air traffic numbers for our consultation were frozen in autumn 2013 (based on our original forecasts of May 2013), to allow the technical studies into the environmental, economic and other effects to be commissioned.

Prior to our 14 May 2014 submission we reviewed the foundations of our case. We were advised in late April 2014 by our traffic forecasting consultants that there was a strong case for increasing forecast annual air traffic movements (ATM) and passenger

numbers to a level higher than published in our consultation. In the light of this advice, we decided to include material covering both the 87mppa case and a 95mppa, 560,000 ATMs case in our updated Option 3 submission to the Commission on 14 May.

We explain in section 7 of this report how we addressed the requirement to provide additional information to the Commission, and the background to the revised traffic forecast.

Revision of the traffic forecast required updated analysis of the assessment of impacts and benefits of some aspects of the scheme, and we explain in section 8 of this report our revised findings.



2.1 Background



On 4 April 2014 we launched a public consultation relating to potential options for a second runway at Gatwick. The consultation ended on 16 May 2014.

We published a consultation document entitled 'A Second Runway for Gatwick' ("the Consultation Document") which provided information about our three shortlisted options for a second runway at Gatwick. We explained that we had analysed the three options and ranked them in a provisional order of preference, with Option 3 (a masterplan based on a new runway 1,045m

south of the existing runway operating in mixed mode) being our preferred first choice. We invited responses to the options set out in the consultation document.

Ipsos MORI helped with the design of the response form, independently analysed the consultation responses, and has produced an independent report ("the Ipsos MORI report").

2.2 Purpose of the consultation

The purpose of the consultation was:

- to help ensure that local residents, businesses, stakeholders and other interested parties with an interest in the future of Gatwick were provided with information about the runway options we were considering;
- to provide an opportunity for such people and organisations to influence the development by telling us what was important to them;
- to provide context and information about the development process, including the work of the Airports Commission ("the Commission") and the relationship between our consultation and the Commission's own work;

 for us to gather as much information as possible so that we could refine our proposals to best reflect local views and needs, as well as those of the airport.

Our consultation did not seek to address the question of whether Gatwick should have a second runway. There will be an opportunity to give views on whether a new runway should be built at Gatwick or elsewhere when the Commission launches its own national consultation later this year.

The consultation was undertaken in line with our consultation commitment, which is set out below:

- We take seriously our commitment to consult those interested in or affected by our airport's operation.
- This consultation is an opportunity for everyone with an interest in the future of Gatwick to help to shape the development of the airport.
- We want to make sure that information is available to everyone who wishes to review it, and that anyone who wishes to express a view has the opportunity to do so.
- We cannot promise to accommodate every suggestion made, but we will consider every view submitted to us and if we can respond positively, we will do so. If we can't, we will explain why.

2.3 Context of the consultation

The Airports Commission

In September 2012, the Government announced the setting up of an Airports Commission, chaired by Sir Howard Davies, to consider the UK's runway capacity needs.

In December 2013, the Commission published an Interim Report which shortlisted possible locations for a new runway in the UK. A proposed second runway at Gatwick was shortlisted alongside proposals for an additional runway at Heathrow.

In 2015, the Commission will recommend to Government where the next runway should be built.

The Commission's assessment of Gatwick

In paragraph 6.74 of its Interim Report, the Commission stated: "Gatwick Airport Ltd has proposed that a new runway should be constructed south of the existing one. It has identified three options: close-spaced, wide-spaced/dependent operation and wide-spaced/independent operation. The Commission's assessment has focused on the last - a runway over 3,000m in length spaced sufficiently south of the existing runway (at least 1,035m) to permit fully independent operation. This offers the greatest increase in capacity while still having relatively low environmental and noise impacts compared with some other potential sites. The Commission will, however, keep this under review as it takes forward more detailed development and appraisal. The proposal also includes related new terminal facilities and taxiways between the new and existing runways."

The Commission's consultation

The Commission has said that it will hold a national consultation in the autumn of 2014.

It plans to present the promoters' refreshed designs of the schemes at Gatwick and Heathrow, and its assessments of the schemes' economic, social and environmental impacts and their viability. The Commission asked Gatwick to provide updated information for it to assess. We indicated in the Consultation Document that we would provide further information on our Option 3, as requested. We submitted our scheme design on 14 May 2014.

Our consultation

When we made our first submission to the Commission in July 2013, we committed to consulting on our options for a second runway, indicating that we would do so in Spring 2014. This is because we believe that it is essential for the local community and stakeholders to have an opportunity to comment on our runway options before a preferred option is chosen.

In its Interim Report in December 2013, the Commission has stated that "it will be important for the promoters of short-listed schemes to ensure that groups representing nearby residents and businesses, and other stakeholders such as passengers and airport users, have the opportunity to make their views known. The Commission therefore encourages scheme promoters to engage with and understand the views of these groups, and to report on this as part of their submissions."

We therefore decided to launch the public consultation in April 2014, including all three of our main runway options, and to report the outcome of the consultation to the Commission (and more widely) in July 2014.

2.4 Delivery of the consultation

Overview

The consultation ran for a 6 week period ending on 16 May 2014 and was widely publicised to help ensure that everyone with an interest in the proposed development of a second runway at Gatwick had the opportunity to take part. Four of our neighbouring local authorities held local elections on 22 May 2014 and for this reason we agreed to extend the deadline for the submission of their responses.

- We developed a comprehensive Consultation Document which described the three runway options, the impacts and benefits of these, and our assessment of them.
- Recognising that not all interested parties would wish to review the full Consultation Document, we produced a range of other material including a 16 page summary brochure and exhibition boards summarising the main differences between the options.
- Our website, www.gatwickairport.com/ consultation, hosted information about the consultation, including the Consultation Document, air noise contour maps, layout plans and pages summarising our proposals. Over 23,000 people visited these website pages.
- We hosted 17 public exhibitions at venues across the local area, enabling visitors to learn about the proposals and discuss them with Gatwick representatives. Over 6,000 people attended these exhibitions.
- We publicised the public exhibition dates and times on our website, via local print and broadcast media, and via a newsletter which was sent directly to over 180,000 homes and businesses.
- All homes and businesses within the airport's 57dBA LAeq noise contour also received a letter from our Chief Executive Stewart Wingate inviting them to participate in the consultation.

- We hosted two stakeholder workshop sessions, which provided an opportunity for invited local stakeholders to meet with the project team and discuss the proposals in detail
- We provided a consultation queries email address and telephone line and publicised this on all materials including the website and all documentation.
- There were a number of formal channels through which individuals and organisations could make known their views on the runway options known:
 - o Hard copy response form;
 - Online response platform mirroring the hard copy response form, which could be accessed through the Gatwick Airport website;
 - o Through completing an online response form at the exhibitions;
 - Via a written letter. A freepost address was provided on the hard copy response form, as well as in the consultation document and the summary consultation document in order for individuals and organisations to post their response to Ipsos MORI;
 - o By email via a dedicated address set up.

Consultation queries

315 people contacted the consultation queries team via email, telephone and post. Many were requesting copies of the consultation document or response form. Others had specific queries about aspects of the proposed development, which were responded to by technical experts on the project team.

Consultation responses

7,717 consultation responses were submitted.

The responses were collated, coded and analysed by Ipsos MORI. Full details of the responses provided are presented in the Ipsos MORI report which is available from www.gatwickairport.com

2.5 Further consultation and dialogue

Airports Commission

We submitted our refreshed scheme design information to the Commission on 14 May 2014 as requested and we continue to work with the Commission as they undertake their assessments of the proposals for Heathrow and Gatwick.

We will also provide the Commission details of our updated scheme following this consultation, and a copy of the consultation report.

We are working with the Commission to assist them in their evaluation of our development proposals.

Gatwick Officers Group

The Gatwick Officers Group (GOG) comprises representatives of our neighbouring local authorities, who regularly meet to consider issues relating to Gatwick's operation and development. Gatwick Airport Limited meets regularly with this group. It was agreed in June 2013 that five working groups would be established with representatives from the Gatwick Airport team, to give ongoing consideration to issues arising from development of a second runway at Gatwick. The working groups are:

- WG1: Employment and housing;
- WG2: Air quality;
- WG3: Land use/environmental impacts;
- WG4: Surface access;
- WG5: Noise and airspace.

We will continue to work closely with the GOG throughout the Airports Commission process. We have already begun to discuss what further groups may need to be set up in response to the consultation. The first of these will be a group to explore the issue of employment land, and the displacement of businesses as a result of development, looking at the whole picture of employment land in

the local area, as well as considering Gatwick's proposal for setting aside land within the airport boundary for displaced employment land.

Further public consultation

The Commission has said that it will hold a national consultation in the autumn of 2014, presenting their assessment of the refreshed designs of the schemes at Gatwick and Heathrow.

If the Commission recommends Gatwick as the preferred location of the UK's next runway in 2015, and Government decides in favour of Gatwick, we will then need to decide whether we propose to seek planning consent. We have currently assumed that the process for obtaining consent will be via a Development Consent Order under the 2008 Planning Act, however the Commission is considering other ways to proceed, for example a Hybrid Bill. Whichever process is followed, further local consultation on the detail of the scheme will be an important part of the process.

We will also consult on the details of our proposed measures to compensate those people who would be affected by development of a second runway at Gatwick.

Design of the airspace for a two runway Gatwick would be the subject of an airspace change process undertaken by NATS, which would include public consultation. Details of our surface access proposals will also require further consultation and detailed design discussions with the Highways Agency, local authorities, DfT and Network Rail.

3. Our preferred option



We have considered the responses to the consultation and in particular we acknowledge the widely expressed view that the impacts of development, on the environment and on communities, should be reduced wherever possible.

We provide later in this document more detailed information about how we will reduce and mitigate the impacts of development.

Whilst it is perhaps understandable that the comments of many respondents have focussed primarily on the impacts of development, the Commission will need to balance its assessment of impacts with its assessment of the benefits accruing to the UK as a whole as a result of the additional runway capacity provided by any runway development in the South East.

In our consultation we asked respondents to comment on the runway options we were

considering, and to state a preference, in order to help us select the runway option to take forward.

Of those respondents who stated a preference between Options 1, 2 and 3, the majority (67%) supported Option 3, which was also our provisional preferred option. The main reasons given for supporting Option 3 were:

- It is the best, most logical solution
- It provides the most benefits
- It provides the most long-term solution
- It allows for the maximum increase in capacity
- It allows for the greatest operational efficiency
- It provides the maximum benefits for the economy

3. Our preferred option

We agree that Option 3 has the greatest capacity of the three options and therefore provides the most economic benefits and the best long term solution for additional runway capacity. We also agree that Option 3 has the greatest operational efficiency as the two mixed-mode runways will reduce taxiing distances, will provide operational flexibility and will provide the most resilient operation. We think these are the key strengths of Option 3.

We also note the comments received from those favouring Option 1 or 2. Typically these focus on the lower impacts resulting from reduced land-take (for Option 1) and the lower traffic throughput and therefore lower noise impacts.

In reaching our conclusion on our preferred option we have reviewed our previous analysis in light of these comments. Whilst noting the large number of responses favouring no new runway our task was to identify which new runway option to recommend to the Airports Commission for its consideration. We therefore focused on the responses stating a preference between the options. From these, the clear preference for Option 3 aligned with our preliminary conclusions. Whilst all the comments received add context to the decision making process, we have not been made aware of any new issues or opinions that fundamentally change our view on the balance between the options in terms of benefits and impacts:

- Option 1 clearly has the lowest direct and indirect impacts owing to its smaller throughput and smaller land take. However it adds substantially less capacity than the other options and therefore fails to deliver the full connectivity and economic benefits that the opportunity of a new runway represents
- Option 2 provides more capacity than Option 1 but the method of runway operation is inflexible and less resilient than Option 3. Also, although it has a

- similar land take, it does not deliver the same levels of connectivity and economic benefits as Option 3.
- Option 3 provides the most capacity and will deliver more flights, to a wider range of destinations, create more jobs and provide greater economic benefits for the region and the UK as a whole. Whilst we recognise that in absolute terms Option 3 has the highest impacts, the overall balance of benefits relative to impacts means that it remains the best performing option.

We therefore confirm that Option 3 is our preferred option and that it will be taken forward for evaluation by the Airports Commission.

4. Changes to our scheme as a result of this consultation

The consultation provided an opportunity for local residents, businesses, stakeholders and other interested parties to understand our runway options and influence the development by telling us what factors are most important to them.

On the basis of the responses received and our own ongoing analysis of the scheme, we have identified opportunities for further refinement of Option 3 to reduce its impacts and further enhance its benefits.

This section addresses specific comments raised in relation to Option 3:

- Comments about specific locations, highlighting concerns that the proposed airport boundary and related road diversions would result in loss of commercial premises, or would have an impact on a listed building
- Comments on impact of the development on ancient woodland including responses from members of the Woodland Trust pointing out that by definition, ancient woodland cannot be re-provided and should be protected from development.

We pledged to consider every view submitted to us and to incorporate the views expressed into the masterplan whenever it was possible to do so. We said that where we could not do this, we would explain why. Whilst this report cannot respond to every individual response submitted, we have endeavoured to cover all of the issues raised.

Roads and boundaries

Comments about specific locations highlighting concerns that the proposed airport boundary and related road diversions would result in loss of commercial premises, or would have an impact on a listed building.

