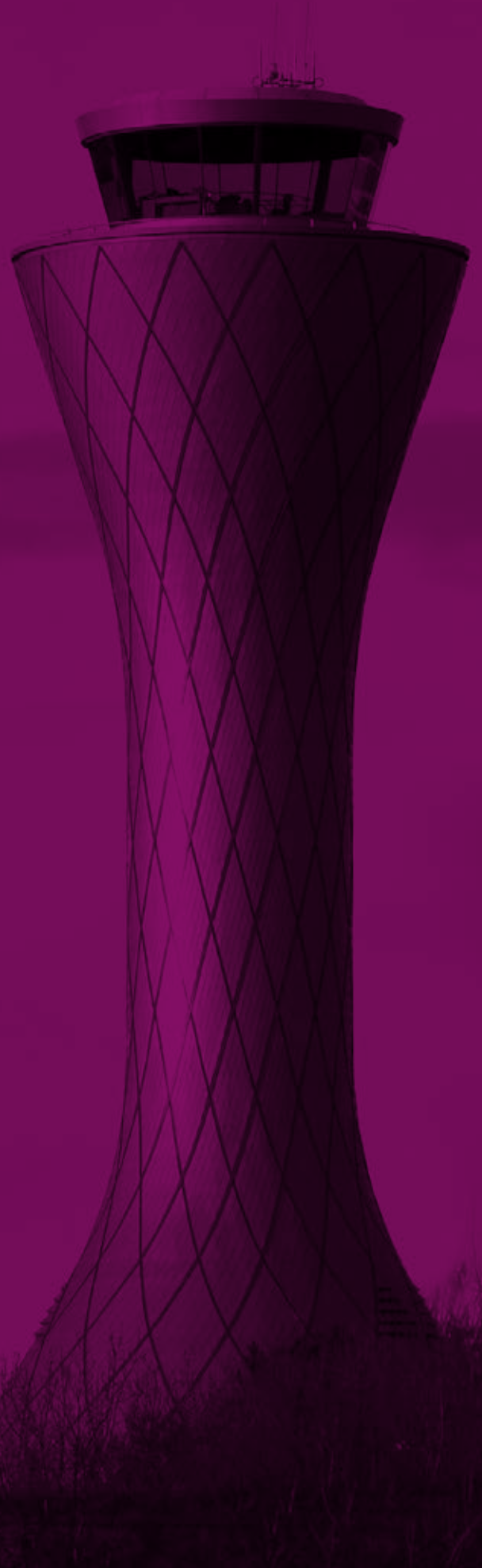


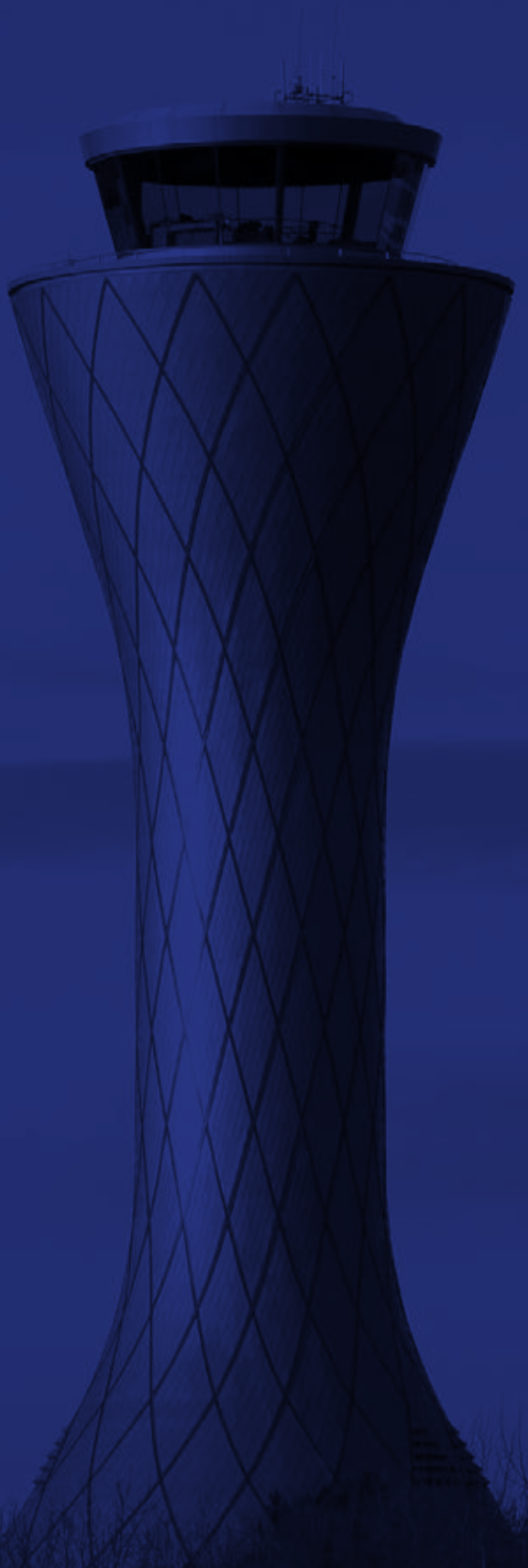
Masterplan 2016-2040



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Foreword



Foreword



Growth

It seems to be a word that we at Edinburgh Airport have had to deal with for a number of years now.

We've grown by one million passengers each year since 2012. We've grown our route network, serving more destinations and working with more airlines than ever.

We believe that this growth is good for Scotland. An independent study that was carried out earlier this year gives evidence to that – the activity at the airport generates almost £1 billion per year for the Scottish economy while supporting over 23,000 jobs.

We also believe that growth will continue at Edinburgh Airport.

Fundamentally we're an importer of people. So we concentrate not just on the 5 million Scots that we serve but on the 7 billion people across the globe that wish to enjoy what our great country has to offer.

Scotland is a great product. Our growth is driven by that product. Edinburgh is Scotland's attack brand, it leads the rest of the country and will continue to do so, whether in terms of tourism or business. Scotland itself has a great global draw.

Edinburgh Airport is an enabler – a conduit for prosperity for all.

So yes, growth is good.

But we also firmly believe that our growth is something that must be linked to, supported by and supportive of Edinburgh's future development.

That's why this Masterplan is so important. It sets out how we think we'll grow in the decades to come, and poses questions around future growth. Your views are important in making sure that our thinking is correct and that it fits with wider plans.

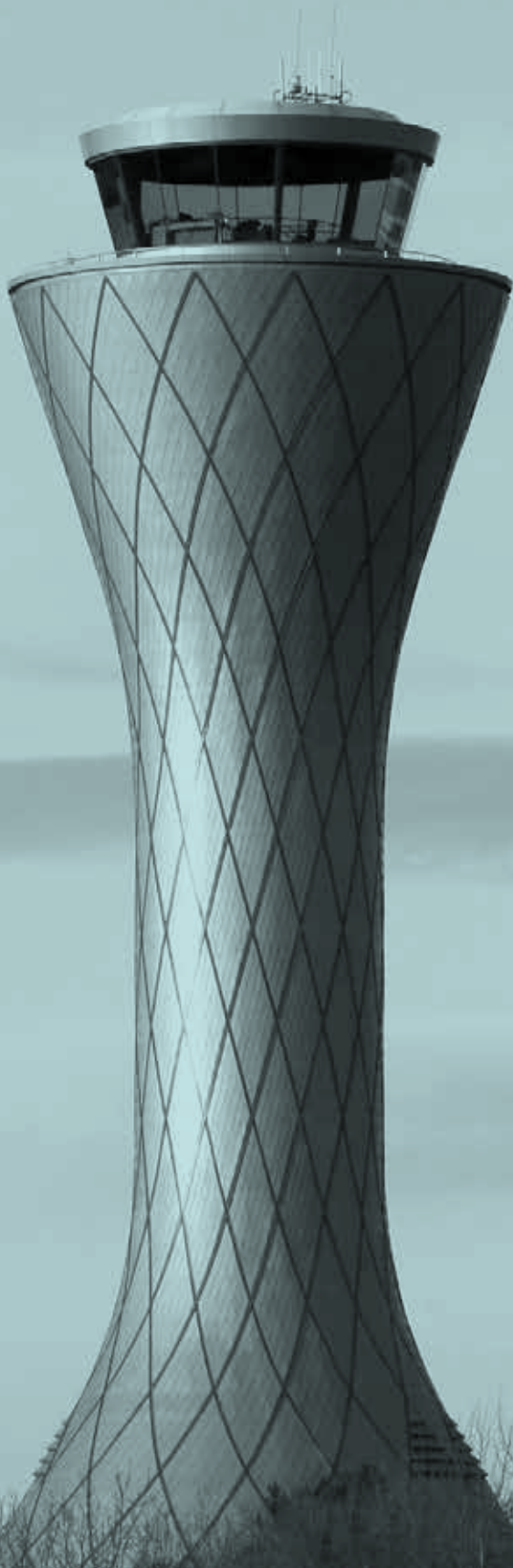
It's important to stress that our Masterplan is focused on our growth on the ground. It is not concerned with air space change. We'll be consulting again on that early in 2017.

Thank you for your interest in our airport. I look forward to reading your views on how we continue to manage its growth for the benefit of all.



Gordon Dewar
Chief Executive

Executive Summary



Executive summary



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This Edinburgh Airport Masterplan sets out the development strategy for the realistic and responsible growth of Edinburgh Airport. Based on forecast growth and resultant expenditure we propose terminal and airfield expansion, and of supporting ancillary facilities, up to 2025 and 2040. We have also produced a more speculative plan of development up to 2050.

The key objectives of this Masterplan are to:

- » set out a sound development scenario which will provide clarity and certainty for local communities, passengers, the local authority and neighbouring landowners, amongst others
- » highlight the prospects for air traffic growth, and associated developments
- » quantify Edinburgh Airport's impact upon the environment and how this can be reduced in the future
- » identify future land uses in order to allow the airport to expand to handle the forecast growth in passenger numbers
- » set out the approximate timescales for the phasing of additional capacity requirements.

Over the last 10 years, the number of passengers travelling through Edinburgh Airport has increased significantly. This has grown more in the past three years than the previous 10 years. It is anticipated that between 2016 and 2020 passenger numbers will increase to 13.1 million.

Continual growth in passenger numbers presents Edinburgh Airport with opportunities and challenges. We need to ensure that growth can be managed efficiently, whilst continuing to improve service levels. The airport operates without any public subsidy, so there is a need to ensure that the business is sustainable.

The current economic benefit of having an airport in Edinburgh amounts to £955.4 million Gross Value Added (GVA)/year to the Scottish economy of which £507.1 million/year is retained within Edinburgh. The analysis also found that this level of activity currently supports almost 23,340 Scottish jobs, including around 12,330 jobs in Edinburgh.

Edinburgh Airport was sold by BAA to Global Infrastructure Partners (GIP) in 2012. The change of ownership kick-started a period of growth and development for the airport, seeing approximately one million passengers added per year and growing to a projected 12 million passengers in 2016. The airport, designed in the 1970s to handle one million passengers a year, has needed to change to accommodate growth and ensure that passenger experience levels are maintained. GIP committed to an investment programme of £150 million to ensure that the airport was able to grow effectively.

This programme has seen improvements to many parts of the campus, most notably a terminal extension containing a new security hall and upgraded retail facilities; a new arrivals hall; and a complete upgrade of the main check-in hall.

Executive summary

Edinburgh Airport is on track to reach the target it set to increase the percentage of passengers using public transport to 35% by 2017. Continued mode shift from car towards public transport has been achieved through a proactive approach working in partnership with councils, the Scottish Government, SEStran and transport operators. The arrival of the tram system during 2014 has provided an alternative mode of travel to and from the city centre, and the opening of Edinburgh Gateway rail station provides a nearby connection for local and national heavy rail services.

Edinburgh Airport is committed to growing sustainably and doing all that it can to protect the environment. A number of initiatives have been undertaken, and efforts will continue in the future to ensure that environmental issues are at the forefront of decision making.

So that the airport can effectively and sustainably serve the people of Scotland and those that wish to come to Scotland, we believe that growth of the airport is required, albeit within its current boundaries and in a sustainable manner.

This Masterplan, therefore, proposes:

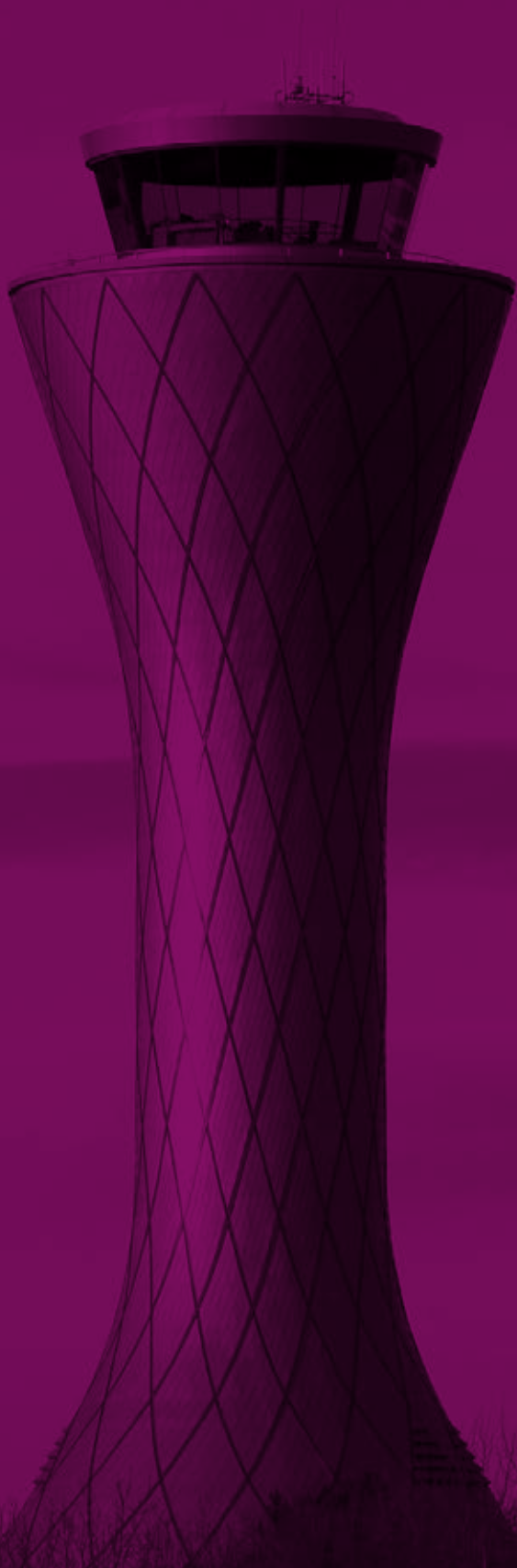
- » an enlarged terminal building to create space for more passengers and facilities, particularly to serve additional international services
- » an enlarged area for the parking of aircraft
- » an enlarged cargo storage area
- » improved access through provision of a new road linking to the Gogar Roundabout
- » in order to achieve all of the above, the removal of the current second runway, the configuration and size of which are not suitable for frequent use
- » the continued safeguarding of land for a new second runway. This safeguarding is a long-term precaution only, as we believe that the future growth of the airport can be sustained by the current main runway only.



Improved access
through provision of
a new road linking to
the Gogar roundabout.



1. Introduction



Introduction



Background to the Masterplan

1.1 The UK Government's 2003 White Paper *The Future of Air Transport* sets out the long-term framework for the development of UK airports over a 30-year period. The White Paper requires all UK airports to produce new or revised airport masterplans to reflect the contents of the White Paper and explain how they propose to take forward the development of airport facilities. The UK Government's policy on aviation continues to be based on the White Paper.

