

First time opening this PDF? PLEASE READ THIS:

THIS LAYERED MAP IS DESIGNED TO COMPLEMENT LCY'S STAGE 2 DOCUMENTATION SET
Please open this PDF using *genuine Adobe Reader or other genuine Adobe product*.
Layer switching **does not work** if this PDF is opened within a browser or other (non-Adobe) PDF viewing application.

This data layer is called '0-01 READ ME then SWITCH OFF THIS LAYER'
Please read this and then switch it off.
This layer also contains the Summer 2019 traffic flow proportions descriptions (box below right).

Each of these layers can be switched on or off, and in combinations. You can compare what happens currently, the early draft concepts we supplied to stakeholders during Stage 2 Engagement sessions, and the more mature indicative design options which were the result of modifications based on stakeholder feedback.

Use the colour key to understand what altitude flights currently are, or might be at, and the regions within which the future routes could be placed.

Decoding the layer names
(Each group of layers has an empty 'separator' layer containing dashes '-' describing the subsequent group)
Layers starting 0:
Contains the layer you are currently reading, the border frame/colour key/ map scale layer, and some technical layers showing air navigation infrastructure.

Layers starting LC-CURR:
Illustrate what happens today, by runway, showing the flightplan lines, typical concentrations and swathe spread

Layers starting LC-ENGAGED:
Illustrate the early draft concepts we supplied to stakeholders during Stage 2 Engagement sessions.
These were presented as proposed systems per runway using indicative lines, potential concentrations, and swathes within which the routes could be placed at the engagement stage.


Layers starting LC-ST2:
Illustrate the more mature indicative Stage 2 design options submitted to the CAA for assessment.
These are consistent with, but modified from, the LC-ENGAGED drafts based on stakeholder feedback, including design envelopes (similar to engagement swathes).
Each group name indicates:
Arrivals **Outer** from 7,000ft-4,000ft, Arrivals **Inner** from 4,000ft to the runway, or **Departures** with left turn out (LTO) or right turn out (RTO) where different turn directions after takeoff may be viable.

Layers containing these codes:
09 means arrivals to, or departures from, the easterly runway
27 means arrivals to, or departures from, the westerly runway
ARR means the lines describe arrival routes known as Transitions, descending from 7,000ft to the runway.
Arrivals are shown in orange.
Common means arrival routes or design envelopes that are common to both runways
DEP means the lines describe departure routes known as Standard Instrument Departures, climbing from the runway to 7,000ft and beyond.
Departures are shown in light blue (cyan) for Current and Engaged, and in dark green for Stage 2 submission.


Layers starting Map:
01-Controlled Airspace CAS shows the outlines of the technical airspace infrastructure
02-AONB shows nearby Areas of Outstanding Natural Beauty. The Kent Downs are also shown but are unlikely to be impacted.
03-Background Map Fade On or Off When background maps such as Ordnance Survey or Aviation are shown, this setting fades out the background to make the coloured shapes easier to see.
Map Aviation and Map Ordnance Survey These are different types of background maps. Note that the Aviation map is 'on top' of the OS 1:250K scale map, which is also 'on top' of the OS large scale map. Bear this in mind as you will not be able to see maps 'lower' than the Aviation map unless it is switched off.
Consider using the **0 Map Fade** layer if the maps are hard to read.
Should you wish to see the background maps more closely, consider using the PDF zoom tools to view the area of interest and then switching off the Map Fade layer.


