Appendix 7A
Climate Supporting Data

Introduction

This appendix should be read in conjunction with the **Chapter 7: Climate** of the Environmental Statement (ES).

This appendix sets out further detail of the methodology for quantifying Greenhouse Gases (GHGs) (**Section 7.2**) and the complete results of the assessment (**Section 7.3**).

This appendix provides the supporting data used to calculate greenhouse gas (GHG) emissions as part of the climate assessment (**Section 7.5).** It presents tables of the following data:

1) 2019 Airport building and ground operation electricity, gas use, diesel usage (for vehicles and heating / power) and refrigerant usage at LLA;
2) Vehicle movements, origins and modal splits for employee and passenger access to LLA; and
3) Aviation movements and destination information.

Assessment methodology

Emission Factors

Data on improvement factors under upper, central and lower emission scenarios have been collated from current government policy, CCC advice and industry reports. The trend for each improvement factor out to 2050 are shown in **Table 7A.1**.

Table 7A.1 Improvement factors (relative to the 2019 baseline data) used in the climate assessment for the upper, central and lower future emission scenarios.

Improvement factor	Upper emission scenario	Central emission scenario	Lowe emission sceanrio
Private vehicle splits by fuel type ł	33% petrol, 21% diesel, 46% electric (assumed to be plug-in hybrids) by 2050 *Source: Department for Transport (DfT) Forecasts*[1]	2% petrol, 1% diesel, 97% battery electric vehicles by 2050 *Source: National Grid Future Energy Scenarios*[2]** Steady Progression*	0% petrol, 0% diesel, 100% battery electric vehicles by 2050 *Source: National Grid Future Energy Scenarios*[2]** Leading the Way*
Vehicle efficiency improvements ł	Efficiency factor of 0.78 petrol, 0.86 diesel, 0.82 electric by 2050 *Source: DfT forecast*[1]		
Vehicle efficiency improvements (Public Service Vehicles including buses and coaches)	Efficiency factor 0.71 diesel, 0.87 electric by 2050. Note the fleet mix is assumed to be all diesel *Source: DfT forecast*[1]		

[1] Department for Transport (2020), TAG Data Book. Available at https://www.gov.uk/government/publications/tag-data-book [Accessed 21 October 2020].

[2] National Grid (2020), Future Energy Scenarios, FES 2020. Available at https://www.nationalgrideso.com/future-energy/future-energyscenarios/
fes-2020-documents [Accessed 21 October 2020].

Improvement factor	Upper emission scenario	Central emission scenario	Lowe emission sceanrio
Rail efficiency improvements (diesel)	Efficiency factor of 0.87 by 2050 *Source: DfT forecast*[1]	Efficiency factor of 0.58 by 2050 (median value)	3.82% annual improvement, equating to an efficiency factor of 0.29 by 2050 *Source: historical data from the Office of Rail and Road (ORR)*[3 #]
Electricity generation efficiency improvements	Efficiency factor of 0.54 by 2050 *Source: National Grid Future Energy Scenarios*[2] *Steady Progression*	Efficiency factor of 0.43 by 2050 *Source: Business, Energy and Industrial Strategy (BEIS) Energy and Emission Projections (EEP) 2019 projections*[4] *(assumed to flat line from 2040)*	Efficiency factor of -0.02 by 2050 *Source: National Grid Future Energy Scenarios*[2] *Leading the Way*
Aircraft and engine efficiency	0.8% (covers both aircraft and engine efficiency and air traffic management and operations**) *Source: CCC*[5]	1.01% (median value)	1.22% *Source: Sustainable Aviation*[6]
Air traffic management and operations		0.115% (median value)	0.23% *Source: Sustainable Aviation*[6]
Sustainable aviation fuel[##]	5% implementation at 50% life-cycle emission reduction *Source: DfT*[7]	10% implementation at 30-47% life-cycle emission reduction *Source: CCC*[5,8, , 9,10,11]	18% implementation at 60% life-cycle emission reduction *Source: Sustainable Aviation*[6]

ǂPrivate vehicle splits are assumed to apply to cars and taxis
*Future energy scenarios provide data on electric vehicle percentage. Petrol/diesel percentages have been calculated based on the splits within the DfT forecasts (pessimistic scenario).
carbon emissions (gCO_2e/pass-km) were obtained from the ORR for the period 2005-2020 for UK rail travel. These were used to extrapolate efficiencies into the future and provide an efficiency factor for carbon emissions per rail passenger to 2050 assuming a constant average annual improvement rate.
**CCC advice provides a combined annual improvement rate for aircraft and engine efficiencies and air traffic management and operations. To calculate median values for the central scenario and for use in the pessimistic scenario, air traffic management and operations has been assumed to result in no improvement (i.e. 0%) as the proportional improvement is unknown.

[3] ORR (2020), Table 6100 - Estimates of normalised passenger and freight carbon dioxide equivalent (CO2e) emissions. Available at https://dataportal.orr.gov.uk/statistics/infrastructure-and-emissions/rail-emissions/ [Accessed 12 November 2020].
[4] BEIS (2019), Updated energy and emissions projections: 2019 [online]. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/931215/Web_figures__EEP2019_.ods [Accessed 12 November 2020].
[5] Committee on Climate Change. (2009). Meeting the UK aviation target – options for reducing emissions to 2050. [online]. Available at: https://www.theccc.org.uk/wp-content/uploads/2009/12/CCC-Meeting-the-UK-Aviation-target-2009.pdf [Accessed 21 October 2020].
[6] Sustainable Aviation (2020). Sustainable Aviation Carbon Road-Map: A path to Net Zero. Available online at: https://www.sustainableaviation.co.uk/wp-content/uploads/2020/02/SustainableAviation_CarbonReport_20200203.pdf [Accessed 21 October 2020].
[7] Department for Transport (2017), UK Aviation Forecasts, Moving Britain Ahead (Oct 2017) [online]. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/878705/uk-aviation-forecasts-2017.pdf [Accessed 21 October 2020].
[8] Committee on Climate Change (2018), Biomass in a low-carbon economy, Committee on Climate Change Nov 2018. Available at https://d423d1558e1d71897434.b-cdn.net/wp-content/uploads/2018/11/Biomass-in-a-low-carbon-economy-CCC-2018.pdf
[9] Committee on Climate Change (2019), "Letter: Aviation 2050 – The future of UK aviation", [online]. Available at https://www.theccc.org.uk/wp-content/uploads/2019/02/Aviation-Letter-from-Lord-Deben-to-Chris-Grayling.pdf
[10] Committee on Climate Change (2012), Aviation – Fact Sheet. Available at https://www.theccc.org.uk/wpcontent/ uploads/2013/04/Aviation-factsheet.pdf
[11] Committee on Climate Change (2019), "Letter: International aviation and shipping and net zero", [online]. Available at: https://www.theccc.org.uk/wp-content/uploads/2019/09/Letter-from-Lord-Deben-to-Grant-Shapps-IAS.pdf [Accessed 21 October 2020].

Sustainable aviation fuel uptake is dependent on fuel infrastructure being in place.

Emission factors for each time period used in the assessment are presented in Table 7A.2 to Table 7A.6.

Table 7A.2 Improvement factors (relative to 2019 data) used in the climate assessment for the pessimistic, central and optimistic scenario for the 2024 time period.

Improvement factor	Pessimistic	Central	Optimistic
Private vehicle splits by fuel type	Petrol 50% / Diesel 46% / Electric 4%	Petrol 51% / Diesel 47% / Electric 2%	Petrol 49% / Diesel 45% / Electric 6%
Vehicle efficiency improvements	Petrol 0.89 / Diesel 0.93 / Electric 0.97		
Vehicle efficiency improvements (Public Service Vehicles including buses and coaches)	Bus / Coach (diesel) 0.88		
Rail efficiency improvements	0.89	0.86	0.82
Electricity generation efficiency improvements	0.89	0.82	0.80
Air traffic management and operations	1.00	0.99	0.99

Table 7A.3 Improvement factors (relative to 2019 data) used in the climate assessment for the pessimistic, central and optimistic scenario for the 2028 time period.

Improvement factor	Pessimistic	Central	Optimistic
Private vehicle splits by fuel type	Petrol 50% / Diesel 40% / Electric 10%	Petrol 52% / Diesel 42% / Electric 7%	Petrol 43% / Diesel 35% / Electric 22%
Vehicle efficiency improvements	Petrol 0.83 / Diesel 0.89 / Electric 0.93		
Vehicle efficiency improvements (Public Service Vehicles including buses and coaches)	Bus / Coach (diesel) 0.75		
Rail efficiency improvements	0.87	0.79	0.70
Electricity generation efficiency improvements	0.84	0.58	0.70
Air traffic management and operations	1.00	0.99	0.98

Table 7A.4 Improvement factors (relative to 2019 data) used in the climate assessment for the pessimistic, central and optimistic scenario for the 2032 time period.

Improvement factor	Pessimistic	Central	Optimistic
Private vehicle splits by fuel type	Petrol 47% / Diesel 34% / Electric 18%	Petrol 48% / Diesel 35% / Electric 17%	Petrol 263% / Diesel 19% / Electric 55%

Improvement factor	Pessimistic	Central	Optimistic
Vehicle efficiency improvements		Petrol 0.8 / Diesel 0.87 / Electric 0.88	
Vehicle efficiency improvements (Public Service Vehicles including buses and coaches)		Bus / Coach (diesel) 0.73	
Rail efficiency improvements	0.87	0.74	0.60
Electricity generation efficiency improvements	0.80	0.54	0.54
Air traffic management and operations	1.00	0.99	0.97

Table 7A.5 Improvement factors (relative to 2019 data) used in the climate assessment for the pessimistic, central and optimistic scenario for the 2040 time period.

Improvement factor	Pessimistic	Central	Optimistic
Private vehicle splits by fuel type	Petrol 40% / Diesel 27% / Electric 33%	Petrol 23% / Diesel 15% / Electric 62%	Petrol 1% / Diesel 1% / Electric 99%
Vehicle efficiency improvements		Petrol 0.78 / Diesel 0.86 / Electric 0.84	
Vehicle efficiency improvements (Public Service Vehicles including buses and coaches)		Bus / Coach (diesel) 0.72	
Rail efficiency improvements	0.87	0.66	0.44
Electricity generation efficiency improvements	0.68	0.43	0.26
Air traffic management and operations	1.00	0.98	0.93

Table 7A.6 Improvement factors (relative to 2019 data) used in the climate assessment for the pessimistic, central and optimistic scenario for the 2050 time period.

Improvement factor	Pessimistic	Central	Optimistic
Private vehicle splits by fuel type	Petrol 33% / Diesel 21% / Electric 46%	Petrol 2% / Diesel 1% / Electric 97%	Petrol 0% / Diesel 0% / Electric 100%
Vehicle efficiency improvements		Petrol 0.78 / Diesel 0.86 / Electric 0.82	
Vehicle efficiency improvements (Public Service Vehicles including buses and coaches)		Bus / Coach (diesel) 0.71	
Rail efficiency improvements	0.87	0.59	0.30

Improvement factor	Pessimistic	Central	Optimistic
Electricity generation efficiency improvements	0.54	0.43	-0.02
Air traffic management and operations	1.00	0.96	0.93
Aircraft and engine efficiency	0.92	0.90	0.88
Sustainable aviation fuel	0.98	0.94	0.93

Note: negative values represent a decrease in emissions between the 19 mppa scenario and the 2019 baseline

Additionally, a fourth emission scenario is used within the sensitivity assessment which represents further ambition based on latest recommendations from the CCC. This scenario is representative of the aviation sector improvements recommended in the CCC's 'Balanced Pathway' scenario for achieving net zero as presented in the report on setting the Sixth Carbon Budget[12].

This scenario has only been applied to aviation sector emissions and requires further aviation policy implementation to occur at a national level. Improvement factors used in the assessment are shown in Table 7A.7.

Table 7A.7 Improvement factors (relative to 2019 data) used in the sensitivity climate aviation assessment for the CCC Balanced Pathway scenario.

Improvement factor	2024	2028	2032	2040	2050
Average efficiency improvements*	n/a	n/a	n/a	0.89	0.78
Sustainable aviation fuel	1.00	1.00	0.98	0.94	0.88

*Note CCC projections for average efficiency improvement include airspace modernisation, operational optimisation, aircraft passenger loading, aircraft design, new engine efficiency improvements and introduction of hybrid electric aircraft from 2040. Individual modelling for these parameters is not conducted. Since aviation forecasts for LLA up to 2032 encompass some of these parameters through the updated fleet mixes, this improvement has not been included in the assessment until beyond 2032.

Methodology for quantifying aviation GHG emissions

The majority of an airport's GHG emissions arise from the combustion of fuel by aircraft. Although research is being undertaken to introduce lower-carbon biofuels, it is likely that fuel will remain largely fossil-derived with only a small percentage of biofuel in the mix over the 2020s and 2030s and therefore this this factor is not considered until 2050.

Aviation emissions sources are broken down into:

- CCD phase (departure only to avoid double-counting with other airports); and
- The LTO cycle.

[12] Committee on Climate Change. (2020). The Sixth Carbon Budget – The UK's path to Net Zero [online]. Available at: https://www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf [Accessed 18 December 2020].

Aircraft movement forecasts were developed for both the 'with development' and 'without development' cases. Real aircraft movement data for the 2019 baseline was also provided.

Emissions factors (see **Table 7A.1**) for aircraft and engine efficiencies were applied to the aircraft movement forecasts from 2040 onwards. This is due to the substantial uncertainty over the emissions and technologies associated with 'next generation' aircraft beyond the current generation of Airbus NEOs and Boeing MAXs. The emissions factors incorporated are very likely to be conservative compared to the expected introduction of low carbon aircraft in the future (e.g. electric, hydrogen).

Both the 'with development' and 'without development' cases are presented for 2024, 2028, 2032, 2040 and 2050.

Climb Cruise Descent (CCD) phase

The CCD phase of flights has only been considered for departing flights, following DfT guidance[7]. Arriving aircraft were not considered as part of the calculation of CCD emissions.

For the 'with development' and 'without development' cases, LLAOL provided forecast movements for a 92-day summer period. This was based on the same period for 2019, but with aircraft types and routes modified to reflect expected changes over the coming years. These forecasts were used to create an annual forecast by scaling emissions from passenger, cargo and general aviation movements by factor derived from actual 2017 data. The factors applied are 3.5, 4.9 and 3.9 for passenger, cargo and general aviation respectively.