1.2 The Department of Transport issued guidance on the *Preparation of Airport Masterplans* in 2004, which requires Masterplans to be prepared and reviewed on a five-yearly basis. The current Edinburgh Airport Masterplan was approved in 2011 and will be replaced by this emerging Masterplan.

1.3 The 2011 Edinburgh Airport Masterplan is referred to in the Edinburgh Local Development Plan. Policy EMP 4 of the Local Plan supports the development of the airport consistent with an agreed Masterplan.

1.4 The Edinburgh Airport Masterplan (2011) reflected the principles of the White Paper and presented:

- » forecasts for passenger demand
- » expansion requirements up to 2013
- » surface transport improvements to access the airport up to 2013
- » a less detailed overview of future development from 2013-2030.

1.5 This new Masterplan is a key tool in taking forward the strategic policy framework for Edinburgh Airport. Further supplementary documents will provide greater detail on how we will address targets or prepare specific strategies. Development proposals will need to be considered through the statutory planning system.

1.6 The relevant national and local planning and transport bodies have taken into account the White Paper and 2011 Edinburgh Airport Masterplan when preparing guidance, strategies and policies. It is therefore advised that these are referred to when reading this document. Planning policies protect land required for future airport expansion.

Historical development of Edinburgh Airport

1.7 Edinburgh Airport, as it stands today, covers 367 hectares and its current layout and land use are shown on Map 1 in Chapter 8. It is bounded to the north by the River Almond, to the south by the Royal Highland Showground, and to the east by the Edinburgh to Fife rail line.

1.8 The existing terminal building and main runway were developed in 1977 replacing the Turnhouse facilities which had been in place since before the second World War. The facilities at Turnhouse now house our expanding cargo operation, which is Scotland's small parcels hub and a key facility supporting Scottish businesses and the economy.

Introduction

1.9 The core developed area is around the terminal building. Other developed areas comprise the business aviation terminal and maintenance area adjacent to the Gogar Burn and the western ancillary area at Almond Road.

1.10 The airport grew from less than 1 million passengers per annum in 1977 to 1.85 million passengers per annum at privatisation in 1987. Since then, by intensively developing the land within our boundaries to provide all the facilities required to support growth, today's airport now handles around 12 million passengers per annum.

Changing role and character of Edinburgh Airport

1.11 Over the last 10 years, the number of passengers travelling through Edinburgh Airport has increased significantly. This has grown more in the past three years than the previous 10 years. It is anticipated that between 2015 and 2020 passenger numbers will increase to 13.1 million in 2020.

1.12 Passenger demand is greater in the summer months as leisure demand increases, primarily due to the school breaks in July/August. This is more than enough to offset any reduction in business demand. Weekdays are busier on average in the peak month than weekends. This is due to the combination of business and leisure demand during the week, and much reduced business traffic at weekends.

1.13 The busiest times at Edinburgh Airport are at the beginning and end of each day. The peak departing period at the beginning of each day, and the peak arriving period at the end of the day, reflect the fact that Edinburgh is an overnight base for a large number of aircraft. Other busy periods during the day reflect the in-bound and out-bound patterns created by a busy short-haul, domestic route network. There remains considerable scope for growth in demand around the middle of the day. Long-haul routes, increased frequencies and internationally-based aircraft operators can naturally fit into these relatively quiet periods.

1.14 Since the publication of the 2011 Edinburgh Airport Masterplan significant investment has been made in providing additional facilities to accommodate passenger growth. These are highlighted in Chapter 4.

1.15 Recent years have seen Edinburgh Airport change immeasurably, based on passenger demand, advances in technology, security and safety. The international route network has grown and Edinburgh Airport offers more choice than any other airport in Scotland. There are daily direct flights to the Middle East, North America and many cities across Europe, including London, which is served by more than 50 flights a day. The benefits of this network to Scotland's position in world markets and therefore to our economy are substantial. The contribution to the Scottish economy of the activity generated by the airport is worth almost £1 billion every year and provides 23,000 jobs across the country.



1.16 That growth is reflective of Scotland and Edinburgh's economic performance and their attractiveness as a destination for visitors. It is because of this attractiveness and Scotland's global reputation that we believe that this growth will continue. The growth, in the main, is driven by visitors to Scotland. The appetite for people from across the globe to visit Scotland remains undiminished. This growth, assisted by progressive Scottish Government policies including the halving of Air Passenger Duty, will mean that Edinburgh Airport will continue to be one of the main drivers of the Scottish economy.

1.17 Continual growth in passenger numbers presents Edinburgh Airport with opportunities and challenges. We need to ensure that growth can be managed efficiently, whilst continuing to improve service levels. The airport operates without any public subsidy, so there is a need to ensure that the business is sustainable.

1.18 We are currently reviewing airspace management and a separate public consultation is being undertaken for that review.

Objectives of the Masterplan

1.19 The Masterplan sets out the development strategy for the realistic and responsible growth of Edinburgh Airport. Based on forecast growth and resultant expenditure we propose terminal and airfield expansion and expansion of supporting ancillary facilities up to 2025 and 2040. We have also produced a more speculative plan of development up to 2050.

1.20 The key objectives of this Masterplan are to:

- » to set out a sound development scenario which will provide clarity and certainty for local communities, passengers, the local authority and neighbouring landowners, amongst others
- » to highlight the prospects for air traffic growth, and associated developments
- » to quantify Edinburgh Airport's impact upon the environment and how this can be reduced in the future
- » to identify future land uses in order to allow the airport to expand to handle the forecast growth in passenger numbers
- » to set out the approximate timescales for the phasing of additional capacity requirements.

2. The social and economic benefits of aviation



The social and economic benefits of aviation



2.1 The responsible growth of air transport in Scotland can help disperse the economic and social benefits which air travel generates across the country and society. The *Future of Air Transport* White Paper states that in the Central Belt: 'air travel plays an important part in improving the economic competitiveness of Scottish businesses and attracting inward investment, as well as serving the main population centres'.

2.2 The economic importance of Edinburgh and Glasgow are critical to the health and competitiveness of the national economy, and it is important that their contribution is reflected in their ability to grow sustainably. The Scottish Government and the City of Edinburgh Council have prioritised West Edinburgh, which includes Edinburgh Airport, as a strategically important location in planning and economic terms, regionally and nationally. Edinburgh Airport is clearly well-placed to support and serve the high value-added economic activities arising from Edinburgh's position as Scotland's capital city and one of Europe's leading financial and business services centres.

2.3 In March 2016, Biggar Economics completed an economic impact analysis of Edinburgh Airport. The study considered the economic benefits of the airport to Edinburgh and the Scottish economies; the analysis also considered how these benefits could increase by 2020 under various growth scenarios.

2.4 The key finding of the analysis is that the economic benefit of having an airport in Edinburgh currently amounts to £955.4 million Gross Value Added (GVA)/year to the Scottish economy of which £507.1 million/year is retained within Edinburgh. The analysis also found that this level of activity currently supports almost 23,340 Scottish jobs, including around 12,330 jobs in Edinburgh.

2.5 The analysis also indicated that by 2020 the value of these benefits to the Scottish economy could increase to between £1.1 billion and £1.6 billion GVA/year, of which between £594.9 million and £767.8 million GVA/year could be retained in Edinburgh. It was estimated that this level of activity could support between approximately 26,000 and 40,280 Scottish jobs, of which between around 13,940 and 19,920 of these could be in Edinburgh.

Current economic impact

2.6 The economic benefits associated with Edinburgh Airport include the direct, indirect and induced impacts associated with:

- » airport operations
- » other associated on-site operations
- » off-site operations
- » passenger expenditure
- » freight traffic arriving and departing from the airport.

The social and economic benefits of aviation

2.7 Airport operations include the employment and economic activity directly supported by Edinburgh Airport, the effect of purchases made by the airport and its staff and the effect of capital investment by the airport. Taken together the impact of these airport operations currently generates £138.1 million GVA/year for the Scottish economy and supports 1,516 jobs. On-site operations include retail concessions and food and drink outlets within the airport as well as airline services, car parking and customs and immigration. This activity is not undertaken by Edinburgh Airport but is attributable to the presence of the airport. Taken together it has been estimated that these activities contribute a further £262.2 million GVA/year to the Scottish economy and support around 6,760 further jobs.

2.8 The airport also supports a range of off-site activity such as hotels and car parks that cater mainly to passengers. It was estimated that the proportion of this activity that is directly attributable to the presence of the airport is £40.7 million GVA/year to the Scottish economy and supports around 940 Scottish jobs.

2.9 In 2015, 11.1 million passengers passed through the airport, making it the busiest airport in Scotland and the sixth busiest airport in the UK. Inbound passengers arriving at the airport make an important contribution to Scotland's tourism industry. While it is likely that if there was no airport in Edinburgh some of these tourists would still visit Scotland, many would not.

2.10 The airport, therefore plays a crucial role in facilitating the expenditure of visitors who would not otherwise travel to Scotland. It was estimated that the expenditure of these passengers currently generates £301.9 million GVA/year for the Scottish economy and supports around 9,620 jobs. This impact is of course also dependent on the existence of a strong tourism sector, capable of providing the type of services and facilities demanded by tourists. The role of the airport in relation to this impact is, therefore, necessary but not sufficient by itself.

2.11 Interestingly, it was also estimated that between a quarter and a third of the total impact associated with passenger expenditure (£114.5 million GVA and almost 2,890 jobs across Scotland) derived from the expenditure of outbound passengers preparing for their trip.

2.12 Although the main focus of activity at Edinburgh Airport is passengers, the airport is also a freight hub. By enabling the import and export of goods, the airport connects Scottish businesses directly with markets and suppliers all over the world. As in the case of passengers, it is likely that if the airport did not exist, then some freight customers would use alternative airports or modes of transport to get their goods to market or secure important supplies. This will not be the case for all freight customers as for some the additional costs of using an alternative airport or mode of transport would be prohibitive.



2.13 For these customers, the presence of an airport in Edinburgh directly facilitates additional trade. It was estimated that this additional trade currently generates £97.9 million GVA/year for the Scottish economy and supports 1,630 Scottish jobs. While the airport plays an important role in facilitating the trade that generates the impact, the trade itself is undertaken by other companies. The role of the airport in relation to this impact is, therefore, necessary but not sufficient by itself.

2.14 A breakdown of the current quantifiable economic benefit to the Scottish economy of having an airport in Edinburgh is provided on page 20. This illustrates that 15% of the annual GVA benefit associated with the airport and 6% of the jobs supported are directly related to airport operations. It also shows that almost half of the GVA benefit associated with the airport, and more than half of the jobs supported, are generated by the expenditure of passengers.

2.15 The airport is an important contributor to public authorities, i.e. Edinburgh Airport currently pays over £2.5 million to Lothian and Borders Police and more than £4.7 million in rates every year to the City of Edinburgh Council. Unlike other rate payers, Edinburgh Airport maintains all the roads within the airport boundary, including the costs of street lighting and is also responsible for all waste disposal costs.

2.16 Edinburgh Airport is a key member of the local community. As part of this, it offers a range of funding and sponsorship programmes to community groups. In addition to this, it has also spent £853,000 on transport improvements since 2007, both in and around the airport, through money generated by a levy placed on on-airport car parking.

Wider economic contribution

2.17 Not all of the economic benefits associated with having an airport in Edinburgh can be quantified. The airport is a key part of Scotland's economic infrastructure, providing a crucial link between Scotland and the rest of the world. The airport also plays a key role in helping to internationalise the Scottish economy by providing vital links to overseas markets and a gateway between Scotland and the rest of the world. These links are vital, not only for supporting the export-led growth of indigenous businesses but also for helping to make Scotland more attractive to overseas investors.

2.18 Edinburgh Airport also provides a number of direct air links to remote mainland and island communities in Scotland, helping to connect them to markets and services elsewhere in Scotland and further afield. In these ways the airport plays a key role in helping to deliver the Scottish Government's primary objective of sustainable economic growth and makes an important contribution to achieving priorities identified in Scotland's Economic Strategy investment, inclusive growth and internationalisation.

The social and economic benefits of aviation

Total current impact of Edinburgh Airport GVA (£ millions)

	Edinburgh	Scotland
Direct impact of Edinburgh Airport	86.2	86.2
Edinburgh Airport supplier impact	10.0	26.7
Edinburgh Airport staff expenditure impact	2.1	10.7
Edinburgh Airport capital expenditure impact	5.5	14.6
Total Edinburgh Airport operations	103.8	138.1
Direct impact of on-site operations	161.8	161.8
Indirect impact of on-site operations	17.8	54.0
Induced impact of on-site operations	15.3	46.4
Total on-site operations	194.9	262.2
Direct impact of off-site operations	26.8	26.8
Indirect impact of off-site operations	3.0	9.0
Induced impact of off-site operations	1.6	4.8
Total off-site operations	31.4	40.7
Inbound passenger expenditure	115.3	301.9
Outbound passenger expenditure	43.3	114.5
Total passenger expenditure	158.6	416.4
Impact of exported goods attributable to airport	4.9	59.3
Impact of imported goods attributable to airport	13.4	38.6
Total impact of freight attributable to airport	18.3	97.9
Total GVA	507.1	955.4



Current impact of Edinburgh Airport (jobs)

	Edinburgh	Scotland
Total Edinburgh Airport operations	901	1,516
Total impact of on-site operations	5,094	6,759
Total off-site operations	766	939
Total impact of passenger expenditure	5,271	12,514
Total impact of freight attributable to airport	294	1,630
Total employment	12,327	23,358

6% of the jobs supported are directly **related** to airport operations.



Over the last 10 years,
the number of passengers
travelling through
Edinburgh Airport
has increased
by **20%**.



The social and economic benefits of aviation



Potential future economic impact

2.19 Over the last 10 years, the number of passengers travelling through Edinburgh Airport has increased by 20%. It is anticipated that between 2015 and 2020 passenger numbers will increase by a further 18%, rising from 11.1 million in 2015 to 13.1 million in 2020. As passenger numbers increase, so too will the scale of the economic contribution associated with the airport.

2.20 The economic impact associated with different types of passenger varies significantly depending on the origin of the passenger and the purpose of their journey. The current average economic impact per passenger varies from just £19 GVA for outbound business and leisure passengers to £521 GVA for inbound international business passengers. The future impact associated with the airport will, therefore, depend directly on the nature of new routes introduced and passenger mix that this attracts.

