

CITY AIRPORT DEVELOPMENT PROGRAMME
(CADP1) S73 APPLICATION

ENVIRONMENTAL STATEMENT

VOLUME 4: TRANSPORT ASSESSMENT
DECEMBER 2022



London City Airport Transport Assessment



London City Airport Transport Assessment

Prepared by:

Steer
14-21 Rushworth Street
London SE1 0RB

+44 20 7910 5000
www.steergroup.com

Prepared for:

London City Airport
Royal Docks
London
E16 2PB
Client ref:
Our ref: 23699202

Contents

1	Introduction.....	1
	Introduction.....	1
	Purpose of Transport Assessment.....	2
	Site Description	2
	Planning History	5
	Master Plan (2020)	6
	Sustainability Roadmap (2022).....	6
	Proposed Development.....	7
	Pre-Application Discussions.....	8
	Policy	9
	Report Structure	9
2	Transport Policy	10
	National Policy.....	10
	Regional Policy.....	12
	Local Planning Policy and Guidance	15
	Summary.....	18
3	Transport Assessment Methodology.....	19
	Introduction.....	19
	Baseline	19
	Assessment Scenarios	19
	Methodology and Response to Scoping Report.....	20
	Approach to Trip Modelling	20
4	2019 Travel Demand	23
	Introduction.....	23
	Air Passenger Surface Access	23
	Saturday.....	33
	Employee Surface Access	34
	Airport Deliveries.....	38
5	Existing Transport Infrastructure	39
	Introduction.....	39

	Public Transport	39
	Silvertown Tunnel and Buses	41
	Local Highway Network	42
	Parking Provision	42
	Road Accidents	43
	Pedestrian and Cycle Infrastructure	44
	Local Amenities	46
6	Active Travel Zone Assessment.....	47
	Introduction.....	47
	Key Destinations and Routes.....	47
	Route Analysis	49
7	Future Travel Demand.....	70
	Introduction.....	70
	Air Passenger Forecasts.....	70
	Employee Travel Demand	81
	Servicing Activity	86
	Combined Travel Demand.....	87
	Future Saturday Landside Movements	88
8	Public Transport Impact Assessment.....	91
	Introduction.....	91
	Railplan modelling.....	91
	Bus Services	92
	Elizabeth Line.....	92
	2041 Public Transport Loadings	92
	Summary.....	92
9	Highway Impact Assessment	93
	Introduction.....	93
10	Mitigation Measures	95
	Introduction.....	95
	Incorporated Mitigation	95
	Planned Transport Enhancements (By Others)	96

Further Mitigation	96
11 Summary and Conclusions.....	98
Summary.....	98
Conclusions.....	99

Figures

Figure 1.1: London City Airport Location Plan.....	3
Figure 1.2: Predicted Annual Passenger Numbers (millions) with/without development	8
Figure 3.1: Approach to Passenger Surface Access modelling	21
Figure 3.2: Approach to Employee Surface Access modelling.....	22
Figure 4.1: 2019 Monthly Total Passenger Numbers	28
Figure 4.2: Typical Weekly Passenger Profile	28
Figure 4.3: 2019 Typical Busy Summer Day Passenger Movements	30
Figure 4.4: Typical Busy Summer Day Landside Passenger Surface Access Travel Movements	32
Figure 4.5: Typical Busy Summer Saturday Landside Passenger Surface Access Travel Movements.....	34
Figure 4.6: Employee Weekday Travel Pattern (as of 2019)	36
Figure 5.1: Public Transport Stations and Bus Stops	39
Figure 5.2: Local Highway Network	42
Figure 5.3: Personal Injury Accidents (2018-2020).....	43
Figure 6.1: Extent of Active Travel Zone Assessment.....	48
Figure 7.1: Do Minimum Scenario (6.5mppa) Typical Busy Summer Weekday Surface Access Passenger Movements	74
Figure 7.2: 2031 Development Case Scenario (9.0mppa) Typical Summer Weekday Surface Access Passenger Demand	76
Figure 7.3: 2031 - Predicted Change Between the Do Minimum and Development Case Scenarios on Typical Busy Summer Weekday Landside Passenger Movements.....	78
Figure 7.4: Daily Employee Travel Times for 2019 Baseline.....	84
Figure 7.5: 2031 Development Case Scenario Typical Busy Saturday Surface access Passenger Movements.....	90

Tables

Table 1.1: Past and Predicted Future Annual Passenger Numbers (millions)	7
Table 4.1: CAA reported Annual Passenger Movements at London City Airport (2012 – 2019)	23
Table 4.2: Summary passenger travel statistics reported in Annual Performance report	24
Table 4.3: CAA reported Passenger Public Transport Travel 2007-2019	25
Table 4.4: Main surface Access to City Airport 2017-2019	25
Table 4.5: 2019 Passenger Main Mode of Travel (CAA and ASQ, 2019)	26
Table 4.6: Observed and Target Future Year Passenger Final Mode of Surface Access	26
Table 4.7: CAA reported Volume of Passengers by Type (2019)	27
Table 4.8: Last Mode Share According to Passenger Type (2019 CAA data)	27
Table 4.9: 2019 Busy Summer Day Passenger Numbers	29
Table 4.10: 2019 -Typical Busy Summer Day Landside Passenger Surface Access Travel Movements	31
Table 4.11: 2019 Typical Busy Saturday Landside Passenger Surface Access Travel Movements	33
Table 4.12: 2019 Final Mode Target Employee Mode Shares	34
Table 4.13: Daily Employee Working Patterns (as of 2019)	35
Table 4.14: 2019 Employee Weekday Travel Demand	37
Table 4.15: 2019 Recorded servicing activity	38
Table 5.1: Weekday Elizabeth Line First/Last Train Services	40
Table 5.2: Elizabeth Line Frequencies	41
Table 5.3: Current Bus Services	41
Table 6.1: ATZ Key Destinations	49
Table 6.2: ATZ Route 1- Cycle Superhighway 3 and Custom House DLR and Elizabeth Line Station	51
Table 6.3: ATZ Route 2- Woolwich Foot Tunnel	55
Table 6.4: ATZ - Route 3: St Marks Silvertown Church	58
Table 6.5: ATZ Route 4- Thames Barrier Park and Royal Wharf Riverboat Station	61
Table 6.6: ATZ Route 5 – City Airport Dental Centre	64
Table 6.7: ATZ Route 6 - Gallions Reach DLR Station	67
Table 7.1: 2031 Do Minimum Scenario (6.5mppa) Typical Busy Summer Weekday Passenger Numbers	71
Table 7.2: 2031 Development Case Scenario (9.0mppa) Typical Busy Summer Weekday Passenger Numbers	72

Table 7.3: 2031 Do Minimum Scenario (6.5mppa) Typical Busy Summer Weekday Landside Passenger Surface Access Travel Movements.....	73
Table 7.4: 2031 Development Case Scenario (9.0mppa) Typical Busy Summer Weekday Landside Passenger Surface Access Travel Movements.....	75
Table 7.5: 2031 - Predicted Change Between the Do Minimum and Development Case Scenarios on Typical Busy Summer Weekday Landside Passenger Movements	77
Table 7.6: 2019 Baseline and 2031 Principal Assessment Year Typical Busy Summer Weekday Surface Access Passenger Travel Demands	78
Table 7.7: Observed and Target Future Year Passenger Final Mode of Surface Access.....	79
Table 7.8: AM Peak Mode shares applied to Surface Access Demands Weekday	79
Table 7.9: PM Peak-2031 Mode shares applied to Surface Access Demands Weekday	80
Table 7.10: Car Occupancy and Group Size Factors	80
Table 7.11: 2031 AM Peak (07:00-08:00)- Do minimum and Development Case Traffic Movements Weekday.....	81
Table 7.12: 2031 PM Peak (18:00-19:00)- Do minimum and Development Case Traffic Movements Weekday.....	81
Table 7.13: Employee Population 2019 Baseline and 2031 Forecasts for London City Airport .	81
Table 7.14: 2031 Typical Busy Summer Day-Daily Total Employee Travel Demand	82
Table 7.15: 2031 Final Mode Target Employee Mode Shares.....	82
Table 7.16: 2031 Employee Daily travel demand	83
Table 7.17: Daily Employee Travel Times for 2019 Baseline.	84
Table 7.18: Typical Busy Summer Day – Future Year Daily Employment Movements.....	85
Table 7.19: Weekday AM Peak-2031 Employee mode shares applied to travel profile	86
Table 7.20: Weekday PM Peak-2031 Employee mode shares applied to travel profile	86
Table 7.21: AM Peak-2031 Combined Public Transport, Walk and Cycle Movements Weekday	87
Table 7.22: PM Peak-2031 Combined Public Transport, Walk and Cycle Movements Weekday	87
Table 7.23: 2031 AM Peak Hour (07:00-08:00) Vehicle Movements Weekday	87
Table 7.24: 2031 PM Peak Hour(17:00-18:00) Vehicle Movements Weekday	87
Table 7.25: 2031 Development Case Scenario Typical Busy Saturday Passenger Numbers	88
Table 7.26: 2031 Development Case Scenario Typical Busy Saturday Landside Passenger Surface Access Travel Movements	89
Table 10.1: CADP1 – Key Transport-related Contributions	96
Table 10.2: Passenger Mode Share Targets	96

Table 10.3: Staff Mode Share Targets	97
--	----

Appendices

A	Transport Assessment Scope
B	TfL pre- application advice
C	Railplan modelling
D	LoHAM modelling
E	2026 – 2031 Framework Travel Plan

1 Introduction

Introduction

- 1.1 London City Airport Limited (the airport) (LCY) is proposing to make best use of its available capacity by applying to increase the cap on the number of annual passengers from the currently permitted 6.5 million passengers to 9.0 million.
- 1.2 This Transport Assessment (TA) assesses the proposed increase in the number of people that will access the airport, how they will access the airport and what impacts this has on existing and future transport infrastructure and if this meets planning policy requirements. In considering this, the pattern of movements is relevant, which can be influenced by the opening times of the airport, shift start times, whether passengers are flying for leisure or business and flight take off and landing times.
- 1.3 To compare the impacts of the proposed development (the Development Case scenario) with what the impacts would be without the development (the Do Minimum scenario) the TA assesses both scenarios against a baseline year of 2019, as agreed with Transport for London (TfL) and the London Borough of Newham (LBN).
- 1.4 Forecasts for future year travel demand has been derived from the passenger forecasts as described in Chapter 4 of the Environmental Statement (ES) and is set out in this TA. In line with these forecasts, the projected passenger demand to 2031 will see an increased proportion of leisure travel which traditionally occurs outside of the weekday AM and PM peaks, as well as at weekends.
- 1.5 The Development Case is for 9.0 million passengers being reached in 2031 whilst the Do Minimum case is for 6.5million Passengers in the same year.
- 1.6 The proposed amendments include targets for 80% of all passengers and 55% of staff to travel to and from the airport by public and sustainable transport by the time the airport reaches 9mppa. These targets are in line with the airport's 2022 Sustainability Roadmap, which sets out the airport's aspirations to become net zero by 2030, and the Mayor of London's Transport Strategy (MTS) 2018 for 80% of journeys in London to be by foot, cycle and public transport by 2041, with a target set of LBN of 83% by 2041.
- 1.7 The proposed amendments are supported by a Framework Travel Plan 2025 – 2031, as well as a new Sustainable Transport Fund (STF) to contribute towards initiatives to encourage the use of sustainable modes of transport.
- 1.8 The TA concludes that the additional travel demands associated with increasing the passenger cap to 9.0mppa by 2031, can be managed on the surrounding highway and public transport networks. This assumes the sustainable and public transport mode targets will be achieved and given the multi access modes available, the proposed Framework Travel Plan and wider national, local and borough wide initiatives and infrastructure delivery programmes it is considered these can be achieved. These all build upon past and current initiatives that have

helped the airport record consistent high sustainable mode share for travel to and from the airport.

Purpose of Transport Assessment

- 1.9 The purpose of this Transport Assessment (TA) is to assess the transport-related impacts of the proposed development, which is as follows:

“Section 73 Application to vary conditions 2 (approved drawings and documents), 8 (aircraft maintenance), 10 (restrictions on development – Plan P4), 12 (aircraft stand location – Plan P4), 17 (aircraft take-off and land times), 23, 25, 26 (Daily limits), 35 (temporary facilities), 42 (terminal opening hours), 43 (passengers) and 50 (ground running) attached to planning permission 13/01228/FUL dated 26 July 2016 (as varied) to allow up to 9 million passengers per annum (currently limited to 6.5 million), arrivals and departures on Saturdays until 18.30 with up to 12 arrivals for a further hour during British Summer Time (currently allowed until 12.30), modifications to daily, weekend and other limits on flights and minor design changes, including to the forecourt and airfield layout.”

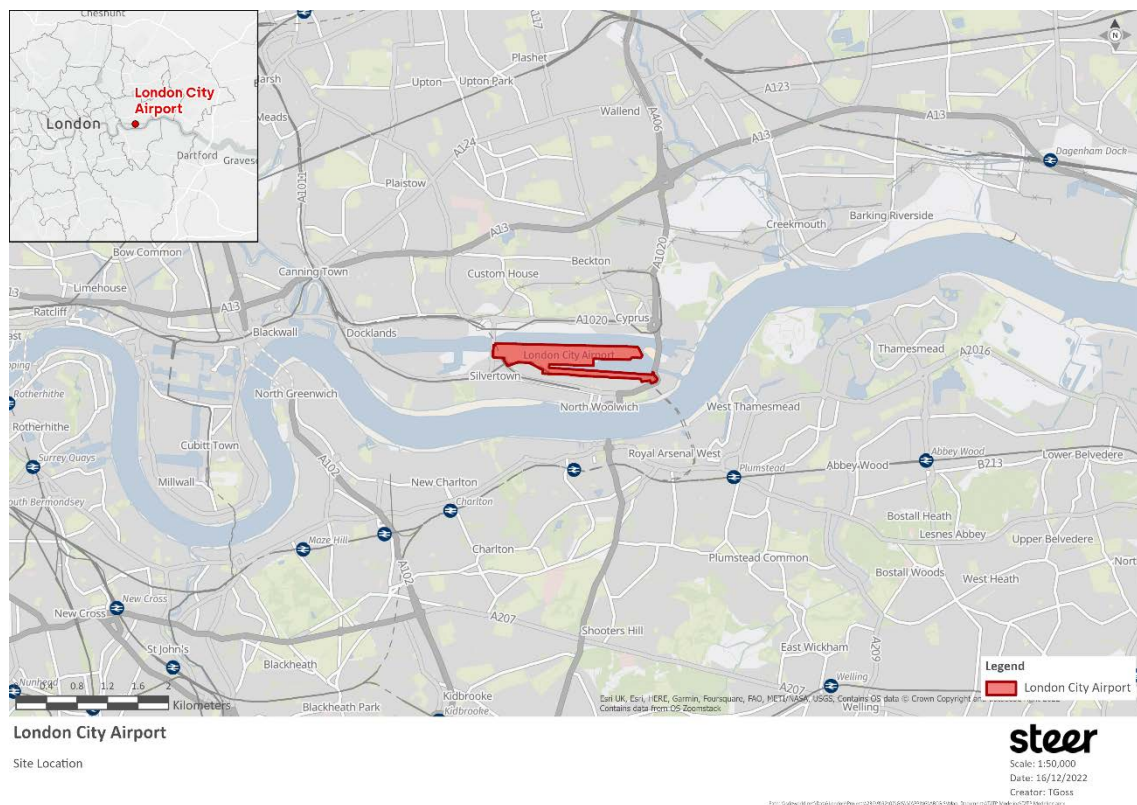
- 1.10 The scope of this TA has been discussed and agreed with both LBN and TfL.
- 1.11 Forecast future year travel demand has been derived from the passenger demand forecasts as described in Chapter 4 of the ES. In line with the forecasts in the accompanying Need Case, the projected passenger demand to 2031 will see an increased proportion of leisure travel which traditionally occurs outside of the normal weekday AM and PM peaks, as well as at weekends. The periods within which the leisure demand is expected to be experienced is when it is expected that spare capacity will exist on the surrounding public transport and highway networks, as shown through the assessment work in this TA. Nevertheless, for robustness, this TA considers the additional impacts during the weekday AM and PM peak hours, as well as the additional impacts on Saturday afternoons, beyond the current closure of 12.30.

Site Description

Site Location

- 1.12 The airport is located off Hartmann Road in the London Borough of Newham. It is located in London's Royal Docks, approximately six miles east of the City of London, two miles east of Canary Wharf and half a mile away from the ExCeL Exhibition and Conference Centre. The site location is provided in Figure 1.1.

Figure 1.1: London City Airport Location Plan



- 1.13 The surrounding area includes a mix of residential, industrial, and commercial uses. There is also a significant amount of planned development and regeneration in the Royal Docks and the surrounding area.

Transport Infrastructure

- 1.14 The airport is well served by transport infrastructure that serves all modes of transport.
- 1.15 The airport's highway access is on Hartmann Road, which runs east-west from the A112. The A112 connects eastwards to the A1020 via Albert Road and northwards to the A1020, via Connaught Bridge. The A1020 provides direct connectivity to the A13 and A406, which form part of London's Strategic Road network.
- 1.16 The airport has its own station on the Docklands Light Railway (DLR), which forms the principal connectivity for public transport, with the DLR providing onward connectivity to London Underground and Overground services and national rail services.
- 1.17 The airport is also currently served by two bus services that, alongside cycle and pedestrian routes, provide local connectivity.
- 1.18 Access is also possible via the River Thames by the river bus services that stop at the Royal Wharf and construction traffic can access the site by barge via the Royal Docks.
- 1.19 Passengers and staff make good use of the public and sustainable access modes available to them and the airport actively supports and promotes their use. Prior to the Covid-19 hiatus, the airport was also the best performing in the UK for public and sustainable transport usage

(73% reported in the Annual Performance Report)¹. Through its Travel Plans improved public and sustainable transport usage is sought, with the current target for passengers being 75%² by 2025 and for staff journeys no more than 48% will be by car without a passenger. Collectively these are in line with regional and local targets of 80% and 83% set by TfL and LBN respectively, by 2040.

- 1.20 The airport published a Sustainability Roadmap in May 2022 which sets out its aspiration to become London's first net zero carbon emissions airport³ by 2030. This includes a target of 80%⁴ for passengers to travel to and from the airport by public and sustainable transport modes by 2030. These are more ambitious than the current planning targets and would accelerate progress towards achieving the local 2040 target. These targets are embedded in the assessment as part of this TA and will become part of the airport's planning commitments should permission for the Section 73 proposed amendments be granted.

Airport Operations

- 1.21 First opened in 1987, the airport has grown from a small operation to be an important element of London's transport infrastructure. It provides convenient air travel options for both business and leisure trips attracting UK based passengers, mainly from London, alongside foreign visitors.
- 1.22 The airport provides both domestic and short haul international flights and, until Covid-19 in 2020, experienced annual passenger growth year on year ⁵ (between 2006 and 2019). In 2019, passenger levels were the highest in the airport's history, at 5.1 million, and passenger numbers were projected to reach 6.5 million in 2025.
- 1.23 During the Covid-19 pandemic the airport closed temporarily for 3 months and domestic and international travel restrictions were imposed for a sustained period of time throughout 2020 and 2021. As a result, passenger numbers were significantly impacted and levels dropped by 82% in 2020 and 86% in 2021 compared to 2019 levels. Employee numbers were also affected during this period and reduced by about a third.
- 1.24 The airport is now fully operational and passenger numbers are recovering and are expected to reach 3 million by the end of 2022. Staff recruitment has also recommenced in line with passenger demand.

¹ London City Airport- Annual Performance Report 2019

² 75% of passengers using the following public and sustainable transport modes: walking, cycling, DLR, train, underground and London Taxis

³ https://sustainability.londoncityairport.com/?_ga=2.65801516.364981698.1653473393-1005117842.1641938441

⁴ NPPF 2021- "Sustainable transport modes: Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, ultra low and zero emission vehicles, car sharing and public transport."

⁵ London City Airport (2021) Total Passenger Numbers, available here: <https://www.londoncityairport.com/corporate/Corporate-information/passenger-statistics> [Accessed 28.06.2022]

- 1.25 Current operating hours include an eight-hour night-time curfew on all flights between 22.30 and 06.30 and a 24-hour weekend closure between 12.30 on Saturday and 12.30 on Sunday. There are restrictions to terminal opening hours, being a closed between 22.30 and 04.30 Monday to Friday and 13.00 on Saturday through to 10.30 on Sunday.

Construction

- 1.26 The airport commenced an infrastructure delivery programme in 2017 as part of its CADP1 planning permission that was granted in 2016.. These initial works included a number of surface access improvements within the airport site, such as a new and extended terminal forecourt layout, new passenger and staff car parking arrangements, walkways, increasing the number of secure cycle parking, a new and extended London Taxi feeder park, a series of electric vehicle charging points and opening up and improving access from the east of Hartmann Road for car, taxi, bus, pedestrian and cycle access from Woolwich Road.
- 1.27 The CADP1 programme was due to be completed in 2025 but construction was temporarily suspended in 2020 due to the impacts of Covid-19. Chapter 6 of the ES outlines the likely programme for the remaining CADP1 works in the Development Case (DC), which are expected to be completed by the time the airport reaches 9mppa in either 2031 or 2033.

Planning History

- 1.28 The most relevant planning history to this TA is described as follows:

CADP1 Consent

- 1.29 In July 2016, planning consent was granted for the City Airport Development Programme 1 (CADP1) (ref: 13/01228/FUL). This is the extant permission for the airport and contains the conditions and obligations that control the development and operation of the airport. CADP1 comprises works to provide additional infrastructure and passenger facilities as follows:
- Demolition of existing buildings and structures;
 - Works to provide 4 upgraded aircraft stands and 7 new aircraft parking stands;
 - The extension and modification of the existing airfield to include the creation of a taxilane running parallel to the eastern part of the runway and connecting with the existing holding point;
 - The creation of a vehicle access point over King George V Dock for emergency vehicle access;
 - Laying out of replacement landside Forecourt area to include vehicle circulation, pick up and drop off areas and hard and soft landscaping;
 - The Eastern Extension to the existing Terminal building (including alteration works to the existing Terminal) to provide reconfigured and additional passenger facilities and circulation areas, landside and airside offices, immigration areas, security areas, landside and airside retail and catering areas, baggage handling facilities, storage, and ancillary accommodation;
 - The construction of a 3-storey passenger pier to the east of the existing Terminal to serve the proposed passenger parking stands;
 - Erection of a Noise Barrier at the eastern end of the proposed Pier;
 - Erection of a temporary Noise Barrier along part the southern boundary of the Application Site to the north of Woodman Street;

- Western Extension and alterations to the existing Terminal to provide reconfigured additional passenger facilities and circulation areas, security areas, landside and airside offices, landside retail and catering areas and ancillary storage and accommodation;
- Western Energy Centre, storage, ancillary accommodation, and landscaping to the west of the existing Terminal;
- Temporary Facilitation Works including the erection of a Noise Barrier to the south of 3 aircraft stands, extension to the outbound baggage area;
- Works to upgrade Hartmann Road, including opening up the eastern end to join Woolwich Manor Way;
- Landside passenger and staff parking, car hire parking and associated facilities, taxi feeder park and ancillary and related work;
- Eastern Energy Centre;
- Dock Source Heat Exchange System and Fish Refugia within King George V Dock; and
- Ancillary and related work.

1.30 The CADP1 consent was also subject to operating conditions limiting the total number of passengers per year to 6.5m and air transport movements to 111,000 per year, along with other aircraft movement limits, restrictions on the hours of operations, aircraft type limitations and airport use restrictions.

1.31 As part of the CADP1 a number of documents relating to surface access/ transport have been submitted to LBN for approval. These include a Travel Plan setting out target mode shares and associated travel initiatives for the period up to 2025.

CADP2 Consent

1.32 Alongside the CADP1 consent, outline planning permission was secured for the erection of a 260-bed hotel and associated development, referred to as the CADP2 consent (ref: 13/01373/OUT). CADP2 remains extant but has not been implemented. It is also not subject to this S73 application.

Master Plan (2020)

1.33 In 2020 the airport produced its master plan for the future which sets out the vision for sustainable and responsible growth for the period up to 2035. The master plan outlines the airport's long-term vision to accommodate up to 11.0 mppa and 151,000 Air Transport Movements (ATMs) by the mid to late 2030's. This vision shows how the airport can make the best use of its existing infrastructure within its operational boundaries and operating within strict environmental controls. It also outlines longer term ambitions to align with the Mayor of London's Transport Strategy and to achieve 90% of passenger journeys by sustainable modes by 2041.

1.34 The master plan was informed by a technical assessment of surface access considerations along with other environmental and economic assessments. The intention of the master plan is to provide the local planning authorities with clarity on the airport's future vision to inform their plan making processes.

Sustainability Roadmap (2022)

1.35 The Sustainability Roadmap sets out the airport's three key priorities to decarbonise the airport, improve the environment and help East London prosper. The Roadmap is based upon five core commitments, all contributing to achieving these priorities. In relation to transport, the key commitment is to become the best-connected airport by sustainable transport in the

UK, with 80% of all passenger journeys to the airport to be made by sustainable transport modes by 2030.

Proposed Development

- 1.36 The Section 73 (S73) application seeks to vary conditions to the current CADP1 consent to allow:
- an increase passenger throughput from 6.5mppa to 9mppa;
 - an extension of the operation hours on Saturday afternoons, from 12:30 to 18:30 (with an additional hour in the evenings for 12 arrivals only during British Summer Time)
 - an increase in the number of flights between 06.30 and 06.59 from 6 to 9;
 - consequential modifications to daily and other limits on flights; and
 - other consequential changes to conditions, as described above.
- 1.37 The proposed amendments do not seek any material changes to the physical elements of the consented CADP1 development. However, minor design changes are sought, including enhancements to the forecourt and airfield layout.

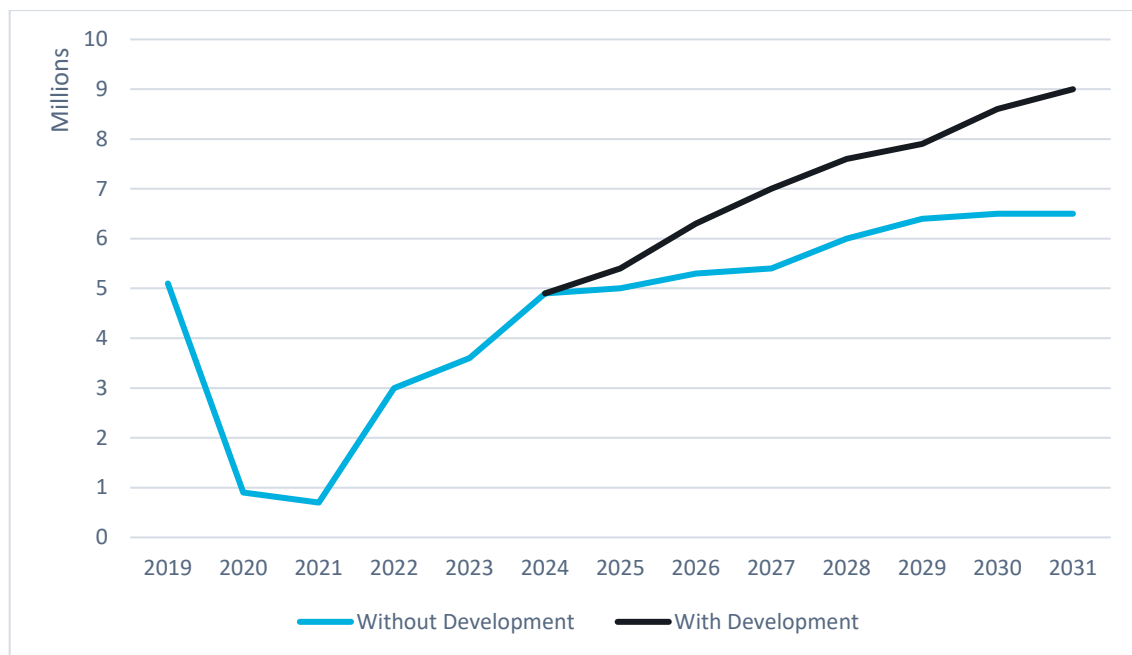
Effective change in passenger demand

- 1.38 Passenger numbers are expected to return to pre-Covid levels rapidly and thereafter the annual total passenger numbers are predicted to grow up to the maximum allowed, with passenger numbers predicted to grow faster after 2024 with the proposed development.
- 1.39 The projected passenger demand in the Do Minimum and Development Case scenarios (as set out in detail in Chapter 4 of the ES) is summarised in Table 1.1 and illustrated at Figure 1.1.

Table 1.1: Past and Predicted Future Annual Passenger Numbers (millions)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Do Minimum (Without Development)	5.1	0.9	0.7	3.0	3.6	4.9	5.0	5.3	5.4	6	6.4	6.5	6.5
Development Case (with Development)	-	-	-	-	-	4.9	5.4	6.3	7.0	7.6	7.9	8.6	9.0

Figure 1.2: Predicted Annual Passenger Numbers (millions) with/without development



Pre-Application Discussions

- 1.40 In May 2022, a formal TA scoping note was provided to TfL and the LBN (see Appendix A).
- 1.41 A pre-application meeting was held with TfL on 16 June 2022. The proposal was presented and the following was discussed:
- Summary of the current consent and the controls over the operation of the airport;
 - Overview of the approved forecourt and the proposed non-material amendments sought; through the S73 application;
 - Greater London Authority (GLA) and LBN Update / Feedback;
 - TA Scope / Modelling Methodology;
 - Existing and future transport network, including changes to DLR; and
 - Next Steps, including further meetings with stakeholders, public consultation and submission programme.
- 1.42 A formal response to the pre-application engagement was received from TfL on 11 August 2022 (see Appendix B).
- 1.43 The comments received have been taken into consideration when undertaking the detailed transport analysis and preparing this TA.
- 1.44 A pre-application consultation meeting was held with LBN highways officers on 29 June 2022 with a TfL representative also attending. This meeting presented the scope of the TA to LBN, including the following points:
- Baseline data methodology;
 - Mode share data sources;
 - Scope and methodology of the transport impact assessment;
 - Transport related document to accompany the application; and
 - Summary of the next steps, including the consultation and programme to the submission.

- 1.45 LBN's formal response was contained in the Scoping Opinion received in November 2022 which concluded the approach to the TA is acceptable. The Scoping Opinion is also attached at Appendix B.

Policy

- 1.46 The following policy and guidance have been considered when developing the proposed scheme and is discussed in further detail in Section 2 of this TA:

National Policy

- National Planning Policy Framework (2021);
- Planning Practice Guidance (PPG) - Travel plans, transport assessments and statements in decision-taking (March 2014);
- Aviation Policy Framework (March 2013); and
- Jet Zero Strategy-Delivering net zero aviation by 2050

Regional Policy

- The London Plan (2021);
- Mayor's Transport Strategy (2018); and
- TfL's Travel Planning Guidance (2013).

Local Policy

- Newham Local Plan (2018) and emerging refresh;
- Newham Infrastructure Delivery Plan (July 2022);
- Newham Travel Plan Guidance (November 2022);
- LBN Local Implementation Plan (2019);
- LBN Cycle Strategy 2017/18 – 2024/25; and
- LBN Emerging Sustainable Transport Strategy – consultation is live until 8th January 2023.

Report Structure

- 1.47 Following this introductory section, the TA is structured as follows:
- Chapter 2: summarises the existing transport policy framework including national, regional and local plans, and transport policies;
 - Chapter 3: describes the TA methodology and response to the scoping report;
 - Chapter 4: provides details of the existing air passenger, airport employee and other airport-related travel demands;
 - Chapter 5: provides a description of existing travel demands;
 - Chapter 6: provides an Active Travel Zone Assessment;
 - Chapter 7: presents the forecast travel demand for air passengers and employees by all modes of transport;
 - Chapter 8: examines the forecast public transport demand and assesses the impacts of the proposals on public transport services;
 - Chapter 9: focusses on the road traffic demand and considered the impacts of the proposals on the highway network;
 - Chapter 10: identifies the mitigation measures considered at this stage and covers both new and continuation of existing initiatives to reduce the impacts of the proposed development; and
 - Chapter 11: provides a summary and conclusions.

2 Transport Policy

- 2.1 This section of the TA summarises the relevant national, regional and local transport policy against which the S73 application has been considered.

National Policy

National Planning Policy Framework (NPPF 2021)

- 2.2 The current National Planning Policy Framework (NPPF), updated in July 2021, replaces the previous Framework published in March 2012, as revised in July 2018 and updated in February 2019.
- 2.3 The NPPF sets out several transport objectives designed to facilitate sustainable development and contribute to wider sustainability by giving people a greater choice about how they travel, in particular Section 9 ‘Promoting Sustainable Transport’.
- 2.4 Sustainable transport modes are defined in the NPPF as including, ‘any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, ultra-low and zero emission vehicles, car sharing and public transport’.
- 2.5 Paragraph 110 states:
- “In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*
- Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
 - Safe and suitable access to the site can be achieved for all users;
 - The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and
 - Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.”
- 2.6 Paragraph 111 continues that:
- “Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”*
- 2.7 In terms of planning applications NPPF states at paragraph 112(a) that development should:
- “Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas, and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use.”*

- 2.8 Paragraph 113 covers the need for the need for Travel Plans and Transport Statement / Assessments for all developments which generate significant amounts of movement.
- 2.9 Regarding parking, Paragraph 107 of the NPPF states that:
- “In setting local parking standards for residential and non-residential development, policies should take into account:*
- The accessibility of the development;
 - The type, mix and use of the development;
 - The availability of and opportunities for Public Transport;
 - Local car ownership levels; and
 - The need to ensure an adequate provision of spaces for charging plug-in and ultra-low emission vehicles.”
- 2.10 Paragraph 108 states that:
- “Maximising parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with Chapter 11 of this Framework)...”*
- Planning Practice Guidance (NPPG) ‘Travel Plans, Transport Assessments and Statements in Decision-Making’ (March 2014)**
- 2.11 This Guidance provides advice on when Travel Plans, Transport Assessments and Statements are required, and what they should contain. The Guidance is regularly updated, with the last update being 28 July 2017.
- 2.12 Transport Assessments and Statements are ways of assessing the potential transport impacts of developments and they may propose mitigation measures to promote sustainable developments. Transport Assessments are thorough assessments of the transport implications of development, and Transport Statements are a ‘lighter-touch’ evaluation to be used where this would be more proportionate to the potential impact of the development.
- 2.13 Transport Assessments and Statements can be used to establish whether the residual transport impacts of a proposed development are likely to be “severe”, which may be a reason for refusal, in accordance with NPPF.
- 2.14 Travel Plans are long-term management strategies for integrating proposals for sustainable travel into the planning process. They are based on evidence of the anticipated transport impacts of development and set measures to promote and encourage sustainable travel.
- Aviation Policy Framework (March 2013)**
- 2.15 There are multiple references to Surface Access within the 2013 Aviation Policy Framework document. Most significant is the encouragement of local involvement in developing surface access transport strategies and the need to agree and then pursue sustainable travel targets. This approach has been adopted by LCY and with an ongoing commitment to set and pursue highly sustainable mode shares for travel to and from the airport.

Jet Zero Strategy. Delivering net zero aviation by 2050

- 2.16 The Government’s policy for achieving net zero within the airport sector includes reference to surface access. At Paragraph 3.60, the policy states:

“We will work with airports, other government departments, local authorities, and other interested bodies to help airports in England improve their surface access through developing Master Plans and Surface Access Strategies.”

- 2.17 It goes on to describe the need for the right policies to be in place to encourage passengers and employees to travel on sustainable modes of transport to and from the airport where possible. There is also encouragement for airports to work with airlines, local authorities and local transport providers to consider how they can develop integrated service offerings with surface transport providers. This is the approach LCY have adopted, and the ongoing discussions with TfL and LBN have identified opportunities for encouraging sustainable travel behaviour that have been incorporated into the Travel Plan for the airport.

Regional Policy

The London Plan (March 2021)

- 2.18 The London Plan is the overall strategic plan for London which covers the period 2019 to 2041. The document provides a long-term view of London’s development to inform decision making.

- 2.19 Policy T1 Strategic Approach to Transport states:

a) *“Development Plans should support, and development proposals should facilitate:*

- *The delivery of the Mayor’s strategic target of 80 percent of all trips in London to be made by foot, cycle or public transport by 2041; and*
- *The proposed transport schemes set out in Table 10.1*

b) *All development should make the most effective use of land, reflecting its connectivity and accessibility by existing and future public transport, walking and cycling routes, and ensure that any impacts on London’s transport networks and supporting infrastructure are mitigated.”*

- 2.20 The London Plan has adopted these specific and ambitious mode share targets (policy T1) since the CADP1 application was originally approved.

- 2.21 Policy T2 Healthy Streets states:

- *“Development proposals and Development Plans should deliver patterns of land use that facilitate residents making shorter, regular trips by walking and cycling;*
- *Development Plans should:*
- *Promote and demonstrate the application of the Mayor’s Healthy Streets Approach to improve health and reduce health inequalities; reduce car dominance, ownership and use, road danger, severance, vehicle emissions and noise; increase walking, cycling and public transport use; improve street safety, comfort, convenience and amenity; and support these outcomes through sensitively designed freight facilities;*
- *Identify opportunities to improve the balance of space given to people to dwell, walk, cycle, and travel on public transport and in essential vehicles, so space is used more efficiently, and streets are greener and more pleasant;*

- *In Opportunity Areas and other growth areas, new and improved walking, cycling and public transport networks should be planned at an early stage, with delivery phased appropriately to support mode shift towards active travel and public transport. Designs for new or enhanced streets must demonstrate how they deliver against the ten Healthy Streets Indicators.*
- Development proposals should:
- *Demonstrate how they will deliver improvements that support the ten Healthy Streets indicators in line with Transport for London guidance;*
- *Reduce the dominance of vehicles on London's streets whether stationary or moving;*
- *Be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport."*

2.22 An Active Travel Zone assessment has been carried out and is reported in Chapter 6 of this TA.

2.23 Policy T3 Transport capacity, connectivity, and safeguarding notes the following:

"Development Plans should appropriately safeguard the schemes outlined in Table 10.1. Development proposals should provide adequate protection for and/or suitable mitigation to allow the relevant schemes outlined in Table 10.1 to come forward. Those that do not, or which otherwise seek to remove vital transport functions or prevent necessary expansion of these, without suitable alternative provision being made to the satisfaction of transport authorities and service providers, should be refused."

2.24 Policy T4 Assessing and mitigating transport impacts asserts that:

- "When required in accordance with national or local guidance, transport assessments / statements should be submitted with development proposals to ensure that impacts on the capacity of the transport network (including impacts on pedestrians and the cycle network), at the local, network-wide and strategic level, are fully assessed. Transport Assessments should focus on embedding the Healthy Streets Approach within, and in the vicinity of, new development. Travel Plans, Parking Design and Management Plans, Construction Logistics Plans and Delivery and Servicing Plans will be required having regard to Transport for London guidance;
- Where appropriate, mitigation, either through direct provision of public transport, walking and cycling facilities, and highways improvements or through financial contributions, will be required to address any adverse transport impacts that are identified;
- Where the ability to absorb increased travel demand through active travel modes has been exhausted, existing public transport capacity is insufficient to allow for the travel generated by the proposed developments, and no firm plans, and funding exist for an increase in capacity to cater for the increased demand, planning permission may be contingent on the provision of necessary public transport and active travel infrastructure;
- The cumulative impacts of development on public transport and the road network capacity including walking and cycling, as well as associated effects on public health, should be taken into account and mitigated; and
- Development proposals should not increase road danger."

2.25 The TA assesses the accumulative impact of the approved development and increase in surface travel demand associated with the s73 proposals.

2.26 Policy T8 Aviation states the following:

- a) *“The Mayor supports the role of airports serving London in enhancing the city’s spatial growth, particularly within Opportunity Areas well connected to the airports by public transport and which can accommodate significant numbers of new homes and jobs. This should be reflected in relevant Development Plans and other area-based strategies;*
- b) *The environmental and health impacts of aviation must be fully acknowledged, and aviation-related development proposals should include mitigation measures that fully meet their external and environmental costs., particularly in respect of noise, air quality and climate change. Any airport expansion scheme must be appropriately assessed and if required demonstrate that there is an overriding public interest or no suitable alternative solution with fewer environmental impacts;*
- d) *All airport expansion development proposals that would impact on passenger movements through London should demonstrate how public transport and other surface access networks would accommodate resulting increases in demand alongside forecast background growth; this should include credible plans by the airport for funding and delivery of the required infrastructure;*
- e) *Development proposals that would lead to changes in airport operations or air traffic movements must take full account of their environmental impacts and the views of affected communities. Any changes to London’s airspace must treat London’s major airports equitably when airspace is allocated;*
- f) *Development proposals should make better use of existing airport capacity, underpinned by upgrader passenger and freight facilities and improved surface access links, in particular rail;*
- g) *Airport operators should work closely with airlines, Transport for London and other transport providers and stakeholders to ensure straightforward, seamless and integrated connectivity and to improve facilities and inclusive access. They should also increase the proportion of journeys passengers and staff make by sustainable means such as rail, bus and cycling, and minimise the environmental impacts of airport servicing and onward freight transport;*
- h) *Development proposals relating to general and business aviation activity should only be supported if they would not lead to additional environmental harm or negative effects on health, nor impact on scheduled flight operations. Any significant shift in the mix of operations using an airport – for example, the introduction of scheduled flights at airports not generally offering such flights – should be refused.”*

2.27 In summary, Part F of Policy T8 of the London Plan states that development proposals for aviation facilities should make better use of existing airport capacity, underpinned by upgraded passenger and freight facilities and improved surface access links, in particular rail.

Mayor’s Transport Strategy (MTS) for London (March 2018)

2.28 The MTS was published in March 2018 after a detailed public consultation. The document sets out the policies and proposals to reshape transport in London over the next two decades.

2.29 The central aim is for 80% of all trips in London to be made on foot, by cycle or public transport by 2041, whilst the aim set for LBN is for 83%.

- 2.30 Central to the new strategy is the ‘Healthy Streets Approach’, which seeks to prioritise human health and experience in planning the city, and thus change London’s transport mix so the city works better for everyone. As such, the key themes of the strategy are:

- *“Healthy Streets and healthy people – creating streets and street networks that encourage walking, cycling and public transport use will reduce car dependency and the health problems it creates;*
- *A good public transport experience – public transport is the most efficient way for people to travel over distances that are too long to walk or cycle, and a shift from private car to public transport could dramatically reduce the number of vehicles on London’s streets;*
- *New homes and jobs – more people than ever want to live and work in London. Planning the city around walking, cycling and public transport use will unlock growth in new areas and ensure that London grows in a way that benefits everyone.”*

TfL Active Travel Zone Assessment Instructions

- 2.31 This document provides guidance on what to include in an Active Travel Zone Assessment and cross references the TfL Guide to Healthy Streets Indicators (November 2017).

TfL Guide to Healthy Streets Indicators (November 2017)

- 2.32 TfL’s Guide to the Healthy Streets Indicators has been prepared to support the Mayor’s Healthy Streets Approach to shaping life in London and has been prepared to support the Mayor’s Transport Strategy that sets a target for 80 percent of all journeys to be made on foot, by bicycle or using public transport by 2041.

- 2.33 It provides guidance on the indicators and what to look for when assessing the quality of streets.

Transport for London (TfL) Travel Planning Guidance (November 2013)

- 2.34 This TfL-produced document gives advice on when Travel Plans are required for developments and the level of detail required for framework and full travel plans. The guidance shows best practice examples of the type and level of travel plan targets that should be identified by the process, along with a number of example measures and an action plan.

Local Planning Policy and Guidance

Newham Local Plan (2018)

- 2.35 The London Borough of Newham Local Plan (2018) sets out the development policies to support how Newham will change up to 2033. Policies relating to transport matters and the proposed development are summarised below.

- 2.36 Policy INF2 Sustainable Transport states the following:

“Proposals that address the following strategic principles and spatial strategy and design and technical criteria will be supported:

1) Strategic Principles and Spatial Strategy

- a) *Securing a more sustainable pattern of movement in Newham, maximising the efficiency and accessibility of the borough’s transport network on foot, cycle and public transport, maximising positive health impacts, and enabling development through:*
 - i. *Raising and maintaining the safety, quality, appearance and functioning, as spaces for social activity and movement, of the public realm which comprises new and*

existing streets and other public spaces including squares, parks and riverside pathways, securing improvements to Key Corridors as per SP7, notably the key schemes highlighted in INF1:1bxiii;

- ii. Continuing the address linear and other physical barriers including rivers, railways and major roads with accessible linkages and, where applicable, providing connecting public routes through and within new development and to public transport nodes, existing neighbourhoods and facilities, and to linear routes along rivers and docks or connecting green spaces notably through the bridge and connections planned as part of the Lea River Park, the Canning Town Activity and Residential Streets, a crossing of the railway between Connaught Riverside and London City Airport DLR Station, and a crossing of the docks from ExCeL to Barrier Park via Silvertown Quays;*
- iii. Reviewing, completing, adding, maintaining and improving defined routes for walking, horse riding and cycling including the Capital Ring, and others specified in INF1 and the IDP;*
- iv. Providing safe, secure and high quality measures to encourage and facilitate cycling as an increasingly popular mode of transport, including, as appropriate, the provision of high quality, continuous dedicated infrastructure, general public realm interventions that benefit cyclists and public cycle parking, both on street and in secure, covered facilities;*
- v. Supporting improvements to local public transport services by continuing to invest in infrastructure and network enhancements, including; those specified in INF1 and the IDP, more accessible bus stops, environmental performance, communication and service enhancements and ensuring that negative impacts on transport capacity including stations are fully addressed;*
- vi. Maintaining careful management of the supply of routes and transport network capacity and parking for motor traffic in order to reduce or minimise congestion and the dominance and environmental impacts of motor-vehicular traffic in the public realm and to make space for other modes, having regard to the need to alleviate and not add to cumulative congestion issues as particularly highlighted in Congestion Zones in policy SP9, and to avoid off-site individual and in-combination effects on air/water quality in the vicinity of the Epping Forest SAC;*
- vii. Ensuring that Major development proposals that generate or attract large numbers of trips, including higher density residential and commercial development, are located in areas with good public transport accessibility or planned improvements to this level, and demonstrate the existence of, or propose new safe, attractive walking and cycling routes to public transport nodes; and*
- viii. Particularly promoting sustainable travel in defined STOAAs, through proportionate proposals including car-free development.*

2) Design and Technical Criteria

- a) In planning public transport and active travel routes across and between Strategic Sites and between new and existing communities:*
 - 800m is the maximum distance people should have to travel to bus stops;

- 200m and 400m respectively are designed as the optimal route frequencies for pedestrian and cyclists in the Arc of Opportunity to be secured where practicable at least between North Woolwich Road and the River Thames and preferably more generally
- b) *Travel Plans which show the likely impacts of trip generation, and which include acceptable, robust, monitored, proposals to counter or minimise the potential impacts identified to include 'Smarter Travel' strategies and plans; and proposed measures to facilitate and encourage more widespread walking, cycling and public transport use will be required in accordance with the following indicative thresholds:*
 - All major applications;
 - Any development in or adjacent to a Congestion Zone (SP9) and Sustainable Travel Opportunity Area (STOA); and
 - All D1 uses (including extensions).
- c) *An appropriate level of car parking and charging points and bays for electric vehicles and car clubs should be provided taking into account a combination of London Plan standards, Public Transport Accessibility Levels (PTAL), local car ownership / car sharing opportunities and local context including the availability of existing public parking (parking stress) in line with SP8; and*
- d) *High quality cycle facilities should be provided in line with the standards set out in the London Plan, and local context, as well as opportunities to promote cycle sharing to support sustainable travel to and from the site, including where appropriate associated facilities and for washing and changing facilities."*

Newham Infrastructure Delivery Plan (2022)

- 2.37 The Newham Infrastructure Delivery Plan (July 2022) sets out LBN's priorities for new infrastructure to support growth in the Borough. Transport projects of relevance to LCY include:

- Platform Improvements at London City Airport DLR station;
- Longer-term provision of a new Elizabeth line station at Silvertown adjacent to LCY; and
- Public realm improvements at Custom House station.

Newham Travel Plan Guidance (2022)

- 2.38 This recently adopted document provides guidance on Travel Planning for sites within the London Borough of Newham. It is intended for use by any party looking to prepare a Travel Plan within the borough. The guidance sets out the Council's sustainable travel policies, drivers and emerging trends that Travel Plans should respond to as they are developed. It also conveys the purpose of Travel Plans along with the evidence-based benefits that they can deliver, which can be used to achieve stakeholder buy-in and assist engagement with Travel Plan beneficiaries.
- A.1 The guidance specifies specific travel mode targets should be agreed with LBN and otherwise includes some default figures to be achieved within 5 years of a Travel Plan's implementation, including:
- At least 5% of all trips cycled
 - Combined walk, cycle, and public transport mode share of at least 83%
 - 10% reduction in Single Occupancy Vehicle (SOC) trips (or 0% if baseline mode share is <10%)

Note: the targets denote % point changes and not % change from the previous.