The schedules provide destination airports for departures. The coordinates (latitude/longitude) of each destination airport were obtained from publicly available databases[13] and cross-checked[14,15]. The great circle distance[16] (GCD) from LLA to each airport was calculated from the coordinate pairs using standard trigonometric formulae.

To account for the fact that aircraft often do not fly exact great circle routes, it is usual practice to uplift the GCD by a certain amount to obtain the actual flight distance. Various procedures for uplifting the GCD have been proposed. For the Proposed Scheme, the procedure recommended by DfT was used**Error! Bookmark not defined.**, namely uplifting the GCD by 5% for short-haul "*to reflect the latest evidence in inherent inefficiencies in air traffic control, flight paths and airspace*".

Emission factors were derived from the EMEP/EEA guidebook[17]. The EEA and the United Nations (UN's) Long-Range Transboundary Air Pollution project (LRTAP) produce the guidebook to support the compilation of GHG inventories across Europe and across market sectors. The aviation chapter of the guidebook recommends methodologies for calculating GHG emissions from aviation, with various "tiers" or levels of accuracy. The Tier 3A approach has been used for this work, since it provides the best level of accuracy consistent with the availability of data. Specifically, it uses data on aircraft type and origin/destination.

The Tier 3A method takes into account that emission rates vary between phases of flight, and consequently that fuel burn is related to flight distance, but not in a simple way because different flight lengths entail different times in the various phases such as CCD.

EMEP/EEA provides two spreadsheets for calculating emissions, one for the LTO phase and one for the CCD phase. The underlying methodologies behind these spreadsheets are briefly described in the main guidebook

[13] GitHub (2018). JSON database of 28k+ airports with ICAO/IATA codes, names, cities, two-letter country identifiers, elevation, latitude & longitude, and a timezone identifier, [online]. Available at: https://github.com/mwgg/Airports [Accessed 21 October 2020].
[14] OpenFlights (2018). Airport database, [online]. Available at: https://openflights.org/data.html [Accessed 21 October 2020].
[15] Arash Partow (2018). The Global Airport Database, [online]. Available at: http://www.partow.net/miscellaneous/airportdatabase/ [Accessed 21 October 2020].
[16] Great Circle Distance is the shortest distance between two points on the surface of a sphere measured along the surface of the sphere.
[17] EMEP/EEA air pollutant emission inventory guidebook (2019). Chapter 1.A.3.a Aviation, [online]. Available at: https://www.eea.europa.eu/publications/emep-eea-guidebook-2019 [Accessed 21 October 2020].

document, with more detail available in a supporting document. The spreadsheet embodies a set of factors derived by using Eurocontrol's Advanced Emissions Model (AEM) tool. AEM uses a high level of four-dimensional trajectory information to calculate fuel burn — a level of detail which is not generally available to the public, and in particular is not available for future movements

Because aircraft types, engines, flight trajectories etc. evolve over time, Eurocontrol's AEM and the EMEP/EEA spreadsheets are updated periodically. For the climate assessment, the latest available version of the EMEP/EEA spreadsheets was used, from 2019. However, it should be noted that the 2019 version does not incorporate any substantive updates over the 2016 version. The EMEP/EEA spreadsheets are based on the current contemporary (2015) aircraft fleet characteristics, so it is only able to calculate emissions for many of the most common existing aircraft types. It does not include newer types such as the Airbus 320neo series or the Boeing 737Max series, both of which feature in the LLA schedules. For these newer types, the Small Emitters Tool (SET), published by Eurocontrol[18], was used as a supplementary source of information. SET is updated annually and includes emissions for these newer aircraft types, but it only provides whole-flight emissions, without separating out emissions from CCD and LTO. Therefore, for each of the newer aircraft types, a suitable surrogate aircraft type for which EMEP data is available was chosen, and an adjustment factor was calculated equal to the ratio of the whole-flight emissions for a typical 1500 km flight as calculated by SET. Surrogates and adjustment factors are given in **Table 7A.8.**

Table 7A.8 Surrogate and adjustment factors for SET calculation

Aircraft type	Surrogate	Adjustment factor
A320neo	A320ceo	0.804
A321neo	A321ceo	0.786
B737 Max 8	B737-800	0.834

Landing and Take Off (LTO) cycle

The LTO cycle is considered for all Air Traffic Movements (ATM)s that occur as a result of the Proposed Scheme. As is common practice, emissions are calculated for all parts of the LTO at LLA, including the arrival elements (approach, landing roll and taxi-in). This is a minor deviation from the formal recommendation to present emissions for departing flights only, as this would entail calculating the arrival LTOs at a large number of remote airports for which data collection would be extremely onerous. This is therefore a conservative approach and represents a reasonable worst-case for assessment.

As noted in paragraph 7.9.18, EMEP/EEA provides a generic spreadsheet for calculating emissions for the LTO phase, but this was not used for this assessment. This is because it was possible to compile a detailed emissions inventory using data specific to LLA, including detailed taxi-in and taxi-out times as described in **Chapter 6: Air Quality** of the ES. This inventory included fuel consumption as an integral part of the calculation. LTO emissions of CO_2 were calculated by multiplying the fuel consumption by a factor of 3.15**Error! Bookmark not defined.** (or a reduced factor where efficiencies were added). This approach is considered to be more accurate than using a more generic approach such as the EMEP/EEA spreadsheet.

Methodology for quantifying surface access GHG emissions

Surface access emissions have been calculated using employee and passenger numbers and by estimating the number of total kilometres travelled for each mode of transport, based on information from the Traffic Assessment and Travel Plan and provided in Appendix A.

[18] Eurocontrol (2019). Small Emitters Tool. Available at: https://www.eurocontrol.int/tool/small-emitters-tool

Passenger data for the 2019 baseline modal splits has been sourced from raw data provided to LLAOL from the 2019 CAA Passenger Survey[19] at LLA. The modal splits in the 'without development' case are based on targets within the 2019 ASAS re-issue[20] for passenger bus/coach and rail travel. For the 'with development' case, modal splits are based on targets within the Travel Plan for bus/coach and rail. Although there is an additional target for non-electric cars this has not been incorporated into the assessment as no target data is available for electric cars and the assumptions are therefore too great. Uptake of electric vehicles are included in future projections (see **Table 7A.1**). Average car occupancy from the National Travel Survey 2019[21] has been applied to private car and taxi travel, it is assumed to remain constant in future time periods.

Details of passenger origin locations has been sourced from the public report of the CAA Passenger Survey 2019 for LLA. Origin is assumed constant in the 'with development' and 'without development' cases and all future time periods.

No data is available on the last mode of transport for rail passengers in the 2019 baseline, although it is assumed that the majority of passengers' onward travel would be by shuttle bus or taxi. Since passenger split details are unknown, the baseline assessment therefore only considers rail passengers' journey to Luton Airport Parkway and not their journey by the last mode of transport to LLA. In the future scenarios a last mode of transport assessment has been included. It has been assumed that all rail passengers will travel by DART, and this has been incorporated into the assessment for future assessment years once operational.

Baseline employee modal split data has been taken from the 2019 Staff Travel Survey (see **Chapter 10: Transport**). The modal splits in the 'without development' case are based on targets within the 2019 ASAS re-issue[22] for staff rail travel (note the targets for single occupancy vehicle and bus/coach have been achieved already in 2019 and no further improvements are assumed). For the 'with development' case, modal splits are based on targets within the Travel Plan for bus/coach, rail and cycling. As with the passenger data, there is an additional target for non-electric cars but this has not been incorporated into the assessment as no target data is available for electric cars and the assumptions are therefore too great. Uptake of electric vehicles are includes in future projections (see **Table 7A.1**).

Employee numbers for the 2019 baseline and 'with development' case are noted in the Transport Assessment (document reference **41431MP17V1).** 2019 baseline is assumed to be representative of an 18 mppa airport and is therefore used for the 'without development' case. Peak employee numbers are assumed be reached in the year the planning capacity is forecast to be reached and then remain constant.

Employee commuting distance has been sourced from the DfT National Travel Survey 2019[21] average commuting length of 14.7 km. This is in line with the data from the Staff Travel Survey where the median commute length of respondents was 14.5 km (representative of approximately 8.4% of staff).

Data on passenger and employee journeys have been multiplied by emissions factors from the 2019 conversion factors published by BEIS[4]. The emissions factors used for the surface access assessment are:

- Passenger vehicle (average sized car petrol): 0.18084 $kgCO_{2e}$/km;
- Passenger vehicle (average sized car diesel): 0.17336 $kgCO_{2e}$/km

[19] CAA. (2020). 2019 Passenger survey report [online]. Available at: https://www.caa.co.uk/Data-and-analysis/UK-aviation-market/Consumer-research/Departing-passenger-survey/2019-Passenger-survey-report/
[20] London Luton Airport (2019). LLAOL Airport Surface Access Strategy 2019 Reissue [online]. Available at: https://www.london-luton.co.uk/CMSPages/GetFile.aspx?guid=a31129aa-284b-4b4c-aae0-ed0208d70fec [Accessed 04 November 2020].
[21] Department for Transport, (2018), "National Travel Survey: 2019", [online]. Available at: https://www.gov.uk/government/statistics/national-travel-survey-2019
[22] London Luton Airport (2019). LLAOL Airport Surface Access Strategy 2019 Reissue [online]. Available at: https://www.london-luton.co.uk/CMSPages/GetFile.aspx?guid=a31129aa-284b-4b4c-aae0-ed0208d70fec [Accessed 04 November 2020].

- Passenger vehicle (average sized car plug in hybrid electric vehicle, including UK Electivity for EV usage): 0.11182 kgCO_{2e}/km
- Passenger vehicle (average sized car battery electric vehicle, including UK Electivity for EV usage): 0.05549 kgCO_{2e}/km
- Motorbike (average sized): 0.11551 kgCO_{2e}/km;
- Taxis (black cab): 0.31764 kgCO_{2e}/km;
- Taxis (regular taxi): 0.21024 kgCO_{2e}/km;
- Local Bus (average): 0.10471 kgCO_{2e}/passenger/km;
- Coach (average): 0.02779 kgCO_{2e}/passenger/km;
- National rail: 0.04115 kgCO_{2e}/passenger/km; and
- Light rail and tram: 0.03508 kgCO_{2e}/passenger/km.

All journeys are assumed two-way journeys. Well-to-tank emissions have not been considered.

Surface access emissions have been calculated for pessimistic, central and optimistic scenarios based on governmental policy and projections, CCC advice and industry projections (**Table 7A.1**). Data has been collated for all sources for 2024, 2028, 2032, 2040 and 2050.

Both the 'with development' and 'without development' cases are presented for 2024, 2028, 2032, 2040 and 2050.

Methodology for quantifying airport buildings and operations GHG emissions

Raw data on airport building and ground operations at LLA have been provided for 2019. These have been multiplied by emissions factors from the 2019 conversion factors published by BEIS[4] unless otherwise specified. The emission factors used are:

- Electricity generation 2019 UK grid mix: 0.2556 kgCO_{2e}/kWh;
- Transmission and distribution (T&D) of UK grid electricity: 0.0217 kgCO_{2e}/kWh
- Natural gas: 0.18385 kgCO_{2e}/kWh;
- Diesel (heating and power): 2.75821 kgCO_{2e} /litre;
- Diesel (vehicles): 2.59411 kgCO_{2e}/litre;
- Refrigerants (R410A): 2088 kg $CO2_e$/kg
- Refrigerants (HFC-134a): 1430 kg $CO2_e$/kg
- Refrigerants (R407C): 1774 kg $CO2_e$/kg

An increase in airport building and ground operations requirements has been calculated based on a linear increase proportionate to passenger numbers, relative to the 2019 baseline. Once the passenger capacity is reached, emissions are assumed to remain constant due to uncertainties in projections.

Where data is available information on tenant emissions have also been included. Presently this data is available for diesel for third party vehicle usage only. Future endeavours on carbon reporting in line with the ACA process will result in more detailed analysis being possible.

LLA have committed to securing electricity generated from renewable sources by the end of 2021. In line with guidance from the GHG Protocol[23], a market-based Scope 2 electricity factor has been calculated to reflect the renewable energy tariff which will be supported by a Renewables Obligation Certificate (ROC). The emission factor used in the market-based method is 0.0125 $kgCO_2e/kWh$[24]. This is reported in addition to the location-based emission for Scope 2 electricity, representative of the average emission of the UK Electricity grid including T&D emissions, as reported in paragraph 7.9.33.

Data on engine testing is not available for LLA and has not been included in the climate assessment. Based on the results of other airports the emissions associated with engine testing are likely to be negligible.

Improvement factors for three scenarios as stated in Table 7A.2 have been incorporated into the assessment for UK grid electricity generation. There is not sufficient information available to quantify anticipated changes in gas use, fleet vehicles or refrigerants for the future scenarios. These are therefore assumed to be constant, although expected changes such as improved building management processes, further boiler upgrades and fleet upgrades to electric or alternative fuel technologies are anticipated.

Both the 'with development' and 'without development' (i.e. Future Baseline) cases are presented for 2024, 2028, 2032, 2040 and 2050.

Quantification of GHGs

This section sets out further quantifications of GHG emissions that are not presented in **Section 7.10** of **Chapter 7** of the ES.

Total emissions

A breakdown of total projected GHG emissions by source for the upper emission scenario is shown in **Figure 7A.1**. The lower emission scenario is presented in **Figure 7A.2** (note the central emission scenario is shown in Chapter 8).

[23] Greenhouse Gas Protocol. (2015). GHG Protocol Scope 2 Guidance. An amendment to the GHG Protocol Corporate Standard [online]. Available at https://www.ghgprotocol.org/sites/default/files/ghgp/standards/Scope%202%20Guidance_Final_0.pdf [Accessed 21 October 2020].

[24] Pehl et al (2017). Understanding future emissions form low-carbon power systems by integration of life-cycle assessment and integrated energy modelling. Naturel energy, Volume 2 December 2017 939-945.