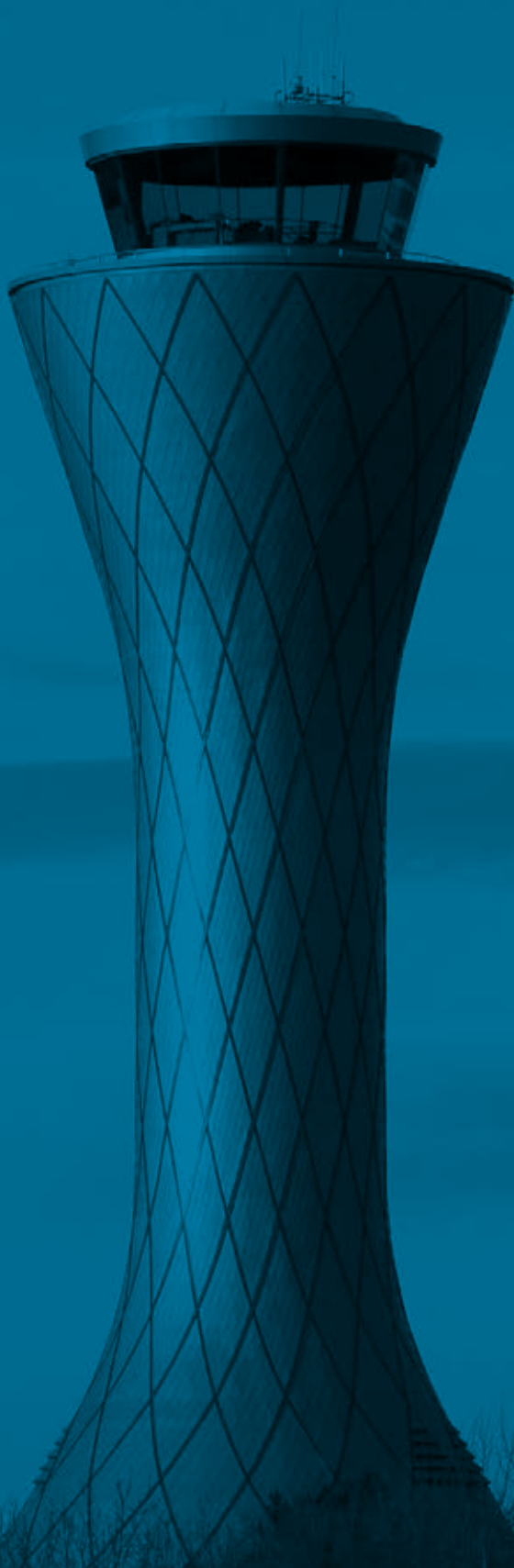
2.21 To illustrate the potential scale of the benefits to the Scottish economy of having an airport in Edinburgh, the Biggar Economic Impact analysis considered a range of potential growth scenarios. Based on these scenarios it was estimated that by the year 2020 the value of the benefits of having an airport in Edinburgh could amount to between £1.1 billion and £1.6 billion GVA/year for the Scottish economy, of which between £594.9 and £767.8 could be retained in Edinburgh. It was further estimated that this level of activity could support between around 26,000 and 40,280 Scottish jobs, of which between approximately 13,940 and 19,920 could be in Edinburgh.

2.22 Exactly where in this range the future economic benefits associated with the airport falls will depend on the nature of the new routes introduced between 2016 and 2020 and the type of passengers that these help to attract. By way of illustration, it was estimated that the additional passenger expenditure associated with the introduction of a new international route could generate £7.8 million GVA/year for the Scottish economy and support almost 240 jobs.



We have spent
£853,000 on transport
improvements since
2007, both in **and**
around the airport.

3. Policy and regulation



Policy and regulation



3.1 There are functional and legal limits to Edinburgh Airport activities as an airport owner and operator. For example, responsibility for aviation policy and air traffic control lies respectively with the UK Government and National Air Traffic Services. This chapter outlines the principal controls and influences of relevance to Edinburgh Airport's operation and future development.

3.2 The Masterplan is a material consideration in the planning process. It applies to principles and policies contained within national, regional and local planning documents.

UK airport policy

3.3 The White Paper *The Future of Air Transport* (2003) remains the principal policy document with which future proposals for Edinburgh Airport should be aligned.

3.4 The White Paper forecasts a significant increase in passenger demand at Edinburgh Airport to 2030, and also recognises the increasing importance of the airport to the economy, and demand for air freight. One of its key proposal is that land should be safeguarded for terminal development and an additional runway. The findings of the White Paper are reflected within the current hierarchy of planning policy documents at national and local level. However, given that the document is 13 years old, it should be noted that a number of its proposals are no longer considered relevant to the emerging Masterplan. We now believe that it is unlikely that an additional runway is required before 2040. However, we believe that it is prudent to continue to safeguard land for it as a precaution.

Planning policy

3.5 The National Planning Framework (NPF3) sets the context for development planning in Scotland and provides a framework for the spatial development of Scotland as a whole. The NPF3 recognises the importance of Scotland's airports as locations for investment and supports their enhancement as national development. It supports the enhancement of Edinburgh Airport's 'gateway role', which it states will bring economic and connectivity benefits.

Policy and regulation

The development plan

3.6 The development plan comprises of the SESPlan (2013) and The Edinburgh Local Development Plan (2016).

SESPlan

3.7 Edinburgh Airport is located within the West Edinburgh Strategic Development Area (SDA), which is described as an ‘internationally recognised area of economic importance’. SESPlan acknowledges that the strategic enhancement of Edinburgh Airport is a national development. It states that the area is an attractive location for inward investment and as well as airport expansion proposals, includes the development of a new multi-modal station at Gogar, the relocation of the Royal Highland Centre, the creation of an International Business Gateway (IBG) and the resolution of the Gogar Burn flooding issues. In the light of this new Masterplan, we question the need to relocate the Royal Highland Centre.

Edinburgh Local Development Plan (LDP)

3.8 The Edinburgh LDP identifies Edinburgh Airport as a Special Economic Area and Table 2 states: “The connectivity provided by Edinburgh Airport supports and enhances Scotland’s economy. The most recent Edinburgh Airport Masterplan was prepared by the former owner in July 2011 and agreed by the Council in March 2012. The Masterplan sets out development intentions for airport and related uses up to 2020 with more indicative proposals from 2020-2040.”

3.9 Policy EMP 4 Edinburgh Airport states: “The development and enhancement of Edinburgh Airport will be supported within the airport boundary defined on the Proposals Map, provided proposals accord with the approved masterplan. Proposals for ancillary services and facilities will only be permitted where it can be demonstrated that these have strong and direct functional and locational links with the airport and are compatible with the operational requirements of the airport.”

3.10 All development proposals within the airport boundary must accord with the West Edinburgh Strategic Design Framework (WESDF) and other relevant local development plan policies. Supporting information will be required to demonstrate how proposals will contribute to meeting the mode share targets set out in the WESDF.

3.11 Land to the north of the existing airport boundary is safeguarded to provide a second main parallel runway, if required in the future, to meet air passenger growth forecasts. Within this area, green belt policy will apply (Policy Env 10). Proposals which would prejudice the long-term expansion of Edinburgh Airport will not be supported.



Supplementary Planning Guidance – West Edinburgh Strategic Design Framework (WESDF) (2010)

3.12 The West Edinburgh Strategic Design Framework (WESDF) identifies West Edinburgh as an area of national economic importance, with significant potential to attract inward investment, create new jobs and develop new visitor infrastructure and facilities in a high quality environment. It sets out the vision for West Edinburgh to become the most successful employment-led city extension in Europe. The WESDF is a material consideration in the determination of planning applications.

3.13 One of the key aims of the Framework is for the improvement and expansion of Edinburgh Airport, which will bring economic benefit and contribute to high-quality place-making in West Edinburgh. In terms of the Edinburgh Airport Masterplan, it states that it should seek to meet the airport's operational requirements, whilst also contributing to the wider objectives for sustainable development and high-quality place-making in West Edinburgh as a whole.

3.14 The WESDF sets out the following design principles for the airport:

EA1 – Development at the airport, in particular adjacent to its boundaries, should complement the layout, form and design of development in the International Business Gateway and the Royal Highland Centre.

EA2 – Development proposals coming forward in advance of the Masterplan review should demonstrate how these will form a cohesive part of the longer terms development of the airport.

EA3 – Proposals should aim to maximise the share of journeys to the airport by public transport, minimise number of private motor vehicle trips and limit emissions of greenhouse gasses and local pollutants.

EA4 – Proposals should take account of the need to integrate with the wider transport, landscape, open space and civic space network particularly within the International Business Gateway and Royal Highland Centre sites.

EA5 – Appropriate structural landscaping should be provided to reinforce the landscape quality of the western section of the A8.

EA6 – The ecological potential of the Gogar Burn should be maximised either through the design of its potential new route, or improvements to its existing form.

EA7 – If it is decided that land to the north of the airport no longer requires to be safeguarded for a potential second runway, improvement works should be undertaken to complete the River Almond Core Path route between Hallyyards and Cammo Road.

Policy and regulation

Scottish Planning Policy (2014)

3.15 SPP highlights the importance of airports as economic generators and the need for airport operators, planning authorities and other stakeholders to work together to prepare airport masterplans and address other planning and transport issues relating to airports. It advises that relevant issues include public safety zone safeguarding, surface transport access for supplies, air freight, staff and passengers, related on- and off-site development such as transport interchanges, offices, hotels, car parks, warehousing and distribution services, and other development benefiting from good access to the airport.

Development management – permitted development rights

3.16 All airports in Scotland have extensive permitted development rights, which are set out in Part 14 of the Town And Country Planning (General Permitted Development) (Scotland) Order 1992. In terms of development at an airport, this allows: “the carrying out on operational land by a relevant airport operator or its agent of development (including the erection or alteration of an operational building), in connection with the provision of services and facilities at a relevant airport”.

3.17 The Town and Country Planning (Scotland) Act 1997 defines operational land as: “land owned by the airport and used for the purpose of carrying out the airport’s undertaking.”

3.18 Development is not permitted by this class if it would consist of, or include the:

- » the construction or extension of a runway
- » the erection of a building other than an operational building (e.g. hotel)
- » the alteration or reconstruction of a building other than an operational building, where its design or external appearance would be materially affected.

3.19 The GDPO states that development is permitted by this class, subject to the condition that the relevant airport operator shall consult the planning authority before carrying out any development, unless that development falls within the description in sub-paragraph (4).

3.20 Development falls within this sub-paragraph 4 if:

- a. it is urgently required for the efficient running of the airport; and
- b. it consists of the carrying out of works, or the erection or construction of a structure or of an ancillary building, or the placing on land of equipment, and the works, structure, building, or equipment do not exceed 4 metres in height or 200 cubic metres in capacity.



3.21 The UK, as a signatory to the 1944 Chicago Convention, is required to operate its airports in accordance with specific internationally agreed criteria. To comply with this, we operate in accordance with the terms of a licence issued by the Civil Aviation Authority (CAA) and, to obtain and retain that licence, we must satisfy and continually adhere to the CAA's exacting safety-related standards. Those affecting the design of airports are finely detailed in a CAA publication, CAP168, and are subject to revision in the light of ongoing monitoring and review. New developments may be required in response to the introduction of new or revised standards. Whilst it is not appropriate for this Masterplan to explain the standards in fine detail, it is worth noting that these cover such matters as:

- » the layout, separation and widths of runways and taxiways
- » aircraft stand sizes and apron layouts
- » airport fire service facilities
- » the height and design of buildings and structures.

Airport security

3.22 Airport security requirements are the subject of regulatory control by the Department for Transport (DfT). They can have a defining influence on the need for development, as well as on the form and character of the facilities at Edinburgh Airport.

Aerodrome safeguarding

3.23 Major airports are situated at the centre of a series of obstacle limitation surfaces (OLS) which define, relative to the runway, maximum acceptable heights for buildings and other structures, such as telecommunications masts. Should the airport's OLS be breached it could constrain and consequently determine the usable length of a runway. The protection of these surfaces is undertaken as part of the routine Aerodrome Safeguarding process. Safeguarding of Aerodromes is a process of consultation between local planning authorities and airport operators.

3.24 The process is intended to:

- » ensure that an airport's operation is not inhibited by infringements in an aerodrome's OLS
- » protect visual flight paths by ensuring that runway approach lighting is not obscured by any development and that lights elsewhere do not present any potential for confusion
- » protect the accuracy (and therefore safety) of radar and other electronic aids to air navigation, e.g. protecting intermittent returns, causing clutter on air traffic controllers radar screens from wind turbines
- » reduce the hazard from bird strikes to aircraft, associated with such land uses as waste disposal and sewage treatment, areas of open water and large landscaping schemes.

Policy and regulation



3.25 Local Planning Authorities are issued with safeguarding maps which enable them to identify planning applications where the relevant airport operator must be consulted. Edinburgh Airport limited (EAL Safeguarding) is a statutory consultee and will treat each 'aerodrome safeguarding' consultation on its merits. If necessary they will object to a development or require particular conditions to be attached to the planning permission. Where conflicts exist, EAL Safeguarding will also notify the Planning Authority of any changes that could remove concerns and will, if appropriate, work with the authority and the prospective developer before and post application to explore the issues in more detail. If the authority recommendation is contrary to safeguarding advice the application will be referred to Scottish Ministers.

3.26 In order to safeguard the future expansion of the airport and the safe, orderly and expeditious flow of air traffic, EAL Safeguarding will continue to examine very closely any proposals for development, which are referred to them for advice. We would recommend that developers undertake discussions at an early stage in order to identify any potential areas of concern. This can be done through contacting EAL Safeguarding.

3.27 An Aerodrome Safeguarding process is also in place to protect land outside the existing airport boundary against development which may prejudice airport expansion. Safeguarded land is shown within the Development Plan.

3.28 SEDD Circular 8/2002: Control of Development in Public Safety Zones (PSZ) states that the Department for Transport are responsible for PSZ policy in the UK, and Local Planning Authorities are responsible for applying the published policy and ensuring that the directions within the circular are adhered to. The basic policy objective is that there should be no increase in the number of people living, working or congregating in PSZs and that, over time, the number should be reduced as far as circumstances allow. The circular further states that there should be a general presumption against new or replacement development, or changes of use of existing buildings, within PSZs and they should be of sufficient size to allow for possible future growth in the number of aircraft movements.

3.29 PSZs are the means by which airport operators identify areas where the risk of an aircraft accident, while extremely low, may be such as to merit some restrictions on the use of land. Edinburgh Airport's PSZs for the main runway were updated in 2009. There are no PSZs relating to the secondary runway, as this runway is not used intensively enough to warrant this particular form of protection. The PSZs for the main runway extends backwards from the runway's landing threshold.



Safeguarding of aerodromes is a process of consultation between local planning authorities and airport operators.

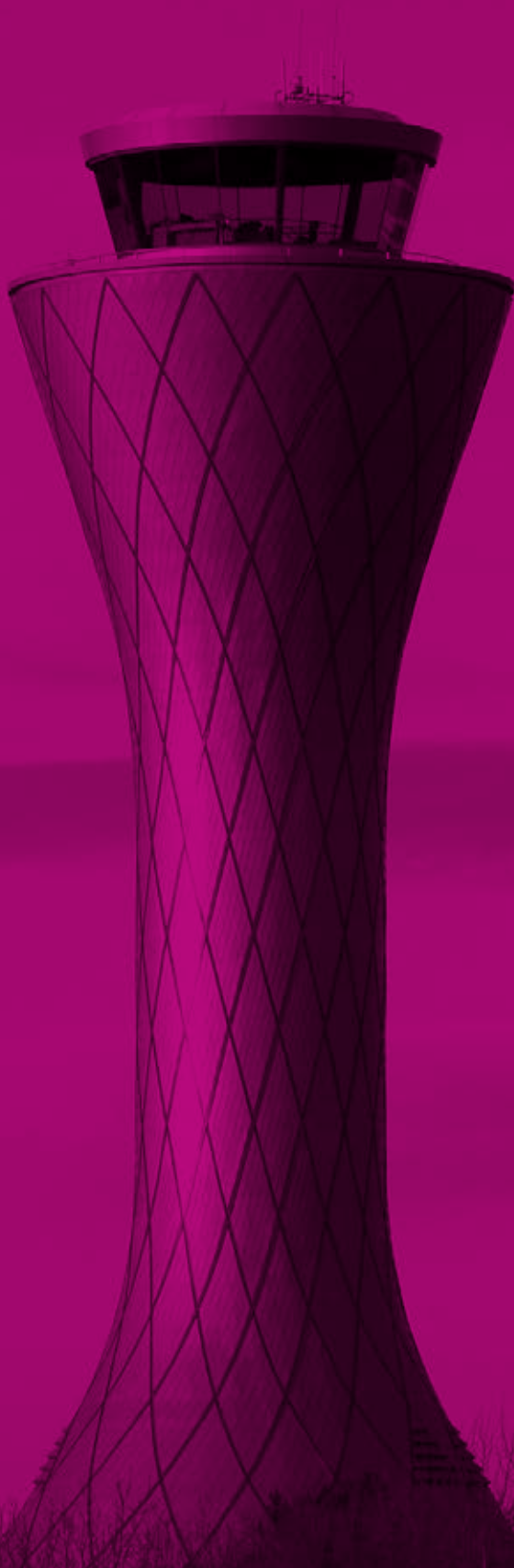
Environmental regulation

3.30 Edinburgh Airport operates within the context of a variety of nationally applicable policies and standards relating to the environment. These are described in Chapter 6 of this plan, which explores the scale and mitigation of Edinburgh Airport's potential environmental effects.