Newham Local Implementation Plan (2019)

- 2.39 The Newham Local Implementation Plan (LIP) (2019) sets out how the Borough proposes to deliver the Mayor's Transport Strategy (MTS). The LIP outlines our long-term transport goals and objectives for the LBN for the next 20 years. It provides a detailed three-year programme of schemes and initiatives from 2019/20 to 2021/22, devised to meet the required MTS objectives while also addressing local priorities, concerns and needs.
- 2.40 The LIP identifies how the LBN will implement a programme of physical transport improvements and other supporting programmes and initiatives towards achieving the primary MTS goals.
- 2.41 The aim of the strategy and targets sets include:
- An average of 80% of all trips in London to be made on foot, by cycle or using public transport by 2041, compared to 63% today;
 - An average of 83% of all trips in Newham to be made on foot, by cycle or using public transport by 2041, compared to 71.6% today.
- 2.42 It is worth noting that London City Airport have made financial contributions to the DLR serving the airport, which form part of these plans (set out in Table 10.1, later in the TA).

Newham Cycling Strategy 2017/18 – 2024/25

- 2.43 The Newham Cycling Strategy sets out the Council's policy to support cycling and presents a plan of action to deliver greater numbers of cycling trips in Newham, with a target of 5% of trips across the Borough to be made by bike by 2025.
- 2.44 The Borough seeks to achieve this increase with a series of targeted interventions based around five broad objectives. The Strategy also sets out steps needed to deliver a significant increase in the levels of cycling in Newham and improve safety, including the transformation of the built environment so that all residents can benefit from increased levels of physical activity, improved air quality, less noise pollution and unnecessary traffic, better access to employment and services, and the resilience this brings.
- 2.45 London City Airport have financially contributed to this via the CADP1 S106 agreement (set out in Table 10.1, later in the TA).

LBN Emerging Sustainable Transport Strategy

- 2.46 LBN intend to publish a Sustainable Transport Strategy that will support the new Local Plan and influence the future of sustainable transport schemes to be delivered across the Borough, to enable people living and working in, and visiting, Newham to travel more sustainably. The Strategy is being developed and a draft has not yet been published for public consultation.

Summary

- 2.47 The consistent theme from the policies and guidance is the need to provide suitable infrastructure and incentives to encourage the most sustainable forms of transport whilst also ensuring that highways are suitably monitored and managed to avoid excessive congestion. This TA assesses and ensures the proposed surface access strategy for the proposed development takes these into account and that it meets policy requirements.

3 Transport Assessment Methodology

Introduction

- 3.1 This chapter sets out the context and methodology of the TA. It provides a list of the data sources used for the assessment and summarises the baseline and future assessment years.

Baseline

- 3.2 This assessment uses 2019 as the baseline year as agreed with TfL and LBN, drawing on the most up to date full calendar year passenger and staff survey data pre Covid-19. For travel by all transport modes, information has been obtained from a range of sources including the following:

- LCY Airport Employee Survey 2019;
- Airport Service Quality (ASQ) passenger surveys, 2019;
- Civil Aviation Authority (CAA) passenger surveys 2019;
- DLR loadings from TfL Railplan modelling; and
- LCY Annual Performance Reports 2017, 2018 and 2019.

- 3.3 Existing surface access infrastructure conditions around the airport were established by means of desktop research, site visits and publicly available data. The following have been undertaken to assess the baseline (2019) and existing (2022) conditions:

- Public transport services and associated capacity and frequencies for DLR, rail and bus travel has been assessed where feasible by reference to the operators' published data (2019);
- Local highway network within the immediate vicinity of the airport has been analysed (2022);
- Traffic survey data has been obtained for a range of roads throughout the study area (2019);
- Historical accident data for the latest five-year period for all roads within the vicinity of the airport has been analysed (2017 – 2022);
- The ease of access to public transport facilities has been reviewed (2022); and
- CADP1 planning permission (2016) and subsequent approved strategies; and
- LCY Annual Performance Report 2019.

Assessment Scenarios

- 3.4 The following scenarios have been considered within the assessment:

- 2019 Baseline Year;
- 2031 Do Minimum (6.5 mppa) scenario ; and
- 2031 Development Case (9.0 mppa) scenario.

- 3.5 Overall transport impacts will increase as passenger numbers grow and, though there is assumed to be a gradual mode shift within the surface access modelling, the greatest overall impact arises for all modes when the airport reaches its operational limit. However, the degree of impact will also be dependent on the pattern of passenger use of the airport, for example, whether passengers are travelling for business or leisure. The TA assesses and describes the incremental changes in effects between the Do Minimum and Development Case scenarios in 2031, i.e., the effect of an additional 2.5mppa and also evaluates the future pattern of use over this time period.

Methodology and Response to Scoping Report

- 3.6 A scoping note for the TA was issued in May 2022 (See Appendix A) with responses received from TfL and LBN (see Appendix B). The TA has subsequently been prepared with cognisance of the comments received and, at TfL's request, the public transport models have also been run for 2041.

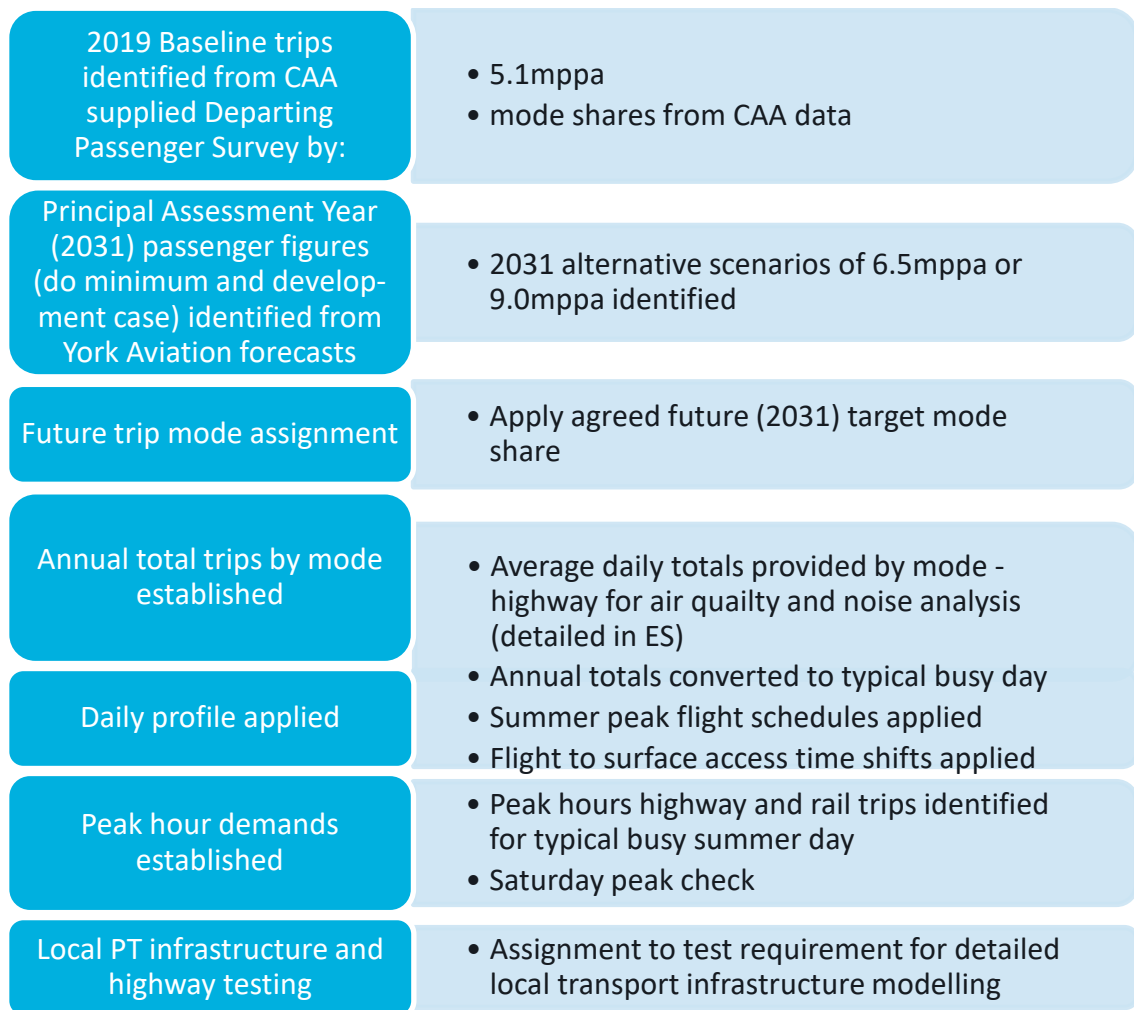
Approach to Trip Modelling

- 3.7 Set out below, in a series of diagrams, is the approach adopted for surface access trip modelling. It is considered that the assumptions made in this modelling approach are reasonable for the purposes of this TA and have been adopted to ensure robustness to the figures reported where appropriate, such as:
- Increasing future passenger and staff sustainable and public transport mode shares;
 - No deductions made for internal transfer passengers (though small, ignoring means overestimating surface access figures);
 - Daily Profile Changes in daily departure and arrival pattern, greater increase in lower utilised runway capacity but greater impact on surface access peak hour;
 - Adoption of a neutral month (busy summer day schedule) for traffic modelling even though the summer peak airport demands coincides with lower background demands on rail and road infrastructure; and

Passenger Multi Modal Trip Modelling

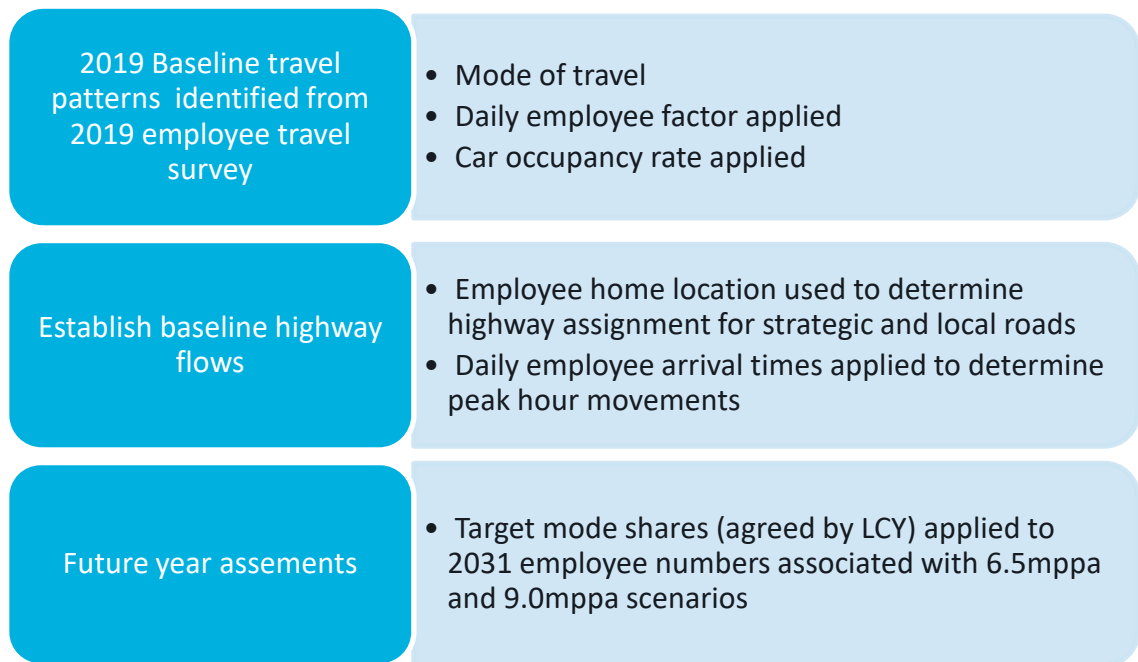
- 3.8 Figure 3.1 describes the overall steps adopted for surface access trip modelling. The detailed steps and assumptions are contained in Chapter 10 of the ES.

Figure 3.1: Approach to Passenger Surface Access modelling



- 3.9 The employee travel analysis has been based on the understanding of travel patterns gained through the travel monitoring surveys, with the most recent pre Covid-19 representative survey data used for the modelling in the TA. The steps of this modelling are set out in Figure 3.2.

Figure 3.2: Approach to Employee Surface Access modelling



- 3.10 The output from the trip modelling has then been used for the purposes of assessing likely impact from increased public transport and highway movements associated with the proposed increase in passenger numbers to 9.0mppa and employee numbers to 3,650 by 2031 (see Table 7.13 for more detail). Public Transport modelling has been undertaken using the TfL Railplan model and highway modelling using the TfL LoHAM (London Highway Assignment Model).

4 2019 Travel Demand

Introduction

- 4.1 This chapter provides a summary of surface access travel demand and characteristics of people travelling to and from the airport in 2019 to establish the baseline for the TA.
- 4.2 Demand has been assessed in the following categories:
- Air Passengers – all persons travelling to and from the airport for air travel related purposes;
 - Employees – all persons working at the airport and associated operations on-site (excluding any temporary construction staff); and
 - Miscellaneous – additional trips including business and servicing which take place at the airport.

Air Passenger Surface Access

Air Passenger Demand

- 4.3 Air passenger flows account for the largest proportion of travel to and from the airport. Prior to the Covid-19 disruptions from March 2020 until the time all UK Government restrictions were lifted in February 2022, there had been a steady growth in passenger numbers for many years. Table 4.1 shows the pre-pandemic growth since 2012.

Table 4.1: CAA reported Annual Passenger Movements at London City Airport (2012 – 2019)

Year	Annual Passengers
2012	3.0 million
2013	3.4 million
2014	3.6 million
2015	4.3 million
2016	4.5 million
2017	4.5 million
2018	4.8 million
2019	5.1 million

Transfer Passengers

- 4.4 The airport does not have dedicated flight transfer facilities and is not recognised as a hub airport and though there are some identified transfer activity at the airport (less than 1% of passengers), for robustness it has been assumed that there are zero transfer passengers for modelling purposes, i.e., all airside PAX movements will result in an equivalent landside surface access passenger movement

Air Passenger Travel Modes

- 4.5 With the exception of the lockdown period, quarterly passenger surveys have been undertaken every year at LCY. Further detail is provided in the following paragraphs.

ACI ASQ Surveys

- 4.6 Historically, LCY's Annual Performance Reports have reported passenger travel modes to the airport based on data collected as part of the Airport Service Quality (ASQ) programme undertaken by the Airports Council International (ACI) as set out in Table 4.2:

Table 4.2: Summary passenger travel statistics reported in Annual Performance report

Mode	2017 (%)	2018 (%)	2019 (%)
DLR	60	64	64
Bus	7	4	1
London Taxi	1	1	8
Minicab	14	12	8
Ride Sharing / Transport as a service (e.g., Uber)	5	6	7
Private Car (+ Car Rental)	11	11	9
Other/Transfer	2	2	3
TOTAL	100	100	100

Source: LCY Annual Performance Reports⁶

- 4.7 The ASQ surveys are carried out at airports around the world with the last ASQ (complete year) survey understood to have been carried out at LCY in 2019. The principal focus of the surveys was based upon the experience of arriving and departing passengers at each airport with a small range of questions asked about passenger travel. LCY have previously relied on ASQ data as it provides information on both arriving and departing passengers while also providing information that can be compared with similarly size airports around the world, not just in the UK.
- 4.8 Though the ASQ surveys provides comprehensive data that is comparable internationally, it does not provide the same level of detail as the CAA surveys with regard to passenger surface access travel behaviour. Unlike CAA data, ASQ data has a smaller sample size and is not weighted to reflect different flight destinations or passenger types.
- 4.9 Therefore, although the ASQ surveys do capture both arriving and departing passengers (in contrast to the CAA surveys which only capture departing passengers), the much smaller sample size and the lack of weighting does lead to a less robust picture of surface passenger access at any airport. The ASQ surveys were suspended at the airport during the Covid-19 pandemic and have not recommenced. Therefore, this TA assumes that CAA surveys will be the sole dataset available going forward.

CAA Surveys

- 4.10 While surveys were curtailed at the height of the Covid-19 pandemic, the CAA has recommenced its full annual surveys of departing passengers in the UK's principal airports, including LCY. A

⁶ <https://www.londoncityairport.com/corporate/Action-Plans-and-Reports/Annual-Performance-report>

wide range of questions are asked about passenger travel and the survey data is weighted to represent more specific passenger information.

- 4.11 CAA survey data has been used for recent analysis and planning application reporting at London Stansted and Bristol airports and by TfL to complement Heathrow's own analysis of the potential surface access travel for the third runway and expansion at LHR.
- 4.12 The CAA annual passenger surveys have shown a long-term trend of increasing public transport use by passengers to reach the airport, both in mode share percentage and absolute numbers, as set out in Table 4.3.

Table 4.3: CAA reported Passenger Public Transport Travel 2007-2019

Year	Public Transport	Equivalent Patronage
2012	50.0%	1.5 million
2013	46.4%	1.4 million
2014	46.3%	1.6 million
2015	52.1%	1.9 million
2016	54.7%	2.3 million
2017	45.2%	2.0 million
2018	54.1%	2.4 million
2019	51.9%	2.5 million

Source: CAA Annual Departing Passenger Survey reports Tables 6a

- 4.13 The most recent CAA Annual Departing Passenger Survey reports also provides a more detailed breakdown of the main mode of travel as shown in Table 4.4.

Table 4.4: Main surface Access to City Airport 2017-2019

Year	2017	2018	2019
Car	15.2%	11.5%	11.2%
Taxi/Minicab/Uber	39.7%	37.9%	33.5%
Bus/Coach	2.8%	2.2%	1.3%
Rail	27.4%	28.6%	3.0%
Tube/Metro/Subway/Tram	12.6%	17.8%	49.5%
Other	2.5%	2.0%	1.4%
Total	100%	100%	100%

- 4.14 For the purposes of this TA, the surface access travel modes for air passengers at the airport have been derived from the most recent validated pre-Covid CAA passenger survey data (2019). The main mode of travel is shown in Table 4.5. Table 4.5 also contains a comparison with the 2019 ASQ data.

Table 4.5: 2019 Passenger Main Mode of Travel (CAA and ASQ, 2019)

Mode	CAA - 2019	ASQ – 2019
Car	11.2%	9%
London Taxi	13.3%	25%
Minicab	12.3%	
Uber	10.5%	
Bus/Coach	1.3%	1%
Rail	3.0%	64%
Tube/DLR	49.5%	
Other	1.4%	1
Total	100%	100%

Source: CAA Departing Passenger survey report 2019 - Table 7a (figures rounded) - <https://www.caa.co.uk/Data-and-analysis/UK-aviation-market/Consumer-research/Departing-passenger-survey> and LCY Annual Performance Report 2019

Table 4.6: Observed and Target Future Year Passenger Final Mode of Surface Access

Mode	2019 (CAA)	2031
DLR	50.0%	61%
Bus	1.1%	5%
Walk	1.5%	3%
Cycle	0.0%	1%
Car – parked	1.8%	1.6%
Car – drop-off	9.6%	8.4%
London taxi	13.3%	10%
Minicab	12.3%	10%
Uber	10.5%	
Other	0.0%	0%
TOTAL	100.0%	100%

Air Passenger Types

- 4.15 The air passenger modal split is influenced by journey purpose (and proportional use of the airport for journey purpose is anticipated to vary with time):
- UK resident travelling for leisure purposes (UK Leisure);
 - UK resident travelling for business purposes (UK Business);
 - Foreign resident travelling for leisure purposes (Foreign Leisure); and
 - Foreign resident travelling for business purposes (Foreign Business).
- 4.16 Table 4.7 sets out the proportions of passenger trips per category in 2019. This illustrates that the largest proportion of passengers at the airport were 'UK Leisure' at 34%. This was followed by 'UK Business' at 28%. Table 4.7 also shows the overall split between business and leisure passengers was 54% leisure to 45% business (figures rounded).

Table 4.7: CAA reported Volume of Passengers by Type (2019)

Passenger Type (000's)								Total
UK Leisure		UK Business		Foreign Leisure		Foreign Business		
000's	%	000's	%	000's	%	000's	%	000's
1,715	34%	1,445	28%	1,042	20%	886	17%	5,088

(Note figures and % rounded)

- 4.17 The data collected for the CAA passenger surveys also provides details of the different characteristics of surface travel to and from the airport for the varying passenger types. Table 4.8: sets out the modal differences according to the passenger typologies above.

Table 4.8: Last Mode Share According to Passenger Type (2019 CAA data)

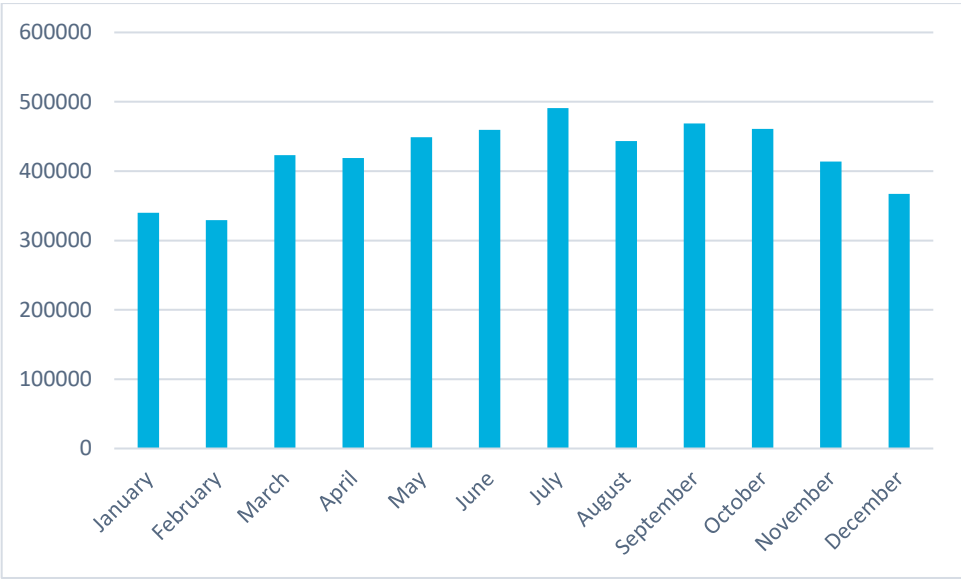
Mode of Travel	Percentage Split (%)			
	UK Leisure	UK Business	Foreign Leisure	Foreign Business
Private Car	4%	0%	1%	0%
Car Passenger	6%	3%	15%	9%
Taxi/Rentals	41%	46%	33%	30%
Bus/Coach	0%	1%	1%	2%
Rail/UG/DLR	48%	47%	48%	54%
Other	1%	4%	1%	5%

Any discrepancies are due to rounding.

Air Passenger Annual Demand Profiles

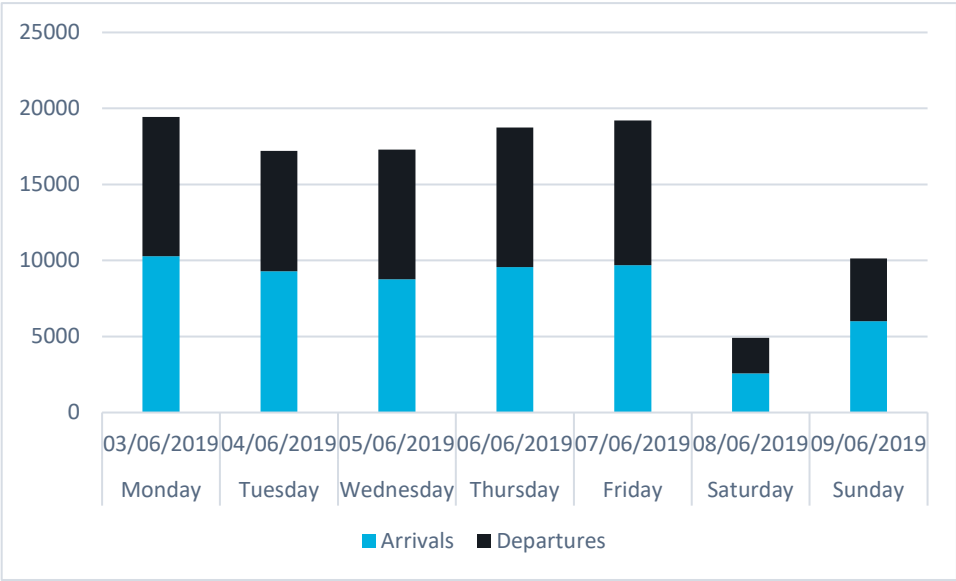
- 4.18 The airport operates every day of the year (except Christmas Day) between 06:30 and 22:00 Monday to Friday, with the airport closing at 12:30 on Saturdays and reopening at 12:30 on Sundays. There is also a later opening time on Bank Holidays and Public Holidays of 09:00. The passenger numbers vary throughout the year, with the summer months being the busiest as shown in Figure 4.1 for 2019, reflecting the use of the airport for holiday related travel. The peak demand coincides with generally lower demands on off-site transport infrastructure such as the local highway network.

Figure 4.1: 2019 Monthly Total Passenger Numbers



- 4.19 The passenger numbers for every flight using the airport during 2019 have been analysed to understand the baseline movements. The average daily number of passengers handled by the airport was 14,010 with a weekday average of 16,735 passengers.
- 4.20 The airport operating hours are restricted at the weekend and accordingly, weekdays are considerably busier than weekends as illustrated in Figure 4.2.

Figure 4.2: Typical Weekly Passenger Profile



- 4.21 For the purposes of analysis and comparison with future years, the weekday 85th percentile figure is considered to be representative of a typical busy summer weekday for the airport. For the 2019 base year this was the 6th of June, when a total of 18,737 passengers were handled at the airport.

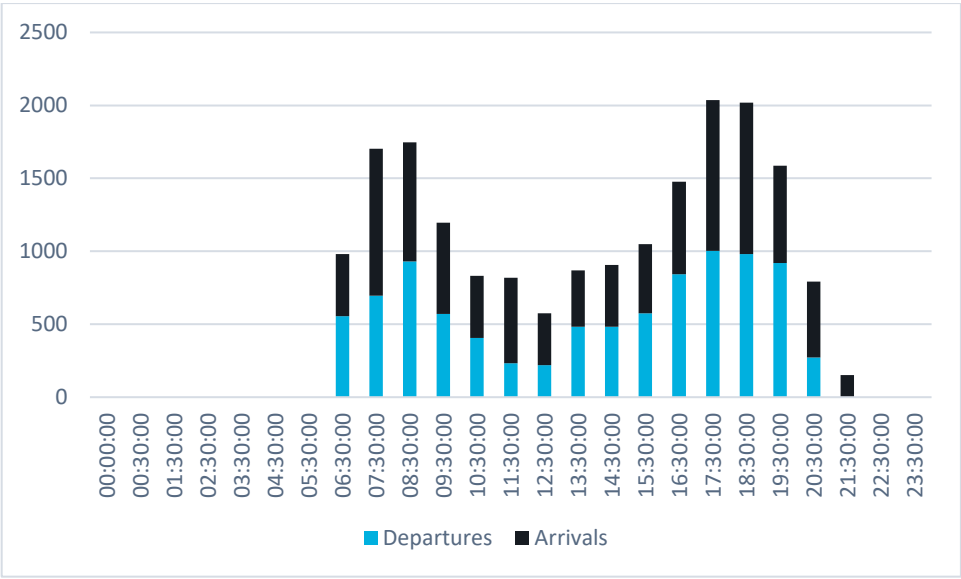
Air Passenger Daily Demand Profiles

- 4.22 On the 6th of June 2019 there was a total of 289 flights and the detailed passenger loadings have been collated into hour long slots as set out in Table 4.9 and illustrated in Figure 4.3.

Table 4.9: 2019 Busy Summer Day Passenger Numbers

Hr Commencing	Departing Passengers	Arriving Passengers	Total
00:00:00	0	0	0
00:30:00	0	0	0
01:30:00	0	0	0
02:30:00	0	0	0
03:30:00	0	0	0
04:30:00	0	0	0
05:30:00	0	0	0
06:30:00	555	426	981
07:30:00	695	1008	1703
08:30:00	931	816	1747
09:30:00	571	626	1197
10:30:00	407	424	831
11:30:00	233	585	818
12:30:00	220	354	574
13:30:00	483	386	869
14:30:00	484	423	907
15:30:00	576	473	1049
16:30:00	843	633	1476
17:30:00	1002	1034	2036
18:30:00	981	1037	2018
19:30:00	920	666	1586
20:30:00	272	521	793
21:30:00	0	152	152
22:30:00	0	0	0
Total	9173	9564	18737

Figure 4.3: 2019 Typical Busy Summer Day Passenger Movements



Note: represents recorded Passengers for 06/06/2019

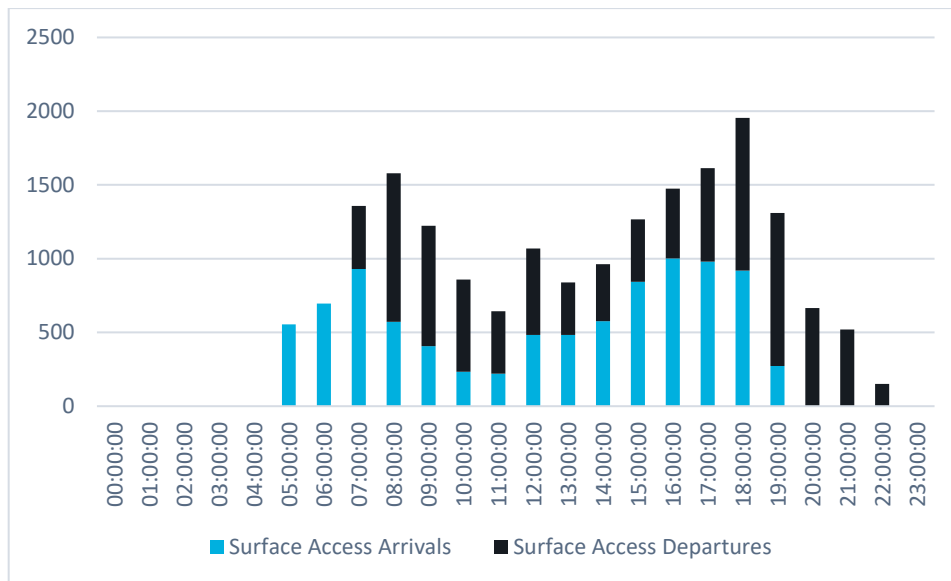
Air Passenger Surface Access Travel Demand

- 4.23 To understand surface access travel demand it is necessary to account for airport throughput times. There is a lag in time between travel activity and flight times. Past analysis of operational data and forecourt activity indicates that at London City Airport passengers typically arrive on average 90 minutes prior to their flight departure and leave the airport 30 minutes post flight arrival.
- 4.24 The passenger flight departure and arrival data has been translated to landside surface access movements taking into account these lag times, as set out in Table 4.10 and illustrated in Figure 4.4.

Table 4.10: 2019 -Typical Busy Summer Day Landside Passenger Surface Access Travel Movements

Hr Commencing	Arrivals	Departures	Total
00:00:00	0	0	0
01:00:00	0	0	0
02:00:00	0	0	0
03:00:00	0	0	0
04:00:00	0	0	0
05:00:00	555	0	555
06:00:00	695	0	695
07:00:00	931	426	1357
08:00:00	571	1008	1579
09:00:00	407	816	1223
10:00:00	233	626	859
11:00:00	220	424	644
12:00:00	483	585	1068
13:00:00	484	354	838
14:00:00	576	386	962
15:00:00	843	423	1266
16:00:00	1002	473	1475
17:00:00	981	633	1614
18:00:00	920	1034	1954
19:00:00	272	1037	1309
20:00:00	0	666	666
21:00:00	0	521	521
22:00:00	0	152	0
23:00:00	0	0	0
Daily Total	9173	9564	18737

Figure 4.4: Typical Busy Summer Day Landside Passenger Surface Access Travel Movements

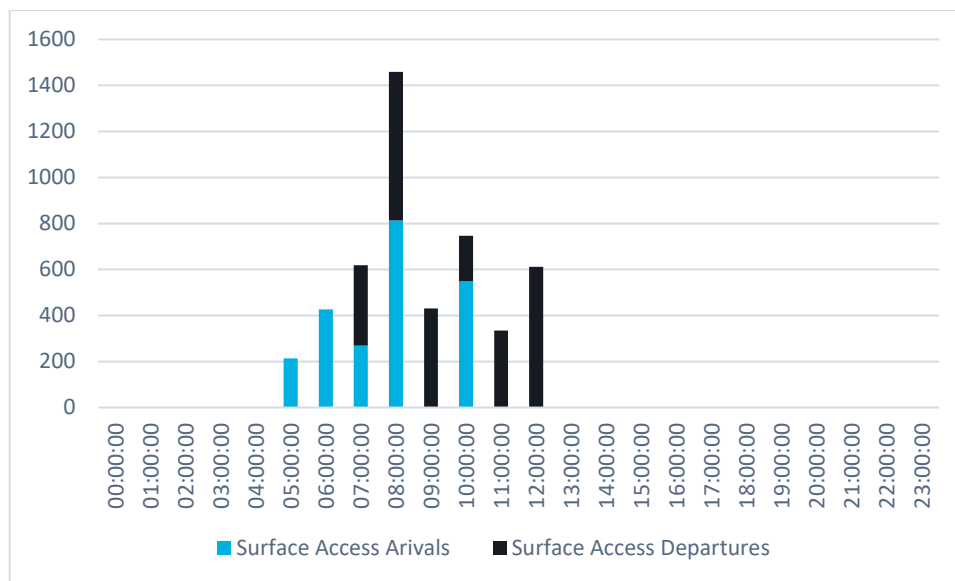


Saturday

- 4.25 A similar exercise as above has been carried out for a typical busy Saturday (8th June 2019), which results in the surface access movements set out in Table 4.11 and illustrated in Figure 4.5.

Table 4.11:2019 Typical Busy Saturday Landside Passenger Surface Access Travel Movements

Hr Commencing	Arrivals	Departures	Total
00:00:00	0	0	0
01:00:00	0	0	0
02:00:00	0	0	0
03:00:00	0	0	0
04:00:00	0	0	0
05:00:00	214	0	214
06:00:00	426	0	426
07:00:00	269	350	619
08:00:00	814	645	1459
09:00:00	0	430	430
10:00:00	549	197	746
11:00:00	0	335	335
12:00:00	0	611	611
13:00:00	0	0	0
14:00:00	0	0	0
15:00:00	0	0	0
16:00:00	0	0	0
17:00:00	0	0	0
18:00:00	0	0	0
19:00:00	0	0	0
20:00:00	0	0	0
21:00:00	0	0	0
22:00:00	0	0	0
23:00:00		0	0
Daily Total	2272	2568	4840

Figure 4.5: Typical Busy Summer Saturday Landside Passenger Surface Access Travel Movements

Employee Surface Access

Employee Demand

- 4.26 In 2019, there was a total of 2,310 employees at the airport, employed directly by the airport and across the supply chain, but excluding construction workers that were delivering elements of the consented CADP1 development. To understand how this translates to a typical busy day of employee travel demand it is necessary to take account of working patterns. Employees typically worked 45 weeks per year and 5 days per week. This equates to a daily attendance factor of 0.62 per employee ($45/52 \times 5/7$) such that on a typical day 1,428 employees could be expected to travel to and from the airport, i.e., a total of 2,856 trips.

Employee Travel Modes

- 4.27 Pre-Covid-19, 2019 employee surveys were used to understand 2019 baseline travel patterns. They indicated the travel modes as set out in Table 4.12.

Table 4.12: 2019 Final Mode Target Employee Mode Shares

Mode	Proportion
DLR	29%
Bus	6%
Walk	2%
Cycle	3%
Car driver	57%
Car passenger	1%
London Taxi/minicab	0%
Motorcycle	1%
Other	1%
TOTAL	100%

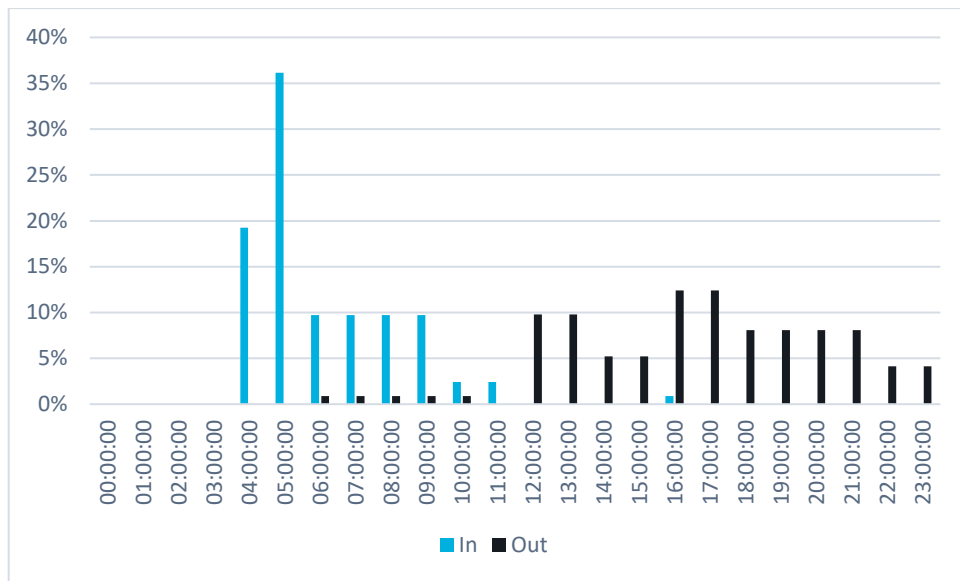
Working Patterns

- 4.28 Employee working patterns data has been analysed with raw data taken from information provided by LCY and the 2019 employee travel survey. The time of travel to and from work is influenced by operational hours, particularly for ground-based staff and flight profiles for airline staff. The aggregated data is shown in Table 4.13 and Figure 4.6.

Table 4.13: Daily Employee Working Patterns (as of 2019)

Hr Commencing	Arrive	Depart
00:00:00	0%	0%
01:00:00	0%	0%
02:00:00	0%	0%
03:00:00	0%	0%
04:00:00	19%	0%
05:00:00	36%	0%
06:00:00	10%	1%
07:00:00	10%	1%
08:00:00	10%	1%
09:00:00	10%	1%
10:00:00	2%	1%
11:00:00	2%	0%
12:00:00	0%	10%
13:00:00	0%	10%
14:00:00	0%	5%
15:00:00	0%	5%
16:00:00	1%	12%
17:00:00	0%	12%
18:00:00	0%	8%
19:00:00	0%	8%
20:00:00	0%	8%
21:00:00	0%	8%
22:00:00	0%	4%
23:00:00	0%	4%

Figure 4.6: Employee Weekday Travel Pattern (as of 2019)



Employee Surface Access Travel Demand

- 4.29 Applying the daily attendance factor and working patterns to the 2019 employee figures results in the baseline travel demand as set out in Table 4.14.

Table 4.14: 2019 Employee Weekday Travel Demand

Hr Commencing	Arrive	Depart
00:00:00	0	0
01:00:00	0	0
02:00:00	0	0
03:00:00	0	0
04:00:00	275	0
05:00:00	516	0
06:00:00	139	13
07:00:00	139	13
08:00:00	139	13
09:00:00	139	13
10:00:00	35	13
11:00:00	35	0
12:00:00	0	140
13:00:00	0	140
14:00:00	0	74
15:00:00	0	74
16:00:00	13	177
17:00:00	0	177
18:00:00	0	116
19:00:00	0	116
20:00:00	0	116
21:00:00	0	116
22:00:00	0	59
23:00:00	0	59
00:00:00	0	0

Airport Deliveries

- 4.30 Recorded data for miscellaneous vehicle movements visits to the airport is available from 2019 records and are set out in Table 4.15. Total traffic movements will be twice the number of visits to account for movements to and from the airport.

Table 4.15:2019 Recorded servicing activity

Function/location	Deliveries	Frequency (deliveries per)	per annum	per day (assume 6 days)	% HGV
Concessions	125	week	6,500	1,083	50%
Hertz	1	day	365	61	50%
ABC car hire	27	week	1,404	234	25%
Europcar	18	week	936	156	20%
Waste	174	week	9,048	1,508	100%
Jet Centre	15	week	780	130	50%
Fuel Farm	200	month	2,400	400	100%
Blue Shed	30	fortnight	780	130	10%
VCP	1738	month	20,856	3,476	50%
City Aviation House	169	fortnight	4,394	732	50%
TOTAL			47,463		60%

5 Existing Transport Infrastructure

Introduction

- 5.1 This chapter provides a summary of the public transport network, services and usage, a description of existing traffic flows on the strategic and local road network serving the airport, and facilities for pedestrians and cyclists.
- 5.2 In line with advice from TfL and LBN, 2019 has been adopted as the baseline year for transport analyses although interim transport enhancements have also been considered.

Public Transport

- 5.3 Figure 5.1 shows public transport infrastructure in the vicinity of the airport.

Figure 5.1: Public Transport Stations and Bus Stops



- 5.4 London City Airport DLR Station is located on the Woolwich branch of the DLR and is situated adjacent to the main terminal building providing a direct connection between the station and main terminal building. London City Airport DLR Station is step free.
- 5.5 The DLR operates between 05:30 – 00:30 Monday to Saturdays and between 07:00 – 23:58 on Sundays. Trains arrive and depart from London City Airport DLR Station approximately every 5 minutes in both directions in the morning and evening peak periods. Outside of the peak

period there is a frequency of every 6 minutes. Eastbound services continue to Woolwich Arsenal DLR. Meanwhile, westbound services run towards Bank and Stratford International.

- 5.6 Substantial funding has already been provided as part of the existing CADP1 consent towards purchasing new DLR carriages, service enhancements and additional station staff at London City Airport DLR station (see Table 10.1 Later in TA).
- 5.7 A number of London Underground, Overground and National Rail services are accessible from these stations. Canning Town is the key interchange for and provides access to the Jubilee Line on the London Underground and for other DLR services to Tower Gateway and Beckton. To access services to Lewisham, it is possible to change service at Poplar DLR station on the Bank branch.
- 5.8 This provides direct connections to Woolwich in the south, Stratford to the north and Bank in Central London to the west. It provides a direct connection to Jubilee, Hammersmith & City and District Line London Underground services, and C2C national rail services.

Elizabeth Line

- 5.9 The Elizabeth line opened for passenger services between Paddington and Abbey Wood on 24 May 2022 and on 6 November 2022 was integrated with services to Reading, Heathrow and Shenfield. The Elizabeth line serves Custom House (for ExCeL), 2.2km to the north-west of the airport. This provides a direct, frequent rail service to several Central London rail terminal such as Liverpool Street, Farringdon, and Paddington, and connect directly to many London Underground services at Tottenham Court Road and Bond Street. It additionally provides a direct connection to Heathrow Airport.
- 5.10 The airport indirectly benefits from the opening of the Elizabeth line in two ways. Some passengers and staff can be expected to use the bus connection to and from Custom House to pick up Elizabeth line services. At just over 2 km away its also within cycling distance⁷, but less walkable especially for those with luggage. Also, rail passengers who used to cross the Thames using the DLR airport branch could be anticipated to switch to the Elizabeth line, freeing up space for airport demand.
- 5.11 Timetables for the Elizabeth line are still evolving but those applicable from 11 December 2022 are as shown in Table 5.1:.

Table 5.1: Weekday Elizabeth Line First/Last Train Services

Elizabeth Line Service	First Train		Last Train	
	Mon-Fri	Saturday	Mon-Fri	Saturday
Abbey Wood-Heathrow	05:34		22:46	
Heathrow-Abbey Wood	05:16		23:16	
Shenfield-Liverpool Street	04:44		23:56	
Liverpool Street-Shenfield	05:25		00:33	

- 5.12 Frequencies are illustrated in Table 5.2:.

⁷ Non-folding bikes are only accepted between 09.30 and 16.00.

Table 5.2: Elizabeth Line Frequencies

Elizabeth Line Service	Frequency (tph)	
	Mon-Fri	Saturday
Abbey Wood- Heathrow	Up to 8 (AM/PM peak periods)	Up to 10
Liverpool Street - Shenfield	Up to 10 (AM/PM peak periods)	Up to 12

- 5.13 Custom House (for ExCeL), which is served by DLR services on the Beckton branch, can be accessed from LCY through interchanging from the DLR at Canning Town. TfL have recently rerouted bus service 474 to provide a direct connection between Custom House station and London City Airport via the Elizabeth line. This bus journey takes approximately 8 minutes.

Buses

- 5.14 London Buses directly serve the airport, which include the 473 (Stratford – North Woolwich) and the 474 (Canning Town – Manor Park), frequencies of which are shown in Table 5.3:.

Table 5.3: Current Bus Services

Time of Day	Bus Route & Frequency per Hour	
	473	474
AM Peak (0700-1000)	5-6	5-6
Off Peak (1000-1600)	5-6	5-6
PM (1600-1900)	5-6	5-6
Overnight	-	2-3

Silvertown Tunnel and Buses

- 5.15 This new 1.4km twin-bore road tunnel under the Thames will be the first in London in over 30 years. A modern tunnel combined with a user charge and improved cross-river public transport will improve the reliability and resilience of the wider road network. The plan is to complete construction by 2025.
- 5.16 The Tunnels provides more opportunities to cross the river by public transport with a network of zero-emission buses offering new routes and better access to more destinations. Pending finalisation of service patterns, the advice from TfL on the TA assumptions was the provision of a new 5 bus per hour route from the south end of the Greenwich peninsula via Silvertown Tunnel and North Woolwich Road to London City Airport and then on to Beckton via Connaught Bridge, Stansfield Road and Tollgate Road. This should be fully operational once the Silvertown Tunnel opens in 2025.

River Bus Services

- 5.17 The nearest Thames Clipper pier is Royal Wharf which is wheelchair accessible and served by the RB1 service that operates weekday mornings and evenings. This opened in November 2019. Access from the airport to the pier is either by bus and a circa 600 metre walk from the nearest bus stop to the pier or a direct 10 minute cycle ride. The new service offers journey times of 38 minutes between Royal Wharf Pier and central London (London Bridge City Pier),

with boats running a direct service every 20-30 minutes during morning and evening peak times and every 30 minutes during the day at weekends

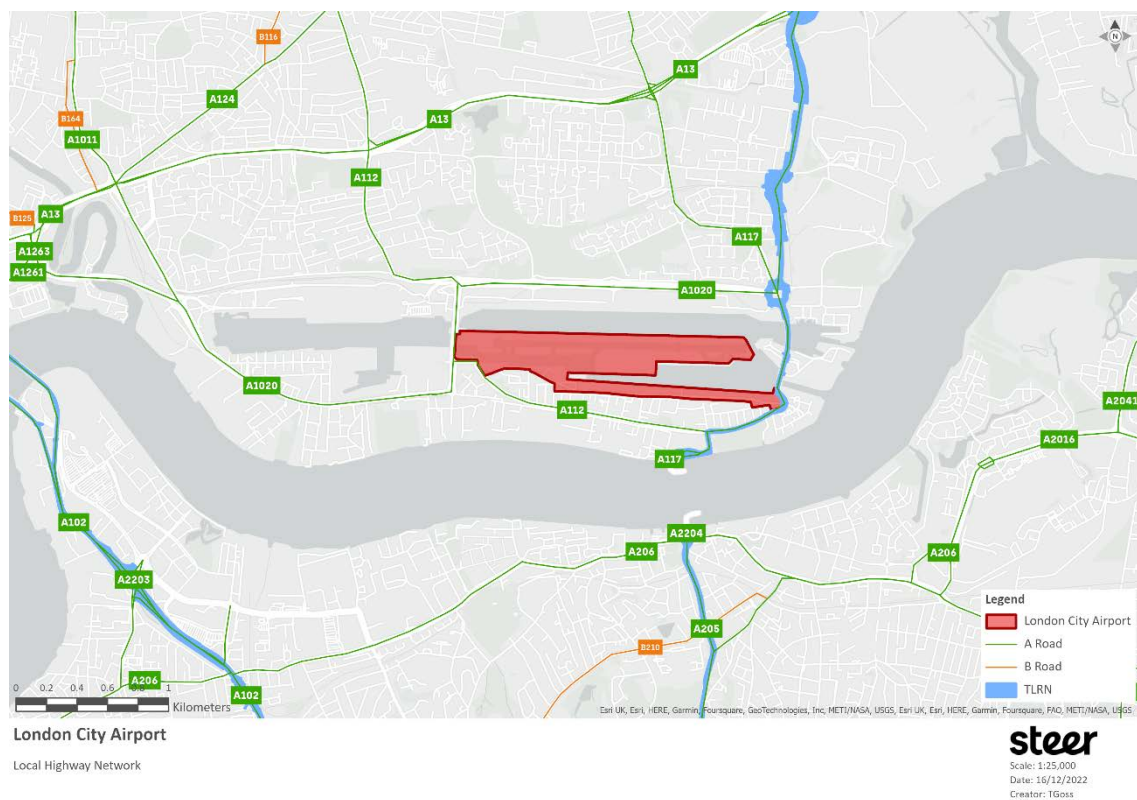
Coach Services

- 5.18 There are no direct coach services servicing London City Airport, but the infrastructure is in place to accommodate a drop off and pick up area for a coach in the terminal forecourt.