Figure 7A.1 Total GHG emissions for the 2017 baseline, and 'without development' and 'with development' cases for the upper emission scenario

Note: location-based approach is used to calculate all emissions

Figure 7A.2 Total GHG emissions for the 2017 baseline, and 'without development' and 'with development' cases for the upper emission scenario using a location-based approach

Note: location-based approach is used to calculate all emissions

Aviation emissions

Total projected aviation GHG emissions from LLA for the baseline, 'without development' and 'with development' cases for the assessment years 2024, 2028, 2032, 2040 and 2050 in three future improvement scenarios (upper, central and lower emissions scenarios) are shown in **Table 7A.9**.

Table 7A9 Aviation GHG emissions ($ktCO_2/yr$) for domestic and international sources in the 2019 baseline, 'without development' and 'with development' cases in the upper, central and lower emission scenarios.

		2024		2028		2032		2040		2050	
	2019 baseline	Without development	With development	Without development	With development	Without development	With development	Without development	With development	Without development	With development
Upper emissions scenario											
Domestic	41.86	38.73	38.33	37.96	35.67	35.13	34.82	35.13	34.82	31.61	31.33
International	1033.83	998.69	1011.84	950.79	928.30	884.49	907.75	884.49	907.75	795.82	816.74
Pessimistic scenario total	1075.69	1037.42	1050.17	988.76	963.98	919.62	942.56	919.62	942.56	827.43	848.07
Central emissions scenario											
Domestic	41.86	38.51	38.11	37.57	35.30	34.61	34.30	34.29	33.99	28.74	28.49
International	1033.83	992.96	1006.03	941.00	918.74	871.36	894.27	863.38	886.07	723.69	742.71
Central scenario total	1075.69	1031.46	1044.15	978.57	954.04	905.97	928.57	897.66	920.06	752.43	771.20
Lower emissions scenario											
Domestic	41.86	38.29	37.89	37.19	34.94	34.09	33.79	33.47	33.17	26.85	26.61
International	1033.83	987.26	1000.26	931.29	909.26	858.41	880.97	842.74	864.89	675.98	693.75
Optimistic scenario total	1075.69	1025.54	1038.15	968.48	944.20	892.50	914.76	876.21	898.07	702.82	720.36

*2019 baseline is based on actual data and therefore no future scenarios were applied to the data, the same data is repeated in this table.

Surface access emissions

Projected surface access GHG emissions for the 2019 baseline, 'without development' and 'with development' cases for the assessment years 2024, 2028, 2032, 2040 and 2050 in three future improvement scenarios (upper emission, central emission and lower emission scenarios) are shown in **Table 7A.10**.

Table 7A.10 Surface access GHG emissions ($ktCO_2e/yr$) associated with LLA.

		2024		2028		2032		2040		2050	
	2019 baseline	Without development	With development	Without development	With development	Without development	With development	Without development	With development	Without development	With development
Upper emission Scenario											
Passengers	396.06	281.22	352.80	258.49	324.49	243.46	305.46	223.96	280.60	207.02	258.83
Employees	9.69	8.61	9.17	7.90	8.43	7.47	7.97	6.91	7.39	6.41	6.87
Upper emission total	405.75	289.83	361.97	266.39	332.92	250.93	313.44	230.87	287.99	213.42	265.70
Central emission scenario											
Passengers	396.06	279.55	350.85	251.80	316.31	224.69	281.91	137.78	169.94	71.21	84.19
Employees	9.69	8.57	9.13	7.73	8.25	6.95	7.42	4.30	4.67	2.28	2.56
Central emission total	405.75	288.13	359.98	259.53	324.56	231.64	289.33	142.07	174.61	73.49	86.75
Lower emission scenario											
Passengers	396.06	271.49	340.76	223.69	280.77	153.87	191.37	52.75	61.29	27.44	29.28
Employees	9.69	8.36	8.91	6.95	7.44	4.87	5.27	1.80	2.06	1.07	1.29
Lower emission total	405.75	279.85	349.67	230.64	288.20	158.74	196.64	54.55	63.35	28.51	30.57

Airport buildings and ground operations

In line with the GHG protocol guidance[23], both location-based and market-based carbon reporting methods have been used to calculate emissions associated with Scope 2 electricity.

Future efficiencies are applied to the UK grid electricity and there is therefore variation in the location-based results for the upper, central and lower emission scenarios. Data is presented for the both approach for all three emission scenarios in **Table 7A.11.**

Table 7A.11: Airport building and ground operation emissions ($ktCO_2e/yr$)

		2024		2028		2032		2040		2050	
	2019 baseline*	Without development	With development	Without development	With development	Without development	With development	Without development	With development	Without development	With development
Upper emission scenario											
Electricity (location-based)	10.10	9.40	6.64	6.30	5.41	4.25	10.10	9.40	6.64	6.30	5.41
Electricity (market-based)	10.10	0.48	0.36	0.36	0.36	0.36	10.10	0.48	0.36	0.36	0.36
Gas	1.50	1.58	1.58	1.58	1.58	1.58	1.50	1.58	1.58	1.58	1.58
Diesel – Heating	0.10	0.11	0.11	0.11	0.11	0.11	0.10	0.11	0.11	0.11	0.11
Diesel – Power	0.10	0.11	0.11	0.11	0.11	0.11	0.10	0.11	0.11	0.11	0.11
Diesel – Vehicles LLAOL	1.08	1.14	1.14	1.14	1.14	1.14	1.08	1.14	1.14	1.14	1.14
Diesel – Vehicles 3rd Part	0.67	0.71	0.71	0.71	0.71	0.71	0.67	0.71	0.71	0.71	0.71
Refrigerants (total)	0.27	0.28	0.28	0.28	0.28	0.28	0.27	0.28	0.28	0.28	0.28
TOTAL (location-based)	13.82	13.33	10.57	10.23	9.34	8.18	13.82	13.33	10.57	10.23	9.34
TOTAL (market-based)	13.82	4.40	4.28	4.28	4.28	4.28	13.82	4.40	4.28	4.28	4.28
Central emission scenario											
Electricity (location-based)	10.10	8.68	4.62	4.24	3.39	3.39	10.10	8.68	4.62	4.24	3.39
Electricity (market-based)	10.10	0.48	0.36	0.36	0.36	0.36	10.10	0.48	0.36	0.36	0.36
Gas	1.50	1.58	1.58	1.58	1.58	1.58	1.50	1.58	1.58	1.58	1.58
Diesel – Heating	0.10	0.11	0.11	0.11	0.11	0.11	0.10	0.11	0.11	0.11	0.11
Diesel – Power	0.10	0.11	0.11	0.11	0.11	0.11	0.10	0.11	0.11	0.11	0.11
Diesel – Vehicles LLAOL	1.08	1.14	1.14	1.14	1.14	1.14	1.08	1.14	1.14	1.14	1.14
Diesel – Vehicles 3rd Part	0.67	0.71	0.71	0.71	0.71	0.71	0.67	0.71	0.71	0.71	0.71
Refrigerants (total)	0.27	0.28	0.28	0.28	0.28	0.28	0.27	0.28	0.28	0.28	0.28
TOTAL (location-based)	13.82	12.60	8.55	8.16	7.31	7.31	13.82	12.60	8.55	8.16	7.31
TOTAL (market-based)	13.82	4.40	4.28	4.28	4.28	4.28	13.82	4.40	4.28	4.28	4.28
Upper emission scenario											
Electricity (location-based)	10.10	8.47	5.52	4.26	2.05	-0.16	10.10	8.47	5.52	4.26	2.05
Electricity (market-based)	10.10	0.48	0.36	0.36	0.36	0.36	10.10	0.48	0.36	0.36	0.36
Gas	1.50	1.58	1.58	1.58	1.58	1.58	1.50	1.58	1.58	1.58	1.58

	2024		2028		2032		2040		2050	
	2019 baseline*	Without development	With development	Without development	With development	Without development	With development	Without development	With development	Without development	With development
Diesel – Heating	0.10	0.11	0.11	0.11	0.11	0.11	0.10	0.11	0.11	0.11	0.11
Diesel – Power	0.10	0.11	0.11	0.11	0.11	0.11	0.10	0.11	0.11	0.11	0.11
Diesel – Vehicles LLAOL	1.08	1.14	1.14	1.14	1.14	1.14	1.08	1.14	1.14	1.14	1.14
Diesel – Vehicles 3rd Part	0.67	0.71	0.71	0.71	0.71	0.71	0.67	0.71	0.71	0.71	0.71
Refrigerants (total)	0.27	0.28	0.28	0.28	0.28	0.28	0.27	0.28	0.28	0.28	0.28
TOTAL (location-based)	13.82	12.40	9.45	8.19	5.98	3.77	13.82	12.40	9.45	8.19	5.98
TOTAL (market-based)	13.82	4.40	4.28	4.28	4.28	4.28	13.82	4.40	4.28	4.28	4.28

Note negative values represent reductions in emissions. The direction of magnitude for these emission sources is beneficial in terms of impact on the global climate.
*2019 baseline is based on actual data and therefore no future scenarios were applied to the data, the same data is repeated in this table.

Assessment of effects: the global climate

This section sets out further information considered in the assessment of effects, and should therefore be read in conjunction with the **Chapter 7, Section 7.11**.

International aviation

International aviation GHG emissions for the Proposed Scheme and the 'with development' case as a percentage of the 37.5 $MtCO_2$/yr planning assumption are shown graphically in Chapter 8. These results are presented in **Table 7A.12** and **Table 7A.13**.

Table 7A.12 International aviation GHG emissions from the expansion of LLA (i.e. the Proposed Scheme) as a proportion of 37.5 $MtCO_2$/yr

	2024		2028		2032		2040		2050	
	$MtCO_2$/yr	%	$MtCO_2$/yr	%	$MtCO_2$/yr	%	$MtCO_2$/yr	%	$MtCO_2$/yr	%
Upper emission scenario	0.01	0.04%	-0.02	-0.06%	0.02	0.06%	0.02	0.06%	0.02	0.06%
Central emission scenario	0.01	0.03%	-0.02	-0.06%	0.02	0.06%	0.02	0.06%	0.02	0.05%
Lower emission scenario	0.01	0.03%	-0.02	-0.06%	0.02	0.06%	0.02	0.06%	0.02	0.05%

Table 7A.13 International aviation GHG emissions from the 'with development' case as a proportion of the 37.5 $MtCO_2$/yr planning assumption

	2024		2028		2032		2040		2050	
	$MtCO_2$/yr	%	$MtCO_2$/yr	%	$MtCO_2$/yr	%	$MtCO_2$/yr	%	$MtCO_2$/yr	%
Upper emission scenario	1.01	2.70%	0.93	2.48%	0.91	2.42%	0.91	2.42%	0.82	2.18%
Central emission scenario	1.01	2.68%	0.92	2.45%	0.89	2.38%	0.89	2.36%	0.74	1.98%
Lower emission scenario	1.00	2.67%	0.91	2.42%	0.88	2.35%	0.86	2.31%	0.69	1.85%

Sensitivity analysis

Aviation GHG emissions for the Proposed Scheme and the 'with development' case as a percentage of the 23 $MtCO_2$/yr planning suggestion are shown graphically in Chapter 8. These results are presented in **Table 7A.14** and **Table 7A.15**.

Table 7A.14 Aviation GHG emissions from the expansion of LLA (i.e. the Proposed Scheme only) as a proportion of 23 $MtCO_2$/yr

	2024		2028		2032		2040		2050	
	MtCO2/yr	%	MtCO2/yr	%	MtCO2/yr	%	MtCO2/yr	%	MtCO2/yr	%
Upper emission scenario	0.01	0.06%	-0.02	-0.11%	0.02	0.10%	0.02	0.10%	0.02	0.09%
Central emission scenario	0.01	0.06%	-0.02	-0.11%	0.02	0.10%	0.02	0.10%	0.02	0.08%
Lower emission scenario	0.01	0.05%	-0.02	-0.11%	0.02	0.10%	0.02	0.10%	0.02	0.08%
CCC Balanced Pathway scenario	0.01	0.06%	-0.02	-0.11%	0.02	0.10%	0.02	0.08%	0.02	0.07%

Table 7A.15 Aviation GHG emissions from the 'with development' case (i.e. all aviation emissions including the Proposed Scheme) as a proportion of the 23 $MtCO_2$/yr planning suggestion

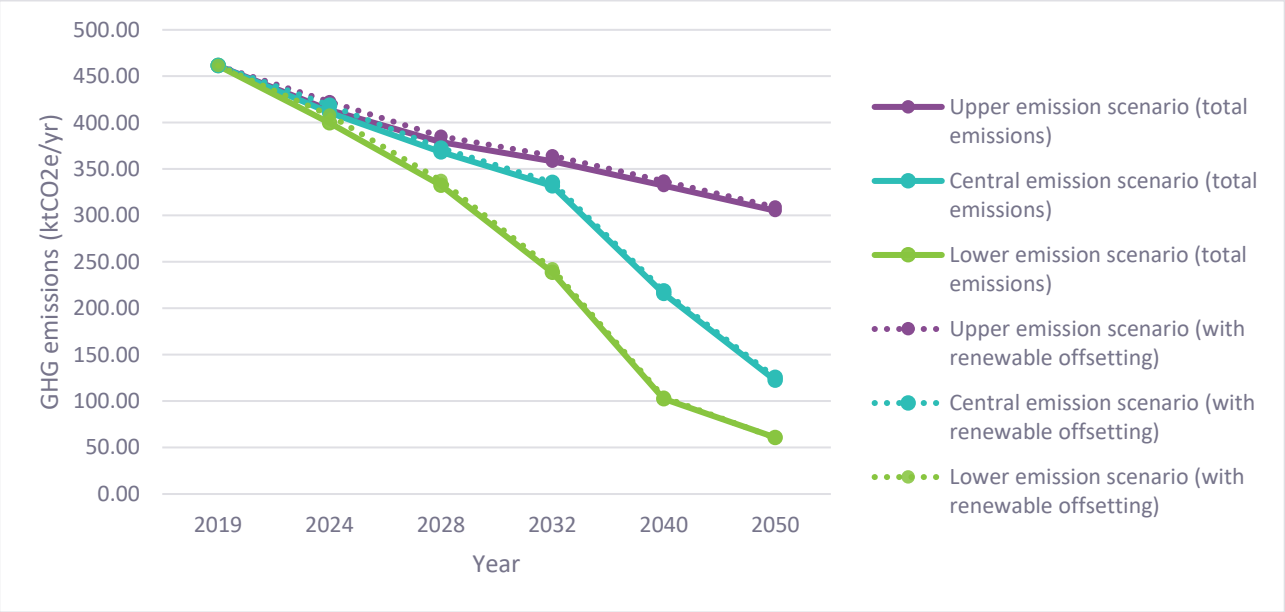
	2024		2028		2032		2040		2050	
	$MtCO_2$/yr	%	$MtCO_2$/yr	%	$MtCO_2$/yr	%	$MtCO_2$/yr	%	$MtCO_2$/yr	%
Upper emission scenario	1.05	4.57%	0.96	4.19%	0.94	4.10%	0.94	4.10%	0.85	3.69%
Central emission scenario	1.04	4.54%	0.95	4.15%	0.93	4.04%	0.92	4.00%	0.77	3.35%
Lower emission scenario	1.04	4.51%	0.94	4.11%	0.91	3.98%	0.90	3.90%	0.72	3.13%
CCC Balanced Pathway scenario	1.05	4.57%	0.96	4.17%	0.92	4.00%	0.79	3.43%	0.64	2.78%

UK Carbon Target for 2050 and UK Carbon Budgets (non-international aviation)

Figure 7A.3 shows the GHG emissions associated with the 'with development' case that are considered in the UK Carbon Budget[25] and Net Zero Target[26]. This represents all activities at LLA that are considered in the UK Carbon Budget and Net Zero Target, including emissions from the Proposed Scheme. Both the total emissions and residual emissions following offsetting commitments are shown.