Economic regulation

3.31 The Airports Act 1986 established the framework for private ownership of airports and provides specific controls on the use and operation of airports. The status of Edinburgh Airport limited as a relevant airport operator and Edinburgh Airport as a relevant airport is conferred by Section 57 of that Act. Airlines are required to pay for the air traffic control services for the airspace through which they fly. In the UK, this service is provided by National Air Traffic Services. There is also a government tax, Air Passenger Duty, which is a levy paid directly to the UK Treasury. Charges currently range from £12 to £170 per departing passenger depending on the distance travelled and type of passenger (business, first or economy).

4. Edinburgh Airport changes 2011 - 2016



Edinburgh Airport changes 2011 - 2016



4.1 Edinburgh Airport was sold by BAA to Global Infrastructure Partners (GIP) in 2012. The change of ownership kick-started a period of growth and development for the airport, seeing approximately one million passengers added per year and growing to a projected 12 million passengers in 2016. The airport, designed in the 1970s to handle one million passengers a year, has needed to change to accommodate growth and ensure that passenger experience levels are maintained. GIP committed to an investment programme of £150 million to ensure that the airport was able to grow effectively.

4.2 This programme has seen improvements to many parts of the campus, most notably a terminal extension containing a new security hall and upgraded retail facilities; a new arrivals hall; and a complete upgrade of the main check in hall. The table (overleaf) projects completed since the publication of the last masterplan. Investment will continue to match the forecast growth over coming decades.

Growing to
a projected
12 million
passengers
in 2016.



Edinburgh Airport changes 2011 - 2016

Location	Date	Project	Notes
Airfield	2011	New link taxiway	To enable more efficient ground manoeuvring of aircraft
Surface access	2015	Tram terminus	By CEC
Surface access	2015	Covered walkway to/from tram terminus	To enhance passenger experience
Surface access	2015	New plaza area	A new Edinburgh welcome site
Surface access	2010-15	Additional car parking	In response to demand
Surface access	2015	New Valet parking area	In response to demand
Landside	2016	Hotel	Under construction
Surface access	2013	Relocated/increased coach park	In response to demand
Surface access	2015	Enhanced drop-off facility	In response to demand
Surface access	2016	Improved pedestrian access	To enhance passenger experience
Environment	2014	Gogarburn water quality monitoring	Monitoring devices to measure water quality
Airfield	2012	Five new aircraft stands	On secondary runway
Airfield	2013-15	Apron optimisation	To accommodate long-haul aircraft
Terminal	2015	Terminal building extension	To replace security hall
Terminal	2015	Increased retail facilities	To improve customer choice
Terminal	2014-15	Additional check-in areas	To reduce queuing and delays
Terminal	2015	Additional immigration/reclaim facility	To reduce queuing and delays



Terminal extension containing a **new security hall** and **upgraded** retail facilities.

5. Surface access (transport links)



Surface access (transport links)



5.1 Edinburgh Airport is on track to reach the target it set to increase the percentage of passengers using public transport to 35% by 2017.

5.2 Continued mode shift from car towards public transport has been achieved through a proactive approach working in partnership with councils, the Scottish Government, SEStran and transport operators. The arrival of the tram system during 2014 has provided an alternative mode of travel to and from the city centre, and the opening of Edinburgh Gateway rail station provides a nearby connection for local and national heavy rail services.

5.3 A SEStran (South East Scotland Transport Partnership) Air Forum has been established which is attended by the SEStran members, SESPlan (South East Scotland Strategic Planning Authority) and Transport Scotland. The focus of the forum is varied but covers surface access and the long term strategy for the airport including connectivity with surface access modes.

Surface access context

5.4 We believe that an integrated approach to surface access issues is required if the appropriate infrastructure to enable the airport to grow is to be provided.

5.5 The scale of activity at Edinburgh Airport, combined with the development aspirations for the wider West Edinburgh area, are the main drivers of demand improvements to access improvements.

5.6 The relationship between airport activity and the demand for road, rail and non-motorised travel is complex and requires understanding of a wide range of passenger and airport servicing requirements.

5.7 We recognise the importance of monitoring, planning for and managing this demand and the prominence that this issue has been given within both UK and Scottish Government policy.

5.8 Early recognition of the importance of access improvements prompted the formation of the Edinburgh Airport Transport Forum (ATF), which in turn developed a long-term Airport Surface Access Strategy (ASAS), the first ASAS being published in 2002.

The relationship between airport activity and the demand for road, rail and non-motorised travel is complex.

Surface access (transport links)

5.9 It is important to be clear on the very different roles of this Masterplan and the ASAS. The Masterplan takes a long-term strategic view, outlining the anticipated demand for air travel and the physical responses to this demand. As would be expected of such a strategic document it takes an overview. The ASAS deals with short-to-medium-term responses to the demand identified in the Masterplan and has increasingly challenging transport mode share targets as a core objective.

5.10 The ASAS is a supplementary document to the Masterplan and should be read in conjunction with it. A new ASAS will be published in 2017 to cover the next five-year period. In this Masterplan we therefore focus on current performance, the drivers of transport mode share, future challenges and the potential strands for future ASAS.

5.11 The ASAS acknowledges and seeks to implement the principles set out in the National Transport Strategy, the Regional Transport Strategy and the Local Transport Strategy. As well as transport strategy, it will be important for the next ASAS to consider the Edinburgh Local Development Plan Second Action Plan, which identifies a number of improvements to transport infrastructure within West Edinburgh to cater for extensive development proposals surrounding the airport.

5.12 The airport has recently participated in the City of Edinburgh Council's West Edinburgh Transport Assessment update. The updated study is a response to City Deal, the draft Local Development Plan and live planning applications within West Edinburgh. The study seeks to identify transport infrastructure requirements within West Edinburgh, which will be required in order to maintain surface access to existing users such as the airport, Royal Highland Showground and Royal Bank of Scotland as well as proposed development including the International Business Gateway. The current WETA study builds upon existing works, and the Strategic Transport Projects Review conclusion that the A8 corridor (and M8) will be over saturated in the near future.

Current Airport Surface Access Strategy (ASAS 2012)

5.13 The ASAS is an important element of the airport's sustainable development policies. Improving travel choices will benefit not only passengers and staff but will benefit the environment by reducing emissions from private cars.

5.14 The ASAS deals with short-to-medium-term responses to the demand identified in the current Masterplan, including the setting of mode share targets. These targets are developed by corridor or area in relation to the existing and potential passenger and employee concentrations, transport infrastructure and services levels.



Improving travel choices will **benefit** not only passengers and staff but will benefit the environment by **reducing emissions** from private cars.



Surface access (transport links)

5.15 The strategy makes clear that while improvement in public transport access is important, road capacity is of increasing long-term concern, given the disparate nature of passenger demand and the limited capability of public transport to serve such a geographically-dispersed customer base. Therefore, although we continue to promote bus routes and the use of the trams to and from the airport in an effort to meet objectives, we also realise that other transport interventions, including increasing road capacity are likely to be required to support both airport development and that of West Edinburgh.

5.16 The current ASAS commits to:

- » achieve a 35% public transport mode share target
 - » deliver enhanced external roads infrastructure and future transport interventions
 - » enhance and add to the bus network to and from the airport. We shall review bus charging and bus stance allocation, and further promote staff travel by bus
 - » consolidating the existing taxi ranks to improve passenger choice and experience
 - » promotion of the tram system and review how it contributes to access options one year after it becomes operational
- » support and promote cycling as an option for accessing the airport
 - » as opportunities arise, seek to enhance access to the cargo areas
 - » review car parking strategy to reflect changing trends and passenger profile
 - » continue to offer coach parking close to the terminal, and overflow facilities
 - » maintain the Public Transport Levy
 - » continue to offer the Ride 2 Work scheme to Edinburgh Airport staff, and to promote the car share scheme for all airport staff.

5.17 The airport is committed to the development of the next Airport Surface Access Strategy, which will address the period 2017 to 2022.

Existing surface access infrastructure

5.18 The airport is primarily accessed from the A8 by Eastfield Road, with Ingliston Road also providing road access from the west. The major surface access routes are shown on Map 1 in Chapter 8.

5.19 Access to the freight terminal is taken from Turnhouse Road, via the Maybury junction located on the A8 corridor. The freight terminal is located on the site of the former RAF Turnhouse airfield, to the east of the main passenger terminal.



Surface access demand: passenger and employee distribution

Origin	Percentage
Edinburgh City	52.8%
Fife	9.3%
Glasgow City	4.4%
West Lothian	4.3%
East Lothian	2.2%
Perth and Kinross	3.9%
Dundee City	2.8%
Stirling	2.7%
Falkirk	2.6%
Midlothian	1.4%

Passenger mode share (2015)

Origin	Share (%)
Public bus	24%
Dropped off in private car	22%
Taxi	23%
Private car parked	16%
Tram	8%
Rental car	4%
Plane	1%
Other inc. hotel shuttle and charter/coach bus	3%

Surface access (transport links)

5.20 As can be seen on the previous table showing the origin of passengers, the vast majority come from the Lothians – the airport’s immediate hinterland.

5.21 As can be seen from the table on the adjacent page on passenger mode share, 32% of passengers utilised public transport (bus and tram) to access the airport during 2015. This is anticipated to increase with the arrival of Edinburgh Gateway station during 2016 and further promotion of public transport services as discussed below.

Existing surface access mode options

5.22 Besides the car, bus travel represents the second largest mode of transport accessing the airport. Journey planners, amongst other initiatives, are available within the terminal and online to ensure that such options are promoted.

Bus and coach

5.23 Edinburgh Airport promotes the bus services through a range of initiatives – including information posters throughout the terminal; information and links on the airport’s website.

5.24 The Lothian Buses Airlink 100 bus service currently represents the main bus transport connection between Edinburgh and the airport and operates twenty-four hours per day, seven days per week.

Operating at least every ten minutes during the day, this service runs from Waverley Station in the city centre, past Haymarket Station, and through Corstorphine to the

airport. The journey time for this service is 25 minutes.

5.25 Lothian Buses Service 35 connects the airport to the Gyle, Fountainbridge and Ocean Terminal in Leith. Total journey time to Ocean Terminal is 1 hour and 30 minutes. The 35 operates every 15 minutes during the main part of the day. At night times 12:43 am to 4:13 am a similar route is followed by the N22 service, which operates every half hour.

5.26 The Stagecoach 747 service connects the airport with Fife and those travelling further north. The service calls at Ratho Station for connections west, South Queensferry (Forth Road Bridge), Ferrytoll Park and Ride, Inverkeithing rail station (offering a National Rail connection) an Halbeath Park and Ride. The service operates every 30 minutes during the day, 40 minutes in the evening, with a journey time of approximately 25 minutes.

5.27 The Citylink Air service provides a limited stop service to Glasgow Buchanan Street Station where an opportunity exists to connect with local services in and around Glasgow. The services operates 7-days a week, every 30 minutes at peak periods with a travel time of approximately 60 minutes.

5.28 Although Edinburgh Airport is not served directly by a railway station the buses provide links to Haymarket, Waverley, Edinburgh Park, Slateford and Inverkeithing stations, amongst others.



5.29 A coach park is provided for charter coaches and off-airport car park operators. The coach park is located to the south of the multi-storey car park. Facilities for coach layover are provided to the south-east of the airport adjacent to the Long-Stay car park.

5.30 The public transport fleet serving the airport meet current DDA requirements, including, wheelchair access, priority seats, handrails and step heights.

Tram

5.31 The introduction of tram system in 2014 has assisted in improving mode share by public transport, as opposed to displacing existing bus patrons.

5.32 Trams offer a frequent and reliable service linking the airport and the city centre. Trams run every five minutes between 06.15am and 22.45am and offer a consistent journey time of just 35 minutes into the city. Trams interchange with rail services at Edinburgh Park and Haymarket stations with Waverley Station just a short walk from St Andrew Square stop. Other stops on the tram route include Murrayfield Stadium and Princes Street.

5.33 All trams are fully low-floor and have dedicated spaces for wheelchairs. There are luggage racks located throughout the tram for large bags and suitcases.

Taxis

5.34 The airport has one taxi rank located on the ground floor of the multi-storey car park. In 2013 the airport appointed two official taxi partners who share the taxi rank, these being a black cab operator and a private hire car operator. A booking office for the private hire cars is located within the taxi rank.

5.35 Other pre-booked taxis are able to pick up passengers from within the designated pick up zone within the ground floor of the Multi-Storey car park.

Pedestrian and cycling

5.36 Edinburgh Airport is one kilometre to the north of the local cycle path network, linked by Eastfield Road. Cyclists heading towards Edinburgh are advised to follow the road under the A8 and join the cycle path on the south side of the A8. Cyclists heading either west or north are advised to join the cycle path on the north side of the A8 heading west.

5.37 Cycle racks are provided in front of the terminal and outside most office buildings within the airport campus. Additional facilities, such as showers and lockers, are also available for some staff.

Surface access (transport links)

5.38 A network of footpaths is provided within the landside airport providing connection between the various facilities. Footpath connections to the existing A8 Glasgow Road corridor are provided along the Eastfield Road corridor.

Car parking

5.39 The airport has seven car parking options including: Business Valet, Valet; Terminal Multi-Storey, Terminal Surface, Mid Stay, Long-Stay and Plane Parking across a total of 7,426 spaces.

Terminal surface car park

5.40 Edinburgh Airport's Terminal parking is located directly outside the terminal, within a short walk of the terminal building. There are two parking options available within the Terminal Surface car park: a covered Multi-Storey car park and a Surface Parking area.

5.41 The Multi-Storey car park provides 1,746 spaces and is located directly outside the terminal building, connected to the terminal by means of a fastTRACK bridge at Level 2 providing direct access to departures.

5.42 The Terminal Surface car park offers 1,872 spaces and provides connection to the terminal by a series of pedestrian footpaths.

Long-Stay car park

5.43 The Long-Stay car park is located to the south-east of the airport and provides 2,389 spaces. The Long-Stay car park is connected to the terminal by a complimentary coach which runs every ten minutes and arrives and departs into the airport coach park.

5.44 Both the Terminal Surface car parks offer fully-secure parking with 24-hour car parking attendants, frequent patrols, security fencing, comprehensive CCTV coverage and have a Park Mark Accreditation.

5.45 Designated blue badge spaces are provided at the front of the Terminal Surface car park and on each floor of the Multi-Storey car park. Designated spaces within the Long-Stay car park are provided close to bus stops and customer services with transfer to the terminal. Blue badge car parking spaces are wider and have clear access around them to meet current DDA standards.

Car hire

5.46 Edinburgh Airport developed a car hire centre which opened in 2009, which consolidated a number of car hire facilities around the campus and now incorporates eight car hire providers with 627 ready-return parking spaces, fuelling, maintenance and wash facilities. The car hire facility is connected to the terminal building by a covered walkway.



5.47 There are a number of off-site car hire companies who operate courtesy shuttle bus between sites which we facilitate in the coach park or who utilise shuttle services provided to off-site car parks.

Future surface access infrastructure

5.48 We are keen to explore any initiative which improves surface access links to the airport in the future and as such will work with the relevant agencies to ensure that appropriate improvements are implemented as and when required.

