



2018 GATWICK CAPITAL INVESTMENT PROGRAMME

Gatwick

May 2018

Published following consultation with Gatwick's airlines and the Passenger Advisory Group

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Images on front cover:

Top: Main Runway works winter 2017

Bottom: North Terminal Walk-through World Duty Free Store opened September 2017

CONTENTS

SECTION	SUBJECT	PAGE
Foreword by Stewart Wingate		5
BUSINESS DEVELOPMENTS		9
INTRODUCTION		17
CHAPTER 1	Key Drivers for Investment	21
CHAPTER 2	2018 Capital Investment Programme	31
CHAPTER 3	Major Development Projects Overview	37
APPENDICES		
APPENDIX A	Terminals and Airfield Facilities Capacity Analysis	41
APPENDIX B	Core Service Standards and Airline Service Standards	43

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FOREWORD BY STEWART WINGATE



Once again, I am delighted to report that it has been another successful year for Gatwick. Our annual passenger numbers exceeded 45 million; with a record 8 million passengers using the airport during the summer school holidays. For the year (April 2017 to March 2018) we saw an increase of 3.6% in passengers over the previous year. We have continued to see significant growth in our long-haul services, which now serve over 60 destinations. This impressive performance has been achieved through our ongoing investment in facilities, services and people, and all importantly, through collaboration with our airline customers, many of whom have also successfully grown their businesses at Gatwick this year.

I am also proud to report that even as we experienced our busiest summer season, the airport has continued to achieve all of its challenging service standards, including a marked improvement in On-Time-Performance compared to 2016, due to the combined efforts of Gatwick, our airline customers and their ground handlers.

I am unable to reflect on the past year without mentioning the loss of Monarch Airlines from our skies after 50 years of operation. We were very sad to see their departure from Gatwick, but at the same time we were hugely impressed by the positive reaction of the whole Gatwick airport community who rallied around to help passengers whose plans were disrupted and our Monarch colleagues who suddenly found themselves unemployed. We are looking forward to working further with the International Airlines Group (IAG) who have purchased the runway slots vacated by Monarch and who, of course, already operate several airlines out of Gatwick. Monarch's collapse is a reminder of the highly competitive nature of the aviation industry and reinforces the need for Gatwick to never become complacent, but to continue to invest for a successful future.

In our Capital Investment Programme, we recognise that our future plans need to continue to be ambitious and focus on keeping pace with the rising demand for air travel. In light of this, we have once again reviewed the needs of our passengers, our airline customers and our community to produce our latest investment plans contained in this document. These are evaluated against our underlying investment drivers which are set out in Chapter 1.

In September 2017 we completed the final element of our programme to transform the North Terminal with the opening of the new walk-through World Duty Free store, which has already proven to be extremely popular with passengers. In addition, we have continued to provide automated check-in and self-service bag-drop facilities for those of our airline customers who were ready to adopt the new technology and gain the operational benefits technology brings to their businesses. More automation has taken place in our Immigration Halls, with the installation of further electronic gates to ease passengers' arrival into the UK. We are now taking the same technology one step further and exploring automation of the aircraft boarding process at the gateroom, which potentially offers passengers an improved boarding process, as well as operational advantages for our airlines.

One of our major ‘behind the scenes’ projects is the replacement of every Hold Baggage Screening machine across the airport to meet new regulations, set by the Department for Transport, from winter 2019. This incredibly complex work has been progressing well and three of the new machines have now been installed and are undergoing extensive testing. The remainder of the programme will be delivered in phases over the next two years, taking extreme care to minimise disruption to the airport community.

We remain committed to maintaining our existing assets, as well as continuing our programme of resilience measures, to ensure passengers receive the best experience possible during their journey through the airport. This is achieved through a large programme of smaller projects, which often go unnoticed by passengers, but are invaluable to the smooth running of the airport. Similarly we have projects in this Capital Investment Programme to upgrade information technology systems. Perhaps the most critical of these projects is the replacement of our Airfield Data Network over the next two years; this is the network on which all navigational airfield systems operate. As we upgrade the Airfield Data Network, another key IT programme will replace aging Air Traffic Control navigational aids and communications systems over the next five years. Beyond these specific information technology projects, we are embedding the use of new and innovative technology within a number of our projects, which will provide for our future growth.

We are now developing and designing the next tranche of our major capital projects. The South Terminal Common Travel Area and the Pier 6 Extension will ensure we continue to meet our pier service targets and provide a better experience for passengers by reducing the number of passengers who are coached to and from their aircraft. We are currently in the detailed design stage for these two projects, defining the detailed scope and engineering requirements. We know from experience that time spent on design up-front, before construction begins, will ensure the best possible delivery of these new facilities. We are also starting to explore how we can expand both our International Departure Lounges to accommodate passenger growth. It is still early days for these plans, with delivery expected to be completed in the latter half of this five year period.

You can read more about our achievements and significant developments in the following Business Developments section.

This 2018 Capital Investment Programme sets out our plans to invest £1.11 billion over the next five years through to 2023, with £266 million planned for 2018/19 alone. The project portfolio remains very similar to that which we published in the 2017 Programme. Last year’s Programme re-timed a number of projects to match revised growth forecasts and, as our current forecast shows little change to the peak since last year, the Programme continues to reflect the airport community’s future needs.

We continue to respond to the Government’s consultations on the wider Aviation Strategy and the draft airport National Policy Statement (NPS). Gatwick continues to offer the Government a low cost, low risk and privately funded solution to meet the need for additional airport capacity in the South East, which, we believe, is greater and more urgent than ever before. This greater urgency is due to the much stronger than predicted growth of UK traffic over the past 5 years, and the need to maintain and improve vital economic connections so that Britain can better compete in a post-Brexit world. We are prepared to deliver additional capacity regardless of whether or not a new runway at Heathrow is progressed provided the Government gives policy support for this.

Whilst the government completes its consultations, we will continue to develop the airport to meet the needs of our airline customers and passengers based on our current infrastructure. We believe that everything possible should be done to use existing infrastructure ever more effectively and recognise that to do so, we will need to continue to be agile in investing in innovation and challenging the way we have done things in the past. We have successfully transformed check-in and security through these approaches and will continue to apply them across the airport.

As Gatwick grows, we are acutely aware of the need to do so in a sustainable manner, encouraging the use of quieter aircraft and working with Government regulators, air traffic controllers and airlines to minimise impacts on local communities. Gatwick's independent Noise Management Board (NMB) was created in 2016 in response to the Independent Arrivals Review, to develop, agree, oversee and maintain a co-ordinated noise management vision and subsequent strategies for Gatwick on behalf of stakeholder organisations. The NMB has made significant progress since its establishment, and continues to evolve. It has developed a comprehensive and dynamic workplan, including arrivals and departures related activities, prioritised and aligned with community groups and industry stakeholders.

The basic structure of the UK's airspace was developed over fifty years ago and modernisation is long overdue. Congested airspace and out-dated infrastructure are causing unnecessary delays for passengers and restricting innovations that could reduce the noise and carbon impacts of aviation. If successfully implemented, airspace modernisation can facilitate aircraft to fly quieter, cleaner and more efficient routes, and Gatwick is working closely with all stakeholders to push for these changes.

We cannot look to the future without mentioning Brexit. We are very much aware of the uncertainty surrounding Brexit for the UK aviation industry, and are maintaining close links with Government as they develop their Brexit plans. We have assessed the potential impact of scenarios such as changes to the Border but, given the uncertainty, this Capital Investment Programme does not contain any investment for such eventualities. As and when any changes become clear we will adapt our plans as necessary.

We constantly strive to improve the experience passengers receive during their journey through the airport, and with this in mind, we will continue to meet our airline customers, both individually and multi-laterally, as well as representatives of our passenger community, to understand the needs of all our stakeholder groups. We remain committed to our formal consultation structure for major capital investment projects through dedicated working groups, and future working groups will be convened as and when appropriate.

As always, we look forward to delivering the new services and facilities in this Capital Investment Programme over the next five years for the benefit of our airline customers and passengers. By continuing to make improvements at the airport, our aim is to encourage more and more passengers to make Gatwick their London airport of choice.



Stewart Wingate
Chief Executive

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BUSINESS DEVELOPMENTS

Traffic Growth

Once again, Gatwick's traffic has excelled during 2017/18. The year (April 2017 to March 2018) saw 45.7 million passengers using Gatwick, an increase of 1.6 million passengers (3.6%) over the previous year. We have continued to focus on developing our long-haul network, with 40% of the growth in Air Transport Movements (ATMs) coming from these routes, equating to an increase of 0.4 million passengers for this market during the half-year alone. Overall the number of ATMs increased by 0.7%, reflecting a continued improvement in the utilisation of our single runway. We also managed to exceed the previous number of ATMs achieved in one day, with a record 950 ATMs on 1 September 2017.