Following receipt of these comments we have reviewed the alignment of the road diversions around the perimeter of the

expanded airport to seek to avoid some of the impacts raised by respondents. In doing so we were constrained by the geometric standards that govern the safe design of highways. However in three locations we have been able to make modifications. These are illustrated in Plans A, B, C and D at the back of this report and are described below.

At the south-west corner of the new boundary, near Ifield Court, we have reviewed the alignment of the new River Mole channel and the diversion of Charlwood Road. The consultation plan showed the new road crossing the river in a number of places. Plan B at the back of this report shows that we have now been able to modify the design so that the road diversion and the river channel have been separated. This will improve the quality of both the road and the river channel by removing the need for bridges.

On the southern section of the new boundary, between the current A23 and the railway, the proposed alignment impacted several existing and planned businesses. This was caused by the proposed alignment of the A23 diversion, which we had shown connecting to an improved version of the existing A23/Fleming Way junction. We have been able to re-align the A23 diversion further north so that the impact on commercial property in this area is reduced.

Conversely, further east, the section of the A23 diversion where it crosses the Gatwick Road has been moved slightly south. This is to enable the provision of a road link between the A23 and the new Terminal building, which will provide an important access route for local bus services.

The changes to the alignment of the A23 are shown on Plan C at the back of this report.

At the south-east corner of the new boundary we were asked if the boundary could be adjusted to avoid a Grade II listed farmhouse (Teizers Farm). We have reviewed the alignment of the proposed diversion

4. Changes to our scheme as a result of this consultation



of the Balcombe Road and Plan D at the back of this report shows that we have been able to modify this to avoid the property in question.

Woodland

Comments on impact of the development on ancient woodland including responses from members of the Woodland Trust pointing out that by definition, ancient woodland cannot be re-provided and should be protected from development.

One of the defining characteristics of the area around Gatwick, Horley and Crawley is the wooded nature of the surrounding

countryside and we recognise that people value this highly. Therefore, in developing our proposals, we sought to avoid areas of woodland (and ancient woodland in particular), including those lying within the land safeguarded for the second runway.

Our decision in July 2013 to focus only on runway options to the south of airport means that ancient woodland to the west of the airport (e.g. woodland at Stanhill Court and Edolphs Copse – together around 50ha), will not be affected by the proposed development.

For our consultation options, we configured the internal master plan, and arranged the scheme boundary, to reduce effects where possible. This has meant that we have

4. Changes to our scheme as a result of this consultation

been able to avoid nearly all of the 9ha of ancient woodland within the existing airport boundary.

Plan E at the back of this report shows in green the areas of ancient woodland around Gatwick. The areas of ancient woodland that we have been able to avoid, or largely avoid are:

Horleyland and Lower Picketts Woods

These lie to the east of the railway line adjacent to the airport's long term car parks. The proposed alignment of the A23 diversion has been designed to avoid any impact on either of these woodland areas. However a very small area to the north west of Horleyland Wood will need to be removed to provide an access road to the new terminal building. This route has been designed to keep the affected area as small as possible.

Allen's Wood

An area of ancient woodland known as Allen's Wood lies between the Balcombe Road where it joins with Radford Road, and the M23. Although this lies within the safeguarded area for the second runway we were able to design the Balcombe Road diversion to avoid this woodland and keep it outside the extended boundary.

However there are areas of ancient woodland that we have not been able to avoid as the land they occupy would be needed to provide essential operational infrastructure associated with the new runway. These are:

- Bonnetts Coppice which lies off Bonnetts lane to the south west of the existing airport,
- Rowley Wood which is to the north of the Manor Royal industrial estate, and
- Huntsgreen Wood which lies adjacent the A23 roundabout at the point to the south east of the existing airport boundary.

Bonnets Coppice and Huntsgreen Woods wood be lost through the proposed development. The southern edge of Rowley Wood could be retained where it extends beyond the southern boundary of the proposed A23 realignment.

The total loss of ancient woodland for Option 3 would amount to 7.7ha.

Following the consultation responses we have considered carefully whether these areas of woodland could be avoided but we have concluded that generally this is not possible. The exception is a further, small area of Rowley Wood (approximately a third of a hectare) which could be saved owing to the new alignment for the proposed A23 diversion that is described above.

Outside of the airport boundary there will be a need to reduce the heights of some trees to ensure the safe operation of aircraft landing on the new runway. Current estimates are that, to the west of the runway, around 0.5ha ancient woodland may have to be removed entirely and a further 5.7ha reduced in height.

Further details on how we propose to manage these impacts including translocation are described in section 5.

We received responses which, whilst they did not directly relate to selection of a preferred option, or to the detail of the option design, did address other issues related to development of a second runway at Gatwick. We have reviewed and considered all comments, full details of which are provided in the Ipsos MORI Report.

In this section of our report we highlight the results recorded via our response form, and identify the common themes expressed by respondents, with our responses.

This section addresses the following themes:

Impacts of development

- Community and people
- Noise
- Employment and jobs
- Economic and financial
- Air quality
- · Ecology, wildlife and environment
- Rivers and flooding
- Property
- Cultural heritage historic buildings

The Consultation

- Criticism of the consultation process
- Information provided in the consultation document

Benefits of the development

- · Economic benefits
- Job creation
- More choice of destinations and more competition for Heathrow

How we will minimise the impacts

- Surface access
- Noise
- Air quality

- · Water and flood risk
- Biodiversity
- Landscape, heritage and visual impacts

Surface transport

- Concern about road and rail congestion
- Suggestions for expansion of scope of surface access strategy

Airport related development

- Feedback on proposals
- Runway crossings
- · Provision of end around taxiways
- Selection of runway option
- Preferences expressed by respondents
- Criticism of Option 1
- Criticism of Options 2 and 3
- Opposition to development of a second runway

5.1 Impacts of development

Respondents were asked to consider to what extent, if at all, they were personally concerned about a number of potential impacts of a second runway development at Gatwick.

The chart below shows that the main concerns for respondents were noise, the impact on homes and on air quality, with over four in five respondents concerned about these potential impacts. Potential flood risk and the effect on business premises were the issues of least concern.

Respondents were also invited to offer comments and suggestions about the potential impacts of a second runway development at Gatwick Airport.

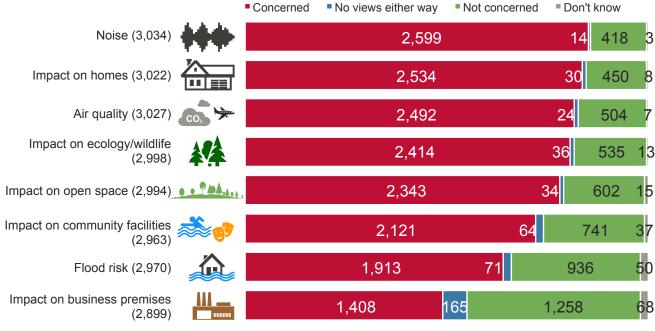
Community and people

Concerns that development at Gatwick would have an adverse effect on community, the quality of life, health and wellbeing of local residents, and that existing infrastructure, including schools and hospitals, would not be able to cope. It was suggested that Gatwick should make a contribution to the necessary infrastructure. Concerns relating to the expansion at Gatwick resulting in people moving into the surrounding area, leading to over development, that the South East is already over developed, and cannot sustain any more jobs.

The areas of Sussex, Surrey and Kent which surround Gatwick offer a high quality of life for residents, with excellent transport links,

FIGURE 1: CONCERN ABOUT POSSIBLE IMPACTS OF SECOND RUNWAY

To what extent, if at all, would you say you are personally concerned about each of the following potential impacts of a second runway development at Gatwick Airport?



Source: Ipsos MORI

5.1 Impacts of development

vibrant towns and villages and beautiful countryside. As a result many people are attracted to the area, to both live and work. This attractiveness, combined with a growing population inevitably leads to pressures for new housing.

Our study of potential housing and employment effects of a second runway concluded that across the study area of fourteen districts and boroughs, the additional housing demand generated by expansion at Gatwick would represent only 4% of the overall demand for new houses across this wide area in the 25 years from 2025 to 2050.

The study was conducted with input from a working group with local authority planning officers, as a sub-group of the Gatwick Officers Group. We are continuing our work with this group to explore how future development can be managed across the local area.

Although the additional housing demand associated with Gatwick is a small proportion of the overall numbers, we have carefully considered the concerns expressed over the pressure this places on community infrastructure. This is why we are now making a pledge of £46.5m to create a housing infrastructure fund for local authorities, which commits £5,000 per new house built as a result of Gatwick's expansion, to support the delivery of community infrastructure.

As part of our submission independent consultants carried out a study on the likely impacts on the quality of life for local populations with the proposed development of a second runway. Because our expansion would predominantly take place within the current safeguarded area we will be minimising negative impacts from the outset. We are committed to being a good neighbour and we will continue to work with local communities and wider stakeholders to maximise the benefits we can deliver to socio economic and environmental enhancements.

Within our Surface Access Strategy we have considered both airport related traffic as well as growth in background demand. The road network that we have proposed has sufficient capacity for all generated demand. We have also tested our proposals to help ensure they will still work if we do not achieve our proposed public transport mode shares as well as making sure that our proposed road network can continue to flow even if a main route is blocked.

Noise

Concerns relating to the number of additional flights; the noise and disturbance from aircraft; concerns about night flights; the closeness of the airport boundary to homes and businesses.

A key purpose of our consultation was to seek views on our three runway options at Gatwick, each of which, as explained in the Consultation Report would give rise to different numbers of aircraft operations and different noise impacts. Ultimately it will be for the Airports Commission to make a recommendation to Government on where the next runway should be built and for Government to respond to that recommendation and prepare a National Policy Statement.

Even so we fully understand the concerns that were raised by respondents in regard to additional noise from the increased number of flights and fully accept that we will need to do everything we reasonably can to minimise and reduce the noise impacts that would arise from the operation of a second runway if the Airports Commission and Government decide to support it.

We have explained later in this report, that in the event of a second runway being provided at Gatwick, NATS would need to undertake a formal Airspace Change Process to determine the routes that aircraft would fly in

5.1 Impacts of development

the future, and their altitude. This too would be subject to a public consultation process.

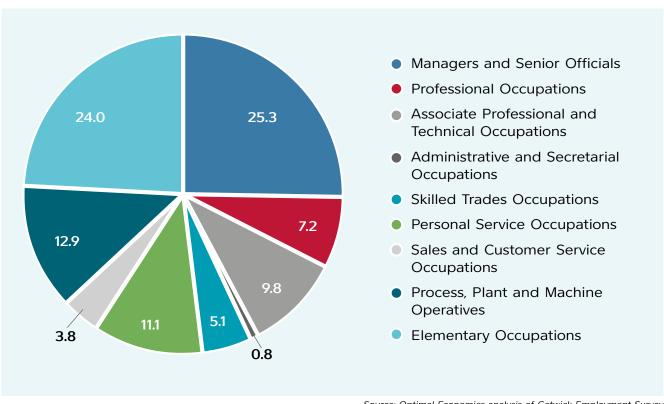
However current guidance means that any new flights paths will be designed to reduce the population overflown below 4,000 feet.

In relation to night flights, Gatwick is one of three London airports where the number of night flights allowed between the hours of 2300 and 0700 hours is controlled by limits set by the Government. The permitted numbers are reviewed by Government every few years following consultation. In the event that Gatwick was successful in securing consent for a second runway we would expect that the Government would continue to strictly control night flights.

We set out in Section 4.2 of the Consultation Document the steps and measures we are already taking to reduce noise impacts and those which we would plan to introduce in the event a second runway is provided at Gatwick. This includes our pledge to expand our noise insulation scheme and our proposed Council Tax Compensation Initiative. In relation to ground noise our options all included noise bunds and noise walls to attenuate noise from aircraft taxiing and when on the ground.

We will continue to explore and consult on further ways to reduce noise impacts building on Gatwick's industry leading approach to noise reduction. In addition, if selected, we will begin work to assess options for providing a Ground Run Pen (engine testing facility). This work will explore the potential location options and their relative effectiveness in reducing the impact of engine testing noise.

FIGURE 2: DISTRIBUTION OF GATWICK EMPLOYMENT BY OCCUPATION, 2012



Source: Optimal Economics analysis of Gatwick Employment Survey

Impacts of development

Employment and jobs

Respondents expressed the view that job creation in the area is unnecessary, and that there is sufficient employment already or would not help local people. Others expressed concern that only low quality jobs, unskilled jobs and jobs with zero hour contracts would be created.

With regard to the economic benefits, including job creation, as a very strong part of our case for a second runway at Gatwick, as the airport can help support economic prosperity in the long term. However, at the same time, we recognise that this remains an area of concern for many people, reflected in the wide range of views expressed on the topic in consultation responses.

Currently around 60% of Gatwick's current workforce lives within the six Districts and Boroughs within the Gatwick Diamond. It is an area that is likely to continue to have even greater significance in the context of a two runway airport.

Figure 2 illustrates that the airport's operation currently supports a wide range of jobs and skill sets. We expect this to continue into the future, with jobs being created right across the board from managerial, professional and service jobs to the less skilled elementary occupations.

We want to ensure that people of all ages and skills can benefit from the wider benefits of growth associated with a second runway. That is why we will develop our Life Long Employability Programme with local businesses, local councils and education providers, to help drive a partnership approach targeting education, employment, training and recruitment. A key part of this programme is our pledge of a £3.75m apprenticeship fund, which will help airport employers and local companies create 2,500 new job opportunities for local young people. Grants of £1,500 will be given to cover the

start-up costs of each new apprenticeship created.