[25] The UK Government. (2016). Carbon Budgets. [online]. Available at: https://www.gov.uk/guidance/carbon-budgets [Accessed 21 October 2020].
[26] The UK Government. (2008). Climate Change Act 2008. [online]. Available at: http://www.legislation.gov.uk/ukpga/2008/27/contents [Accessed 21 October 2020].

Figure 7A.3 Total GHG emissions (solid line) and residual GHG emissions once offsetting commitments (renewable energy procurement) are considered (dashed line) which contribute to the UK Carbon Target and UK Carbon Budgets from the 'with development' case.



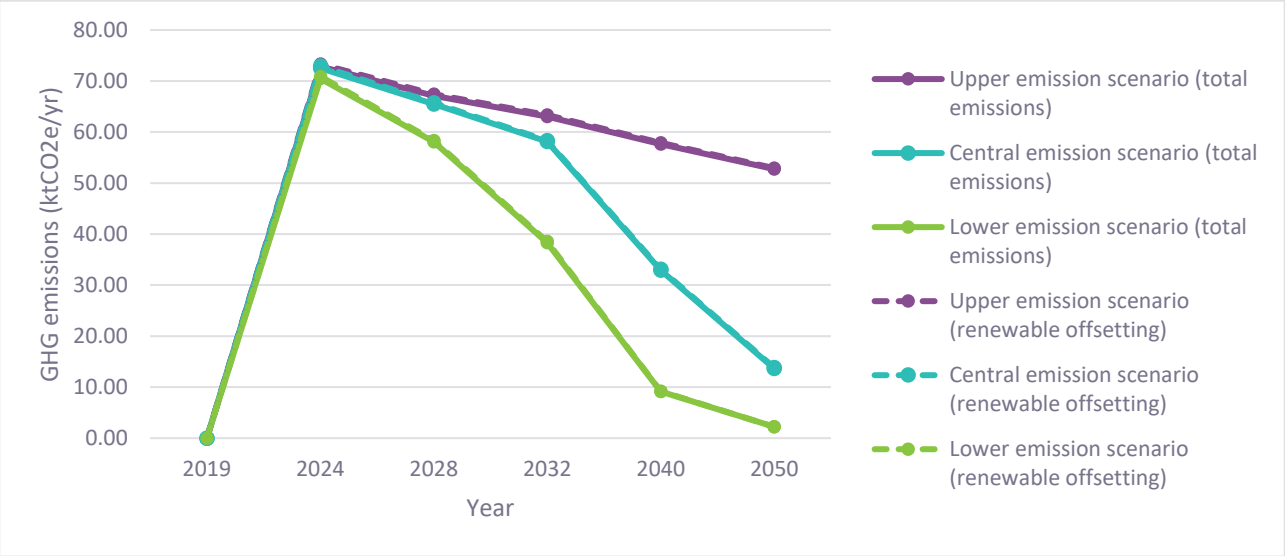
In 2050, GHG emissions from the 'with development' case that are considered in the UK Net Zero 2050 Target are 60.9 – 305.2 $ktCO_{2e}$/yr, dependent on the future improvement scenario used. Residual GHG emissions once offsetting commitments have been considered reduce to 60.4 – 309.1 $ktCO_{2e}$/yr, dependent on the scenario used.

The Luton Borough Council Climate Change Action Plan[27] aims for a carbon neutral borough by 2040. To date, this is an aim rather than a policy and the scope of this aim has not yet been defined. To provide an indication, GHG emissions from surface access, and airport building and operations GHG emissions from the Proposed Development case have been considered in line with the target year of this aim.

GHG emissions that are assumed to be indicative of the scope of the Luton Borough Council Climate Change Action Plan[27] aim are shown for the Proposed Development in **Figure 7A.4**. Both the total emissions and residual emissions following offsetting commitments are shown.

[27] Luton Borough Council [2019] Climate Change Action Plan [online]. Available at: https://www.luton.gov.uk/Environment/Lists/LutonDocuments/PDF/Climate%20change/Climate-change-action-plan.pdf [Accessed 01 December 2020].

Figure 7A.4 Total GHG emissions (solid line) and residual GHG emissions once offsetting commitments are considered (dashed line) which are assumed to be indicative of the scope of the Luton Borough Council Climate Change Action Plan aim from the Proposed Scheme only.



GHG emissions that are assumed to be indicative of the scope of the Luton Borough Council Climate Change Action Plan aim are shown for the 'with development' case in **Figure 7A.5**. This represents all activities at LLA that are considered indicative of the scope of the Luton Borough Council Climate Change Action Plan[27] aim, including emissions form the Proposed Scheme. Both the total emissions and residual emissions following offsetting commitments are shown.

Figure 7A.5 Total GHG emissions (solid line) and residual GHG emissions once offsetting commitments are considered (dashed line) which are assumed to be indicative of the scope of the North Somerset Climate Emergency Strategy aim from the 'with development' case.

In 2040, GHG emissions from the 'with development' case that are considered indicative of the scope of the Luton Borough Council Climate Change Action Plan aim are 69.3 – 297.3 $ktCO_{2e}$/yr, dependent on the future improvement scenario used. Residual GHG emissions once offsetting commitments have been considered reduce to 71.0 – 302.4 $ktCO_{2e}$/yr, dependent on the scenario used. GHG emissions then fall in all future scenarios, primarily due to a decrease in surface access emissions due to the increased uptake of electric vehicles and shift in modal splits.

Supporting Data

The section sets out details of supporting data that has been used to quantify GHG emissions in **Chapter 8** of the ES.

Airport building and ground operations

Table 7A.16 Raw data on electricity, gas, diesel and refrigerant usage in 2019 for baseline calculations

Component	Unit	Usage in 2019
Electricity	kWh	36,408,146.5
Gas	kWh	8,140,035
Diesel (heating)	Litres	36,278
Diesel (power)	Litres	37,440
Diesel (LLAOL vehicles)	Litres	417,067
Diesel (third party vehicles)	Litres	258,730
Refrigerant – R407C	Kg	8.70
Refrigerant – R410A	Kg	31.1
Refrigerant – R134A	Kg	131
Refrigerant – R32	kg	0

Surface access

Table 7A.17 Passenger origins for LLA and representative distances travelled used in surface access assessment

Region	% of passengers (CAA Passenger survey results)	Representative distance (road journeys) (km)	Representative distance (rail journeys) (km)
East Midlands	6.95%	146.34	142.92
East of England	32.62%	77.83	107.33
North East	0.13%	388.25	389.98
North West	0.43%	312.61	309.16
Scotland	0.12%	674.31	678.93
South East	53.73%	127.02	130.31
South West	2.05%	258.07	273.33
Wales	0.40%	279.49	290.00
West Midlands	2.84%	144.28	165.94

Region	% of passengers (CAA Passenger survey results)	Representative distance (road journeys) (km)	Representative distance (rail journeys) (km)
Yorkshire and the Humber	0.73%	267.47	266.62
Northern Ireland & Eire	0.00%	146.34	142.92

Table 7A.18 Modal splits for passenger journeys

Mode	2019 Baseline	'without development' case*	'with development' case**
Bus / Coach	16.9%	17.0%	17.0%
Rail	20.7%	24.0%	25.0%
Taxi / Minicab	17.9%	13.3%	13.6%
Walk / Cycle	0.2%	0.1%	0.1%
Private car (drop off / pick up)	26.8%	19.8%	26.8%
Private car (on-site / off-site parking and rental car)	17.5%	12.9%	17.5%
Other	0.1%	0.0%	0.0%

*Based on ASAS re-issue targets for passengers travelling by bus/coach and rail. The remaining passenger journeys have been assigned modal splits based on the same distribution as in the 2019 Baseline data.
**Based on Travel Plan targets for passengers travelling by bus/coach and rail, and assuming the same number of private car journeys. The remaining passenger journeys have been assigned modal splits based on the same distribution as in the 2019 Baseline data.

Table 7A.19 Employee numbers and journeys

	Baseline (2019) and 'without development' case	'with development' case
Employee numbers (total)	10,935	11,285
Equivalent number of employee working days per year*	2,384,221	2,460,533

*It is assumed that one journeys is made to LLA by employees on each working day, and one return journey.

Table 7A.20 Modal splits for staff journeys

Mode	2019 Baseline	'without development' case*	'with development' case**
Private car (single occupancy vehicles)	59.4%	58.5%	59.4%
Private car (as a driver with additional passengers)	4.1%	4.0%	4.1%
Private car (as an additional passenger)	3.8%	3.7%	3.8%
Bus	16.0%	15.8%	17.0%

Mode	2019 Baseline	'without development' case*	'with development' case**
Rail	7.6%	9.0%	10.0%
Walk	5.8%	5.71%	2.1%
Cycle	1.7%	1.67%	3.0%
Motorcycle	0.8%	0.8%	0.3%
Taxi	0.8%	0.8%	0.3%

*Based on ASAS re-issue targets for staff travelling by rail. The remaining staff journeys have been assigned modal splits based on the same distribution as in the 2019 baseline data.
**Based on Travel Plan targets for staff travelling by bus, rail and cycling, and assuming the same number of private car journeys as in the 2019 baseline. The remaining staff journeys have been assigned modal splits based on the same distribution as in the 2019 baseline data.

Aviation emissions

Table 7A.21: Aviation movements and destination information

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
C68A	C68A	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	BGSF	4.35	4.35	4.35	4.35	4.26	4.28
CL35	BIAR	4.35	4.35	4.35	4.35	4.26	4.28
H25B, GLF6, GLF5, GLF4, GLEX, E135, CRJ2, CL60, CL35, CL30, B738, A321, A320, A319, A21N, A20N	BIKF	667.11	667.12	684.27	667.12	665.65	665.88
H25B, GLF5, E35L, CRJ2, CL60	BIRK	30.47	30.47	30.47	30.47	29.83	29.93
C56X, A320, A21N, A20N	BKPR	189.53	189.53	194.85	189.53	189.44	189.46
GLF4, CL30	CYFB	8.71	8.71	8.71	8.71	8.52	8.55
GLEX	CYHU	4.35	4.35	4.35	4.35	4.26	4.28
GLF5	CYHZ	4.35	4.35	4.35	4.35	4.26	4.28
F2TH	CYPQ	4.35	4.35	4.35	4.35	4.26	4.28
GALX, E135, CL35, CL30	CYQX	21.76	21.76	21.76	21.76	21.31	21.38

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
GLEX, CL60, CL35, CL30	CYUL	21.76	21.76	21.76	21.76	21.31	21.38
GLF4	CYWG	4.35	4.35	4.35	4.35	4.26	4.28
GLF5	CYYC	4.35	4.35	4.35	4.35	4.26	4.28
F2TH, CL35	CYYR	8.71	8.71	8.71	8.71	8.52	8.55
CL30	CYYT	4.35	4.35	4.35	4.35	4.26	4.28
GLEX, CL60	CYYZ	13.06	13.06	13.06	13.06	12.78	12.83
LJ40	DAAG	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, CL60, A318	DGAA	17.41	17.41	17.41	17.41	17.05	17.10
GLF6, GALX, FA7X, CL60	DNAA	21.76	21.76	21.76	21.76	21.31	21.38
GLF5, GLF4, GLEX, FA7X, E135	DNMM	43.53	43.53	43.53	43.53	42.61	42.76
E135	DNPO	4.35	4.35	4.35	4.35	4.26	4.28
B7M8, B738	DTNH	45.42	45.42	46.73	45.42	45.42	45.42
CRJ2, CL35, C750	DTTA	13.06	13.06	13.06	13.06	12.78	12.83
TBM7, PC12, G280, FA8X, E135, C680, C650, C56X, C25A	EBAW	43.53	43.53	43.53	43.53	42.61	42.76
PRM1, GLF6, GLF5, GLF4, GLEX, FA8X, FA7X, E55P, CRJ2, CN35, CL60, C510, C25A, BET, B738	EBBR	87.05	82.71	87.05	82.71	85.23	81.24
FA7X, C56X	EBCI	17.41	17.41	17.41	17.41	17.05	17.10
P180, G280, G150, C500, C25C, C25A	EBKT	30.47	30.47	30.47	30.47	29.83	29.93
CRJ2, CL60, CL30, C25A	EBLG	21.76	21.76	21.76	21.76	21.31	21.38
E145	EBMB	4.35	4.35	4.35	4.35	4.26	4.28