Airline Developments

We continue to work with our airline customers to develop both their existing services and new routes for passengers. Notable developments since we published our 2017 Capital Investment Programme last July include:

- Norwegian Air Shuttle introduced a morning flight to New York JFK which has proved very popular with business passengers. In addition, they have embarked on services to Denver, Seattle, Singapore and commenced further routes to Buenos Aires in February 2018 and to Chicago and Austin from summer 2018. They have acquired 28 weekly slots from Lithuanian airline Small Planet which they are looking to utilise for summer 2018.
- British Airways launched services to Oakland, Fort Lauderdale, Las Vegas and announced a service to Toronto from May 2018.
- China Airlines are a new entrant to Gatwick, introducing a new service to Taipei in December 2017.
- Cathay Pacific's route to Hong Kong now operates as a daily service.
- Air Canada Rouge commenced services to Vancouver.
- Rwandair started its service to Kigali, Rwanda.
- Tianjin has announced a direct service to Xi'an commencing in summer 2018.
- easyJet continue to grow their operations at Gatwick, exceeding 18.2 million passengers on a rolling 12-month basis. They will be introducing a fleet of larger A321neo aircraft from summer 2018 and have collaborated with Norwegian and Westjet on their Worldwide service, integrating the GatwickConnects service into the easyJet booking system.
- The airport now operates to 60 long-haul destinations as illustrated on the next page. The newly awarded traffic rights from China to the UK will allow further opportunities for new services into Gatwick which we intend to explore.



Major Capital Projects

We have continued progress on the delivery of our capital investment projects during 2017 and a summary of the key projects is given below:

- North Terminal Development Programme:** This transformational programme was successfully completed in September 2017, with the opening of the new walk through World Duty Free store. In addition, we delivered new toilets in the International Departure Lounge, four new retail units, an airlock delivery bay and new stockrooms and utility services for our retailers.
- Hold Baggage Screening (HBS) Replacement:** Work has been ongoing to deliver this project to meet the Department for Transport's requirement to replace screening equipment with "Standard 3" by 1 December 2019. Following an extensive pilot project to determine the most suitable replacement machines for the airport and the refinement of the delivery programme, we have now commenced the phased installation of these new machines.
- Pier 6 Extension:** To maintain our pier service levels in North Terminal, as the airport continues to grow, we require further stand capacity. One of the solutions for meeting this growth is to build a western extension on Pier 6. This is a complex programme of works which involves creating a new A380 stand on Pier 5 and the associated reconfiguration of Quebec taxiway to provide access to the new stand. The new extension will offer 8 new stands capable of taking any Code C aircraft and bring into service an existing, but unused, stand (103) to give a total of 17 stands on the pier when completed. Works are currently focussing on scoping, designing and planning the delivery of this programme.
- Pier 4 Reconfiguration:** A second project to enhance pier service levels, ahead of the Pier 6 extension being delivered, is the reconfiguration of the stands on Pier 4. This will provide three additional centrelines on Pier 4 for aircraft parking and servicing.

- **ST Common Travel Area (CTA):** Following consultation with our airline customers and Border Force, we have agreed a solution to provide pier service for passengers arriving from domestic and CTA destinations (Ireland and the Channel Islands) who, at the current time, have to be coached from their aircraft to the terminal due to Border Force segregation regulations. The solution will offer over one million domestic and CTA passengers each year an arrival walking route via Pier 1 and will include a new domestic baggage reclaim belt. This new baggage reclaim will allow the current domestic baggage reclaim belt to be converted to international use and solve a capacity shortfall otherwise forecast in 2021.
- **Terminal Automation:** We have continued to roll-out technology solutions across the terminals for faster processing of passengers at check-in/bag-drop, Immigration and, most recently, in gaterooms.
- **Main Runway:** Drainage works have now commenced. These will then be followed by ground improvements, which will further stabilise the runway's sub-structure, ensuring it is in the best condition possible ahead of the planned runway resurfacing due to commence in 2021.
- **Railway Station Redevelopment:** Work on developing the design of the railway station has continued, led by Network Rail, although it has taken longer to find an affordable solution and secure the necessary funding than originally envisaged. We will continue to consult with our airline customers and the Passenger Advisory Group on the project and feed their views through to the project team, whilst continuing to press the Government and Network Rail to ensure this this project remains a priority. We now expect completion of the works by late 2022.
- **Retail:** The new walk through World Duty Free store opened in North Terminal in September completing the NT Development Programme (see above). Our catering offer in South Terminal was significantly enhanced with the opening of Jamie Oliver's Diner, the expansion of the Flying Horse pub and a new Starbucks coffee shop. South Terminal also saw the arrival of fashion retailer Reiss in May 2017 and the return of Next. We have continued our successful "pop-up" stores in both terminals, featuring new brands to the airport such as SkinnyDip and North Face.
- **Asset Stewardship:** The investment programme to maintain the existing asset base of the airport has continued from last year with the works categorised into: Airfield, Facilities, Commercial, IT and Compliance/Risk. Investment has included upgrades to taxiways, electrical switchboard replacements, boiler upgrades, toilet refurbishments and improvements to the Airfield Ground Lighting team's accommodation.

95% Pier Service

Since the publication of the 2017 Capital Investment Programme we have defined three solutions to provide additional pier service so we continue to meet, and indeed exceed, our 95% Core Service Standards target in both terminals. These solutions are:

- Pier 4 Reconfiguration to a Multi-Choice Apron
- Pier 6 Western Extension
- Pier 1 CTA Walking Route

Works on Pier 4 are already underway and are due to be completed ahead of summer 2018. Pier 6 and Pier 1 are both in detailed design stages.

Airfield and Taxiway Optimisation

We have continued to develop our significant investment programme to optimise the efficiency of the airfield over the next few years. This programme includes the provision of drive-through push and hold stands, with improved de-icing facilities, and the reconfiguration of stands to provide more pier-served capacity. Enabling works to enhance drainage and stabilise the sub-structure of the runway have commenced, ahead of full resurfacing later in our five-year programme. We are pleased to report that we have partnered with Boeing to provide a new hangar for aircraft servicing for airlines operating from Gatwick. Preparatory works for the hangar have been completed and the site has been handed over to Boeing to undertake its construction. The overall airfield programme has been, and will continue to be, carefully phased to minimise disruption to the operation.

Car Parking

Developing our car parks to meet forecast demand is key to providing an excellent passenger experience. We have embarked on the first of these by providing a deck on top of part of the South Terminal long-stay car park which will provide an additional 1,126 spaces. We are continuing to develop 'close to terminal' car park options with multi-storey solutions planned in both terminals (MSCP7 and MSCP4). We are always keen to drive more efficient use of existing car park space and are investigating the use of robots for parking vehicles.

Resilience and Stable Operations

As we have demonstrated in previous capital investment programmes, we are committed to investing in projects that maintain and improve the resilience of our airport's operations. We have previously budgeted to invest £10 million per year in Stable Operations. In this Capital Investment Programme, we have focussed our attention on two key areas; power and flood resilience, alongside the day to day maintenance required to keep the airport running smoothly. Resilient IT systems are critical to the entire airport operation and work has been taking place to upgrade the network and several key systems, as well as investment in cyber-security.

During 2017 we invested widely across the airport assets, with some of the key projects listed below:

- Replacement of Fixed Electrical Ground Power units
- Upgrades to electrical substations, generators and boilers
- Check-in systems back-of-house improvements
- Preparatory works for the replacement of the Airfield Data Network
- Upgrades and replacement of CCTV facilities

Collaborative working continues with our airline customers to develop and test new processes and technology to reduce the impact on our passengers in the event of any future disruption events. The Stable Operations function that operates at Gatwick also allows sustained focus on infrastructure resilience, contingency planning and airport community operational response.

We are now over halfway through our Decade of Change programme targeting the reduction of the airport's environmental impact, with some outstanding achievements to date. These include:

- a reduction of 5% in our annual carbon emissions from fuel and energy
- 2.6% drop in annual energy consumption per passengers
- 0.3% reduction in airport annual water consumption per passenger, with 30% of those savings from new toilet facilities
- zero untreated operational and commercial waste to landfill

- continued operation well below annual mean air quality limits for both NO₂ and PM₁₀ during our busiest ever year

All our projects are tasked with finding ways to reduce their impact on the environment and improving sustainability with appropriate investment being included in the individual budget for each project. This year we have included one dedicated Decade of Change project, investing £5 million over the next five years to provide infrastructure to both support and incentivise greater use of electric vehicles. By doing so, we hope to encourage the use of electric and hybrid vehicles primarily across our airfield campus, but also by passengers and staff. We are already consulting with our airline customers and their ground handlers on their current and future requirements, as well as our taxi partner and other third-party surface access suppliers.

UK Aviation Strategy

A Draft Airports National Policy Statement (NPS) was published for consultation on 2 February 2017, with responses due by 25 May 2017. The draft NPS sets out the Government's policy toward the need for new airport capacity in the South East of England, its preferred location and scheme for delivering such capacity (the Heathrow North West Runway option), and the assessment principles to be used when considering an application for development consent. We submitted a full response to this consultation outlining our position for consideration by Government. In September 2017, the Secretary of State announced a further consultation to allow updated evidence in relation to aviation demand forecasts and the Government's final air quality plan to be taken into account. Accordingly, a revised Draft Airports NPS was published 24 October 2017 calling for responses by 19 December 2017.