5.49 A key issue for future surface access is ensuring that road access is maintained when large-scale events are taking place within the airport's immediate surroundings, such as the Royal Highland Show.

5.50 Similarly, it is important that when development proposals come forward within the vicinity of the airport, that the transport infrastructure is appropriate to the scale of development proposed.

5.51 It is important that passengers can access the airport efficiently and reliably. If they cannot, then the growth of the airport and economy will be constrained.

5.52 New surface access initiatives in West Edinburgh should be coordinated to ensure that their development does not compromise the accessibility and operation of the airport or future neighbouring land uses. To this end, new surface access initiatives should be considered as part of a fully integrated transport system.

5.53 A number of studies have previously identified the level of transport infrastructure required to support development of West Edinburgh. The airport has endorsed the suite of transport interventions identified within the West Edinburgh Transport Assessment and associated TISWEP studies. More recently, the airport has participated in the City of Edinburgh Council's West Edinburgh Transport Assessment update.

5.54 Some of the current surface access enhancement initiatives are outlined below.

Rail

5.55 A new train and tram interchange is currently under construction on the existing Fife heavy-rail line. The interchange is to be known as Edinburgh Gateway, and will link the airport to the rail network by means of the tram line, and also has potential for bus interchange.

5.56 It is increasingly important to understand – on the basis of clear and concise data – to what extent heavy-rail initiatives can add to what is delivered by buses and whether it can increase the public transport mode share, or will simply displace existing bus patrons.

Tram

5.57 The arrival of the tram system in 2014 provided an alternative mode of access. The airport is keen to support any of the operator's initiatives that would enhance the speed of service, frequency and extended hours of operation.

Surface access (transport links)



5.58 The airport is aware that the City of Edinburgh Council are considering an extension of the service to Newhaven, which would provide a wider catchment for both airport passengers and staff.

Bus and coach

5.59 We understand the social benefits of bus services and are keen to work with local authorities, bus and coach companies to explore the possibilities for bus services to new destinations. For those areas not served directly by tram or heavy-rail routes, the bus is the only public transport alternative to the car. In particular, the airport is keen to explore improvement of services to West Lothian.

5.60 The airport is also keen to see the extended operating hours of services, such that public transport can become feasible for staff that work unsociable hours.

Roads access

5.61 Even with the development of rail and tram connections to the airport, the differing origins of people coming to the airport will mean that the majority of passengers will continue to access the airport by road, principally by private car.

5.62 Our internal road system remains largely unchanged since the present terminal was built in 1977. It will be necessary to develop a reconfigured internal road network to accommodate the requirements of this Masterplan.

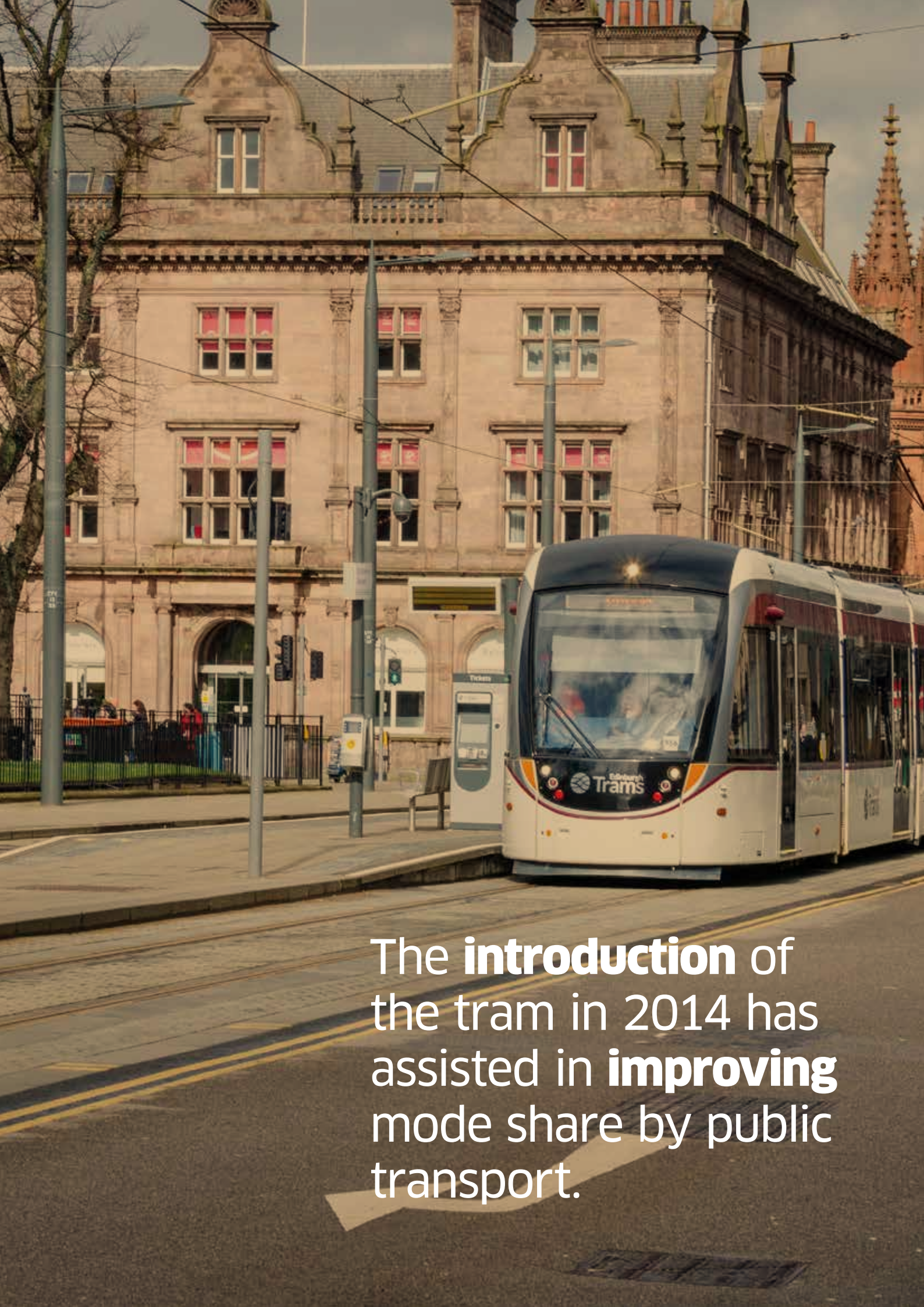
5.63 In late 2010, a new charged fast track drop off system became operational, which allowed private vehicles to drop off passengers in the ground floor of the Multi-Storey car park. A free drop off area was created within the Long-Stay car park from where passengers could utilise shuttle buses to access the terminal building. These two new areas are the only locations on the airport where passenger drop off is permitted. The scheme was introduced to discourage ‘kiss and fly’ type trips and promote alternative modes to access the airport.

5.64 Given the arrival of the tram system and the near completion of the Edinburgh Gateway rail station, the airport is committed to delivery of surface access resilience and has been in discussion with the City of Edinburgh Council with regards the provision of a new access road. The road would connect the airport to the existing road network at Gogar and provides the opportunity to improve access by both motorised modes (public transport, taxi and car) as well as non-motorised links (pedestrian and cycle).

Parking strategy

5.65 It is our view that car parking has to be considered as part of an integrated approach to surface access improvements.

5.66 There are approximately 5,290 spaces provided in off-airport car parks by other providers in the surrounding area. Thus, of total Long-Stay car park provision, approximately 42% is located on-airport and 58% off-airport. Broadly speaking, it is envisaged that this split will continue in the future.



The **introduction** of the tram in 2014 has assisted in **improving** mode share by public transport.

Surface access (transport links)

5.67 The relationship between provision and pricing of car parking, the quality and availability of public transport, and the number of vehicle access movements is complex. Experience in recent years in Edinburgh has shown that provision of high-quality, reasonably-priced car parking reduces the number of passengers being dropped off and picked up by friends and relatives ('kiss and fly'). There will always be some passengers who do not have a practicable public transport option for accessing the airport, who should not be penalised by excessively high car parking charges.

5.68 We intend to re-provide any Long-Stay car park capacity displaced by airfield and/or terminal expansion.

5.69 As part of our wider surface access strategy, we will work with the airport's neighbours, CEC, and off-site car park providers to ensure off-site parking provision has appropriate facilities at the airport, suitable planning in place, and we will encourage provision to be Park Mark accredited.

Non-motorised modes of transport

5.70 There are well-established routes for pedestrians at the airport and these are kept under review to ensure that pedestrian access to and around the airport continues to be safe and convenient.

5.71 The airport will work with the local authority to promote existing cycle facilities along the A8, which are understood to be delivered as part of improvements within the city. We aim to facilitate bicycle access

to the airport for both passengers and staff, and in recent years have significantly improved cycle parking facilities at the airport.

Technology enhancement

5.72 The airport is committed to working with authorities and operators to look at the benefits of technology within airport surface access. Technology has a significant role to play in providing passengers and staff with an enhanced journey experience; whether that be from information and planning to single ticketing.

West Edinburgh Transport Assessment 2016

5.73 An update to the existing West Edinburgh Transport Assessment dated 2010 has been commissioned by The City of Edinburgh Council. The study is a response to City Deal, the draft Local Development Plan and live planning applications within West Edinburgh.

5.74 The study seeks to identify transport infrastructure requirements within West Edinburgh which will be required in order to maintain surface access to existing users such as the airport, Royal Highland Showground and Royal Bank of Scotland, as well as proposed development including International Business Gateway.

5.75 At the time of compiling this draft Masterplan document, the outcomes of the updated study are not within the public domain, however the report is expected to identify infrastructure improvements including:



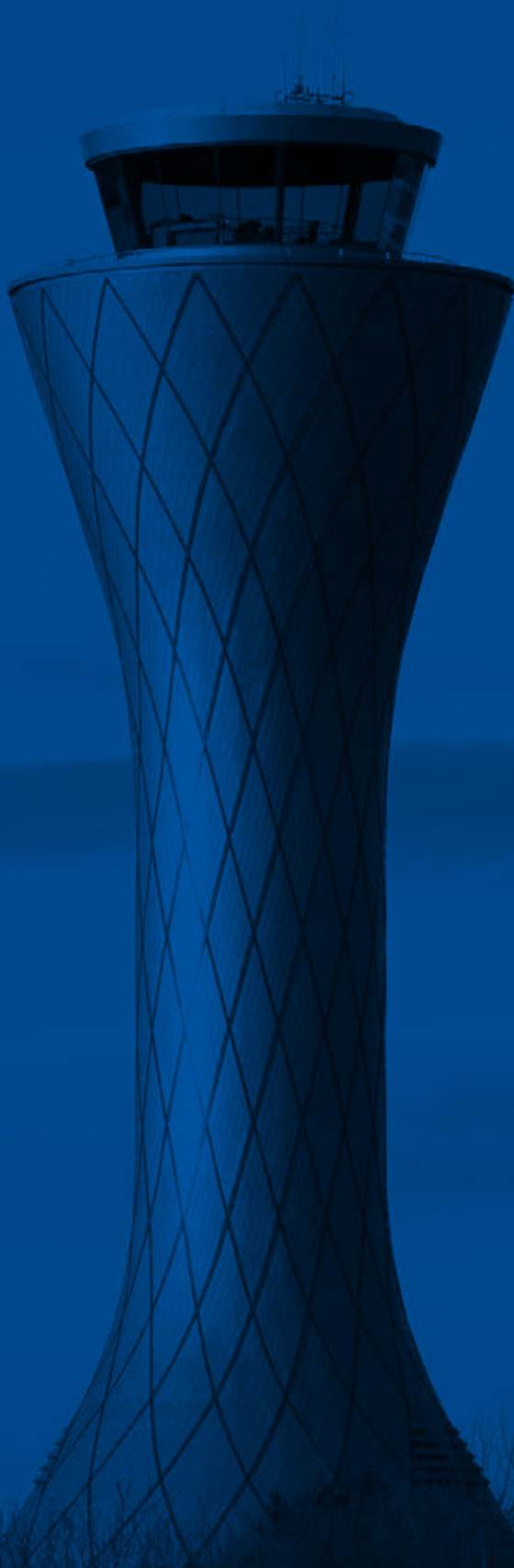
- » A720 City of Edinburgh Bypass/ A9 Glasgow Road junction (Gogar Roundabout);
- » dualling of Eastfield Road;
- » introduction of an access road connecting Gogar roundabout to the airport and providing connection to the International Business Gateway site;
- » A8 Glasgow Road/Eastfield Road dumb-bell roundabout;
- » M9/A8 Glasgow Road junction (Newbridge roundabout);
- » public transport, and
- » pedestrian and cycle links within the West Edinburgh.

Airport Surface Access Strategy 2017

5.76 The development of ASAS will be informed and influenced by the findings of the current West Edinburgh Transport Appraisal (WETA) study as well as the airport's aspiration for growth as outlined in this Masterplan.



6. Local environment



Local environment



Corporate social responsibility and the environment

6.1 We recognise that Edinburgh Airport must grow sustainably and responsibly, and with the support of the many people who have a stake in its future.

6.2 Globally, the aviation industry has never been under greater scrutiny, particularly in regard to the growing contribution towards climate change. On this, and on a range of other issues, our industry needs to rise to the challenges that come with more flights and bigger airport.

6.3 We will always work hard to maintain effective working relationships with a wide range of stakeholders in a way which promotes the social and economic benefits of the airport, and which seeks, wherever possible, to minimise the impact on the environment.

6.4 We wish to be a good corporate citizen which means using our success and influence to be a force for good in our local communities and beyond.

Safeguarding the environment

6.5 We recognise that the Scottish Government, SEPA, the City of Edinburgh Council and other stakeholders need to be satisfied that the environmental implications of airport growth can be managed in a manner which would reduce impacts. We are working to both quantify and reduce our impact upon the environment and the following sections detail how we are doing this.

Climate change

6.6 We accept that the biggest global environmental issue facing aviation is its contribution to climate change and we are working with our airline partners to reduce the climate change impact of operations at Edinburgh Airport.

6.7 Globally, aviation accounts for around 3.5% of the total human contribution to climate change. It is estimated that this will increase to between 5% and 15% by 2050. In the UK, the Department for Transport calculate that CO₂ emissions from international and domestic aviation as being 37.5 million tonnes in 2005, i.e. 6.4% of the UK's total.

6.8 At Edinburgh Airport we have been managing our carbon emissions from electricity and gas consumption for some time, however it has become apparent that we also need to work with our business partners and stakeholders to deliver a more holistic approach to reducing emissions.

6.9 The first step in this work was to measure the carbon footprint of the airport, then prioritise the areas of work which will have the biggest benefit in terms of carbon reduction. Details of our carbon footprint can be found on our website.

Local environment

6.10 Our carbon footprint has been developed to be comprehensive, holistic and consistent with best practice. We therefore calculate not only emissions we directly control but also airport-related emissions in the direct control of our stakeholders and which we seek to guide and influence. These include, for example, emissions from all passenger and staff door-to-door journeys to the airport and emissions associated with aircraft landing and taking off at the airport up to a height of 3000ft.

6.11 Direct emissions are made up from electricity, gas and fuel use from our own vehicles. This amounted to 9653 tonnes of CO₂ equivalent in 2014.

6.12 We are faced with a significant challenge when it comes to growing our airport and reducing our energy consumption. As we grow and build more facilities we need to consume more energy to heat, light and cool the buildings.

6.13 However we need to ensure that when we are developing the airport we consider installing low carbon technologies and micro renewable generation to ensure we build the most energy efficient buildings possible.

6.14 Aircraft emissions account for 17.9% of our carbon footprint. Whilst we cannot control these emissions we can influence and help our airline partners in their quest to reduce emissions.