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
CL35, C500	EBOS	8.71	8.71	8.71	8.71	8.52	8.55
A109	ED28	3.17	3.17	3.17	3.17	3.17	3.17
C56X	EDAC	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLEX, GL5T, FA7X, F900, F2TH, E50P, E135, CRJ2, CL35, CL30, C680, C56X, C510, C500, A320, A319, A20N	EDDB	648.60	648.61	663.85	648.61	646.14	646.53
B752	EDDC	4.35	4.35	4.35	4.35	4.26	4.28
GLF6	EDDE	4.35	4.35	4.35	4.35	4.26	4.28
LJ55, GLF6, GLF5, GLF4, GLEX, F2TH, E135, CRJ2, CL60, CL35, C680, C56X, BE2, A306	EDDF	227.39	227.39	220.14	227.39	225.65	225.93
GLEX, C56X	EDDG	8.71	8.71	8.71	8.71	8.52	8.55
H25B, GLF5, GLEX, F2TH, E55P, C750, C56X, C25C, BET, BE2	EDDH	56.58	56.59	56.58	56.59	55.40	55.59
LJ55, LJ40, LJ28, GLF5, GLEX, F2TH, E55P, E50P, CRJ2, CL60, C56X, C550, B752	EDDK	69.67	69.68	69.45	69.68	68.30	68.52
GLF5, GLEX, E550, E135, CL60, C750, C680, C56X,	EDDL	82.70	78.35	82.70	78.35	80.96	76.96

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
C55B, C550, C500, B738, B735							
LJ55, LJ40, H25B, GLF5, GLEX, F900, E55P, E190, E135, CL35, C750, C680, C56X, A320, A319, A20N	EDDM	361.36	361.36	369.49	361.36	359.72	359.98
LJ75, LJ55, LJ40, GLEX, DA42, CL30, C68A, C56X	EDDN	52.23	52.24	52.23	52.24	51.14	51.31
CL60, B752, B734, A306	EDDP	197.27	197.27	366.70	197.27	385.71	197.19
E50P, C750, C56X, C25C	EDDS	17.41	17.41	17.41	17.41	17.05	17.10
H25B, E35L, CL35	EDDT	13.06	13.06	13.06	13.06	12.78	12.83
F900, CRJ2, CL60, C56X, C55B	EDDV	34.82	34.82	34.82	34.82	34.09	34.21
C56X, C550	EDDW	8.71	8.71	8.71	8.71	8.52	8.55
E50P, E135, BE2	EDFH	13.06	13.06	13.06	13.06	12.78	12.83
E50P, C680, C500	EDHL	17.41	17.41	17.41	17.41	17.05	17.10
C650, C56X	EDLN	8.71	8.71	8.71	8.71	8.52	8.55
C550	EDLP	4.35	4.35	4.35	4.35	4.26	4.28
E55P, C550, A320, A319, A20N	EDLW	308.27	308.27	316.50	308.27	307.81	307.89
GLEX, C56X	EDMO	17.41	17.41	17.41	17.41	17.05	17.10
GLEX, E55P	EDNY	8.71	8.71	8.71	8.71	8.52	8.55
C25C	EDQG	4.35	4.35	4.35	4.35	4.26	4.28
C25A	EDQM	4.35	4.35	4.35	4.35	4.26	4.28
C500	EDRY	4.35	4.35	4.35	4.35	4.26	4.28
E50P, D228	EDRZ	17.41	17.41	17.41	17.41	17.05	17.10
LJ28, E55P, E135,	EDSB	39.17	39.18	39.17	39.18	38.35	38.48

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
CL35, C25A							
E55P, C56X	EDTL	8.71	8.71	8.71	8.71	8.52	8.55
E55P	EDTM	8.71	8.71	8.71	8.71	8.52	8.55
C56X	EDTY	4.35	4.35	4.35	4.35	4.26	4.28
FA7X	EDVE	4.35	4.35	4.35	4.35	4.26	4.28
E55P, CL35, C680, C550, BE2	EDXW	34.82	34.82	34.82	34.82	34.09	34.21
H25B, A321, A21N, A20N	EETN	102.18	102.18	104.99	102.18	102.09	102.11
GLF4, GLEX, FA7X, E190, E135, CL60, C680, C550	EFHK	39.17	39.18	39.17	39.18	38.35	38.48
CL60	EFKU	4.35	4.35	4.35	4.35	4.26	4.28
CL60, A321, A320, A21N, A20N	EFTU	119.65	140.62	122.96	140.62	119.56	140.54
PC12	EG0B	4.35	4.35	4.35	4.35	4.26	4.28
H25B, E55P, E135, BE2, B7M8, A320, A319, A20N	EGAA	1138.06	1138.06	1169.86	1138.06	1137.42	1137.52
H25B, E55P, C56X	EGAC	26.12	26.12	26.12	26.12	25.57	25.65
F2TH, CL35, C680	EGAE	13.06	13.06	13.06	13.06	12.78	12.83
LJ28, GLF5, GLF4, E55P, E550, E195, CRJ2, C56X, BE40, B7M8	EGBB	81.84	78.35	81.94	78.35	80.20	76.96
A109	EGBE	9.52	9.52	9.52	9.52	9.52	9.52
C510	EGBJ	4.35	4.35	4.35	4.35	4.26	4.28
HELI	EGBV	3.17	3.17	3.17	3.17	3.17	3.17
RJ85, LJ40, H25B, GLF5, GLEX, E55P, E550, E35L, E135, CRJ2, CL60, C650, C56X, C55B,	EGCC	189.06	154.13	190.36	154.13	186.04	151.58

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
C550, C510, C25C, B7M8, B788, B738, A320, A20N							
GALX, C750	EGCM	8.71	8.71	8.71	8.71	8.52	8.55
GLF4, CL35, CL30, C750, C680, C500, B350	EGCN	30.47	30.47	30.47	30.47	29.83	29.93
A109	EGDD	3.17	3.17	3.17	3.17	3.17	3.17
BET	EGFE	4.35	4.35	4.35	4.35	4.26	4.28
LJ40, GLEX, E35L, CL35, C56X, BET, BE40, BE2	EGFF	69.64	69.65	69.64	69.65	68.18	68.41
GLF6, GLF5, E55P, E550, E135, CL35, C25A, A319, A20N	EGGD	50.51	50.52	50.71	50.52	49.60	49.75
RJ1H, LJ55, FA7X, F900, F2TH, E55P, E145, E135, C56X, C25A, BE40, BE2, A320, A319, A20N	EGGP	101.03	101.03	101.43	101.03	99.20	99.49
GLF6, GLF5, C56X	EGGW	26.12	26.12	26.12	26.12	25.57	25.65
AS55	EGHC	3.17	3.17	3.17	3.17	3.17	3.17
PC12, H25B, F900, F2TH, E550, E135, CL60, C56X, C55B	EGHH	69.64	69.65	69.64	69.65	68.18	68.41
GLF5, E55P, C680, C56X, C55B, C550, C510,	EGHI	59.76	59.76	59.76	59.76	58.57	58.76

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
C500, B462, A169							
B752, B737, AS55, A109	EGHL	35.28	35.28	35.28	35.28	35.00	35.05
H25B, FA7X, E55P, E50P, DA42, C56X	EGHQ	39.17	39.18	39.17	39.18	38.35	38.48
LJ75, E55P, E550, E135, CL60, CL30, C550, C510	EGJB	104.46	104.47	104.46	104.47	102.27	102.62
PC12, H25B, GLEX, G280, E50P, CRJ2, CL60, CL35, C56X, C550, C510, C500, BET, A320, A319, A20N	EGJJ	425.05	425.06	434.38	425.06	422.95	423.28
LJ75, LJ40, GLF5, GLF4, GLEX, FA7X, F900, E55P, E550, E135, CRJ2, CL60, CL35, C680, C56X, C550, C510, BET, BE40, A109	EGKB	257.62	257.64	257.62	257.64	252.42	253.24
GLEX, E55P, B7M8, B788, B738, A320, A319, A20N	EGKK	75.09	64.61	77.00	64.61	74.91	64.46
GLEX, G280, E55P, E35L, C680, C56X, C55B, C510	EGLC	56.58	56.59	56.58	56.59	55.40	55.59

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
PC12, B06, A109	EGLD	19.41	19.41	19.41	19.41	19.13	19.18
PC24, LJ40, H25B, GLF6, GLF5, GLF4, GLEX, GALX, G280, FA7X, F900, F2TH, E55P, E50P, E35L, E135, DFL, CRJ2, CL60, CL35, C680, C56X, C550, C25A, B738, B737, B06	EGLF	455.84	455.88	455.84	455.88	446.35	447.86
C510, BET	EGLK	8.71	8.71	8.71	8.71	8.52	8.55
GLF6, GLF5, B752, A306	EGLL	105.16	105.16	100.33	105.16	104.98	105.01
S76, B06, AS55, A139, A109	EGLW	101.94	101.94	101.94	101.94	101.66	101.70
RJ1H, LJ40, GLF5, GLEX, FA7X, F900, CL60, C680, C550, B462	EGMC	69.64	69.65	69.64	69.65	68.18	68.41
C55B, B350	EGMD	8.71	8.71	8.71	8.71	8.52	8.55
GLF6	EGNC	4.35	4.35	4.35	4.35	4.26	4.28
LJ40, CL35, C56X, C55B, BET	EGNH	21.76	21.76	21.76	21.76	21.31	21.38
E145, C56X	EGNJ	13.06	13.06	13.06	13.06	12.78	12.83
GLF6, CRJ2, C550	EGNM	13.06	13.06	13.06	13.06	12.78	12.83
FA8X, CL60, C56X, C550, C510	EGNR	21.76	21.76	21.76	21.76	21.31	21.38
LJ75, LJ40, E55P, E50P, E35L, E135, CL60, C56X, A320,	EGNS	254.58	254.59	257.89	254.59	251.66	252.13

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
A319, A20N							
RJ1H, H25B, GLF5, GLF4, GLEX, FA7X, E55P, E50P, E145, C56X, C550, BET, BE2, B06, A320, A319, A20N	EGNT	106.78	106.79	106.88	106.79	104.68	105.01
E55P, CL30, C56X, C55B, C550, BET, BE2	EGNV	47.88	47.88	47.88	47.88	46.87	47.03
H25B, E135, CL35, C750, C56X, B752, B735, B734, B733, A306	EGNX	394.32	394.32	376.53	394.32	393.50	393.63
H25B, F2TH, F100, E55P, CL35, C56X, A320, A319, A20N	EGPD	276.76	276.77	283.59	276.77	275.94	276.07
RJ85, LJ75, H25B, GLF5, GLF4, G280, E55P, E50P, CL60, C56X, C550, C25A, A320, A319, A20N	EGPE	602.38	602.39	616.93	602.39	600.38	600.70
GLF4, GLEX, FA7X, E50P, E135, CL60, C56X, C510, C500, BET,	EGPF	805.95	798.97	826.72	798.97	804.22	797.51

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
B7M8, B788, A320, A319, A20N							
RJ1H, H25B, GLF6, GLF5, GLF4, GLEX, FA7X, F2TH, E55P, E35L, CL60, CL30, C680, C56X, C55B, C550, C500, C25A, BET, BE40, BE2, A320, A319, A20N	EGPH	1140.34	1140.35	1169.33	1140.35	1137.60	1138.03
C680	EGPI	8.71	8.71	8.71	8.71	8.52	8.55
GLF4, GLEX, E550, C550	EGPK	21.76	21.76	21.76	21.76	21.31	21.38
FA7X, CL60, C680, B350	EGPN	21.76	21.76	21.76	21.76	21.31	21.38
E55P	EGPU	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLEX	EGQL	13.06	13.06	13.06	13.06	12.78	12.83
H25B, GLF4, E190, C56X, C55B	EGSC	30.47	30.47	30.47	30.47	29.83	29.93
C56X	EGSH	4.35	4.35	4.35	4.35	4.26	4.28
LJ75, HELI, H25B, GLF6, GLF5, GLF4, GLEX, G280, E55P, E550, E35L, E135, CL35, C56X, BET, B7M8, B752, B738, B737, A320, A20N, A109	EGSS	190.13	190.15	183.85	190.15	179.95	187.45
CL60	EGTC	4.35	4.35	4.35	4.35	4.26	4.28

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
A109	EGTD	3.17	3.17	3.17	3.17	3.17	3.17
PC12, LJ40, H25B, GLF5, GLF4, E50P, CL60, B350	EGTE	56.58	56.59	56.58	56.59	55.40	55.59
S76, EC55, BET, B06, A139	EGTF	26.57	26.57	26.57	26.57	26.48	26.50
HELI, GLEX, E55P, CL60, C680, C55B, C550, C510	EGTK	41.17	41.17	41.17	41.17	40.44	40.55
AS55	EGTR	3.17	3.17	3.17	3.17	3.17	3.17
GLF6	EGVN	4.35	4.35	4.35	4.35	4.26	4.28
C56X	EGYM	4.35	4.35	4.35	4.35	4.26	4.28
PRM1, P180, LJ40, H25B, GLF6, GLF5, GLF4, GLEX, FA7X, F2TH, E55P, E50P, E35L, E135, CL60, CL35, C750, C680, C650, C56X, C550, C510, B763, B738, A332, A321, A320, A319, A306, A21N, A20N	EHAM	2491.69	2446.29	2546.61	2268.09	2483.73	2264.32
PRM1, E135, CRJ2, C680, C56X, C55B, C550, C510	EHBK	39.17	39.18	39.17	39.18	38.35	38.48
E55P, E135, CL60, C750, C680	EHEH	30.47	30.47	30.47	30.47	29.83	29.93
C510	EHGG	4.35	4.35	4.35	4.35	4.26	4.28
PRM1, E55P, E135,	EHRD	39.17	39.18	39.17	39.18	38.35	38.48

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
CL35, C510, C500, C25A							
LJ40, FA7X, CN35, C56X, B7M8, B738	EICK	338.86	338.86	348.09	338.86	338.49	338.55
LJ40, LJ28, H25B, GLEX, GL5T, E55P, E550, E50P, E35L, E135, CRJ2, CL60, CL35, C56X, C550, C500, B7M8	EIDW	1180.55	1180.56	1210.95	1180.56	1177.99	1178.40
GLF4, GLEX, E50P, B7M8, B738	EIKN	433.19	433.20	445.13	433.20	432.83	432.89
PRM1, GLF6, GLF4, GLEX, GALX, E55P, E50P, E135, CL35, C55B, C550, BET, B7M8	EIKY	378.03	378.03	387.26	378.03	376.84	377.03
CN35	EIME	13.06	13.06	13.06	13.06	12.78	12.83
LJ28, GLF6, GLF4, GLEX, GL5T, F2TH, CL60, CL35, CL30, C68A, C56X, C550, BET, B752	EINN	69.67	69.68	69.45	69.68	68.30	68.52
PC12	EKAE	4.35	4.35	4.35	4.35	4.26	4.28
C56X, C55B	EKAH	8.71	8.71	8.71	8.71	8.52	8.55
J328, FA7X, F2TH, CL35	EKBI	17.41	17.41	17.41	17.41	17.05	17.10
GLF5, GLF4, FA7X, F2TH, CL60,	EKCH	314.34	314.34	322.36	314.34	313.61	313.73

