Air Transport Movements (000s)*, central demand scenario

scenario				
Airport	2016	2030	2040	2050
Aberdeen	73	77	83	91
Belfast City	43	47	51	58
Belfast Inte	42	46	52	60
Birminghar	104	116	144	188
Bournemo	3	1	5	15
Bristol	58	61	75	77
Cardiff	17	14	15	20
Doncaster	9	4	3	5
East Midla	58	79	90	98
Edinburgh	109	123	145	164
Exeter	12	11	15	30
Gatwick	277	277	296	299
Glasgow	76	90	86	91
Heathrow	476	743	749	750
Humbersid	9	9	9	9
Inverness	11	13	14	16
Leeds/Brac	28	51	54	60
Liverpool	40	37	37	60
London Cit	74	76	97	120
Luton	101	129	163	201
Mancheste	196	201	239	265
Newcastle	41	42	42	47
Newquay	8	8	8	8
Norwich	24	24	25	26
Prestwick	5	1	1	1
Southampt	42	35	38	66
Southend	7	6	7	8
Stansted	173	139	155	205
Teesside	3	1	1	5
Total	2119	2460	2700	3043

^{*}Includes arriving and departing ATMs

Passengers (million passengers per annum)**, central demand scenario

Airport	2016	2030	2040	2050
Aberdeen	2.6	3.0	3.4	4.0
Belfast City	2.7	3.3	3.9	5.0
Belfast Inte	5.1	6.3	7.7	8.9
Birminghar	12.3	15.0	20.1	27.5
Bournemo	0.6	0.1	0.3	1.5
Bristol	7.6	8.8	10.9	10.7
Cardiff	1.4	8.0	1.0	1.5
Doncaster	1.2	0.2	0.2	0.5
East Midla	4.8	6.5	7.5	8.4
Edinburgh	11.8	13.1	16.3	19.3
Exeter	8.0	0.7	1.0	3.1
Gatwick	43.4	44.6	50.1	51.6
Glasgow	8.2	11.4	12.1	13.8
Heathrow	76.0	130.8	134.3	137.3
Humbersid	0.2	0.2	0.2	0.2
Inverness	0.7	0.9	1.0	1.2
Leeds/Brac	3.4	7.8	9.2	10.1
Liverpool	4.8	4.6	5.1	9.4
London Cit	4.0	4.6	6.2	7.8
Luton	14.5	19.9	26.3	32.5
Mancheste	26.8	29.4	36.8	41.9
Newcastle	4.7	5.1	5.1	5.6
Newquay	0.4	0.5	0.5	0.5
Norwich	0.5	0.4	0.5	0.6
Prestwick	8.0	0.0	0.0	0.0
Southampt	2.0	1.8	2.0	3.8
Southend	0.7	0.7	0.7	0.9
Stansted	24.5	21.3	26.4	36.1
Teesside	0.1	0.0	0.0	0.6
Total	266.6	341.9	388.8	444.2

^{**}Passengers are defined as 'terminal passengers' - a terminal passenger is counted each time they land or take off on a plane at a UK airport

Departing flight CO₂ (million tonnes)***, central demand scenario

Airport	2016	2030	2040	2050
Gatwick	4.52	2.96	2.88	2.79
Heathrow	19.48	27.16	24.28	20.79
London City	0.16	0.15	0.24	0.31
Luton	0.97	1.17	1.41	1.62
Stansted	1.33	1.06	1.08	1.43
London	26.46	32.49	29.88	26.94
Outside London	8.04	7.95	9.67	11.01
Ground (APUs)	0.46	0.55	0.59	0.64
Freighters	1.04	1.06	0.95	0.85
Residual	1.34	1.34	1.34	1.34
Total UK	37.34	43.38	42.43	40.79

^{***}Departing commercial passenger flights only Ground APUs, freighters and the residual correction to baseline bunker fuel outturn cannot robustly be allocated around the airports All figures are modelled

2. Providing applicant with information requested

Thank you for your information request of 27th May 2019. You requested the following information:

In "Beyond the horizon ... Making best use of existing runways", published by the DfT in June 2018, Table 3 shows projections of 43.4Mt, 42.4Mt and 40.8Mt for 2030, 2040 and 2050 respectively for CO2 emissions from fights departing from UK airports, for the LHR NWR option + best use. Please provide the airport level projections which underpin this, i.e. an update of tables 65, 67 and 70 (LHR NWR) from "UK Aviation Forecasts" published by the DfT in October 2017.