We expect Gatwick's operation to continue to support employment in the local area in the long term; however we are also aware of the need to support balanced growth, so that one area does not become 'overheated' whilst other areas are in economic decline. That is why we are already working with local authorities to understand how balanced growth might be achieved, to help ensure that benefits can be realised locally and opportunities for regeneration can be identified and action taken to make this happen.

We will also continue to recruit locally whenever we can, working in partnership with local organisations to target recruitment campaigns in specific areas where appropriate.

Economic and financial

Comments that the development would be good for local business and the local and national economy, including increasing exposure to global markets, and creation of new jobs, both at the airport and in the surrounding region.

Gatwick expansion, through development of Option 3, will deliver significant economic benefit to London and the UK, attracting inward investment, supporting tourism, and helping businesses to grow. Gatwick already serves as a strong economic driver within the local Gatwick Diamond area, supporting local businesses and employment either directly or indirectly. We predicted that in the local area around 17,500 new jobs will be created locally as a result of airport expansion between 2025 and 2050.

Gatwick is committed to ensuring that these benefits of airport expansion result in sustainable growth, both locally and across the region. That is why we will continue to engage with our local authorities, the

5.1 Impacts of development

Gatwick Diamond Initiative and Gatwick Diamond Business Group, and the Local Economic Partnerships (LEPs) to explore how the local area can build on the current strengths that Gatwick supports, and develop robust plans for the long term.

To support this work we have commissioned Farrells to develop a Strategic Vision for the region, which draws together the strengths of the area and suggests how the long terms benefits can result in balanced growth. We have engaged local authorities and the Coast to Capital LEP in the development of this vision.

The Regional Vision also highlights the strong position of Gatwick in being able to support regeneration in areas of need along the South Coast, and in London. We will work in partnership with the relevant organisations to help identify and deliver these opportunities in the long term.

Concerns about the cost of development, querying whether development would be taxpayer funded.

We can confirm that the development of a second runway can be funded at no additional cost to the taxpayer.

Concerns that air fares would need to rise to fund the development of a second runway at Gatwick.

Provision of a second runway at Gatwick will increase competition to destinations around the world from London's airports which will deliver extra capacity at a lower cost than expansion elsewhere, resulting in lower fares for passengers.

Expanding Gatwick will create genuine competition in the market resulting in lower fares for passengers than would be the case in the event of any move back to a London airport market dominated by a single player

(through further expansion of Heathrow), which would reduce competition and result in higher air fares.

Air quality

Concerns that the increased number of flights would have a negative impact on air quality, including the smell of aviation fuel.

Air quality is an important issue. We have demonstrated that any proposals for a second runway would be compliant with UK air quality objectives and EU limit values for certain atmospheric emissions including Nitrogen Dioxide (NO₂) and fine particulate matter (PM₁₀ and PM_{2.5}).

Whilst at present large parts of London and some parts of the south east England experience long term average concentrations that are in excess of legal standards for NO₂ there are currently no locations in proximity to Gatwick, including with the Air Quality Management Area at Horley, where concentrations exceed limits. A summary of our results of our future modelling of emissions was presented in the Consultation Document (Table 10) and we remain confident that with the ongoing trend toward lower emissions from aircraft and especially from road vehicles as a result of improved technologies that concentration of NO2 as well as PM₁₀ and PM_{2.5} would continue to be well below the limits that have been set, despite the predicted increase in the number of vehicles and flights.

Odours associated with airports can occur as a result of the incomplete combustion of aviation fuel which results in emissions of hydrocarbons. The main sources of this are when aircraft start up, taxi and when engines are idling. We did not consider the issue of odour separately from air quality in our assessment and evaluation of our runway options but we do not consider there will be any material difference between the options.

Impacts of development

Ecology, wildlife and environment

Concerns about the impact on the environment and wildlife surrounding Gatwick, including loss of green space; open areas; countryside; woodland and related ecology and habitats; and negative impact on Areas of Outstanding Natural Beauty (AONB).

The options we have identified place the runway to the south of the present Gatwick site. This means that there is little or no change to the airport boundary on the north and north west sides of the airport, and that the new airport boundary can remain to the west of the M23.

To the south of the airport site the airport development will require land take from what is currently open land north of the Manor Royal industrial estate, and to the north of Ifield. We will provide a high quality boundary in this area, by means of the diversion of the Crawter's Brook and the River Mole into wide valleys with natural planting and screening bunds. This zone bordering the new airport boundary will become an attractive linear park with cycle path and bridleway access.

In our submission to the Airports Commission we have reviewed effects to biodiversity. There are no direct effects to any sites which are designated for their importance for habitats internationally or nationally.

We will comply with the requirements of the EU and UK regulations relating to protected species, however, we will also need to manage bird hazard carefully. Locally, the Willoughby Fields Site of Nature Conservation Importance would have to be removed if the airport development were approved, along with some limited areas of woodland and mature trees.

We are committed to meeting current best practice in respect of replanting three times

as much ancient woodland as that which we remove, and twice as much for other woodland. In all instances, however, we would look to get the most benefit out of any habitat creation rather than following any prescriptive formula. We would look to ensure that the new habitat links with other habitats, together with meeting wider objectives for nature conservation locally and nationally.

There will, therefore, be a further stage, if we are selected, where we look to develop proposals for off-site planting, habitat creation and public access. It is our intention, for instance, to replace the functionality of the Willoughby Fields Site of Nature Conservation Importance. We will consult on these proposals at this time.

Some respondents expressed concern about potential effects to ecology resulting from habitat loss, and also potential effects to designated sites of importance for biodiversity under international or national legislation. However, both Natural England and the Environment Agency, in their consultation responses also identified that some aspects of the development could provide opportunities beneficial to wildlife. We are committed to meeting the requirements of the European Habitats Directive, and also to providing new habitats which will go some way to compensating for the effects of that which is unavoidably lost.

With regard to effects to sites which are internationally or nationally important for biodiversity, we have undertaken more detailed analysis for the Airports Commission, we have reviewed potential effects to sites within 15km of Gatwick. Ashdown Forest and Mole Gap to Reigate Escarpment are designated under European legislation as Special Areas of Conservation (SACs) and are within our wider study area. Ashdown Forest is also a European Special Protection Area (SPA). Both of these sites are also Sites of Special Scientific Interest

5.1 Impacts of development

(SSSIs). Potential effects to other SSSIs closer to the airport e.g. at Glover's Wood (approximately 1.7km to the west of the airport) and House Copse (approximately 4.5km west) have also been reviewed. Our work has involved consideration of the likely significant effects to the sites concerned, including those from arising from noise and or air quality. Our conclusion is that there will be no negative impacts on any sites designated internationally or nationally for their biodiversity value.

With regard to effects to sites designated as important for biodiversity under regional or local policies, the project will result in the unavoidable loss of the locally designated Willoughby Fields (a Local Nature Reserve (LNR), and Site of Nature Conservation Importance (SNCI)) and Rowley Wood (SNCI). In due course, if Gatwick is selected for development of a second runway, we will consult with Natural England and local stakeholders regarding how best to offset the loss of these sites.

Several respondents to our consultation raised concerns regarding increased noise and visual intrusion to the Areas of Outstanding Natural Beauty (AONB) surrounding Gatwick.

Gatwick lies between the Surrey Hills and Kent Downs AONB to its north, and the High Weald AONB to its south. Further south still, is the South Downs National Park. All of these areas are presently overflown to some degree by aircraft operating from Gatwick, as well as those using the other London airports. The High Weald AONB is, however, most likely to be overflown by aircraft under 7,000 feet, as aircraft tend to fly over it in the process of joining the runway centreline to arrive towards the west.

As we describe below, it is not possible to be exact at this stage as to where the arrivals and departure routes for the two runway airport will be and an Airspace Change Process would ultimately determine

the routes that aircraft will fly. This will take into account various priorities that apply at different levels of altitude. Current Government guidance to the CAA on airspace changes identifies that where practicable and where routes would not have a significant detrimental impact on efficient aircraft operations or noise impacts on populated areas, airspace routes below 7,000 feet should where possible, be avoided over AONB and National Parks.

Rivers and flooding

Concerns about the impact on rivers (e.g. river Mole/Crawter's Brook) and the increased risk of flooding and the development of flood plains.

The flooding in the south east of England over the winter 2013/2014 period seriously affected a great many people, including in areas local to Gatwick and at the airport itself.

On Christmas Eve 2013 a severe winter storm, following a period of sustained wet weather, caused flood defences at the airport to be overwhelmed. The surface water in the catchment areas upstream of the airport could not be contained in the local river systems, and flooded low lying areas adjacent to the airport and an electrical substation. In addition, the amount of rainfall that fell onto the airfield led to the flooding at the airport's North Terminal. These incidents caused travel disruption to our passengers and were widely reported in the press. Areas further downstream in the Mole Valley, e.g. at Leatherhead, suffered severe flooding.

At the time, it was suggested by some that the airport had contributed in some way to the severity of the flooding, either by its simple presence or by operational measures enacted to protect its facilities at the expense of others. We have since undertaken modelling which shows that surface water running off the Gatwick site was less than

5.1 Impacts of development

it would have been if the airport was not present, owing to the airport's own surface water storage and attenuation systems. In fact, our analysis indicates that the flooding that we experienced is likely to have reduced the impact on downstream areas by reducing the peak flow from the Gatwick site.

Gatwick Airport asked David McMillan, a non-Executive Director of Gatwick, to undertake a full review of the events surrounding the Christmas Eve Flooding and provide a report to the Gatwick Airport Board of Directors with recommendations. The report was published in February 2014, and recommended changes in operational practices and an investment programme of up to £30m to improve Gatwick's flood prevention measures and contingency and resilience plans. The Board accepted the recommendations and is in the process of implementing them. The McMillan report is a public document which has been provided to the Environment Agency and is available from www.gatwickairport.com.

At the heart of our second runway proposals we have developed a scheme which meets Environment Agency (EA) best practice for flooding and water quality.

We have consulted in detail with the EA on the options. In respect of flooding, the EA state in their consultation response of 2 May 2014 that:

"The proposals demonstrate that there will be no increase in flood risk to the surrounding communities and infrastructure'.

In respect of the potential biodiversity of the proposed new river corridors for the River Mole and Crawter's Brook, and their removal from culvert under the existing runway, the EA have stated:

"As currently proposed, the newly diverted river channel has the potential to create significant benefits for biodiversity... Furthermore the scheme has the potential to contribute towards targets set out within the England Biodiversity strategy in terms of creating new priority habitats."

There will be a further stage, if selected, where we we will look to refine the detailed design of the river channels and their corridors further and also to review the nature and type of planting within them. If we are selected we will consult further on these proposals at the appropriate time.

Property

Concerns about potential housing developments to accommodate an increased population, the lack of housing in the area and the potential impact on property values.

We have carefully considered the concerns of local home owners during the consultation, which is why we have further increased the compensation made to home owners to 25% above the market value for their properties. This pledge will apply to home owners already eligible under our existing Property Market Support Bond. We will revise the details of this £131m scheme to take account the additional compensation level.

We have long understood the concerns of home owners over possible future runway development, which is why we already have both the Property Market Support Bond, and the Home Owner Support Scheme, both of which were introduced following the Air Transport White Paper in 2003.

The Home Owner Support Scheme is for homes which would be close to the expanded airport boundary, and which are exposed to medium to high levels of aircraft noise. We will expand this scheme to support owners of properties which, if development went ahead, would be newly exposed to medium-to-high levels of noise (66dBA LAeq). The £14m voluntary scheme means that people will not have to wait until any new development has opened for any

5.1 Impacts of development

support or assistance against blight, as they would usually have to if Gatwick only fulfilled its legal obligations.

Details of both schemes were shared during the consultation. Full details are available at:

www.gatwickairport.com/consultation

If Gatwick is selected as the location for the UK's next runway, we would consult the local community on these schemes.

Cultural Heritage - historic buildings

There were concerns that the development could lead to demolition of or damage to listed buildings, such as houses and churches. In particular the potential impacts on St Michael and All Angels Church and the Seventh Day Adventist church building in Lowfield Heath were mentioned. Some respondents called for listed or historic buildings that were at risk to be moved or carefully protected.

As we have explained in the Consultation Document, and in earlier sections of this report, we are trying to incorporate listed buildings into the airport masterplan, or are arranging the boundary so as to avoid them. In this manner, the Grade II* Gatwick Beehive, Teizer's Farm and Old House Farm can be retained. As we develop our proposals further and refine our masterplan design, it may be possible to retain other listed buildings and we will discuss this further with English Heritage and other consultees.

Unfortunately for some heritage buildings, their location relative to the planned development makes their retention in-situ impossible and they will have to be removed if the development is to go ahead. For example, in Options 2 & 3, St Michael and All Angels Church at Lowfield Heath would have to be removed to allow the new airside terminal and stands to be built (for Option 1,

the Church would lie very close to the new runway).

Not all stakeholders support relocating listed buildings when they have to be removed. Part of the significance of any historic building is its relationship to its original site. The dismantling and relocation process can result in damage to the building and loss of its historic fabric. This notwithstanding, there is extensive experience of buildings being dismantled and re-erected, and there are many examples of buildings being re-listed by English Heritage at their new site.

If Gatwick is selected as the location for the next new runway, there will need to be further detailed consultation with Heritage stakeholders and the Local Planning Authorities regarding the preferred outcome for each of the heritage buildings affected. In the case where it was decided that a building shouldn't be removed, then it would be dismantled carefully to enable a full archaeological recording.