Local Highway Network

- 5.19 The airport is served directly from the A112 by Hartmann Road. The A112 is relatively lightly trafficked near the airport and is a Principal Road that provides access to the airport and Silvertown Area from the A13, which is a Strategic Road. A local highway plan is provided at Figure 5.2.

Figure 5.2: Local Highway Network



Parking Provision

- 5.20 Passenger parking is currently provided in the airport's Main Stay car park. This has provision for up to 30 one hour stay parking spaces and 521 long-stay spaces, including 50 spaces for car rentals, i.e., a total of 551 spaces. A further 64 spaces for car rentals are provided off Hartmann Road. Staff parking is currently provided in separate car parks to the west and east of Hartmann Road, 341 car parking spaces in total. Staff can also use the Main Stay car park if they have a medical exemption. Overall, current car parking provision is 956 spaces.
- 5.21 CADP1 provides for increasing the total number of car parking spaces to 1,251 (passengers, staff and car rental).
- 5.22 To accommodate cyclists accessing the airport by bicycle there are 20 sheltered cycle parking spaces located beneath the DLR viaduct and adjacent to the motorcycle parking area opposite

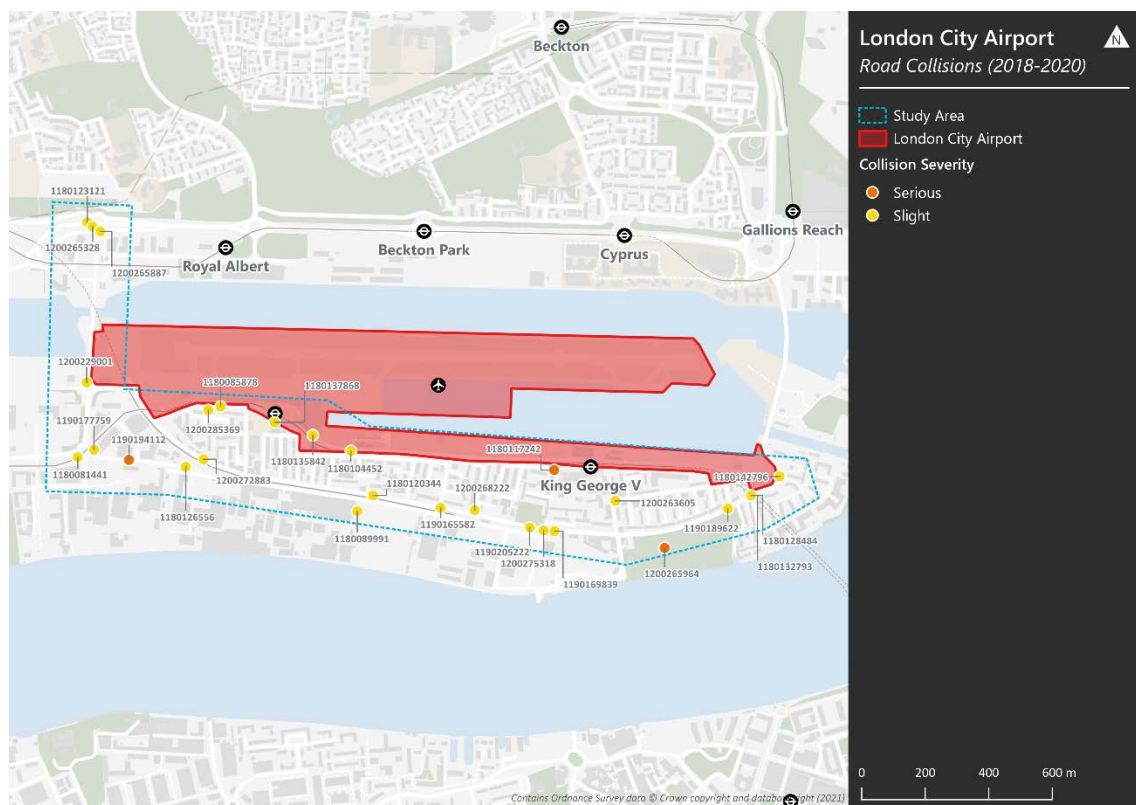
the passenger drop-off area on Hartmann Road. There are 58 cycle parking spaces dedicated for staff use, 48 are located within secure bike stores outside City Aviation House (CAH) and the Western car park (24 at each location) and a further 10 lockable cycle stands outside CAH.

- 5.23 The consented CADP1 scheme provides for increasing the total number of cycle parking spaces to 128 (40 passengers and 78 staff).

Road Accidents

- 5.24 Figure 5.3 shows the collisions classified by severity on the local highways where anticipated increase in traffic exceeds 10%, i.e., roads where increase in flows could exacerbate any existing significant safety issues. Serious collisions are shown in orange and slight collisions in yellow. There were no recorded fatal collisions.

Figure 5.3: Personal Injury Accidents (2018-2020)



- 5.25 As shown in Figure 5.3, there are no serious or fatal KSI clusters along the local access routes based on the most recent three-year period of collision (01/01/2018 - 31/12/2020) obtained from TfL. A total of 23 slight and 3 serious collisions are recorded within the study area. No fatal collisions were recorded. There are two clusters of collisions as follows:

Cluster 1: Connaught Roundabout

- 5.26 Three slight collisions were recorded in this area, one in 2018 and the remaining in 2020.
- 5.27 The first collision involved a bus in which a passenger was slightly injured. The second involved a car slightly injuring a cyclist and the final collision involved two cars.

Cluster 2: Albert Road / Antwerp Way / Factory Road

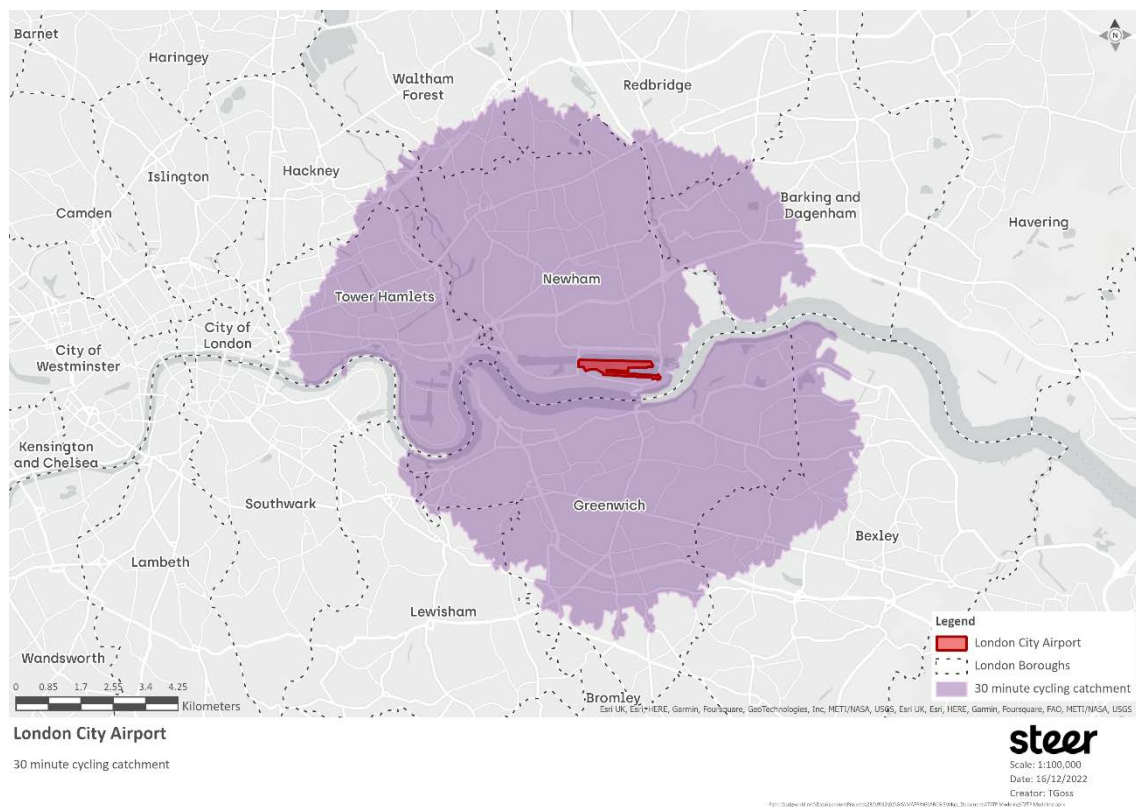
- 5.28 A cluster of three slight collisions were recorded on this junction, the first taking place in 2019 and the remaining two collisions in 2020.

- 5.29 The first collision involved a car driver hitting a kerb, causing a slight injury to a pedestrian.
- 5.30 The two collisions that took place in 2020 both involved cars approaching the junction, resulting in slight injuries.
- 5.31 There appear to be no significant safety problems on the local highway that may be exacerbated by any increase in traffic associated with the proposals and no physical interventions which might reduce the frequency and severity of collisions are recommended at this time.

Pedestrian and Cycle Infrastructure

- 5.32 As noted at paragraph 5.21, cycle parking provision at the airport currently comprises 20 spaces for passengers and 58 spaces for staff.
- 5.33 Sustrans, the national cycling charity, sets out a number of cycling routes within the vicinity of London City Airport. Route 13 travels to the north of the airport along the Royal Albert Dockside path. Route 13 connects to Tower Bridge in the west and travels further east adjacent to Albert Way. Route 13 also links to TfL Cycle Superhighway 3 at Blackwall towards central London and at the junction of the A1020 with the A13 towards Barking.
- 5.34 A 30-minute cycle catchment is shown at Figure 5.4.

Figure 5.4: 30-Minute Cycle Catchment

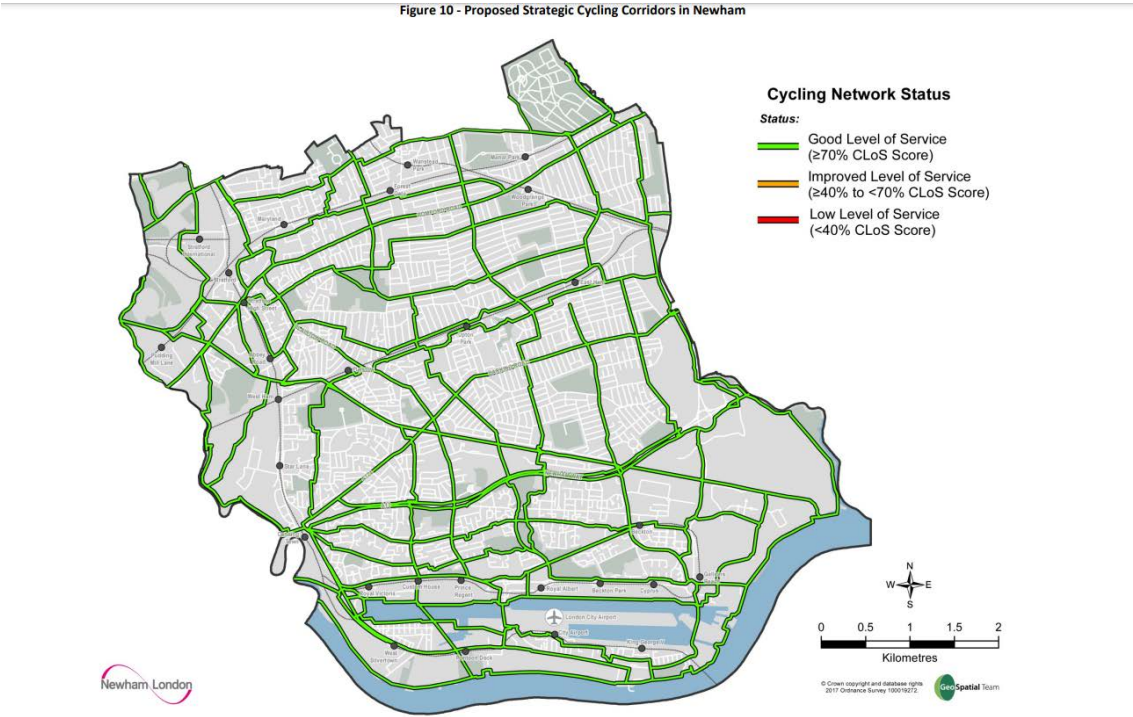


- 5.35 The existing cycle network is shown in Figure 5.5, whilst the Newham Cycle Strategy includes a plan indicating future cycle network status, replicated at Figure 5.6. This indicates a comprehensive network of routes suitable for cycling to and from the airport.

Figure 5.5: Existing Formal Cycle Network



Figure 5.6: Proposed Strategic Cycling Corridors (Newham Cycle Strategy)



Local Amenities

- 5.36 The airport is accessible on foot from the surrounding residential and commercial areas. The footways on the surrounding highways are lit, well-maintained, of sufficient width for their intended purpose and free of surplus street furniture. There are defined routes for pedestrians to use in and around the airport and there are controlled pedestrian facilities at the traffic signal-controlled junction of Connaught Road and Hartmann Road. A detailed assessment is provided at Chapter 6 of this document.
- 5.37 These facilities enable local residents, local employees and visitors to the area to walk to the airport in order to board the bus services and the DLR.

6 Active Travel Zone Assessment

Introduction

- 6.1 This chapter presents an assessment of the routes for people travelling to/from the airport to the key destinations in the Active Travel Zone (ATZ).
- 6.2 This assessment is based on an analysis of catchment data, local collision data and a visit to the application site during which photos were taken at 150m intervals along key routes, which were then assessed against Healthy Streets indicators 3-10 as follows:
- Easy to cross;
 - People feel safe;
 - Things to see and do;
 - Places to stop and rest;
 - People feel relaxed;
 - Not too noisy;
 - Clean air; and
 - Shade and shelter.

Key Destinations and Routes

- 6.3 The ATZ Area Plan (Figure 6.1) includes only those key destinations which are relevant to the application site and Table 6.1 indicates which of the key destination criteria have been excluded and the priority given to those which remain.
- 6.4 The relevant key destinations have been selected as they represent the shortest and most appropriate available walk/cycle routes for staff and passengers to/from the airport. The locations of the destinations also allow for a full assessment to be made of the walk and cycle infrastructure surrounding the site in all directions and desire lines. Duplications of key destination categories have been excluded beyond those outlined in Table 6.1 as staff/passengers will most likely route to the closest available key destination.
- 6.5 London City Airport Bus Stops and DLR Station are determined to be the nearest station and bus stops to the site, however they have been excluded from the assessment as they are located within the application boundary of the site. Wider improvements will be made within the application boundary as part of the consented CADP1 scheme in which these key destinations are located and therefore it is not considered necessary to assess these destinations. See Section 1 for a full description of what will be delivered as part of the consented CADP1 scheme.

6.6 Although a number of recommendations are made within this chapter to improve the Healthy Streets indicators on the assessed routes, it is important to note that, as set out at paragraph 56 of the NPPF, planning obligations must only be sought where they meet all of the following tests (and hence suggested opportunities for improvement are not identified as being necessarily needed for this development):

- “necessary to make the development acceptable in planning terms;
- directly related to the development; and
- fairly and reasonable related in scale and kind.”

6.7 It is noted that as part of the consented CADP1 scheme, Hartmann Road will eventually be opened up to the east to vehicles, pedestrians and cyclists, providing more convenient walking and cycle routes to and from the east.

Figure 6.1: Extent of Active Travel Zone Assessment



Table 6.1: ATZ Key Destinations

Destination		Excluded?	Priority
Public transport stops	London City Airport Bus Stops	Yes – within LCY Airport application boundary	N/A
Public transport stations	London City Airport DLR Station	Yes – within LCY Airport application boundary	N/A
	Royal Wharf Riverboat Station	No	High
	Gallions Reach DLR Station	No	High
	Custom House DLR and Elizabeth Line Station	No	High
	Woolwich Foot Tunnel for Woolwich Arsenal Station	No	High
Town centres	North Woolwich High Street	No	High
Parks	Royal Victoria Gardens Thames Barrier Park	No	High
Schools/colleges	Chestnut Nursery School Drew Primary School	Yes – not relevant to S73 application	High
Hospitals/doctors	City Airport Dental Centre Royal Albert Thames Medial Centre	No	High
Places of worship	Parish of North Woolwich and Silvertown Church St Marks Silvertown Church	No	High
Cycle Infrastructure	Cycle Superhighway 3	No	High

Route Analysis

- 6.8 As per TfL's ATZ Assessment guidance, the routes were walked, and point of view photos taken every 150m. Only photos of routes which did not perform well have been provided and assessed against the Healthy Streets criteria (indicators 3-10) as per TfL's guidance. Generally, the routes are of a good standard and focus has therefore been given to the lowest scoring elements of the routes.
- 6.9 The assessment of the key routes was undertaken between 09:30 and 13:00 on Wednesday 8th June 2022. The weather during the site visit was sunny, clear skies with very few intermittent clouds. An additional site visit was undertaken between 09:30 and 12:00 on Tuesday 16th August 2022 following comments received from TfL. The routes, as per **Figure 6.1**, are described in detail below.
- 6.10 Air quality data from the King's College London Environmental Research Group's 'London Air' website (www.londonair.org.uk) has been used to assess typical current air quality in identified locations.

Route 1: Cycle Superhighway 3 and Custom House DLR and Elizabeth Line Station

- 6.11 The first route is a maximum 2,500m cycle/walk northwest of the site, and comprises the destinations Cycle Superhighway 3 and Custom House DLR and Elizabeth Line Station.
- 6.12 The lowest scoring part of this route is the underpass beneath Connaught Bridge and narrow footway prior to Prince Regent Bus Station. Commentary for this is provided in Table 6.2.

Table 6.2: ATZ Route 1- Cycle Superhighway 3 and Custom House DLR and Elizabeth Line Station

Indicator	Commentary	Photos
Easy to cross	This route will be used by both cyclists and pedestrians routing between Cycle Superhighway 3, Custom House DLR and Elizabeth Line Station and LCY Airport. The route consists of a mixture of the use of the carriageway, designated cycle lanes and shared pedestrian and cycle footways. Overall, the route is considered easy for cyclists to cross the road, except at the junction between Victoria Dock Road (A112) and Prince Regent Lane (A112) as there is no dedicated priority signalised crossing facilities for cyclists, which may make cyclists feel uncomfortable. There is an opportunity to improve the crossing between Victoria Dock Road (A112) and Prince Regent Lane (A112) to give cyclists signalised priority.	
People feel safe	The route which follows the carriageway is well-lit with street lighting which will make cyclists and pedestrians feel safe. However, on the section of the route that follows the underpass of Connaught Bridge, there is a lack of lighting which reduces a cyclists and pedestrians' sense of security and safety, especially at night. There is no dedicated cycle lane along Hartmann Road and Prince Regent Road (A112) which causes cyclists to mix with vehicular traffic and may result in collisions and cyclists feeling unsafe. There is an opportunity to provide further lighting on the underpass section of the route beneath Connaught Bridge.	
Things to see and do	Signage is provided along the route to indicate shared pedestrian and cycle footways and cycle routes. The underpass route beneath Connaught Bridge presents a	

Indicator	Commentary	Photos
	pleasant environment near Royal Albert Dock away from busy roads. However, the remainder of the route is associated to the carriageway with little to see or do. No measures are suggested at this time.	
Places to stop and rest	The route between Cycle Superhighway 3 and LCY Airport is 2.5km and is considered an acceptable distance for a cyclist to cycle without requiring the need to stop and rest. However, the underpass route beneath Connaught Bridge is located away from busy roads and would provide a safe stopping location if a cyclist does need to stop and rest. Furthermore, public seating is provided at Prince Regent Bus Station which is covered by tree canopy to provide shading. Further seating is also provided at sheltered bus stops along the route. No measures are suggested at this time.	
People feel relaxed	Pedestrians and cyclists will feel relaxed on the shared cycle and pedestrian footway route located on underpass route beneath Connaught Bridge. This route is located away from busy roads and noise and located nearby pleasant scenery including Royal Albert Dock. Cyclists will feel less relaxed on the carriageway routes on Hartmann Road and Prince Regent Road (A112) as they share the carriageway with vehicular traffic which will be noisy and less safe. Pedestrians may not feel relaxed at the crossing to the Prince Regent Bus Station which is too narrow for a mobility impaired pedestrian to pass by the fence. There is the potential to provide an on-road cycle lane on either Hartmann Road or Prince Regent Road (A112) and increase the width of the footway leading to the crossing to Prince Regent Bus Station.	

Indicator	Commentary	Photos
Not too noisy	The route is quieter along the shared cycle and pedestrian footway route located on the underpass route beneath Connaught Bridge. The remainder of the route is noisy due to the proximity to vehicular traffic on the carriageway. The road surface is considered to be good which helps to mitigate unnecessary additional vehicle associated vibration. No measures are suggested at this time.	 
Clean air	There are high volumes of traffic along the Hartmann Road, Connaught Road and Bridge, Victoria Dock Road and Prince Regent Lane. Low traffic volumes are observed on routes below Connaught Bridge. NO2, PM10 and PM2.5 levels are not an issue relative to UK Government annual mean objectives. Encouraging sustainable transport will help to mitigate worsening levels of NO2. No measures are suggested at this time.	
Shade and shelter	The underpass beneath Connaught Bridge provides the opportunity for cyclists and pedestrians to take shelter, in addition to any covered bus stops along the route. Besides this, there are not many places for cyclists to find shelter. No measures are suggested at this time.	

Route 2: Woolwich Foot Tunnel.

- 6.13 This route is approximately a 1,500m walk east of the site, and comprises the following destinations:
- Woolwich Foot Tunnel;
 - North Woolwich High Street;
 - Royal Victoria Gardens;
 - Parish of North Woolwich and Silvertown Church; and
 - Royal Albert Thames Medical Centre.
- 6.14 The lowest scoring part of this route is the underpass beneath the DLR line and informal pedestrian crossing facilities along the northern side of Albert Road (A112). Commentary for this is provided in Table 6.3.

Table 6.3: ATZ Route 2- Woolwich Foot Tunnel

Indicator	Commentary	Photos
Easy to cross	There is a mix of high and low scoring crossings throughout the route. A zebra crossing is provided from the LCY Airport forecourt to provide a safe crossing for pedestrians to the southern side of Hartmann Road. The underpass route beneath the DLR line from Hartmann Road to Newland Street is the only means for pedestrians to cross the DLR line within the vicinity of LCY. However, this crossing is overgrown with vegetation and has little lighting. Further, a few of the minor road crossings on Albert Road (A112) do not provide tactile paving and/or dropped kerbs which does not create a safe environment for mobility impaired pedestrians to cross the road. This is found at the following locations; Albert Road Surgery vehicular access, Parish of North Woolwich and Silvertown Church vehicular access, and Albert Road (A112) / Antwerp Way junction. The remainder of the route provides adequate tactile paving and dropped kerbs at a mix of formal and informal pedestrian crossing points. There is an opportunity to improve the informal pedestrian crossing facilities at the outlined three minor junctions on the northern side of Albert Road (A112), by providing dropped kerbs and/or tactile paving, to facilitate easier pedestrian movement for mobility impaired pedestrians when travelling east/westbound on the northern side of Albert Road (A112).	 
People feel safe	The majority of the route is well lit and in some sections is overlooked by residential properties and commercial use (particularly on North Woolwich High Street),	

Indicator	Commentary	Photos
	contributing to a high level of natural surveillance. The underpass beneath the DLR line is unpleasant, not well-lit and could result in pedestrians feeling unsafe, especially at night. There is an opportunity to improve lighting along the underpass of the DLR line section of the route.	 
Things to see and do	Royal Victoria Gardens provides a recreational space for pedestrians to use at the end of the route, whilst North Woolwich High Street provides retail stores. However, the remainder of the route is associated to the carriageway with little to see or do. No measures are suggested at this time.	
Places to stop and rest	Public seating is provided at bus stops along Albert Road (A112) which are covered to provide shading and shelter from weather conditions. No measures are suggested at this time.	
People feel relaxed	Pedestrians will likely feel relaxed across the majority of the route, as footways are level, of good quality and well maintained. The exception is at the minor junction crossings previously outlined which are not adequate for mobility impaired pedestrians to cross the road. Further, the footway becomes too narrow along the northern side of Albert Road (A112) within the vicinity of the bus stops which can be congested with pedestrians waiting for the bus and passing through. North Woolwich High Street is located away from busy roads and noise; however it is rundown and may make pedestrians feel unsafe. Royal Victoria Gardens provides a recreational space away from Albert Road (A112) for pedestrians to relax and enjoy. Albert Road (A112) is	

Indicator	Commentary	Photos
	highly trafficked and may not be suitable for cyclists who are not confident. There is potential to provide a cycle lane on the carriageway of Albert Road (A112).	 
Not too noisy	The route is quieter at North Woolwich High Street and Newland Street. The remainder of the route is noisy due to the proximity to vehicular traffic on the carriageway. The road surface is considered to be good which helps to mitigate unnecessary additional vehicle associated vibration. No measures are suggested at this time.	
Clean air	There are low volumes of traffic on Newland Street and Lord Street, and a high volume of traffic along the Albert Road (A112) and Pier Road, but NO2, PM10 and PM2.5 levels are not an issue relative to UK Government annual mean objectives. Encouraging sustainable transport will help to mitigate worsening levels of NO2. No measures are suggested at this time.	
Shade and shelter	The underpass beneath the DLR line provides the opportunity for pedestrians to take shelter, in addition to any covered bus stops along the route. Besides this, there are not many places for pedestrians to find shelter. No measures are suggested at this time.	

Route 3: St Marks Silvertown Church

- 6.15 The third route is approximately a 750m walk southwest of the site and comprises the destination St Marks Silvertown Church.
- 6.16 The lowest scoring part of this route is the ramp section of the route leading from Hartmann Road to Parker Street, and the stepped access to the overpass over the railway line. Commentary for this is provided in Table 6.4.

Table 6.4: ATZ - Route 3: St Marks Silvertown Church

Indicator	Commentary	Photos
Easy to cross	There is a mix of high and low scoring crossings throughout the route. A zebra crossing is provided from the LCY Airport forecourt to provide a safe crossing for pedestrians to the southern side of Hartmann Road. A pedestrian footway is provided from the southern side of Hartmann Road to Parker Street which is overgrown with vegetation and the ramp provided may be difficult for mobility impaired pedestrians and those using a pram. The remainder of the route is provided with adequate dropped kerbs, tactile paving and a zebra crossing when crossing Albert Road (A112). An overpass is provided to cross the railway line and access St Marks Silvertown Church, which mobility impaired pedestrians and likely those with prams will not be able to use and subsequently will have to take a much longer route to the destination. There is an opportunity to improve the pedestrian footway ramp route from Hartmann Road to Parker Street by reducing the overgrown vegetation. The potential for a lift could be investigated for the overpass to allow mobility impaired pedestrians to use it.	

Indicator	Commentary	Photos
People feel safe	The majority of the route is well lit and in some sections is overlooked by residential properties, contributing to a high level of natural surveillance. The ramped route from Hartmann Road to Parker Street is unpleasant, not well-lit and could result in pedestrians feeling unsafe, especially at night. There is an opportunity to improve lighting along the ramp route section by reducing the amount of overgrown vegetation and providing lighting.	 
Things to see and do	The majority of the route is associated to the carriageway with little to see or do. No measures are suggested at this time.	
Places to stop and rest	No public seating is provided along the route from LCY Airport to the destination, but it is considered a reasonable distance to walk without requiring to stop and rest. No measures are suggested at this time.	
People feel relaxed	Pedestrians will likely feel relaxed across the majority of the route, as footways are level, of good quality and well maintained. The exception for mobility impaired pedestrians is the ramp section of the route and the requirement to travel further to the destination as they cannot use the stepped access to the overpass over the railway line. The majority of the route is located away from busy roads and noise. No measures are suggested at this time.	
Not too noisy	The majority of the route is located away from busy roads and noise. The road surface is considered to be good which helps to mitigate unnecessary additional vehicle associated vibration. No measures are suggested at this time.	

Indicator	Commentary	Photos
Clean air	There are low volumes of traffic on Parker Street and North Woolwich Road, and a high volume of traffic along Hartmann Road and Albert Road (A112), but NO ₂ , PM ₁₀ and PM _{2.5} levels are not an issue relative to UK Government annual mean objectives. Encouraging sustainable transport will help to mitigate worsening levels of NO ₂ . No measures are suggested at this time.	
Shade and shelter	There are not many places for pedestrians to find shelter, except for tree canopy. No measures are suggested at this time.	

Route 4: Thames Barrier Park and Royal Wharf Riverboat Station

- 6.17 The fourth route is approximately a 2,300m walk southwest of the site, and comprises the destinations Thames Barrier Park and Royal Wharf Riverboat Station.
- 6.18 The lowest scoring part of this route is the lack of street lighting provided in Thames Barrier Park. Commentary for this is provided in Table 6.5.

Table 6.5: ATZ Route 4- Thames Barrier Park and Royal Wharf Riverboat Station

Indicator	Commentary	Photos
Easy to cross	There is a good provision of pedestrian crossings throughout the route from LCY Airport to Thames Barrier Park and Royal Wharf Riverboat Station. Signalised pedestrian crossings are provided at the junction between Hartmann Road / Connaught Road (A112) and informal pedestrian crossings with pedestrian refuge islands for the remainder of the route. There is no requirement to cross the carriageway from Thames Barrier Park to Royal Wharf Riverboat Station. No measures are suggested at this time.	
People feel safe	The majority of the route is well lit and in some sections is overlooked by residential properties, contributing to a high level of natural surveillance. The exception is the footway to the east side of Connaught Bridge which has sporadic street lighting and has no natural surveillance so pedestrians will likely feel unsafe, especially at night. Further, no street lighting is provided along sections of the route through Thames Barrier Park which is not safe for pedestrians to route through at night, with little to no natural surveillance. Routing through Thames Barrier Park and to Royal Wharf Riverboat Station is located away from busy roads and noise, which will make pedestrians feel at ease. There is an opportunity to	

Indicator	Commentary	Photos
	provide additional street lighting on routes to the east of Connaught Bridge and within Thames Barrier Park.	 
Things to see and do	Thames Barrier Park provides recreational space for pedestrians to enjoy. The route following the Thames River to Royal Wharf Riverboat Station is surrounded by a good provision public realm associated to the newly constructed residential development, which creates a pleasant environment for pedestrians to travel through. No measures are suggested at this time.	
Places to stop and rest	Public seating is provided along the route from Thames Barrier Park to Royal Wharf Riverboat Station, allowing pedestrians to stop/rest. However, there is a lack of covered public seating to protect pedestrians from adverse weather conditions. No measures are suggested at this time.	
People feel relaxed	Pedestrians will likely feel relaxed across the majority of the route, as footways are level, of good quality and well maintained. The majority of the route is located away from busy roads and noise, especially within Thames Barrier Park. No measures are suggested at this time.	
Not too noisy	The majority of the route is located away from busy roads and noise. The road surface is considered to be good which helps to mitigate unnecessary additional vehicle associated vibration. No measures are suggested at this time.	
Clean air	There are low volumes of traffic on the route between Thames Road, Thames Barrier Park and Royal Wharf Riverboat Station, and a high volume of traffic along	

Indicator	Commentary	Photos
	Connaught Bridge, Connaught Road and Hartmann Road, but NO₂, PM₁₀ and PM_{2.5} levels are not an issue relative to UK Government annual mean objectives. Encouraging sustainable transport will help to mitigate worsening levels of NO₂. No measures are suggested at this time.	
Shade and shelter	There are not many places for pedestrians to find shelter, except for tree canopy. The route would benefit from increased shade and shelter which would be achieved via landscaping; however this is not a necessity and therefore no measures are suggested at this time.	 The 'Photos' column for the 'Shade and shelter' indicator contains four photographs. The top-left photo shows a paved pedestrian path with a person walking away from the camera. The top-right photo shows a gravel path running alongside a modern building. The bottom-left photo shows a paved path with a tree canopy overhead. The bottom-right photo shows a gravel path running alongside a modern building.

Route 5: City Airport Dental Centre

- 6.19 The fifth route is approximately a 400m walk to the south of the site and comprises the destination City Airport Dental Centre.
- 6.20 The lowest scoring part of this route is the underpass beneath the DLR line. Commentary for this is provided in Table 6.6.

Table 6.6: ATZ Route 5 – City Airport Dental Centre

Indicator	Commentary	Photos
Easy to cross	There is a mix of high and low scoring crossings throughout the route. A zebra crossing is provided from the LCY Airport forecourt to provide a safe crossing for pedestrians to the southern side of Hartmann Road. The underpass route beneath the DLR line from Hartmann Road to Newland Street is the only means for pedestrians to cross the DLR line within the vicinity of LCY. However, this crossing is overgrown with vegetation and has little lighting. The rest of the route is characterised by a good provision of tactile paving and dropped kerbs when pedestrians are required to cross the road. The roads surrounded by residential properties are lightly trafficked and considered an easy location for pedestrians to cross. No measures are suggested at this time.	
People feel safe	The majority of the route is well lit and in some sections is overlooked by residential properties, contributing to a high level of natural surveillance. The underpass beneath the DLR line is unpleasant, not well-lit and could result in pedestrians feeling unsafe, especially at night. There is an opportunity to improve lighting along the underpass of the DLR line section of the route.	
Things to see and do	The majority of the route is associated to the carriageway with little to see or do. A small play park is	

Indicator	Commentary	Photos
	located approximately 100m to the north, but is not directly located on the route to the destination. No measures are suggested at this time.	
Places to stop and rest	A small, landscaped area is located to the south of City Airport Dental Centre with the provision of uncovered public seating for pedestrians to stop and rest. It is considered that the distance from LCY to the destination is a reasonable walk distance without the requirement for pedestrians to stop and rest at a covered seat and therefore no measures are suggested at this time.	
People feel relaxed	Pedestrians will likely feel relaxed across the majority of the route, as footways are level, of good quality and well maintained. The majority of the route is located away from busy roads and noise. No measures are suggested at this time.	
Not too noisy	The majority of the route is located away from busy roads and noise. The road surface is considered to be good which helps to mitigate unnecessary additional vehicle associated vibration. No measures are suggested at this time.	
Clean air	There are low volumes of traffic on Newland Street, Leonard Street and Saville Road, and a high volume of traffic along the Albert Road (A112), but NO ₂ , PM ₁₀ and PM _{2.5} levels are not an issue relative to UK Government annual mean objectives. Encouraging sustainable transport will help to mitigate worsening levels of NO ₂ . No measures are suggested at this time.	

Indicator	Commentary	Photos
Shade and shelter	There are not many places for pedestrians to find shelter, except for tree canopy. No measures are suggested at this time.	

Route 6: Gallions Reach DLR Station

- 6.21 The sixth route is approximately a 2,600m walk to the northeast of the site, and comprises the destination Gallions Reach DLR Station. Route 6 will form an extension of Route 2 and will be assessed from Royal Victoria Gardens to Gallions Reach DLR Station.
- 6.22 The lowest scoring part of this route is the pedestrian crossing at the junction between Woolwich Manor Way / Gallions Road. Commentary for this is provided in Table 6.7.

Table 6.7: ATZ Route 6 - Gallions Reach DLR Station

Indicator	Commentary	Photos
Easy to cross	Route 6 will form an extension of Route 2 and is assessed from Royal Victoria Gardens to Gallions Reach DLR Station. The majority of the route has good quality crossings with the provision of tactile paving and dropped kerbs at all priority/roundabout junctions that pedestrians are required to cross. There is a signalised crossing with tactile paving, dropped kerbs and pedestrian refuge island at the junction between Woolwich Manor Way / Fishguard Way / Albert Road. There is a poor crossing at the priority junction between Woolwich Manor Way / Gallions Road with no provision of tactile paving and dropped kerbs which may inhibit mobility impaired pedestrians from the crossing the road easily. A signalised crossing is provided at Atlantis Avenue with tactile paving, dropped kerbs and widened pedestrian refuge island to facilitate high pedestrian movements associated to Gallions Reach DLR Station. There is an opportunity to improve the pedestrian crossing at the junction between Woolwich Manor Way / Gallions Road by providing dropped kerbs and tactile paving.	

Indicator	Commentary	Photos
People feel safe	The majority of the route is well lit and in some sections is overlooked by residential properties, contributing to a high level of natural surveillance. Railings are provided at the signalised crossing between Woolwich Manor Way / Fishguard Way / Albert Road to help pedestrians feel safe when crossing the road within the vicinity of moving vehicles. No measures are suggested at this time.	
Things to see and do	The majority of the route is associated to the carriageway with little to see or do. No measures are suggested at this time.	
Places to stop and rest	Public seating is provided at bus stops along the route which are covered to provide shading and shelter from weather conditions. No further public seating is provided along the route from Royal Victoria Gardens to Gallions Reach DLR Station. No measures are suggested at this time.	
People feel relaxed	Pedestrians may feel stressed along Albert Road and Woolwich Manor Way due to the heavy flow of traffic and no separation between the carriageway and footway. However, the footways are level, of good quality and well maintained. The route following Albert Road, Woolwich Manor Way is highly trafficked and may not be suitable for cyclists who are not confident. The potential to provide a cycle lane on the carriageway of Albert Road (A112) and Woolwich Manor Way could be explored.	
Not too noisy	The route following Albert Road, Woolwich Manor Way and Gallions Roundabout is relatively noisy due to the heavy flow of traffic. The road surface is considered to	

Indicator	Commentary	Photos
	be good which helps to mitigate unnecessary additional vehicle associated vibration. At the time of the site visit, construction works were taking place to the southeast of Gallions Roundabout which contributed to the noise levels. No measures are suggested at this time.	
Clean air	There are high volumes of traffic along the Albert Road, Woolwich Manor Way and Gallions Roundabout, but NO ₂ , PM ₁₀ and PM _{2.5} levels are not an issue relative to UK Government annual mean objectives. Encouraging sustainable transport will help to mitigate worsening levels of NO ₂ . No measures are suggested at this time.	
Shade and shelter	Covered bus stops along the route provide an opportunity for pedestrians to have shade and shelter from adverse weather conditions. Besides this, there are not many places for pedestrians to find shelter. No measures are suggested at this time.	

- 6.23 The ATZ has identified a range of potential improvements on routes pertinent to pedestrian and cycle access to the airport. It is suggested that these could in time form the basis of a package of improvements which are coordinated by TfL/LBN with the potential involvement of LCY or, if any such improvements were considered by LBN/TfL necessary to make the proposed development acceptable in planning terms, included in a planning agreement.

7 Future Travel Demand

Introduction

- 7.1 This chapter presents the forecast air passenger and employee surface access travel demand. It provides the forecasts of travel demand by all modes of transport for the Principal Assessment Year of 2031 for both existing permitted CADP1 scheme (Do Minimum) and the proposed development (Development Case), with 6.5mppa and 9.0mppa respectively, taking into account proposed changes in weekday profiles and corresponding flight scheduling.

Air Passenger Forecasts

- 7.2 The currently permitted operations at the airport are capped at 6.5 mppa. The anticipated growth in demand at the airport in the Do Minimum scenario is such that 6.5 mppa will be achieved by 2030 and then remain at that level.
- 7.3 Based upon projections provided by York Aviation Limited (see Chapter 4 of ES), the Development Case scenario will accelerate the growth of the airport operations such that 6.5mppa is predicted to be reached by 2027 and 9.0 mppa by 2031.
- 7.4 Passenger numbers on a typical busy summer weekday are predicted to rise from a 2019 figure of 18,737 to 26,255 for 6.5mppa and 33,879 for 9.0 mppa.⁸ There will be an increase in network peak hour travel demand as detailed in subsequent sections of this chapter including Table 7.5.
- 7.5 In addition to the proposed overall passenger increase, the planning application includes amendment to the Saturday hours of operation, extending operational hours from 12:30 to 18:30 (with an additional hour for up to 12 arrivals during British Summer Time). This would result in additional passengers on Saturdays with passenger movements increasing from around 4,840 on a typical busy Saturday in 2019 to a predicted 18,886 for a typical busy Saturday in 2031. As noted in Tables 7.25, 7.26 and Figure 7.5, demand would be spread throughout the day with peaks of activity occurring in the hours beginning 0700, 0800 and 1500 hours.

Air Passenger Surface Access

Air Passenger Daily Demand

- 7.6 Daily passenger numbers have been derived from predicted future flight profiles prepared by York Aviation⁶. For the 2031, a typical summer busy weekday schedule in the Development Case scenario has been estimated as 371 flights carrying a total of 33,813 passengers. This compares with 390 flights carrying 22,158 passengers for the Do Minimum scenario.

⁸ Figures derived from York Aviation future year flight schedules, contained in Chapter 4 of the Environmental Statement

Hourly profile

Passenger Flight Movements

- 7.7 The predicted 2031 typical busy day daily passenger profiles (in local time) for the Do Minimum and Development Case scenarios, derived from the York Aviation flight schedules, are set out in Tables 7.1 and 7.2.

Table 7.1: 2031 Do Minimum Scenario (6.5mppa) Typical Busy Summer Weekday Passenger Numbers

Hr Commencing	Departing Passengers	Arriving Passengers	Total
00:00:00	0	0	0
00:30:00	0	0	0
01:30:00	0	0	0
02:30:00	0	0	0
03:30:00	0	0	0
04:30:00	0	0	0
05:30:00	0	0	0
06:30:00	995	683	1677
07:30:00	1278	1482	2759
08:30:00	1573	1099	2672
09:30:00	762	1074	1837
10:30:00	814	593	1408
11:30:00	429	836	1265
12:30:00	418	330	748
13:30:00	558	474	1032
14:30:00	558	462	1020
15:30:00	643	926	1568
16:30:00	1110	645	1755
17:30:00	1240	1422	2662
18:30:00	1323	1429	2751
19:30:00	1095	926	2020
20:30:00	287	619	906
21:30:00	0	173	173
22:30:00	0	0	0
Total	13082	13172	26255

Note: all figures rounded

Table 7.2: 2031 Development Case Scenario (9.0mppa) Typical Busy Summer Weekday Passenger Numbers

Hr Commencing	Departing Passengers	Arriving Passengers	Total
00:00:00	0	0	0
00:30:00	0	0	0
01:30:00	0	0	0
02:30:00	0	0	0
03:30:00	0	0	0
04:30:00	0	0	0
05:30:00	0	0	0
06:30:00	1457	1004	2461
07:30:00	1696	1710	3406
08:30:00	1885	1475	3360
09:30:00	980	1132	2112
10:30:00	940	915	1855
11:30:00	638	983	1622
12:30:00	537	420	957
13:30:00	580	668	1248
14:30:00	1051	861	1912
15:30:00	749	932	1681
16:30:00	1370	966	2337
17:30:00	1545	1846	3392
18:30:00	1741	1757	3498
19:30:00	1304	1038	2342
20:30:00	400	916	1316
21:30:00	0	383	383
22:30:00		0	0
Total	16873	17007	33879

Note: all figures rounded

Landside Passenger Movements

- 7.8 Applying the observed lag time for landside movement as set out at Chapter 3 (90 minutes prior to departure and 30 minutes post arrival) to the above passenger arrival and departure profile for a typical 2031 busy summer weekday results in predicted future year surface access movements as set out in Tables 7.3 and 7.4 and illustrated in Figure 7.1.

Table 7.3: 2031 Do Minimum Scenario (6.5mppa) Typical Busy Summer Weekday Landside Passenger Surface Access Travel Movements

Hr Commencing	Surface Access Arrivals	Surface Access Departures	Total
00:00:00	0	0	0
01:00:00	0	0	0
02:00:00	0	0	0
03:00:00	0	0	0
04:00:00	0	0	0
05:00:00	995	0	995
06:00:00	1278	0	1278
07:00:00	1573	683	2256
08:00:00	762	1482	2244
09:00:00	814	1099	1913
10:00:00	429	1074	1504
11:00:00	418	593	1012
12:00:00	558	836	1393
13:00:00	558	330	887
14:00:00	643	474	1117
15:00:00	1110	462	1573
16:00:00	1240	926	2166
17:00:00	1323	645	1968
18:00:00	1095	1422	2517
19:00:00	287	1429	1716
20:00:00	0	926	926
21:00:00	0	619	619
22:00:00	0	173	173
23:00:00	0	0	0
Total	13082	13172	26255

Figure 7.1: Do Minimum Scenario (6.5mppa) Typical Busy Summer Weekday Surface Access Passenger Movements

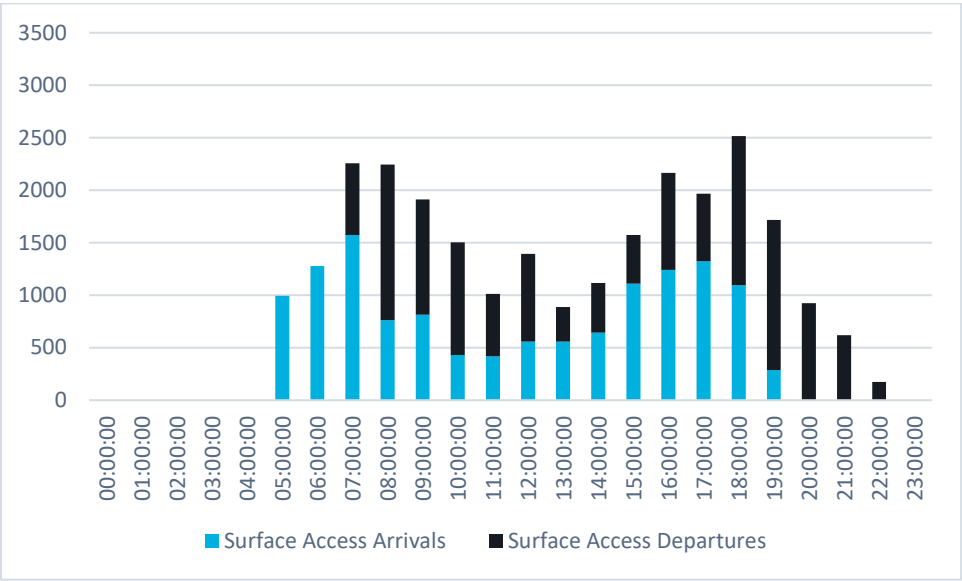


Table 7.4: 2031 Development Case Scenario (9.0mppa) Typical Busy Summer Weekday Landside Passenger Surface Access Travel Movements

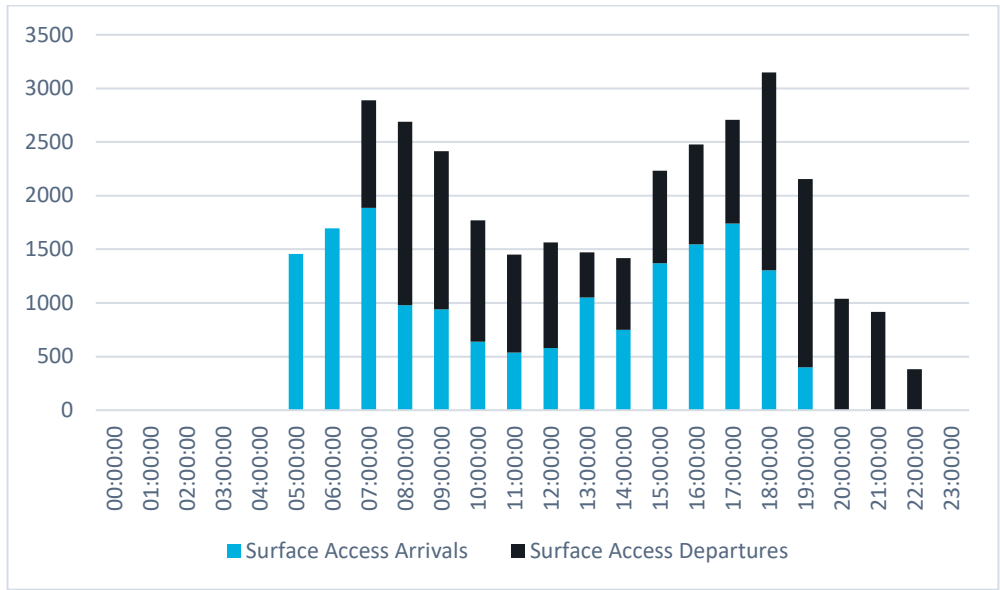
Hr Commencing	Surface Access Arrivals	Surface Access Departures	Total
00:00:00	0	0	0
01:00:00	0	0	0
02:00:00	0	0	0
03:00:00	0	0	0
04:00:00	0	0	0
05:00:00	1457	0	1457
06:00:00	1696	0	1696
07:00:00	1885	1004	2889
08:00:00	980	1710	2690
09:00:00	940	1475	2415
10:00:00	638	1132	1771
11:00:00	537	915	1452
12:00:00	580	983	1563
13:00:00	1051	420	1471
14:00:00	749	668	1417
15:00:00	1370	861	2231
16:00:00	1545	932	2478
17:00:00	1741	966	2707
18:00:00	1304	1846	3150
19:00:00	399	1757	2156
20:00:00	0	1038	1038
21:00:00	0	916	916
22:00:00	0	383	383
23:00:00		0	0
Total	16872	17007	33879

Note: all figures rounded

7.9

The future predicted surface access movement profile as set out in Table 7.4 is illustrated in Figure 7.2.