The Revised Draft NPS demonstrates the need for additional airport capacity in the South East of England is greater and even more urgent than ever. This is largely due to faster than expected UK traffic growth and the need to maintain and improve global connectivity, including exploiting new opportunities in a post-Brexit world. We consider that the Revised Draft NPS shows clearly that a second runway at Gatwick is the best option on all the major assessment criteria used by the Department for Transport, including on Economic Benefit and Environmental Impacts. Gatwick continues to offer the Government a deliverable, affordable and privately funded solution in the form of a second runway which could be progressed in addition to a third runway at Heathrow. This would allow the Government to mitigate the high risks associated with expansion at Heathrow, as well as ensuring that traffic demand is met in a timely manner, and the advantages of airport competition are secured. Should the Government consider only one new runway is needed in the South East, then we maintain that any decision on runway capacity should be based on an objective analysis of the evidence which would clearly identify the advantages of the Gatwick scheme.

Following the further period of consultation, the Government will decide whether to proceed with the NPS and what its final form should be, taking into account comments received during the consultation. A final version of the NPS will then be laid before Parliament for designation – likely to be sometime in 2018. Any such designation can be subject to legal challenge.

In addition to work on the NPS, the Government has published for consultation a call for evidence in relation to a new Aviation Strategy. The Aviation Strategy has six objectives:

- Help the aviation industry work for its customers
- Ensure a safe and secure way to travel
- Build a global and connected Britain
- Encourage competitive markets
- Support growth while tackling environmental impacts
- Develop innovation, technology and skills

During the remainder of 2017 and throughout 2018, the Government intend to consult on the detail behind each of these objectives, concluding at the end of 2018 with the publication of a Final Aviation Strategy. This will then replace the Aviation Policy Framework (2013) and will include consideration of airport development requirements at all UK airports including Gatwick.

We have formally responded to the draft NPS and will continue to fully engage in any further NPS consultation and all other Government consultations in support of a new Aviation Strategy.

We maintain our position that we offer the UK Government a credible and deliverable option for runway expansion that the south-east so urgently requires.

Community Engagement

We actively participate in extensive consultation with community groups and authorities at a local level as a key enabler to continue to meet our ambition to grow and deliver economic and social benefits to our community. This ambition is supported by a Section 106 agreement which was renewed during the course of 2015. The current Section 106 legal agreement with the Local Planning Authorities expires at the end of 2018 and Gatwick will be engaging with these authorities during 2018 with a view to agreeing a new version of this agreement.

Our objective is to be a good neighbour, to be trusted by local people and play a valued role in local and regional matters. During 2017 we:

- Participated in Crawley's STEMfest programme to encourage students and children to work in science, technology, engineering or maths
- Continued to support the Gatwick Diamond Meet the Buyers events
- Won the Outstanding Sustainability Programme award at the Airports Going Green Awards for the world's first waste plant turning airline waste (food and packaging) into on site energy
- Secured ACI Europe's Airport Carbon Accreditation as the first carbon neutral London airport
- Celebrated the first anniversary of Gatwick's Foundation Fund which has awarded £300,000 to community projects across Sussex, Surrey and Kent, benefiting 80 organisations and more than 46,000 people so far
- Won the trophy for Environmental Awareness in the inaugural International Airport Review Awards for our sustainability strategy as being innovative and influential

Aircraft Noise and Airspace

Gatwick's independent Noise Management Board (NMB) was created in 2016 in response to the Independent Arrivals Review, to develop, agree, oversee and maintain a co-ordinated noise management vision and subsequent strategies for Gatwick on behalf of stakeholder organisations.

Having made substantial progress on the original 23 recommendations of the Independent Arrivals Review, the priority areas for the NMB in 2018 will build on initiatives already taken to provide further reductions in the effects of aircraft noise at Gatwick. The priorities currently involve aircraft Arrivals, Departures, the Fair and Equitable Dispersal of aircraft and the Reduction of Noise at Night.

Other notable initiatives include:

- Noise Action Plan - The Environmental Noise (England) Regulations 2006 require airports to produce Noise Action Plans. The third version of this plan will be for the 2019-2024 period. The Gatwick Consultative Committee (GATCOM) and the NMB have discussed the development of the Action Plan for Gatwick, which also aligns with Gatwick's Section 106 Agreement with West Sussex.
- Gatwick's new charging regime for A320 aircraft – Gatwick is the first airport in the world to implement a differential charge for the Airbus A320 family aircraft, to incentivise operators to adopt an aircraft modification proven to reduce noise. In the run-up to the commencement of the charge in January 2018 both easyJet and British Airways upgraded their entire fleets. These two airlines account for more than 80% of the flights by this type of aircraft at Gatwick. Other airlines are also rapidly adopting the modification.
- Measures to improve the Fair and Equitable Distribution of arrival traffic on the instrument landing system (ILS) centreline successfully reduced the concentration of air traffic at a particular “hot spot” (11 nautical miles before landing) by over 20%.
- New meeting format - The NMB public meeting in December 2017 adopted a new format, including several interactive programmes and the chance for residents to meet pilots, air traffic controllers, noise and airspace management experts, technology providers, airport representatives and members of the NMB.
- Measuring the impact of noise - work has begun to identify measures and metrics which can best quantify the noise impacts of investments in noise reduction made by aviation, and the noise impact of any growth in the number of flights in the same period.

For more information on the work of the NMB please use the link below:

<https://www.gatwickairport.com/business-community/aircraft-noise-airspace/noise-management-board/>

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INTRODUCTION

The Capital Investment Programme is an annual document which we publish under our Commitments framework. This document is consulted upon with our airline customers and the Passenger Advisory Group (PAG), and is informed by our ongoing programme of passenger research to understand better the needs of those using the airport.

This document sets out the capital investment we are proposing for the fifth year under Commitments (April 2018 to March 2019) and the programme proposed for the following four years. The aviation business is highly competitive and we are pleased that our Commitments framework offers the opportunity to manage a rolling five-year capital programme which adapts to dynamic business requirements, driven primarily by the needs of our airline customers and passengers. We look forward to continuing to develop the airport through the flexibility the Commitments framework has given us, by working with our airline customers and PAG to provide the right investment at the right time.

The Capital Investment Programme in Context

Within our Commitments framework we undertook to consult on our investment plans with both the airline community and PAG, and to annually publish a rolling five-year Capital Investment Programme. In addition to this Capital Investment Programme, we will normally refresh our Master Plan (high-level strategic development direction for Gatwick comprising current and future land use plans) at five-yearly intervals (or as directed by Government policy), including a consultation with airlines and the wider community prior to its publication. Owing to the continuing consultations by Government on its airports National Policy Statement and wider Aviation Strategy, now not expected to conclude until the end of 2018, we have delayed the production of our next Master Plan until the end of 2018.

To fulfil our capital investment consultation under the Commitments framework we have established the following forums:

- Capital Investment Programme published annually and consulted upon with our airline customers and PAG;
- Meetings held jointly with airlines and PAG (through their Capital Plan Review Working Group) to review the performance of the previous 12 months' Capital Investment Programme and the programme for the following 12 months;
- Airport and Airlines Group bi-monthly meetings consulting with the airlines on strategic issues; and
- Individual working groups for Major Development Projects jointly with airlines and PAG at an operational level.

In conjunction with the above formal capital consultation forums, we work closely with our airline customers on operational matters which, in some instances, can lead to the requirement for capital investment. The Joint Operations Group is where such operational matters are discussed. An example of capital investment to have come through this route in 2017 is the planned investment in common user ground handling equipment which will assist in making the airfield more efficient, as each individual ground handler will no longer need to provide and store their own equipment on the airfield.

Following the format of previous Capital Investment Programme consultations, we have again held workshops covering specific areas of this Capital Investment Programme during November and December 2017, which culminated in our annual meeting to review the programme for the following 12 months on 1 February 2018.

Together the Master Plan and Capital Investment Programme documents provide a picture of Gatwick's current, medium, and long term view development plans.

Assumptions for this Capital Investment Programme

This five-year Capital Investment Programme is based on the assumption that Gatwick will remain a single-runway, two terminal airport. Gatwick continues to safeguard land for a second runway.

There is still capacity for growth in air traffic movements in the short to medium term by utilising runway capacity during off-peak periods. In addition, the introduction of larger aircraft with higher seat capacities will lead to further growth in passenger numbers.

Due to the uncertainty surrounding Brexit, this Capital Investment Programme has not included any assumptions on requirements which may or may not be needed for the aviation industry as an output of the Government's negotiations on exiting the European Union.

The Structure of the Capital Investment Programme

The content of this document is guided by our Commitments framework for consultation on the Capital Investment Programme and is intended to describe the capital investment for Gatwick over the next five years. It aims to provide details regarding the drivers and priorities for investment as well as giving specific information on current and future projects.