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
C680, C56X, B7M8, B738, B737, A320, A20N							
E55P, C55B	EKOD	8.71	8.71	8.71	8.71	8.52	8.55
FA7X	EKSB	4.35	4.35	4.35	4.35	4.26	4.28
C680	EKVG	4.35	4.35	4.35	4.35	4.26	4.28
C550	EKYT	4.35	4.35	4.35	4.35	4.26	4.28
SF34, PC24, LJ55, LJ40, H25B, GLF6, GLF5, GLEX, F2TH, CL35, C750, C56X, C550	ELLX	100.11	100.12	100.11	100.12	98.01	98.34
E135, CL60	ENAL	8.71	8.71	8.71	8.71	8.52	8.55
C650	ENAT	4.35	4.35	4.35	4.35	4.26	4.28
CRJ2, C680, C25A, A321, A21N, A20N	ENBR	166.79	198.24	171.21	198.24	166.52	198.01
LJ40, H25B, E135, C56X	ENCN	30.47	30.47	30.47	30.47	29.83	29.93
GLEX, F900, F2TH, E545, E35L, CRJ2, CL60, C680, C56X	ENGM	43.53	43.53	43.53	43.53	42.61	42.76
C680	ENRO	4.35	4.35	4.35	4.35	4.26	4.28
E50P, C56X	ENZV	8.71	8.71	8.71	8.71	8.52	8.55
B7M8, B738	EPBY	139.76	139.76	143.77	139.76	139.76	139.76
E35L, A320, A21N, A20N	EPGD	811.46	811.46	834.64	811.46	811.37	811.39
GLF4, C680, A321, A320, A319, A21N, A20N	EPKK	829.79	829.79	853.37	829.79	829.61	829.64
A21N, A20N	EPKT	817.59	817.59	841.07	817.59	817.59	817.59

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
A321, A320, A21N, A20N	EPLB	380.84	380.84	391.78	380.84	380.84	380.84
LJ55, G280	EPMO	8.71	8.71	8.71	8.71	8.52	8.55
GLF5, C550, A321, A320, A21N, A20N	EPPO	333.65	330.15	317.82	330.15	309.00	330.00
B7M8, B738	EPRZ	132.77	132.77	136.58	132.77	132.77	132.77
A321, A320, A21N, A20N	EPSY	136.27	136.27	140.18	136.27	136.27	136.27
GLF5, C55B, C25A, A21N, A20N	EPWA	1059.48	1059.48	1089.27	1059.48	1059.02	1059.09
A21N, A20N	EPWR	454.22	454.22	467.26	454.22	454.22	454.22
GLF5, E55P, E35L, C680	ESGG	17.41	17.41	17.41	17.41	17.05	17.10
C56X	ESGT	4.35	4.35	4.35	4.35	4.26	4.28
E35L, CL35	ESMS	8.71	8.71	8.71	8.71	8.52	8.55
LJ75	ESNN	4.35	4.35	4.35	4.35	4.26	4.28
GLF4	ESNQ	4.35	4.35	4.35	4.35	4.26	4.28
E55P, C56X	ESNZ	8.71	8.71	8.71	8.71	8.52	8.55
FA7X	ESOW	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5, GLEX, GALX, E550, E35L, CL35, C55B, C25A, A320, A319, A306, A20N	ESSA	300.92	300.92	295.62	300.92	299.82	300.00
P180, GLEX, FA7X, E55P, CL60, CL35, C750, C56X, C550, C500, C25A	ESSB	69.64	69.65	69.64	69.65	68.18	68.41
GLEX, C500	ESTA	8.71	8.71	8.71	8.71	8.52	8.55

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
LJ55, E55P, CL60, CL35, C750, C56X, A320, A21N, A20N	EVRA	658.53	658.53	676.68	658.53	657.98	658.07
B7M8, B738, A321, A21N, A20N	EYKA	538.07	538.07	553.52	538.07	538.07	538.07
A320, A21N, A20N	EYPA	185.18	185.18	190.50	185.18	185.18	185.18
CL35, B7M8, B738, A321, A320, A21N, A20N	EYVI	787.86	787.86	810.23	787.86	787.68	787.71
GLF5	FCOB	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5, CL60	FGSL	13.06	13.06	13.06	13.06	12.78	12.83
GLEX	FLLS	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	FMNA	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	FNLU	4.35	4.35	4.35	4.35	4.26	4.28
CL60	FOOL	8.71	8.71	8.71	8.71	8.52	8.55
F900	GBYD	4.35	4.35	4.35	4.35	4.26	4.28
B7M8	GCFV	90.84	90.84	93.45	90.84	90.84	90.84
B7M8	GCLP	136.27	136.27	140.18	136.27	136.27	136.27
B7M8, B738, A320, A319, A20N	GCRR	279.52	279.52	287.54	279.52	279.52	279.52
B7M8, B738, A320, A319, A20N	GCTS	300.48	300.48	215.66	300.48	209.64	300.48
CRJ2	GMAD	4.35	4.35	4.35	4.35	4.26	4.28
CRJ2, C56X	GMME	8.71	8.71	8.71	8.71	8.52	8.55
C56X	GMMI	4.35	4.35	4.35	4.35	4.26	4.28
H25B	GMMN	4.35	4.35	4.35	4.35	4.26	4.28
LJ40, H25B, GLEX, CRJ2, B7M8, B738	GMMX	199.10	199.10	204.31	199.10	198.73	198.79
GLF6	HEAL	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, E35L	HECA	13.06	13.06	13.06	13.06	12.78	12.83
GLF6, CL60	HEGN	13.06	13.06	13.06	13.06	12.78	12.83

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
GLF6, GLF5, FA7X	HKJK	13.06	13.06	13.06	13.06	12.78	12.83
GLF6, GLF5	HRYR	17.41	17.41	17.41	17.41	17.05	17.10
GLF5	HTDA	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	HTKJ	4.35	4.35	4.35	4.35	4.26	4.28
GLF4	KADW	4.35	4.35	4.35	4.35	4.26	4.28
GLF4, GLEX, FA7X	KBDL	17.41	17.41	17.41	17.41	17.05	17.10
GLF6, GLEX, F2TH, CL60	KBED	34.82	34.82	34.82	34.82	34.09	34.21
GLF6	KBFI	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5, GLF4, GLEX, G280, F900, F2TH, F28, CL60, CL35	KBGR	121.87	121.88	121.87	121.88	119.32	119.72
GLEX	KBJC	8.71	8.71	8.71	8.71	8.52	8.55
GLF5, GLEX, FA7X, F2TH, CL60	KBOS	47.88	47.88	47.88	47.88	46.87	47.03
GLF5	KBRY	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, GLEX, CL60	KBUF	13.06	13.06	13.06	13.06	12.78	12.83
F900	KBVY	8.71	8.71	8.71	8.71	8.52	8.55
GLF5, GLF4	KBWI	8.71	8.71	8.71	8.71	8.52	8.55
CL60	KCGI	4.35	4.35	4.35	4.35	4.26	4.28
GLF6	KCLT	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	KCMH	4.35	4.35	4.35	4.35	4.26	4.28
GLF6	KCRQ	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, FA7X	KDAL	21.76	21.76	21.76	21.76	21.31	21.38
GLEX	KDAY	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, FA7X	KEGE	8.71	8.71	8.71	8.71	8.52	8.55
GLF5	KETB	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5, GLF4, GLEX, GL5T, FA7X	KEWR	39.17	39.18	39.17	39.18	38.35	38.48
GLEX	KFAR	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	KFLL	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, GLF4, GLEX, FA7X	KFOK	56.58	56.59	56.58	56.59	55.40	55.59
GLEX	KFRG	4.35	4.35	4.35	4.35	4.26	4.28
GLF5	KFTY	4.35	4.35	4.35	4.35	4.26	4.28
GLF6	KGEG	4.35	4.35	4.35	4.35	4.26	4.28

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
B737	KGTF	4.35	4.35	4.35	4.35	4.26	4.28
GLF4	KGYY	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, GLEX	KHOU	13.06	13.06	13.06	13.06	12.78	12.83
GLF6, GLF5, GLF4, GLEX, F900	KHPN	87.05	87.06	87.05	87.06	85.23	85.52
FA7X	KHYA	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5, GLF4, GLEX, FA7X, F900	KIAD	47.88	47.88	47.88	47.88	46.87	47.03
GLF4	KINL	4.35	4.35	4.35	4.35	4.26	4.28
CL30	KISL	4.35	4.35	4.35	4.35	4.26	4.28
GLF6	KISP	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5	KLAS	8.71	8.71	8.71	8.71	8.52	8.55
GLF6, GLF5, GLEX, FA7X	KLAX	39.17	39.18	39.17	39.18	38.35	38.48
GLF5	KLEX	4.35	4.35	4.35	4.35	4.26	4.28
GLEX, F900	KLGA	8.71	8.71	8.71	8.71	8.52	8.55
GLF6	KLIT	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF4, GLEX	KMDW	13.06	13.06	13.06	13.06	12.78	12.83
GLEX	KMEM	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, GLEX	KMMU	8.71	8.71	8.71	8.71	8.52	8.55
F900	KMTN	4.35	4.35	4.35	4.35	4.26	4.28
GLF5	KNEW	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	KOAK	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	KOPF	8.71	8.71	8.71	8.71	8.52	8.55
GLEX	KPDK	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, GLF4, GLEX	KPHL	17.41	17.41	17.41	17.41	17.05	17.10
GLF4, GLEX	KPIT	8.71	8.71	8.71	8.71	8.52	8.55
GLF4, F900	KPSM	17.41	17.41	17.41	17.41	17.05	17.10
GLF4, GLEX, F2TH	KPTK	21.76	21.76	21.76	21.76	21.31	21.38
GLEX, FA7X	KPWM	8.71	8.71	8.71	8.71	8.52	8.55
GLF5, GLF4	KRDU	8.71	8.71	8.71	8.71	8.52	8.55
GLF6	KROG	4.35	4.35	4.35	4.35	4.26	4.28
F2TH	KRST	4.35	4.35	4.35	4.35	4.26	4.28
GLF6	KSAT	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5	KSAV	13.06	13.06	13.06	13.06	12.78	12.83
GLF6, GLF5	KSFO	17.41	17.41	17.41	17.41	17.05	17.10
GLF6, GLF5	KSJC	8.71	8.71	8.71	8.71	8.52	8.55
GLF4	KSTP	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	KSUS	4.35	4.35	4.35	4.35	4.26	4.28

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
GLF5	KSWF	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5, GLF4, GLEX, GL7T, GL5T, FA8X, FA7X, F900, F2TH, CL60	KTEB	278.57	278.59	278.57	278.59	272.72	273.65
GLF5, GLEX, DFL	KVNY	34.82	34.82	34.82	34.82	34.09	34.21
C55B, A321, A320, A21N, A20N	LATI	304.83	304.84	313.46	304.84	304.74	304.76
A321, A320, A21N, A20N	LBBG	457.71	457.71	442.10	457.71	429.76	457.71
B733, A321, A21N, A20N	LBSF	773.03	773.03	795.10	773.03	772.94	772.95
A320, A20N	LBWN	412.29	412.29	424.13	412.29	412.29	412.29
CL35, B7M8, B738, A321, A319, A21N, A20N	LCLK	801.84	801.84	824.61	801.84	801.66	801.69
B7M8, B738, A320, A319, A20N	LCPH	303.98	303.98	312.70	303.98	303.98	303.98
GLF6, GLF4, GLEX, E135, CL35, C680, C56X, A320, A319, A20N	LDDU	180.65	180.65	184.46	180.65	179.65	179.81
GL5T, E550, E135, CRJ2, C680, BE2, B737, A319	LDPL	43.53	43.53	43.53	43.53	42.61	42.76
LJ40, GLEX, CRJ2, CL60, C680, C56X, C500,	LDSP	669.81	624.39	615.78	624.39	598.92	623.54

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
A321, A320, A319, A21N, A20N							
C650, C56X	LDZA	8.71	8.71	8.71	8.71	8.52	8.55
GLF4, GLEX, CL60, C56X, C550, A320, A319, A20N	LDZD	116.96	116.96	62.06	116.96	60.51	116.50
LJ40, CL35, B7M8, B738, A320, A319, A20N	LEAL	1021.96	1021.96	1047.46	1021.96	1018.28	1021.81
LJ75, LJ40, H25B, GLF6, GLF5, GLEX, F900, E55P, CRJ2, CL60, CL35, CL30, C750, C56X, C55B, C510, B7M8, B738, A320, A319, A20N	LEBL	1377.19	1377.20	1414.11	1373.70	1375.27	1372.08
E135	LEDA	4.35	4.35	4.35	4.35	4.26	4.28
PC24, H25B, GLF6, GLF4, CL60, C680, C56X, C550, C510, BET, B7M8, B738	LEGE	179.79	179.79	183.70	179.79	178.88	179.02
C55B	LEGT	8.71	8.71	8.71	8.71	8.52	8.55
LJ75, LJ40, H25B, GLF6, GLF5, GLEX, GL5T, FA7X, E55P, E550,	LEIB	795.67	795.70	763.80	795.70	744.41	790.76

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
E35L, E135, CRJ2, CL60, CL35, CL30, C750, C56X, C55B, C550, C500, C25C, BE40, B7M8, B738, A320, A319, A20N							
C56X	LEJR	4.35	4.35	4.35	4.35	4.26	4.28
H25B, GLF6, GLF5, GLEX, F2TH, E55P, CRJ2, CL60, CL35, C56X, C55B, C550, C500, C25A, BET, BE40, B735, A320, A319, A20N	LEMD	455.58	455.59	465.41	455.59	453.20	453.58
LJ75, LJ40, GLF6, GLF5, GLF4, GLEX, FA8X, FA7X, F2TH, E55P, E550, E135, CRJ2, CL35, C680, C650, C56X, C55B, C550, C25A, B7M8, B738, A320, A319, A20N	LEMG	1515.67	1375.93	1409.42	1375.93	1371.53	1372.23
PRM1, GLF4, GLEX,	LEMH	436.63	433.14	448.17	433.14	435.90	432.52