5.2 The consultation



Criticism of the consultation process

Views expressed included comments that the questionnaire was loaded, that the consultation document lacked detail and was too short, or contained too much detail, and that the document was biased and misleading.

We take seriously our commitment to consult those interested in or affected by our airports operation.

We decided to hold the consultation because we strongly believe it is important for everyone with an interest in the future of Gatwick to have an opportunity to have their voice heard and shape the development of the airport at the earliest opportunity.

Although our proposals are at a very early stage, and are not part of a statutory

planning process, our aim was to hold a consultation that met the same standards and reflected best practice in consultation.

We therefore commissioned PPS Group to help develop and deliver the consultation material and exhibitions, and Ipsos MORI to collect, analyse and report on the responses to the consultation. Both were selected on the basis of their extensive experience and reputation in delivering high quality and effective public consultations on major projects, including Nationally Significant Infrastructure Projects. Both contributed substantial advice and expertise to help ensure that our consultation process and documents were balanced, and appropriate.

We also formed a consultation working group with local authority planning officers, as a sub-group of the Gatwick Officers Group. This work included review and feedback

5.2 The consultation

on the consultation exhibition locations; the consultation response form; and the proposed list of stakeholders to be consulted.

We therefore believe that we have taken the necessary steps to help ensure that this consultation was appropriate and fair and achieved its objective, which was to seek views on our three runway options.

It is also important to reiterate here that the purpose of our consultation was to seek feedback on our runway options, not to address the question of whether Gatwick should have a second runway. This is for the Airports Commission to consider, and there will be an opportunity to give views on whether a new runway should be built at Gatwick or elsewhere when the Commission launches its own national consultation later this year.

Criticism that the document lacked information about future airspace (flight paths) was frequent, as was criticism that the information about noise was misleading and lacked detail.

During our consultation many people asked about flight-paths associated with the proposed new runway and why we were not able to describe these.

The process for designing and approving airspace change is managed by the Civil Aviation Authority's Safety and Airspace Regulation Group (SARG) and is described in the CAA publications CAP 724 and CAP 725. The process is designed to ensure that proposed changes to the UK airspace are initiated, considered, refined, approved and implemented in a safe and controlled manner. It is therefore a lengthy process requiring detailed engagement with many stakeholders, including public consultation. The scale of airspace change required to support the addition of a new runway in the south-east is complex and

involves consideration of the impact on other adjacent airports and their traffic flows.

There is already a major airspace change programme underway in the south-east. This is known as LAMP, the London Airspace Management Programme. This programme is re-designing the airspace around London in order to simplify its control and operation, to create capacity and to reduce environmental impacts. It is designed to meet the objectives of the UK Government's Future Airspace Strategy (FAS) and is being carried out in a phased basis between now and 2020. We are working with NATS on this programme which is scheduled to begin operational rollout in winter 2015. As part of this, NATS and Gatwick Airport held a major public consultation on airspace design options between 15 October 2013 and 21 January 2014. A further Gatwick-led consultation is currently taking place with stakeholders, focussed on the impacts of more detailed design options drawn up as a result of the first period of consultation.

While the LAMP process takes no account of a new runway at Gatwick, or at any other London airport, it is a significant change programme which will establish a new framework for air traffic management in the London area. It will be designed to take full advantage of new technologies to drive greater efficiency and minimise environmental impacts. The later phases of LAMP between 2015 and 2020 include changes to Heathrow routes (which currently interact with Gatwick routes) enabling further efficiency improvements in the air traffic management of flights and so the route structure around Gatwick and adjacent airports may look very different by 2020.

If, in due course, the Airports Commission and the Government support the provision of a new runway at Gatwick, a further airspace change programme will be required which is likely to build on the principles established through LAMP. Because, at this stage, we do

5.2 The consultation

not know the structure of the new airspace design that will emerge from LAMP, we are not able to describe how it might need to change with the addition of a new runway.

Therefore, owing to the current change programmes and long timetable required to design new airspace for a second runway at Gatwick and the fact that we are still quite early in the process to determine if a new runway at Gatwick should be built it was not possible to include flight-paths in our consultation material.

We were able to include indicative noise contour drawings in our consultation report. These contours indicate the 'noise footprint' of overflying aircraft. The shape of the contours mirrors the initial departure routes and final approach routes to the two runways. They extend approximately 15km to the east and to the west on the same alignment as the runways themselves. We can be reasonably confident that the modelled flight-paths, close to the airport, are representative of what would be operated if the new runway were built.

The flight-paths further out from the airport are far less certain and could only be identified by following the full airspace change process, referred to above. Such a process would involve a separate and detailed stakeholder consultation process in order to develop options and then finalise these routes based on stakeholder feedback.

We modelled the number of households, population and area that would be affected by different levels of noise for each of the three options, as well as the number of noise sensitive buildings that would be affected, and we provided these details in the consultation document along with noise contour plans for each of our shortlisted options.

The UK Government acknowledges that the summer daytime 57dBA LAeq contour marks the approximate onset of significant community annoyance but recognised that airports may, in addition, want to use a lower level and/or use other noise metrics when reporting on noise.

For this reason we presented the results based on both the 57 and the lower 54dBA LAeq summer daytime noise metric.

We believe that the information provided enabled respondents to assess:

- the relative differences between the noise contours of the three options;
- the difference between noise today and noise in the future.

As such we believe that the information provided was appropriate and sufficient to allow people to comment.

5.3 Benefits of the development

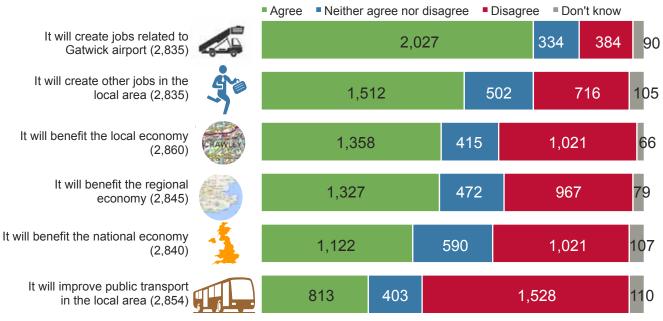
Questions A3 - A5 invited respondents to tell us what potential benefits they saw in the development. The majority of respondents were positive about the benefits of development.

In respect of the wider benefits, the chart below shows that employment was seen to be the benefit most likely to arise from the second runway development. Seven in ten respondents thought the second runway development could create jobs related to Gatwick Airport and over half said it could create other jobs in the local areas. Opinion was more evenly split when considering the potential benefit of the development on the local, regional and national economy. Over half of respondents said they did not agree the development would improve public transport in the local area.

Respondents were then asked to consider a number of potential economic benefits and whether they would personally benefit from them. As can be seen by the chart below, most individuals said they did not think that these potential impacts would benefit them personally. Around seven in ten of respondents said that benefits to the local or national economy, as well as creation of jobs in the local area, would not benefit them very much or not at all. The creation of airport-related jobs was seen to be most likely to benefit respondents personally, with one in three saying it would benefit them a great deal or a fair amount.

FIGURE 3: ECONOMIC EFFECTS OF A SECOND RUNWAY AT GATWICK

Thinking about a second runway development at Gatwick Airport, to what extent, if at all, do you agree or disagree with each of the following statements?

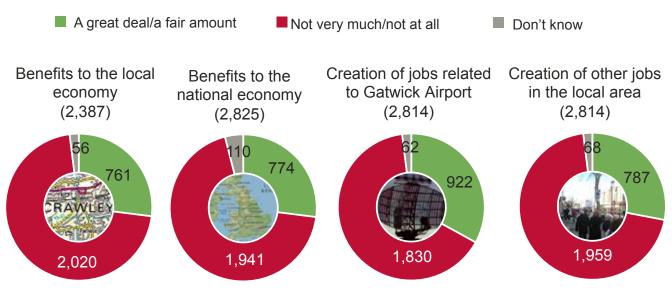


Source: Ipsos MORI

5.3 Benefits of the development

FIGURE 4: EXTENT TO WHICH RESPONDENTS THINK THEY WOULD BENEFIT ECONOMICALLY FROM A SECOND RUNWAY

Thinking about a second runway development at Gatwick Airport, to what extent, if at all, do you think the following would benefit you personally?



Source: Ipsos MORI

The majority of respondents also said that they would not benefit very much or at all from improved transport links, including bus services in the local area, rail services to and from Gatwick Airport, improved road conditions and a wider range of flight destinations from the airport.

A number of respondents also commented on aviation market benefits, as follows:

Comments stating that benefits would include more choice of destinations and more competition between airports. Also that development at Gatwick could reduce congestion at other London airports including Heathrow.

Expanding Gatwick will create genuine competition in the market resulting in lower fares for passengers in relative terms. Whereas any move back to a London airport market dominated by a single player (through further expansion of Heathrow)

would reduce competition and result in higher air fares overall.

Gatwick's forecasting suggests that 10 million more passengers each year will be able to travel with a second runway at Gatwick than with a third runway at Heathrow.

5.4 How we will minimise the impacts

Questions A6 and A7 invited respondents to tell us what they thought of our approach to minimising the impacts of the proposed development. We call these our mitigation plans. Whilst the response to our mitigation proposals as summarised in question A6 was generally supportive, those who chose to comment in A7 were generally concerned that key impacts could not in fact be mitigated, or that mitigation proposed was insufficient.

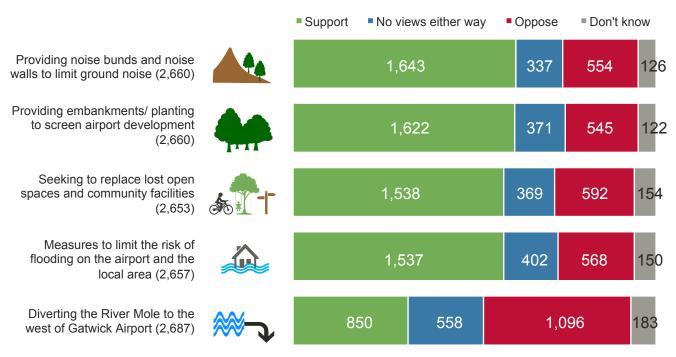
Around three in five supported four out of the five plans to build noise bunds and walls to limit the effect of noise, to erect embankments and plant trees to screen the airport, to replace lost open spaces and community facilities and also to limit the risk of flooding. The exception was the proposed diversion of the River Mole, something which only one in three respondents supported. A greater proportion of respondents, two in five, opposed this.

Some respondents expressed a view that Gatwick's mitigation was well thought out and was welcomed, other respondents who commented on mitigation had a more negative view, suggesting that mitigation measures were insufficient, inadequate or simply that impacts could not be mitigated at all.

Some respondents also made specific suggestions on mitigation measures which they thought should be considered, including re-provision of habitats and preservation of landscape, ensuring that flight paths and physical noise attenuation methods were correctly configured to minimise annoyance from air and ground noise, addressing the impact on local communities, businesses and infrastructure, and addressing flood risk.

FIGURE 5: RESPONSES TO THE PROPOSED LANDSCAPE CHANGES

To what extent do you support or oppose Gatwick Airport Ltd's proposals for:



Source: Ipsos MORI

5.4 How we will minimise the impacts

We recognise that whilst aviation brings great benefits to the national and local economy it also has impacts on the local community in particular. Our overall approach – avoid, minimise, mitigate, compensate – is designed to help ensure that we are as sensitive as possible to local needs and avoid concerns today and in the future.

If Gatwick is selected for development of an additional runway, we will work closely with the local community and other key bodies to help ensure we continue to minimise these impacts.

We have described below key elements of our mitigation plans in response to respondents who suggested that measures were insufficient or inadequate or too vague.

Surface Access

We have developed a comprehensive Surface Access Strategy with our stakeholders to help ensure we take into account both airport users and other users. We have developed a comprehensive set of proposals for all modes of transport (car, rail, bus, coach, cycling and walking) with key stakeholders.

For example, the additional road capacity we have proposed accommodates both the airport traffic and background traffic to maintain current conditions until beyond 2040. We have also tested the network with higher than expected airport traffic that doesn't factor in the target for more trips to travel by train, coach or bus. This help ensure the mitigation is resilient and sustainable for the long term.

Noise

We understand concerns expressed by our local community on the potential impact on them of additional noise with an expansion at Gatwick. We are already working hard to minimise impacts through Our Airport Collaborative Decision Making (A-CDM55) programme, Fly Quiet & Clean (FQC) strategy, noise track keeping system

(CASPAR) and state-of-the-art precision based satellite navigation (PRNAV). These will be extended and continually improved, thereby bringing substantial changes in the way the airport operates for local communities, stakeholders and airport management. Our proposed measures will include:

- Avoiding overflying more densely populated areas including Crawley, Horley, East Grinstead and Horsham and we will work with NATS on flight paths and navigational procedures to further minimise and reduce the number of people overflown;
- Adopting night time preferential runway use, providing respite;
- Aiming to minimise night time noisy ground operations, including construction works, especially at the southern boundary of the airport;
- Concentrating live operations where possible on inner taxiways and aprons at night and other noise sensitive time periods;
- Maintaining restrictions on aircraft types, particularly at night, based on their noise performance;
- Implementing other noise management principles and targets in line with ICAO's 'Balanced Approach' and Sustainable Aviation's Noise Road-Map;
- Working proactively with all current and any future noise authorities.