The structure of this document is as follows:

- *Chapter 1* describes Gatwick's key drivers for investment and articulates how these drivers are translated into capital investments.
- *Chapter 2* provides the programme of capital investment for the next five years as presented to our Board in January 2018.
- *Chapter 3* provides details of the Major Development Projects.
- *Appendix A* provides our Terminals and Airfield Facilities Capacity Analysis.
- *Appendix B* provides the extracted Core Service Standards and Airline Service Standards table from Gatwick Airport's Conditions of Use.

This Capital Investment Programme document should be regarded as a product of consultation at the time of publication and also as a basis for future consultation and thus, does not represent a mandatory investment programme. Projects in the first year of this Capital Investment Programme are confirmed and, in many cases, are already making good progress, having been envisaged in preceding Programmes.

Annual Capital Investment Performance Review

This Capital Investment Programme document does not include a review of the performance of the 2017/18 Capital Investment Programme. This information will be shared separately at a meeting with the airlines and PAG following the completion of the 2017/18 financial year.

Feedback

This document was distributed to the members of the Airport Consultative Committee (the Gatwick airlines' consultative body) and PAG as a draft for consultation on 2 February 2018, with a request for feedback by 5 March 2018. This period of formal consultation has since expired with this being the final version of the Gatwick 2018 Capital Investment Programme. We appreciate the contribution that the airlines and PAG have made in this consultation process and we would like to thank them for helping us shape Gatwick's future capital plans.

We do, of course, value feedback throughout the year. The feedback will help us improve Gatwick's facilities and services for all passengers. If you have any queries on this document, or would like to comment, please email Maureen Spence: maureen.spence@gatwickairport.com.

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CHAPTER 1: KEY DRIVERS FOR INVESTMENT

Our key drivers for capital investment are set out below:

- Environmental, Health and Safety (EHS), Security, and Compliance
- Asset Stewardship and Resilience
- Capacity
- Service Quality
- Cost Efficiencies
- Commercial Revenue

1.1 ENVIRONMENTAL, HEALTH, AND SAFETY (EHS), SECURITY, AND COMPLIANCE

Providing a safe and secure environment for our passengers is paramount for our business. We need to invest to comply with the requirements from a range of authorities to be able to continue to operate safely. These include the CAA for granting our licence to operate the airfield, the Department for Transport for security regulations and the Environment Agency for protecting the environment. Examples of projects which fall into this investment driver are:

- Hold Baggage Screening (HBS) replacement project to be compliant with the Department for Transport's security directive to install Standard 3 machines by December 2019
- Common Travel Area (CTA) Solution to provide facilities to meet the change in enforcement of UK Border Force's regulations for CTA passengers since March 2015
- Pedestrian Safety Enhancement project to ensure that airport staff and passengers are guided by safe walking routes when moving around the airport campus
- Our Decade of Change strategy is embedded into the development of projects where appropriate. As set out in the previous Business Development section, we identified in the 2017 Capital Investment Programme a project to encourage the use of electric vehicles. This project has been carried forward into this Capital Investment Programme.

For more information on our environmental approach please use the link below to our Sustainability reports on our website:

<https://www.gatwickairport.com/business-community/community-sustainability/sustainability/sustainability-reports/>

and for specific information on our Decade of Change strategy please use the link below to our booklet:

http://www.gatwickairport.com/globalassets/publicationfiles/business_and_community/all_public_publications/2010/decade_of_change_aug10.pdf

1.2 ASSET STEWARDSHIP AND RESILIENCE

At the heart of our business is the continued smooth running of the operation for our passengers and airline customers through maintaining our existing assets. These are categorised into: Airfield, Facilities, Commercial, IT, and Compliance/Risk. We do not just renew assets as they come to the end of their lives but also take the opportunity to upgrade them, where appropriate, so that we deliver a higher performing asset base over time. As an example, when we are replacing passenger airbridges we also upgrade the associated software to provide better manoeuvrability.

Additionally, we invest in measures to enhance the airport's ability to be operationally resilient in the face of unexpected events, such as snow or power outages due to third party supplier failures.

Examples of such projects in our Capital Investment Programme are:

- Main Runway enhancements and resurfacing
- Taxiway rehabilitations and Airfield Ground Lighting replacements
- Flood mitigation
- Electrical power resilience
- Airfield Data Network replacement
- Air Traffic Control voice communications systems replacement
- Inter-Terminal Shuttle control system refresh

1.3 CAPACITY

Traffic forecasting determines the capacity required to meet the future needs of our airlines and passengers and enables us to plan capital investments to meet these in a timely manner. Our traffic forecasts are reviewed annually and for this 2018 Capital Investment Programme we have revised the traffic projections above those which were defined in the 2017 Capital Investment Programme.

Assumptions

The traffic assumptions used in our forecasts are intended to provide a realistic potential growth profile for Gatwick over the forecast horizon. For several years we have seen traffic volumes perform better than expected, tracking above the published case. We have seen the 2017/18 traffic results outturn at 45.7 million, close to the 2017 CIP published forecast of 45.2 million passengers per annum. Whilst we have seen very positive growth, particularly in our long-haul market, we also saw the demise of Monarch Airlines. This illustrates the need to balance previous positive experience with appropriate caution. Figure 1.1 shows traffic forecasts from the 2014 to 2018 Capital Investment Programmes and outturn traffic.

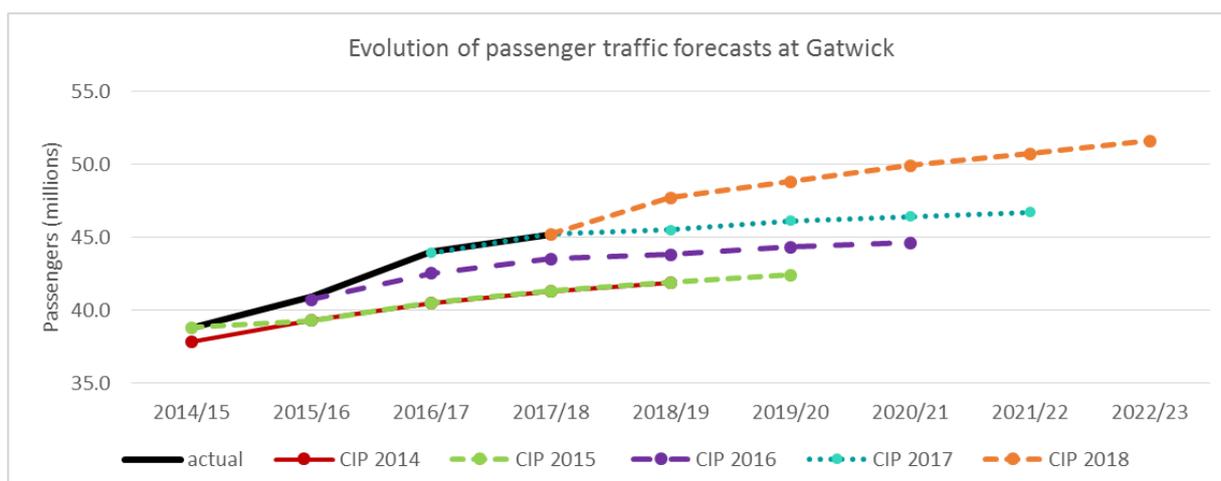


Figure 1.1 – Base Case Traffic Forecasts from 2014 to 2018 Capital Investment Programmes and actual outcome

Using the summer 2017 schedule as a base, we have reviewed the following assumptions:

- Runway limits (held at a maximum 55 Air Transport Movements (ATMs) per hour)
- Profile of ATMs through the busy day
- Profile of ATMs through the season
- Average load factors
- Seats per ATM (up-gauging to larger aircraft)

Traffic Forecast

We remain very positive about the growth achieved this year by many of our airlines and the forecast of overall demand in the London market, which was demonstrated by the significant level of interest in the Monarch slots that became available both at Gatwick and Luton. However, we must also consider the significant downside risks which exist to the traffic forecast. These include the impact of further airlines collapsing in a highly competitive market and the ever-present terror threats as a result of conflicts around the world. The decline in the value of sterling has impacted traffic patterns, both inbound and outbound, and we should expect that a continued slowdown in economic recovery in the face of European political uncertainty will continue to affect passenger confidence. The traffic forecast is broadly an extrapolation of existing trends and does not reflect these risks, but it remains important to retain the flexibility to modify the capital programme in response to changing trading conditions.

Year	GAL Forecast at April 2018
	Million Passengers Per Annum
2017/18 (Actual)	45.7
2018/19	47.1
2019/20	49.1
2020/21	50.6
2021/22	52.0
2022/23	52.8

Whilst we were encouraged by the significant improvements in On-Time-Performance during summer 2017 that were the result of a strong collaborative effort from airport, airline and ground handling teams, we have not assumed that we will release any new peak slots in our traffic forecast for this 2018 Capital Investment Programme. Our runway limit therefore remains 55 ATMs per hours. We do assume some limited release of slots in the evening off-peak period to allow for growth and block time improvements.