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
E35L, E135, CL35, C56X, BET, B7M8, B738, A320, A319, A20N							
E55P, C680, B7M8, B738	LEMI	326.66	326.66	335.79	326.66	326.47	326.50
LJ40, H25B, GLF5, GLF4, GLEX, FA7X, E55P, E550, E35L, E135, CRJ2, CL60, CL35, C750, C680, C56X, C55B, C550, BET, BE40, B7M8, B738, A320, A319, A20N	LEPA	1339.08	1339.10	1363.09	1014.16	1326.80	1009.69
GLEX, B7M8, B738, A320, A319, A20N	LERS	119.65	119.65	122.96	119.65	119.56	119.58
CRJ2, CL35, C500	LESO	13.06	13.06	13.06	13.06	12.78	12.83
GLF6	LEST	21.76	21.76	21.76	21.76	21.31	21.38
E190	LETO	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, F2TH, C56X, A320, A20N	LEVC	152.82	152.82	156.83	152.82	152.54	152.59
CRJ2	LEVT	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	LEVX	4.35	4.35	4.35	4.35	4.26	4.28
E550	LEXJ	4.35	4.35	4.35	4.35	4.26	4.28
H25B, C56X, C550, B737, A320, A319, A20N	LEZL	192.11	192.11	186.34	192.11	181.26	191.80
E50P	LFAQ	4.35	4.35	4.35	4.35	4.26	4.28

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
LJ75, JET, GLF6, GLF4, GLEX, E55P, C680, C56X, C510, C500, A320, A319, A20N	LFBD	406.84	406.84	416.77	406.84	405.56	405.77
E50P, ASTR	LFBE	8.71	8.71	8.71	8.71	8.52	8.55
GLF4, C68A, C500	LFBH	13.06	13.06	13.06	13.06	12.78	12.83
F2TH	LFBL	4.35	4.35	4.35	4.35	4.26	4.28
FA7X, C550, BET, BE2, A320, A20N	LFBO	224.41	224.42	230.23	224.42	223.96	224.03
CL60, A20N	LFBP	7.85	7.85	7.95	7.85	7.76	7.77
FA7X, C56X	LFBT	8.71	8.71	8.71	8.71	8.52	8.55
GLF5, E55P, CL35, C750, C680, C56X, BE2, A320, A319, A20N	LFBZ	104.70	104.70	106.71	104.70	103.97	104.09
CL60	LFGA	4.35	4.35	4.35	4.35	4.26	4.28
F2TH	LFGJ	4.35	4.35	4.35	4.35	4.26	4.28
C56X	LFJL	4.35	4.35	4.35	4.35	4.26	4.28
BET	LFKB	4.35	4.35	4.35	4.35	4.26	4.28
CL35, C680	LFKC	8.71	8.71	8.71	8.71	8.52	8.55
GLF5, FA8X, E50P, CL60	LFKF	17.41	17.41	17.41	17.41	17.05	17.10
GLEX, E550, C750, C56X	LFKJ	21.76	21.76	21.76	21.76	21.31	21.38
C56X, BE40	LFLC	8.71	8.71	8.71	8.71	8.52	8.55
GLF5, GL5T, E55P, C56X, BET, BE2, A320, A319, A20N	LFLL	315.20	315.20	323.12	315.20	314.38	314.51
G280	LFLP	13.06	13.06	13.06	13.06	12.78	12.83
C680	LFLS	4.35	4.35	4.35	4.35	4.26	4.28
LJ75, FA10, E55P,	LFLY	30.47	30.47	30.47	30.47	29.83	29.93

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
C56X, C55B, C25A							
LJ75, H25B, GLF4, G280, F900, F2TH, E55P, E50P, E135, CRJ2, CL60, CL35, CL30, C68A, C680, C56X, C510, C500, C25A	LFMD	261.16	261.18	261.16	261.18	255.68	256.55
E55P	LFMK	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF4, F2TH, C56X, C25A, A320, A319, A20N	LFML	206.94	206.95	212.26	206.95	206.49	206.56
PRM1, PC24, P180, LJ75, H25B, GLF6, GLF5, GLF4, GLEX, GL5T, GALX, G280, FA8X, FA7X, FA50, F900, F2TH, E55P, E550, E50P, E35L, E135, CRJ2, CL60, CL35, CL30, C750, C680, C56X, C550, C25C, C25A, BE40, B752, B737, A320,	LFMN	1763.52	1763.60	1784.29	1763.60	1741.70	1745.18

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
A319, A20N							
E135, C25A	LFMP	8.71	8.71	8.71	8.71	8.52	8.55
CL60, A320, A20N	LFMT	140.62	140.62	144.53	140.62	140.53	140.54
B7M8, B738	LFMU	136.27	136.27	140.18	136.27	136.27	136.27
GLF5, GLEX, E55P, E550, C56X, C550, C25C, C25A	LFMV	39.17	39.18	39.17	39.18	38.35	38.48
C500, C25C	LFOH	8.71	8.71	8.71	8.71	8.52	8.55
PC24, H25C, H25B, GLF6, GLF5, GLF4, GLEX, GL5T, GALX, G280, FA7X, F900, F2TH, E55P, E550, E50P, E35L, E135, CRJ2, CL60, CL35, C750, C68A, C680, C56X, C550, C500, C25A, BET, BE40, B737, B735, A320, A319, A318	LFPB	696.41	696.47	696.41	696.47	681.81	684.13
B737, A320, A319, A20N	LFPG	797.49	797.49	820.26	783.51	797.39	783.43
A320, A20N	LFPO	3.49	3.49	3.59	0.00	3.49	0.00
CRJ2, C56X	LFPT	8.71	8.71	8.71	8.71	8.52	8.55
F900, C56X	LFQB	8.71	8.71	8.71	8.71	8.52	8.55

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
E50P, C55B, C550	LFQQ	13.06	13.06	13.06	13.06	12.78	12.83
GLEX	LFRD	4.35	4.35	4.35	4.35	4.26	4.28
H25B, FA7X, E50P, E135, CL35, C680, C56X, C55B, C550, C510	LFRG	47.88	47.88	47.88	47.88	46.87	47.03
GLEX	LFRK	4.35	4.35	4.35	4.35	4.26	4.28
RJ85, C500	LFRM	8.71	8.71	8.71	8.71	8.52	8.55
E35L, BE2	LFRN	8.71	8.71	8.71	8.71	8.52	8.55
C550, C500, BET, A320, A319, A20N	LFRS	191.25	191.25	196.37	191.25	190.98	191.02
C55B	LFRT	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF4, GLEX, FA7X, F2TH, CL30, C56X, BET, A320, A319, A20N	LFSB	356.27	356.27	365.50	356.27	355.54	355.65
GLF4, F2TH, C680, C56X	LFSD	21.76	21.76	21.76	21.76	21.31	21.38
C56X	LFST	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF4, GLEX, GL7T, F2TH, E55P, E550, CRJ2, CL35, C680, C56X, BE40	LFTH	73.99	74.00	73.99	74.00	72.44	72.69
LJ75, GLEX, CL35, B7M8, B738	LFTW	153.68	153.68	157.59	153.68	153.31	153.37
PC12, C68A	LFTZ	8.71	8.71	8.71	8.71	8.52	8.55
H25B, GLF6, GLF5, GLF4, GLEX, GL5T, GALX,	LGAV	769.12	769.13	787.58	769.13	766.47	766.89

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
G150, FA7X, F2TH, E35L, E135, CRJ2, CL60, CL35, C680, B7M8, B738, B737, A321, A21N, A20N							
E135	LGEL	8.71	8.71	8.71	8.71	8.52	8.55
GLEX, C55B, B7M8, B738, A320, A319, A20N	LGIR	169.43	169.43	174.04	169.43	169.25	169.27
C56X	LGKF	4.35	4.35	4.35	4.35	4.26	4.28
GLF4, GLEX, B735	LGKL	13.06	13.06	13.06	13.06	12.78	12.83
GLEX, DFL	LGKO	8.71	8.71	8.71	8.71	8.52	8.55
GLF4, GLEX, CL35, B7M8, B738, A320, A319, A20N	LGKR	334.50	334.50	343.73	334.50	334.23	334.27
CL35	LGKV	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5, GLEX, FA7X, E55P, E550, E35L, E135, CRJ2, CL60, CL35, C680, C56X, C550, A320, A319, A20N	LGMK	212.72	212.73	215.32	212.73	210.16	210.57
C750, C56X	LGPZ	13.06	13.06	13.06	13.06	12.78	12.83
B7M8, A320, A319, A20N	LGRP	178.19	178.19	183.31	178.19	178.19	178.19
E135	LGRX	4.35	4.35	4.35	4.35	4.26	4.28
B7M8, B738	LGSK	45.42	45.42	46.73	45.42	45.42	45.42

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
GLF6	LGSM	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, GLEX	LGSR	8.71	8.71	8.71	8.71	8.52	8.55
F900, E135, CL60, C56X, B7M8, A321, A320, A319, A21N, A20N	LGTS	326.60	358.05	335.23	358.05	326.05	357.58
C750, B7M8	LGZA	49.77	49.77	51.08	49.77	49.68	49.70
F2TH, E190, E135, CL60, C55B, A21N, A20N	LHBP	1388.77	1388.77	1427.89	1388.77	1388.22	1388.31
A321, A21N, A20N	LHDC	457.71	457.71	470.85	457.71	457.71	457.71
PC12, E135	LHSM	8.71	8.71	8.71	8.71	8.52	8.55
GLEX, FA7X, C680, C550, A321, A21N, A20N	LIBD	202.59	202.59	207.91	202.59	202.23	202.28
GLF5, CL35, C56X	LIBR	13.06	13.06	13.06	13.06	12.78	12.83
GLF6, CRJ2, CL60	LICA	13.06	13.06	13.06	13.06	12.78	12.83
GLF6, GLEX, E35L, E135, CL60, C750, C550, A320, A319, A20N	LICC	220.00	220.00	225.32	220.00	219.27	219.39
GLF6, GLEX, F2TH, CL60, CL30, C680, A320, A319, A20N	LICJ	175.44	175.44	179.35	175.44	174.62	174.75
GLF5, F2TH, CL60	LICT	17.41	17.41	17.41	17.41	17.05	17.10
A320, A20N	LIEA	94.34	94.34	86.26	94.34	83.86	94.34
H25B, C56X, C550, BE40	LIEE	21.76	21.76	21.76	21.76	21.31	21.38

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
H25B, GLF6, GLF5, GLEX, GL5T, GALX, FA8X, FA7X, F900, F2TH, E55P, E550, E35L, E135, CRJ2, CL35, CL30, C750, C680, C650, C56X, C550, C25C, A320, A319, A20N	LIEO	426.11	426.13	429.72	426.13	419.81	420.81
GLF5, GLEX, FA7X, F2TH, E55P, E550, E50P, E35L, E135, CL60, CL35, C680, C56X, C550, C25A, BET, BE2, B752, B734, A320, A319, A306, A20N	LIMC	831.87	831.88	836.34	510.44	829.04	508.05
GLEX, F900, B734, A306	LIME	43.78	43.78	42.02	43.78	43.60	43.63
H25B, GLEX, FA7X, E50P, C510, C25A	LIMF	39.17	39.18	39.17	39.18	38.35	38.48
GLF6, GLF4, GLEX, F2TH, E55P, CRJ2, C750, C680, C56X, C25A,	LIMJ	205.91	205.91	199.04	205.91	193.96	204.68

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
BE40, A320, A319, A20N							
GLF6, GLF5, GLF4, GLEX, F900, F2TH, E55P, E135, CL60, CL35, C56X, C550, BE40	LIML	69.64	69.65	69.64	69.65	68.18	68.41
LJ75, E550, E135, C56X	LIMP	17.41	17.41	17.41	17.41	17.05	17.10
E55P, CL60, C56X	LIPB	13.06	13.06	13.06	13.06	12.78	12.83
FA7X, E55P, E135, CRJ2, CL30, C56X, C550, B7M8, B738	LIPE	351.91	351.92	30.47	351.92	29.83	351.38
B752, A306	LIPO	13.15	13.15	12.49	13.15	13.15	13.15
LJ40	LIPQ	4.35	4.35	4.35	4.35	4.26	4.28
GLF4, E135, CL35, C680, C56X, C510	LIPX	43.53	43.53	43.53	43.53	42.61	42.76
LJ40, H25B, GLF6, GLF5, GLF4, GLEX, FA7X, F2TH, E55P, E550, CL60, CL35, C56X, C55B, C550, C25C, A320, A319, A20N	LIPZ	410.22	410.22	419.24	410.22	408.21	408.53
H25B, GLF5, G150, E55P, CL35	LIQS	21.76	21.76	21.76	21.76	21.31	21.38
GLF6, GLF5, GLF4, FA7X, F900,	LIRA	95.76	95.76	95.76	95.76	93.75	94.07

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
F2TH, E55P, E50P, E135, CL35, C680, C56X, C510, BE40							
RJ1H, A320, A319, A20N	LIRF	318.81	318.81	327.84	318.81	318.72	318.73
GLF6, GLF5, GLF4, GLEX, G280, F2TH, E550, E135, CL60, CL35, C68A, C680, C56X, C25C	LIRI	91.40	91.41	91.40	91.41	89.49	89.79
H25B, GLF6, GLF4, GLEX, GL5T, FA8X, FA7X, E135, CL60, CL35, C750, C56X, C550, A320, A319, A20N	LIRN	535.88	535.89	511.57	525.41	498.20	523.09
H25B, GLEX, FA7X, F2TH, E55P, E35L, E135, CL60, CL35, CL30, C510, C25A, A320, A319, A20N	LIRP	521.22	521.23	534.06	521.23	519.67	519.92
LJ40, GL5T, FA8X, E55P, E550, E135, CRJ2, CL35, C680, C56X,	LIRQ	183.11	183.11	185.61	183.11	181.10	181.42