Figure 7.2: 2031 Development Case Scenario (9.0mppa) Typical Summer Weekday Surface Access Passenger Demand



Net Impact

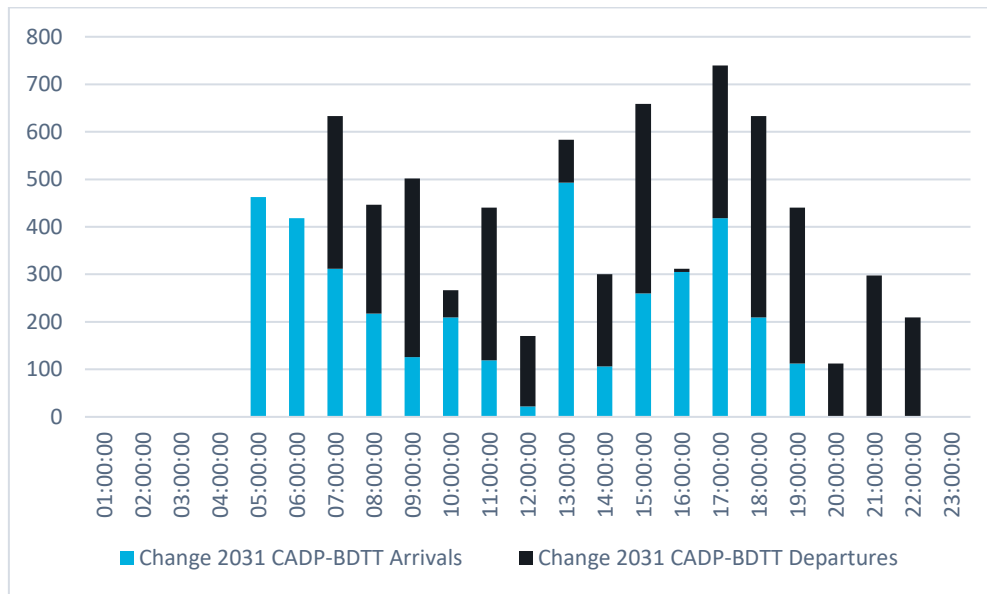
7.10 Comparing the numbers from Table 7.3 and 7.4 provides the predicted net change in landside passenger movements for a typical busy summer weekday in the 2031 assessment year, as set out in Table 7.5.

Table 7.5: 2031 - Predicted Change Between the Do Minimum and Development Case Scenarios on Typical Busy Summer Weekday Landside Passenger Movements

Hr Commencing	Surface Access Arrivals		Surface Access Departures		Total Net Change	
	Number	% Increase	Number	% Increase	Number	% Increase
00:00:00	0	0%	0	0%	0	0%
01:00:00	0	0%	0	0%	0	0%
02:00:00	0	0%	0	0%	0	0%
03:00:00	0	0%	0	0%	0	0%
04:00:00	0	0%	0	0%	0	0%
05:00:00	462	46%	0	0%	462	46%
06:00:00	418	33%	0	0%	418	33%
07:00:00	312	20%	321	47%	633	27%
08:00:00	218	29%	229	15%	446	20%
09:00:00	126	15%	376	34%	502	26%
10:00:00	209	49%	58	5%	267	18%
11:00:00	119	28%	321	54%	440	44%
12:00:00	22	4%	148	18%	170	12%
13:00:00	493	88%	90	27%	583	63%
14:00:00	106	17%	194	41%	300	27%
15:00:00	260	23%	399	86%	659	42%
16:00:00	305	25%	7	1%	312	14%
17:00:00	418	32%	321	50%	740	38%
18:00:00	209	19%	424	30%	633	25%
19:00:00	112	39%	328	23%	440	26%
20:00:00	0	0%	112	12%	112	12%
21:00:00	0	0%	298	48%	298	48%
22:00:00	0	0%	210	121%	210	121%
23:00:00	0	0%	0	0%	0	0%
Total	3790	29%	3834	29%	7625	29%

Note: all figures rounded

- 7.11 The difference between the Do Minimum and Development Case scenarios in surface access movement, as set out in Table 7.5, is illustrated in Figure 7.3.

Figure 7.3: 2031 - Predicted Change Between the Do Minimum and Development Case Scenarios on Typical Busy Summer Weekday Landside Passenger Movements

Air Passenger Peak Hour Demand Weekday

7.12 Although the largest increase is between network peaks, the total travel demand to and from the airport in the network peak periods increases as shown in Figure 7.3. Detailed consideration has hence been given to 07:00-08:00 in the AM peak period and 18:00-19:00 in the PM peak period, alongside the 3-hour peak periods (07:00-10:00 and 16:00-19:00), when transport infrastructure is expected to be at its busiest. Other busy hours, such as of demand at 1300 and 1500 are lower than the evening peak and coincide with lower background traffic and public transport usage levels.

7.13 The base (2019 CAA) and 2031 total peak period travel demand for the permitted and proposed scenarios is set out in Table 7.6.

Table 7.6: 2019 Baseline and 2031 Principal Assessment Year Typical Busy Summer Weekday Surface Access Passenger Travel Demands

Scenario	07:00-08:00		07:00-10:00		18:00-19:00		16:00-19:00	
	In	Out	In	Out	In	Out	In	Out
2019	931	426	1909	2250	920	1034	2903	2140
2031 Do Minimum	1573	683	3150	3263	1095	1422	3658	2993
2031 Development Case	1885	1004	3805	4189	1304	1846	4590	3745

Air Passenger Mode Share

7.14 Consideration has been given to the initiatives set out in the existing approved 2019 - 2022 Travel Plan (19/02858/AOD) and recently submitted 2023 to 2025 Travel Plan to increase sustainable surface access travel for both passengers and employees. For the purposes of the TA the assumptions set out in Table 7.7 have been made for 2031 based on the 2019 baseline,

the airport's aspiration in its Sustainability Roadmap 2022 and what is considered to be realistically deliverable. The current overall public and sustainable transport target for 2025 is 75% (which is broadly similar to the 2025 target assumed at Table 6.9 of the Updated Transport Statement supporting the original CADP1 application). The proposed target for the Development Case for 2031 is 80% (inclusive of London Taxis), which will be achieved by a variety of measures which will be contributed to by the airport (via the proposed Sustainable Transport Fund) and other planned enhancements to public transport services including National and London wide transport policy initiatives.

Table 7.7: Observed and Target Future Year Passenger Final Mode of Surface Access

Mode	2019 (CAA)	2031
DLR	50.0%	61%
Bus	1.1%	5%
Walk	1.5%	3%
Cycle	0.0%	1%
Car – parked	1.8%	1.6%
Car – drop-off	9.6%	8.4%
London Taxi	13.3%	10%
Minicab	12.3%	10%
Uber	10.5%	
Other	0.0%	0%
Total by sustainable modes including London Taxi	65.9%	80%
TOTAL	100.0%	100%

Any discrepancies due to rounding

- 7.15 The 2031 target s have been applied to the predicted passenger demands as set out in Tables 7.8 and 7.9 for the weekday AM and PM peaks respectively.

Table 7.8: AM Peak Mode shares applied to Surface Access Demands Weekday

Mode	07:00-08:00				07:00-10:00			
	Do Minimum		Development Case		Do Minimum		Development Case	
	In	Out	In	Out	In	Out	In	Out
DLR	960	416	1150	612	1922	1991	2321	2555
Bus	79	34	94	50	158	163	190	209
Walk	47	20	57	30	95	98	114	126
Cycle	16	7	19	10	32	33	38	42
Car – parked	25	11	30	16	50	52	60	66
Car – drop-off	132	57	159	85	265	275	320	353
London Taxi	157	68	189	100	315	326	381	419
Minicab/Uber	157	68	189	100	315	326	381	419
Total	1573	683	1885	1004	3150	3263	3805	4189

Table 7.9: PM Peak-2031 Mode shares applied to Surface Access Demands Weekday

Mode	18:00-19:00				16:00-19:00			
	Do Minimum		Development Case		Do Minimum		Development Case	
	In	Out	In	Out	In	Out	In	Out
DLR	668	867	795	1126	2231	1826	2800	2285
Bus	55	71	65	92	183	150	230	187
Walk	33	43	39	55	110	90	138	112
Cycle	11	14	13	18	37	30	46	37
Car – parked	17	22	21	29	58	47	72	59
Car – drop-off	92	120	110	155	308	252	387	315
London Taxi	109	142	130	185	366	299	459	375
Minicab/Uber	109	142	130	185	366	299	459	375
Total	1095	1422	1304	1846	3658	2993	4590	3745

Vehicle Movements

- 7.16 To determine the number of vehicles on the network it is necessary to allow for car occupancy and for potential 2-way trips associated with private drop-off or taxi travel. The London City Airport Master Plan – Surface Access Technical Reports (5 April 2019) includes car occupancy factors and group size factors that considered the trends in passenger type, increased taxi return trips (driven by Uber type operations) and effect of forecourt charges, as set out in Table 7.10.

Table 7.10: Car Occupancy and Group Size Factors

Year	Group Size by Year	Car Parked	Private Car Drop-off	London Taxi	Uber/ Private Hire
		Vehicle Trips per Group			
		1.00	2.00	1.25	1.50
		Vehicle Trips per passenger			
2019	1.36	0.73	1.47	0.92	1.10
2022	1.36	0.73	1.47	0.92	1.10
2023	1.37	0.73	1.46	0.91	1.09
2024	1.39	0.72	1.44	0.90	1.08
2025	1.40	0.72	1.43	0.90	1.07
2026	1.40	0.71	1.42	0.89	1.07
2027	1.41	0.71	1.42	0.88	1.06
2028	1.42	0.71	1.41	0.88	1.06
2029	1.42	0.70	1.41	0.88	1.06
2030	1.43	0.70	1.40	0.88	1.05
2031	1.43	0.70	1.40	0.87	1.05

- 7.17 The 2031 occupancy factors have been applied to the AM and PM peak hour predicted passenger demands to determine anticipated traffic movements as set out in Table 7.11 and 7.12.

Table 7.11: 2031 AM Peak (07:00-08:00)- Do minimum and Development Case Traffic Movements Weekday

Mode	Do Minimum		Development Case		Change		
	In	Out	In	Out	In	Out	2 way
Car – parked	17	8	21	11	4	3	7
Car – drop-off	186	80	222	118	36	38	74
London Taxi	137	59	164	87	27	28	55
Minicab/Uber	165	72	198	105	33	33	66
Total	505	219	605	322	100	102	202

Table 7.12: 2031 PM Peak (18:00-19:00)- Do minimum and Development Case Traffic Movements Weekday

Mode	Do Minimum		Development Case		Change		
	In	Out	In	Out	In	Out	2 way
Car – parked	12	16	14	20	2	5	7
Car – drop-off	129	168	154	218	25	50	75
London Taxi	95	124	113	161	18	37	55
Minicab/Uber	115	149	137	194	22	45	66
Total	351	457	418	593	67	136	203

Employee Travel Demand

- 7.18 Baseline 2019 and forecast airport employee totals have been supplied by York Aviation Limited and are contained in the ES.
- 7.19 Table 7.13: outlines the number of employees at the airport for the 2019 baseline, 2031 Do Minimum (6.5mppa) and 2031 Development Case (9.0mppa).

Table 7.13: Employee Population 2019 Baseline and 2031 Forecasts for London City Airport

Year	Number of Employees
2019 Baseline	2,310
2031 Do Minimum (6.5mppa)	2,420
2031 Development Case (9.0mppa)	3,650

Employee Daily Demand

- 7.20 In determining daily travel demands, a factor allowance has been made for the typical attendance at the airport compared with total employees. The airport operates seven days per week and hence on a typical day only a proportion of employees will be travelling to the airport. A factor of 0.62 has been applied to the total workforce to account for the likelihood of travelling on any given day, taking into account the following factors:

- Typically, employees will work 5 days out of 7; and
- Annual leave and training mean that employees will work 45 out of 52 weeks;

- 7.21 Applying these factors and assuming that an employee will make two trips per day means total daily travel demand for 2031 for the two assessment scenarios are as set out in Table 7.14.

Table 7.14: 2031 Typical Busy Summer Day-Daily Total Employee Travel Demand

2031 Do Minimum (6.5mppa)	2031 Development Case (9.0mppa)
2,992	4,512

Employee Mode Share

- 7.22 For future year trips, 2031 employee mode split targets have been adopted as set out in Table 7.15. The proposed target for 2031 Development Case is 35% car driver (single occupancy) and, as discussed in Chapter 10, it is proposed to achieve this through a combination of measures to encourage staff to use sustainable transport modes and potential parking charges.

Table 7.15: 2031 Final Mode Target Employee Mode Shares

Mode	Proportion
DLR	34%
Bus	9%
Walk	6%
Cycle	6%
Car driver (single occupancy)	35%
Car passenger	8%
Taxi/minicab	0%
Motorcycle	1%
Other	1%
TOTAL	100%

- 7.23 It is also notable that no additional car parking is proposed as part of the proposed development, with parking provision capped at the overall total of 1,251 car parking spaces allowed under the existing CADP1 consent. This will assist with reducing the propensity for car travel as employee numbers increase.

Employee Surface Access Trips

Employee Daily Demand

- 7.24 Applying the mode share targets to the predicted employee movements results in total daily trips as set out in Table 7.16.

Table 7.16: 2031 Employee Daily travel demand

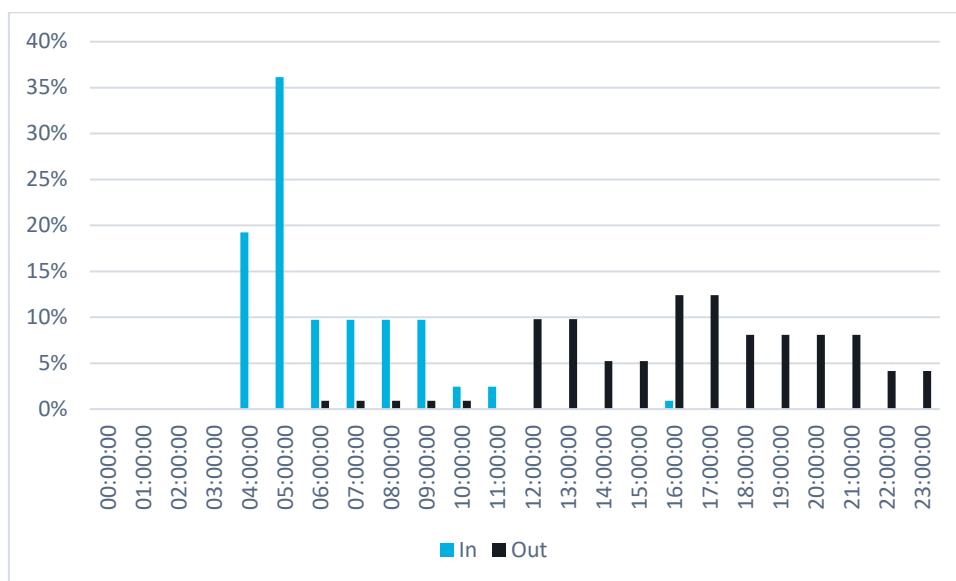
Mode	2031 Do Minimum (6.5mppa)		2031 Development Case (9.0mppa)	
	Numbers	Proportion	Numbers	Proportion
DLR	1,017	34%	1,534	34%
Bus	269	9%	406	9%
Walk	180	6%	271	6%
Cycle	180	6%	271	6%
Car driver	1,047	35%	1,579	35%
Car passenger	239	8%	361	8%
Motorcycle	30	1%	45	1%
Other	30	1%	45	1%
TOTAL	2,992	100%	4,512	100%

Employee Daily Travel Profile

- 7.25 An indication of typical staff travel patterns has been determined by an analysis of a 2019 employment survey as set out in Table 7.17 and illustrated at Figure 7.4. These patterns have been applied to future years in Tables 7.18, 7.19 and 7.20.

Table 7.17: Daily Employee Travel Times for 2019 Baseline.

	In	Out	Total
00:00:00	0%	0%	0%
01:00:00	0%	0%	0%
02:00:00	0%	0%	0%
03:00:00	0%	0%	0%
04:00:00	19%	0%	10%
05:00:00	36%	0%	18%
06:00:00	10%	1%	5%
07:00:00	10%	1%	5%
08:00:00	10%	1%	5%
09:00:00	10%	1%	5%
10:00:00	2%	1%	2%
11:00:00	2%	0%	1%
12:00:00	0%	10%	5%
13:00:00	0%	10%	5%
14:00:00	0%	5%	3%
15:00:00	0%	5%	3%
16:00:00	1%	12%	7%
17:00:00	0%	12%	6%
18:00:00	0%	8%	4%
19:00:00	0%	8%	4%
20:00:00	0%	8%	4%
21:00:00	0%	8%	4%
22:00:00	0%	4%	2%
23:00:00	0%	4%	2%

Figure 7.4: Daily Employee Travel Times for 2019 Baseline.

7.26 The total daily travel movements for the two assessment scenarios are as set out in Table 7.18.

Table 7.18: Typical Busy Summer Day – Future Year Daily Employment Movements

Hr Commencing	2031 Do Minimum (6.5mppa)		2031 Development Case (9.0mppa)	
	In	Out	In	Out
00:00:00	0	0	0	0
01:00:00	0	0	0	0
02:00:00	0	0	0	0
03:00:00	0	0	0	0
04:00:00	288	0	576	0
05:00:00	541	0	1082	0
06:00:00	145	13	291	20
07:00:00	145	13	291	20
08:00:00	145	13	291	20
09:00:00	145	13	291	20
10:00:00	36	13	73	20
11:00:00	36	0	73	0
12:00:00	0	147	0	221
13:00:00	0	147	0	221
14:00:00	0	78	0	118
15:00:00	0	78	0	118
16:00:00	13	186	27	280
17:00:00	0	186	0	280
18:00:00	0	121	0	183
19:00:00	0	121	0	183
20:00:00	0	121	0	183
21:00:00	0	121	0	183
22:00:00	0	62	0	93
23:00:00	0	62	0	93
Total	1496	1496	2992	2256

7.27 It can be seen that a great deal of employee travel lies outside network peak periods reflecting the operational hours of the airport. The peak hour travel demands by mode are set out in Tables 7.19 and 7.20.

Table 7.19: Weekday AM Peak-2031 Employee mode shares applied to travel profile

Mode	07:00-08:00				07:00-10:00			
	Do Minimum		Development Case		Do Minimum		Development Case	
	In	Out	In	Out	In	Out	In	Out
DLR	49	5	99	7	148	14	296	21
Bus	13	1	26	2	39	4	78	5
Walk	9	1	17	1	26	2	52	4
Cycle	9	1	17	1	26	2	52	4
Car driver	51	5	102	7	153	14	305	21
Car passenger	12	1	23	2	35	3	70	5
Taxi/minicab	0	0	0	0	0	0	0	0
Motorcycle	1	0	3	0	4	0	9	1
Other	1	0	3	0	4	0	9	1
Total	145	13	291	20	436	40	872	61

Table 7.20: Weekday PM Peak-2031 Employee mode shares applied to travel profile

Mode	17:00-18:00				16:00-19:00			
	Do Minimum		Development Case		Do Minimum		Development Case	
	In	Out	In	Out	In	Out	In	Out
DLR	0	41	0	62	5	167	9	252
Bus	0	11	0	16	1	44	2	67
Walk	0	7	0	11	1	30	2	45
Cycle	0	7	0	11	1	30	2	45
Car driver	0	42	0	64	5	172	9	260
Car passenger	0	10	0	15	1	39	2	59
Taxi/minicab	0	0	0	0	0	0	0	0
Motorcycle	0	1	0	2	0	5	0	7
Other	0	1	0	2	0	5	0	7
Total	0	121	0	183	13	492	27	743

Servicing Activity

- 7.28 Future servicing activity has been assessed by applying an uplift from the current 152 vehicles to 177 per day for the Do Minimum scenario, reflecting additional servicing requirements with more passengers. The number of service vehicles would increase to 216 vehicles per day under the Development Case scenario. It is assumed that these would be spread across around 12 hours of the day such that movements will increase from around 15 to 18 vehicles in a peak hour, around 60% of these will be HGVs. This very small increase in demand on roads is equivalent to less than 2% of available capacity (on the conservation assumption that a traffic lane carries 1,000 vehicles per hour) and will result in no discernible effect on the local highway network.

Combined Travel Demand

- 7.29 The predicted 2031 peak hour travel demand for public transport, walk and cycle over weekday peak hours has been aggregated for passengers and employees as set out in Tables 7.21 and 7.22.

Table 7.21: AM Peak-2031 Combined Public Transport, Walk and Cycle Movements Weekday

Mode	07:00-08:00				07:00-10:00			
	Do Minimum		Development Case		Do Minimum		Development Case	
	In	Out	In	Out	In	Out	In	Out
DLR	1009	421	1249	619	2070	2004	2618	2576
Bus	92	35	120	52	197	167	269	215
Walk	56	21	74	31	121	100	166	129
Cycle	24	8	36	11	58	35	90	46

Table 7.22: PM Peak-2031 Combined Public Transport, Walk and Cycle Movements Weekday

Mode	17:00-18:00				16:00-19:00			
	Do Minimum		Development Case		Do Minimum		Development Case	
	In	Out	In	Out	In	Out	In	Out
DLR	668	909	795	1188	2236	1993	2796	2537
Bus	55	82	65	102	184	194	232	254
Walk	33	50	39	62	111	119	139	157
Cycle	11	21	13	28	37	59	48	82

- 7.30 The predicted weekday 2031 peak hour vehicle movements have been aggregated for passengers (using the total vehicle movements from Table 7.11 and 7.12), employees (using Car driver figures from Tables 7.19 and 7.20), and servicing as set out in Tables 7.23 and 7.24.

Table 7.23: 2031 AM Peak Hour (07:00-08:00) Vehicle Movements Weekday

Mode	Do Minimum		Development Case		Change		
	In	Out	In	Out	In	Out	2 way
Passengers	505	219	605	322	100	103	203
Employees	51	5	102	7	51	2	53
Servicing	15	15	18	18	3	3	6
Total	571	239	725	347	154	108	262

Table 7.24: 2031 PM Peak Hour (17:00-18:00) Vehicle Movements Weekday

Mode	Do Minimum		Development Case		Change		
	In	Out	In	Out	In	Out	2 way
Passengers	351	456	418	593	67	103	170
Employees	0	42	0	64	0	22	22
Servicing	15	15	18	18	3	3	6
Total	366	514	436	674	70	128	198

Future Saturday Landside Movements

- 7.31 The proposed revised Busy Saturday flight schedule has been analysed in the same manner as the weekday analysis above. The predicted Saturday airside passenger movements are provided in Table 7.25.

Table 7.25: 2031 Development Case Scenario Typical Busy Saturday Passenger Numbers

Hr Commencing	Departing Passengers	Arriving Passengers	Total
00:00:00	0	0	0
00:30:00	0	0	0
01:30:00	0	0	0
02:30:00	0	0	0
03:30:00	0	0	0
04:30:00	0	0	0
05:30:00	0	0	0
06:30:00	1501	653	2154
07:30:00	1209	1425	2634
08:30:00	1386	1082	2468
09:30:00	785	377	1162
10:30:00	360	445	806
11:30:00	796	756	1552
12:30:00	337	202	539
13:30:00	90	373	463
14:30:00	553	743	1296
15:30:00	653	871	1524
16:30:00	1314	890	2204
17:30:00	447	427	874
18:30:00	0	1192	1192
19:30:00	0	0	0
20:30:00	0	0	0
21:30:00	0	0	0
22:30:00	0	0	0
Total	9432	9437	18868

Landside Passenger Movements

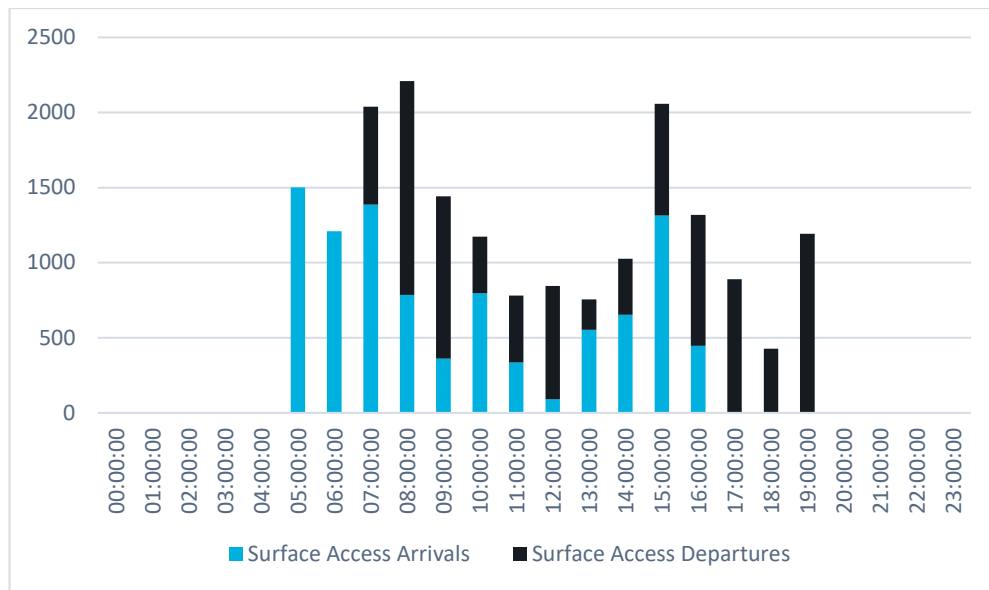
- 7.32 Applying the observed lag time for landside movements, as set out at Chapter 3 (90 minutes prior to departure and 30 post arrival), to the above passenger numbers results in predicted future year surface access movements as set out in Table 7.26.

Table 7.26: 2031 Development Case Scenario Typical Busy Saturday Landside Passenger Surface Access Travel Movements

Hr Commencing	Departing Passengers	Arriving Passengers	Total
00:00:00	0	0	0
01:00:00	0	0	0
02:00:00	0	0	0
03:00:00	0	0	0
04:00:00	0	0	0
05:00:00	1501	0	1501
06:00:00	1209	0	1209
07:00:00	1386	653	2039
08:00:00	785	1425	2210
09:00:00	360	1082	1442
10:00:00	796	377	1174
11:00:00	337	445	782
12:00:00	90	756	846
13:00:00	553	202	756
14:00:00	653	373	1026
15:00:00	1314	743	2057
16:00:00	447	871	1318
17:00:00	0	890	890
18:00:00	0	427	427
19:00:00	0	1192	1192
20:00:00	0	0	0
21:00:00	0	0	0
22:00:00	0	0	0
23:00:00		0	0
Total	9432	9437	18868

- 7.33 The future predicted typical Busy Saturday surface access movement profile as set out in Table 7.26 is illustrated in Figure 7.5.

Figure 7.5: 2031 Development Case Scenario Typical Busy Saturday Surface access Passenger Movements



7.34 For the busiest hour, the number of passengers travelling to and from the airport on a typical Busy Saturday is predicted to be around two thirds of the movements than for the busiest hour on a weekday. This occurs at a time when there is less background traffic and demand on the public transport networks, as advised by TfL. The detailed weekday capacity analysis has indicated no anticipated capacity issues and accordingly no further detailed analysis has been undertaken for Saturday demands.

8 Public Transport Impact Assessment

Introduction

- 8.1 This chapter provides an assessment of the impact that the proposed development may have on public transport demand during the weekday AM and PM peak hours. This includes Railplan modelling assessment of the impact on London Underground (Elizabeth line), Docklands Light Railway (DLR), Rail and London bus services, in addition to a quantitative review of the impact on future bus services.
- 8.2 As the DLR does not start operating until 05:30 hours in the morning, it is not possible for first shift staff and passengers arriving for early flights to use the DLR to access the airport. This has an adverse effect upon maximising the proportion of trips which can use the DLR and has the knock-on consequence of forcing early staff and passenger arrivals to make use of car-borne modes. LCY continue to hold ongoing discussions with DLR about the potential for starting DLR services earlier.

Railplan modelling

- 8.3 TfL's 2031 Railplan model has been utilised to understand potential line loadings with the 6.5mppa and 9.0mppa scenarios. Total public transport demand forecast, as set out in Tables 7.21 and 7.22, have been adopted as alternative origin and destination figures, distributed in line with the Railplan model assumptions. The model has then been run for the Do Minimum and Development Case scenarios.
- 8.4 The model provides 3-hour AM and PM peak period results, a series of plots of crowding and line loadings are provided at Appendix C.
- 8.5 The net effect of the additional demand is shown to be minimal across the network (as shown in Figures C3 and C9 in Appendix C) for the weekday AM and PM peak respectively. The greatest impact being on the DLR, which serves the airport directly.
- 8.6 The Railplan modelling crowding diagrams, (replicated as C4/C10 and C5/C11 and the difference plots, C6/C12 for AM and Peak respectively in Appendix C), indicate that with the proposed development, during both the AM and PM peak period, there will be some standing required on the DLR trains west of the airport in either direction, but only to the extent of 0 to 1 customer per square metre. The modelling indicates no standing required east of the airport.
- 8.7 The modelling provides comfort that with the increase in demand from expanded operations at the airport, irrespective of the timing of upgrades to the DLR fleet, there is ample spare capacity on the network in the vicinity of the airport and that the impact on the wider public transport network is minimal.

Docklands Light Railway

- 8.8 New DLR trains will be in place by 2031. For the purposes of this assessment, the frequency has been based on 2031 assumptions within TfL's Railplan models. Due to the uncertainty around the delivery of new HIF funded trains, it has been assumed that services remain at current frequencies (15tph peaks, 12tph off peaks, split half and half to Bank and Stratford International). This is considered to be the most robust assumption to apply to the modelling.
- 8.9 The deployment of New Trains and B07s (type of DLR rolling stock) to given routes is not yet fixed and may involve a mix in practice so again, for robustness, a conservative assumption of 3-car B07s operating on both routes serving the airport has been applied.
- 8.10 TfL's guideline capacity for planning applications is 3 standees per square metre. In the modelling, the future baseline takes account of extra train capacity funded by the airport and CADP1 permitted demand. The assessment determines that there would be a marginal difference due to the proposed development.

Bus Services

- 8.11 TfL have suggested that it is reasonable to assume that, in addition to existing services, a 5 bus per hour route will operate from the south end of the Greenwich Peninsula via Silvertown Tunnel and North Woolwich Road to London City Airport and then on to Beckton via Connaught Bridge, Stansfield Road and Tollgate Road. In addition, the existing 473 and 474 services both provide 5 to 6 buses per hour.
- 8.12 Accordingly, there could be a total of at least 15 buses both arriving and departing per hour. The anticipated busiest hour total bus demand, as set out in Tables 7.21 and 7.22, is 120 passengers inbound between 07:00 and 08:00 and 102 passengers outbound between 17:00 and 18:00. These equate to a peak demand of around 7-8 customers per bus, or an average increase of 2 customers per bus.

Elizabeth Line

- 8.13 The Elizabeth line has limited attraction as a route for accessing the airport as the DLR provides a direct connection. Future loadings on the Elizabeth Line are only marginally changed as a result of the proposed development.
- 8.14 However, the airport benefits from the opening of the Elizabeth line, in two ways. Some passengers and staff can be expected to use the bus connection to and from Custom House to pick up Elizabeth Line services and the new line frees up capacity on the DLR.

2041 Public Transport Loadings

- 8.15 At the request of TfL, 2041 Railplan crowding plots for the Development Case scenario are provided at Figures C7 and C8 of Appendix C respectively. These also show no crowding problems on sections of the network in the vicinity of the airport where additional demand might be noticed.

Summary

- 8.16 The airport is well served by existing and proposed future public transport with capacity to absorb additional public transport demand associated with the proposed development by 2031. In addition to the recent opening of the Elizabeth Line at Custom House, TfL have proposals to run an additional bus route to LCY via the Silvertown Tunnel, both of which will enhance public transport capacity to/from LCY.

9 Highway Impact Assessment

Introduction

- 9.1 This chapter focuses on the surface access travel demand and impact upon the strategic and local highway network during the weekday AM and PM peaks. The highway impact assessment takes on board comments raised by LBN and TfL during the pre-application process and, where required, changes have been made to the methodology and approach.
- 9.2 This chapter provides a summary of the methodology used to determine the highway impact assessment and then presents the traffic impact during the weekday highway network peak hours and the airport peak hours of operation.

LoHAM modelling

- 9.3 The predicted future 2031 year traffic generation figures for the Do Minimum and Development Case scenarios, as set out in Tables 7.23 and 7.24, have been substituted for the origin and destination figures for LCY within TfL's 2031 LoHAM strategic highway model. This therefore provides a suitable indication of the likely future traffic flows on the local highway with or without development, taking into account a wide range of committed and planned development incorporated within the 2031 LoHAM trip matrix.
- 9.4 The LoHAM model is established for 08:00-09:00 in the AM weekday peak and 17:00-18:00 in the PM weekday peak. For robustness, for the AM weekday peak the higher airport trip generation for 07:00-08:00 has been assumed to provide a worst-case scenario rather than applying any adjustments,
- 9.5 A series of plots from the modelling are provided at Appendix D, as follows:

Local Area Plots

AM Peak

- D1: Actual Flow in PCU/ HR change (6.5mppa-9.0mppa) in local area (green = increase in flows with the proposed development and blue = decrease)
- D2: Average Link delay in Seconds change (6.5mppa-9.0mppa) in local area (green = increase in delay with the proposed development and blue = decrease)
- D3: Average junction delay in Seconds change (6.5mppa-9.0mppa) in local area – values shown filtered to show change greater than 5 seconds
- D4: Link Volume over Capacity ratio – 6.5mppa scenario filtered to show VoC greater than 90%
- D5: 9.0mppa scenario filtered to show VoC greater than 90%

PM Peak

- D6: Actual Flow in PCU/ HR change (6.5mppa-9.0mppa) in local area (green = increase in flows with the proposed development and blue = decrease)
- D7: Average Link delay in Seconds change (6.5mppa-9.0mppa) in local area (green = increase in delay with the proposed development and blue = decrease)

- D8: Average junction delay in Seconds change (6.5mppa-9.0mppa) in local area – values shown filtered to show change greater than 5 seconds
- D9: Link Volume over Capacity ratio – 6.5mppa scenario filtered to show VoC greater than 90%
- D10: 9.0mppa scenario filtered to show VoC greater than 90%

Wider Area Plots

- D11: AM Peak - Wider Area - Actual Flow in PCU/ HR change (9.0mppa- 6.5mppa)
- D12: AM Peak-Link Delay Wider Area - Average Link delay in Seconds change (9.0mppa- 6.5mppa) in local area
- D13: Wider Area - Average Junction Delay in Seconds Change (9.0mppa- 6.5mppa) in Local Area
- D14: Wider Area – 6.5mppa Scenario Filtered to Show VoC Greater Than 90%
- D15: Wider Area – 9.0mppa Scenario Filtered to Show VoC Greater Than 90%
- D16: Wider Area - Actual Flow in PCU/ HR change (9.0mppa- 6.5mppa)
- D17: Wider Area - Average Link delay in Seconds change (9.0mppa- 6.5mppa) in local area
- D18: Wider Area - Average Junction Delay in Seconds Change (9.0mppa- 6.5mppa) in Local Area
- D19: Wider Area – 6.5mppa Scenario Filtered to Show VoC Greater Than 90%
- D20: Wider Area – 9.0mppa Scenario Filtered to Show VoC Greater Than 90%

9.6 The modelling indicates some increase in traffic flows, associated with the predicted increase in traffic generation at weekday peak times (see figures D11 and D16 at Appendix D). However, comparison of the Do Minimum and Development Case runs of the model indicate virtually no reassignment of traffic on the wider road network, a good indication that the free flow nature, or any future predicted delay, on these roads is not affected by the modest quantities of additional traffic predicted with the proposed development.

10 Mitigation Measures

Introduction

- 10.1 This chapter describes measures which will be introduced and those which are already in place and will be retained, in order to mitigate the impacts of the proposed development.
- 10.2 There are existing transport related planning conditions and S106 agreement obligations associated with the current CADP1 permission.

Incorporated Mitigation

- 10.3 The airport is committed to encouraging sustainable travel to and from the airport for passengers and employees. The key documents include LCY's commitment to its Sustainability Roadmap and LCY's existing 2019-2022 Travel Plan and proposed 2023 – 2025 Travel Plan that incorporate a range of sustainable travel targets to 2022 and 2025 respectively, backed up by initiatives that encourage walking, cycling, public and sustainable transport usage for passengers and employees.
- 10.4 The CADP1 S106 agreement and planning conditions specify the key components of the surface access strategy for LCY. These comprise:
- Passenger and Staff Travel Plans to encourage the use of sustainable modes and discourage vehicle use, which includes measures to encourage staff car sharing and pick up charges for passengers;
 - Financial contribution towards enhancing local walking and cycle facilities;
 - Increased facilities for secure cycle parking;
 - Provision of an enhanced forecourt;
 - Financial contributions towards purchasing additional DLR rolling stock and enhancing DLR services;
 - Extending Hartmann Road eastwards to join the A117 Woolwich Manor Way (the Eastern Access) and associated changes to highway signage, including provision for segregated pedestrian and cycle routes;
 - Minimising the increase in car parking provision to 1,250 spaces; and
 - Financial contribution towards establishing a localised Controlled Parking Zone on roads.
- 10.5 Table 10.1 summarises the key transport-related contributions associated with CADP1, of which £5.3 million has already been passed over to LBN and/or TfL as applicable focused upon DLR enhancements. To date, no requests have been made for parking improvements on surrounding roads.

Table 10.1: CADP1 – Key Transport-related Contributions

Contribution	Value
DLR Service Enhancement	£2,500,000 + RPI
CADP DLR	£2,600,000 + RPI
Walking and Cycling	£100,000 + RPI
DLR Station Management	£300,000 + RPI
Parking Improvements on Surrounding Roads	£250,000 + RPI

Planned Transport Enhancements (By Others)

- 10.6 Since the grant of the CADP1 permission, a number of additional transport measures are planned to improve access to/from the Royal Docks area which will also benefit the airport. Key schemes include:
- The Elizabeth line with a new station at Custom House, which opened in May 2022;
 - Changes to bus services to improve links to Custom House station, including the diversion of Route 474 to provide a direct link with the airport;
 - The Silvertown Tunnel, currently under construction with a planned opening date of 2025. In addition to relieving congestion in the Blackwall Tunnel, TfL plan to introduce new bus services between the Royal Docks and areas south of the River Thames;
 - Introduction of new river services; and
 - Enhancements to facilities for pedestrians and cyclists in the Royal Docks Area, consistent with LBN Cycle Strategy, as outlined in the draft Royal Docks and Beckton Riverside Opportunity Area Framework, that was consulted upon at the start of 2022.
- 10.7 The Newham Infrastructure Delivery Plan identifies further projects which would assist access to LCY. As noted in Chapter 2, these include:
- Platform Improvements at London City Airport DLR station;
 - Longer-term provision of a new Elizabeth line station at Silvertown adjacent to LCY; and
 - Public realm improvements at Custom House station.

Further Mitigation

- 10.8 Although the surrounding transport networks can physically accommodate the additional travel demand associated with the increase from 6.5mppa to 9.0mppa, it is recognised that further measures will be required to aid the achievement of the mode share targets set out in Tables 10.2 and 10.3.

Table 10.2: Passenger Mode Share Targets

Mode	2025 Target (%)	2031 Target (%)	Difference (%)
Sustainable and Public Transport (DLR, trains, underground, bus, walking, cycling, London Taxi)	75%	80%	+5%
Car	10%	10%	-
Minicab and Ride Sharing services	15%	10%	-5%
TOTAL	100%	100%	-

Table 10.3: Staff Mode Share Targets

	2025 Target (%)	2031 Target (%)	Difference (%)
Sustainable and Public Transport (DLR, train, underground, bus, walking, cycling, London Taxi, minicab/ride sharing)	52%	65%	+13%
Car (single occupancy)	48%	35%	-13%
TOTAL	100%	100%	-

- 10.9 The Framework Travel Plan (FTP) attached at Appendix E sets out the range of measures which LCY will consider implementing between 2025 and 2031 to help achieve the desired mode share targets. In addition to capping overall car parking provision at the 1,250 spaces proposed under the CADP1 consent, the following key measures will be considered:
- Further enhancing provision for pedestrians and cyclists, including more cycle parking;
 - increased drop off and parking charges for passengers and staff Introducing parking charges for staff; and
 - Encouraging further car sharing for staff.
- 10.10 The Framework Travel Plan will be further developed for the period to 2031 (the current Travel Plan to 2025 is currently under review with LBN) and this will help to achieve the airport's mode share targets.
- 10.11 However, to achieve the targets for improved passenger and staff travel by sustainable modes, further investment is beneficial and the airport is also proposing a new Sustainable Transport Fund (STF). The fund has the potential to be subsidised by a levy on car users, e.g. from a proportion of car parking revenue or forecourt charges, and can be used to contribute to surface access projects which assist with the airport achieving its mode share targets. The STF would operate for a minimum of 7 years and would be managed by the airport in consultation with the Airport Transport Forum, which includes local authorities, transport providers, neighbouring landowners and community representatives.
- 10.12 A flexible approach is important to ensure that initiatives can respond to how modal share targets are being achieved and can adapt to working with transport providers and others (whose priorities and investment decisions typically change). A fund of at least £2 million per annum could fund a range of projects, such as, subsidising earlier DLR services, provide better connectivity between the airport and Elizabeth line station at Custom House and other initiatives to encourage staff and passengers to use public transport.

11 Summary and Conclusions

Summary

- 11.1 London City Airport is proposing to make best use of its available capacity by applying for an increase to its passenger cap, from the current 6.5mppa to 9.0mppa as well as an extension to its operating hours on Saturday afternoons from 12:30pm to 18:30pm (with an additional hour for 12 arrivals during British Summer Time) and an increase of 3 additional flights in the first half hour of operations (06:30-06:59).
- 11.2 The majority of the additional travel demand will occur outside of the weekday AM and PM peak periods when the surrounding public transport networks have ample spare capacity.
- 11.3 The airport is fully operational and passenger numbers are recovering from the impacts of Covid-19. Prior to this, in 2019, the airport processed its highest number of passengers in its history at 5.1 million. London City Airport has been the best performing airport in London for public transport usage by passengers and has plans to become a zero emissions airport by 2030.
- 11.4 Pre-application discussions have been held with TfL and LBN; comments received have been taken into consideration when undertaking the detailed transport analysis and preparing this Transport Assessment.
- 11.5 The following scenarios have been considered within the assessment for the purposes of understanding the impact of the proposed increase in passengers when first reached:
- 2019 Baseline Year;
 - 2031 Do Minimum (6.5 mppa) scenario; and
 - 2031 Development Case (9.0 mppa) scenario.
- 11.6 The site is directly accessed by London City Airport Docklands Light Railway (DLR) station. The station is managed by the DLR and is served by DLR services on the Woolwich branch.
- 11.7 The airport benefits from the opening of the Elizabeth line, in two ways. Some passengers and staff can be expected to use the bus connection to and from Custom House to pick up Elizabeth line services and the new line frees up capacity on the DLR.
- 11.8 London Bus services directly serve the airport, which include the 473 (Stratford – North Woolwich) and the 474 (Canning Town – Manor Park). Following the opening of the Silvertown Tunnel in 2025, there is the potential for further bus services between destinations south of the River Thames and London City Airport.
- 11.9 The airport is also accessed by River Bus services at Royal Wharf Pier.
- 11.10 The airport is easily accessed from the strategic highway network with modestly trafficked roads providing local access.

- 11.11 There are no serious or fatal KSI clusters along the local access routes based on the most recent three-year period of collision data.
- 11.12 In addition to the proposed increase to the passenger cap, the planning application includes amendments to the weekend hours of operation. If permitted this would result in additional passengers at weekends with passenger movements increasing from around 4,840 in 2019 to a predicted 18,868 for a typical busy Saturday.
- 11.13 The net effect of the additional demand has been shown to be minimal across the network for both the weekday AM and PM peaks. The greatest impact is upon the DLR, which serves the airport directly. Nevertheless, it is concluded that the DLR has sufficient spare capacity to accommodate the additional demand generated by the proposed development.
- 11.14 The airport is well served by existing public transport infrastructure and services and this will be enhanced as additional planned and proposed services are delivered. The currently predicted 2031 public transport services (as incorporated into TfL models) have capacity to absorb additional demand associated with the proposed development by 2031.
- 11.15 The ATZ has identified a range of potential improvements on routes pertinent to pedestrian and cycle access to the airport. It is suggested that these could in time form the basis of a package of improvements which are coordinated by TfL/LBN with the potential involvement of London City Airport or, if any such improvements were considered by LBN/TfL necessary to make the proposed development acceptable in planning terms, included in a planning agreement.
- 11.16 LCY are committed to encouraging sustainable travel to and from the airport for passengers and employees. A Framework Travel Plan accompanies this planning application and sets out the proposed longer-term mode share targets and high-level travel planning objectives covering the period 2025-2031. A Sustainable Transport Fund is proposed to contribute to initiatives that encourage walking, cycling and public transport usage. These specific sustainable travel initiatives will be complemented by wider initiatives (National, London and Borough-level) to enhance sustainable travel and reduce the proportion of trips made by car.
- 11.17 These measures will be designed to assist LBN with achieving their target of an average of 83% of all trips in Newham to be made on foot, by cycle or using public transport by 2041, as set out in the Newham Local Implementation Plan (LIP 2019) and Mayor's Transport Strategy (MTS 2018).

Conclusions

- 11.18 It is concluded that the additional travel demands associated with the proposed development can be managed on the surrounding highway and public transport networks.
- 11.19 LCY propose to set up a Sustainable Transport Fund to implement measures which will encourage greater use of sustainable travel modes and reduce the proportion of trips made by car. The recently submitted 2023-2025 Travel Plan and the proposed 2025-2031 Framework Travel Plan will be used to monitor travel conditions and identify priorities for the Sustainable Transport Fund.

A Transport Assessment Scope

To LB Newham / TfL
Cc London City Airport
From Steer
Date 26 May2022
Project London City Airport

Scoping Note

Project No. 23699202

London City Airport – Transport Scoping Note

Introduction

1. This scoping note has been prepared by Steer on behalf of London City Airport (LCY) (the Applicant) in relation to the proposals to uplift the current passenger cap, extend operating hours on Saturdays and other modifications to daily limits.
2. The airport is fully operational at present, and passenger numbers are recovering from the impacts of COVID-19. Prior to this, in 2019, the airport processed its highest number of passengers in its history at 5.1 million. LCY has been the best performing airport in London for public transport usage by its staff and passengers and will continue to be with our plans to become a zero emissions airport¹.
3. In 2020 the airport produced its Masterplan for the future which sets out the plans to achieve 11 million passengers, which is set to be achieved at some point in the mid to late 2030s. The current planning permission (ref. 13/01228/FUL, granted in July 2016) allows the airport to process up to 6.5 million passengers per year, therefore the need to plan ahead for long term growth is critical to the airport's future.
4. The airport is part way through implementing the consented City Airport Development Programme (CADP) which will transform the terminal, surface access, apron and runway operations to allow for increased peak hour capacity and an enhanced passenger experience.
5. Taking into account the above, and subject to the outcome of planned public consultation on the proposals, this 'minor material amendment' Section 73 (S73) application proposes to vary conditions to the CADP consent to facilitate a passenger cap of 9 million per year which is forecast to be reached by 2031. The application will also seek permission for flights on Saturday afternoon and into the evening (no later than 22:00), and for slightly extended morning and evening operational hours.

Scheme Proposals

6. The S73 planning application is an essential component of the Airport's Covid-19 recovery plan to 2031 and beyond and seeks to make best use of the runway, existing and approved infrastructure in accordance with the Government Making Best Use (MBU) policy².
7. Since CADP was first planned, the profile of demand using the airport has changed, with a more even balance of business and leisure traffic as well as more airlines basing their aircraft at the airport overnight. The changes in demand have resulted in changes in airline operating patterns with less pressure on the

¹ https://sustainability.londoncityairport.com/?_ga=2.65801516.364981698.1653473393-1005117842.1641938441

²

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/714069/making-best-use-of-existing-runways.pdf

traditional peak hours of traffic at the airport (inbound traffic in the morning and outbound traffic in the early evening). More aircraft based overnight at the airport also means that there is some spreading of the peak throughout the day which means that, the approved CADP terminal facilities can accommodate a higher annual passenger throughput than originally envisaged, particularly when the effect of new technologies such as self-service check-in are taken into account.