Using Gatwick Traffic Forecasts to Determine Facility Requirements

While annual projections are useful to understand total demand, infrastructure provision relies on satisfying the peak demand within the year. Therefore, underlying Gatwick's annual traffic forecast is the demand in a busy hour on a busy day in summer. This is calculated by taking the busiest Friday in August (in terms of aircraft movements) and applying forecast load factors for the Friday average of the busiest six summer weeks. Due to the lead time between planning and delivery of infrastructure projects, solutions need to be resilient to a range of different busy day outcomes. For this reason, the busy day schedule, consistent with our annual forecast, has been flexed for a range of different scenarios by changing the above assumptions to stress test the facility and airfield requirement.

- Profile of ATMs within the busy day (timing of existing flights)
- Changes to long-haul and short-haul mix within runway limits

As in the 2017 Capital Investment Programme, this assessment has assumed no further release of peak slots and thus generated a busy hour departure demand profile that is largely equivalent for all scenarios, as growth is now being driven by up-gauging of aircraft, increases in load factors, slot utilisation and winter growth. The release of slots in the evening and increased utilisation of slots in off-peak weeks is expected to primarily be used for inbound flights driving up the requirements for arrivals facilities such as baggage reclaim and Borders. This is further compounded by the up-gauging of aircraft in both terminals. Gatwick is developing its infrastructure to provide for anticipated changes in fleet mix, continued changes in seasonality and the additional resilience that peak spreading across the day requires. The busy hour forecasts driving the infrastructure plan are shown below (Figure 1.2).

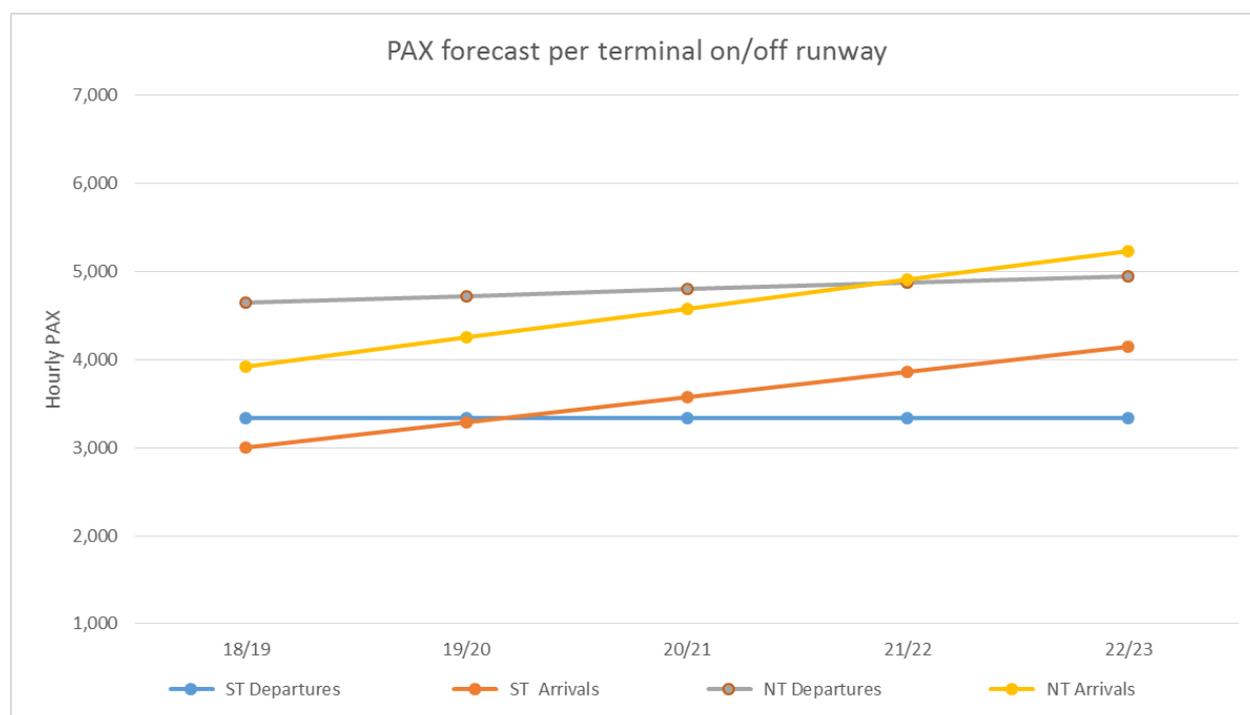


Figure 1.2 – Infrastructure Busy Day Peak Hour Schedule Demands

Gatwick Terminal and Airfield Facilities

Using the busy day schedules to assess demand, we have identified the capacity and service impacts for the North Terminal, South Terminal and the Airfield for which intervention will be required (Figure 1.3). This analysis highlights those aspects of airport infrastructure where, in the absence of any additional investment by Gatwick to enhance capacity, forecast demand would exceed the capacity which current assets could deliver. Capital projects which are designed to address these emerging capacity and/or service short-falls are included in this 2018 Capital Investment Programme.

Key capacity & service gaps	Summer 2022
NT Stands	● 5 code C
NT Borders	● 2 traditional desks
NT Baggage Reclaim	● 1 international belt
ST Baggage Reclaim	● 1 belt

Figure 1.3 – Key Capacity and Service Impact

Appendix A provides Gatwick's full future forecast terminal and airfield facilities requirements until summer 2022 using the busy day schedules to assess demand.

Our expectation is that, given the runway capacity constraint of 55 ATMs per hour, growth will be focused on off-peak and winter which will see the level of demand become more consistent through both the year and through busy days. The focus of the capital plan is therefore on the following:

- Airfield optimisation and utilisation of taxiways and stands
- Additional pier-served stands to maintain pier service levels in North terminal
- CTA solution for South Terminal
- Additional car parking services
- Additional capacity for processing non-EU and EU passengers in border zones
- Additional space in the international departure lounges

New projects will be developed in the context of more sustained peak hours throughout the day and through both seasons. Projects may be accelerated should passenger traffic grow at a faster rate than currently forecast. Equally projects may be postponed should significant risks to traffic be realised.

1.4 SERVICE QUALITY

Gatwick operates in a competitive environment and has a driving ambition to become London's airport of choice. The quality of service we provide for our passengers is therefore one of our key drivers for investment. Our service performance is measured through the Core Service Standards (Rebates) scheme, which was introduced in April 2014 under our Commitments framework. This scheme provides targets that we need to achieve and against which we report performance every month. Details of these targets as set out in Gatwick Airport's Conditions of Use can be found at Appendix B.

We pride ourselves on not limiting service improvements to meeting only those service standards which are monitored, but maintaining a far wider remit to provide our passengers with an excellent overall experience whilst passing through our airport. Examples of our commitment to this are outlined below. Maintaining our Core Service Standards and driving for transformational and innovative improvements in passenger experience in many different areas, requires investment across the entire campus, in facilities for both our airline customers and our passengers.

Furthermore, in developing our Capital Investment Programme, we are mindful of airline and third party operational performance targets and the impact of these on our passengers. On Time Performance (OTP) is a critical success factor for our airlines and is a key driver of passenger satisfaction. OTP is dependent upon a large number of factors such as airline schedules, ground handler performance at Gatwick and in Europe, and airspace congestion. Other contributing factors are ramp and taxiway infrastructure, as well as having high quality air traffic control navigational aids. We have, therefore, continued to include a number of projects in this 2018 Capital Investment Programme that target OTP. Examples include the creation of a drive-through push and hold point (including a de-icing facility) and a programme to replace and upgrade navigation aids. We plan to continue to invest in technology to improve the aircraft boarding process such as the implementation of automated boarding gates. As well as investing in infrastructure, we continue to work with the airlines, ground handlers and the airspace agencies to drive forward process improvements in this area.

Examples of some of the direct service improvements for airlines and passengers in this Capital Investment Programme are:

Airfield/OTP and Piers Projects

- Providing push and hold aircraft capability enabling more efficient airfield operations
- Providing additional pier-served stands through Pier 4 reconfiguration and an extension to Pier 6
- Providing a walking route on Pier 1 for South Terminal arriving Domestic and Common Travel Area passengers who would otherwise be coached to the terminal
- Installation of automated gates in gaterooms to improve processing and reduce waiting time to board aircraft
- Providing a suite of equipment for common use by all ground handlers
- Partnering with Boeing to provide an aircraft maintenance hangar for airlines

Terminals Projects

- Reduced check-in queues through working with the airlines to upgrade their check-in and bag drop facilities
- Quicker processing at gaterooms from the installation of e-gates
- Provision of an additional international baggage reclaim belt in the South Terminal (made possible through the ST CTA project's inclusion of a domestic baggage reclaim belt)

- Additional baggage reclaim facilities in the North Terminal
- Link bridge from the airline lounges to the gaterooms on Pier 5 for premium passengers
- An additional block of toilet facilities in the North Terminal International Departure Lounge (ground floor)
- An expanded and a more suitably located special assistance passengers' waiting area in North Terminal International Departure Lounge
- More choice of catering outlets for departing passengers in the International Departures Lounges

Projects responding to specific feedback from PAG

- Improving access from public transport on the A23 into the South Terminal
- Upgrading toilet facilities when other projects are undertaken
- Improving special assistance passengers' reception and waiting areas
- Improved wi-fi and mobile services capacity and capabilities
- Improving signage visibility on the roadway welcome arches

Other Service Improvements

- Additional short-stay and long-stay car parking spaces
- Re-located car rental facilities
- Redevelopment of the railway station to relieve crowding, improve vertical circulation and provide a more integrated concourse offering intuitive connections with airport terminals and/or onward travel
- Improved surface transport facilities such as the widening of the passenger drop-off area in the North Terminal, and access to the terminal from public transport on the A23.