6.15 We include emissions from the landing and take-off cycle in our measurement of our carbon footprint, as these are the emissions we have some influence over.

6.16 We are promoting and facilitating, where possible, measures to help reduce emissions in the landing and take-off cycle, these include taxiing with a single engine and reducing Auxiliary Power Unit use.

6.17 We are committed to Sustainable Aviation, which is a coalition of UK aviation stakeholders spanning aircraft manufacturers, UK carriers, airports and the principal air navigation service provider. As part of our commitment we have signed up to the Aircraft on the Ground CO₂ Reduction Programme, which has a simple objective - to deliver CO₂ emission reductions from aircraft ground operations at UK airports. The approach for delivering these savings is simple and pragmatic and relies on a series of practical 'action steps' and initiatives that can be led by UK airports whilst engaging and working collaboratively with their stakeholders.

6.18 To tackle total aircraft emissions we believe that carbon emissions trading is the most efficient way to drive aviation emissions down. This places a cap on the total amount of CO₂ emissions allowed across industry as a whole. Permits are then allocated to companies setting the amount each can pollute. The total number of permits is finite and no pollution is allowed above the cap.



6.19 Companies can then trade their permits – selling permits if they can cut their emissions below their allocation, and buying them if they want to pollute above their allocation. Permits are sold at a market price – so if everyone wanted to pollute above their cap, then permits would become scarce and the price would go up.

Growing aviation within CO₂ limits

6.20 It is forecast by the Committee on Climate Change that UK aviation can continue to grow whilst contributing towards government targets for cutting greenhouse gas emissions. Technological advancements, such as the development of more efficient aircraft, low carbon fuels and more efficient operations, will ensure that less greenhouse gas emissions are generated by flights today when compared to flights in 1990. Modal shift and other measures will also have a role to play. Investment in technology will be encouraged through aviation's participation in emissions trading, initially within the European Union and then globally.

Noise

6.21 For people living under flight paths or close to an airport, noise is a major concern and its effective management is an important part of Edinburgh Airport's ability to deliver responsible development. Edinburgh Airport is a 24-hour operational airport and we take the issue of noise very seriously. However, as long as people want to fly, there will be noise from aircraft landing and taking off.

6.22 Noise has been a growing issue at the airport and we are currently consulting on redrawing our flightpaths in order to balance growth and minimise the impact on our surrounding communities.

6.23 This document does not provide noise maps because our airspace is currently under consultation. We can, however, detail the range of steps to address the monitoring and reporting of air noise. A number of measures are also taken to lessen the impact of noise. In summary, these are:

- » Noise Fining – Where any aircraft that breaks the stated noise thresholds set down by the UK Government is now automatically fined, with the level of the fine dependent on the level of infringement.
- » Noise and Track Keeping – We gather and analyse the tracks, including position and height, of all aircraft flying to and from the airport. This allows us to study the consistency of piloting procedures and, through working with NATS and airlines, we can identify opportunities to lessen the overall impact of its operation. We are currently updating this system to improve transparency and ease of use.
- » Noise Insulation Scheme – This currently exists for residents living in the 66-68dB noise contour around the airport.

Local environment

6.24 We also operate the following schemes for residents affected by our current and likely future operation:

- » The Home Relocation Assistance Scheme – This provides households within the 69dB Leq noise contour with financial assistance towards the costs of relocation.
- » The Property Market Support Bond – This seeks to protect property values inside the expanded boundary of Edinburgh Airport as outlined in the airport’s Masterplan.
- » The Home Owner Support Scheme – This seeks to assist residents who would be subject to a significant increase in noise arising from a new parallel runway.
- » The Vortex Damage Assistance Scheme – For those residents whose properties have been affected by vortex damage from aircraft operating at Edinburgh Airport.

6.25 Full details of each scheme can be accessed through our website.

6.26 Ground noise relates to the noise produced by aircraft when running their engines while on the ground, either for taxiing or engine running and is of particular concern to residents living close to the airport. Engine running is an essential part of airport operations. Engines need to be tested for safety reasons and engine runs form part of the maintenance programme for aircraft.

6.27 We understand that this noise can cause disturbance to local residents and therefore adopt certain measures to reduce the impact on the community. We do not allow engine testing during the night unless required due to exceptional circumstances. In order to develop a better understanding of engine running within our local communities we have begun to report on the frequency and times of engine running to the local community through our newsletter. We hope by reporting on engine running we will assure residents that we are managing engine running as responsibly as possible.

6.28 The CAA, the independent regulator of aviation in the UK, produces noise contour maps for Edinburgh Airport every five years. These contours measure the average noise at Edinburgh Airport over the busiest hours of the day and busiest months at the airport, using the dB Leq noise scale.

6.29 In accordance with the Environmental Noise (Scotland) Regulations 2006, which transposes the Environment Noise Directive into Scottish Law, we have published a Noise Action Plan, which is available online. The plan sets out the actions we propose to take to manage and, where possible, minimise aircraft-related noise at Edinburgh Airport.

6.30 Our Noise Action Plan will be updated in 2017. The Noise Action Plan enables us to develop our relationship with our communities and other key stakeholders, and to improve our understanding of residents’ concerns and priorities, so that we can take effective action in response. Each year we feedback our performance against the actions set



out in the plan in our annual Corporate Responsibility Report, which is also available on our website.

Air quality

6.31 Air quality is an issue of concern both locally and nationally. People have a right to breathe air which is free from harmful levels of pollutants generated by industry, vehicle exhausts and other sources.

6.32 There is a range of legislation which seeks to manage and reduce the emission of air pollutants at source. For example, activities that are significant producers of air pollutants (such as industry and transport) are specifically regulated to reduce their contribution to air pollution.

6.33 Emissions from aircraft are regulated in the UK by the European Aviation Safety Agency and the CAA. In addition, the International Civil Aviation Organisation has published a number of internationally agreed standards and recommended practices on aircraft engine emissions.

6.34 In addition to reducing aircraft emissions, all airside vehicles are required to meet certain standards to limit vehicle exhaust emissions. We also carry out routine spot checks to ensure that they meet emissions standards. A large number of electric vehicles are already used airside, primarily by the handling agents, in order to transport luggage to and from the planes.

6.35 Vehicles under our control are regularly tested and serviced to ensure that they meet the best standards in relation to modern engines. The replacement vehicle

programme for vehicles supports these principles and the use of alternatively fuelled and hybrid vehicles. We will be investigating further the use of alternatively fuelled vehicles in the Carbon Emissions Plan.

6.36 Our Airport Surface Access Strategy (ASAS) aims to manage landside vehicle emissions by setting out a number of targets to increase public transport mode share, decrease single occupancy car use, reduce the number of people who get friends and family to drop them off and pick them up at the airport and measures to improve the environmental performance of buses and coaches.

6.37 There have been a number of air quality studies at the airport. Oxides of nitrogen are amongst the principal pollutants in the vicinity of the airport. The main oxides of nitrogen considered are nitric oxide (NO) and nitrogen dioxide (NO₂). The chief sources of these pollutants are combustion of fuel from motor vehicles, heating and power-generation plant and other industrial processes. However, local ground level concentrations of these pollutants can also be significantly affected by airport activities such as movements of aircraft and associated motor vehicles, both airside activity and passenger-traffic travelling to and from the airport.

Local environment

6.38 Whilst NO is not considered a health concern at ambient levels, NO₂ is a known respiratory irritant. We are fully committed to working in partnership with the City of Edinburgh Council to reduce the emissions that contribute to poor air quality within and beyond the airport boundary. We will continue to work collaboratively with local authorities to share information and knowledge to better manage air quality within the vicinity of the airport. The mode share targets within WETA are a key element in addressing potential air quality impacts from transport on the road network approaching the airport.

6.39 Our last air quality study was in 2014. The air quality study consists of a six-month survey using diffusion tubes to measure levels of NO₂ at different locations across and around the airport, and the expectation is that it will show similar results to previous studies. These showed that the concentrations of NO₂ at the majority of sites around the airport were lower than at most of the Edinburgh City monitoring sites outside the Council's priority air quality management areas. Results of the study will be shared with the City of Edinburgh Council.

The water environment

6.40 Our surface water drains to the River Almond to the north of the airport perimeter and the Gogarburn, which passes through the airport from south to north. It is culverted beneath the main runway before joining the River Almond.

6.41 Following flooding in 2002, flood risk assessments were carried out on both watercourses and also on the airport drainage network. To reduce the risk of flooding flood protection measures have been built around the Gogarburn within the airport boundary.

6.42 We will continue to work closely on surface water issues with all key stakeholders as the airport develops and in particular with respect to the land to the south of the existing airport boundary, earmarked in this Masterplan for future airport development.

Water quality

6.43 There are several airport activities which have the potential to cause pollution of local water courses, if those activities are not properly managed. For example, these are:

- » de-icing of aircraft and airside areas
- » aircraft and vehicle maintenance and washing
- » aircraft refuelling (spillages)
- » waste and cargo handling
- » fire training.

6.44 We are currently working with the Scottish Environment Protection Agency towards the development of a range of solutions to ensure compliance with future surface water discharge consents relating to discharge quality management. The airport will continue to manage water quality issues in line with statutory control and best practice.



Biodiversity

6.45 There is a range of statutory measures protecting nationally or locally designated sites and species. Public bodies have a duty to enhance and maintain different sites for biodiversity.

6.46 The nearest nationally designated area to the airport is the Forth Estuary, which is five kilometres away and has been assessed by the Government as being at low-risk at present from aviation activities.

6.47 Closer to the airport, biodiversity issues primarily focus on the impact of airport developments on protected species, particularly around the River Almond and Gogar Burn, both Sites of Importance for Nature Conservation.

6.48 We have carried out various ecological assessments of the site, which can be shared with the relevant bodies if requested. The assessments allow us to build up a good picture of the biodiversity on the site and therefore we can understand and evaluate any impacts the airport activities might be having. As the airport develops, we will continue to work with Scottish Natural Heritage and other stakeholders, with regards to biodiversity.

6.49 Each future airport development will be assessed to establish the impact on biodiversity and provide appropriate mitigation. When appropriate, we will take guidance from Scottish Natural Heritage and other stakeholders on what level of assessment and consideration is required, when considering development which may have an impact on the wider biodiversity outwith the boundaries of the airport.

Waste management

6.50 Waste is a significant environmental issue and must, therefore, be minimised through reduced consumption of non-renewable resources. Waste is generated from a variety of sources and we have concentrated our efforts to recycle more of the valuable resources which would otherwise end up in landfill sites.

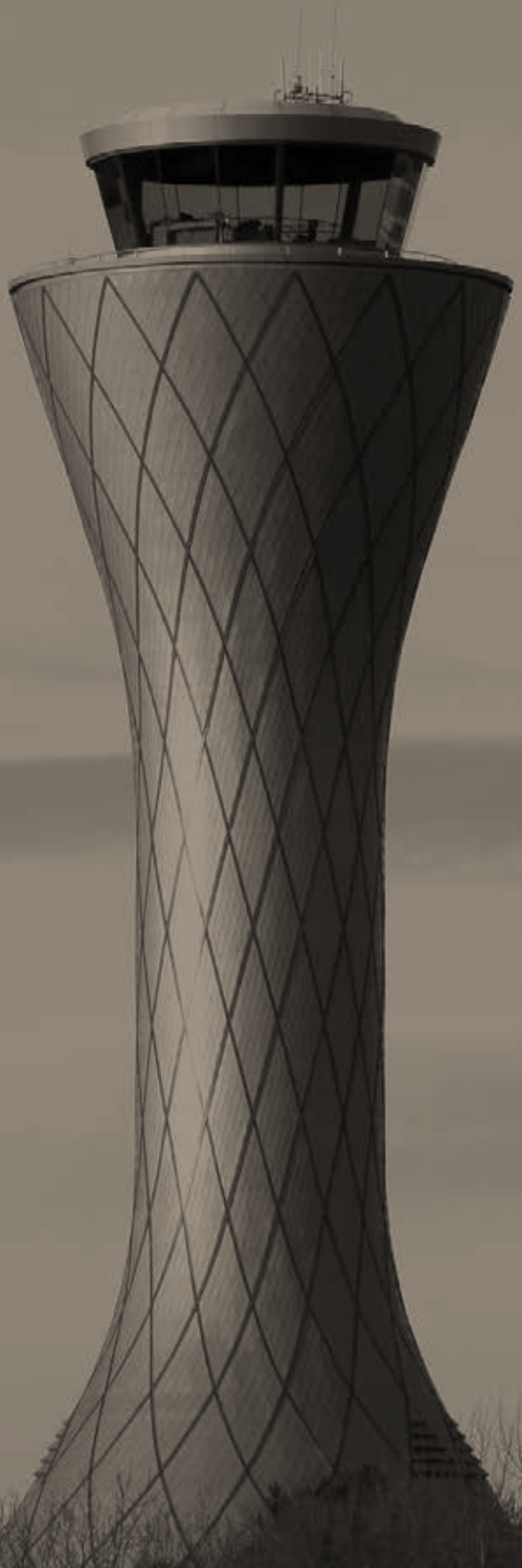
6.51 Working on the principle of the waste hierarchy – reduce, re-use, recycle, dispose – we are reducing the amount of waste generated through improved efficiency and more thoughtful selection of goods. We are encouraging re-use, recycling, re-processing and composting within the waste stream. Another aim is to reduce the cost to the business of waste processing by ensuring a responsible approach to waste management.

6.52 We currently recycle 62% of our waste, which is 3% under our target of 65%.

Built and natural heritage

6.53 We are aware of the importance of historic buildings, archaeological inheritance and landscape designations both within the immediate locality and beyond. As development proposals come forward we will need to consider the potential impact of the development proposals contained within this Masterplan.

7. Future land uses



Future land uses



7.1 This section provides some background to and overview of development intentions at Edinburgh Airport between now and 2050. Development will be undertaken in line with demand. There will be distinct phases such as terminal building expansion which will happen when major growth triggers are passed and others which will be more continual as passenger and aircraft numbers increase.

7.2 The overview is based on addressing the infrastructure and land use requirements of serving 35 million passengers annually by 2050. The Land Use Maps contained in Chapter 8 identify three ‘snapshots’ of future development – 2025, 2040 and 2050. Clearly the longer-term scenarios become more speculative.

7.3 Efficient and effective development solutions will continue to be delivered incrementally towards the ultimate development vision although the phasing and specifics of development solutions will be reviewed and designed as required as passenger, aircraft and cargo demands materialise.

7.4 Passenger and aircraft forecasts (see table below) influence all development and phasing and perhaps, more importantly, it is the ‘peaks’ that determine the scale of development. Different groups of passengers and aircraft have different needs and dictate varying design detail. Business travellers for example demand a reliable, on time service but spend little time in the terminal. Leisure travellers however prefer longer in the terminal. Long haul passengers often require longer still due to the logistics of check-in, baggage processing and embarkation.

Airspace

7.5 The airspace around Edinburgh Airport has remained largely unchanged since the 1970s. Recently a consultation exercise has taken place to remove some of the arrival/ departure restrictions to enhance runway capacity. Further consultation will be undertaken in 2017.

Passenger (Pax) and air traffic movement (ATM) forecasts

	2011	2017	2020	2025	2030	2035	2040	2045	2050
Pax	9m	12.5m	14.3m	16.6m	19.2m	22.3m	25.8m	29.9m	3m
ATM	110k	124k	134k	149k	166k	186k	208k	233k	261k

Future land uses

Runways

7.6 Edinburgh Airport currently has two runways:

- » the main runway (06/24) is 2,556m long and 46m wide
- » the contingency runway (12/30) is 1,797m long and 46m wide.