8. The proposed changes to the CADP consent include:
 - An increase in the passenger cap from 6.5 to 9.0 million in any 12-month period;
 - An extension of operational hours on Saturday to allow flights to take place through the afternoon and into the evening, but no later than 22:00 (currently 12:30); and
 - Consequential modifications to daily and other limits and changes to temporary facilitating works.
9. This Scoping Note provides an overview of the initial design principles and sets out the proposed methodology for the Transport Assessment (TA) and associated deliverables that will be submitted with the planning application. Establishing the approach to the following is of particular importance:
 - Trip generation methodology
 - Determining future mode share splits and targets for both passengers and staff.
10. It is envisaged that as the proposals progress and are refined, further updates to this note will be produced for consideration by LBN and TfL.

Local Highway Context

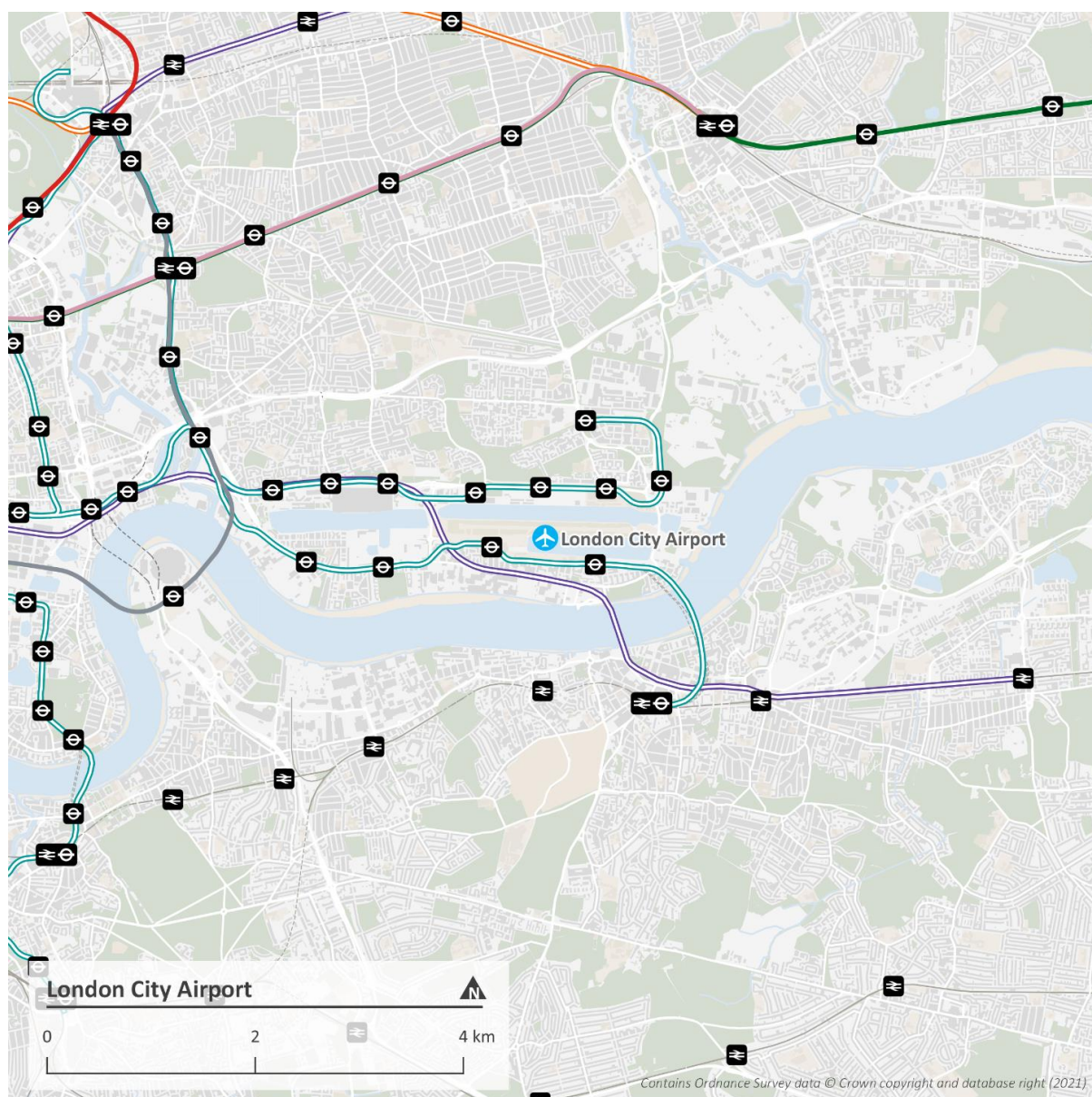
Existing Situation

11. Vehicular access is provided from Hartmann Road, a private road which connects to a signalised junction with the A112 Connaught Road at its western end. At its eastern end Hartmann Road connects to a private LCY service road, with a gated access to the A117 Albert Road to the east. The airport's drop-off area, pick-up area, and visitor and staff car parks are located directly off Hartmann Road.
12. The site's location is detailed in Figure 1.
13. The Ultra-Low Emission Zone (ULEZ) was expanded in October 2021 to cover all areas bordered by both the North and South circular roads, which includes the A117 Albert Road. As such Hartmann Road and all car parks accessed from it are covered by the ULEZ.
14. The A112 Connaught Road connects directly to the South Circular at the A117 Albert Road to the east, and to the A13 Newham Way via the A112 Victoria Dock Road/Prince Regent Lane to the north.
15. The public roads within the vicinity of the site are covered by a Controlled Parking Zone (CPZ) in operation 08:00 – 18:30 Monday – Sunday. This includes parking bays on the residential streets of Silvertown and double-yellow lines on Connaught Road/Albert Road and Hartmann Road.

Committed Proposals

16. Transport for London (TfL) are in the process of constructing the Silvertown Tunnel. This will relieve the capacity constraints of the Blackwall Tunnel and will run from North Woolwich Road to the Blackwall Tunnel Approach road to the south of the O2. It is anticipated to open for traffic in 2025.
17. As part of the CADP consent, it is proposed to open up the eastern end of Hartmann Road, connecting into the already constructed signal junction at Albert Road/Fishguard Way. This will reduce the reliance upon Connaught Bridge and Royal Albert Way for access to LCY to/from the north and east.

Figure 1: Site Location and Surrounding Area

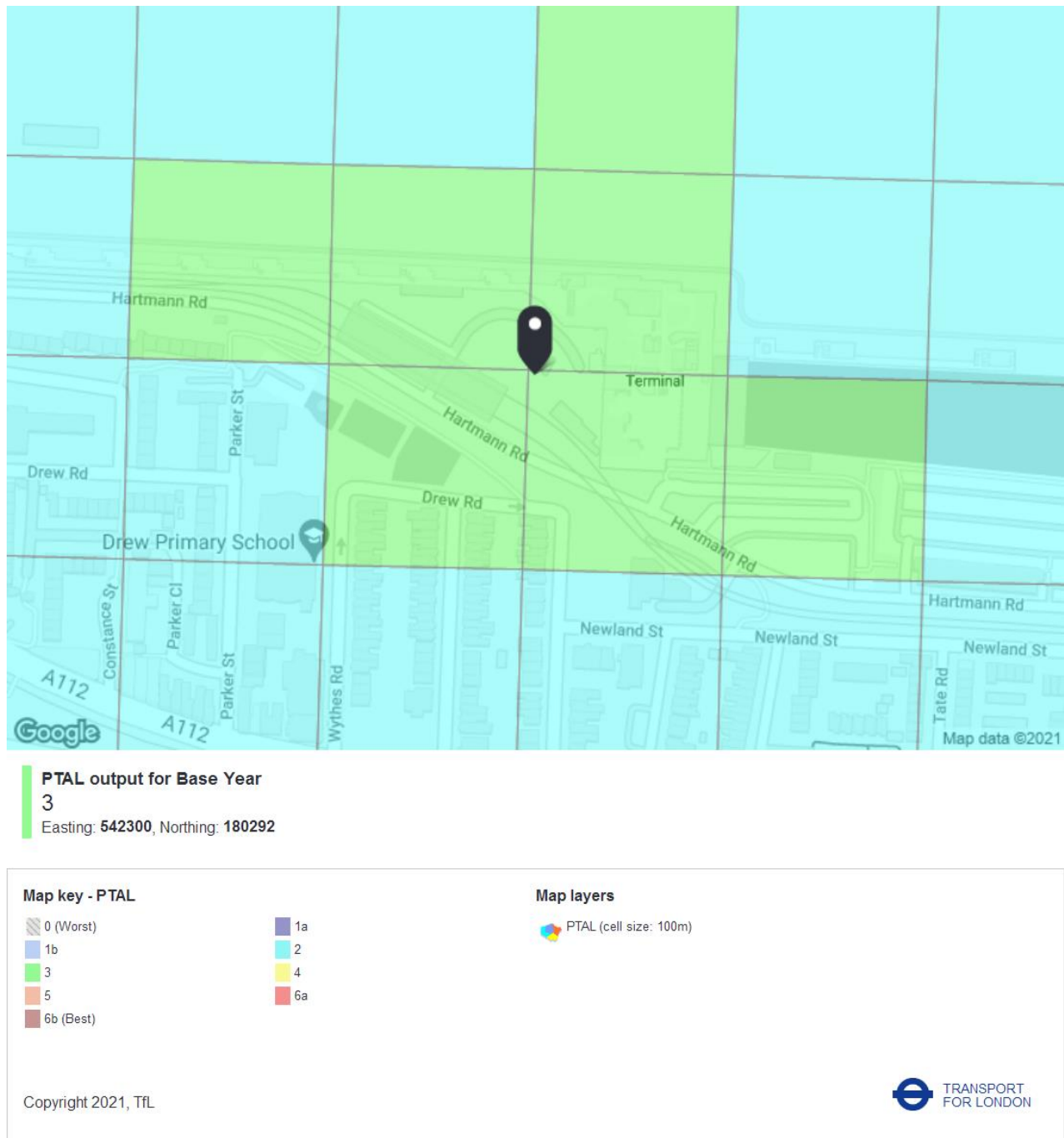


Public Transport Accessibility

PTAL

18. A Public Transport Accessibility Level (PTAL) assessment has been undertaken for the site. PTAL is a measure of the accessibility of a location to the public transport network, considering walk access time and service availability. PTAL is categorised in 6 levels, 1-6, where 6b represents the highest level of accessibility and 1a the lowest level of accessibility. The site's major passenger and staff entrances have a PTAL level of 3 (good).

Figure 2: Public Transport Accessibility Level



19. There are no anticipated changes in the PTAL score forecasted for the future year 2031.

DLR

20. The site is directly accessed by London City Airport Docklands Light Railway (DLR) station as shown in Figure 1 above. The station is managed by the DLR and is served by DLR services on the Woolwich branch. This provides direct connections to Woolwich in the south, Stratford to the north and Bank in Central London to the west. It provides a direct connection to Jubilee, Hammersmith & City and District Line London Underground services, and C2C national rail services.

Elizabeth Line

21. Elizabeth Line services have served Custom House (for ExCeL), 2.2km to the north-west of the airport from 24 May 2022. These provide a direct, frequent rail service to several Central London rail terminal such as Liverpool Street, Farringdon, and Paddington, and connect directly to many London Underground services at Tottenham Court Road and Bond Street. The Elizabeth Line network is show in Figure 1 above.
22. Initially, the Elizabeth Line will serve Custom House between 06:30 and 22:00 hours, Monday to Saturday, with trains running every 5 minutes in each direction. Once the line is fully commissioned, services are expected to operate for longer hours and on Sunday and in addition will connect to Reading and Heathrow in the west.
23. To accompany the opening of the Elizabeth Line, Transport for London (TfL) have rerouted service 474 to provide a direct connection between Custom House station and London City Airport.

TfL Buses

24. London Bus services directly serve the airport, which include the 473 (Stratford – North Woolwich) and the 474 (Canning Town – Manor Park via Custom House station), frequencies of which are shown in Table 3:

Table 3 – Bus Services

Time of Day	Bus Route & Frequency per Hour	
	473	474
AM Peak (0700-1000)	10-12	10-13
Off Peak (1000-1600)	10-12	10-13
PM (1600-1900)	10-12	10-13
Overnight	-	2-3

40. Following the opening of the Silvertown Tunnel in 2025, there is the potential for further bus services between destinations south of the River Thames and London City Airport. The nature of these enhancements will be established in dialogue with TfL and the London Borough of Newham (LBN).

River Bus services

41. The nearest Thames Clipper pier is Royal Wharf which is wheelchair accessible and served by the RB1 service that operates weekday mornings and evenings. The pier is within short walking distances of nearby bus services that connect to London City Airport, thereby providing an opportunity for multi-modal travel to London City Airport.

Summary

42. The airport is well connected by a range of public transport options, which are shortly to be enhanced by the commencement of Elizabeth Line services to the nearby Custom House station.

Existing/Committed Site Access and Parking

Existing Site Access

43. There are several vehicular access points, including:
- Connaught Road West (Private Jet Centre)
 - Hartmann Road West
 - Hartmann Road (under DLR Station)
 - Main Entrance – Taxis only
 - Main Entrance – Passenger drop-off and Buses
 - Main Entrance – Motorcycles and Rental car pick-up
 - Hartmann Road East – Pick-up car park
 - Hartmann Road East – Waste Storage
 - Hartmann Road East – On-site car park
 - Hartmann Road East – Car Rental, Staff Car Parks, KGV House.

Existing Car Parking

44. The site has a charge for on-site passenger car parking, alongside staff car parks which are free to use. These are all accessed from Hartmann Road, east of the main terminal building. All car parks provide blue-badge user parking.
45. The two main car parking areas are shared between passengers and staff. The short-stay car park has provision for 148 spaces and the long-stay has 644 spaces. 52 spaces are provided in the western staff car park, whilst 10 are provided in the triangle staff car park. In addition, 120 parking spaces are allocated to car hire companies and are located within the Forecourt and in an area adjacent to Hartmann Road.
46. Both short stay and main stay car parks have a pay at the barrier-controlled exit to Hartmann Road. The pricing schedule for the two car parks is shown in Table 4 overleaf and are applicable to individuals who drive-up on the day. Discounts are available for those who pre-book parking.

Existing Cycle Parking

47. There are 30 sheltered cycle parking spaces (15 Sheffield stands) located beneath the DLR viaduct and adjacent to the motorcycle parking area which is opposite the passenger drop-off area on Hartmann Road.
48. There are a further 12 cycle parking spaces located within a secure bike store in the short stay car park. These are predominantly used by staff.

Existing Drop-off/Pick-up

49. At present black taxis have their own drop-off and pick up loop directly in front of the Terminal building with a £1 fee per usage charged.
50. Private hire minicabs and private cars share separate pick-up and drop-off areas within the Airport forecourt and there are no formal vehicle controls in place. A £3.80 charge is levied for pick-up and drop-off.

Opening up of Hartmann Road

51. As part of the consented CADP scheme, it is proposed to connect Hartmann Road to the existing Albert Road/Fishguard Way junction. This will provide a more direct route for traffic accessing to/from the north and east.

Table 4: Parking Charges at the Airport

Short stay car park		Main car park	
Hours	Price	Hours	Price
0 - 0.5	£7.00	0 – 4	£20.00
0.5 – 1	£12.00	4 – 8	£30.00
1 – 2	£15.00	8 – 24	£45.00
2 – 4	£22.00	2 Days	£90.00
4 – 8	£34.00	3 Days	£135.00
8 – 12	£48.00	4 Days	£180.00
12 – 24	£55.00	5 Days	£225.00
Per additional 24 hours	£55.00	6 Days	£270.00
		7 Days	£315.00
		8 Days	£350.00
		9 Days	£385.00
		10 Days	£420.00
		11 Days	£455.00
		12 Days	£490.00
		13 Days	£525.00
		14 Days	£560.00
		Additional 24 hours	£25.00

Proposed Development

52. The proposals will increase the passenger cap from 6.5m passengers per year to 9.0 million per annum and adjust airport opening times.

Trip Generation

53. The increase in passengers will increase trips to/from the airport via surface access modes (car, taxi, private hire, bus, DLR, Elizabeth Line, walk, cycle). Compared with the consented CADP scheme, it is expected that the majority of the increase in passengers will be accommodated outside of the AM and PM peak hours for highway and public transport movements for the following reasons:
- This application seeks to extend operating hours for flights on Saturdays and more flexibility for aircraft movements in the early morning and late evening; these changes occur at times which are outside of the weekday AM/PM peak periods.
 - The composition of future passengers is forecast to be weighted more towards leisure travel in the future vs the historic business dominated travel.
 - Leisure passengers are not as sensitive to arrival and departure times of flights compared to business travellers, other than weekend days are preferred over weekdays.
 - Therefore, flight times are much more likely to be outside of the AM and PM weekday peak periods, which is where the airport expect the vast majority of future growth to occur.
54. Therefore, it is not expected that impacts during the AM and PM weekday peak periods will be significantly different or material to that assessed under the CADP consent.
55. Notwithstanding the above, a full assessment of trips to/from the airport by passengers and staff during the AM and PM weekday peak periods will be undertaken in the Transport Assessment which will accompany

this application. More detail on what the Transport Assessment will contain and the assessment years is presented below.

Proposed Car Parking and Access

56. There will be no changes to external highways access compared with the CADP consent. Vehicles will access via Hartmann Road from the west and the east, the latter via the already-constructed junction with Albert Road/Fishguard Way.
57. No additional car parking is proposed than already consented under CADP. As part of the CADP consent, it is proposed to replace the main car parking areas with three passenger car parks, a new staff car park and two new car hire areas. Each of the car parks would be accessed from Hartmann Road. As part of CADP, it is proposed to increase the parking provision from 974 spaces to 1,251 spaces, i.e. an increase of 277 spaces. A summary of the previously consented proposed car parking provision in comparison to the existing situation is set out in Table 5.

Table 5: Comparison of existing and proposed car parking provision

	Existing	Consented within CADP
Short stay	148	749
Main stay	644	
Staff car park	Within short and main stay	300
Western staff car park	52	52
Triangle staff car park	10	0
Car Hire	120	150
Total	974	1,251

58. Passenger car parking will continue to be chargeable. Staff car parking will continue to operate on a permit basis with the Travel Plan encouraging use of sustainable access modes.

Proposed Motorcycle Parking

59. A dedicated motorcycle parking area will be provided adjacent to the new staff car park and will accommodate 22 motorcycles.

Proposed Cycle Parking and Access

60. The CADP Consent includes an uplift in the provision of cycle parking spaces from 42 to 70. All cycle parking will be located in the sheltered area beneath the DLR.
61. Consideration will be given to the provision of further cycle parking, particularly to encourage staff to access by bicycle.

Proposed Forecourt Changes

62. The new passenger forecourt area is proposed to the south and east of the extended Terminal and has been designed to cater for forecast future demand.
63. The changes in forecourt capacity approved under CADP by mode are summarised in **Table 6**, indicating the increase in car and black taxi pick-up and drop-off spaces to accommodate the increase in future demand.

Table 6: Consented forecourt capacity

Vehicle Type	Existing Forecourt	Consented Forecourt
Car pick-up/ drop-off spaces	8	48
Black taxi pick-up spaces	200	336*
Black taxi drop-off spaces	8	10
Bus stops	3	3
Bus stand	1	1

*Total in forecourt, taxi feeder queue and taxi park

64. There will be further minor modifications to the approved CADP forecourt design to take account of changes in travel habits and the proposals to run a passenger shuttle bus to/from Custom House station.

Transport Assessment Methodology

65. A Healthy Streets TA will be prepared in support of the forthcoming planning application. The remainder of this note outlines the proposed methodology of assessment for each transport mode.
66. It is proposed to include an Active Travel Zone Assessment (ATZ) within the TA. The assessment routes will be scoped subsequently and agreed with LBN and TfL prior to the submission of the TA.

Report Structure

67. We envisage the TA will consist of the following sections:
- Introduction
 - Background to the project
 - Planning history
 - Development proposal summary
 - Summary of strategic transport impacts and scheme design
 - Report structure
 - Transport planning for people
 - Who is the development for, how will they travel to the site and why?
 - Site and surroundings, taking account of committed schemes including CADP and policy aspirations
 - Pedestrian access
 - Cycle access
 - Public transport access
 - Vehicular access and parking
 - Servicing arrangements
 - Waste strategy
 - Cycle and car parking arrangement
 - Relevant Policies
 - National Planning Policy Framework
 - London Plan
 - Mayors Transport Strategy
 - Newham Local Plan
 - Active Travel Zone Assessment (ATZA)
 - Area plan
 - Neighbourhood and key routes plan
 - Key route assessment
 - London-wide network
 - Multi-modal trip generation (existing and proposed uses) and impact assessment
 - Proposed mitigation

- Construction
 - Outline Construction Logistics Plan (CLP)
- Summary and Conclusions.

68. The proposed routes for the Active Travel Zone Assessment (ATZA) are shown in Figure 3. These cover walking routes to nearby shops, surgeries and parks and the route cyclists would take to access the nearest cycleway adjacent to the A13.

Figure 3: Proposed ATZ Routes



Baseline Data

69. As a result of the COVID-19 outbreak and resultant changes to people's behaviours, including suppressed demand for air travel and increased prevalence of working from home, any surveys conducted at this time on surrounding highways and public transport networks are unlikely to be representative of typical conditions. Discussions and agreement will be sought with LBN and TfL on an acceptable and robust approach such that the conclusions of the TA are reasonable. This is expected to include use of:
- Pre-Covid data (ideally from 2019)
 - TfL strategic models, particularly to establish future baseline and with development conditions, focussing upon 2031 as the future analysis year.
70. The following data sources will be used to update baseline and future mode shares:
- Staff travel surveys – historic plus those proposed to be undertaken in 2022
 - Historic passenger surveys.
71. The future baseline will also include the impacts of the Silvertown Tunnel and the Elizabeth Line.

Proposed Trip Generation Methodology

72. A trip generation exercise to determine the multi modal trip generation of the site will be undertaken in the TA. This will take account of the forecast increase in passengers and staff up to 2031, compared with the consented CADP proposals.
73. To draw comparisons and accurately determine the impact, this will be compared to the impacts with the consented CADP proposals. It will focus on the weekday peak hours of 08:00-09:00 and 17:00-18:00, albeit there is not expected to be significant changes during these periods relative to the CADP proposals.
74. Changes in daily traffic flows will be assessed to assist with air quality assessments.

Assessment Years

75. We propose to assess the following key years:
 - The baseline year of 2019, which is the last year for which reliable data can be obtained due to COVID
 - The future year of 2031 without development, which is when 6.5 mppa is likely to be achieved
 - The future year of 2031 with development, which is when the 9 mppa cap is forecast to be met.

Proposed Mode Share Changes

76. The 2020 London City Airport Masterplan sets out ambitious targets to increase the proportion of travel to/from the site by sustainable modes. The aim is to get 90% of passengers travelling by sustainable modes by 2041, with sustainable modes being defined as in the 2019 National Planning Policy Framework (NPPF) to include public transport, walking, cycling, low and ultra-low-emission vehicles and car sharing.
77. The LCY travel plan is in the process of being updated and will also include targets to reduce passenger and staff vehicle use.
78. The staff and passenger mode share changes over the years up to 2031 when 9 million passengers per annum is expected to be reached, and our 'do something' assessment year (known as the Development Case for the purposes of the EIA) has been calculated based on 2018/19 observed mode shares and adjusting them year by year in a linear fashion to reach the 2041 masterplan targets.
79. By 2031 this is expected to result in circa 82% of travel to/from the Airport being made via sustainable modes (in accordance with the NPPF definition).

Cumulative Developments

80. We seek the opinion of LBN and TfL officers as to which cumulative schemes should be included in the assessment.
81. In terms of cumulative transport schemes, we will consider the following in our future year analyses:
 - The opening of the Elizabeth Line; and
 - The opening of the Silvertown Tunnel (due in 2025).
82. The advice of TfL is sought on:
 - Timescales surrounding the opening of the DLR extension to Thamesmead
 - Any further adjustments to local bus services to take account of the opening of the Elizabeth Line.

Transport Impact Assessment

83. Impacts on the public transport and highway networks (car, taxi, private hire, bus, DLR, Elizabeth Line, walk, cycle) will be assessed using the approved LoHAM and Railplan TfL Strategic Models, access to which has already been arranged. Impacts from construction works will also be included in the assessment.

Mitigation

84. It is acknowledged that in order to facilitate the additional passenger and staff trips and the mode share targets set out above, a series of mitigation measures will be required over and above that associated with the consented CADP scheme. These are currently being worked up and will be shared with TfL/LBN in due course.

Planning Submission Documents

85. It is proposed to produce the following transport-related documents to support the planning application:
- **Healthy Streets Transport Assessment**
This document will be prepared in line with TfL's guidance as per paragraph 67 above
 - **Updated Outline Travel Plan**
The current Travel Plan will be updated to cover both passengers and staff and will be submitted with the planning application in accordance with TfL's and LBN's best practice guidance
 - **EIA Transport Chapter.**

Next Steps

86. The views of LBN and TfL are sought on the content of this note to guide the preparation of the proposed analysis and transport documents.

B TfL Pre-Application Advice and LBN Scoping Opinion



Jane Custance
Director of Planning and Development

Newham Dockside
1st Floor, West Wing
Dockside Road
London, E16 2QU

Philippa Raphael
RPS Consulting Services Ltd
20 Farringdon Street
London
EC4A 4AB

Ask for: James Bolt
Telephone: 020 337 33155
Email: james.bolt@newham.gov.uk

Date: 24th November 2022

Dear Sir/Madam,

Application No: 22/01859/SCOPE
Location: London City Airport Hartmann Road Silvertown London E16 2PX
Proposal: Request for formal Scoping Opinion in accordance with Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) for the variation (Section 73) of 13/01228/FUL dated 26 July 2016. Variations to increase number of passengers per annum, extension to operating hours and other ancillary alterations.

This Scoping Opinion is issued pursuant to Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, in response to your request for a Scoping Opinion dated 03 August 2022.

The Local Planning Authority (LPA) instructed Land Use Consultants (LUC) to prepare a response on its behalf to the request for a Scoping Opinion; and has itself also taken a considered review of the EIA Scoping Report dated November 2022, prepared by LUC.

The attached Report dated November 2022 prepared by LUC in association with Ardent Consulting Engineers and Yellow Sub Geo (entitled "London City Airport – Review of EIA Scoping Report") constitutes the Scoping Opinion of the LPA, and its contents should be fully addressed in an Environmental Statement accompanying the application.

Yours faithfully,

A handwritten signature in blue ink, appearing to read "JBolt", written in a cursive, stylized script.

James Bolt
For and on behalf of Jane Custance, Director of Planning and Development

London Borough of Newham

London City Airport **Review of EIA Scoping** **Report**

Final report

Prepared by LUC in association with Ardent Consulting Engineering and
Yellow Sub Geo
November 2022



London Borough of Newham

London City Airport Review of EIA Scoping Report

Version	Status	Prepared	Checked	Approved	Date
1.	Draft Report	LUC in association with Ardent Consulting Engineering (including APS) and Yellow Sub Geo Ltd.	H. Kent	H. Kent	29.09.2022
2.	Final Report	LUC in association with Ardent Consulting Engineering (including APS) and Yellow Sub Geo Ltd.	L. McGowan	H. Kent	23.11.2022

Bristol
Cardiff
Edinburgh
Glasgow
London
Manchester

landuse.co.uk

Land Use Consultants Ltd
Registered in England
Registered number 2549296
Registered office:
250 Waterloo Road
London SE1 8RD

100% recycled paper

Landscape Design
Strategic Planning & Assessment
Development Planning
Urban Design & Masterplanning
Environmental Impact Assessment
Landscape Planning & Assessment
Landscape Management
Ecology
Historic Environment
GIS & Visualisation



Contents

Chapter 1 Introduction	1	Chapter 11 Ecology and Biodiversity – Scoped Out	29
Purpose of the EIA Scoping Report Review	1		
The Proposed Development and Background	1	Chapter 12 Archaeology and Built Heritage – Scoped Out	31
Structure of the Review	3		
Chapter 2 Review of Approach to EIA	4	Chapter 13 Ground Conditions and Contamination – Scoped Out	32
Requirement for EIA	4		
Approach to EIA Scoping	4	Chapter 14 Waste – Scoped Out	33
Chapter 3 Socio-economics – Scoped In	7		
Chapter 4 Surface Access & Transport – Scoped In	9	Chapter 15 Major Accidents and Disasters – Scoped Out	35
Chapter 5 Noise – Scoped In	11	Chapter 16 Conclusions	37
Chapter 6 Air Quality – Scoped In	13		
Chapter 7 Climate Change – Scoped In	19		
Chapter 8 Public Health and Wellbeing – Scoped In	22		
Chapter 9 Water Resources and Flood Risk – Scoped Out	25		
Chapter 10 Townscape and Visual Effects – Scoped Out	26		

Chapter 1

Introduction

Purpose of the EIA Scoping Report Review

1.1 LUC was appointed in May 2022 by the London Borough of Newham (LBN) to review the Environmental Impact Assessment (EIA) Scoping Report for the London City Airport (hereinafter referred to as 'the Proposed Development') located between the Royal Albert Dock and King George V (KGV) Dock, adjacent to the Woolwich Reach and Gallions Reach of the River Thames. The Scoping Report (SR) was prepared by RPS on behalf of London City Airport (hereafter referred to as 'the Applicant'). The SR was submitted to LBN as a formal request for a Scoping Opinion (SO) under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (hereafter referred to as 'the EIA Regulations'), in July 2022.

1.2 The purpose of this review is to provide independent advice to LBN regarding the SR which has been submitted. LBN should also take into account the responses received from statutory consultees which have also been received during this process. LBN remains the determining authority for the SO and any direction provided to the Applicant.

1.3 The comments provided in this review report have also been informed by:

- Draft Scoping Report version 8.0 dated 13th May 2022;
- Applicant presentation/Meeting on 15th June 2022 focusing on the topics of noise and climate change;
- Jet Centre information provided by the Applicant via email dated 22nd June 2022;
- Applicant presentation/Meeting on 29th June 2022 focusing on the topics of Air Quality and surface access; and London City Airport Transport Scoping Note dated 26th May 2022 and associated ATZ Route Plan as provided by the Applicant on 29th June 2022.
- Further meeting focusing on Air Quality and Public Health on 14th September.

The Proposed Development and Background

1.4 The Proposed Development is located between the Royal Albert Dock and King George V (KGV) Dock, adjacent to the Woolwich Reach and Gallions Reach of the River Thames and

within the administrative area of the London Borough of Newham.

1.5 The surrounding area comprises of a mix of residential, industrial and commercial uses within clearly defined zones located on the northern and southern banks of the River Thames at Silvertown and North Greenwich. A significant amount of planned development and regeneration is located in the vicinity of the Proposed Development.

1.6 A previous planning application – The City Airport Development Programme (CADP1) (Ref: 13/01228/FUL) was granted in July 2016 following an appeal and public inquiry which was held in March 2016. Planning permission was granted for the following:

- a. “Demolition of existing buildings and structures;
- b. Works to provide 4 no. upgraded aircraft stands and 7 new aircraft parking stands;
- c. The extension and modification of the existing airfield to include the creation of a taxi lane running parallel to the eastern part of the runway and connecting with the existing holding point;
- d. The creation of a vehicle access point over King George V dock for emergency vehicle access;
- e. Laying out of replacement landside Forecourt area to include vehicle circulation, pick up and drop off areas and hard and soft landscaping;
- f. The Eastern Extension to the existing Terminal building (including alteration works to the existing Terminal Building) to provide reconfigured and additional passenger facilities and circulation areas, landside and airside offices, immigration areas, security areas, landside and airside retail and catering areas, baggage handling facilities, storage and ancillary accommodation;
- g. The construction of a 3 storey Passenger Pier to the east of the existing Terminal building to serve the proposed passenger parking stands;
- h. Erection of a noise barrier at the eastern end of the proposed Pier;
- i. Erection of a temporary noise barrier along part the southern boundary of the Application Site to the north of Woodman Street;
- j. Western Extension and alterations to the existing Terminal to provide reconfigured additional passenger facilities and circulation areas, security areas, landside and airside offices, landside retail and catering areas and ancillary storage and accommodation;
- k. Western Energy Centre, storage, ancillary accommodation and landscaping to the west of the existing Terminal;
- l. Temporary Facilitation works including erection of a noise reduction wall to the south of 3 aircraft stand, a Coaching Facility and the extension to the outbound baggage area;
- m. Works to upgrade Hartmann Road;
- n. Landside passenger and staff parking, car hire parking and associated facilities, taxi feeder park and ancillary and related work;
- o. Eastern Energy Centre;
- p. Dock Source Heat Exchange System and Fish Refugia within King George V Dock; and
- q. Ancillary and related works”.

1.7 Some of these aspects have since been built (specifically elements in items a-d). However, due to the Covid-19 pandemic, works were put on hold in early 2020.

1.8 It is now anticipated that the remaining CADP1 works will be built over a longer period of time (2024 – 2031), subject to further revision to the Construction Phasing Plan.

1.9 The Applicant is seeking approval to revise planning conditions attached to the CADP1 planning permission pursuant to Section 73 (S73) of the Town and Country Planning Act 1990 (as amended).

1.10 The application will comprise:

- *“Application to vary conditions attached to planning permission 13/01228/FUL dated 26 July 2016 (as varied) to allow up to 9 million passengers per annum (currently 6.5 million), flights to take place on Saturday PM, modifications to daily and other limits and changes to temporary facilitating works”*

1.11 The number of flights and number of aircraft stands will remain the same, however the disposition and layout of stands to the west airfield will be modified to allow parking of larger Code C aircrafts, and increased flexibility is requested to allow more flights than currently permitted within the first and last half hours of the operational day.

1.12 Where appropriate all relevant existing environmental and operational controls, strategies and systems approved under the other conditions attached to the CADP1 planning permission and Section 106 planning agreement will continue to apply and/or be re-imposed under a new agreement with LBN.

Structure of the Review

1.13 This report comprises the following sections:

- Chapter 2 reviews the requirement for EIA for the Proposed Development and the general approach to the EIA as set out in the introductory text of the SR;
- Chapters 3 - 8 reviews the information provided on the proposed topics for detailed assessment in the EIA. Each chapter provides commentary in relation to the SR;
- Chapters 9 - 15 reviews the information provided on the topics proposed to be scoped out of detailed assessment in the EIA. Each chapter provides commentary in relation to the SR; and
- Chapter 16 provides the conclusions of this review and a summary table setting out the recommendations made. This table should be read alongside the rest of the review and not in isolation to ensure the context of recommendations is understood.

Chapter 2

Review of Approach to EIA

Requirement for EIA

2.1 Under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, “EIA Development” is defined as “development which is either:

- *Schedule 1 development; or*
- *Schedule 2 development likely to have significant effects on the environment by virtue of factors such as its nature, size or location.”*

2.2 Schedules 1 and 2 of the EIA Regulations detail projects that may require EIA. Schedule 1 projects, for which EIA is mandatory, are generally large-scale industry and infrastructure projects while Schedule 2 developments are required to be screened for EIA where certain thresholds are exceeded.

2.3 The Proposed Development falls under Schedule 2 13(b) (Any change to or extension of development of a description listed in paragraphs 1 to 12 of column 1 of this table, where that development is already authorised, executed or in the process of being executed) with the requirement for EIA being determined on the following thresholds:

- *“The development as changed or extended may have significant adverse effects on the environment; or*
- *in relation to development of a description mentioned in column 1 of this table, the thresholds and criteria in the corresponding part of column 2 of this table applied to the change or extension are met or exceeded.”*

2.4 As the Proposed Development has the potential to give rise to significant environmental effects, the Applicant decided to undertake an EIA without requesting a Screening Opinion from LBN.

Approach to EIA Scoping

Regulatory Requirements

2.5 Where an EIA Scoping Opinion is sought, the EIA Regulations set out that this should include the following information (Regulation 15):

1. *“A person who is minded to make an EIA application may ask the relevant planning authority to state in writing*

their opinion as to the information to be provided in the environmental statement (a “scoping opinion”).

2. A request under paragraph (1) shall include—
- a. in relation to an application for planning permission
 - a plan sufficient to identify the land;
 - a brief description of the nature and purpose of the development and of its possible effects on the environment; and
 - such other information or representations as the person making the request may wish to provide or make”

2.6 The EIA Regulations are considered in **Chapter 1: Introduction**, of the SR. Section 1.3 summarises the need for an EIA and why the Proposed Development constitutes as a Schedule 2 EIA development.

2.7 The introductory chapter of the SR sets out the purpose and process of the EIA, including the scoping stage. The approach to EIA is set out in Chapter 5 of the SR and states that the ES will include a full statement of competency for the whole EIA team in accordance with Regulation 18(5) and Schedule 4 of the EIA Regulations.

The Site and Surrounding Area

2.8 Chapter 1 of the SR introduces the Site and its surroundings. The Site Location and Existing Layout is shown in Figure 1.1.

2.9 Section 1.2: Site Location and Context, goes into details providing an exact location of the Proposed Development and a description of its immediate surroundings including existing and proposed developments in the area.

Description of the Proposed Development

2.10 The SR provides a summary of the nature and purpose of the Proposed Development.

2.11 Sections 1.1 and 2.2 of the SR provide details of what the development will comprise. This includes the ‘*Application to vary conditions attached to planning permission 13/01228/FUL dated 26 July 2016 (as varied) to allow up to 9 million passengers per annum (currently 6.5 million), flights to take place on Saturday PM, modifications to daily and other limits and changes to temporary facilitating works*’.

2.12 The number of flights and number of aircraft stands will remain the same, however increased flexibility is requested to allow more flights than currently permitted within the first and last half hours of the operational day.

2.13 The disposition and layout of stands to the west of the airfield would be altered to allow parking of larger Code C

aircraft to facilitate greater resilience of the airport and accommodate new generation aircraft. It may also necessitate the removal of the existing Corporate Aviation Facility, known as the ‘Jet Centre’. It is proposed that the following aspects of the CADP1 approval will remain unchanged:

- 111,000 airport transport movements (ATMs) per annum with a maximum of 45 ATS per hour;
- 8 hour night time curfew; and
- no changes to the number of aircraft stands, runway or other infrastructure/buildings.

2.14 It would be helpful to include the information at 1.1.3 and 1.1.4 of the SR (proposed variations to conditions and consequential modifications) in Section 2.2 (Proposed Amendments to Conditions), to avoid the need to check back to understand the details of the proposed changes.

Assessment Methodology and Significance Criteria

2.15 Section 5.1 provides a Summary of the EIA Process. This notes at 5.1.5 ‘With respect to identifying the likely significant environmental effects associated with the proposal, the ES will give due consideration to a range of potential effects associated with the amended CADP1 development’. This is a key principle, as the requirement is to assess the overall development, as amended by the S73 application (not simply the change proposed). This will enable the impacts of the development incorporating the variation to be assessed. It will also ensure that consideration can be given to the mitigation of any identified significant impacts.

2.16 The SR outlines the methodology for the assessment of the significance of environmental effects in Chapter 5, Section 5.2 ‘EIA Approach’. It applies a common EIA approach of classifying effects based on nature (beneficial / adverse / direct / indirect / cumulative) and duration (temporary / permanent) and provides a definition of each. This section also references the EIA Regulations for consideration of alternatives.

2.17 Consideration will be given to the combined impacts of the consented development and the s73 proposals. This will enable the impacts of the variation to be assessed to demonstrate that it causes no material change to the conclusions of the consented scheme and also ensure that consideration can be given to the mitigation of any identified significant impacts.

Cumulative Effects

2.18 The SR identifies two types of cumulative effects to be considered. These include cumulative schemes which define the effects of the Proposed Development in combination with other existing and/or approved developments. The

assessment of intra-cumulative effects on the other hand will assess the combined effects resulting from the development, for example an individual receptor close to the site boundary may be affected by noise and visual effects.

2.19 The SR proposes in Appendix B a 'long list' of cumulative schemes which will be considered during further discussions with LBN. The Applicant however notes that most of the developments identified using the criteria will have been built and operational by 2024 and will form a baseline for the EIA. The difference between the baseline schemes and cumulative schemes will be described in the ES.

2.20 LBN should satisfy themselves that the list of cumulative developments when provided is appropriate and acceptable.

Mitigation and Residual Effects

2.21 'Incorporated mitigation' will be provided before the impact assessment section to account for 'designed in' mitigation and will form part of the future baseline. Further mitigation measures and residual effects will be addressed within each technical chapter.

Alternatives

2.22 The SR indicates that the ES will include consideration of reasonable alternatives for the Development as required by Schedule 4 of the EIA Regulations and National Planning Practice Guidance.

2.23 A 'do-minimum' scenario will be considered to describe the environmental and socio-economic conditions at the site were the Proposed Development not to occur. The SR states that no other alternatives are considered relevant in this instance. This is a reasonable approach.

Non-Technical Summary

2.24 It is noted that the concepts of the Proposed Development can be complex and that there is a lot of aviation language which may not be easily understood by members of the public. To ensure that the Proposed Development is easy to understand, the Non-Technical Summary (NTS) should ensure that all terminology is clearly defined and illustrated to provide greater clarity where relevant.

Terminology

2.25 The SR proposes that the ES will include a chapter on 'Non-Significant Topics' to provide additional information and explanation for those topics where additional significant effects or impacts are not predicted to arise from the s73 application. This will be helpful to readers.

Chapter 3

Socio-economics – Scoped In

3.1 The Proposed Development is expected to have social and economic effects, particularly effects arising from the construction and operation. As a result, a detailed socio-economic assessment will be scoped into the ES; we agree with the decision to scope in this topic.

3.2 Section 7.1 outlines the approach to the assessment. It outlines the policy context, baseline assessment and data sources that will be used to establish the baseline. These are considered acceptable.

3.3 The proposed impact area is the local area (LBN) and other adjoining boroughs. It is based on historical socio-economic benefits including the existing comprehensive community programme by the Applicant and will take into consideration matters raised through the consultation on the previous CADP1 application.

3.4 Baseline assessment years have been set out in Section 3.2 of the SR and will use 2019 (pre-pandemic) as the baseline year and 2025, 2027 and 2031 as the assessment years. This will be done in context of both with and without the Proposed Development. This approach is considered acceptable.

3.5 The assessment of the sensitive receptors, potential effects and sources are outlined in this section. Effects will be evaluated on a net additional basis considering baseline conditions in London City Airport (LCY), the local economy and the wider London economy. In the absence of formal guidance that influences socio-economic assessment methodology, the significance criteria for this topic should be clearly presented in the methodology section of this chapter topic in the ES (**SE1**).

3.6 Mitigation measures are not outlined in this section beyond the proposal to integrate existing community benefit programmes to the Proposed Development. These should be identified and outlined in the ES (**SE2**). The combined socio-economic benefits of the Proposed Development and cumulative schemes should also be considered in the assessment (**SE3**).

3.7 The SR references new Government Guidance on the designation of Public Safety Zones (PSZ). The 2015 Updated Environmental Statement considered the impacts of changes to the PSZ on the development of sites around the airport.

However, the new guidance makes a similar assessment unnecessary as the extent of PSZs is fixed by reference to the physical distances rather than the number or type of aircraft movements. This means the extent of the PSZ is the same with or without the development.

3.8 Overall, the approach to assessment is considered appropriate.

Table 3-1: Summary of SR Socio-Economics Comments

Scoping Report Socio-Economics (Scoping In is agreed – refer to recommendations in this review)	
■	In the absence of formal guidance that influences socio-economic assessment methodology, the significance criteria for this topic should be clearly presented in the methodology section of this chapter topic in the ES (SE1).
■	Mitigation measures are not outlined in this section beyond the proposal to integrate existing community benefit programmes to the Proposed Development. These should be identified and outlined in the ES (SE2).
■	The combined socio-economic benefits of the Proposed Development and cumulative schemes should also be considered in the assessment (SE3).

Chapter 4

Surface Access & Transport – Scoped In

4.1 It is considered appropriate to scope Transport into the Environmental Impact Assessment (EIA).

4.2 The EIA will address the following likely transport and access related effects during demolition and construction and once the Development is complete and operational:

- Effects upon traffic flow on local road network (severance, driver delay and accidents);
- Effects upon pedestrian and cyclist access (delay, amenity and fear and intimidation);
- Effects on pedestrian and cycling facilities and permeability through the site with improved pedestrian / cycle access through the site;
- Effect of additional vehicle trips; and
- Effect upon public transport access (delay and amenity)

4.3 The above is considered reasonable.

4.4 The ES should clearly set out likely receptors.

4.5 As set out in the SR, a Transport Assessment (TA) will be produced to accompany the application. It is considered appropriate that the TA will follow Transport for London's (TfL) Healthy Streets guidance. The list of key routes was detailed in a scoping note submitted to TfL. Notwithstanding TfL/LBN's advice, the list of key routes appears reasonable.

4.6 The TA will include multi modal trip generation predictions focussing on peak hour passenger demand on the DLR, Elizabeth Line, taxis and buses. Detailed methodology for how trip generation will be calculated is not provided however it is noted that forecast numbers of passengers up to 2031 will be included in the assessment. It is stated that the key peak hours of 0800-0900 and 1700-1800 will be assessed, however it is suggested that these peak hours are confirmed with LBN/TfL to ensure they are the appropriate network peak hours that need to be considered, as it may be worth assessing the extended peak hours of 0700-1000 and 1600-1900 as well as weekend peaks, given the unique travel characteristics of an airport land use. Further assessment may also be required when the peak hours of arrivals/departures associated with the airport itself are known, if these do not coincide with the above. The justification for the majority of impact being outside of the peak hours appears sound

however detailed justification would be included, especially with regards to impact on the PM peak where evening flights could cause impact on the transport network during this time and passenger arrival/departure profiles are established. Detailed methodology for calculating trip generation and arrival/departure profiles is to be agreed with TfL/LBN.

4.7 The TA will use the above multi modal trip generation predictions to inform junction modelling and impact on the local bus and rail networks. The extent of this modelling is to be agreed with LBN and TfL. The need for modelling of

crowding on the platforms on the DLR and potentially interchange spaces at Canning Town will be reviewed once the change in DLR loadings resulting from the proposals have been established.

4.8 The use of 2019 and pre-COVID baseline data is considered appropriate subject to agreement from TfL / LBN.

Table 4-1: Summary of DSR Surface Access and Transport Comments

Scoping Report Surface Access (Scoping In agreed – refer to recommendations in this review)	
■	The SR is considered acceptable in terms of Access and Transport.

Chapter 5

Noise – Scoped In

5.1 The noise scoping report addresses the assessment approach to be undertaken towards potential impacts from the proposals namely: noise from airborne aircraft, noise from aircraft on the ground, noise from surface access to and from the airport, and noise from construction of the remaining elements from the CADP1 permission plus any additional construction necessitated by the proposed development.

5.2 The use of 2019 as a baseline is considered appropriate.

5.3 Most significant proposals in terms of potential noise impact are considered to be additional flights in the 0630-0700 period where currently there is a two-movement limit in the 0630-0645 period and a maximum number of six-movements in the period 0630-0700; and the introduction of flights and operations on Saturday afternoons, where there currently are none.

5.4 The scoping report notes that aircraft movements are currently assessed against the LAeq,16h index including the period 0630-0700. The period 0630-0700 would ordinarily be considered as night-time, however in the CADP1 ES the 0630-0700 period has been included in the daytime contours. The proposals suggest that future operations in this (0630-0700) period would be considered using the LAeq,8h index. This change may be appropriate however a number of factors should be considered, and discussion included in the ES.

5.5 BS8233 (Note 2 under Table 4) suggests that where the pattern of operation results in high levels of noise at a certain time in the period an alternative period may be appropriate. As the only night-time operations are proposed to take place in the 0630-0700 period, it may be appropriate to consider an alternative LAeq,T index to avoid averaging over the whole night period. However, the SR notes that this will be supplemented by consideration of single aircraft operations which will provide further context to the assessment. The justification to assess the early morning <0700 movements within a night-time assessment is understood and the precedent at Heathrow is useful to understand the way the metrics are applied in relation to the LOAEL. The SR notes that the night averaging period will also be supplemented by consideration of single aircraft operations. It is expected that this will include both average (LAeq) and short duration (LAm_{ax}) noise levels to assist with the discussion and that this should be considered in the context of the ambient acoustic

environment (**NV1**). Operations (air and ground) are proposed to take place on Saturday afternoon. Separate consideration of weekend daytime noise is suggested and seems appropriate.

5.6 Surface access noise is proposed to be assessed by reference to a change in associated noise level, this is

appropriate. Surface access assessment during the proposed changes to the Saturday operations is also proposed to be included in the assessment.

5.7 Construction noise will be considered in the EIA, and the scope and approach appear suitable.

Table 5-1: Summary of SR Noise Comments

Scoping Report Noise Recommendations (Scoping In is agreed – refer to recommendations in this review)	
■	Where individual aircraft movements in the <0700 period are considered this should include discussion on the average (LAeq), and short duration (LAmax) noise levels in the context of the existing ambient acoustic environment at sensitive receptors (NV1).

Chapter 6

Air Quality – Scoped In

Scope of assessment

6.1 This section summarises the review of the proposed approach to the assessment of air quality. Since the issue of the Scoping Report a meeting between LBN and the Applicant was held on 14th September 2022 which confirmed some amendments to the scope.