1.5 COST EFFICIENCIES

Another key driver underlying our investment decisions is to drive down costs both for the airport and for our airline customers. We look at where cost efficiencies can be made through developing innovative processes, which may necessitate capital investment to realise them. Some examples of projects which are reducing costs are:

- Upgrades to passenger self-service bag drop units which will provide operational savings for the airlines taking advantage of these by reducing the numbers of their hosting staff
- Provision of automated boarding gates which will reduce the number of staff required by the airlines to process passengers boarding aircraft
- Provision of common user ground handling equipment which will reduce cost for both ground handlers and airlines
- Provision of Boeing Hangar which will provide operational savings to many of our airlines by allowing their Boeing aircraft to be maintained at Gatwick

1.6 COMMERCIAL REVENUE

We strive to maximise the revenue we can generate through commercially returning projects. This benefits passengers through the provision of a wide choice of quality restaurants, shops, car parking, car rental, and other services which enhance their experience at Gatwick, while also enabling us to maintain competitive airport charges and thereby incentivise further growth in airline services and destinations.

In delivering additional car parking capacity we are also responding to Crawley Borough Council's local plan (GAT 3) that all additional car parking should be provided on-airport. We recognise that, as a good neighbour, we have a part to play in supporting their strategy to limit the impact that airport parking can have on their community by providing an appropriate level of on-airport parking.

Examples of Commercial projects within our Capital Investment Programme are:

- Additional short-stay and long-stay car parking spaces through decking and new multi-storey builds
- Continued updating and re-vitalising of the variety of shops and restaurants throughout the airport
- Expansion of on-airport hotel accommodation
- Short term expansion of the North Terminal International Departure Lounge mezzanine to offer increased catering space ahead of longer term expansion of both North Terminal and South Terminal international departures lounges
- Reconfiguration of the previously vacated Virgin passenger lounge in South Terminal to provide two new passenger lounges
- Re-location of car rental facilities

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CHAPTER 2: 2018 CAPITAL INVESTMENT PROGRAMME

2.1 BACKGROUND

As outlined in the 2012 and 2013 Capital Investment Programmes, the airport consulted with its airline customers in 2012, through a process known as Constructive Engagement, to develop our capital programme for the five years commencing April 2014. The output of this process was submitted to the CAA in our Business Plan in January 2013, and after the CAA's consideration and further consultation with the airport, airlines, and other stakeholders, the CAA published its forecast of our five-year capital programme commencing April 2014 in their final decision on the airport's form of economic regulation in January 2014¹. They also provided their forecast capital expenditure plans for the additional two years of 2019/20 and 2020/21, albeit noting that due to the early stage of developments in these years, the costs were likely to change before the projects were delivered. The CAA published these costs in 2011/12 prices to be consistent with the commencement of their consultation. For comparative purposes, the annual core capital investment totals assumed by the CAA for Gatwick were uplifted to 2015/16 prices using a consensus of forecasts for 2014, 2015 and 2016 (c2.9% per annum). These totals were then further uplifted by c2% to be comparable with 2016/17 prices, and for this Capital Investment Programme in 2017/18 prices, the uplift has been by 3.8%. The comparison between the CAA published forecast in 2011/12 and their equivalent uplifted forecast in 2017/18 prices can be found below (Figure 2.1).

CAA Capital Plan Forecast ²							
Price Base	2014/15 £m	2015/16 £m	2016/17 £m	2017/18 £m	2018/19 £m	2019/20 £m	2020/21 £m
2011/12	154.7	197.8	188.0	139.2	111.0	168.6	216.6
2017/18	181.1	231.6	220.1	163.0	130.0	197.4	253.6

Figures correct as at January 2018

Figure 2.1 – CAA annual core capital investment forecast totals

We published our 2017 Capital Investment Programme in July 2017 following a two-month consultation period with our airline customers and PAG. The performance of 2017/18, being our fourth year of the Capital Investment Programme following the introduction of the Contracts and Commitments regulatory framework in April 2014, will be the subject of a separate review with these stakeholders following the completion of the 2017/18 financial year.

2.2 CONSTRUCTION PRICE INFLATION (COPI)²

The rate of construction tender price inflation (TPI) in the UK has typically trended higher than the Retail Price Index (RPI). However, this trend has adjusted in 2017 with TPI and RPI seeing broadly comparable rates of growth. The devaluation of sterling has driven consumer prices higher whilst uncertainty and other factors has softened construction tender price growth, even with upward pressure on input costs including materials and labour.

The construction market overall is now at an inflection point. The vote for Brexit triggered a lengthy period of uncertainty which has come to adversely impact construction demand in some key sectors. In infrastructure,

¹ CAA Document CAP1139: Economic regulation at Gatwick from April 2014: notice of the proposed licence - published January 2014 (see Appendix C, pages 123-125)

² Source: Arcadis, a leading design and consulting firm focused on natural and built assets

delayed decision making and challenges around private investment has impacted the rate at which projects have come to market in a number of cases. The all construction work output index (seasonally adjusted volume) was - 0.2% lower in the year to October. Commercial sector output fell -3% and infrastructure rose +6% in this time.

This has created a divergent market in terms of pricing. Due to robust demand, upward pressure on input costs and skills shortages, the infrastructure sector can be expected to see continued price inflation of 3% and 5% in 2018 and 2019 respectively. Building sector prices will see different rates of inflation depending on the location, risk profile, size and complexity of the project in question. Complex larger projects with substantial risk profiles can expect to see tender price inflation of 1% and 3% in 2018 and 2019 respectively. Less risky, smaller, and more straightforward projects can expect to see tender price movement of -2% and 3% in 2018 and 2019 respectively.

Input costs can be expected to continue to grow. The weak pound, skills shortages and rising global commodity prices are likely to be the main drivers of input cost inflation. Because of softened tender price growth and rising input costs, supply chain margins will generally be stagnant or squeezed in 2018 and 2019. Supply chain fragility will be heightened as a result. Furthermore, consideration may be needed in relation to implementation of incentives to encourage supply chain innovation at a time when their likely margins may not encourage or enable this.

The graph below (Figure 2.2) shows the BCIS Building Cost Inflation (BCI), which is the input costs for building contractors and their suppliers, compared to the building and infrastructure tender price indices (TPI) published by Arcadis.

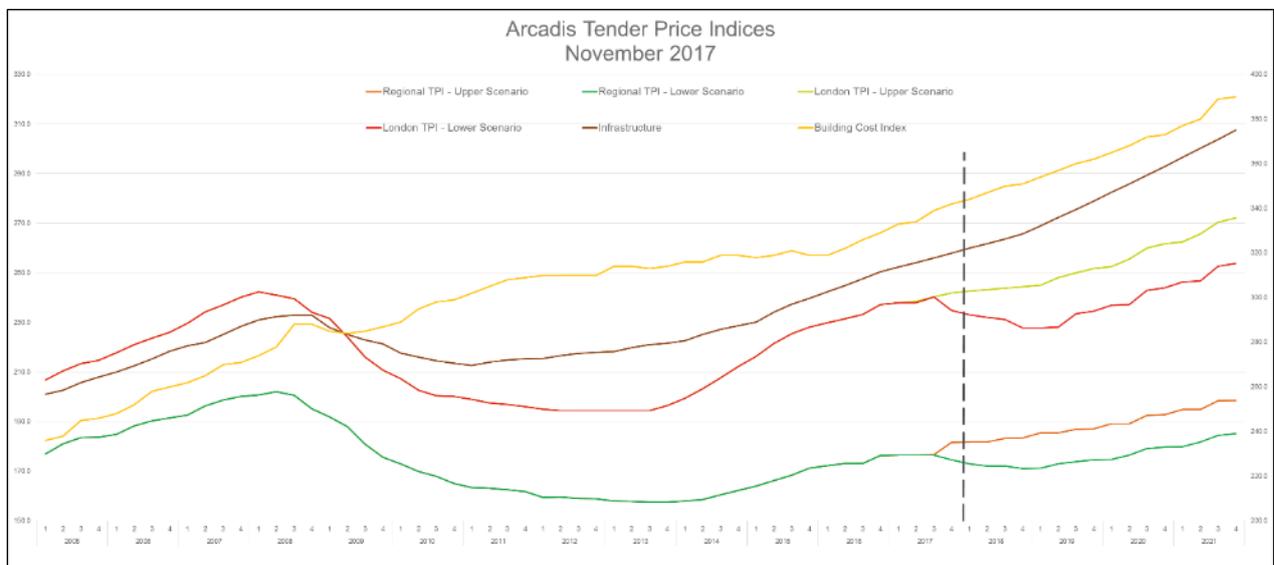


Figure 2.2 – Arcadis Tender Price Index

2.3 CAPITAL INVESTMENT PROGRAMME 2018

As part of our normal business planning cycle, we have reviewed the 2017 Capital Investment Programme in light of changes to our business, the latest traffic forecasts, and the other key drivers for investment set out in Chapter 2. This has resulted in an updated programme of projects in this 2018 Capital Investment Programme as set out in the table below (Figure 2.3).