- Layer List**
- 0---Technical layers inc Read Me
 - 0-01 READ ME then SWITCH OFF THIS LAYER
 - 0-BORDER COLOUR KEYS and MAP SCALE
 - 0-Tech-Aerodrome locations and name codes
 - 0-Tech-LC-CURR-Waypoints and name codes
 - 0-Tech-Navaid Beacons and name codes
 - LC-CURR---Current Arrs & Deps
 - LC-CURR-09-ARRTRANS
 - LC-CURR-09-ARRTRANS-Swathes
 - LC-CURR-09-DEPSIDs
 - LC-CURR-09-DEPSIDs-Swathes
 - LC-CURR-27-ARRTRANS
 - LC-CURR-27-ARRTRANS-Swathes
 - LC-CURR-27-DEPSIDs
 - LC-CURR-27-DEPSIDs-Swathes
 - LC-ENGAGED---Early concepts supplied for stakeholder feedback
 - LC-ENGAGED-09-SYS1-ARRTRANS
 - LC-ENGAGED-09-SYS1-ARRTRANS-Swathes
 - LC-ENGAGED-09-SYS1-DEPSIDs
 - LC-ENGAGED-09-SYS1-DEPSIDs-Swathes
 - LC-ENGAGED-09-SYS2-ARRTRANS
 - LC-ENGAGED-09-SYS2-ARRTRANS-Swathes
 - LC-ENGAGED-09-SYS2-DEPSIDs
 - LC-ENGAGED-09-SYS2-DEPSIDs-Swathes
 - LC-ENGAGED-09-SYS3-ARRTRANS
 - LC-ENGAGED-09-SYS3-ARRTRANS-Swathes
 - LC-ENGAGED-09-SYS3-DEPSIDs
 - LC-ENGAGED-09-SYS3-DEPSIDs-Swathes
 - LC-ENGAGED-27-SYS4-ARRTRANS
 - LC-ENGAGED-27-SYS4-ARRTRANS-Swathes
 - LC-ENGAGED-27-SYS4-DEPSIDs
 - LC-ENGAGED-27-SYS4-DEPSIDs-Swathes
 - LC-ENGAGED-27-SYS5-ARRTRANS
 - LC-ENGAGED-27-SYS5-ARRTRANS-Swathes
 - LC-ENGAGED-27-SYS5-DEPSIDs
 - LC-ENGAGED-27-SYS5-DEPSIDs-Swathes
 - LC-ST2---Mature but still draft routes submitted for CAA study
 - LC-ST2-Arr-09-Inner-4000-0
 - LC-ST2-Arr-09-Inner-4000-0-DesignEnv
 - LC-ST2-Arr-09-Outer-7000-4000
 - LC-ST2-Arr-09SpecialNav-Inner-4000-0
 - LC-ST2-Arr-09SpecialNav-Inner-4000-0-DesignEnv
 - LC-ST2-Arr-27-Inner-4000-0
 - LC-ST2-Arr-27-Inner-4000-0-DesignEnv
 - LC-ST2-Arr-Common-Outer-7000-4000
 - LC-ST2-Arr-Common-Outer-7000-4000-DesignEnv
 - LC-ST2-Dep-09-ENE-LTO
 - LC-ST2-Dep-09-ENE-LTO-DesignEnv
 - LC-ST2-Dep-09-ENE-RTO
 - LC-ST2-Dep-09-ENE-RTO-DesignEnv
 - LC-ST2-Dep-09-NW-LTO
 - LC-ST2-Dep-09-NW-LTO-DesignEnv
 - LC-ST2-Dep-09-NW-RTO
 - LC-ST2-Dep-09-NW-RTO-DesignEnv
 - LC-ST2-Dep-09-SE-LTO
 - LC-ST2-Dep-09-SE-LTO-DesignEnv
 - LC-ST2-Dep-09-SE-RTO
 - LC-ST2-Dep-09-SE-RTO-DesignEnv
 - LC-ST2-Dep-27-ENE-DesignEnv
 - LC-ST2-Dep-27-NW
 - LC-ST2-Dep-27-NW-DesignEnv
 - LC-ST2-Dep-27-SE-LTO
 - LC-ST2-Dep-27-SE-LTO-DesignEnv
 - LC-ST2-Dep-27-SE-RTO
 - LC-ST2-Dep-27-SE-RTO-DesignEnv
 - Map---Background maps in order (upper can hide lower)
 - Map-01-Current Controlled Airspace CAS outlines
 - Map-02-AONB Areas of Outstanding Natural Beauty
 - Map-03-Background FADE On or Off
 - Map-04-Aviation VFR 1-500K Scale
 - Map-05-Ordnance Survey 1-250K Scale
 - Map-06-Ordnance Survey Large Scale


AONB (Areas of Outstanding Natural Beauty)
Kent Downs is the AONB most relevant to this map




Arrival & Departure Illustrations






Arrival most direct example 

Arrival alternate example 





Departure most direct example 

Departure alternate example 

Arrival Design Envelope Altitude Bands

-  From 7,000ft upper network
-  7,000ft-4,000ft
-  3,999ft-3,000ft
-  3,000ft (if level)
-  2,999ft to runway

Departure Design Envelope Altitude Bands

-  To 7,000ft upper network
-  4,000ft-7,000ft
-  3,000ft-3,999ft
-  Runway to 2,999ft

Nautical Miles (1nm is 1.852km or 6,076ft)



Summer 2019 traffic flow proportions (average and peak):

Dep's to SW/W/NW	c.28%	(31-44 per day up to 7,000ft)
Dep's to E/NE	c.21%	(24-33 per day up to 7,000ft)
Dep's to S/SE	c.51%	(58-81 per day up to 7,000ft)

All arrivals use the Estuary arrival system (114-158 per day up to 7,000ft)
Considering arrival flows **above 7,000ft:**
Arrs from W/NW c.27% (30-43 per day above 7,000ft)
Arrs from SW c.12% (14-19 per day above 7,000ft)
Arrs from NE/E/SE/S c.61% (70-96 per day above 7,000ft)

From W/NW arrs currently transit north of the airport, heading east at high levels towards the coast before turning south to join the Estuary arrival flow
From SW and S, arrs currently transit south of the airport, heading east at high levels towards the coast before turning north to join the Estuary arrival flow
From NE/E/SE arrs currently join the Estuary arrival flow, with some shortcuts as per the swathe width.
(The differences in proportion between arrs and deps are due to high level network flows).

The current Easterly Runway 09 system was used c.27% of the time
The current Westerly Runway 27 system was used c.73% of the time

ALL STAGE 2 LINES & DESIGN ENVELOPES ARE INDICATIVE ILLUSTRATIONS OF POTENTIAL FLIGHTPATHS. FINAL BOUNDARIES, PREDICTED ALTITUDES, PRECISE FLOW LOCATIONS AND DIRECTIONS ARE NOT YET SET, DEPENDING ON COLLABORATION AND COORDINATION WITH ADJACENT AIRPORTS WHEN ALL PARTIES ARE IN STAGE 3 OF THE PROCESS.