6.2 The Scoping Report states that the assessment will consider the impacts of both the construction and operational phases. This is considered appropriate.

6.3 The approach to cumulative assessment of the air quality impacts of traffic has not been clearly described. Paragraphs 5.2.14 to 5.2.16 of the Scoping Report describe generic criteria for inclusion of other developments in the cumulative impact assessments. The air quality chapter of the Scoping Report provides no specific information on what will be included in the assessment of cumulative impacts of traffic on air quality (**AQ1**).

6.4 The Scoping Report states the assessment will include the impact on ambient NO₂, PM₁₀ and PM_{2.5} concentrations. This is an incomplete list of the pollutants that need to be considered. Any assessment of the road traffic impacts on air quality within ecological sites will also need to consider ammonia (NH₃) (**AQ2**).

6.5 The Scoping Report (paragraphs 7.4.19 and 7.4.20) states the assessment will not consider ultrafine particles (UFP) on the grounds that there is *“no robust manner in which to quantify UFP emissions from aircraft or other combustion sources, and it is not possible to quantify the impacts of these sources using traditional modelling approaches”*. Although UFP have been scoped out of the air quality assessment it is stated this pollutant will be considered in the Public Health and Wellbeing impact assessment (HIA) (Table 7.4).

6.6 Whilst it is accepted that traditional modelling approaches are not appropriate for assessing UFP it seems odd that the air quality specialists are not intending to provide any qualitative or semi-quantitative assessment of the potential impacts to inform the HIA. Without this it is difficult to understand how the HIA will assess the health effects of this pollutant.

6.7 The Applicant has issued a 15-page document, written by its consultants titled ‘Issues related to UFPs’, dated 20 July 2022. During the meeting between the Applicant and LBN on

14th September 2022, it was agreed that UFP would be included in the Air Quality Chapter. Much of the July document would be useful to include in the y chapter, with supplementary information in an appendix. Additional information should be provided. This could include a quantification, with justification, as to whether UFP due to aircraft emissions, are likely to decline or increase in the future, with a particular focus on sulphur content of fuel. The approach should be agreed with LBN (AQ3). The ES would be incomplete without further consideration of this issue within the air quality chapter.

6.8 There is no commitment to understand the baseline UFP conditions, which would give an indication as to whether there is likely to be a significant impact where there is exposure.

6.9 Despite the quote from the Stansted Airport appeal in the Scoping Report (paragraph 7.4.19), there is no clear relationship between PM_{2.5} concentrations, which are based on the mass of the particles, and the number of UFP (the normal metric used to quantify UFP), which are extremely small and contribute little to the PM_{2.5} mass. The Applicant's own document on UFPs states *"UFP forms an extremely small fraction of suspended particular mater (such as PM₁₀ or PM_{2.5})"*, which suggests the applicant's consultants agree that there is no clear relationship between PM mass and number of UFP. The World Health Organization (WHO) has stated that *"Clinical and toxicological studies have shown that ultrafine particles (in part) act through mechanisms not shared with larger particles that dominate mass-based metrics, such as PM_{2.5} or PM₁₀."*

6.10 Paragraph 7.4.19 of the Scoping Report states there are no guidelines or standards against which to compare UFP concentrations. It is accepted that there are currently no air quality guidelines (AQG) or legislative standards for UFP.

6.11 The 2021 WHO Air Quality Guidelines state that studies have demonstrated *"...short-term effects of exposure to UFP, including mortality, emergency department visits, hospital admissions, respiratory symptoms, and effects on pulmonary/systemic inflammation, heart rate variability and blood pressure; and long-term effects on mortality (all-cause, cardiovascular, IHD and pulmonary) and several types of morbidity. However, various UFP size ranges and exposure metrics were used, preventing a thorough comparison of results across studies (US EPA, 2019a) Therefore, there was a consensus in the GDG [i.e. Guidance Development Group] that the body of epidemiologic evidence was not yet sufficient to formulate an AQG level. At the same time, however, there is a large body of evidence from exposure science that is sufficient to formulate good practice advice."*

6.12 The 2021 WHO guidelines include a good practice statement on UFP which distinguishes between low and high particle number counts (PNC). Low PNC can be considered <

1,000 particles/cm³ (24-hour mean). High PNC can be considered > 10,000 particles/cm³ (24-hour mean) or 20,000 particles/cm³ (1-hour mean). These values, together with other information in the UFP good practice statement can be used to assess the baseline conditions to indicate whether or not the s73 application, together with the consented scheme, is likely to exceed these values.

6.13 It is important that the assessment of the s73 proposals does not repeat the approach used in the ES for the Stansted Airport expansion (planning ref UTT/18/0460/FUL) of assuming that PM_{2.5} can be used as a surrogate for UFP.

6.14 The two most recent airport planning decisions in relation to UFP are not directly relevant to this s.73 application as the context of both sites is different to that of London City Airport.

Methodology

6.15 The Scoping Report states that the review of the baseline conditions will draw on existing monitoring and modelled data provided by the Airport, local authorities and Defra. This is appropriate for the traditional pollutants.

6.16 There is no baseline UFP monitoring data for LCY airport. It would be useful to undertake this monitoring given that there is residential exposure closer at this airport than other UK airports. Given the timescales it may not be practicable to undertake this for the s73 application.

6.17 The assessment of the dust and PM₁₀ impacts due to construction activities will be undertaken using updated Institute of Air Quality Management (IAQM) guidance to identify the risk of adverse impacts, if available in time. (AQ4).

6.18 It is important that the construction traffic is not considered in isolation from the construction non-road mobile machinery (NRMM) and development traffic, and that the combined traffic levels/NRMM are considered together on a year-by-year basis to ensure that the worst-case years are included in the assessment (AQ5).

6.19 The Scoping Report states that the operational impacts will be predicted using ADMS. This suite of dispersion models are considered to be fit for this purpose providing the inputs and setup are suitable and the application is in a manner which has been validated by the software developer. Where it is being applied in a novel way, justification is required and comparison with monitoring may be needed. When the ES is submitted all model files should be provided to the local planning authority to enable a full audit of the modelling to be carried out (AQ6).

6.20 No information is provided regarding the receptors to be included in the ADMS models (AQ7).

6.21 The scope of the revised emission inventory for the airport appears adequate.

6.22 The Scoping Report states that the assessment will follow, as far as is possible, the “*sophisticated approach*” defined in the ICAO Airport Air Quality Guidance Manual. This is considered suitable for airport operations.

6.23 The Scoping Report states that the assessment of the operational impacts will use 2019 as the base year which is appropriate given the impact of the pandemic on travel patterns.

6.24 The future assessment years of 2025, 2027 and 2031 also seem appropriate, however an addition ‘worst case’ year may be required following the analysis of construction traffic/NRMM/ development traffic movements (**AQ8**).

6.25 The Scoping Report describes the study area for the air quality assessment as including a 1km radius around the airport boundary; it will also include all road links where incremental changes to traffic flows exceed established screening criteria. The traffic screening criteria is considered appropriate for human receptors, but for impacts on ecological receptors the criteria is different. If, effects on nature conservation sites are scoped in, these should be defined (**AQ9**).

6.26 The Scoping Report states that the operational impacts will be considered against the assessment of the 2016 consented development in the Updated Environmental Statement (UES) published in 2015. It is not clear if the comparison is with the baseline scenarios set out in the UES or the proposed development scenarios in the UES. Either way, it is not appropriate to use the modelled air quality data reported in the 2015 ES as Defra’s and the local authority’s data, the LAQM tools and guidance, and the ADMS model used have all been updated since 2015. It will be necessary to repeat the modelling using the most recent data and assessment tools and guidance (**AQ10**).

6.27 The assessment should not look solely at the impact of the s73 proposals because that assessment is unlikely to be a true assessment of whether the proposals are acceptable. An incremental change to the planning application, such as this s73 application, could change a previously judged air quality impact from ‘minor’ (and hence not significant) into moderate (and therefore significant) when considered in relation to the original baseline. Whereas considering only the incremental change of the s73 application relative to the extant scheme the change would be negligible.

6.28 In this case, the s73 application on its own is unlikely to be significant because the change compared to the extant scheme is likely to be small, but the original application plus s73 application could together be significant. If it is not assessed together (the cumulative impact as required by the EIA regulations) in relation to the original baseline an opportunity to mitigate a significant impact could be lost. This

is particularly important because although the consent has been implemented, little has been built out. The assessment should consider the combined impacts of the consented development and the s73 proposals. This will enable the impacts of the variation to be assessed to demonstrate that it causes no material change to the conclusions of the consented scheme. It will also ensure that consideration can be given to the mitigation of any identified significant impacts (**AQ11**).

6.29 The ADMS model will be verified for the base year (2019), presumably following the Mayor of London’s LLAQM.TG19 methodology, although this is not stated and, if appropriate, accounting for the LAQM.TG22 approaches. The model verification should include all available monitoring data and if any monitoring sites are excluded, full justification for their exclusion should be provided (**AQ12**). The model verification should aim for an adjustment factor of 2 or less with all predicted concentrations within 10% of the measured concentrations (**AQ13**). This is particularly important for a review of the road emissions model performance but ideally carried out for all modelled emissions. If these model uncertainty criteria are not achieved, the assessment may need to consider whether the assessment criteria needs to be more precautionary to account for the uncertainty in the modelling process.

6.30 In addition, future assessment years should consider the variation in annual meteorological datasets within the assessment process (**AQ14**).

6.31 The Scoping Report states (paragraph 7.4.7) that “*The assessment will consider the relevant objectives for the pollutants of concern. The assessment will also have regard to the 2005 WHO guideline for PM_{2.5} (10 µg/m³ as an annual mean) in accordance with Policy SI 1 of the London Plan*”. Later it states (paragraph 7.4.17) “*The outputs of the model will be used to determine compliance with the objectives and the WHO guidelines at each receptor location*”. No reference has been made regarding assessing compliance with the mandatory limit values (including with the PM_{2.5} limit value adopted in 2020) which is required by planning guidance. The objectives and limit values apply at different locations. This assessment of compliance with the limit values should be included in the ES (**AQ15**). If information is available, even in draft form, on the 2021 Environment Act PM_{2.5} targets, the ES should include an assessment against these targets (**AQ16**).

6.32 Comparison of the predicted concentrations to the 2021 WHO guidelines and interim targets should be provided for all relevant pollutants (**AQ17**). Compliance with the WHO guidelines is not mandatory but a commentary on the levels the local community will be exposed to with the s73 proposals, and the consented development should be provided in the Air Quality chapter which can then be assessed in the HIA in

terms of the significance of effect on human health. The WHO guidelines are solely based on the medical evidence, while the objectives and limit values are based on out-of-date medical evidence and several non-medical factors such as technical and economic feasibility of achieving them.

6.33 The Scoping Report (paragraph 7.4.17) states that the magnitude of the impacts will be based on professional judgement following relevant professional guidance. This is considered appropriate providing robust evidence to support the judgement is presented.

6.34 The Scoping Report (paragraph 7.4.12) states that consideration will also be given to the potential impacts of airport odours. However, no information has been provided regarding how the odours would be assessed other than stating the impacts will be modelled using ADMS-Airport, nor what assessment criteria would be used. No reference has been made to the IAQM odour guidance which recommends that several different assessment methods should be used to assess odour for planning purposes. Further details should be submitted to the local planning authority (**AQ18**).

The air quality assessment should provide a commentary on how climate change will impact on air quality in the future (**AQ19**).

Surveys

6.35 The Scoping Report states that the baseline assessment will draw on existing air quality monitoring and modelling data from the airport, local authorities and Defra. No additional monitoring is to be undertaken. For the traditional pollutants this is an appropriate approach.

6.36 It is recommended that baseline UFP monitoring is undertaken close to the receptors most likely to be affected (i.e., those closest to the runway and downwind most frequently) to assess whether there is potential for UFP to be a significant issue at relevant locations (**AQ20**). This may show that receptors are too far from the runway for UFP exposure to be an issue and will help inform an assessment of the impacts of the s73 proposals. This would be consistent with the 2021 WHO Air Quality Guidelines good practice statement on UFP which recommends integrating UFP monitoring into existing air quality monitoring.

Reference to best practice guidance

6.37 The guidance documents referred to in the air quality section of the Scoping Report are listed below:

- Professional guidance produced by the IAQM on the assessment of the construction and demolition impacts
- Greater London Authority's SPG on the Control of Dust and Emissions during Construction and Demolition

- Professional guidance produced by Environmental Protection UK (EPUK) and IAQM on assessing operational impacts for planning
- Statutory guidance from Defra - LAQM Technical Guidance TG16. This document is not applicable to London although may contain useful information. However, it has been updated and the current version should be used (LAQM.TG22).
- Statutory guidance for London – London LAQM Technical Guidance, LLAQM.TG19
- ICAO Airport Air Quality Guidance Manual
- WHO 2005 Air Quality Guidelines. This has been replaced by the 2021 Air Quality Guidelines
- Guidance on Buildings Emission Benchmarks and Transport Emissions Benchmarks for air quality neutral assessments produced on behalf of the GLA.
- Mayor of London Guidance on Air Quality Positive

6.38 The air quality section of the Scoping Report also mentions the 2021 Environment Act, and its requirement to set a new PM_{2.5} target.

6.39 The above noted guidance should be referenced in the ES (**AQ21**).

6.40 The following guidance documents, of possible relevance to the assessment of the s73 Proposals, have not been referred to:

- Professional guidance published by IAQM on the assessment of odour for planning
- Professional guidance published by IAQM on the assessment of air quality impacts on designated nature conservation sites.

6.41 Consideration should be given to the relevance of the above noted guidance documents (**AQ22**).

6.42 Furthermore, it is recommended that any draft IAQM guidance is taken into consideration (**AQ23**).

Receptors identified

6.43 The Scoping Report refers to the receptors in general terms but does not identify where they will be or how many will be included. It states that the baseline study will determine the existing and new receptors introduced by committed / proposed development, likely to be affected by the s73 Proposals. These should be confirmed with the local planning authority prior to assessment of impacts (**AQ24**).

Consultees

6.44 There are no statutory consultees explicitly on air quality in the planning system. The Environment Agency would not normally comment on the air quality impacts of development it does not regulate. Natural England would consider the air quality impacts on Sites of Special Scientific Interest (SSSIs), National Network Sites and Ramsar but at this stage it is unclear whether this will be included in the assessment or not.

6.45 It is considered good practice to consult the local authority's air quality specialist to agree the methodology in detail (i.e., greater detail than is normal in a Scoping Report). This has not been mentioned in the Scoping Report. The Applicant should confirm any proposed consultation (**AQ25**).

6.47 The Greater London Authority's SPG on the Control of Dust and Emissions during Construction and Demolition is also referred to.

6.48 The 2007 UK Air Quality Strategy is mentioned, but there is no reference to Defra currently updating it.

6.49 No other national, regional or local air quality policy documents are referred to, such as the 2019 Clean Air Strategy, the Mayor of London's Environment Strategy and the 2019 London Borough of Newham's Air Quality Action Plan 2019-2024. The Applicant should confirm if these documents will be referred to in the assessment (**AQ26**).

Policy documents referenced

6.46 The London Plan is mentioned in the context of the Mayor's PM_{2.5} target of 10 µg/m³ (as an annual mean).

Table 6-1: Summary of SR Air Quality Comments

Summary of Final Scoping Report Air Quality recommendations
The Applicant is requested to provide clarity on what information will be included in the assessment of cumulative impacts on traffic (AQ1).
Any assessment of the road traffic impacts on air quality within ecological sites will also need to consider ammonia (NH₃) (AQ2).
Additional information should be provided which should include a quantification, with justification, as to whether UFP due to aircraft emissions, are likely to decline or increase in the future, with a particular focus on sulphur content of fuel. The approach should be agreed with LBN (AQ3).
It is understood that IAQM is updating its guidance and it is important that the most recent guidance is used if available in time (AQ4).
It is also important that the construction traffic is not considered in isolation from the development traffic, and that the combined traffic levels are considered together on a year-by-year basis to ensure that the worst-case years are included in the assessment (AQ5).
When the ES is submitted all model files should be provided to the local planning authority to enable a full audit of the modelling to be carried out (AQ6).
Information should be provided on the receptors to be included in the ADMS models (AQ7).
The future assessment years of 2025, 2027 and 2031 also seem appropriate, however an addition 'worst case' year may be required following the analysis of construction traffic/NRMM/ development traffic movements (AQ8).
The traffic screening criteria is considered appropriate for human receptors, but for impacts on ecological receptors the criteria is different. If, effects on nature conservation sites are scoped in, these should be defined (AQ9).
It is not appropriate to use the modelled air quality data reported in the 2015 ES as Defra's and the local authority's data, the LAQM tools and guidance, and the ADMS model used have all been updated since 2015. It will be necessary to repeat the modelling using the most recent data and assessment tools and guidance (AQ10).
The assessment should not look solely at the impact of the s73 proposals; the assessment should consider the combined impacts of the consented development and the s73 proposals. This will enable the impacts of the variation to

Summary of Final Scoping Report Air Quality recommendations	
	be assessed to demonstrate that it causes no material change to the conclusions of the consented scheme. It will also ensure that consideration can be given to the mitigation of any identified significant impacts (AQ11) .
■	The ADMS model will be verified for the base year (2019), presumably following the Mayor of London's LLAQM.TG19 methodology, although this is not stated. The model verification should include all available monitoring data and if any monitoring sites are excluded, full justification for their exclusion should be provided (AQ12) . The model verification should aim for an adjustment factor of 2 or less with all predicted concentrations within 10% of the measured concentrations (AQ13) . In addition, future assessment years should consider the variation in annual meteorological datasets with the assessment process (AQ14) .
■	No reference has been made regarding assessing compliance with the mandatory limit values (including with the PM _{2.5} limit value adopted in 2020), and if information is available, even in draft form, on the 2021 Environment Act PM _{2.5} target. The objectives and limit values apply at different locations and should be included in the ES (AQ15) .
■	If information is available, even in draft form, on the 2021 Environment Act PM _{2.5} targets, the ES should include an assessment against these targets (AQ16) .
■	Comparison of the predicted concentrations to the 2021 WHO guidelines and interim targets should be provided for all relevant pollutants (AQ17) .
■	No reference has been made to the IAQM odour guidance which recommends that several different assessment methods should be used to assess odour for planning purposes. Further details should be submitted to the local planning authority (AQ18) .
■	The air quality assessment should provide a commentary on how climate change will impact on air quality in the future (AQ19) .
■	It is recommended that baseline UFP monitoring is undertaken close to the receptors most likely to be affected (i.e. those closest to the runway and downwind most frequently) to assess whether there is potential for UFP to be a significant issue at relevant locations (AQ20) .
■	All guidance noted in the commentary should be referenced in the ES (AQ21) .
■	Consideration should be given to the relevance of the following guidance documents (AQ22) :
■	Professional guidance published by IAQM on the assessment of odour for planning
■	Professional guidance published by IAQM on the assessment of air quality impacts on designated nature conservation sites.
■	It is recommended that any draft IAQM guidance is taken into consideration (AQ23) .
■	The Scoping Report refers to the receptors in general terms but does not identify where they will be or how many will be included. It states that the baseline study will determine the existing and new receptors introduced by committed / proposed development, likely to be affected by the s73 Proposals. These should be confirmed with the local planning authority prior to assessment of impacts (AQ24) .
■	It is considered good practice to consult the local authority's air quality specialist to agree the methodology in detail (i.e. greater detail than is normal in a Scoping Report). This has not been mentioned in the Scoping Report. The Applicant should confirm any proposed consultation (AQ25) .
■	The Applicant should confirm if the following documents will be used in the assessment (AQ26) :
■	2019 Clean Air Strategy;
■	the Mayor of London's Environment Strategy;
■	2019 London Borough of Newham's Air Quality Action Plan 2019-2024.

Chapter 7

Climate Change – Scoped In

7.1 The following commentary is provided by LUC.

7.2 Overall, the methodology and activities scoped into the study is broadly correct and consistent with guidance and is therefore considered acceptable.

7.3 Overall, the assessment method chosen for Climate Change is appropriate. However, more detail is needed regarding climate resilience. It is not sufficient to state that the assessment will follow IEMA guidance. Please see 7.18-7.20 for more detail.

7.4 We agree with the scoped in and scoped out activities that could give rise to changes in GHG emissions from the operation of the airport. This should capture any overall changes in emissions.

7.5 In 7.5.1 The SR correctly refers to the updated IEMA GHG guidance (2022) but should explicitly acknowledge the following *“the crux of significance is not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050” (CC1)*

7.6 In 7.5.13 consideration should be made towards the electrification of surface transport and the impacts this will have on the energy consumption and emissions in both modelled scenarios.

7.7 In 7.5.19 clarification is needed on what scenario from the “Jet zero: further technical consultation” will be used to inform the assumptions used in modelling both scenarios. Scenario 1: Continuation of Current trends would be the likely worst-case scenario. It should be noted that even this scenario involves optimistic assumptions, particularly surrounding carbon pricing. Sensitivity testing could include modelling the three other more optimistic scenarios set out by the Jet Zero technical consultation **(CC2)**.

7.8 7.5.20 states “The approach to classifying and defining likely significant effects will rely on:

- IEMA (2022) guidance (see Section 6 of the IEMA guidance) applying expert judgment on the significance of the Airport’s lifecycle **ground-based** GHG emissions”

7.9 Therefore, does the applicant intend to only assess the significance of the ground-based activities of the proposed changes in operations? In 7.5.6, climb out, cruise and descent (CCD) departures are scoped in **(CC3)**.

7.10 In 7.5.20 please ensure that the choice of carbon budget is justified. In section 6.2 of IEMA's Assessing Greenhouse Gas Emissions and their Significance states "Generating a project's carbon contribution, will enable the impact of your project, to be contextualised against sectoral, local or national carbon budgets". If, for example, national carbon budgets are chosen rather than sectoral, this will need to be justified **(CC4)**.

7.11 In the Climate Change resilience assessment, IEMA Environmental Impact Assessment Guide to: Climate Change Resilience & Adaption (2020) suggests that the following information should be outlined during the scoping stage of the EIA:

- Identify the scale and scope of the project, including design life
- Identify the climate change projections for use in the assessment
- Identify key climatic variables relevant to the project
- Identify likely effects

7.12 The applicant has not provided these, only shown an indication that the assessment will follow the guidance from IEMA (2020). More detail is needed and should be provided in the ES **(CC5)**.

7.13 The applicant has also not indicated the method they will use to assess significance in regard to climate resilience. With respect to climate change adaptation and effect significance, section 7 of the IEMA Guidance (IEMA, 2020) explains that in determining significance, account should be taken of the susceptibility of the receptor (e.g., ability to be affected by a change and the opposite of climate resilience) and the vulnerability of the receptor (e.g., potential exposure to a change).

7.14 In 7.5.29 a reference should be provided for this quote **(CC6)**.

7.15 In 7.5.31 a specific page reference should be provided to the location of the approach set out in the Airports National Policy Statement **(CC7)**.

7.16 In 7.5.30 – the Bristol expansion inquiry is relevant as provides an indication of government policy. However, the applicant should note Figure 4 of the IEMA (2020) guidance that states: *"For clarity, Module D in Figure 4 (Benefits and Loads Beyond the System Boundary) refers to wider impacts that may not be appropriate to attribute (in part or whole) to the project when calculating net impacts within the study boundary but are nevertheless relevant context to consider. Examples include the benefits of a project sending waste materials for recycling rather than disposal (which is properly attributed to the user of recycled products, but still relevant to acknowledge) or where a major project such as an airport or rail line might affect regional or national travel patterns and emissions (properly attributable to a wider group of transport users, but relevant to acknowledge in the project context)."* Therefore, acknowledging the wider context surrounding air travel, climate change and the UK's climate targets is necessary in relation to the project.

Air Quality Considerations

7.17 The following comment is provided by Ardent/Air Pollution Services.

7.18 The SR in paragraph 7.5.2 states *"will account for the seven GHG's included in the UNFCCC/Kyoto Protocol"*. This covers only direct GHG's. The assessment should also account for 'indirect GHG's' in line with IPCC GWP evidence **(CC8)**.

7.19 SR table 7.3 states: *"Passengers passing through the terminal consume food, drinks and other products however there is limited data on the types and amounts as retail activities are carried out by 3rd parties. GHG emissions associated with the delivery of materials to the airport and the treatment of any waste however is included in the assessment and the overall effect of excluding the GHG emissions from the manufacture of consumables (a material proportion of which would occur outside of the UK) is considered to be small and less than the 1% threshold identified by IEMA"*. It is assumed that data on the stock supplies for the retail units will be available or at the very least estimates produced. Evidence should be provided to demonstrate that the emissions will be less than the 1% threshold. Often consumables account for very high quantities of emissions, especially for retail units with high footfall. The fact that a material proportion of consumables are manufactured outside the UK will further contribute emissions through additional transport **(CC9)**.

Table 7-1: Summary of FSR Climate Change Recommendations

Summary of Final Scoping Report Climate Change recommendations	
■	The applicant will need to acknowledge the wider context surrounding air travel, climate change and national climate targets in relation to the project (CC1).
■	Clarification is sought on which scenario from the “Jet zero: further technical consultation” will be used to inform the modelling of both scenarios proposed (CC2).
■	Clarification is sought on whether the climate change assessment will only include ground operations (CC3).
■	Please ensure that the most appropriate carbon budget is used to assess significance and its use is justified (CC4).
■	
■	The applicant will need to provide more detail in regard to the following aspects of the climate resilience assessment (CC5): – Identify the scale and scope of the project, including design life – Identify the climate change projections for use in the assessment – Identify key climatic variables relevant to the project – Identify likely effects – Provide an outline of the method to be used to determine significance in regard to climate change adaptation and effect significance
■	In 7.5.29 a reference should be provided for this quote (CC6).
■	In 7.5.31 a specific page reference should be provided to the location of the approach set out in the Airports National Policy Statement (CC7).
■	The assessment should also account for ‘indirect GHGs’ in line with IPCC GWP evidence (CC8).
■	It is assumed that data on the stock supplies for the retail units will be available or at the very least estimates produced. Evidence should be provided to demonstrate that the emissions will be less than the 1% threshold as consumables often account for very high quantities of emissions (CC9).

Chapter 8

Public Health and Wellbeing – Scoped In

8.1 It is considered appropriate to scope Public Health and Wellbeing into the EIA as set out in the SR. Table 7.4 of the SR sets out the scope of the assessment based on tools used by the Institute of Public Health (IPH, 2021) and uses strategic determinants of health set out in Health Impact Assessment (HIA) guidance that span environmental, social, behavioural, economic and institutional factors to assess potential effects. This approach is considered acceptable.

8.2 A population health approach will be taken, informed by discussion of receptors in conjunction with other technical chapters of the ES. This approach is in line with guidance and good practice and is considered acceptable.

8.3 The approach for setting out baseline conditions considers a wide range of data sources including local, regional and national sources. The Applicant notes that the east-west alignment of the airport means that populations in Newham, Greenwich and Tower Hamlets are of particular interest to the health assessment. The baseline data will be acquired from the Office for Health Improvement and Disparities (OHID) Fingertips Local Authority Health Profiles using the most recent profiles (2019-2020). This should provide a high-level summary of some of the key health issues in the three local authorities. Small area data for a larger range of indicators will be collected and presented as part of the ES using the OHID local data tool and deprivation mapping. This approach is considered acceptable.

8.4 The Potential Sensitive Receptors identified in section 6.6.31 of the SR are considered acceptable for inclusion within the HIA. However, if when gathering the baseline conditions any further sensitive human receptors are identified, these should also be considered within the HIA (**PHW1**).

8.5 Further in the HIA scope of works it states that while there is a lack of specific guidance in determining significance for health in EIA, the UK guidance (IPH, 2021), and International Association for Impact Assessment (IAIA) and European Public Health Association (EUPHA) (IAIA/EUPHA 2020) can be applied consistently to all determinants of health and will therefore be used provided an agreement with public health stakeholders is secured. This agreement should be reflected in the ES and is considered acceptable.

8.6 The SR notes that the following will be scoped into the public health and wellbeing assessment:

- Operational air noise;
- Ground noise;
- Daytime and night time effects;
- Air quality including ultra-fine particulate matter (UFPs); and
- Climate change.

8.7 Issues relating to water and soil quality and electro-magnetic fields (EMF) are scoped out of the public health and wellbeing assessment.

8.8 With regards to the scoped in considerations of the public health and wellbeing assessment it is noted that with regards to operational and ground noise, that these will be assessed in the noise assessment and that the health assessment will consider the public health, population level and implication of such changes, where the noise assessment will consider changes in the aircraft and the increase in passenger surface access requirements.

8.9 The Applicant proposes to undertake a qualitative assessment in line with IPH 2021 guidance as opposed to the WHO guidelines proposed in the review of the DSR. The FSR also highlights that IEMA in collaboration with OHID, are in the process of producing further guidance on health in EIA, and that regard will be given to this which may include updates to the final methodology used. This is considered generally appropriate, but reference should also be made to the 2021 WHO Air Quality Guidelines (see further detailed comments below).

8.10 The applicant's intention to continue dialogue with LBN's Director of Public Health is welcomed.

8.11 Insufficient information is provided on the approach to assessing the impacts on health due to air pollution.

8.12 The Applicant should consider how the impacts change due to the variation (i.e., the consented development + variation) compared to the impacts set out for the consented scheme. These changes should be used to evidence whether there is a beneficial or adverse effect of the proposed variation compared to the consented scheme.

8.13 The health assessment criteria for air quality are unclear. Paragraph 7.6.6 states that the assessment will include "...consideration of small changes below health protection standards". Presumably this is referring to the objectives and limit values, but Table 7.4 states that it will consider the non-threshold effects of NO₂ and PM_{2.5} on population health (the standards are thresholds). Clarity is required regarding how the health effects of air pollution will be assessed (**PHW 2**).

8.14 It also states that "WHO air quality guideline values will also be referenced as an aspirational target, for example the Mayor's aspiration to meet the 2005 WHO guideline for PM_{2.5}". It should be noted that this is no longer a WHO air quality guideline. Furthermore, whether a target is aspiration or not is not relevant for health impacts; it is relevant for policy development which this s.73 does not address.

8.15 Table 7.4 states the assessment will have "regard to WHO guide values and how the air quality chapter modelling results compare to them; but the health assessment will not hold the project to WHO guide values where they are more stringent than UK statutory standards".

8.16 The Air Quality chapter should assess compliance against regulatory standards, while the Public Health and Well Being chapter should consider the health impacts of air pollution as part of a wider health impact assessment which includes both the benefits and disbenefits to health of the proposals. The health assessment will not "*hold the project to WHO guide values*" and this statement suggest a misunderstanding of the role of this assessment which is to robustly and appropriately identify the health effects.

8.17 The Public Health and Well Being chapter should assess against the 2021 WHO Air Quality Guidelines which are based on the most recent synthesis of the medical evidence (**PHW3**).

8.18 The current air quality objectives and limit values are not suitable for assessing the impact of exposure to air pollution on health. They are based on the technical and economic feasibility combined with as the medical evidence. Furthermore, they were adopted nearly 25 years ago, since when there has been a very significant body of research which show health effects at considerably lower levels as reflected in the 2021 WHO air quality guidelines. For example, the WHO guidelines, not the limit values or objectives, were relied upon by the 2020 Coroner's conclusions into the causes of the death of Ella Kissi Debrah.

8.19 The HIA appears rather narrow in its approach to the consideration of air quality. For example, there is no mention of the impact of exposure to air pollution as a direct result of the airport operations, such as exposure airside and in airport buildings nor does it appear to include the impacts of exposure to odours. The applicant should consider the full range of risks to health including exposure of the future users within the airport boundary (**PHW4**).

8.20 The air quality objectives and limit values apply at different locations. For the HIA, full considerations of all locations where people may be exposed to air pollution over different averaging periods should be considered (**PHW5**). The Applicant should provide quantitative information on air pollution in relation to WHO guidelines in the Air Quality

Assessment to allow the HIA to fully assess the health effects (PHW6).

8.21 HIA guidance suggests a population-based approach. It should be noted that air quality assessments assess impacts using individual receptors which typically represent worst-case impacts. There is no information on the methodology for going from the air quality impact at individual receptors to the impact on populations. This needs to be provided (PHW7).

8.22 The Applicant should provide an assessment of UFP in the Air Quality Assessment to allow the health assessment to fully assess the health effects of this pollutant (PHW8).

8.23 The determination of significance in relation to air quality should be related to the health outcomes rather than a breach of statutory standards (PHW9).

8.24 The Applicant has stated that the health chapter conclusions will be presented in both EIA categories of significance, such as major, moderate, minor or negligible; and a narrative explaining this 'score' with reference to evidence, local context and any inequalities. The details of the 'score' methodology should be clearly outlined in the ES (PHW10).

Table 8-1 – Summary of FSR Public Health and Wellbeing Comments

Summary of Final Public Health and Wellbeing recommendations
When gathering the baseline conditions, if any further sensitive human receptors are identified, these should also be considered within the HIA (PHW1)
Clarity is required regarding how the health effects of air pollution will be assessed (PHW 2).
The Public Health and Well Being chapter should assess against the 2021 WHO Air Quality Guidelines which are based on the most recent synthesis of the medical evidence (PHW3).
The HIA is narrow in its approach to consideration of Air Quality. The Applicant should consider the full range of risks to health including exposure of the future users within the airport boundary (PHW4).
For the HIA, full considerations of all locations where people may be exposed to air pollution over different averaging periods should be considered (PHW5).
The Applicant should provide quantitative information on air pollution in relation to WHO guidelines in the Air Quality Assessment to allow the HIA to fully assess the health effects (PHW6).
There is no information on the methodology for going from the air quality impact at individual receptors to the impact on populations. This needs to be provided (PHW7).
The Applicant should provide an assessment of UFP in the Air Quality Assessment to allow the health assessment to fully assess the health effects of this pollutant (PHW8).
The determination of significance in relation to air quality should be related to the health outcomes rather than a breach of statutory standards (PHW9).
The Applicant has stated that the health chapter conclusions will be presented in both EIA categories of significance, such as major, moderate, minor or negligible; and a narrative explaining this 'score' with reference to evidence, local context and any inequalities. The details of the 'score' methodology should be clearly outlined in the ES (PHW10).

Chapter 9

Water Resources and Flood Risk – Scoped Out

9.1 It is considered appropriate for Water Resources and Flood Risk to be **scoped out** of the EIA, on the basis that the modifications to the planning conditions sought through the current S73 application will not introduce further significant environmental impacts, but some updated information will need to be provided.

9.2 The SR identifies the need to consider the updated Thames Tidal Downriver Breach Inundation Modelling study (2018), which was not available at the time the previous Flood Risk Assessment for the CADP1 was undertaken, and which shows the site to be partly within the breach extents. The Applicant will consider any implications of this change within an updated Flood Risk Assessment (FRA) which is to accompany the S73 application. This is deemed appropriate.

9.3 The updated FRA will identify any required updates to the surface water drainage strategy with consideration to current policy requirements. Revisions or upgrades to the proposed mitigation measures will be specified within the ES. Any new findings of the updated FRA will be detailed in the ES Chapter, with due consideration to the Environment Agency's latest modelled breach extents.

9.4 The FSR states that no new or materially different effects on water quality are expected following the proposed changes to the scheme, in view that the approved Construction and Environmental Management Plan (CEMP) will continue to be adhered to throughout the construction process. This assessment is supported.

9.5 The Applicant has stated that the impact that the increase in passenger traffic may have on potable water infrastructure capacity will be assessed in consultation with Thames Water. The assessment and consultation will also consider any increase in wastewater capacity. This information will be covered as part of the ES.

Table 9-1 – Summary of FSR Water Resources and Flood Risk Commentary

Water Resources and Flood Risk (Scoping Out is acceptable – refer to recommendations in this review)	
■	As proposed in the Scoping Report it is considered appropriate to Scope Out Water Resources.

Chapter 10

Townscape and Visual Effects – Scoped Out

10.1 The SR outlines the proposed structure, content and scope of the Environmental Statement (ES) to be submitted with a forthcoming Section 73 (S73) planning application, which will comprise amendments to the City Airport Development Programme 1 (CADP1) Planning Permission, 13/01228/FUL, granted in July 2016.

10.2 The SR (para 6.2) proposes that the Townscape and Visual Impact Assessment (TVIA) is **scoped out** of the EIA. This is on the basis that it is highly unlikely that this topic will exhibit any new, or materially different, likely significant environmental effects as a result of the proposed changes. It is noted that this is especially because there are no physical changes to the approved CADP1 infrastructure.

10.3 The following section considers whether the Scoping Report clearly justifies exclusion of the TVIA on the basis that proposed changes will not give rise to any new or materially different significant townscape and visual effects. It looks at:

- The effects reported by the 2015 TVIA produced by RPS (submitted for the CADP1 planning permission);
- The proposed amendments to the CADP1 (forthcoming S73 planning application);
- Whether the amendments as part of the forthcoming S73 planning application change the effects reported by the 2015 TVIA; and
- Whether it is justified to scope out the TVIA from the S73 application and whether the Scoping Report clearly justifies its exclusion.

The effects reported by the 2015 TVIA

10.4 The 2015 TVIA assessed the likely significant effects of the development of the proposed CADP1 on townscape character and visual receptors. The likely effects were assessed for both daytime and night-time during the construction and operation of the proposed CADP1.

10.5 The 2015 TVIA was carried out in accordance with the Guidelines for Landscape and Visual Impact Assessment, 3rd edition (GLVIA), 2013 produced by the Landscape Institute and Institute of Environmental Management and Assessment.

10.6 In its conclusions the 2015 TVIA stated (para 10.216) that *'the proposed CADP will give rise to some likely significant effects on views during both the construction and operational phases. However, negative impacts will be restricted to only a few local views of the Airport. No likely significant effects on townscape character have been identified.'*

10.7 A Digital ATC Tower Visual Impact Assessment (VIA) was also produced in 2016 by RPS. This was an assessment of the potential visual effects that would result from the proposed Digital ATC Tower at the Airport (50m height above existing ground level). In its conclusions the 2016 TVIA stated (para 7.1) *'For each of the existing baseline views included in the assessment, it is concluded that the proposed development would not result in any effects which are significant in visual terms. Whilst the proposed development would form an immediately noticeable new element within each of the views included in this assessment, it would result in very little visual obstruction to these existing views which include tall buildings.'*

10.8 Because the 2016 VIA focussed solely on the Digital ATS Tower it is not necessary to review this assessment in relation to the proposed S73 amendments.

Proposed amendments to CADP1 (forthcoming S73 planning application)

10.9 The Scoping Report (para 1.1.3) states that the 'minor-material' planning application will seek to vary conditions attached to the CADP1 planning permission. Consequential modifications (Scoping Report, para 1.14) which are relevant to the TVIA are:

- **An increase in the number of flights** - permitted between 06:30 and 06:59, from 6 flights to 12 flights and more flexibility for arrivals that have suffered unavoidable delays in the last half hour of operations;
- **Greater flexibility in the location of aircraft stands** - given the increased dimensions of new generation aircraft compared to current variants; and
- **Retention of temporary facilities required to maintain levels of service and safe operations** until they are required to be removed in accordance with the details approved in the Construction Phasing Plan (CPP).

10.10 The DSR (para 2.2.2) states that there will be no changes to the number of aircraft stands, the runway, other infrastructure or the design and layout of the buildings as approved under the CADP1 permission and subsequently varied by several non-material amendment applications (as listed in Annex 2 of the DSR).

10.11 However, the disposition and layout of stands to the west of the airfield will be altered to allow parking of larger Code C (new generation) aircraft. This may also necessitate the removal of the existing Corporate Aviation Facility, known as the 'Jet Centre' (Scoping Report, para 2.2.3)

10.12 To expand on information provided in the DSR the following information has been obtained as part of this review in order to further understand the proposed changes:

- It is understood, from the Applicant, that the approved CADP1 building heights, massing and design (assessed in the 2015 TVIA) will not be materially altered by the S73 application.
- The Applicant has confirmed that any new stands in the Jet Centre would not involve additional infrastructure but at most would be new paint markings on concrete. They are not seeking additional stands to the 25 that are conditioned, only that they have flexibility to alter the stand layout to include the Jet Centre. This is because the new generation of aircraft that will use the airport have a wider wingspan than the current fleet and require slightly larger stand dimensions, so the flexibility to park aircraft in the Jet Centre will help accommodate all 25 stands across the airport.
- Plan P4 (part of CADP1) shows the location of stands for scheduled aircraft movements. It is understood that Plan P4 will be updated for the S73 application to identify the Jet Centre as a parking location for scheduled aircraft.

Do amendments as part of the S73 planning application change effects reported by the 2015 TVIA

10.13 The greater flexibility in location of airport stands (understood to be new paint markings on concrete) would mean extending parking of scheduled aircraft into the western edge of the site (the Jet Centre). The western edge of the site is currently used for corporate jet parking and is comprised of concrete hardstanding and infrastructure.

10.14 The western extent of the airport is located in Townscape Character Area 4 Royal Docks which is fast changing with much modern development and characterised by the open areas of water of Royal Docks, road infrastructure, open vacant land awaiting development, industrial sites and airport associated infrastructure (briefly summarised from Table 10.9, TVIA 2015).

10.15 The 2015 TVIA (para 10.190) states that the Royal Docks Character Area would experience Moderate Adverse daytime and Minor Adverse night-time effects during both the construction and operational phases. The proposed CADP1 would be located within this CA and therefore it would experience permanent direct effects.

10.16 It is not considered, by this review, that the proposed S73 amendments would change effects identified by the 2015 TVIA for the Royal Docks Character Area.

10.17 The TVIA 2015 (para 10.192) states visual effects on some parts of this CA, in close proximity to the CADP1, would be Moderate to Substantial Adverse and therefore sufficient to result in a localised significant visual effect. However, most of these effects have been identified from a relatively small number of private residential receptors in localised areas and the only significant visual effect identified from a publicly accessible location would be from part of the dockside on the north side of the Royal Albert Dock. This would be insufficient to result in a significant adverse effect on the inherent character of the area as a whole.

10.18 Of the 12 representative viewpoints selected in TVIA 2015 there are none which have direct views onto the western edge of the site including the Jet Centre. Viewpoint 1 omits this area from view and in Viewpoint 10 this area is screened by existing road infrastructure.

10.19 It is not considered, by this review, that the proposed S73 amendments would change effects identified from viewpoints and visual receptors within the Royal Docks Character Area reported in the 2015 TVIA. However, given the western part of the site is not covered by the 2015 TVIA Viewpoints, acknowledgement of visual change in this area could be provided (see para 4.2.3).

10.20 Given the nature of the proposed amendments (additional flights/ aircraft movements on Saturday afternoons / evenings and at the start / end of each day, and flexibility to park scheduled aircraft in the western extent which already provides parking for corporate aircraft) with no material

Table 10-1 – Summary of SR Townscape and Visual Comments

changes to building, heights, massing and design, it is not anticipated that there will be any implications for additional effects over those reported in the 2015 and 2016 TVIA chapters.

10.21 It should be noted that parts of the CADP1 work have already been carried out/ built. The baseline conditions for any assessment are now different to those reported in 2015.

Whether it is justified to scope out the TVIA from the S73 application and whether the Scoping Report clearly justifies its exclusion

10.22 This review confirms that the proposed changes to the CADP1 application and the subject of the S73 application are not anticipated to give rise to any new or materially different likely significant townscape and visual effects. As such an updated standalone TVIA chapter is not needed as part of the new EIA. It is considered that the justification, in the SR, for scoping out the TVIA is clear and robust. However, clarity is needed on the following:

10.23 When considering the new airport stands (comprising surface level painted markings), their visual screening and visual effect on receptors, it is not clear whether their use for larger Code C aircraft is taken into account. The visual effect of **larger** parked aircraft will be much greater than the surface level stands which accommodate them alone. This should be clarified in relation to the townscape and visual effects identified in the 2015 UES to confirm the S73 application brings no additional townscape and visual effects to those previously reported (**TVIA1**).

Scoping Report Townscape and Visual Effects Recommendations (**Scoping Out is acceptable** – refer to recommendations in this review)

- Clarification is required in relation to townscape and visual effects identified in the 2015 UES to confirm the S73 application brings no additional townscape and visual effects to those previously reported (**TVIA1**).

Chapter 11

Ecology and Biodiversity – Scoped Out

11.1 It is stated in the SR that the ecological value of the airport is generally considered to be low with limited potential to increase biodiversity due to the need to discourage birds. It considers that opportunities will be present that would ensure an increase in biodiversity that also make provision for the need to discourage birds.

11.2 The airport has developed and implemented a Sustainability and Biodiversity Strategy which is reviewed every 3 years. The targets, actions and initiatives of the strategy to enhance biodiversity off-site and promote access to biodiversity and how the project will align with these are not detailed.

11.3 While it is acknowledged that a landscaping scheme will be implemented at the airport, it does not appear that an assessment of biodiversity using the DEFRA Metric 3.0 or current 3.1 has been undertaken to inform the proposals and long-term management. It is not clear what agreements have been concluded in relation to biodiversity net gain.

11.4 It is noted that a Preliminary Ecological Appraisal (PEA) will be undertaken, however there is no mention of undertaking BNG condition assessments or metric calculations at this point. Further consideration and clarification as to how BNG will be recorded and achieved is required.

11.5 It is stated the updated PEA report is anticipated to confirm that the airport has no intrinsic habitat value and that the proposed works will have a negligible effect on terrestrial ecology and biodiversity, however the original report findings have not been provided for review. It is also anticipated that through the collection of habitat condition data using the DEFRA condition sheets, that a more detailed and accurate picture of the habitat value of the airport will be provided.

11.6 While it is stated that habitat and species variation is low, the justification surrounding the potential to increase the sites' biodiversity value is limited to restrictions around birds. It is not clear as to the level of habitat connectivity to the wider landscape or the baseline biodiversity value, including condition as per the DEFRA metric and associated condition sheets.

11.7 Once the updated PEA has been undertaken, including an assessment of biodiversity, it will then be possible to

assess the full impact of the proposed works upon terrestrial ecology and biodiversity.

11.8 The scoping report does not make reference to consultee comments. It would be recommended to provide relevant comments or agreements reached with consultees, in particular the Local Planning Authority, with regard to biodiversity and on or offsite enhancement or habitat creation.

11.9 The report references relevant best practice guidance for Preliminary Ecological Appraisal but does not reference DEFRA guidance and its application to the proposed works.

11.10 Given the applicant has undertaken an updated desk study and Phase 1 (including search of protected species records) this should suffice as evidence that appropriate surveys have been undertaken by suitably qualified ecologists and therefore the scoping out can be deemed to be appropriate given the potential impacts have been assessed.

Notably the ES still proposes to include a section on ecology and biodiversity.

11.11 Given that the updated PEA concludes that the airport has no intrinsic habitat value and that the proposed Section 73 amendments will have a negligible effect on terrestrial biodiversity, the Biodiversity Strategy is expected to adequately mitigate the impacts of the proposed works.

11.12 The applicant has stated that a meeting with the Environment Agency was scheduled for 16th August 2022 which would confirm their position regarding the inclusion of Ecology and Biodiversity in the EIA. This position should be confirmed (**EB1**).

Table 11-1: Summary of SR Ecology and Biodiversity Comments

Summary of Scoping Report Ecology and Biodiversity recommendations	
■	Confirmation from the Environment Agency with regard to the scope of the EIA should be provided by way of written recommendation that Ecology and Biodiversity either be scoped in or out (EB1).

Chapter 12

Archaeology and Built Heritage – Scoped Out

12.1 Archaeology and built heritage are discussed at paragraphs 8.5.1 to 8.5.5 of the SR. The Applicant sets out that the Site is located in a Tier 3 Archaeological Priority Area relating to the Royal Docks, of which the Site historically forms part. Other heritage assets within 1km of the Site include eight listed buildings and the non-designated above ground remains of the Royal docks (e.g., pontoons, dock walls, railway tracks).

12.2 The Applicant is seeking to amend conditions to an existing planning permission (13/01228/FUL). The effects to archaeology and built heritage arising from this existing permission are subject to conditions that have, according to the Applicant, been discharged. The amendments sought are to facilitate an increase in passengers and flexibility in flight times, which will necessitate some re-arrangement of aircraft stands and, potentially, the removal of the ‘Jet Centre’ but no physical changes to the consented buildings and infrastructure.

12.3 The Applicant proposes scoping out the topic of archaeology and built heritage on the basis that there “*would be no changes to infrastructure or new areas of hardstanding at the airport*” (paragraph 7.5.5). The Applicant confirms that these amendments entail no ground intrusive activity (i.e., no potential for effects to buried archaeological remains) or meaningful modification to the appearance of the development (i.e., the change in the setting of any assets affected would remain as per that assessed in earlier applications). The proposed scoping out is acceptable.

Table 12-1: Summary of SR Archaeology and Built Heritage Comments

Scoping Report Archaeology and Built Heritage Recommendations (Scoping Out is acceptable – refer to recommendations in this review)	
■	No recommendations required.

Chapter 13

Ground Conditions and Contamination – Scoped Out

13.1 The SR provides a good overview of the site, inherent ground conditions and requirements for the wider redevelopment as a condition of planning.