Capital Investment Programme in 2017/18 prices (£m)	2018/19	2019/20	2020/21	2021/22	2022/23	5 Year Total
 Investment in Year No Investment in Year						
ASSET STEWARDSHIP, OPERATIONAL RESILIENCE, COMPLIANCE AND EHS						
ASSET STEWARDSHIP						
Main Runway Resurfacing						
Northern Runway Resurfacing						
Taxiway Rehabilitation Programme						
Airfield Data Network Replacement						
Air Traffic Control Asset Replacement Programme						
CCTV Replacement Programme						
IT End of Serviceable Life Programme						
Core Asset Stewardship						
Asset Stewardship Total	67.3	69.2	66.8	98.3	68.3	369.8
OPERATIONAL RESILIENCE						
Power Resilience						
Flood Mitigations						
Operational Resilience Minor Projects (less than £1m each)						
Operational Resilience Total	8.6	7.9	10.0	10.5	7.0	44.0
COMPLIANCE AND EHS						
Common Travel Area (CTA) / Baggage Reclaim Solution						
ST Access Restrictions						
Pedestrian Safety Enhancement						
Electric Vehicles Infrastructure						
Compliance and EHS Total	19.1	8.3	1.0	1.0	2.0	31.4
	94.9	85.4	77.8	109.8	77.3	445.2
CORE PROJECTS - Capacity and Service						
ST Baggage and Pier 1						
NT Retail Churn of ex-WDF areas						
NT PRM and Toilets						
Check-in Automation						
95% Pier Service (Pier 6)						
95% Pier Service (Pier 4 Multi-Choice Apron Reconfiguration)						
Push and Hold Stands (130's and 140's)						
NT IDL Expansion						
ST IDL Capacity						
Railway Station Contribution						
Public Transport/DDA Access						
Gatwick Roads						
NT Coaching Bays						
Pier 4 Gaterooms / Internal Refurbishment						
Pier 5 Link Bridge						
Automated Boarding Gates						
NT Baggage Reclaim						
Gen3 Security						
Common User Ground Handling Equipment [^]						
Gatwick Gateway (previously Logistics Centre Relocation/Expansion)						
Capacity and Service Minor Projects (less than £1m each)						
	81.8	68.0	82.6	91.6	66.1	390.0

* Common User Ground Handling Equipment will be a lease purchase but will be reflected in GAL's balance sheet.

Figures correct as at January 2018

Capital Investment Programme in 2017/18 prices (£m)	2018/19	2019/20	2020/21	2021/22	2022/23	5 Year Total
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Investment in Year
No Investment in Year

CORE PROJECTS - Commercial

Hotel Redevelopment Programme						
Accommodation Strategy						
Consolidated Car Rental						
Batching Plant						
easyJet Hangar Utilities						
Digital Media						
Car Parking - Product Development						
NT Short Stay Car Park (MSCP7)						
ST Short Stay Car Park (MSCP4)						
Car Park Decking						
Car Park Optimisation (Long-Stay, Short-Stay and Staff)						
IT Commercial Initiatives and Innovation						
Property Minor Works						
Commercial Minor Projects (less than £1m each)						
	26.6	36.6	59.5	23.4	9.9	156.0

DEVELOPMENT PROJECTS

HBS Replacement						
Hangar Facilities						
Business System Transformation and Renewals						
	63.0	42.5	6.9	4.1	2.5	119.1

GRAND TOTAL	266.4	232.6	226.9	228.8	155.7	1,110.4
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Figures correct as at January 2018

Figure 2.3 – Programme of forecast projects for the 2018 Capital Investment Programme

Figure 2.4 below provides a graphical representation of our 2018 Capital Investment Programme.



Figures correct as at January 2018

Figure 2.4 – 2018 Capital Investment Programme per investment category

2.4 EMERGING PROJECTS

As part of our consultation with the ACC and PAG on this Capital Investment Programme, we discussed what we termed 'emerging projects'. In previous editions of this Programme, we have put in 'placeholders' to identify investment in projects to address known issues or opportunities, but which were sufficiently far in advance to have no clear scope. Such placeholders can make it somewhat difficult to compare plans over multiple years. Now we have gained experience in managing a more flexible capital planning approach, we propose to highlight projects or initiatives that we are considering, but that lack sufficient maturity to be included in the Programme during our consultation process. If and when they progress to a more concrete stage, they will be added into the Capital Investment Programme. Emerging projects that are not within this Capital Investment Programme, but which we envisage may be needed in the future, and were shared during the consultation workshops, are given below:

- **Risk and Lessons Management:** to provide a more sophisticated system than is currently in place to manage key operational risks for the airport, understand what actions are required to mitigate against them and take learnings from any previous events.
- **Integrated Command and Airport Operations Control Centre:** to facilitate shared, real-time operational awareness and management data between ourselves, the airlines and their ground handlers.
- **Airfield Operations Database Replacement:** to replace the existing IDAHO airfield operations system.
- **Microsoft Windows 10 Replacement:** to replace, the soon to be obsolete, Microsoft Windows 7 operating system with Windows 10 across all relevant airport facilities
- **Ground Based Augmentation System (GBAS):** an alternative to an aircraft instrument landing system (ILS). Deployment of this system would be dependent upon aircraft fleets having the corresponding system.
- **Follow the Greens:** to provide real-time directional airfield ground lighting to guide aircraft to and from the runway to parking stands.
- **Robotic Car-parking:** the use of robots to park cars, offering the potential for more efficient use of existing car park space through close-space parking. A pilot project at Lyon airport is being monitored for effectiveness and customer response.

During the consultation process the ACC asked us to look into the provision of the following facilities and therefore we have added the projects below to our emerging projects list:

- **Pier 2 Gates 23 to 27:** to address operational difficulties for wide-bodied aircraft in an open gateroom configuration.
- **Lift Access of Piers 2, 3 and 4:** to look at the feasibility of providing additional lifts for transporting passengers to/from ground level.
- **Passenger Conformance:** to expand the recent trial to improve the boarding process undertaken with easyJet to other airlines.
- **Baggage Auto re-flighting:** to automate the re-flighting process. This would significantly improve baggage repatriation following a baggage system failure.

- **Review Image of Bag Initiative (RIBi):** to explore the opportunity for aircraft to carry unaccompanied hold bags and reduce the on-time-performance of off-loading such bags.

In addition to the above projects, we discussed the emerging projects below which are itemised in the Programme, but at this time have little certainty of the full scope and cost:

- **Automated Boarding Gates:** a small allowance has been made within this Capital Investment Programme to fund proving the concept of automated boarding gates, but further investment would be required if the concept was found to be successful.
- **International Departure Lounges Expansions:** whilst an immediate expansion of the North Terminal food and beverage mezzanine is clearly scoped, estimates for further expansion in the North Terminal and an expansion of the South Terminal has been included in the latter years of this Capital Investment Programme, but the required investment is likely to go beyond this five year period.

2.5 SUMMARY

The total expenditure outlined in this investment plan for the five years commencing April 2018 is £1.11 billion in 2017/18 prices. We are responding to the feedback received from our airline customers, PAG and passengers to the products and services that they have told us would enhance their experience of using the airport. This is being done by efficiently developing and delivering the projects in this Capital Investment Programme to meet their requirements. These projects include the improvements we will be making to the efficiency and capacity of the airfield; automation of check-in and bag drop facilities; additional baggage reclaim facilities; automation of aircraft boarding processes; additional car parking capacity; and the provision of shops and restaurants best suited to our passengers' needs. We are continually striving to deliver more value for less cost by working more efficiently, ensuring that the projects appearing in this Capital Investment Programme have been fully explored in their development phase, considering people, process, systems, and infrastructure.

The 2018 CIP demonstrates our continuing commitment to a balanced investment portfolio. The biggest proportion of investment, 40%, will be invested in asset replacement, resilience and compliance, rising to 51% if the Standard 3 Hold Baggage Screening upgrade were to be included in this category. 35% of the total budget will be invested in service and capacity (including CTA), and 14% in commercially returning projects.

As noted, this is a live rolling five-year Capital Investment Programme and where an investment case is clear we may look to accelerate projects at the back end of the programme or introduce additional projects, as we have done since the introduction of the Commitments framework. Agility is critical to our success in adapting our plans to suit an ever-changing environment whilst maintaining our commitment to invest in the interests of our passengers and airline customers.

This document represents a Capital Investment Programme issued as an output of, and for the purposes of, further consultation, and thus does not represent a mandatory investment programme.