7.7 Runway 06/24 is capable of handling all but the largest aircraft. Runway 12/30 is short by modern standards and has no instrument landing equipment, generally restricting its use to smaller aircraft in periods of good visibility and cloud-base at night or during the day. Additionally, Runway 12/30 is not orientated to the prevailing wind, often rendering it undesirable from a 'cross wind' perspective.

7.8 'Double Decker' or 'Code F' aircraft such as the Airbus A380 are currently not able to operate effectively from Edinburgh. Moreover, some of the larger aircraft that can operate from Edinburgh are limited in their range capabilities due to departure weight restrictions caused by the limited runway length.

Runway safeguarding

7.9 Investment in airspace changes and on airport infrastructure will enable a maximum of circa 56 ATMs per hour to use Runway 06/24. This will delay the need for a second parallel runway to sometime after 2040, if it is required at all.

Runway use

7.10 Runway 06/24 is the main runway at Edinburgh Airport, serving 99.99% of traffic movements. The majority of departures (70%) are from Runway 06/24. This traffic departs to the south west. The remaining departures (30%) are from Runway 06/24. This traffic departs to the 06/24.

7.11 Runway 06/24 departures are subject to a 'noise preferential' routing upon departure to avoid overflying Crammond and north west Edinburgh. Other than the noise preferential routing from Runway 06 there are no operating restrictions.

7.12 Runway 06/24 is currently maintained for contingency use only for previously mentioned reasons and its use is currently under detailed review but it is forecast that Runway 12/30 will be removed from service, possibly within the life of this Masterplan but certainly by 2025. This is consistent with previous versions of the Masterplan and will require detailed consultation with CAA and the Scottish Government.

7.13 It is forecast that Air Traffic Movements (ATMs) on Runway 06/24 will increase as demand grows. This is highlighted in the table below:

7.14 Investment in airspace changes and on-airport infrastructure changes will enable a maximum of circa 56-59 ATMs per hour to use Runway 06/24.



Taxiways

7.15 Taxiways provide ground manoeuvring facilities for aircraft between the runway and the apron. An efficient taxiway layout can minimise ground manoeuvring delays and enhance on-time departures and arrivals and minimise environmental impacts from unnecessary aircraft engine running. A network of taxiways exists to connect current operational areas of the airport.

7.18 An individual ‘parking spot’ is termed an aircraft ‘stand’. Stands may be ‘contact’ or ‘non-contact’ depending on their proximity to the terminal/pier area. The ratio of contact/non-contact stand will alter to an operationally optimum level as development continues.

7.19 The ultimate size and location of aprons will be influenced by the number and type of aircraft that will concurrently be parked at the airport at any one time.

	2011	2017	2020	2025	2030	2035	2040	2045	2050
Peak hour ATM	33	34	39	44	49	54	59	62	65
ATM	110k	124k	134k	149k	166k	186k	208k	233k	261k

7.16 There has been a focus on reviewing previous airfield layouts, which has resulted in an optimised future plan that is highly efficient and compact.

7.20 Whilst the airport has no restrictions on operating times, the vast majority of aircraft movements are between 0600 hrs and 2330 hrs. There are a small number of scheduled and cargo aircraft that operate out-with these times.

Aprons

7.17 The apron is the area where the aircraft park, either overnight or when embarking/disembarking passengers between flights. The airport currently has three distinct aprons largely as a result of historic development. Over time these aprons will be merged enabling highly efficient operational and land use.

7.21 Although Edinburgh Airport is actively seeking to increase its long haul market, which utilise larger aircraft such as the B787, A330, B777 and B747, these aircraft are not predicted to overnight in Edinburgh due to operational timing requirements.

Future land uses

Passenger terminal

7.22 The existing passenger terminal was opened in 1977 and has undergone several transformations and alterations. The most recent additions include the East Expansion, containing a new Security Hall, a larger retail area, and an additional Immigration, Reclaim and Customs area to the east of the main terminal.

Passenger terminal

7.22 The existing passenger terminal was opened in 1977 and has undergone several transformations and alterations. The most recent additions include the East Expansion, containing a new Security Hall, a larger retail area, and an additional Immigration, Reclaim and Customs area to the east of the main terminal.

7.23 There have been several refurbishment projects including Departure Lounge enhancements and Check-in/Bag Drop capacity increases. The terminal and its associated piers currently serve circa 12 million people per annum at a peak rate of circa 3,000 people per hour.

7.24 Whilst future phasing and detail will be reviewed in line with increasing passenger demand, there is an immediate need to increase capacity and service levels to meet the five-year forecast horizon. Additional capacity will be required for the Departure Lounge, Immigration and Baggage Reclaim and for further passenger connectivity with the addition of a pier/ gate area.

Cargo terminal

7.25 The Cargo Terminal at Edinburgh Airport is situated on the east side of the airport and is known as Turnhouse, the original name of Edinburgh Airport.

7.26 Edinburgh Airport serves as a Scottish hub for Royal Mail and a number of night-time flights operate to East Midlands Airport, Stansted, Scottish Highlands and Islands. A number of dedicated cargo operators are based at the airport and deal predominantly with overnight parcel and package deliveries between East Midlands, Liege, and Stansted using specialised aircraft. The above operations are almost exclusively night-time operations.

This results in a peak demand for aircraft parking during night-time hours.

	2011	2017	2020	2025	2030	2035	2040	2045	2050
Stands	36	45	58	63	68	72	77	82	86



7.27 With the forecast increase in additional long-haul routes, there is a forecast increase in ‘belly-hold’ cargo, i.e. cargo that is transported in the hold of passenger aircraft. This is an increasingly common aspect of commercial aviation, adding an important revenue stream to the airline to support route viability.

Access

7.28 Access to Edinburgh Airport is principally taken via the Eastfield Road/A8 Glasgow Road corridor since its opening in the 1970s. The draft West Edinburgh Transport Assessment dated 2016 indicates a requirement to provide a new access road from the Gogar roundabout to facilitate further development within the West Edinburgh, including airport growth.

7.29 In order to accommodate growth of the airport, it will be necessary to safeguard for surface access improvement in particular, an access from the west side of the airport which allows private car and public transport access. Strategic access from the motorway network remains an aspiration and may be required to unlock further development beyond that considered in the current WETA scenarios.

Land use

7.30 Whilst requirements for additional land are inevitable in the long term there are a number of factors that influence the timing. It is also important to note that current land use is being intensified and that change of use is also proposed in many areas. Key factors in determining additional land requirements are:

- » land release from the closure of runway 12/30
- » density and efficiency of future terminal expansion
- » changes in public transport mode share
- » optimisation of airside layout.

7.31 Detailed work has been completed to understand future land use in the near term. The following tables summarise land use changes in 2025, 2040 and 2050.



Future land uses



On-airport development summary by 2025

Where	What	When	Why
Main runway 06/24	Addition of rapid exit taxiways	By 2025	To reduce runway occupancy time and maximise use of existing main runway. This assists in the deferral of a new runway to the north
Contingency runway 12/30	Closed and withdrawn from operational service	By 2025	No longer required. Other priorities for land use
Terminal	Large (phase 1) extension to the east end of existing terminal	By 2020	To provide space for additional facilities to cater for forecast growth in international passengers
Aprons	Construction of six new contact aircraft stands to complement Phase 1 terminal extension	By 2018	To provide parking spaces for new aircraft
Aprons	Construction of five new remote aircraft stands	By 2021	To provide parking spaces for new aircraft
Car parking	Construction of additional car parking	Phased increases 2017-2025	To cater for increased demand for car parking
Road access	New east access road	By 2025	To reduce congestion and increase access resilience to enable both on and off airport development

Future land uses

On-airport development summary by 2040

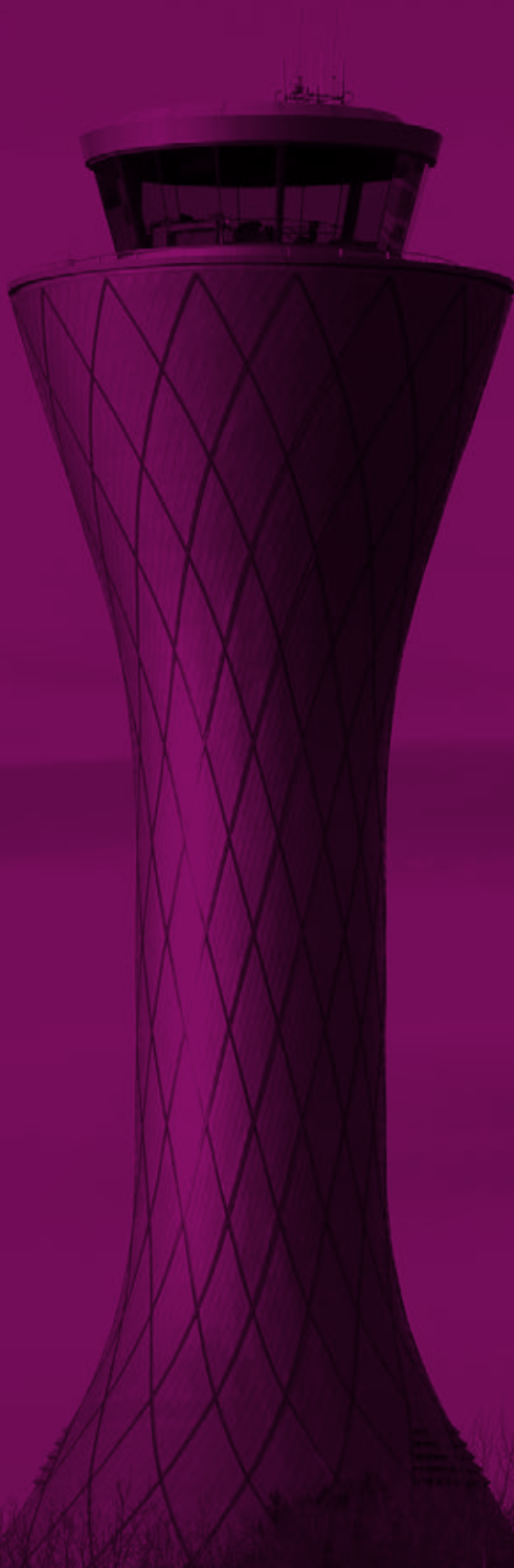
Where	What	When	Why
Main runway 06/24	Addition of additional rapid exit taxiways	By 2040	To reduce runway occupancy time and maximise use of existing main runway. This assists in the deferral of a new runway to the north
Terminal	Large (Phase 2) extension to the south east pier terminal	By 2026	To provide space for additional facilities to cater for forecast growth in international passengers
	Large (Phase 3) extension to the main terminal to create an 'east pier'	By 2030	
Aprons	Construction of 10 new contact aircraft stands to complement Phase 1 terminal extension	By 2028	To provide parking spaces for new aircraft
Aprons	Construction of six new remote aircraft stands	By 2030	To provide parking spaces for new aircraft
Car parking	Construction of additional car parking	Phased increases 2025-2040	To cater for increased demand for car parking



On-airport development summary by 2050

Where	What	When	Why
Main runway 06/24	Additional length (if operationally justified)	By 2041	To enable greater aircraft take off weights and in doing so create further range capabilities from Edinburgh
New parallel runway 06L/24R	Construction of a new runway	Post 2040	Required only to cater for traffic greater than circa 59 ATMs per hour or circa 30m annual pax
Terminal	Extension to the east end of existing terminal. Consideration of 'satellite' gate areas	Post 2040	To provide space for additional facilities to cater for forecast growth in international passengers
Aprons	Construction of new aircraft stands as required	Post 2040	To provide parking spaces for new aircraft
Car parking	Construction of additional car parking	Phased increases 2025-2040	To cater for increased demand for car parking
Road access	West access road	Post 2040	To cater for development to the south west of the airport and provide public transport connection from the west.
	M8 link	Post 2040	To safeguard opportunity for strategic access