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
C550, C510, C500, A320, A319, A20N							
H25B, GLF6, FA7X, F2TH, E55P, E550, E35L, C56X	LIRS	39.17	39.18	39.17	39.18	38.35	38.48
E35L, CL35, C56X, C55B, C550	LIRZ	26.12	26.12	26.12	26.12	25.57	25.65
C55B, A321, A320, A21N, A20N	LJLJ	172.06	172.06	176.88	172.06	171.97	171.99
GLF5	LKKV	8.71	8.71	8.71	8.71	8.52	8.55
E35L, C680	LKMT	8.71	8.71	8.71	8.71	8.52	8.55
E55P, CRJ2, C680, C56X, BE40, A321, A320, A21N, A20N	LKPR	357.13	357.13	362.66	357.13	352.81	356.43
C56X	LKTB	4.35	4.35	4.35	4.35	4.26	4.28
H25B, GLF6, GLF5, GLF4, GLEX, FA7X, F2TH, E135, CL60, C750, B7M8, B788, B772, B739, B738, A320, A319, A21N, A20N	LLBG	1581.56	1581.56	1624.09	1581.56	1579.46	1579.79
CL60	LLSD	4.35	4.35	4.35	4.35	4.26	4.28
LJ75, GLF5, F2TH, E35L, CL60, C680, C56X, C25C, B7M8	LMML	414.75	414.75	425.28	414.75	413.74	413.90
E135, A321	LOWG	8.71	8.71	8.71	8.71	8.52	8.55

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
GLEX, E50P, CL35, C550, ASTR	LOWI	30.47	30.47	30.47	30.47	29.83	29.93
GLEX, F2TH, C510	LOWK	17.41	17.41	17.41	17.41	17.05	17.10
RJ85, H25B, GLF6, F900, E55P, E135, CRJ2, C750, C680, C56X	LOWS	47.88	47.88	47.88	47.88	46.87	47.03
GLF4, GLEX, E135, CRJ2, CL60, C680, B737, A320, A319, A20N	LOWW	228.71	228.71	234.02	228.71	227.79	227.94
C510	LOXZ	4.35	4.35	4.35	4.35	4.26	4.28
E55P, E35L, C750	LPCS	13.06	13.06	13.06	13.06	12.78	12.83
LJ40, H25B, GLF6, GLF5, GLF4, GLEX, F2TH, E55P, CL35, C680, C56X, C500, B7M8, B738, A320, A319, A20N	LPFR	1223.28	1223.29	1117.69	1223.29	1087.49	1220.74
B7M8, B738	LPMA	24.46	24.46	25.16	24.46	24.46	24.46
GLF6, GLF4, GLEX, E35L, E135, CL60, C25A, A321, A320, A319, A21N, A20N	LPPR	344.01	364.98	248.40	364.98	241.77	364.20
GLF4, CL35, C56X, BE2, A321,	LPPT	1213.21	1213.21	1247.42	1213.21	1212.75	1212.83

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
A320, A319, A21N, A20N							
B7M8, B738	LRBC	276.02	276.02	283.95	276.02	276.02	276.02
GLF6, GLF4, CRJ2, C56X	LRBS	17.41	17.41	17.41	17.41	17.05	17.10
A321, A21N, A20N	LRCK	216.63	216.63	222.85	216.63	216.63	216.63
E35L, B7M8, A320, A21N, A20N	LRCL	870.86	870.86	895.74	870.86	870.77	870.78
A21N, A20N	LRCV	415.78	415.78	427.72	415.78	415.78	415.78
C500, B7M8, B738, A320, A21N, A20N	LRIA	549.41	549.41	565.06	549.41	549.32	549.34
C56X, B7M8, B738, A321, A320, A21N, A20N	LROP	1726.88	1643.03	1776.34	1643.03	1726.79	1642.95
A320, A21N, A20N	LRSB	370.36	370.36	381.00	370.36	370.36	370.36
A320, A21N, A20N	LRSM	185.18	185.18	190.50	185.18	185.18	185.18
A321, A21N, A20N	LRSV	324.94	377.35	334.27	377.35	324.94	377.35
A320, A21N, A20N	LRTM	132.77	132.77	136.58	132.77	132.77	132.77
A321, A320, A21N, A20N	LRTR	447.23	447.23	460.07	447.23	447.23	447.23
PC24, LJ75, LJ55, H25B, GLF6, GLF5, GLF4, GLEX, GL5T, G280, FA7X, F900, F2TH, E55P, E35L, E135, CRJ2,	LSGG	1054.61	1054.64	1072.77	1054.64	1045.76	1047.17

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
CL60, CL35, CL30, C750, C680, C56X, C55B, C550, C510, BET, BE2, B737, A320, A319, A20N							
PC12, H25B, GLF6, FA7X, F2TH, E55P, E50P, CL60, CL30, C680, C56X, C55B	LSGS	78.35	78.35	78.35	78.35	76.70	76.96
GLEX, FA7X, E55P, C680, C25C	LSZA	34.82	34.82	34.82	34.82	34.09	34.21
GLEX, G280, F2TH, E135, CL35, C56X, C550, C510, BE40	LSZB	56.58	56.59	56.58	56.59	55.40	55.59
E55P, CL60	LSZC	8.71	8.71	8.71	8.71	8.52	8.55
LJ75, H25B, GLF6, GLF5, GLF4, GLEX, GL7T, G280, FA8X, FA7X, F900, F2TH, E55P, E50P, E35L, E135, CRJ2, CL60, CL35, C68A, C680, C56X, C510, C500, C25A,	LSZH	812.46	812.48	800.66	812.48	779.86	808.55

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
A320, A319, A20N							
FA7X, C56X	LSZR	13.06	13.06	13.06	13.06	12.78	12.83
GLF5, E55P, C56X, C500	LSZS	17.41	17.41	17.41	17.41	17.05	17.10
LJ55, F2TH, B7M8, B738	LTAC	54.13	54.13	55.43	54.13	53.94	53.97
H25B, B7M8, A320, A319, A20N	LTAI	231.46	231.46	173.28	231.46	168.48	231.38
B7M8, B738	LTAJ	45.42	45.42	46.73	45.42	45.42	45.42
LJ40, GLF5, GLEX, CRJ2, CL60, CL30, A332, A306	LTBA	170.64	170.65	164.50	170.65	169.64	169.80
GLF4, E55P, B7M8, B738	LTBJ	111.75	111.75	114.46	111.75	111.38	111.44
CL60	LTBO	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF4, GLEX, CRJ2, C750, B7M8, B738, A320, A319, A20N	LTBS	174.52	174.52	178.03	174.52	173.42	173.60
F2TH	LTCG	4.35	4.35	4.35	4.35	4.26	4.28
H25B, GLF6, GLF5, GLF4, GLEX, GL5T, FA7X, F900, E135, CRJ2, CL60, CL30, C56X, C55B, B7M8, A320, A319, A20N	LTFE	280.94	280.95	217.96	280.95	212.54	279.25

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
FA7X, CRJ2	LTFJ	13.06	13.06	13.06	13.06	12.78	12.83
A320, A21N, A20N	LUKK	454.22	454.22	467.26	454.22	454.22	454.22
A320, A21N, A20N	LWOH	90.84	90.84	93.45	90.84	90.84	90.84
C550, A320, A21N, A20N	LWSK	210.50	210.50	216.42	210.50	210.41	210.42
C56X, B735, A320, A319, A20N	LXGB	29.67	29.67	30.27	29.67	29.49	29.52
GLF4, FA50, C56X, C55B, C550, A321, A320, A21N, A20N	LYBE	211.30	211.30	216.61	211.30	210.75	210.84
GLF4	LYBT	4.35	4.35	4.35	4.35	4.26	4.28
F2TH, C680	LYTV	8.71	8.71	8.71	8.71	8.52	8.55
GLF6, C56X, A321, A21N, A20N	LZIB	330.15	330.15	339.38	330.15	329.97	330.00
A321, A21N, A20N	LZKZ	321.45	321.45	330.68	321.45	321.45	321.45
A320, A21N, A20N	LZTT	136.27	136.27	140.18	136.27	136.27	136.27
GLEX	MMUN	8.71	8.71	8.71	8.71	8.52	8.55
E35L	OEDF	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, B7M8, B739	OEDR	13.06	13.06	13.06	13.06	12.78	12.83
GLF6, GLF4, GLEX, E135, CL60, B7M8, B739, B737, A319	OEJN	69.64	69.65	69.64	69.65	68.18	68.41
GLF6, GLF4, GLEX, FA8X, F900, E190, E135, A319	OERK	60.94	60.94	60.94	60.94	59.66	59.86
B7M8, B739	OERY	4.35	4.35	4.35	4.35	4.26	4.28

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
GLF5	OETF	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, GLEX, E135	OKBK	13.06	13.06	13.06	13.06	12.78	12.83
GLF4, GLEX, E550, E35L, CRJ2, CL60	OLBA	39.17	39.18	39.17	39.18	38.35	38.48
GLF5, GLEX, GL5T, F2TH, A319	OMAD	34.82	34.82	34.82	34.82	34.09	34.21
GLF4, GLEX	OMDB	21.76	21.76	21.76	21.76	21.31	21.38
GLF6, GLF4, A319	OMDW	17.41	17.41	17.41	17.41	17.05	17.10
GLEX	OMSJ	8.71	8.71	8.71	8.71	8.52	8.55
GLF4, F900, CL60	OOMS	13.06	13.06	13.06	13.06	12.78	12.83
GLF4, CL60	ORER	8.71	8.71	8.71	8.71	8.52	8.55
GLEX	ORSU	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, GLEX, E135	OTBD	39.17	39.18	39.17	39.18	38.35	38.48
GLF6, GLEX	RJAA	8.71	8.71	8.71	8.71	8.52	8.55
GLF6, GLEX	RJTT	13.06	13.06	13.06	13.06	12.78	12.83
GLF6	RKSI	4.35	4.35	4.35	4.35	4.26	4.28
GLF5	SBGL	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLEX	SBGR	8.71	8.71	8.71	8.71	8.52	8.55
GLEX	TBPB	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	TJSJ	4.35	4.35	4.35	4.35	4.26	4.28
GLF4, FA7X, F900	TXKF	26.12	26.12	26.12	26.12	25.57	25.65
GLF4, GLEX, E135, CL60	UAAA	30.47	30.47	30.47	30.47	29.83	29.93
GLF5, GLF4, CL60, A319	UACC	26.12	26.12	26.12	26.12	25.57	25.65
CL60	UATG	17.41	17.41	17.41	17.41	17.05	17.10
GLF6, GLF4, G280, A319	UBBB	21.76	21.76	21.76	21.76	21.31	21.38
GALX	UDYZ	4.35	4.35	4.35	4.35	4.26	4.28
A320, A21N, A20N	UGKO	94.34	94.34	97.05	94.34	94.34	94.34
CL60	UGSB	4.35	4.35	4.35	4.35	4.26	4.28
F2TH, E35L, B738	UGTB	13.06	13.06	13.06	13.06	12.78	12.83
GLEX	UHWW	4.35	4.35	4.35	4.35	4.26	4.28
LJ55, GALX, CRJ2, CL30, A320,	UKBB	38.37	38.38	38.98	38.38	38.01	38.07

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
A21N, A20N							
CL35	UKDD	4.35	4.35	4.35	4.35	4.26	4.28
CL30	UKHH	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF4, GALX, E35L, CRJ2, CL60, C55B, A320, A21N, A20N	UKKK	192.05	192.05	196.56	192.05	191.32	191.44
A320, A21N, A20N	UKLL	136.27	136.27	140.18	136.27	136.27	136.27
CL30, C56X	UKOO	13.06	13.06	13.06	13.06	12.78	12.83
GLF6, GLEX, F900, CL60, CL35, C56X	ULLI	39.17	39.18	39.17	39.18	38.35	38.48
H25B, GLF5, GALX, G280, BE40	UMMS	21.76	21.76	21.76	21.76	21.31	21.38
GLF4	URKA	4.35	4.35	4.35	4.35	4.26	4.28
FA8X	URSS	4.35	4.35	4.35	4.35	4.26	4.28
FA50	URWW	4.35	4.35	4.35	4.35	4.26	4.28
H25B	USSS	4.35	4.35	4.35	4.35	4.26	4.28
CL60	UTAA	4.35	4.35	4.35	4.35	4.26	4.28
FA8X	UTTT	4.35	4.35	4.35	4.35	4.26	4.28
GLF5, GLEX	UUDD	8.71	8.71	8.71	8.71	8.52	8.55
H25B, GLF6, GLEX, F900, F2TH, CRJ2, CL60, CL35, CL30, C750, C25A	UUEE	73.99	74.00	73.99	74.00	72.44	72.69
H25B, GLF6, GLF5, GLF4, GLEX, GALX, G280, G150, FA8X, FA7X, F900, F2TH, E135, CL60,	UUWW	139.28	139.29	139.28	139.29	136.36	136.83

Aircraft type code	Destination	without development' 2024	with development' 2024	without development' 2028	with development' 2028	without development' 2032	with development' 2032
CL35, CL30, C750, B737							
CRJ2	UWWW	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	VAAH	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLEX	VABB	39.17	39.18	39.17	39.18	38.35	38.48
GLF5, GLEX	VAPO	17.41	17.41	17.41	17.41	17.05	17.10
GLEX	VCBI	4.35	4.35	4.35	4.35	4.26	4.28
GLF5	VGHS	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5, GLEX	VHHH	69.64	69.65	69.64	69.65	68.18	68.41
GLF6, GLF5, GLEX, GL5T	VIDP	34.82	34.82	34.82	34.82	34.09	34.21
GLEX, GL5T	VOBL	8.71	8.71	8.71	8.71	8.52	8.55
GLEX	VOHS	4.35	4.35	4.35	4.35	4.26	4.28
GLEX	VRMM	4.35	4.35	4.35	4.35	4.26	4.28
GLF6	VTBD	8.71	8.71	8.71	8.71	8.52	8.55
FA8X	WMSA	4.35	4.35	4.35	4.35	4.26	4.28
GLF6	WSSL	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5, GLEX, FA7X, B737	ZBAA	21.76	21.76	21.76	21.76	21.31	21.38
GLF6	ZGSZ	4.35	4.35	4.35	4.35	4.26	4.28
GLF6, GLF5, GLEX, E55P	ZSSS	17.41	17.41	17.41	17.41	17.05	17.10
GLF6	ZSWX	4.35	4.35	4.35	4.35	4.26	4.28
GLEX, GL5T	ZWWW	8.71	8.71	8.71	8.71	8.52	8.55
PUMA, HELI, EC55, B06, AS55, A109	ZZZJ	36.09	36.09	36.09	36.09	36.00	36.02
HELI, EC55, C56X, A109	ZZZZ	34.10	34.10	34.10	34.10	33.92	33.95