Although we will minimise noise impact as much as possible we recognise that local communities will be impacted and we have therefore committed to:

 The provision of £1,000 Council tax contribution to affected residents within the future 57dBA LAeq contour and continued implementation of our recently expanded noise insulation scheme;

5.4 How we will minimise the impacts

- Expanding our Home Owners Support
 Scheme to support owners of properties
 which, if development went ahead, would
 be newly exposed to higher levels of noise
 (66dBA LAeq). The voluntary scheme
 means that people will not have to wait
 until any new development has opened for
 any support or assistance against blight, as
 they would usually have to if Gatwick only
 fulfilled its legal obligations;
- Continuing to work in partnership with schools in the impacted area to provide support and funding for insulation and infrastructural upgrades.

We have sought advice from specialist consultants in respect of where and how earth bunds and a noise wall can be placed to best reduce the effects of ground noise. In addition, if selected, we will begin work to assess options for providing a Ground Run Pen (engine testing facility). This work will explore the potential location options and their relative effectiveness in reducing the impact of engine testing noise.

Air Quality

The air quality at Gatwick currently falls well within the legal limits enshrined in EU and UK legislation and is predicted to remain below this level. We nonetheless recognise that air quality is an important determinant of quality of life. We therefore take steps to monitor and reduce air pollutant levels on and around the airport wherever practical to do so. We are committed to maintaining our current performance of zero breaches of air quality limits and we have confirmed this by modelling the potential impacts of second runway. Our key measures will include:

 Our commitment to a set of increased targets for public transport and sustainable modes, which comprise 60% of passengers and 50% of staff travelling by sustainable modes by 2040, will of course contribute to our commitment to improving air quality standards.

- We will also aim to phase out aircraft
 Auxiliary Power Unit (APU) usage, with all
 stands being provided with fixed electrical
 ground power (FEGP); improve ground
 operational practices such as efficient
 aircraft taxiing; promote/support zero or
 ultra-low emission vehicle use by airport
 support contractors and public transport
 operators.
- We will continue to support industry research and innovation into the use of alternative fuels for aircraft and will undertake a review of how we can further utilise preferential charging to encourage improved fleet performance, with the benefits this bring to noise reduction, amongst other performance factors.

Water and Flood Risk

Through its design development Gatwick has sought to avoid, minimise and mitigate flood risk. We have already committed an investment programme of up to £30m to provide best practice flood resilience to protect both the airport and local communities. By diverting the River Mole and removing it from a concrete culvert not only will there be significant wildlife benefits but also the design helps ensure there is no increase in flood risk to the local communities. The design has included consideration of the potential impacts of climate change. We are also proposing to work with local stakeholders to introduce a Community Flood Risk Forum to provide ongoing dialogue with our local communities.

Biodiversity

We recognise the importance of protecting and promoting natural habitats and biodiversity in and around the airport. We actively support and are sponsors of 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

5.4 How we will minimise the impacts

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.

As part of the optioneering process completed to-date, a deliberate choice has been made to avoid and minimise the loss of woodland and most valuable UK Biodiversity Action Plan (BAP) habitat to the east and northwest of the airport. For example, the route for diversion of the A23 is designed to avoid both the loss of listed buildings and sections of ancient woodland to the east of the railway line.

The new river corridors should allow the water courses to develop natural forms within them and will be a significant improvement over what is there at present. The length of the new corridors would be approximately 5.4km around the airport boundary and in places they are over 100m wide.

Over time, subject to the need to manage bird hazard, the river corridors should develop to provide excellent wildlife habitat. We are also aware that there will be a need to replant woodland and provide further compensatory habitat.

We will replace woodland at 2:1 ratio for nonancient and 3:1 for ancient woodland with the objective of achieving a net gain in woodland provision. Whilst ancient woodland cannot be replaced, as such, there are established best practice methodologies for translocation of ancient woodland to new sites. The aim would be to develop new woodlands using the translocated material that would have a diverse structure and species composition to match as closely as is possible the character of the ancient woodland affected.

The woodland soil store, coppice stools and where practicable, tree boles, would be saved and moved to receptor site. Where appropriate, dead wood providing habitat for invertebrates and fungi could also be translocated.

In the late 1990s these techniques were used to translocate woodland to enable construction of a second runway at Manchester Airport. It is generally accepted that while the resulting translocated woodland is no longer "ancient", it has developed to provide significant nature conservation and amenity value.

Key to the success of our project will be the choice of location of the new woodland planting, and how it links to other habitats. It will be very important to monitor over time the development of the new habitat, and to provide ongoing management and protection for the new site while it establishes. This notwithstanding, we will look to place public access to the new woodland at the heart of our proposals.

Gatwick already has a very strong track record for the successful management of trees and woodland within its boundary for nature conservation benefit. We will continue this strategy and, in the longer term, we believe that the translocated woodland and the additional woodland planted as a result of the proposed development will become important for both wildlife and people.

We will work closely with Natural England and other authorities to develop detailed mitigation plans to avoid, reduce, and where necessary compensate for impacts to protected species such as Great Crested Newts and bats. We will ensure that the natural range of these species is not reduced and that the long term conservation status is not adversely affected, and is preferably enhanced over time.

We will explore the opportunity for a biodiversity offsetting scheme with the Local Biodiversity Partnership which includes the Woodland Trust and the Wildlife Trust, e.g. to explore if there are opportunities to acquire land from private land owners to add to the woodland owned and managed by the Woodland Trust at Glovers Wood Site of Special Scientific Interest (SSSI).

5.4 How we will minimise the impacts

We are very willing to participate in separate biodiversity off-setting and/or enhancement schemes at more distant locations from the airport site. Such initiatives would be explored in conjunction with Natural England, the Environment Agency, the Wildlife Trusts, and other interested stakeholders.

Landscape (including heritage / visual impacts)

We do not believe that the proposed development will significantly change the landscape character of the wider area around Gatwick. This is because the area where the existing airport is situated lies between the towns of Horley and Crawley, and has higher ground surrounding it to its west and south. The project does not open up new long distance views from places which presently cannot see the existing airport or the surrounding towns.

The main areas where landscape change will occur locally will be in the areas between the existing airport and the northern edge of Crawley and the area lying between the railway and the M23. These areas are very largely the same as that safeguarded for a new runway following the 2003 Air Transport White Paper.

A very large extent of the airport boundary, however, will remain unchanged. The flat topography and large numbers of mature trees and thick hedgerows means that the existing airport is well screened from many areas, and in many places difficult to see even when relatively close to it. We believe that the new airport development can be also be screened, and our proposals are intended to provide a boundary which will appear as an attractive natural form in the landscape over time. In some locations, however, we expect that larger buildings and aircraft tail fins may still be visible.

Along the southern and western boundary, the river diversion corridors, and landscaping bunds will act to screen the boundary, and will in time develop a natural appearance. A very large part of the new development west of the railway line will, however, comprise open airside grasslands which will be green in appearance when seen from elevated distance views.

We have focused on understanding the effects at international, national and regional scale, and to also understand the amount of environmentally important features affected (e.g. ancient woodland, woodland and hedgerows).

Our assessment is that the Options will not have effects to nationally or internationally designated sites. There could however, be affects to regionally important sites (e.g. at Willoughby Fields and Rowley Wood).

In the event of being chosen for development of an additional runway, the next steps for us will be to undertake further work to understand in greater detail what the options may be to offset and compensate for the habitats lost. We will look to develop proposals with interested stakeholders, and then to consult more widely on the options available.

5.5 Surface transport

Questions B1 and B2 invited respondents to tell us what they thought of our airport surface access strategy.

Of those who answered the questions on the response form, more supported than opposed the planned changes to Junction 9 of the M23 and to the M23 spur road to the airport. On the other hand, there were more who were opposed to than supportive of the proposed diversion of the A23 than were in favour of it.

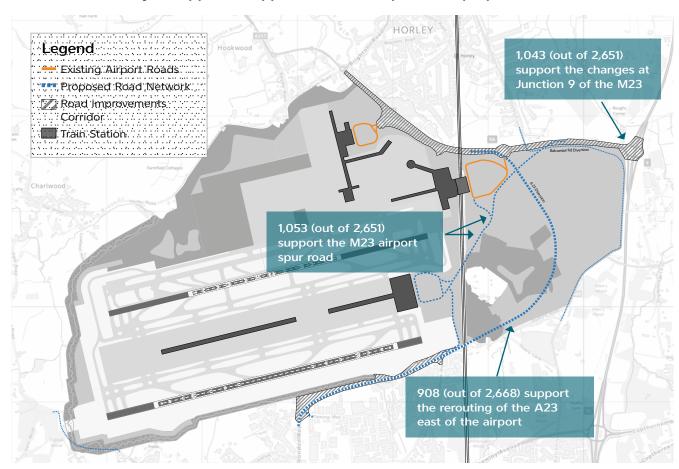
The balance of opinion was more supportive of than opposed to the other aspects of the

Surface Access Strategy. More respondents supported rather than opposed the planned reconnection of local minor roads and cycle paths, footpaths and bridleways and the suggested changes to local bus and coach services and the plans for the Gatwick rail station.

However, open-ended verbatim comments on the Surface Access Strategy were much more likely to express concern than to be positive. By far the most common concerns were about increasing traffic and how the local road system would cope. Some

FIGURE 6: ATTITUDES TO OTHER PROPOSED CHANGES TO LOCAL TRANSPORT NETWORK

To what extent do you support or oppose Gatwick Airport Ltd's proposals for:



Source: Ipsos MORI

5.5 Surface transport

members of the public said the road network was already subject to gridlock; many more expected the level of congestion to get worse if these proposals went ahead. Several stakeholders took a different view, and wanted the proposals to go further to ensure more capacity on roads further away from the airport (e.g. longer stretches of the M23). However, other stakeholders were worried about how changes to more minor roads, such as the Lowfield Heath Road, would affect the volume of traffic on other routes.

Fewer open-ended, free-text question comments were made on other aspects of the Surface Access Strategy, such as the changes to the bus, coach and rail services. Some members of the public were concerned about the level of congestion and overcrowding on local trains, and how much additional pressure would be placed on the railway network. Responses from stakeholders

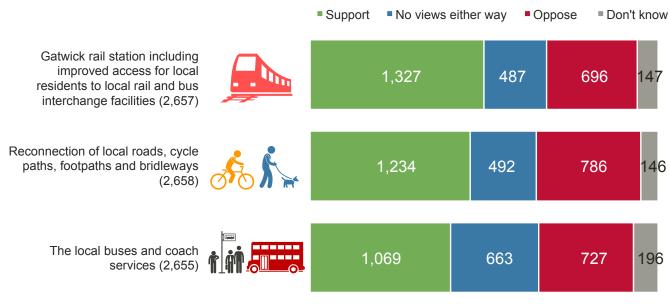
were generally favourable to the idea of Gatwick Gateway or to improvements to the local rail network. Improvements to particular lines, such as the North Downs Line were suggested.

The balance of opinion was more positive than critical towards our other proposals for rail and bus services and for local roads and paths in the area.

Half of those who responded to the question on the response form supported the proposals for Gatwick rail station, and almost half supported the plans to reconnect local roads, cycle paths, footpaths and bridleways. Two in five supported the proposals for the local bus and coach services. In each of these cases, there was much more support than opposition, although there were some who had no views or said they did not know.

FIGURE 7: ATTITUDES TO OTHER PROPOSED CHANGES TO LOCAL TRANSPORT NETWORK

To what extent do you support or oppose Gatwick Airport Ltd's proposals for:



Source: Ipsos MORI

5.5 Surface transport



Some respondents welcomed the surface access proposals, stating that they would improve the road and public transport infrastructure for the airport and for local residents alike, other respondents expressed a more negative view, with the majority expressing concerns about additional road traffic congestion on local roads, trunk roads and the motorway network. Some respondents expressed concern about rail congestion and overcrowded trains.

Our Consultation Document set out the basis of our Surface Access Strategy and the recommended measures we propose to manage the impact of airport development on the road and railway networks. We have undertaken extensive transport modelling of the local road, strategic road and rail networks to test the impacts of a second runway in 2030, 2040 and 2050. This analysis allows us to compare the impacts with and without a new runway at Gatwick, so we can estimate the effects of background traffic alone, to test the ability of existing networks to cater for future traffic. Our analysis makes it clear that without investment in local roads and the rail network conditions for all users will gradually become significantly worse than exist today. On the rail network this will

be mitigated by a series of improvements already committed but investment will be necessary for local roads and connections to the M23 motorway.

The models we have used for this analysis are those used by the Department for Transport. Our proposals were discussed and developed with stakeholders such as local authorities, the Highways Agency and Network Rail. This process was not an isolated consultation but is part of a continuous programme of engagement on surface transport covering all aspects of access to and from the airport.

Currently 44% of air passenger surface access journeys are by public transport, and we are targeting this to increase to 60%. To do

5.5 Surface transport

this our strategy includes a comprehensive package of measures to encourage more people to travel by rail, coach or bus. The same is true of our employees, where we have incentives and initiatives for sustainable journeys to work and a target of 50% staff travel by these modes. We are committed to making public transport more attractive and the regular mode of choice for the majority of travellers to and from the airport, whatever their purpose.

In response to comments received from the consultation we have prepared a plan showing more detail on our local roads strategy, which has been amended to reflect these comments. Plan F at the back of this report illustrates the way in which separate routes to the airport terminals allow through traffic on the A23 to pass freely, with grade separated junctions that show how future improvements provide more than enough capacity for airport expansion and background growth. We are clear that our recommendations are sufficient to manage the impact of airport growth on surface transport networks. Both Network Rail and the Highways Agency have confirmed our assumptions, and agree with our overall conclusions.