Your request has been considered under the Freedom of Information Act 2000.

I am writing to confirm that the Department has now completed its search for the information. A copy of the information is enclosed along with an explanatory note.

If you are unhappy with the way the Department has handled your request or with the decisions made in relation to your request you may complain within two calendar months of the date of this letter by writing to the Department's FOI Advice Team at:

Zone D/04
Ashdown House
Sedlescombe Road North
Hastings
East Sussex TN37 7GA
E-mail: FOI-Advice-Team-DFT@dft.gov.uk

Please send or copy any follow-up correspondence relating to this request to the FOI Advice Team to help ensure that it receives prompt attention. Please also remember to quote the reference number above in any future communications.

Please see attached details of DfT's complaints procedure and your right to complain to the Information Commissioner.

Yours sincerely,

Mr Dai Richards
Economist, Aviation Appraisal and Modelling (AvAM), Aviation and Maritime Analysis
1/29, Great Minster House
33 Horseferry Road, London, SW1P 4DR
07966 512987

Your right to complain to DfT and the Information Commissioner

You have the right to complain within two calendar months of the date of this letter about the way in which your request for information was handled and/or about the decision not to disclose all or part of the information requested. In addition a complaint can be made that DfT has not complied with its FOI publication scheme.

Your complaint will be acknowledged and you will be advised of a target date by which to expect a response. Initially your complaint will be re-considered by the official who dealt with your request for information. If, after careful consideration, that official decides that his/her decision was correct, your complaint will automatically be referred to a senior independent official who will conduct a further review. You will be advised of the outcome of your complaint and if a decision is taken to disclose information originally withheld this will be done as soon as possible.

If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at:

Information Commissioner's Office Wycliffe House Water Lane Wilmslow Cheshire SK9 5AF

The Future of UK Aviation: Making Best Use of Existing Runways

Freedom of Information Data Release: Explanatory note

- In June 2018, the Government published <u>The Future of UK Aviation: Making Best Use of Existing Runways</u>¹. This provided policy support for airports beyond Heathrow making best use of their existing runways, subject to related economic and environmental considerations.
- 2. In developing this policy, the Government recognised that airports making the best use of their existing runways could lead to increased air traffic which could increase carbon emissions. Therefore, to ensure that our policy was compatible with the UK's climate change commitments, we used the DfT aviation model to look at the impact on carbon emissions of allowing all airports to make best use of their existing runway capacity.
- 3. This FOI data release presents the passenger, Air Transport Movement (ATM) and CO₂ forecasts produced for the *Making Best Use* work. The forecasts are for United Kingdom (UK) airports, and cover a central demand scenario that includes the proposed Northwest Runway at Heathrow (LHR NWR) and the possible impact of the *Making Best Use* policy.

Aviation Forecasts and how they work

- 4. The Department publishes aviation forecasts looking at the longer-term strategic picture for UK aviation. The forecasts are designed to inform longer-term policy making rather than detailed shorter-term forecasts for specific airports.
- 5. The Department's model forecasts overall demand at the national level, based on underlying economic drivers. This demand is then distributed geographically at the district level. The model then allocates passengers at airport level. This allocation is based on estimated drivers of passenger preference, for example accessibility, along with developments in the industry that are captured in the baseline data, in this case up to 2016. More detail on the methodology and guidance on interpretation is given in UK Aviation Forecasts 2017 upon which this data release is based².

Forecast Limitations

6. There is inherent uncertainty in any forecast. Of relevance to this data release is that, where airports compete closely for passengers in overlapping catchment areas, there will be greater uncertainty around forecasts for individual airports. Here local short-term, often commercial, drivers can have significant impact. Forecasts for smaller airports also have greater uncertainty and volatility, with the addition or removal of routes having a larger proportional impact on overall passenger numbers.

¹ https://www.gov.uk/government/publications/aviation-strategy-making-best-use-of-existing-runways

² https://www.gov.uk/government/publications/uk-aviation-forecasts-2017

- 7. For forecasts relating to specific airports, particularly those subject to high levels of competition, reference to alternative forecasts or sensitivity tests, such as alternative local forecasting is recommended to supplement the Department's forecast.
- 8. It should also be recognised that modelling an increasing level of demand and shortage of supply leads to a certain degree of model 'noise'. Where there are small fluctuations year to year, or small differences between different model runs, these changes may well be attributed to such model noise and do not necessarily indicate significant differences in the forecasts.