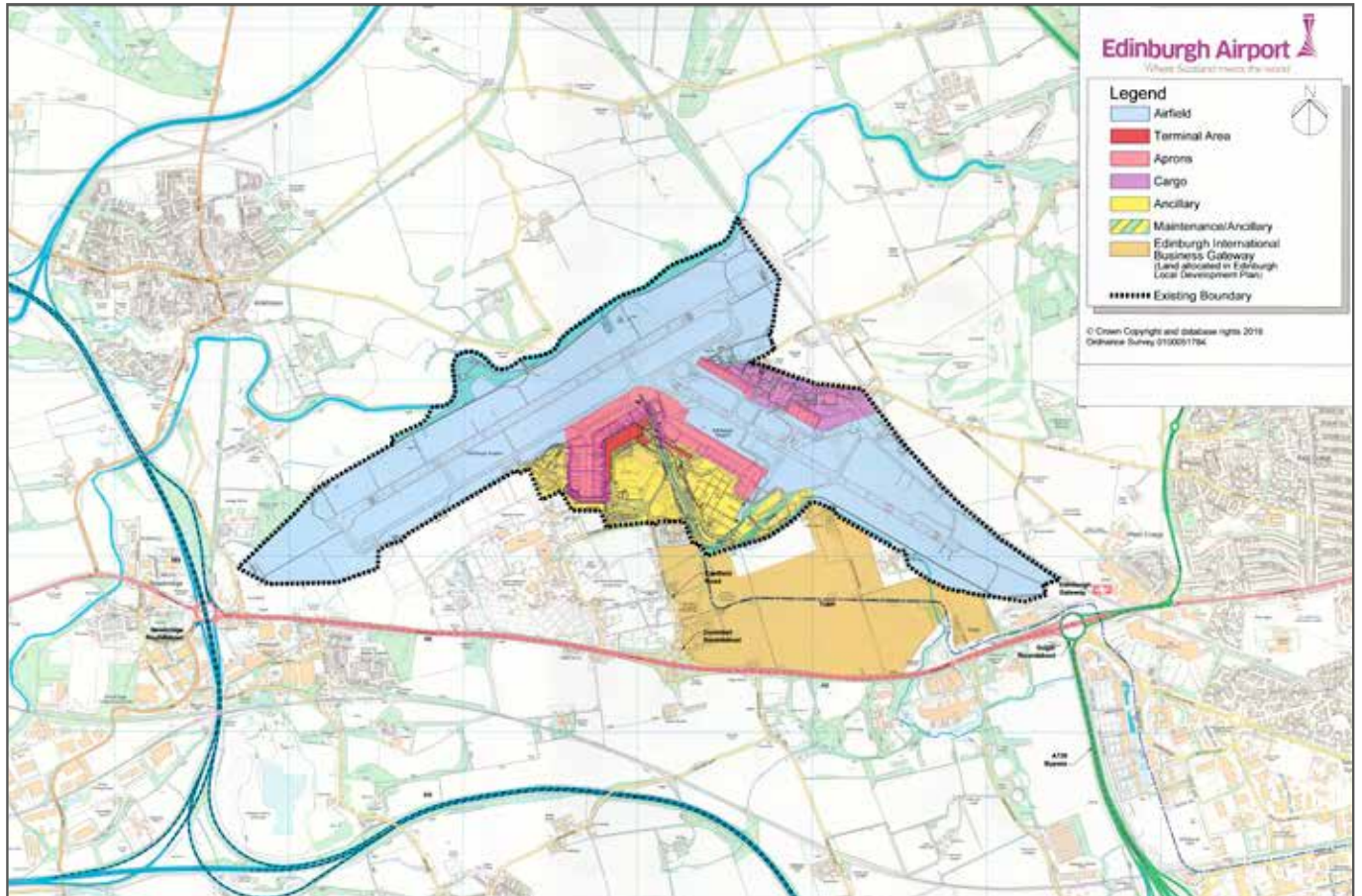
8. Maps



Maps

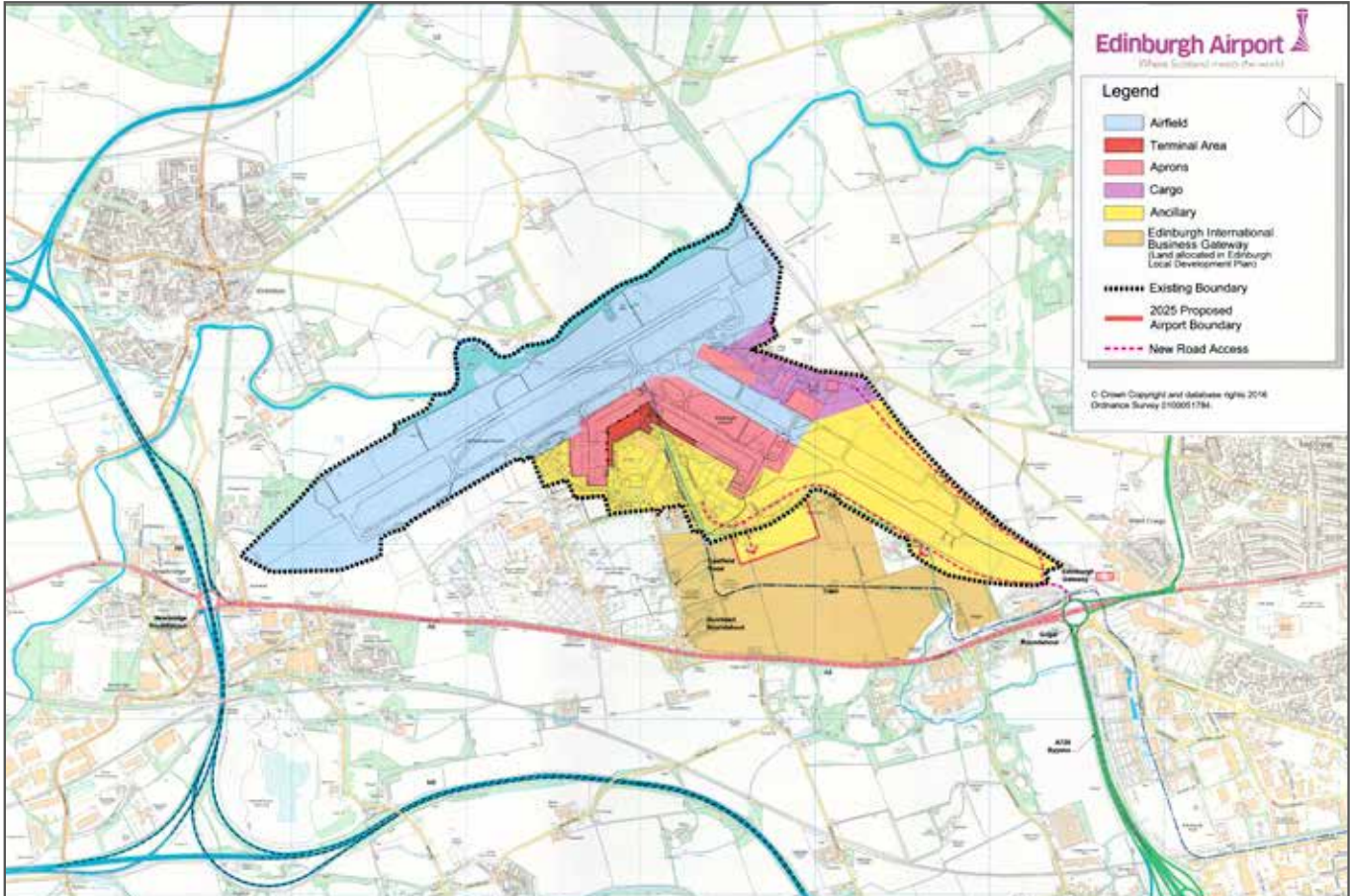


MAP 1 2017 LAND USE



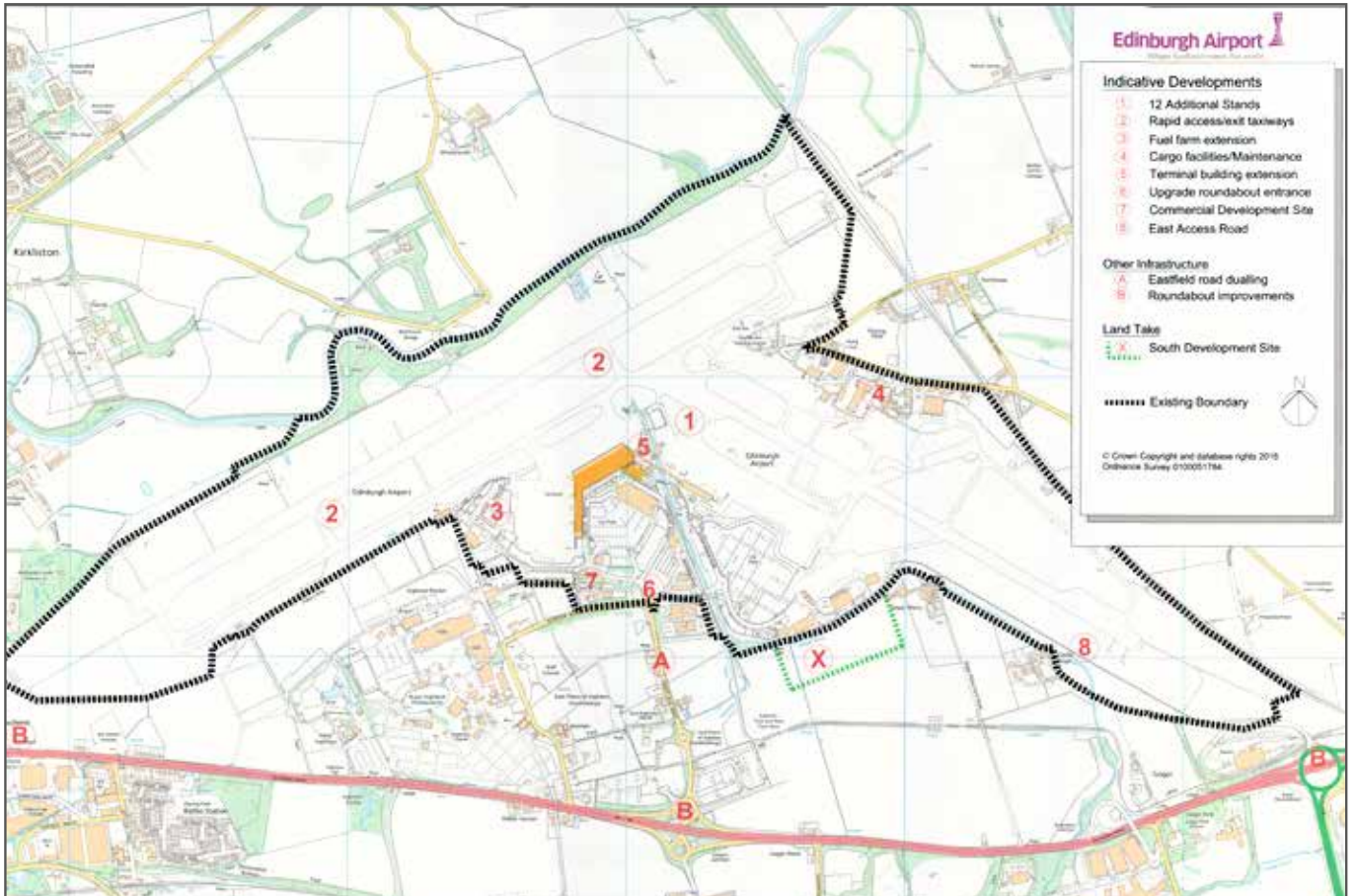
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MAP 2 2025 INDICATIVE LAND USE



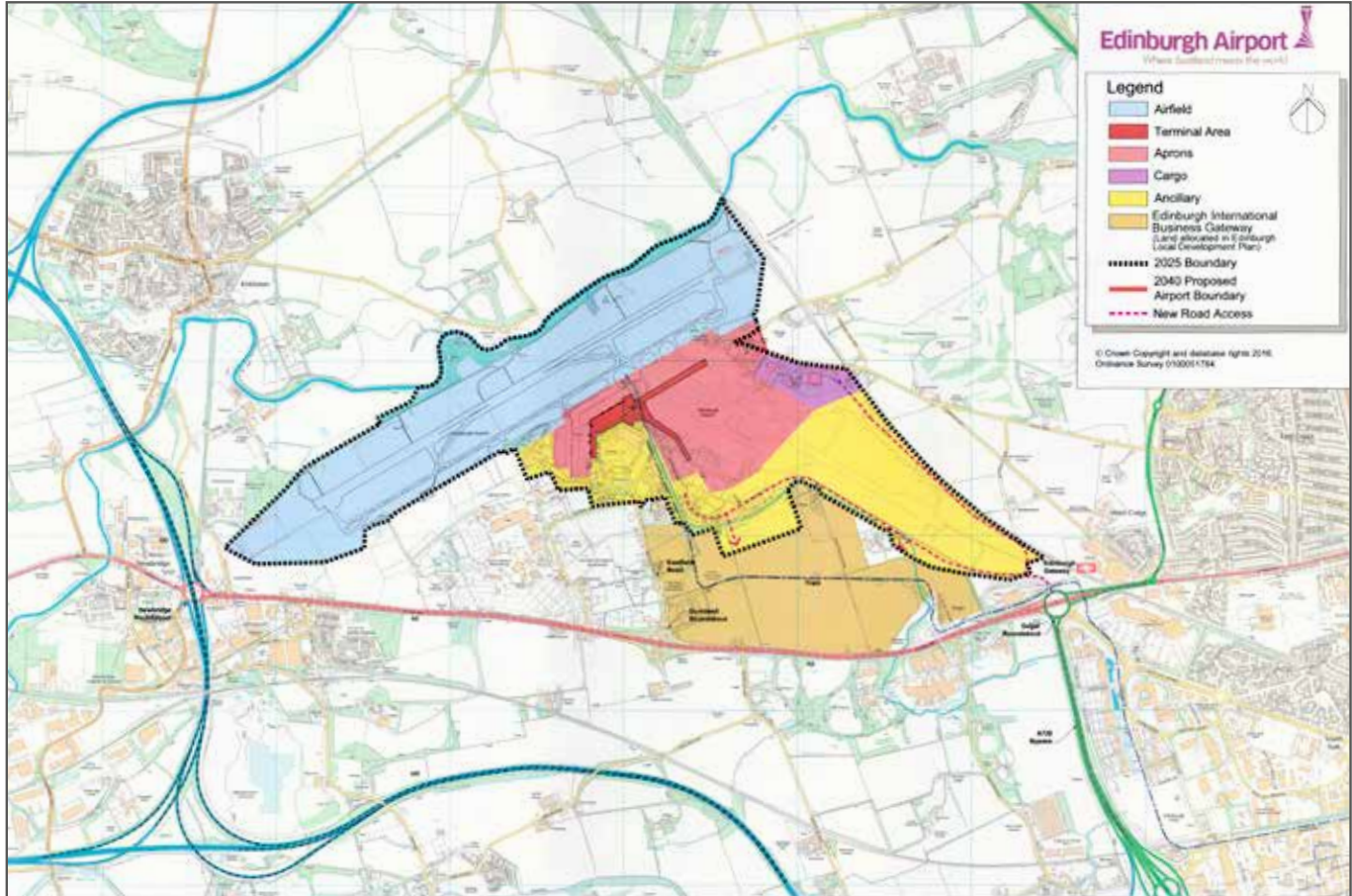


MAP 3 POTENTIAL DEVELOPMENTS UP TO 2025



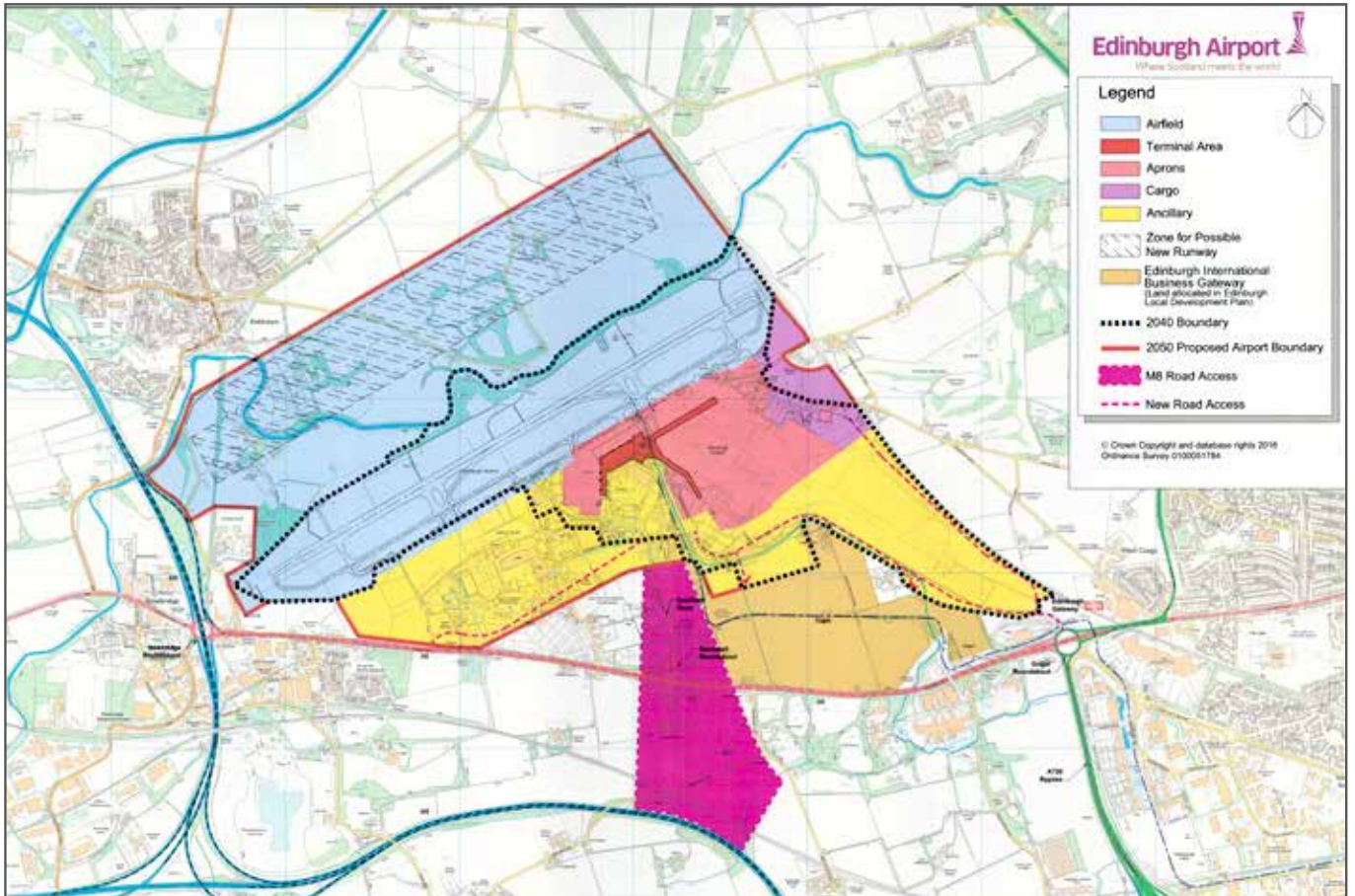
Maps

MAP 4 2040 INDICATIVE LAND USE






MAP 5 2050 INDICATIVE LAND USE - PROVISION FOR TWIN PARALLEL RUNWAYS



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