Rail

Gatwick's aim is to balance the number of journeys to roughly equal by road and rail. Gatwick is fortunate to have a main line railway station directly connected to the South Terminal, ensuring excellent access throughout the day. This means we are confident that our current rail access mode share of 38% can rise to over 50% by 2040. We can achieve this because we are already working with rail industry partners to deliver extra capacity and quality and will continue to do so. Key elements of our proposal for high rail mode share are:

 Changes to the Thameslink services (via London Bridge and St Pancras) to give more than double the number of seats

- in the peak hour towards London by 2018 and even more capacity in the future;
- Brand new trains on all Thameslink services by 2018 with space for luggage, first class compartments and air conditioning;
- New trains for Gatwick Express that will be easier to board and with interiors and branding created specifically to cater for air passengers, which will arrive by 2016;
- Improvements on the Brighton Main Line and on the route into London Victoria to allow many more trains to run in peak hours, several of these serving Gatwick;
- Further service improvements, planned and agreed with Network Rail, the DfT and train operators so that by the time a new runway is built there will be a train towards London every 2.5 minutes;
- This extra capacity delivers between 8,000 and 10,000 more seats per peak hour in each direction, double the current number, before a second runway would open. The extra trips created by a second runway, allowing for reaching our higher rail mode share by 2040 would only require about 4,000 seats, leaving lots of extra capacity for other rail users;
- Our railway station also requires additional capacity and improvements to reduce queuing in the concourse, at the ticket machines and on platforms. Gatwick is working with Network Rail and the DfT to create a new concourse, three times the size of the existing one, more lifts and escalators down to platforms and better passenger facilities. This will be sufficient for airport growth and cater for an increase in the more than one million commuters and leisure travellers that use the station regularly but do not access the airport;
- Improvements to the North Downs Line, including full electrification and changes that support a doubling of the peak hour

5.5 Surface transport

frequency of direct trains between Reading and Gatwick, are being planned by Network Rail and Gatwick is in consultation with them around completing these improvements within the next ten years, before a second runway would be open;

 Passengers will be able to use Oyster cards for their journey to Gatwick for the first time this autumn.

Interchange

Our masterplan sets out to minimise journey times, including connections within the airport. For surface access this requires simple, efficient interchange, at terminals and at the Gatwick Gateway. Following the consultation responses we have reviewed our interchange plans to provide more focus for local non-airport access by reviewing the way:

- Local buses access each terminal to allow drop off and pick up for air passengers and employees. We have improved routes and increased the amount of bus priority.
- The new coach station would work at the Gatwick Gateway and propose better access for local residents and non-airport users transferring to coach or rail.
- We will develop a unique air rail partnership with the new Thameslink rail franchise GoVia Thameslink.
- Pedestrian and cycle access to the airport is developed in light of proposed boundary and road alignment changes.

Road

In response to comments received from the consultation we have prepared a plan showing more detail on our local roads strategy, which has been amended to reflect these comments. Plan F at the back of this report illustrates the way in which separate routes to the airport terminals allow through traffic on the A23 to pass freely, with grade separated junctions that show how future improvements provide more than

enough capacity for airport expansion and background growth. We are clear that our recommendations are sufficient to manage the impact of airport growth on surface transport networks. Both Network Rail and the Highways Agency have confirmed our assumptions, and agree with our overall conclusions.

- The Government announced a 'Smart Motorway' Scheme for the M23 in July 2014. This includes an extra lane on the M23 (by converting the hard shoulder) which will add between 25-30% capacity. The total flow to and from the airport, during the commuter peak hour will be less than one quarter of the overall capacity, meaning there will be more capacity for general traffic too.
- We fully fund a scheme to double the capacity of the M23 Junction 9 by adding a new slip road leading to a new spur road to the airport, creating capacity for over 3,000 more vehicles per hour to access the airport.
- The number of lanes from the M23
 accessing the airport will be doubled with
 separate routes to the North Terminal,
 South Terminal and the New Terminal.
 These routes have been designed with
 capacity for growth in non-airport traffic
 using the motorway between junction
 9a and 9. It means that more than three
 quarters of traffic accessing the airport will
 take a separate route to local traffic, but
 both with have more capacity.

Our proposed local road improvements are shown on Plan F at the back of this document and include the following:

 The A23 will be diverted and separated from the main access routes to the airport, which is a major benefit for local trips. This lets through traffic flow more freely and provides capacity for background growth. This extra capacity would have to be provided even without a second

5.5 Surface transport

runway, with the burden falling to the local authorities involved. Because of the airport expansion the A23 can be re-provided away from its current constraints near North Terminal and South Terminal and grade-separated junctions with flyovers can be incorporated. This separation of traffic is shown in Plan F, which also shows how grade-separated junctions will reduce the number of delays and mitigate queuing traffic. Although the route is slightly longer, traffic will travel more freely, with less delay, due to the efficient design.

- Connections to the motorway at Junction 9
 from Horley and Crawley will be improved
 with additional capacity specifically for
 non-airport traffic 100% funded by the
 airport. This extra capacity will be needed
 for background growth in any case, most
 likely before a second runway would be
 operational.
- Detailed design of any new or improved highway links will incorporate noise reduction measures, either through specifying noise reducing surfaces or working with local authorities and the Highways Agency to incorporate noise barriers and other mitigation measures. Our approach also allows for traffic to flow more freely ensuring mitigation of air pollution issues at junctions and a reduction in stationary or slow-moving traffic.
- Access to car parks will be improved so that it will be quicker and easier to access these. Long stay car parks will be consolidated in one area, close to the M23, which will further reduce flows on parts of the local road network.
- We have amended proposals for Balcombe Road to account for comments received from the consultation. This includes retaining access to Peeks Brook Lane and to a listed building at Teizers Farm close to Antlands Lane. Our aim is to make sure local connections are retained and improved, but not so much as to increase

- traffic on these routes, which should be mainly for local users.
- There is no proposal to make changes to the current restricted access to the airport from Povey Cross Road, consistent with our approach to avoid increasing traffic on local roads.
- To reflect the needs of access to development sites and major commercial premises close to the southern boundary of the airport we have refined the alignment of the A23 diversion and changed the junction arrangement at Fleming Way. This takes up slightly less land and affects less property at the western end of Fleming Way.
- We are committed to preserving the medieval moat at Ifield Court, which is a scheduled ancient monument. We have revisited how the short diversion of Ifield Road can be aligned close to the proposed new route of the River Mole to avoid impacting on Ifield Court.
- By providing around 9km of extra footpaths, cycleways and bridleways, Gatwick will improve both routes to and from the airport and recreational routes for local communities. In many cases the new routes will be more accessible, of better quality and with improved wayfinding, designed to be safe and secure. Following on from responses to our consultation document we are developing our proposals even further, ensuring specific connections are retained or replaced with equivalent new provision. This includes required changes affecting Peeks Brook Lane and Balcombe Road to the east and Charlwood Road, Lowfield Heath Road and Bonnetts Lane to the south and west of the airport.

Some comments have referred to improving links to the east, for example between East Grinstead and M23 Junction 9, to relieve pressure on the A264. This issue will be discussed more generally with Surrey County

5.5 Surface transport

Council and West Sussex County Council. However, we do not believe it is warranted specifically in relation to airport access. In addition, it would impact on Bridges Wood, an area of ancient woodland east of Junction 9.

We recognise that congestion on the A264 is an important issue for local communities, and is one of wider relevance than just for airport related traffic. However, Gatwick wishes to support local authorities to find a solution that meets future demand and has made a commitment to help fund further road improvements that meet local objectives. To ensure that local authorities can improve local roads where Gatwick is one of a number of contributors to traffic, we have developed the Local Highway Development Fund for local authorities to draw on. This makes it easier for West Sussex, Surrey, East Sussex and Kent to deliver improvements that may not otherwise be affordable within their approved spending plans, or may be difficult to fund with contributions from other developers.

We note that some consultation comments received made reference to the impact of road noise from existing routes, in particular the M23. Our proposals for road improvements allow these issues to be addressed for some communities affected, as part of a comprehensive design with suitable landscaping and mitigation.

There were numerous other suggestions including that the surface access strategy should be expanded further to include improvements to existing road infrastructure and links (A23/M23/M25/local roads), improvements to existing rail and public transport infrastructure, network and to include direct links from Gatwick to other major airports.

Our analysis shows that not only does our Surface Access Strategy deliver sufficient capacity for airport traffic but it also supports wider traffic growth, including local highway improvements 100% funded by the airport. We do not require additional public funding to deliver our surface access needs. The scale of additional capacity, on the A23, M23, local junctions and railway network is greater than the increase in demand, so conditions will improve overall with the investment proposed.

Responses to our consultation highlighted some more general issues for transport in the South East that indicate strong support for better public transport links in some areas, and for investment in roads to mitigate congestion. This includes transport needs to the east and west, into Kent and Surrey. Investment from Gatwick can help to deliver solutions to these issues but we will need to work with local authorities and transport operators to provide sustainable, long term answers. In some cases the issues raised in consultation are long standing and the impact of airport demand is only one of a number of contributions. Gatwick has identified the most direct impacts, where the airport contributes most of the related traffic, and will fully fund improvements. Our commitment is to also part-fund wider improvements in consultation with others. This balanced approach results in extra capacity for non-airport traffic and transport demand, funded by Gatwick, for local users. This has been welcomed by local authorities as it will help their own funding go further to meet local objectives.

We have worked closely with Network Rail and the Highways Agency to ensure the needs of the airport passengers and employees can be accommodated alongside other users, particularly in peak periods. We will continue to work with Network Rail and Highways Agency to bring forward further schemes as part of their long term planning process. We will also liaise with local authorities, and respond to concerns of local communities and representative bodies, to examine the case for further

5.5 Surface transport

interventions to improve surface access. This will be an important part of the statutory planning process and positive engagement with transport providers and authorities is ongoing.

The strategy delivers value for money, an important criterion set by the Airports Commission, by making best use of existing and planned infrastructure. The need for additional infrastructure, over and above that proposed is not supported by Network Rail or the Highways Agency and risks additional blight on local communities. We have looked carefully at where to put new infrastructure, and how best to divert roads, taking account of safety, environmental, accessibility and capacity objectives.

Our Strategy builds on the significant extra capacity being delivered over the next ten years and adds further capacity for all users of Gatwick Airport station, the A23 between Horley and Crawley and from the M23 Junction 9. The majority of our spending on roads is targeted at the public highway outside of the airport and creates capacity available to all. Although the number of airport users will broadly double, this does not mean the number of car trips and rail passengers in the busiest times of the day also doubles. Gatwick demand will be spread more evenly, in most cases outside of times when commuters travel, when there is less demand on the transport networks. We have created separate routes for the A23 and access to the airport to reduce delays and to cater effectively for traffic growth, whether it is airport-related or traffic to or from Horley and Crawley.

Public transport journeys by airport passengers and employees make an important positive contribution in terms of revenues and utilises available space in the off peak period and in the opposite direction to commuters. Accessibility and connectivity for buses, coaches and trains will be improved and Gatwick will continue to make

public transport more attractive and easier to access. This is why we are promoting the highest public transport mode share of all those being considered by the Airports Commission.

Gatwick provides considerable ongoing support, around £1m per year to local public transport services and sustainable travel, and we continue to work with transport operators to make improvements. With a second runway this contribution, known as the Passenger Transport Levy, would approximately double to £2m per year, allowing more flexibility to support a wider range of services and initiatives, over a wider area, for more of the time. Gatwick's support means that some services that would not otherwise be commercially viable for operators can stay in place, creating vital links for communities. We can fill more of these gaps with the additional funding proposed.

Our proposal also brings forward some important infrastructure improvements that deliver wider benefits to the region. Gatwick's lobbying with its stakeholders for rail and road improvements on the strategic networks will directly benefit the region many years before they would otherwise have been delivered.

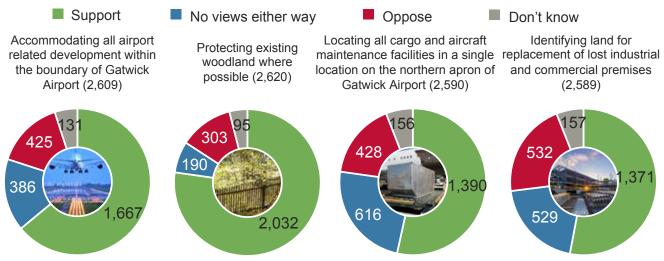
Some consultation responses mentioned access between Gatwick and other south east airports, as a way to help passengers transferring between flights. Our analysis, and the views of our stakeholders, confirms that there is not a significant enough market for links to other airports and demand does not support the business case for investment. This is borne out by the evidence of current coach links, which do not generate sustainable demand.

5.6 Airport related development

Questions C1 and C2 invited respondents to tell us their views on our airport related developments. The chart below shows that the majority of those who responded to the consultation questions supported the proposals for airport related development.

FIGURE 8: ATTITUDES TOWARDS AIRPORT-RELATED DEVELOPMENTS

To what extent do you support or oppose Gatwick Airport Ltd's proposals for:



Source: Ipsos MORI

When reviewing our airport related development, many of the negative comments related to the impact on woodland, and in particular ancient woodland as a result of the second runway development. Other comments expressed concern about the extent of land take proposed as a result of the development, and concern about the impact of loss of homes and the impact on businesses and industrial estates (e.g. Manor Royal).