13.2 The SR confirms that the partially complete CADP1 development includes a suitable condition of planning (Condition 39) pertaining to contamination, remediation and validation of this which have already been partially discharged.

13.3 The SR goes on to confirm that this variation does not include any additional physical works and that the data provided as part of the CADP1 application remains valid. However, it is welcomed that the ES shall be updated to account for the latest works and findings on Site which have been undertaken pursuant to the discharge of Condition 39.

13.4 Based on the review of the information provided by the Applicant, scoping out of the Ground Conditions and Contamination element is considered suitable.

Table 13-1 – Summary of SR Ground Conditions and Contamination Comments

Scoping Report Ground Conditions and Contamination Recommendations (Scoping Out is acceptable – refer to recommendations in this review)	
■	No recommendations required.

Chapter 14

Waste – Scoped Out

14.1 The SR provides reasonable assumptions regarding the ongoing waste generation from the proposed extensions and the resultant passenger number increases.

14.2 These assumptions are that the waste generated from the additional throughput of passengers will be an expansion of the existing waste streams, rather than new streams requiring separate controls. Furthermore, the expansion of the existing waste streams can be suitably controlled and properly recycled or disposed of within the existing systems utilised.

14.3 The existing waste generators (airlines, tenants and retail concessions) will continue to commercially control their waste via the existing recycling systems and via the airport 'waste hub' with all parties expecting to experience a similar increase of waste generation proportional to the passenger volume increase.

14.4 Initiatives to increase the volume of recycled material have also been outlined including the use of training of staff and adoptions of new equipment and storage. These initiatives are welcomed and should assist in greater volumes of recycled material and a reduction in overall waste in accordance with the waste hierarchy.

14.5 Whilst the assumptions are generally suitable, the SR does not indicate what the expected volumetric increases of waste may be and other factors which may be increased due to this. For instance, additional waste haulage is likely to be required and this could be considered in greater detail.

14.6 It is acknowledged that any increase in waste removal/haulage will be negligible compared to the overall increases in traffic the site will see based on the proposed expansion and these numbers may be accounted for elsewhere. Clarification on this point may be prudent to ensure noise and traffic measures are not affected (**W1**).

14.7 In addition to ongoing waste generation the construction elements are considered. The SR outlines the completed elements of construction from the 2019 submission. This includes the extension of the apron and parallel taxiway. These items are known to have generated significant waste but do not require further consideration at this stage as they are now complete.

14.8 The remainder of the structural developments from 2019 submission (Terminal Forecourt, New East Pier, East Terminal Extension and West Terminal Extension) are understood to have suitable controls as part of the Waste Management Strategy (WMS) already submitted as part of planning.

14.9 As the earlier, more intensive waste producing elements of the construction project have been completed (as outlined above), it is assumed the measures in the WMS are suitable for the remaining works to ensure waste is properly handled

and recycled/ disposed of in accordance with waste hierarchy, legislation and regulations.

14.10 Based on the review of the information provided by the Applicant, scoping out of the Waste element is considered suitable.

Table 14-1 – Summary of SR Waste Comments

Scoping Report Waste Recommendations (Scoping Out is acceptable – refer to recommendations in this review)	
■	It is acknowledged that any increase in waste removal/ haulage will be negligible compared to the overall increases in traffic the site will see based on the proposed expansion and these numbers may be accounted for elsewhere. Clarification on this point may be prudent to ensure noise and traffic measures are not affected (W1).

Chapter 15

Major Accidents and Disasters – Scoped Out

15.1 The SR uses EIA Regulations and sets out report specific descriptions to determine the project's vulnerability.

15.2 The Applicant states *“a major accident is defined for the purposes of this report as an occurrence resulting from an uncontrolled event caused by a man-made activity or asset leading to serious damage or destruction of receptors. The term ‘disaster’ is used to describe a natural occurrence leading to serious damage or destruction of receptors. In both cases, the occurrence could be either immediate or delayed.”*

15.3 The Applicant has also highlighted that the topic can be captured under the heading of ‘third party risk’ which includes:

- The fatality risk to people on the ground from the effects of aircraft accidents;
- Birdstrike risk, i.e., risk of collisions occurring between aircraft and large birds; and
- The risk of wake vortex damage generated by aircraft in flight to properties.

15.4 The Proposed Development does not pose significant risks to society and the environment in the event of a major accident.

15.5 The Government has established Public Safety Zones (PSZs) to reduce risk when dealing with proximity to the end of airport runways. Government Policy defines a Public Safety Restricted Zone (PSRZ) closest to the runway, and a Public Safety Controlled Zone (PSCZ) extending to 1,500 metres from the landing threshold (140 metres from the runway centre line), where development is restricted. The DSR notes that under government policy, there would be no change to the PSRZ or PSCZ because of the project. The highest risk areas remain within these zones and there would continue to be a presumption against development within them.

15.6 Against these PSZ policy criteria, the Applicant considers the estimated changes to fatality risk derived from the Proposed Development to be negligible and not significant. It is noted that the applicant will provide more detail on fatality risk with the proposed use of larger aircrafts, and how this does not increase risk factor, compared to older aircrafts..

15.7 The Applicant states that the Proposed Development will not alter the existing natural features in or around the airport,

and that there is therefore no likelihood that it will have any significant effect on the existing number, type or movement patterns of birds in the area. This should also be addressed in detail in the ecology section as proposed by the Applicant.

15.8 The Applicant states that effects associated with flood risk will be considered in an updated Flood Risk Assessment (FRA) submitted with the planning application, whilst climate change impacts will be considered in a dedicated chapter of the ES. This approach is considered acceptable. The DSR concludes that the airport suffers no exceptional climatic conditions or significant flood risk that regularly affect its operations.

15.9 Whilst it should be considered that there is potential for surrounding building users and construction workers to be exposed to risks from traffic movements, demolition and waste, it is considered that none of these are at a scale or complexity that are beyond the management of a proficient contractor to adequately control and mitigate. These would be managed under the Health and Safety at Work Act and are not generally recognised as a major accident. The DSR states that they will also be managed by the Applicant under the

Management of Health and Safety at Work (MHSW) regulations implying that there is a current system in place.

15.10 The SR also states that the Applicant will implement a CEMP to manage the risks of all construction works. It should be noted that a fire statement is required to accompany all major applications in London (London Plan Policy D12B). The Applicant proposes to discuss with LBN if a fire statement will be produced, as required by the London Plan Policy D12B).

15.11 The risk(s) to the development arising from major accidents and/or disasters is considered unlikely following mitigation measures put in place.

15.12 As such, it is acceptable to scope out major accidents and disasters from the ES.

Table 15-1: Summary of DSR MAD Comments

Draft Scoping Report - Major Accidents and/or Natural Disasters (Scoping Out is acceptable – refer to recommendations in this review)	
■	No recommendations provided, however LBN should note proposals made by the Applicant and see that they are satisfied with this approach.

Chapter 16

Conclusions

16.1 The ES will need to record all consultation undertaken and the decisions made during its preparation.

16.2 Overall, the SR meets the statutory requirements for scoping set out in Section 13(a) of the EIA Regulations and includes sufficient detail on the approach to the identification of the baseline environment, receptors and study area.

16.3 There are, however, a number of recommendations made in this review in relation to topics proposed to be scoped in/out where insufficient information has been provided to justify the approach, or where the principle of scoping out is supported, but additional information / justification is required to support this approach in the ES. Recommendations are also made in relation to guidance, methodology and content of the ES which should be addressed during the EIA and in the ES.

16.4 Tables 5.1 – 5.3 below contains a summary of these recommendations. This should be read in conjunction with the rest of the review report so the context of each point can be understood.

Table 5.1 Recommendations of the Review

Recommendations of this Review
Regulatory Requirements
■ N/A. The recommendation to use 'scoped out' in place of 'scoped down' has been taken and so all requirements have been met.
Description of the Development
■ This is acceptable.
Assessment Methodologies and Significance Criteria
■ See comments under topics.

Table 5.2 Topics Scoped into the ES

Topics Scoped Into the ES
Socio-Economics (Scoping In is agreed – refer to recommendations in this review)
In the absence of formal guidance that influences socio-economic assessment methodology, the significance criteria for this topic should be clearly presented in the methodology section of this chapter topic in the ES (SE1).
Mitigation measures are not outlined in this section beyond the proposal to integrate existing community benefit programmes to the Proposed Development. These should be identified and outlined in the ES (SE2).
The combined socio-economic benefits of the Proposed Development and cumulative schemes should also be considered in the assessment (SE3).
Surface Access (Scoping In agreed – refer to recommendations in this review)
The Final Scoping Report is considered acceptable in terms of Access and Transport.
Noise (Scoping In is agreed – refer to recommendations in this review)
NV1 Where individual aircraft movements in the <0700 period are considered this should include discussion on the average (LAeq), and short duration (LAMax) noise levels in the context of the existing ambient acoustic environment at sensitive receptors.
Air Quality (Scoping In is agreed – refer to recommendations in this review)
The Applicant is requested to provide clarity on what information will be included in the assessment of cumulative impacts on traffic (AQ1).
Any assessment of the road traffic impacts on air quality within ecological sites will also need to consider ammonia (NH₃) (AQ2).
Additional information should be provided which should include a quantification, with justification, as to whether UFP due to aircraft emissions, are likely to decline or increase in the future, with a particular focus on sulphur content of fuel. The approach should be agreed with LBN (AQ3).
It is understood that IAQM is updating its guidance and it is important that the most recent guidance is used if available in time (AQ4).
It is also important that the construction traffic is not considered in isolation from the development traffic, and that the combined traffic levels are considered together on a year-by-year basis to ensure that the worst-case years are included in the assessment (AQ5).
When the ES is submitted all model files should be provided to the local planning authority to enable a full audit of the modelling to be carried out (AQ6).
Information should be provided on the receptors to be included in the ADMS models (AQ7).
The future assessment years of 2025, 2027 and 2031 also seem appropriate, however an addition 'worst case' year may be required following the analysis of construction traffic/NRMM/ development traffic movements (AQ8).
The traffic screening criteria is considered appropriate for human receptors, but for impacts on ecological receptors the criteria is different. If, effects on nature conservation sites are scoped in, these should be defined (AQ9).
It is not appropriate to use the modelled air quality data reported in the 2015 ES as Defra's and the local authority's data, the LAQM tools and guidance, and the ADMS model used have all been updated since 2015. It will be necessary to repeat the modelling using the most recent data and assessment tools and guidance (AQ10).
The assessment should not look solely at the impact of the s73 proposals; the assessment should consider the combined impacts of the consented development and the s73 proposals. This will enable the impacts of the variation to

Topics Scoped Into the ES
be assessed to demonstrate that it causes no material change to the conclusions of the consented scheme. It will also ensure that consideration can be given to the mitigation of any identified significant impacts (AQ11).
■ The ADMS model will be verified for the base year (2019), presumably following the Mayor of London's LLAQM.TG19 methodology, although this is not stated. The model verification should include all available monitoring data and if any monitoring sites are excluded, full justification for their exclusion should be provided (AQ12). The model verification should aim for an adjustment factor of 2 or less with all predicted concentrations within 10% of the measured concentrations (AQ13). In addition, future assessment years should consider the variation in annual meteorological datasets with the assessment process (AQ14).
■ No reference has been made regarding assessing compliance with the mandatory limit values (including with the PM_{2.5} limit value adopted in 2020), and if information is available, even in draft form, on the 2021 Environment Act PM_{2.5} target. The objectives and limit values apply at different locations and should be included in the ES (AQ15). ■ If information is available, even in draft form, on the 2021 Environment Act PM_{2.5} targets, the ES should include an assessment against these targets (AQ16).
■ Comparison of the predicted concentrations to the 2021 WHO guidelines and interim targets should be provided for all relevant pollutants (AQ17).
■ No reference has been made to the IAQM odour guidance which recommends that several different assessment methods should be used to assess odour for planning purposes. Further details should be submitted to the local planning authority (AQ18).
■ The air quality assessment should provide a commentary on how climate change will impact on air quality in the future (AQ19).
■ It is recommended that baseline UFP monitoring is undertaken close to the receptors most likely to be affected (i.e. those closest to the runway and downwind most frequently) to assess whether there is potential for UFP to be a significant issue at relevant locations (AQ20).
■ All guidance noted in the commentary should be referenced in the ES (AQ21).
■ Consideration should be given to the relevance of the following guidance documents (AQ22): ■ Professional guidance published by IAQM on the assessment of odour for planning ■ Professional guidance published by IAQM on the assessment of air quality impacts on designated nature conservation sites.
■ It is recommended that any draft IAQM guidance is taken into consideration (AQ23).
■ The Scoping Report refers to the receptors in general terms but does not identify where they will be or how many will be included. It states that the baseline study will determine the existing and new receptors introduced by committed / proposed development, likely to be affected by the s73 Proposals. These should be confirmed with the local planning authority prior to assessment of impacts (AQ24).
■ It is considered good practice to consult the local authority's air quality specialist to agree the methodology in detail (i.e. greater detail than is normal in a Scoping Report). This has not been mentioned in the Scoping Report. The Applicant should confirm any proposed consultation (AQ25).
■ The Applicant should confirm if the following documents will be used in the assessment (AQ26): ■ 2019 Clean Air Strategy; ■ the Mayor of London's Environment Strategy; ■ 2019 London Borough of Newham's Air Quality Action Plan 2019-2024.

Topics Scoped Into the ES
Climate Change (Scoping In is agreed – refer to recommendations in this review)
■ The applicant will need to acknowledge the wider context surrounding air travel, climate change and national climate targets in relation to the project (CC1).
■ Clarification is sought on which scenario from the “Jet zero: further technical consultation” will be used to inform the modelling of both scenarios proposed (CC2).
■ Clarification is sought on whether the climate change assessment will only include ground operations (CC3).
■ Please ensure that the most appropriate carbon budget is used to assess significance and its use is justified (CC4).
■ The applicant will need to provide more detail in regard to the following aspects of the climate resilience assessment (CC5): – Identify the scale and scope of the project, including design life – Identify the climate change projections for use in the assessment – Identify key climatic variables relevant to the project – Identify likely effects ■ Provide an outline of the method to be used to determine significance in regard to climate change adaptation and effect significance
■ In 7.5.29 a reference should be provided for this quote (CC6).
■ In 7.5.31 a specific page reference should be provided to the location of the approach set out in the Airports National Policy Statement (CC7).
■ The assessment should also account for ‘indirect GHG’s’ in line with IPCC GWP evidence (CC8).
■ It is assumed that data on the stock supplies for the retail units will be available or at the very least estimates produced. Evidence should be provided to demonstrate that the emissions will be less than the 1%^ threshold as consumables often account for very high quantities of emissions (CC9).
Public Health and Wellbeing (Scoping In is agreed – refer to recommendations in this review)
■ When gathering the baseline conditions, if any further sensitive human receptors are identified, these should also be considered within the HIA (PHW1)
■ Clarity is required regarding how the health effects of air pollution will be assessed (PHW2).
■ The Public Health and Well Being chapter should assess against the 2021 WHO Air Quality Guidelines which are based on the most recent synthesis of the medical evidence (PHW3)
■ The HIA is narrow in its approach to consideration of Air Quality. The Applicant should consider the full range of risks to health including exposure of the future users within the airport boundary (PHW4)
■ For the HIA, full considerations of all locations where people may be exposed to air pollution over different averaging periods should be considered (PHW5).
■ The Applicant should provide quantitative information on air pollution in relation to WHO guidelines in the Air Quality Assessment to allow the HIA to fully assess the health effects (PHW6).
■ There is no information on the methodology for going from the air quality impact at individual receptors to the impact on populations. This needs to be provided (PHW7).

Topics Scoped Into the ES
■ The Applicant should provide an assessment of UFP in the Air Quality Assessment to allow the health assessment to fully assess the health effects of this pollutant (PHW8).
■ The determination of significance in relation to air quality should be related to the health outcomes rather than a breach of statutory standards (PHW9).
■ The Applicant has stated that the health chapter conclusions will be presented in both EIA categories of significance, such as major, moderate, minor or negligible; and a narrative explaining this 'score' with reference to evidence, local context and any inequalities. The details of the 'score' methodology should be clearly outlined in the ES (PHW10).

Table 5.3 Topics Scoped Out of the ES

Topics Scoped Out of the ES
Water Resources and Flood Risk (Scoping Out is acceptable – refer to recommendations in this review)
■ As proposed in the Final Scoping Report it is considered appropriate to Scope Out Water Resources.
Townscape and Visual Effects (Scoping Out is acceptable – refer to recommendations in this review)
■ Clarification is required in relation to townscape and visual effects identified in the 2015 UES to confirm the S73 application brings no additional townscape and visual effects to those previously reported (TVIA1).
Ecology and Biodiversity (refer to recommendations in this review)
■ Confirmation from the Environment Agency with regard to the scope of the EIA should be provided by way of written recommendation that Ecology and Biodiversity either be scoped in or out (EB1).
Archaeology and Built Heritage (Scoping Out is acceptable)
■ No recommendations required.
Ground Conditions and Contamination (Scoping Out is acceptable)
■ No recommendations required.
Waste (Scoping Out is acceptable – refer to recommendations in this review)
■ It is acknowledged that any increase in waste removal/ haulage will be negligible compared to the overall increases in traffic the site will see based on the proposed expansion and these numbers may be accounted for elsewhere. Clarification on this point may be prudent to ensure noise and traffic measures are not affected (W1).
Major Accidents and/or Natural Disasters (Scoping Out is acceptable – refer to recommendations in this review)
■ No recommendations provided, however LBN should note proposals made by the Applicant and see that they are satisfied with this approach.



TfL Spatial Planning Ref: NWHM/22/46

Adrian Cole
Director
Steer
14-21 Rushworth Street
London, SE1 0RB

11 August 2022

Transport for London
City Planning

5 Endeavour Square
Westfield Avenue
Stratford
London E20 1JN

Phone 020 7222 5600
www.tfl.gov.uk

Dear Adrian,

RE: London City Airport, LB of Newham, TfL Pre-Application Meeting

Thank you for taking advantage of the TfL pre-application advice service, the aim of which is to ensure that development is successful in transport terms and in accordance with the relevant London Plan policies and Mayor's Transport Strategy (MTS) objectives.

This letter concerns the TfL pre-application meeting, which was held to discuss the development proposals for London City Airport in the London Borough of Newham and took place on Friday 16th June 2022. The GLA issued their advice letter following an earlier GLA Pre Application meeting on 11th July 2022 including advice from TfL. TfL also attended Newham's meeting on air quality and transportation with London City Airport on 28th June 2022.

This TfL letter was agreed to be issued later than the 10 working days after the meeting to take account of subsequent meeting with Newham. Interim advice was given on some of the technical questions raised on 8th July 2022, subsequent delay due to annual leave.

The following comments are made by Transport for London (TfL) officers on a 'without prejudice' basis only. You should not interpret them as an indication of any subsequent Mayoral decision on any planning application based on the proposed scheme and these comments do not necessarily represent the views of the Greater London Authority (GLA).

Meeting attendees:

Stephen Allen	London City Airport
Adrian Cole	Steer
Phil Rust	Steer
Lisa Martin	Steer
Stephen Walker	TfL Buses
Richard Smith	TfL Public Transport Servicing Planning

Melvyn Dresner	TfL Spatial Planning/ Case Officer
Anne Crane	TfL Spatial Planning/ East Area Manager
Ella Payne	TfL Spatial Planning/ Aviation Team

Apologies

Shamal Ratnayaka	TfL Strategic Analysis/ Aviation Team
Tim Halley	London City Airport

TfL visited the Airport on 17th May, meeting London City Airport, visiting the terminal building and interim interchange and visiting City Aviation House with views over the wider site.

Policy Context

The London Plan was published in March 2021 and sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years. TfL will be expecting all new development proposals to give considerable weight to policies set out within this plan. The GLA advice assessment states that

“A climate emergence has been declared, and the Mayor has declared that London must achieve net zero emissions by 2030. In order for London to achieve this, the aviation sector needs to play its part and not undermine collective efforts to rapidly decarbonise. The proposed expansion in capacity resulting from the modifications may threaten to undermine the Mayor’s objectives to decarbonise and as such it would be difficult to support the proposal without the applicant being able to demonstrate how they are compatible with the Mayor’s net zero carbon and wider environmental ambitions. Notwithstanding this, GLA officers acknowledge the applicant’s ambition regarding public transport mode share targets for the future and for the promotion of active travel, the delivery of which and how such targets will contribute positively towards net zero carbon and tackling levels of air pollution.”

The London Plan has adopted specific and ambitious mode share targets (policy T1) since the CADP application was originally approved. TfL welcomes these have been adopted by London City Airport to shape the Airport’s Masterplan and would welcome a Transport Assessment that shows what measures can be adopted to achieve these targets for staff and passenger surface travel to the Airport.

Policy T2 promotes the Healthy Streets approach, which is embedded in TfL Transport Assessment Guidance. The original permission includes measures to promote walking and cycling to the Airport for staff and passengers. You should, as discussed, review and summarise agreed measures and through the Active Travel Zone assessment and by looking at the wider cycle network (in accord with Policy T5), you should identify barriers that currently deter active travel to the airport and identify measures that can be secured to improve

cycling and walking links. These should then be discussed with TfL and Newham.

Policy T4 sets the approach to assessing and mitigating transport impacts. The modelling methodology has not been discussed in detail, however, the TA should assess the accumulative impact of the approved development and increase in surface travel demand associated with the s73 proposals. The mitigation secured with the original permission should be updated to reflect current guidance, ambitious mode share targets as well as changes in the development impact arising from the proposals. TfL acknowledge the objective of the proposals is make better use of off-peak capacity at the Airport and on the DLR and bus network. TfL would need to understand these changes in demand, including peak changes and its technical basis.

Policy T6 guides the approach to car parking. We understand it not proposed to alter the permitted level of car parking. The approach to car parking is to support the mode shift target as set out in Policy T1. TfL would **not** support increased car parking on site, however, the TA will need to show how retaining approved parking supports mode shift as TfL would support reduction in car parking supply. Car-free is the starting point in line with London Plan Policy T6. Policy T8 of the London Plan outlines the requirements for aviation activities within Greater London. These have already been covered in more detail at the GLA Pre-application meeting and other discussions between London City Airport and TfL and the GLA

In summary Part F of Policy T8 of the London states that development proposals for aviation facilities should make better use of existing airport capacity, underpinned by upgraded passenger and freight facilities and improved surface access links, in particular rail.

Notwithstanding this, Part B of Policy T8 of the London Plan states that the environmental and health impacts must be fully acknowledged and such development should include mitigation measures that fully meet their external and environmental costs, particularly in respect of noise, air quality and climate change. As such, any airport expansion scheme must be appropriately assessed and if required demonstrate that there is an overriding public interest or no suitable alternative solution with fewer environmental impacts.

Site description

The application site is located in the Royal Docks, with the runway between King George V Dock to the south and Royal Albert Dock to the north. There are landside facilities on the southside of King George V Dock as well as to its west, including the terminal.

The airport is approximately 3.2 km east of Canary Wharf, and 1.7 km south-east of the Excel Exhibition and Conference Centre on the north side of the

Royal Victoria Dock. The site is located within the Royal Docks and Beckton Riverside Opportunity Area. The airport is also allocated as an employment hub for visitor economy, business and logistics within the Local Plan. The application site currently comprises a single runway, an 'apron' area, a main passenger terminal and various operational buildings. The runway is largely surrounded by the water of the Royal Albert Dock and the King George V Dock.

The airport has been served by the Docklands Light Railway (DLR) since 2005 which provides direct access to the airport's (only) passenger terminal. In addition, there is a bus facility and currently one route comes into the airport from the west and back out the same way to serve airport passengers and staff. The bus facility includes a three vehicle bus stop (for routes 473 and 474) and a bus stand, and forms part of a wider forecourt that includes private hire and taxi drop off and pick-up. The taxi facility is linked to a taxi feeder park (interim 200, end state 336) to the east, which includes electric vehicle charging and driver facilities.

There is pedestrian access from the south via a ramp and vehicle access from the east (Woolwich Manor Way) and west (Connaught Bridge) although currently the former is open only to authorised operational vehicles, staff and taxis.

The nearest Thames Clipper pier is Royal Wharf which is wheelchair accessible and served by the RB1 service that operates weekday mornings and evenings. This opened November 2019. Access to the airport to the pier is by bus and circa 600 metre walk from stop to pier. The new service offers journey times of 38 minutes between Royal Wharf Pier and central London (London Bridge City Pier), with boats running a direct service every 20-30 minutes during morning and evening peak times and every 30 minutes during the day at weekends. London's longest pier, Royal Wharf includes a 162m² viewing platform for unparalleled views along the River Thames. This travel option may appeal to airport passengers staying in Central London.

The Airport's Public Transport Accessibility Level (PTAL) is 3, on a scale of 0 to 6b, where 0 is the least accessible and 6b the most. This applies to area around the passenger terminal and adjacent (London City Airport) DLR station. Outside these areas the PTAL is 2 although would be increased to 3 around King George V DLR station if an access was opened up to the station from the airport land.

Development Proposal

It is understood that a Section 73 Application is to be made to vary conditions attached to planning permission 13/01228/FUL to allow: up to 9 million passengers (an increase from 6.5 million); adjustments to opening hours (on Saturday PM, to allow some additional flexibility for flights in the first half hour of operations in the mornings 06.30am-7am), to provide additional flexibility for

delayed departures and arrivals in the last half hour (10pm-10.30pm) and to make related modifications to daily limits); and -changes to City Airport Development Programme (CADP) phasing to allow for extended delivery in line with achieving 9 million passengers per annum as well as interim works to reflect how the scheme will be delivered.

TfL was signatory to CADP s106 agreement in 2016, CADP included:

1. Airport Forecourt works to accommodate buses and taxis, and related taxi feeder park – post approval TfL agreed a deed of variation related to interim forecourt and taxi arrangements.
2. Airside changes that allowed the airport to handle more planes per hour and larger planes, leading to increased passengers per hour most critically to TfL leading in turn to increased peak use of the DLR.
3. The airport allows bus access to the London City Airport privately owned Hartmann Road, which links Connaught Bridge, part of the Strategic Road Network, to the airport forecourt and to Woolwich Manor Way, part of the Transport for London Road Network.
4. The eastern access onto Woolwich Manor Way is not open to general traffic but is now open to taxis and buses (albeit currently there is no route using this access). The eastern access opening is linked to the opening of the new terminal building via an agreed programme. During determination of the CADP application, re-routing vehicle traffic to/from the east at Gallions Roundabout to Woolwich Manor Way and the eastern access, was considered beneficial and removed the much longer journey via Royal Albert Way, Connaught Bridge and Hartmann Road (and the reverse. The Woolwich Manor Way access for general traffic would open based on agreed programme that needs to agreed prior to opening of the new passenger terminal, progress to be reviewed within 6 months.
5. CADP includes a ranges of transport mitigation secured in the s106 or via condition. The largest financial contribution is for DLR rolling stock, this was paid to TfL in 2017, circa £5 million for equivalent to two railcars. These are under construction in Spain as part of a much larger order (43 trains), and due for delivery during 2024. This will enable DLR to upgrade capacity on the Airport branch of the DLR. (How DLR introduce these trains will depend on passenger demand changes due to Elizabeth Line opening and post-Covid travel patterns on the wider DLR network).
6. The secured DLR Management payment funds additional staffing of the station. Newham, the Airport and TfL have agreed to delay this payment until annual passenger numbers recover (4,5 million per annum) to pre-Covid levels. (4,5 million per annum).

DLR Rolling stock replacement and upgrade

For context, the rolling stock programme will replace two-thirds of the existing fleet and provide 10 additional trains to expand capacity and support population

and employment growth across the network. DLR customers will benefit from more frequent and reliable journeys from 2024.

With over 400,000 journeys made each weekday, the DLR is currently the busiest light railway in the UK. It operates within six Opportunity Areas in London, which have the potential to provide more than 124,000 new homes and 200,000 new jobs. The additional capacity the trains will deliver is essential to support further growth, particularly in parts of the Royal Docks such as London City Airport and the Isle of Dogs where the DLR is the main transport option.

The programme will deliver - 43 new trains under construction in Spain, 11 more depend on government funding via the Government's Housing Infrastructure Fund (HIF), which as of writing remains uncertain:

A new design of trains with walk through carriages, real time travel information, air conditioning and mobile device charging points. This will help with uneven loading of trains sometimes observed at London City Airport. They also have 25% more capacity per train, and the committed programme replaces 33 existing trains plus 10 more.

An expansion of DLR's main depot at Beckton. This will include modification of the existing layout to accommodate the extra trains and extension of the existing maintenance facilities to allow maintenance of the new design of trains. Supporting workstreams including an update to the signalling system for the new trains, an additional power supply to the depot and additional stair capacity at Blackwall station. The programme will:

Support population and employment growth across the network, especially planned development in the Royal Docks, the Queen Elizabeth Olympic Park and the Isle of Dogs

Provide crowding relief through increasing capacity

Improve resilience and reliability by replacing trains nearing the end of their design life with modern, reliable trains.

Beckton Depot

The Beckton depot was opened in 1994 and was extended southwards and to the northwest at various times up to 2008. At the moment, it can store 29 trains, but needs to expand that to 39 to cope with increased demand on the line. Works at Beckton depot have been ongoing since September 2019 and are expected to last until June 2024.



Beckton depot and new DLR train

Elizabeth Line

The airport indirectly benefits from opening of the Elizabeth Line, in two ways. Some passengers and staff may use the bus connection to and from Custom House to pick up Elizabeth Line services. At just over 2 km away its also within cycling distance, but less walkable especially for those with luggage despite the segregated dock side route. Also, rail passengers who used to cross the Thames using the DLR Airport branch are and will switch to the Elizabeth Line, freeing up space for airport demand. The Elizabeth line between Paddington and Abbeywood opened for passenger service on 24 May 2022. The routes between Paddington and Reading/Heathrow and that between Liverpool Street and Shenfield are currently being run separately by TfL Rail but are expected to link directly with the Elizabeth Line already open towards the end of the year.



It stretches more than 60 miles: from Reading and Heathrow in the west, through central tunnels, across to Shenfield and Abbey Wood in the east. Trains will serve 41 stations. Ten of them are newly built and many station upgrade projects have been undertaken at the existing stations.

Twelve of these stations interchange with LU services: Heathrow Terminals 2 & 3; Heathrow Terminal 4; Heathrow Terminal 5; Ealing Broadway; Paddington; Bond Street; Tottenham Court Road; Farringdon; Liverpool Street; Whitechapel; Canary Wharf; and Stratford. There are now direct bus services between the Airport and Custom House station with step free access between the bus stops

and the DLR and Elizabeth Line platforms. Both Elizabeth Line and DLR are step free between the platform and the train.

The Elizabeth line runs modern trains with dedicated wheelchair spaces at the centre of the train and multi-use spaces throughout.

- Air-conditioned and Wi-Fi connected, with nine walk-through carriages
- Capacity for 1,500 customers
- Four dedicated wheelchair spaces in the centre of the train
- Customer communication button to talk to the driver in an emergency
- Three sets of double doors in each carriage will allow for quicker and easy boarding and alighting.
- Specially designed moquette seat coverings featuring purple, in line with the Elizabeth line branding
- Regenerative braking, putting electricity back into the power supply when braking, using 30% less energy

Silvertown Tunnel and buses

This new 1.4km twin-bore road tunnel under the Thames will be the first in London in over 30 years. A modern tunnel combined with a user charge and improved cross-river public transport will improve the reliability and resilience of the wider road network.

The plan is to complete construction by 2025.

The Tunnel provides more opportunities to cross the river by public transport with a network of zero-emission buses offering new routes and better access to more destinations. Work on the proposed Silvertown Tunnel bus network is still being undertaken and it will be quite some time before we are able to share the output from that work.

However, it is recognised that the Transport Assessment work would benefit from applying some assumptions on Silvertown Tunnel buses.

Thinking to date has always assumed there would be some North East alignment for buses on exiting the Silvertown Tunnel with the Royal Docks being an obvious development area to connect with the south side of the river. Meanwhile south of the river geography dictates that all buses must traverse through the Greenwich peninsula.

Therefore we consider it reasonable for you to assume a 5 bus per hour route from the south end of the Greenwich peninsula via Silvertown Tunnel and North Woolwich Road to London City Airport and then on to Beckton via Connaught Bridge, Stansfeld Road and Tollgate Road.

Please be clear that this assumption should not be considered as a definite proposal or guarantee of provision. Once we are in a position to consult on a proposed bus network for the opening of the Tunnel we will of course be involving City Airport. In the meantime, we would welcome any data you feel you can make available from your staff and passenger travel surveys as well as any aspirations you have for the bus network.

As noted in our meeting, adequate provision for bus services within the vicinity of the terminal is essential if improved bus services are to be accommodated both now and in the future. This would include space for bus stops with a very strong preference that routes going in different directions have their own stop. This significantly reassures passengers that they are on the right bus as well as having operational efficiencies. Similarly, provision for bus standing gives greater flexibility when planning the network as well as being an important aspect of regulating service quality – both to the potential benefit of City Airport. The current one bus stand provision would typically only be able to accommodate a low frequency route (less than 4 bph). The current road layout prohibits its current use in any case although I understand this is to be resolved – albeit not for several years.

If a more direct road connection was to be made from Albert Road to City Airport e.g. via Lord Street or Leonard Street then significant bus operational benefits might be achievable, although we recognise that there are challenges with such an option. If such an arrangement was to be given consideration we would be happy to look into the matter in more detail with you.

Cycle Parking

The CADP consent includes an uplift in the provision of cycle parking spaces from 42 to 70. All cycle parking will be located in the sheltered area beneath the DLR. It is understood, consideration will be given to the provision of further cycle parking, particularly to encourage staff to access by bicycle.

TfL usual advice is cycle parking provision must meet the minimum standards set out in Policy T5 (Cycling) of The Mayor's London Plan and designed in accordance with the London Cycling Design Standards (LCDS). 5% of cycle spaces should be able to accommodate larger bikes and be easily usable by mobility-impaired cyclists. Access to the cycle parking should be step-free. Provision for cargo bikes eg for luggage should also be considered.

Should the step-free access provision to the cycle parking involve shallow ramps or lifts, these should be large enough to carry all types of bikes. Any two-tier racks should have a mechanically or pneumatically assisted system for accessing the upper levels and to allow for double-locking. TfL asks for short-stay cycle parking being provided at ground floor level in the public realm near building entrances.

Given the nature of the land use, the London Plan doesn't define an overall standard for cycle parking. Therefore, we need appropriate worked confirmation that sufficient cycle parking is provided to support mode shift assumptions proposed in the masterplan, and or there is sufficient space to expand further. Engagement with existing cycle users and those who expressed a preference should inform the design. We should explore the use of cargo bikes and how that can be enhance and supported.

Transport Assessment

The application must be supported by a full Healthy Streets transport assessment (TA), prepared in line with the guidance available on TfL's website. The TA should demonstrate how the development will help deliver sustainable transport outcomes as set out in the Mayor's London Plan. It should also demonstrate how it will help deliver the Mayor's aim for at least 80% of all trips to be made by walking, cycling and public transport as set out in the Mayor's Transport Strategy. The applicant should also demonstrate how the proposed development will support Vision Zero, the Mayor's aim to eliminate death and serious injury on London's street

Active Travel Zone

TfL and the Council will need to agree the ATZ scope in accordance with TfL guidance, the applicant consultants need to follow the steps in guidance to enable that aspect to be agreed.

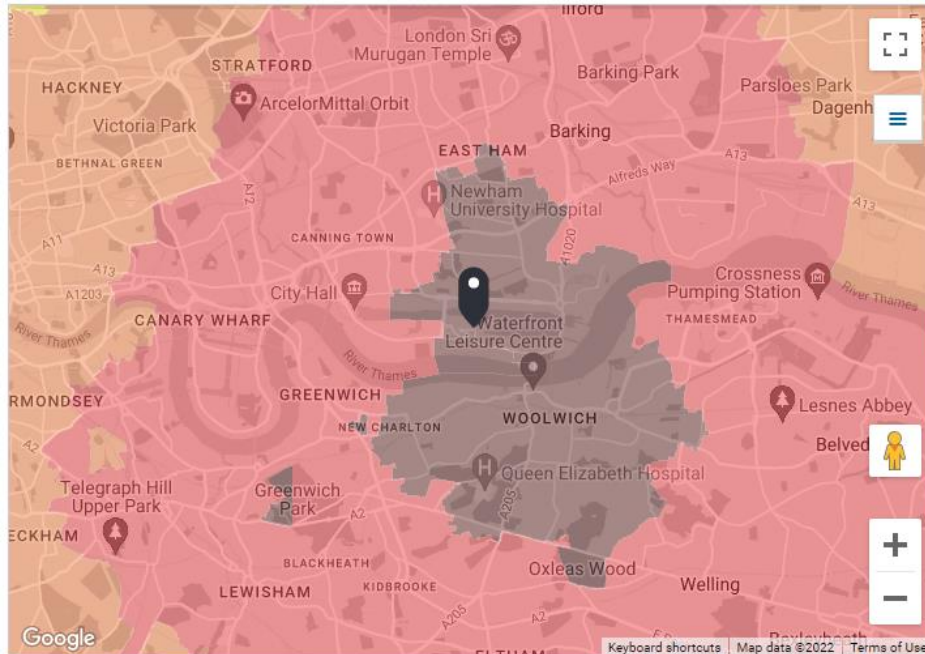
The ATZ assessment will help identify key pedestrian and cycle routes in the study area, and should also tie into the emerging cycle network. Subsequently the Council and TfL would wish to agree suitable mitigation to be provided by the Airport to address the issues arising from the assessment.

The assessment method that TfL applies is the New cycle route quality criteria <https://tfl.gov.uk/corporate/publications-and-reports/cycling> and more general the London Cycle Design Standards.

Nature of the airport suggests the ATZ would have more than one loci to define the zone based on terminal building and the point of arrival for staff, whilst public transport is on site, TfL suggests you use the following to define the local active travel assessment in accord with the guidance:

- Custom House station
- West Silvertown / Royal Wharf Pier,
- Gallions Reach
- Woolwich Ferry/ Woolwich Foot Tunnel

This shows the 20 minute cycle network from the terminal:



We should tie into the walking and cycle routes proposed on site related to CADP, and emerging proposals being promoted for North Woolwich Road by Newham Council. The wider strategic cycle improvements include links via Silvertown Tunnel and via the A13. Links to the former via North Woolwich Road.

Modelling

TfL would expect the TA will include forecast demand for the proposed assessment years. As with the CADP application, York Aviation is preparing the aviation assessment for London City. TfL request that this draft assessment is supplied to TfL prior to submitting the TA, for TfL Aviation colleagues to review and comment. In general, TfL understands that the aims of the proposals are to accommodate increased demand without increasing peak demand. However, we expect the TA to set this out. TfL would want demand forecasts for the full operating hours of the airport to understand the full picture.

The overall aim in terms of surface transport is to get to 80% non-car by 2030, and 90% by 2041. This suggests you should provide 2031 and 2041 future base year assessments with a base year of 2019 and interim year of 2025. Whilst transport models are focussed on weekday peaks, we still want a Saturday demand profile for context. Also, as sense check we like to understand staff departure patterns and how they may change with increased off peak demand and Saturday working hours.

For demand on specific modes, as the policy aim is to reduce private car traffic, then we expect other modes to show increased demand including during the peak. We have already provided a copy of DLR Train Capacity Guidance, and shared some assumptions. TfL recommends a more detailed modelling methodology is supplied to form the basis of the approach in the TA.

New DLR trains would be in place by 2031; we are still uncertain about whether we will have the additional 11 Housing Infrastructure Fund funded trains. The exact frequency changes have to be based on 2031 assumptions within TfL models. Given our uncertainty around HIF trains, our proposed starting point would be to assume today's frequencies (15tph peaks, 12tph off peaks, split half and half to Bank and Stratford International). The deployment of New Trains and B07s (type of DLR rolling stock) to given routes is not yet fixed and may in practice involved a mix in practice, so we suggest you use a conservative assumption of 3-car B07s operating on both routes through LCA. The guidance on DLR capacity is attached; our guideline capacity for planning applications is 3 standees per square metre. In the modelling the future baseline takes account of extra train capacity funded by the Airport and CADP permitted demand, the assessment is to assess the marginal difference due to changes proposed.

TfL doesn't think an earlier start to DLR services is a realistic prospect; the Airport Route is already a priority for launching slightly earlier than other DLR routes, and we wouldn't be looking to launch from depots any earlier post-New Train than today as it would cut into engineering hours and is unlikely to generate sufficient demand to be viable. The current thinking is the Airport reaches pre-Covid level by 2024 (5 million per annum), and would reach the existing cap by the late 2020s (6.5 million).

Taxis and Zero Emissions Cabs

There are currently just under 6,000 licensed zero emission taxis in London, there's just over 14,000 taxis in London and 19,500 taxi drivers. Therefore well over 40% of taxis are already zero emission.

Taxi colleagues would not support the airport restricting access to non zero emission taxis nor offering favourable waiting terms for ZEC owners. Similar proposals in London have not been well received among taxi drivers including those who own a ZEC. In any circumstance the switch to zero emission vehicles is already significant and progress is expected to continue.

The TA should review the Taxi Management Plan and indicate any updates or changes for example to electric charging or use of technology/ traffic marshals.

Travel Plans

Consistent with the deliverables that will be provided in support of the future planning application, TfL suggests your current Travel Plan is updated to reflect

the emerging mode shift targets and opportunities based on what currently influences mode choice and potential demand particularly for walking, cycling and buses. This should be reflective of the expected shift from car travel to active travel and public transport, as set out in the MTS and the London Plan, that is needed to support net zero emissions.

Construction Logistics Plan

The approach to construction is generally agreed with CADP including use of the river and dock for works completed on site. It would be useful to have a summary in the TA of how construction has been managed to date, and how the restarted stages could be completed on site. TfL would want to encourage an approach based on current best practice, such as use of zero emission site machinery, use of water freight, Direct Vision standard, silver and gold Fleet Operators Recognition Scheme (FORS).

If you have any queries, or further questions or seek clarification, please contact the case officer Melvyn Dresner (melvyn.dresner@tfl.gov.uk).