CHAPTER 3: MAJOR DEVELOPMENT PROJECTS OVERVIEW

The table below provides summary details of our Major Development Projects predominantly over £10 million (excluding Asset Stewardship, Operational Resilience, Compliance and EHS projects) to be continued or commenced within this 2017 Capital Investment Programme:

Project Name	Start Date	End Date	Purpose
Check-in Automation	Dependent upon airlines' individual requirements	Dependent upon airlines' individual requirements	Reduces queues for passengers through check-in process efficiencies, provides passengers with check-in product choices, provides technology and infrastructure solutions leading to reduced costs for airlines and allows airlines to respond to current and future passenger requirements.
95% Pier Service (Pier 6 Extension)	Summer 2018	Winter 2021	Provides sufficient pier-served stands to maintain 95% pier service levels in line with forecast passenger growth.
Pier 4 Gaterooms / Internal Refurbishment	2020/21	2023	Refurbishment of gaterooms and other internal facilities improving the passenger experience.
Push and Hold Stands (130's and 140's)	Spring 2019	Phase 1 Spring 2021	Provides 'stands' to hold aircraft whilst waiting for their ATC take-off slots thus freeing-up stands for other aircraft. Includes de-icing facilities.
Hangar Facilities	Autumn 2017	Spring 2019	Provides new hangar for aircraft maintenance in partnership with Boeing.
NT IDL Expansion	2018/19 (Phase 1)	Outside CIP Period	Provides additional IDL capacity to meet forecast traffic growth. First phase provides expanded catering facilities on mezzanine level.
ST IDL Capacity	2021/22	Outside CIP Period	Provides an extension to the existing IDL to meet forecast passenger growth.

Project Name	Start Date	End Date	Purpose
Railway Station Contribution	Winter 2018	Winter 2021	Provides station improvements which offer a much improved passenger experience by relieving crowding, improving vertical circulation, and providing a more integrated concourse which offers intuitive connection with airport terminals and/or onward travel.
Gatwick Roads	Programme yet to be determined	Programme yet to be determined	Provides additional road network capacity to meet forecast traffic growth.
Automated Boarding Gates	Dependent upon proof of concept and airlines' readiness	Dependent upon proof of concept and airlines' readiness	Provides electronic gates for passengers to self-scan boarding passes for quicker processing onto the aircraft.
NT Baggage Reclaim	2020	2022	Provides a new baggage reclaim belt to meet forecast traffic growth.
Common User Ground Handler Equipment	2018/19	2018/19	Provides ground handling equipment for shared use on the airfield.
Accommodation Strategy	Various	Various	Provides campus wide office and contractor accommodation.
Digital Media	Various	Various	Programme to update media and advertising across the airport.
Commercial Re-lets	Various	Various	Ongoing programme to re-let commercial units providing shell and core ready for concessionaire fit-out.
IT Commercial Initiatives and Innovation	Various	Various	Programme of commercial initiatives and innovations through the use of IT
NT Short-Stay Car Park (MSCP7)	Programme yet to be confirmed	Spring 2021	Provides additional car parking capacity to meet forecast traffic growth.
ST Short-Stay Car Park (MSCP4)	Programme yet to be confirmed	Spring 2022	Provides additional car parking capacity to meet forecast traffic growth.
Car Park Decking	Winter 2017	Summer 2018	Provides additional car parking capacity to meet forecast traffic growth.

Project Name	Start Date	End Date	Purpose
HBS Replacement	June 2016	Winter 2019	Provides compliance with Department for Transport security regulations to replace existing HBS machines with Standard 3 machines by 1 December 2019.
Gatwick Gateway	2021/22	Outside CIP Period	Provides a new logistics centre to bring goods into and waste out of the airfield.
Business Systems Transformation and Renewals	Ongoing programme	Various	Ongoing programme of IT transformation projects. Includes Asset Data Platform to consolidate and standardise asset data into one accessible place underpinning the airport's ability to maintain, provide resilience and develop assets.

The table on the following page provides summary details of significant Asset Stewardship, Resilience and Compliance Major Development Projects which are part of this Capital Investment Programme:

Project Name	Start Date	End Date	Purpose
Main Runway Resurfacing	Summer 2017	2022	Rehabilitates the runway to ensure maintenance of CAP168 compliance status and the ability to operate safely.
Common Travel Area (CTA) /Baggage Reclaim Solution	Winter 2017	Summer 2019	Provides a solution for the processing of arriving CTA passengers to facilitate achieving 95% pier service, and provides an additional baggage reclaim facility for South Terminal.
Airfield Data Network Replacement	Winter 2017	Winter 2021	Replacement of airfield operating systems cabling.
IT End of Serviceable Life Programme	Various	Various	Ongoing programme to replace life-expired IT assets, including Network and Firewall Upgrade.
ATC Asset Replacement Programme	Various	Various	Ongoing programme to replace life-expired ATC navigations aids assets.
Power Resilience	Various	Various	Programme of works to stabilise energy and power services across the airport.
Flood Resilience	Various	Various	Programme of works to mitigate against the airport campus flooding.
Electric Vehicles Infrastructure	2018/19	Outside CIP Period	Provides electric vehicles charging points across the airport campus.

Appendix A – Terminals and Airfield Facilities Capacity Analysis

By using the busy day schedules and sensitivity analysis to assess demand, we have identified below the capacity and service impact for the North Terminal, South Terminal and the Airfield for which intervention will be required.

South Terminal Capacity and Service Impact	Summer 2022
ST Check-in	
ST Baggage Outbound	
ST Security	
ST International Departure Lounge	
ST Borders	
ST Baggage Reclaim (inbound)	 1 belt

North Terminal Capacity and Service Impact	Summer 2022
NT Check-in	
NT Baggage Outbound	
NT Security	
NT International Departure Lounge	
NT Borders	 2 traditional desks
NT Baggage Reclaim (inbound)	 1 international belt

Airfield Capacity and Service Impact	Summer 2022
NT Stands	 5 Code C
ST Stands	

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Appendix B – Core Service Standards (Rebates) Scheme

	Standard “i”	Metric	Rebate level	Maximum potential rebate (both terminals, unless noted)
(i)	Passenger satisfaction measures			0.80%
1	Departure Lounge Seat Availability	Moving Average QSM Score	3.8	0.20%
2	Cleanliness		4.0	0.20%
3	Way-Finding		4.1	0.20%
4	Flight Information		4.2	0.20%
(ii)	Security			2.60%
5	Central Passenger Search	Times <5 Minutes and Times ≤15 Minutes	95% 98%	1.0%
6	Central Passenger Search*	Day when single time slice >30 Minutes	Single event per day	(0.05% per day) (0.7% max per month)
7	Transfer Passenger Search	Times <10 Minutes	95%	0.20%
8	Staff Search (Terminals and Crew)	Times <5 Minutes	95%	0.35%
9	External Control Posts Search	Times <15 Minutes	95%	0.35%
(iii)	Passenger operational measures			1.05% (ST) 1.55% (NT)
10	Passenger Sensitive Equipment (General)	% Time Available	99%	0.05%
11	Passenger Sensitive Equipment (Priority)	% Time Available	99%	0.50%
12	Inter Terminal Shuttle System	% Time 1 Car Available and 5 Time 2 Cars Available	99% 97%	0.50% (NT)
13	Arrivals Reclaim (Baggage Carousels)	% Time Available	99%	0.50%

(iv)	Airline operational measures			1.60%
14a	Outbound Baggage	OBP** Daily	97%	0.175% per day (0.70% max per month)
14b	Outbound Baggage	OBP** Monthly	99%	0.70%
15	Stands	% Time Available	99%	0.05%
16	Jetties	% Time Available	99%	0.30%
17	Pier Service	Moving annual average % passengers pier served	95% (both terminals)	0.50%
18	Fixed Electrical Ground Power	% Time Available	99%	0.05%
(v)	Aerodrome congestion term			0.70%
19	Airfield congestion / availability	[maximum cumulative movements deferred following a material event which has a material impact]	>3**	0.70%
	Total			7.25% (NT) 6.75% (ST)

* In a day when the single time slice is greater than 30 minutes the maximum daily penalty is 0.05% with a maximum monthly penalty of 0.70%

** Refer to Gatwick Airport Core Service Standards Handbook for detail.

Calculation of the passenger satisfaction measures, the security queues, the Passenger operational measures and the Airline operational measures shall be undertaken in accordance with the "Gatwick Airport Core Service Standards Handbook".

Appendix B – Airline Service Standards

Standard "k"	Metric	Target Level	Reduction Percentage
Check-in performance - queue time	Times <30 Minutes	95%	1.0%
Arrivals bag performance - last bag on carousel	Times <50 Minutes (large aircraft) Times <35 Minutes (small/medium aircraft)	95%	0.50%

Calculation and measurement of the Airline Service Standards will be undertaken in accordance the "Gatwick Airport Airline Service Standards Calculation Guide" which may be amended from time to time by agreement between Gatwick Airport Limited (GAL), the Gatwick Airline Operators Committee (AOC) and the Gatwick Airport Consultative Committee (ACC).