Some respondents thought that the development of the airport should include provision for infrastructure to support the area, and a number of respondents supported the view that the airport should seek to provide alternative premises for displaced businesses.

In Section 4 we explain our approach to minimise the impact on woodland and ancient woodland in particular. We also explain that, following comments received during the consultation, we have reviewed the boundary and made some adjustments that have reduced the impact on businesses, avoided a Grade II listed property and increased slightly the area of Rowley Wood (an area of ancient woodland) retained.

In developing our proposals, we were conscious of the need to keep the amount of additional land needed to the minimum practicable, whilst meeting the operational requirements generated by the additional runway. The proposal has been designed to bring new land into the boundary only where there is clear justification for doing so.

In the consultation document we explained that Option 3 will result in the loss of businesses in the main employment centres of Lowfield Heath, City Place and the northern fringe of Manor Royal. The area quoted for this was 34.9ha. A variety of further businesses are dispersed over the area of land needed for the expanded boundary.

On reviewing our document we found that the area of employment land affected was

5.6 Airport related development

incorrectly stated. Approximately 55ha of employment land would be displaced by the proposed development. However this does not change our view that the businesses affected could be accommodated within the land to the east of the railway, if they chose to relocate there and if such a strategy were supported by the local authority.

In our consultation document we set out a proposal to identify land for replacement of lost industrial and commercial premises within the airport boundary, which could be used for development of accommodation for displaced businesses if there were no other more suitable options. There was strong support for this option from respondents.

This principle will now be discussed in further detail with the local authorities to understand how, if required, this replacement land could form part of an overall strategy for employment land in the local area. To help move this forward, a dedicated working group is being formed as a sub group of the Gatwick Officers Group. This will examine the types of businesses, land requirements and land availability so that an integrated strategy can be developed which meets the needs of both the businesses impacted and the wider local area.

We have carefully considered the concerns of local home owners during the consultation, which is why we have further increased the compensation made to home owners to 25% above the market value for their properties. This pledge will apply to home owners already eligible under our existing Property Market Support Bond. We will revise the details of this £131m scheme to take account the additional compensation level.

Concerns relating to local infrastructure were are recurring theme in responses. This is why we are now making a pledge of £46.5m to create a housing infrastructure fund for local authorities, which commits £5,000 per new house built as a result of Gatwick's expansion, to support the delivery of community infrastructure.

Runway Crossings

Many comments upon runway crossings were negative. They were perceived to be problematic/dangerous, with increased risk and operationally inefficient.

We note that, of those expressing an opinion, there was a high level of support for minimising or avoiding runway crossings. This was often for reasons of safety and operational efficiency.

While runway crossings have the potential to cause delays, if properly managed we believe it is possible to integrate runway operations and taxiing aircraft satisfactorily, as is the case at many major airports worldwide. Similarly while runway crossings have the potential to increase the risk of runway incursions, new procedural and technological solutions are being developed to manage this risk. Systems are already in place at some airports to automatically monitor the movement of aircraft on the ground, to mitigate the risk of incursions, and this type of technology would certainly be investigated for Gatwick if runway crossings were a routine aspect of our operation.

End Around Taxiways

Positive comments in favour of their use, stating that they would improve safety and efficiency.

We note the strong support for End Around Taxiways (EATs) to avoid or minimise runway crossings. We also recognise the potential benefits of EATs and therefore will continue to safeguard their inclusion in the Option 3 master plan.

Drawing A at the back of this report illustrates the layout plan for Option 3 without the EATs. However we continue to safeguard for EATs (which would require 20ha more land at the west end of the existing runway), as explained in the original consultation document.

5.7 Selection of runway option

Questions D1 and D2 addressed the question of which runway option Gatwick should pursue. Of those respondents who stated a preference, the majority supported Option 3, which was also our provisional preferred option.

Although we stated clearly that the consultation did not seek to address the question of whether Gatwick should have a

second runway, and made clear that there will be an opportunity to give views on whether a runway should be built at Gatwick or elsewhere when the Commission launches its own national consultation later this year, a large number of respondents did choose to express their opposition for a second runway at Gatwick.

FIGURE 9: ATTITUDES TOWARDS THE SECOND RUNWAY OPTIONS

Which one of the THREE options put forward by Gatwick Airport Ltd, if any, is your preferred option for the second runway at Gatwick?

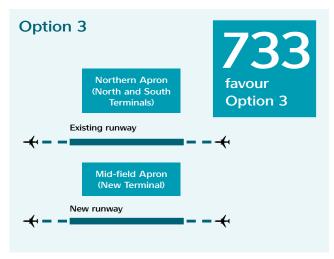
Close Spaced Dependent Segregated Mode

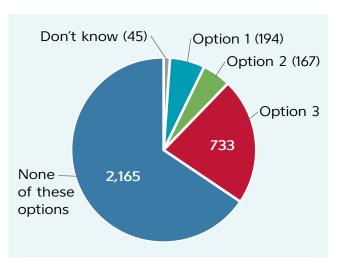


Wide Spaced Independent Segregated Mode



Wide Spaced Independent Mixed Mode





Source: Ipsos MORI

5.7 Selection of runway option

Option Preference

Amongst those respondents who expressed a preference between options 1, 2 and 3, a clear majority supported Option 3, with comments suggesting it provides a long term future proof solution, allows for greater operational efficiencies/flexibility, provides the maximum benefits and maximises the potential increase in capacity, and maximises economic benefit locally and nationally. Other comments responded favourably to the operational benefits of Option 3.

Conversely, positive comments about Option 1 tended to focus on the option's lower impact on the local area, lower noise, and statements to the effect that it was the 'lesser of three evils', rather than on its benefits for airport users and the economy.

Option 2 received the fewest comments in support, with those comments focusing primarily on the view that Option 2 results in the lowest amount of additional noise whilst enabling independent operation and provision of a new terminal building.

We explained in our consultation document that we had evaluated and ranked the three runway options we were considering in a provisional order of preference. We explained that we had reached the provisional view that Option 3 had the best performance overall, followed by Option 2, then Option 1.

Criticism of Option 1 focused on views that it was a compromise, or a short term solution which did not deliver sufficient additional capacity to justify consideration. Some respondents commented that Option 1 had been previously ruled out by the Airports Commission and that as such, it should not have been offered for consideration.

Option 1 was included as an option for consideration in the consultation because it was under consideration by Gatwick as a viable option for delivery of a second runway.

We clearly set out within the consultation document the process by which we developed our runway options, which led to the shortlisting of Options 1, 2 and 3.

We also clearly stated the outcome of our process of ranking the options in a provisional order of preference, with Option 3 being our preferred first choice. Opposition to Options 2 and 3 focused on the greater land take (when compared to Option 1), bringing the airport boundary closer to residential and commercial areas, and on the perceived greater noise impact relative to Option 1. Some respondents were critical that Options 2 and 3 appeared too similar, and some suggested that the choice had already been made and that Option 3 would be built regardless of opinions expressed in the consultation.

Options 2 and 3 do have a greater land take than Option 1.

Gatwick's assessment is that whilst Option 1 has the lowest overall environmental impact, Option 3 brings the greatest social and economic benefits, and greatest operational efficiency.

It is incorrect to say that Option 3 would be built regardless of opinions expressed in the consultation. As explained previously, one of the purposes of the consultation exercise was to elicit views on the relative merits of the three options in order to help Gatwick reach its final decision.

5.7 Selection of runway option

Some respondents suggested that Gatwick should not consider development until it is fully utilised, and others stated the view that the expansion proposals were only being made for financial / profit reasons.

Some expressed the view that Gatwick is too small, or is in the wrong place for development, and that demand for air travel would in any case reduce in the future.

Gatwick has put forward its expansion proposal because it believes that there is demand for an additional runway. Gatwick is already operating close to capacity at peak times although there are times of the day and year where further growth is possible. However we expect the airport to have reached its maximum capacity of 45mppa by 2025. Beyond this time only very small rates of growth will be possible. As we are now only 10 years from reaching capacity, now is the time to consider the case for expansion. The time needed to secure planning permission is lengthy and, if the airport is to continue to help meet the demand for air travel, the planning process needs to begin now.

We firmly believe that the master planning work underpinning our consultation proposal demonstrates that Gatwick can grow into a highly efficient two-runway airport. The proposed boundary provides the right amount of land to support the level of throughput forecast. This has been tested by our experienced team of consultants with simulation modelling and other planning studies.

Gatwick is already the UK's best connected airport by rail, and by 2020 it will connect directly to 175 mainline stations and 1000 with a single change. 15 million people – a quarter of the UK population – will be within

60 minutes of Gatwick by 2019 - more than any other UK airport.

Some respondents expressed a view that a new runway or airport should be built elsewhere, with Birmingham, Manchester, Thames Estuary, Heathrow, Stansted, Manston all mentioned.

The Commission received a large number of submissions from proposers including schemes at Birmingham, Stansted and other locations. In December 2013 they shortlisted Heathrow and Gatwick as the schemes they would take forward for assessment, and also committed to exploring the Thames Estuary scheme. The Commission will hold a national public consultation on their shortlisted schemes later this year.

6. Our community pledges



Through our ongoing engagement with local authorities, local business groups and statutory stakeholders, we already had a good understanding of the key issues of concern in the local area. We used this knowledge to help inform our submission to the Commission on 14 May 2014.

By undertaking this consultation, we have also been able to hear directly from local residents, businesses and other stakeholders on what is most important to them when considering the development of a second runway at Gatwick. This has been invaluable in helping us confirm which issues are most important, and to identify new areas that we may need to explore further.

Although our proposals for a second runway at Gatwick are still at a very early stage, we believe it is vitally important to begin to set out how we can help ensure that expansion can benefit the local community, and how we might compensate those most affected.

We are therefore launching a package of measures for the local community, which responds to the issues that have been identified to us both through our ongoing engagement, and via our consultation. Some of these have already been published, and formed part of our submission to the Commission, and some of them are new.

1. We have carefully considered the concerns of local home owners whose homes would be affected. A Property Market Support Bond fund of £131m will offer owners whose homes we need to purchase 25% above market value for their properties, significantly above what Gatwick is statutorily required to offer home owners. This pledge will also apply to home owners already eligible under our existing Property Market Support Bond. We will revise the details of this scheme to take account the additional compensation level.

6. Our community pledges

- 2. In addition there is a £14m Home Owners Support Scheme to support owners of properties which, if development went ahead, would be newly exposed to medium-to-high levels of noise (66dBA LAeq). The voluntary scheme means that people will not have to wait until any new development has opened for any support or assistance against the risk of blight, as they would usually have to if Gatwick only fulfilled its legal obligations.
- 3. We pledge £3.75m to help create 2,500 new apprenticeships for local young people. This is one part of our Life Long Employability Programme, which will aim to engage and up-skill all working age sections of the community to position them to capitalise upon employment and career development opportunities anywhere in the region.
- 4. We pledge £46.5m to help local authorities deliver essential community infrastructure, associated with any new house-building that arises as a result of expansion at Gatwick.
- 5. We will establish a new Engagement Charter setting out how we will work with local landowners and businesses if they are impacted by development of a second runway.
- 6. We will establish a Community Flood Risk Forum to provide ongoing communication and dialogue with our local communities on this critical issue.
- 7. We will develop local partnerships which can target investment in identified regeneration priority areas; bringing together local procurement; skills and development agencies to capitalise upon local uptake of employment opportunities.
- 8. We will continue our support of the existing Gatwick Community Trust, and establish a new Community Foundation to build on the work of the Community Trust, to support sustainable development

- in our communities, with funding directly linked to growth in passenger numbers at the airport.
- 9. We commit to supporting further road improvement through the introduction of a £10m Local Highway Development Fund should we build a second runway. Local authorities would use the fund to help improve the local road network where Gatwick is one of a number of contributors to traffic.
- 10. Gatwick's unique Council Tax Initiative would see those homes most affected by noise from a second runway receiving annual compensation equivalent to Band A Council Tax (currently £1,000) if and when the runway becomes operational.
- 11. We will extend our existing Noise Insulation Grants Scheme to cover the equivalent area for the second runway. Gatwick has recently announced a significantly expanded noise insulation scheme which is one of the most innovative at any airport in Europe. The noise threshold for the scheme has been reduced, with the boundary line drawn flexibly to ensure entire streets and communities are included. The boundary has also been extended along the flight paths by 15km to both the east and west of the airport. Eligible homes can apply for up to £3,000 towards double glazing for their windows and doors and loft insulation. Over 40% more homes are now eligible than under the old scheme. This scheme would be extended to cover the equivalent area for the second runway should this be built. Again we would draw the boundary line for this scheme flexibly to ensure entire streets and communities were included.

7. Our submission to the Airports Commission



The Airports Commission's timetable required additional information on Gatwick's Option 3 (the option shortlisted by the Commission) to be submitted on 14 May 2014, in line with their published Appraisal Framework. This timetable was confirmed in the Commission's Interim Report in December 2013. This was after we had committed to our programme for delivering our consultation in April and May 2014. Therefore our work for the Commission and our planned runway consultation had to be progressed in parallel, and we committed to providing the Commission results of our consultation by July 2014.

The air traffic numbers for our consultation were frozen in autumn 2013 (based on our original forecasts of May 2013), to allow the technical studies into the environmental, economic and other effects could be commissioned. This meant that the necessary material would be available in time to launch the public consultation on 4 April 2014.

The traffic numbers that Gatwick used for the purpose of these studies are shown below, as at 2050:

Prior to our 14 May 2014 submission to the Commission we reviewed the foundations of our case. For major infrastructure projects extending over lengthy periods of time, it is usual to review data periodically. We were advised in late April 2014 by our traffic forecasting consultants that there was a strong case for increasing forecast annual air traffic movements (ATM) and passenger numbers to a level higher than published in our consultation. This was on the basis that the forecast for our 'busy day' and the peak period numbers used in our analysis would not increase, but that that the spread of traffic across the year at Gatwick could match that of Heathrow's today, since the airports would be of a similar size.

In the light of this advice, we decided to include material covering both the 87mppa case and a 95mppa, 560,000 ATMs case in our updated Option 3 submission to the Commission on 14 May 2014.

Table 1	Annual Passengers (mppa)	Annual Aircraft Movements
Option 1	66	389,000
Option 2	82	483,000
Option 3	87	513,000

With no change to the passenger and airline traffic on the 'busy day' in the peak periods, the size of the proposed terminal, apron parking area and all the principal buildings as well as the boundary of the expanded airport would remain unaltered from those shown in our consultation documents. The airport would make no greater contribution to road and rail access at peak periods and the land based environmental effects (such as visual impact, the amount and type of land taken), the ecological effects and the number of residential and commercial buildings lost would remain the same.

The increased annual number of ATMs and passengers does, however, make some difference to our noise and air quality

assessments as well as affecting, water consumption and water discharges and the overall economic and employment opportunities.

Air Noise and Ground Noise

In the Consultation report we set out the number of properties, population and noise sensitive buildings that would be subject to levels of noise for each of our three options.

The table below provides an update with the revised figures for the size of the contour area, population and households affected for Option 3 being shown in the main table in red and the figures associated with our previous 87mppa case being shown in brackets.

Table 2 54 dBLAeq, 16hr noise contours and 57dBLAeq, 16hr noise contours	Contour Area (km²)	Population in contour (thousands)	Households in contour (thousands)
54dBALAeq, 16hr noise contours			
Existing Runway at Gatwick (2040)	64.1	7.7	3.1
Option 1 (2040)	85.2	10.2	4.1
Option 2 (2040	109.0	25.9	10.0
Option 3 (2040)	121.7 (118.3)	32.2 (31.1)	12.4 (12.0)
Option 2 (2050)	113.3	25.2	9.7
Option 3 (2050)	126.7 (124.1)	31.4 (30.6)	12.1 (11.8)
57dBALAeq, 16hr noise contours			
Existing Runway at Gatwick (2040)	35.4	3.1	1.3
Option 1 (2040)	46.6	2.7	1.1
Option 2 (2040	61.0	10.8	4.1
Option 3 (2040)	66.5 (64.7)	15.4 (14.4)	5.9 (5.6)
Option 2 (2050)	62.4	11.3	4.3
Option 3 (2050)	68.2 (66.9)	14.6 (14.2)	5.6 (5.5)

Table 3 below shows the updated figures for the number of schools and other noise sensitive buildings affected. The updated Option 3 figures are in the table in red and the figures associated with our previous 87mppa case being shown in brackets.

Table 3 Noise Sensitive buildings	Schools / Nui	rseries	Hospitals		Places of wor	rship
	54dBALAeq	57dBALAeq	54dBALAeq	57dBALAeq	54dBALAeq	57dBALAeq
Existing Runway at Gatwick (2040)	10	3	0	0	10	0
Option 1 (2040)	12	3	0	0	10	1
Option 2 (2040	24	6	1	0	18	2
Option 3 (2040)	33 (31)	10 (8)	1 (1)	0 (0)	20 (19)	5 (5)
Option 2 (2050)	25	8	1	0	18	4
Option 3 (2050)	<mark>29</mark> (29)	10 (10)	2 (1)	0 (0)	20 (20)	<mark>7</mark> (7)

The increased number of aircraft operations on the ground would also have a small increased effect on levels of ground noise.

Air Quality

In the Consultation Report we presented results of air quality modelling in Horley where in the past levels of concentration of nitrogen dioxide (NO_2) have reached levels approaching the Government's standards.

Table 4 below provides the results of the updated modelling we have carried out. The revised results, for Option 3 are shown in in red and the figures associated with our previous 87mppa case are shown in brackets.

Table 4 Current and Predicted NO ₂ concentrations (ugm ³) in the Horley Air Quality Management Area	2012	2040 Option 1	2040 Option 2	2040 Option 3
RG1 Horley	25	27.4	26.4	25.6 (26.3)
RG2 Horley South	31	30.3	29.8	28.8 (29.1)

*In updating our modelling we have used the a slightly more advanced version of the same Air Quality model that we previously used, together with data from some updated traffic surveys. This is reporting slightly lower predicted levels of NO_2 for Option 3 compared to the model we used previously. We would expect that predicted levels of NO_2 for Options 1 and 2 would also now be slightly lower than the results presented in the table.

The updated assessment shows that the predicted concentrations of NO_2 in Option 3, as previously stated, are well within the national NO_2 annual average standard of 40ugm^3 .

Water

There are no material issues in respect of the higher traffic forecast for either water supply requirements or potential additional flood risk.

For water supply, the increased throughput is well within Sutton & East Surrey Water's planned supply to Gatwick. For flood risk, the impermeable area does not change significantly and therefore there are no requirements to change the size of the proposed facilities.

For waste water treatment, our assessments indicate that the infrastructure can accommodate the increases, however, there may need to be some small design changes. A revised operational strategy involving greater use of aircraft de-icer collection and recycling is appearing increasingly desirable. Further consultation with the water companies will take place in due course regarding the changes and our conclusions on them.

Employment and Housing

Our consultation document also included our analysis of the employment and housing growth that might be associated with a two runway airport. We have updated this analysis based on the revised traffic forecast of 95mppa. The updated results have been shared with the local authority Housing and Employment Working Group and an Addendum has been inserted into the original report.

Whilst there are implications arising from the revised forecasts in terms of consequential increases in relation to the maximum associated employment and housing effects that would be associated with the development of a second runway, these do not change the overall conclusions reached in the March 2014 report regarding the impact of a second runway at Gatwick in the context of general growth in the Study Area.

Table 5 below summarises the changes for both employment and housing that arise from the revised air traffic and passenger forecasts in the defined Gatwick Study Area. The Table sets out the previous maximum levels under both headings (again related to Option 3 in the March 2014 report) and the revised estimates, based on a throughput of 95mppa in 2050/51. The methodology used is exactly the same in both cases.

For employment, there is an absolute increase of 4,500 jobs (26%) over the previous 87mppa related increase for the Study Area as a whole. The proportionate effect, however, involves an increase of just 0.3% of total employment in 2050/51 from 1.6% to 1.9%.

In relation to housing the maximum effect rises from 7,000 to 9,300, an increase of 33%. This increase is greater than the increase in employment in percentage terms because the reduction factors used to convert employment to migrant households remain the same (reduced unemployment, increased activity rates and reductions in commuting).

Table 5: Maximum two runway airport employment and household increase to 2050/51 over single runway base, Gatwick Study Area.	Employment (jobs)	Households
March 2014 (Option 3)	17,500 (1.6%)	7,000 (4.1%)
May 2014 (AC submission)	22,000 (1.9%)	9,300 (5.4%)
Increase	4,500	2,300

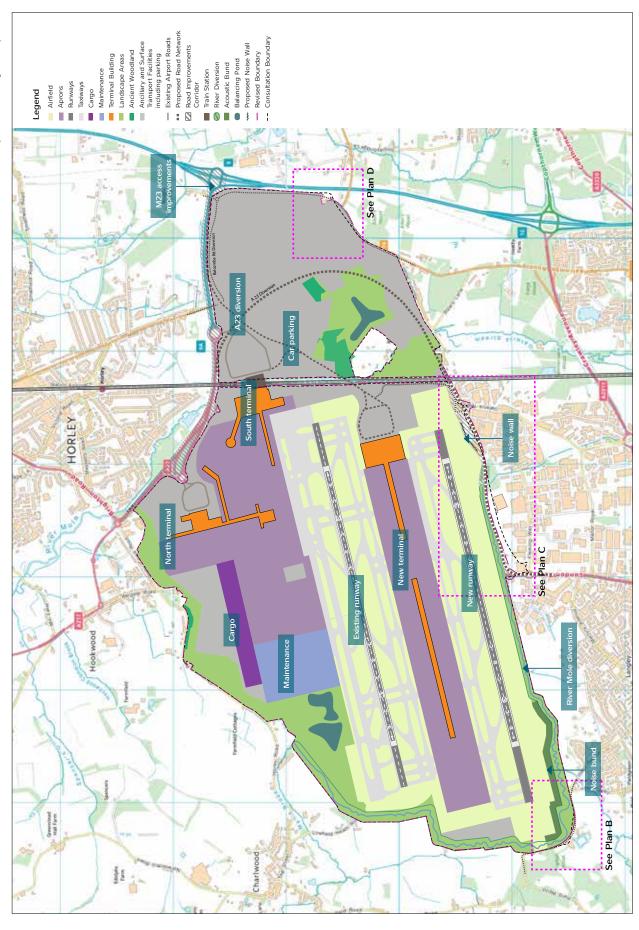
The proportional effect in relation to total households at 2050/51, again based on netnil migration, involves an increase of 1.3% from 4.1% to 5.4% for the Study Area.

As indicated above, these changes do not affect the overall conclusions reached in our original study based on 85mppa as the proportional effects in respect of employment and housing arising from the airport remain limited in the context of general growth.

Conclusions on revised Option 3

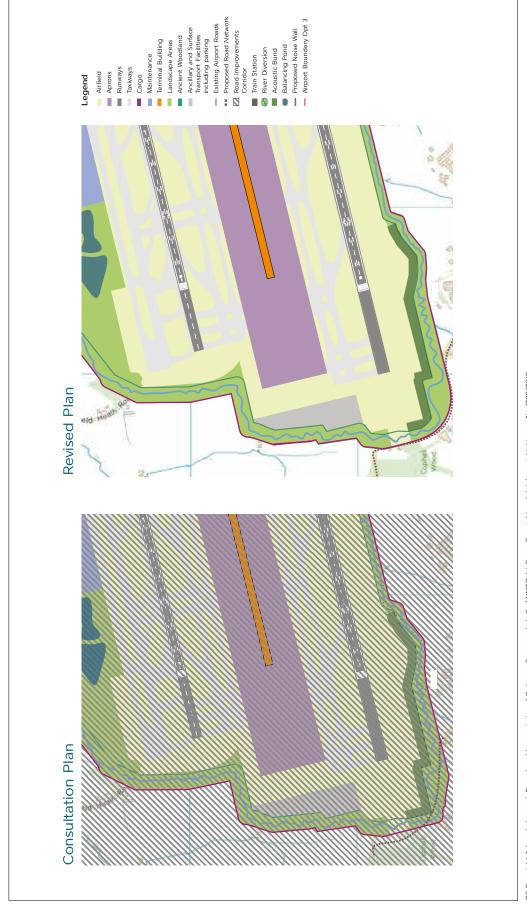
In summary therefore, the increased number of passengers and air transport operations offered by Option 3 results in changes to certain impacts and benefits. The differences do not alter the finding that Option 3 continues to be the preferred Option in terms of benefits relative to impacts, neither do the differences alter the relative difference between the Options. Therefore it remains the Option that we wish the Airports Commission to assess.

Plans



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Plan B - South western boundary and road alignment



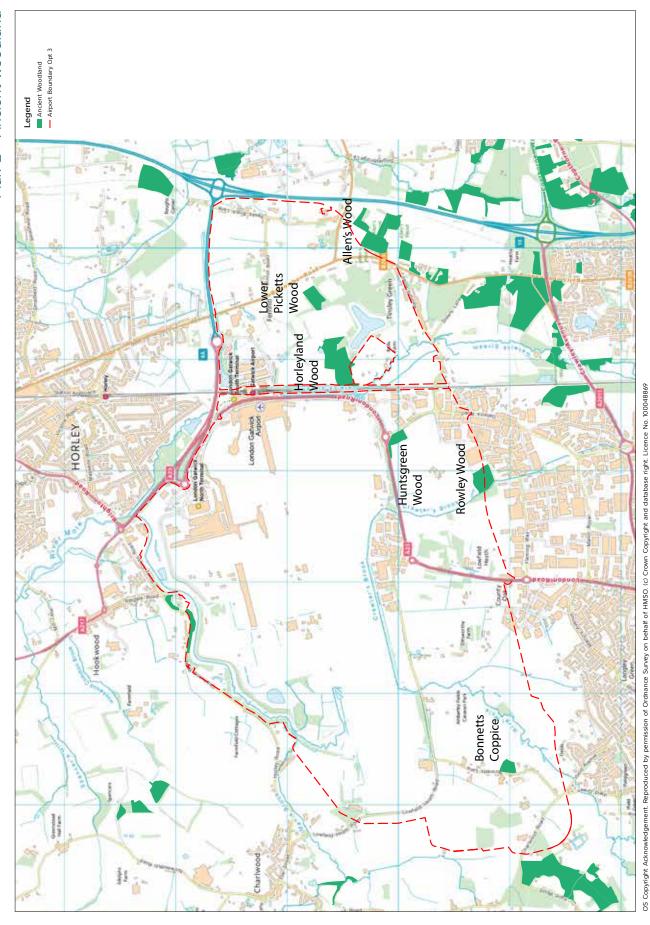
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