Yours sincerely



Lucinda Turner

Director of Spatial Planning

Email: lucindaturner@tfl.gov.uk

Direct line: 020 3054 7133

cc: all meeting attendees
Scott Schimanski

Appendix C- Railplan Modelling

[illegible]

Fig C2: 2031 Railplan Modelling AM Peak (07:00-10:00)-9.0mppa Network Flows

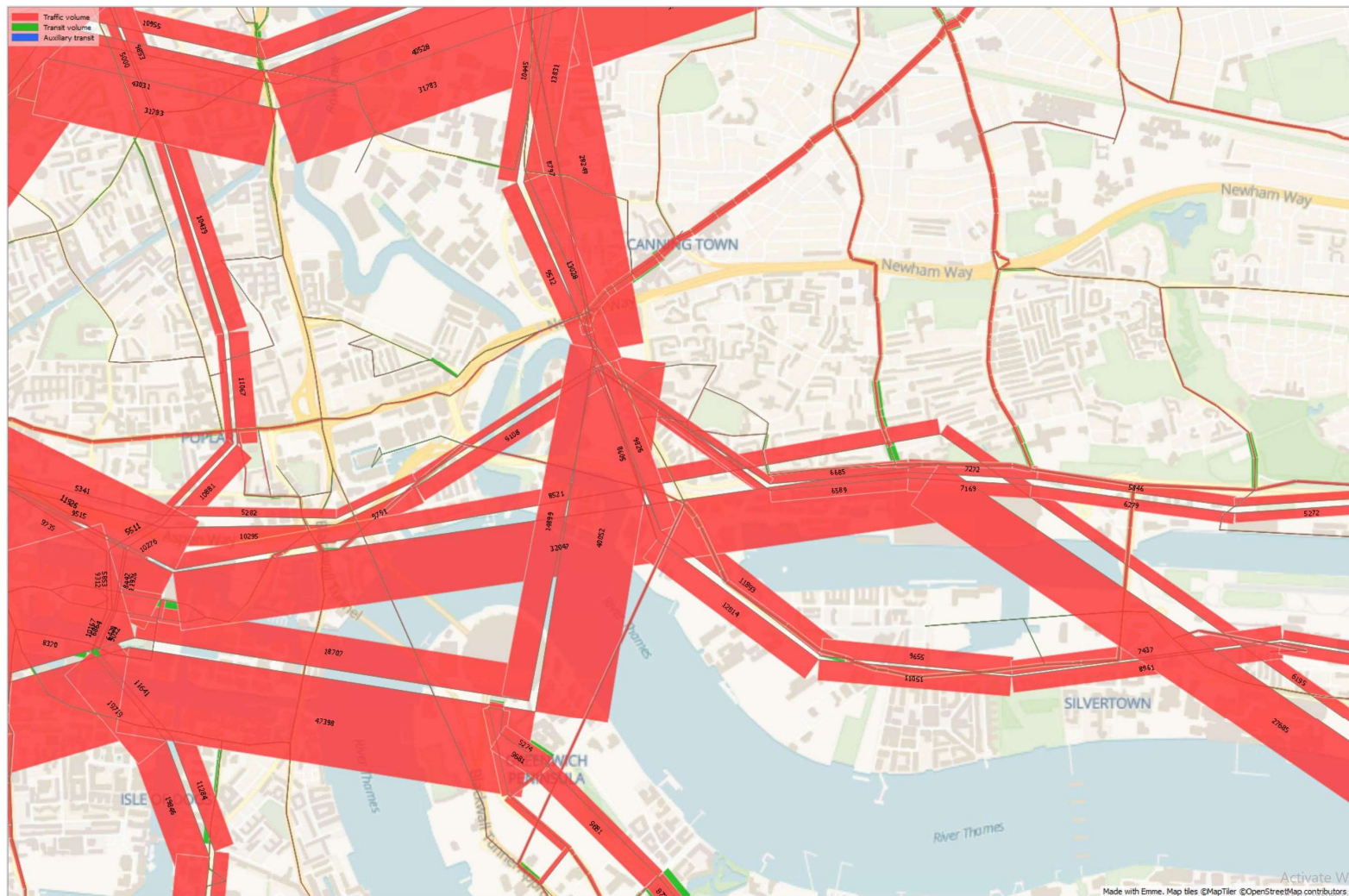


Fig C3: 2031 Railplan Modelling AM Peak (07:00-10:00)-Net Change (9.0mppa-6.5mppa) Network Flows

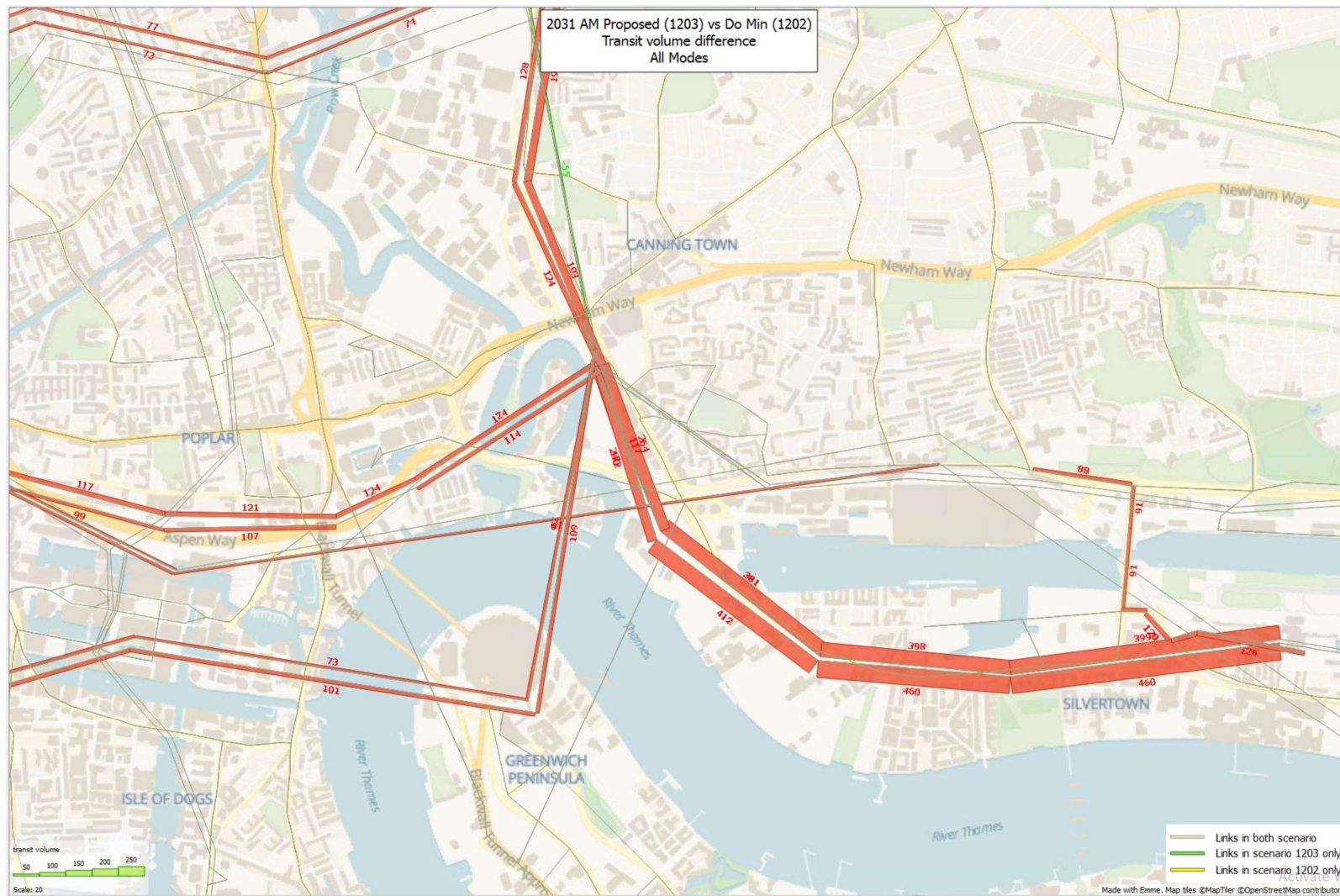


Fig C4: 2031 Railplan Modelling AM Peak(07:00-10:00)- 6.5mppa Network Crowding

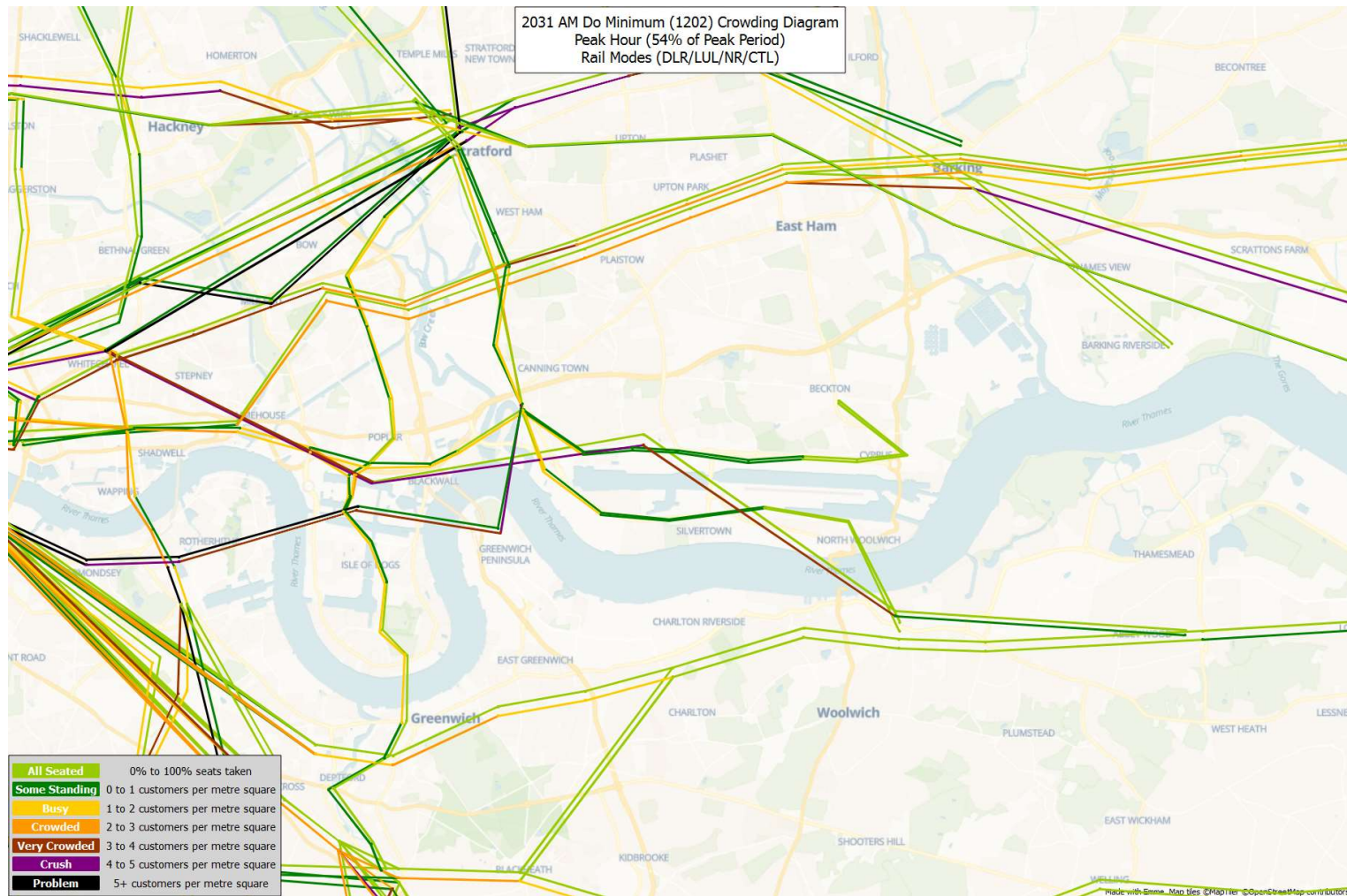


Fig C5: 2031 Railplan Modelling AM Peak(07:00-10:00)- 9.0mppa Network Crowding

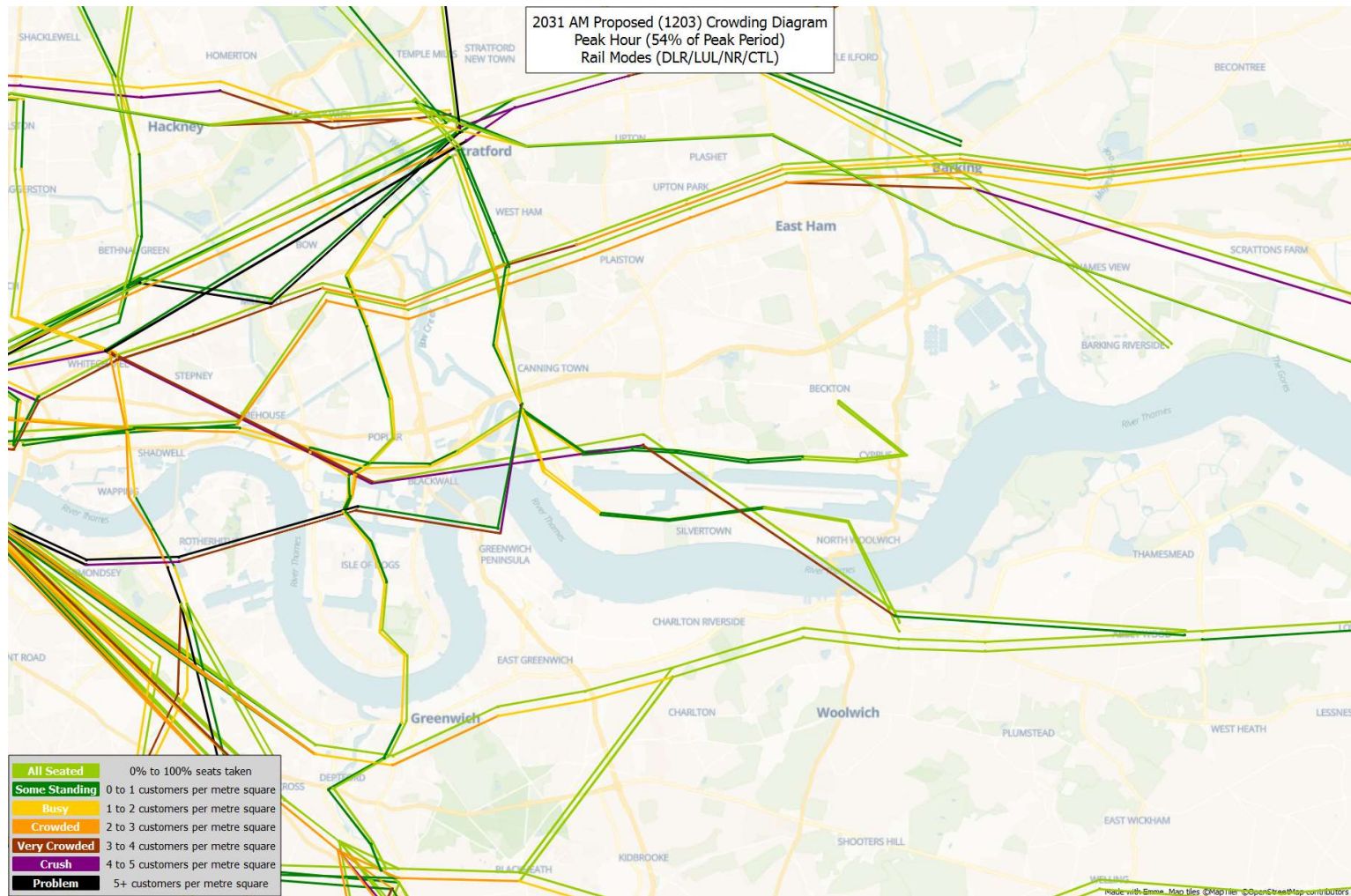


Fig C6: 2031 Railplan Modelling AM Peak(07:00-10:00)-Change (9.0mppa-6.5mppa) Network Crowding

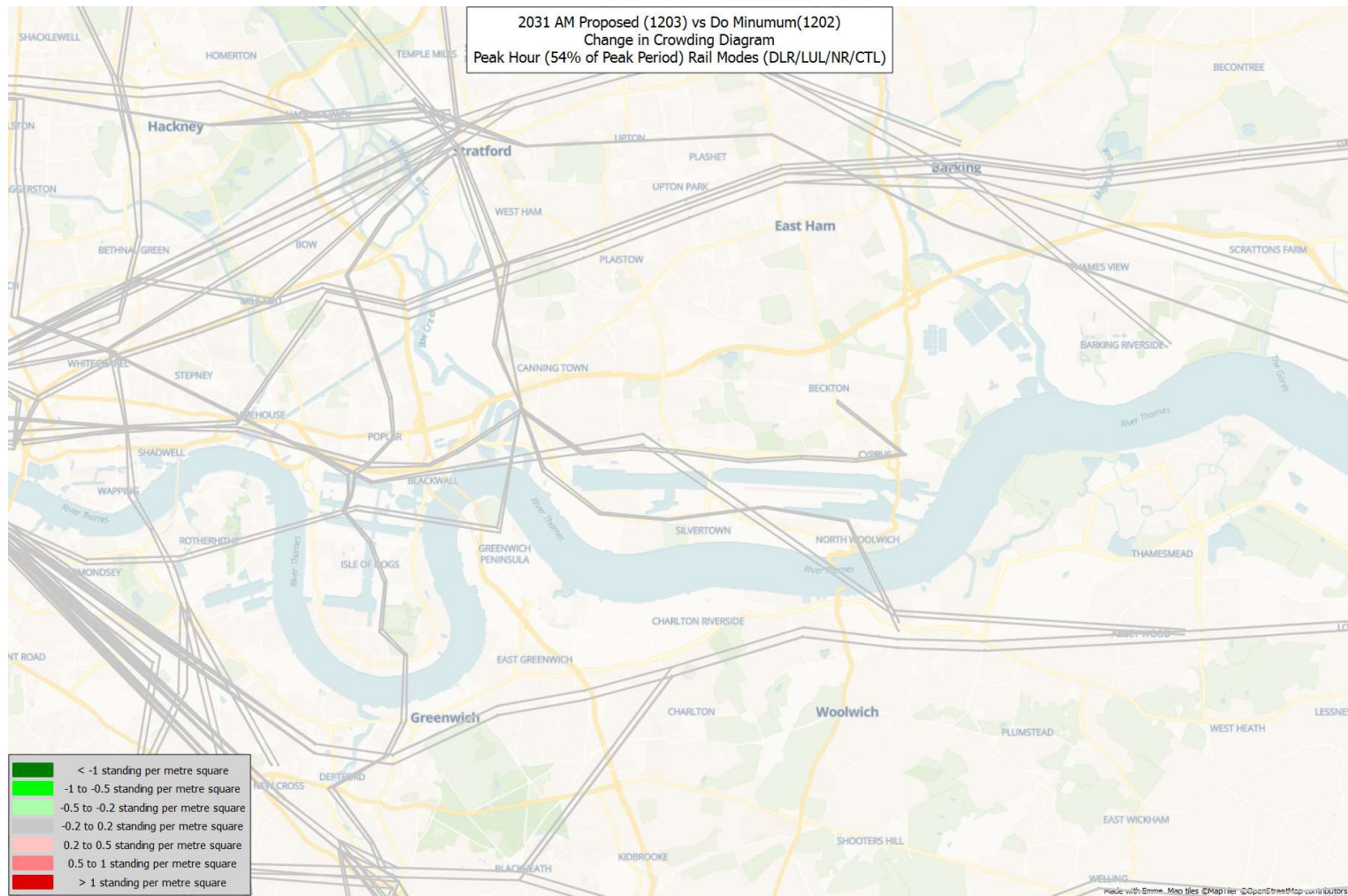


Fig C7: 2031 Railplan Modelling PM Peak (16:00-19:00)-6.5mppa Network Flows



Fig C8: 2031 Railplan Modelling PM Peak (16:00-19:00)-9.0mppa Network Flows



Fig C9: 2031 Railplan Modelling PM Peak (16:00-19:00)-Net Change (9.0mppa-6.5mppa) Network Flows

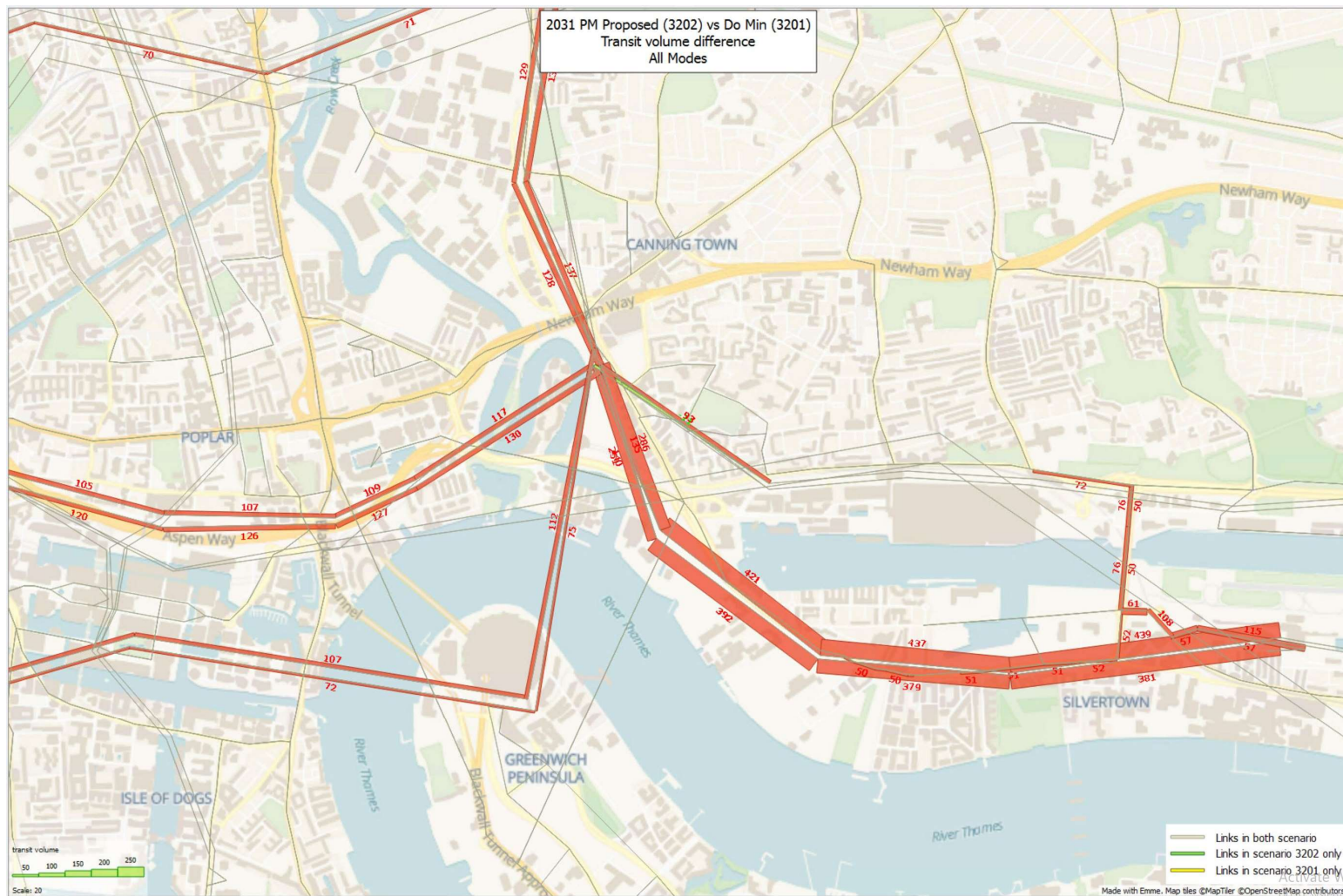


Fig C10: 2031 Railplan Modelling PM Peak(16:00-19:00)- 6.5mppa Network Crowding

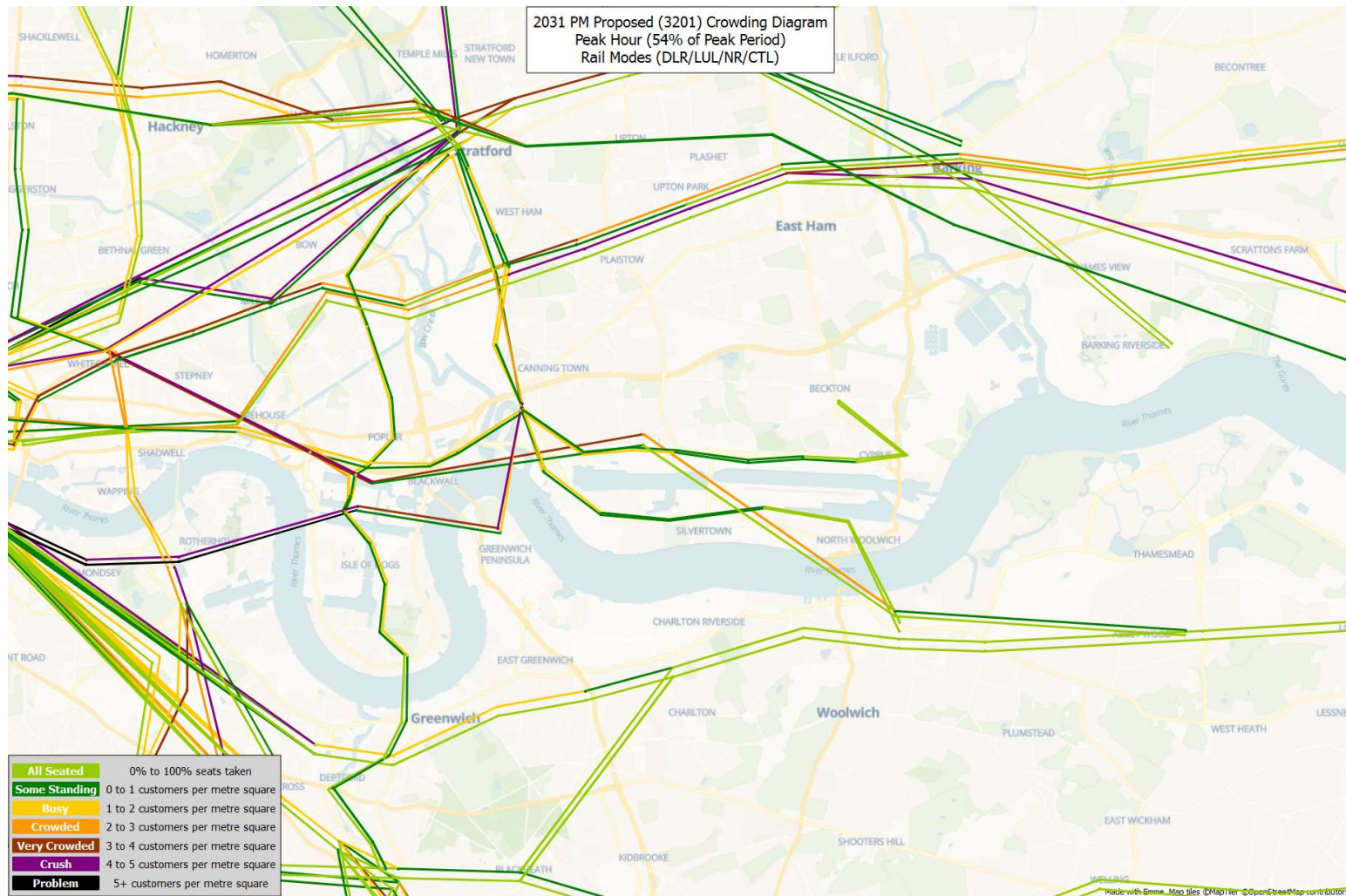


Fig C11: 2031 Railplan Modelling PM Peak (16:00-19:00)- 9.0mppa Network Crowding

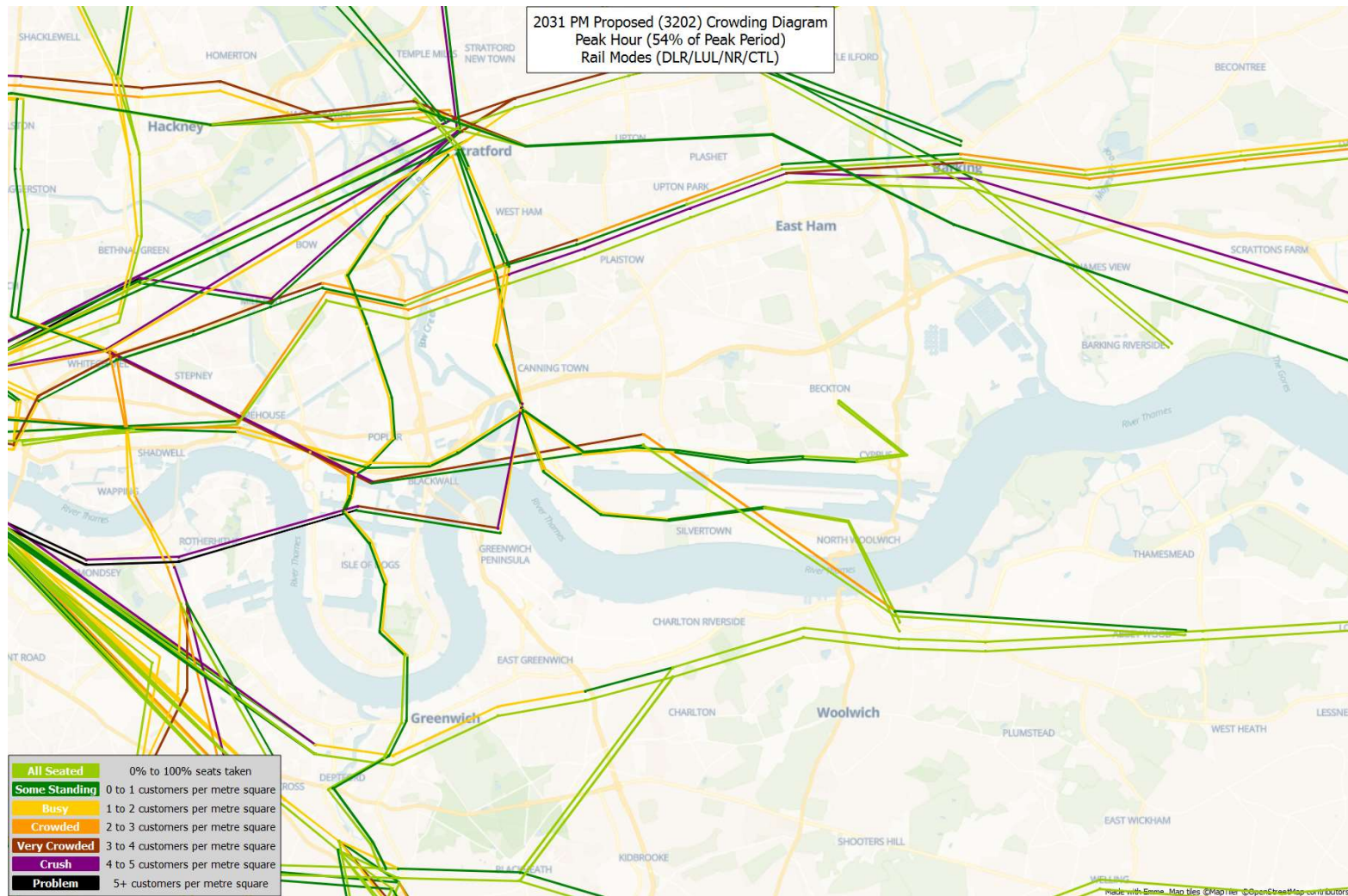


Fig C12: 2031 Railplan Modelling PM Peak (16:00-19:00)- Change (9.0mppa-6.5mppa) Network Crowding

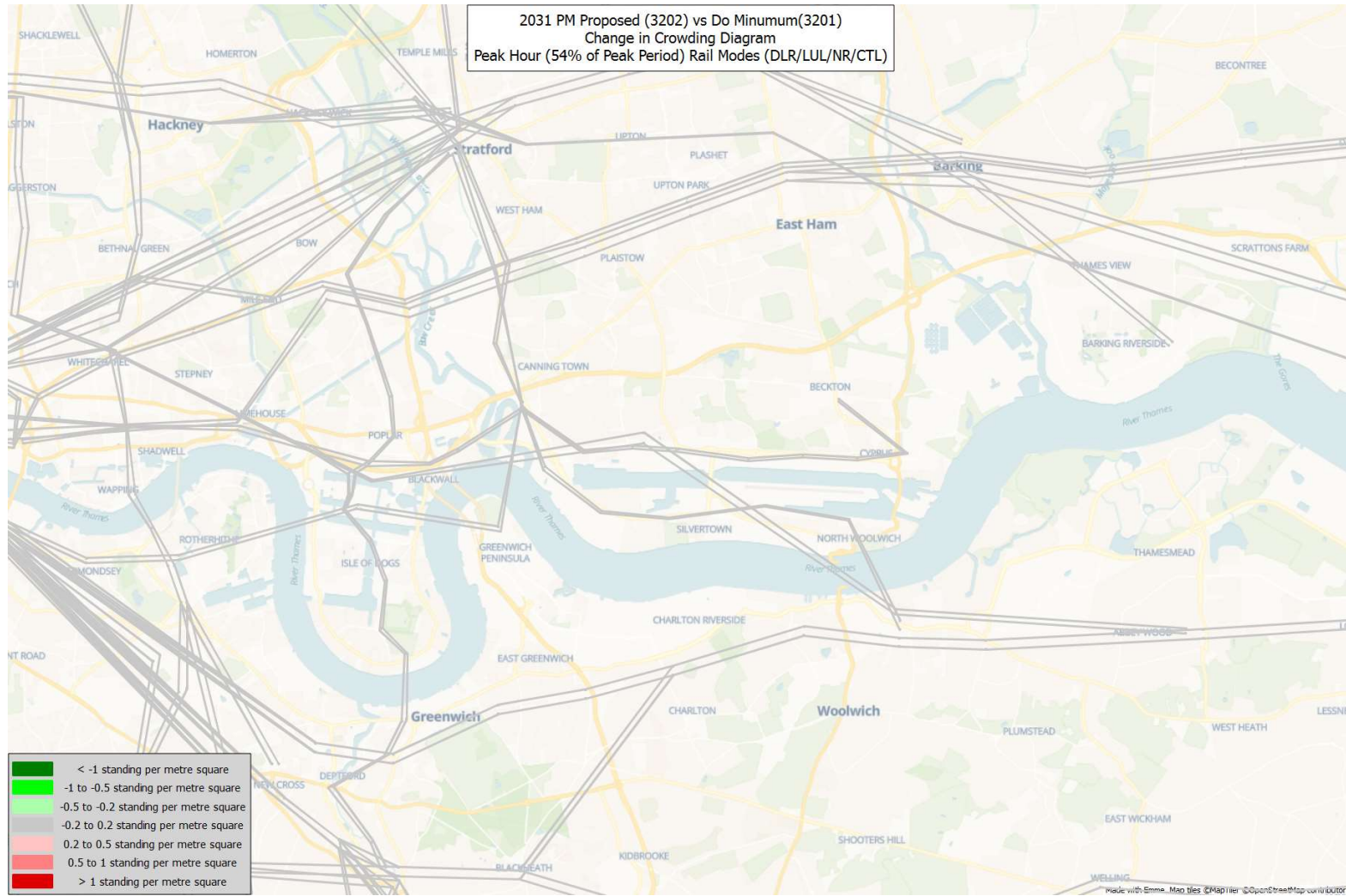


Fig C13: 2041 Railplan Modelling AM Peak (7:00-11:00)- Change (9.0mppa-6.5mppa) Network Crowding

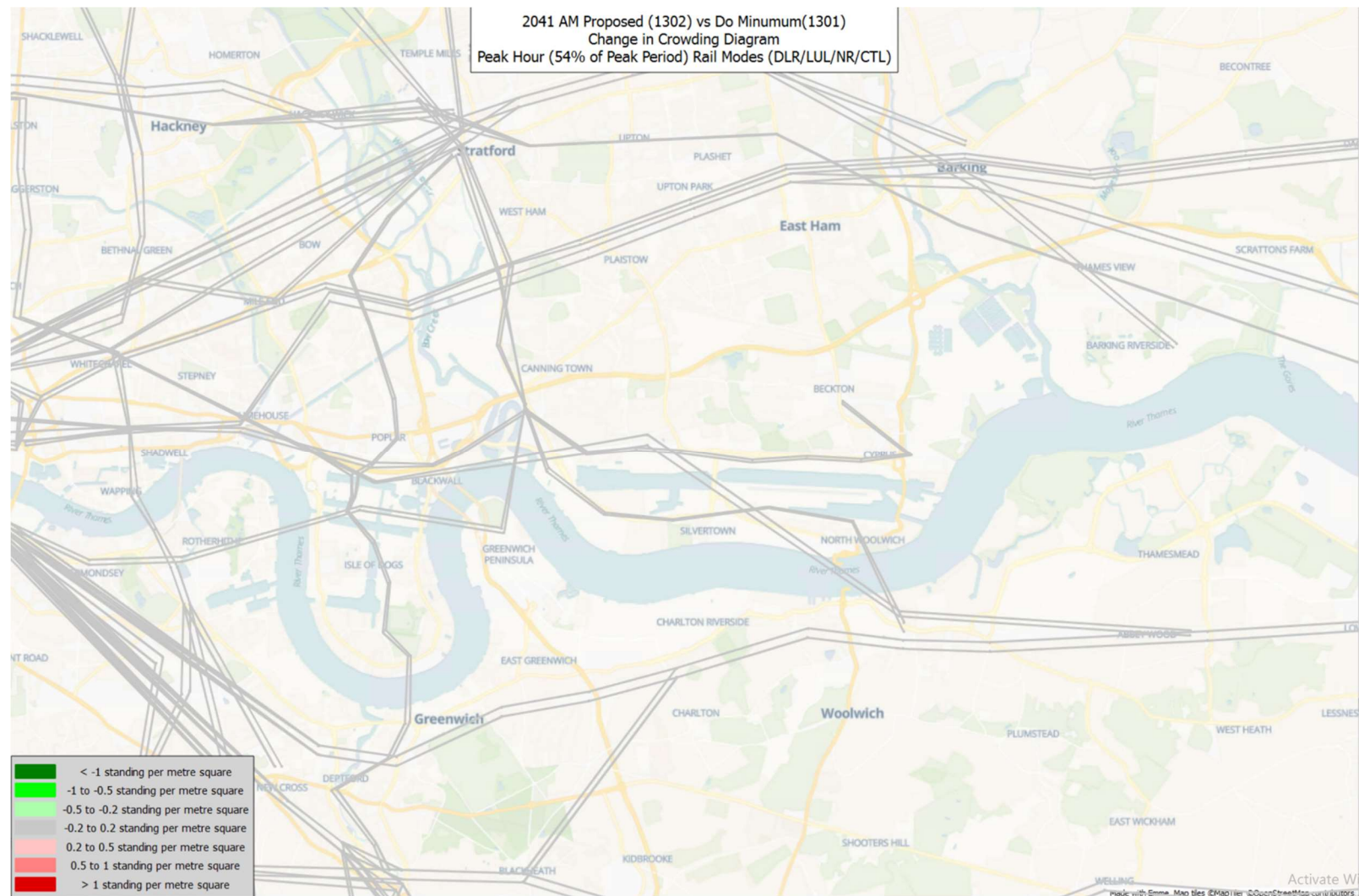
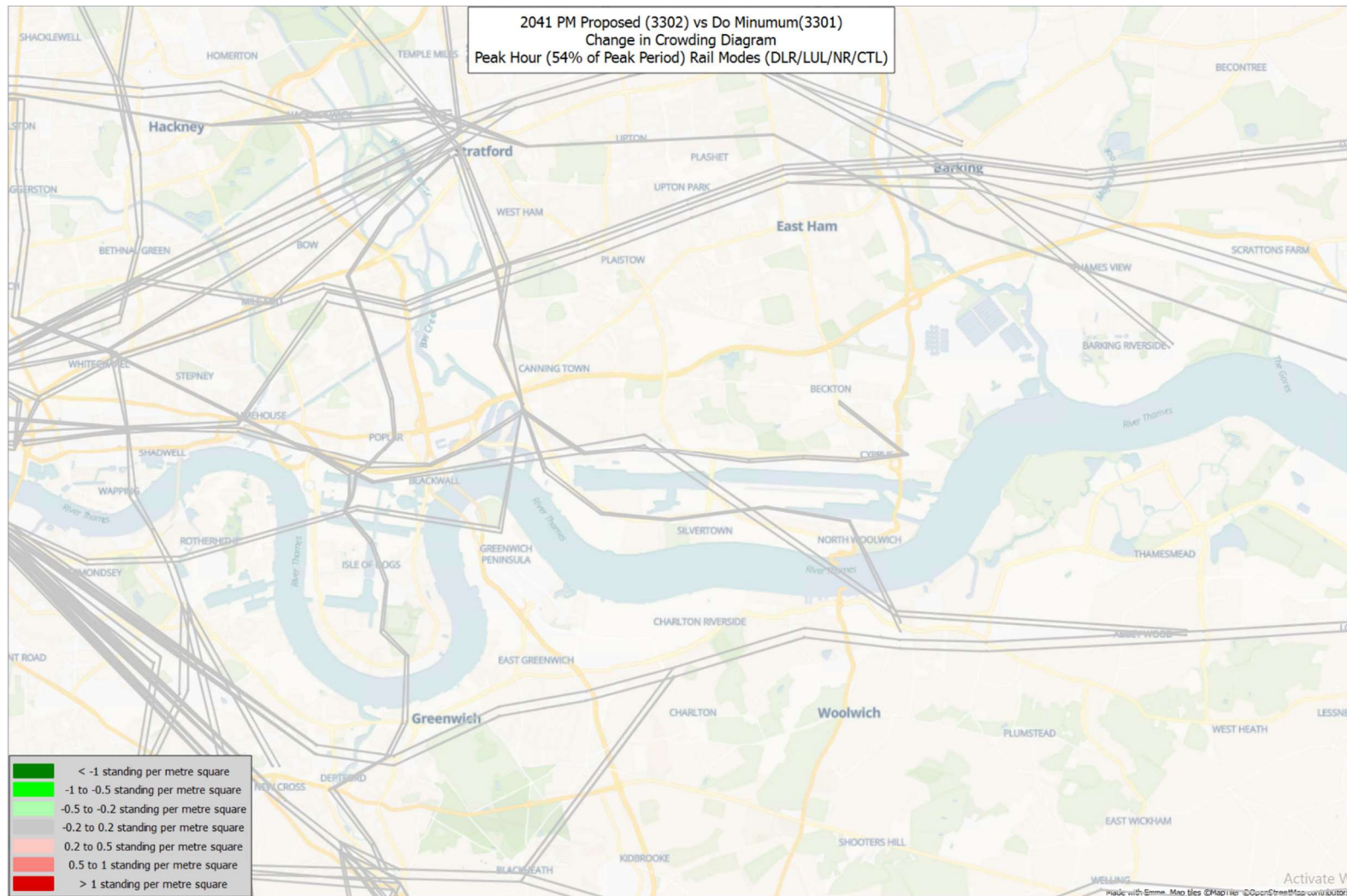


Fig C14: 2041 Railplan Modelling PM Peak (16:00-19:00)- Change (9.0mppa-6.5mppa) Network Crowding



Appendix D- LoHAM Modelling

SATUR
Atkins Ltd
DVV / ITS

A31ref04_AM
.UFS
\A31ref04_AM

Scale 8503

Link Annot:
+ Actual flo
- Actual flo

Differ: 1-2

Bandwidths =
100.00/mm

See 11.6.9

LoHAM AM 2031 - Network: V1.46 31/08/22

31/08/22
STEER DAVIES

31/08/22
STEER DAVIES

Fig D2: LoHAM Modelling 2031 AM Peak- Average Link delay in Seconds change (Expansion – No Expansion) in local area

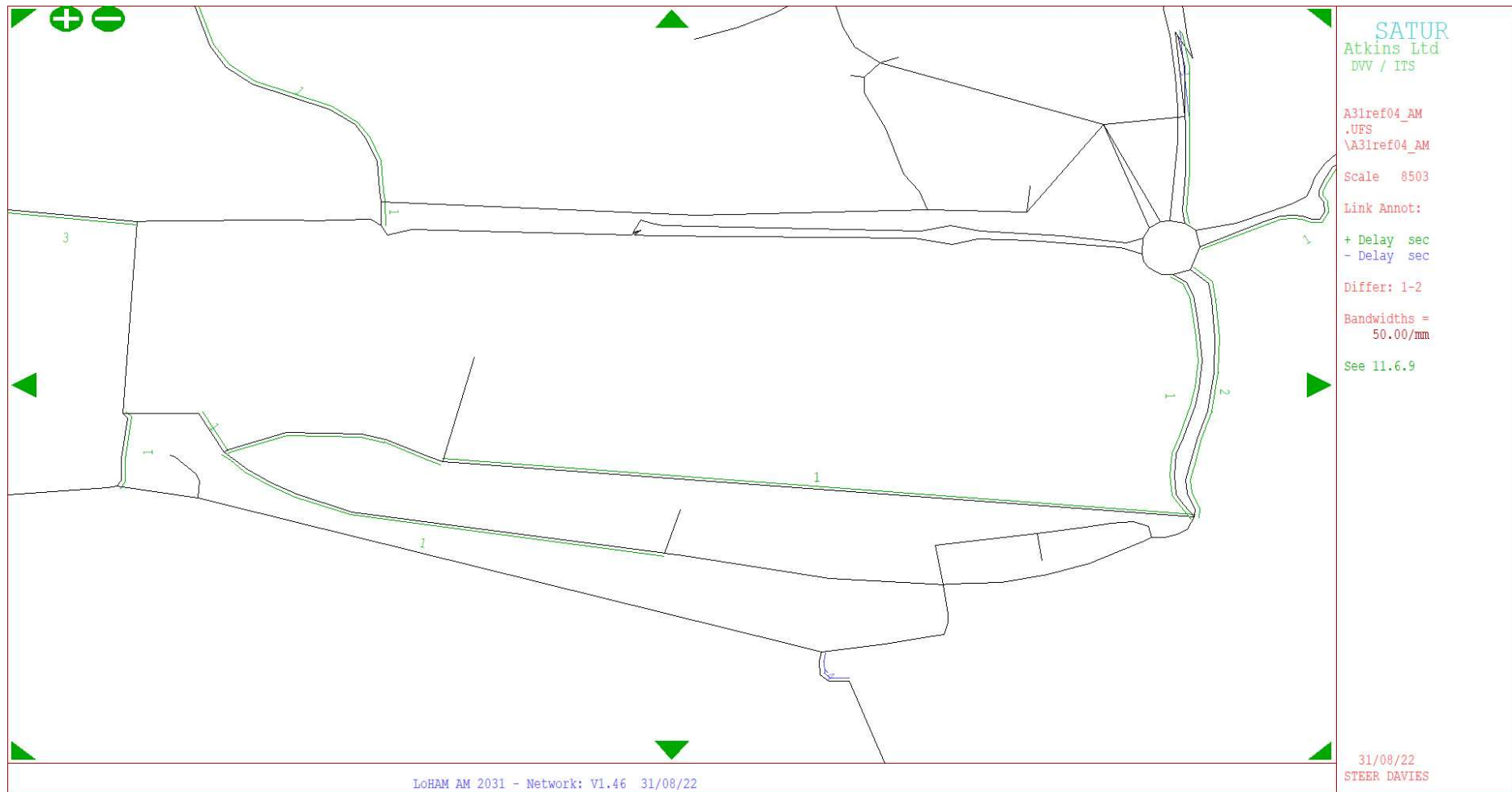


Fig D3: LoHAM Modelling 2031 AM Peak- Average junction delay in Seconds change (9.0mppa- 6.5mppa) in local area

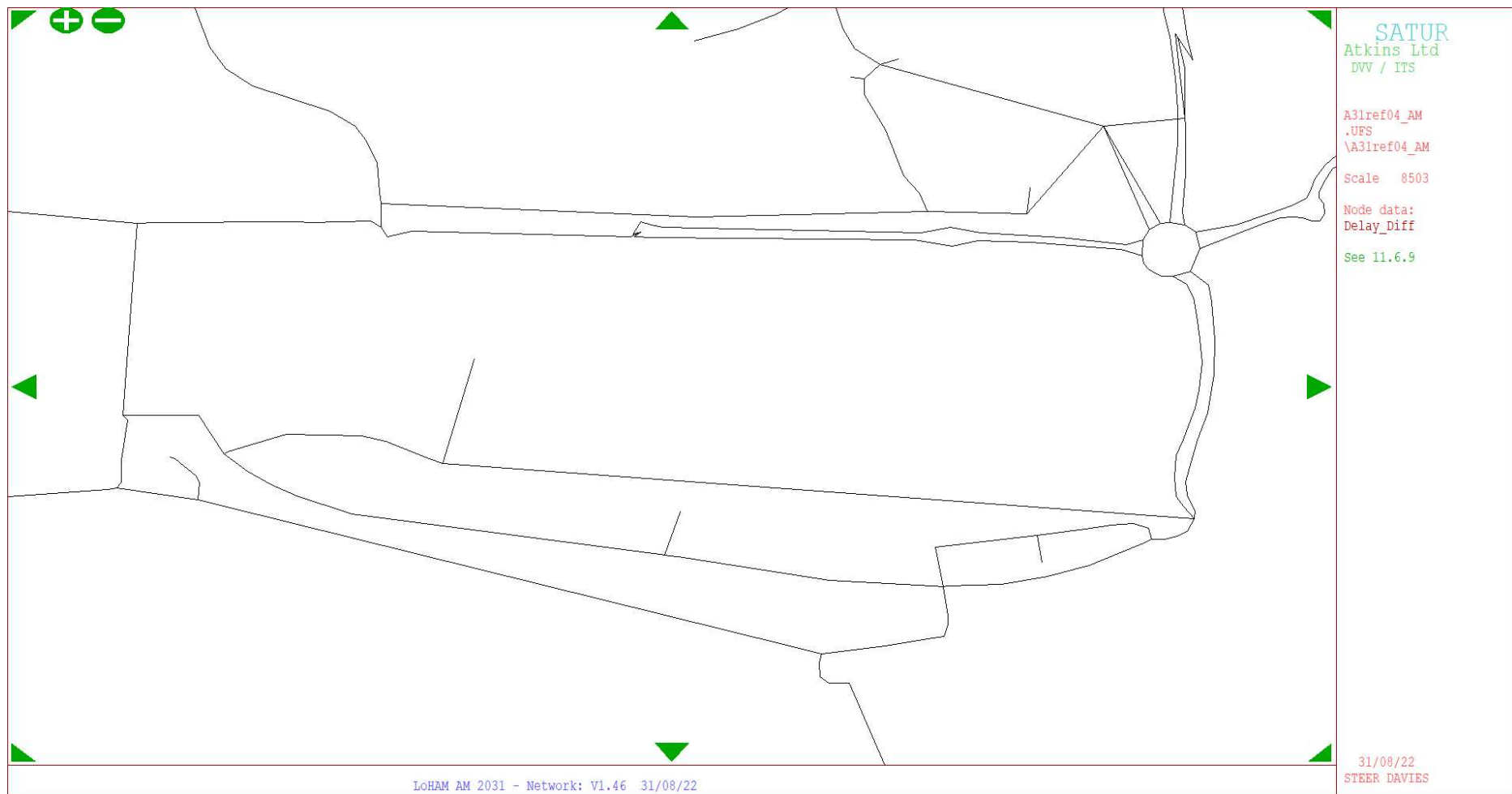


Fig D4: LoHAM Modelling 2031 AM Peak- Link Volume over Capacity ratio – 6.5mppa scenario filtered to show VoC greater than 90%

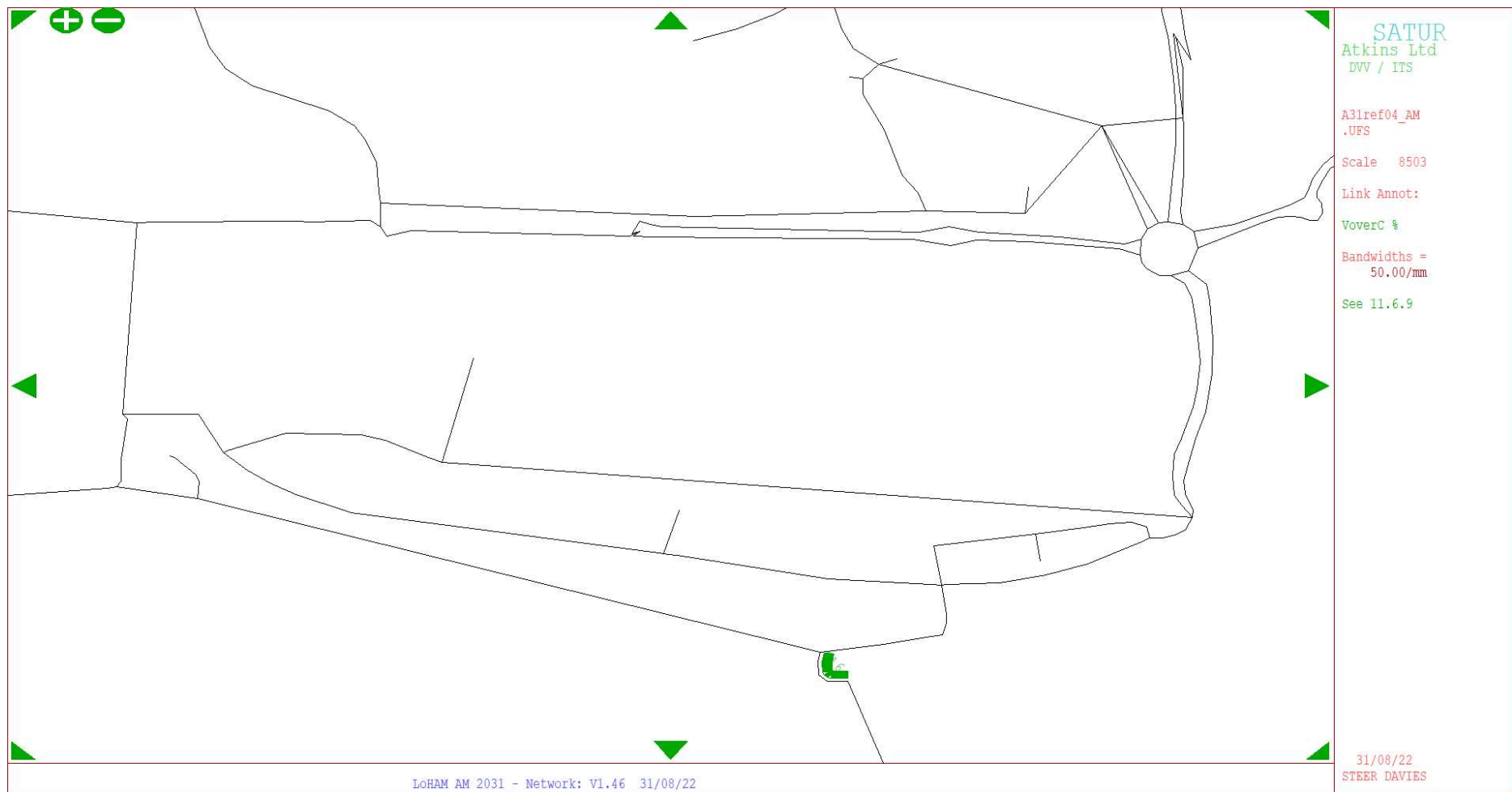


Fig D5: LoHAM Modelling 2031 AM Peak- Link Volume over Capacity ratio – 9.0mppa scenario filtered to show VoC greater than 90%

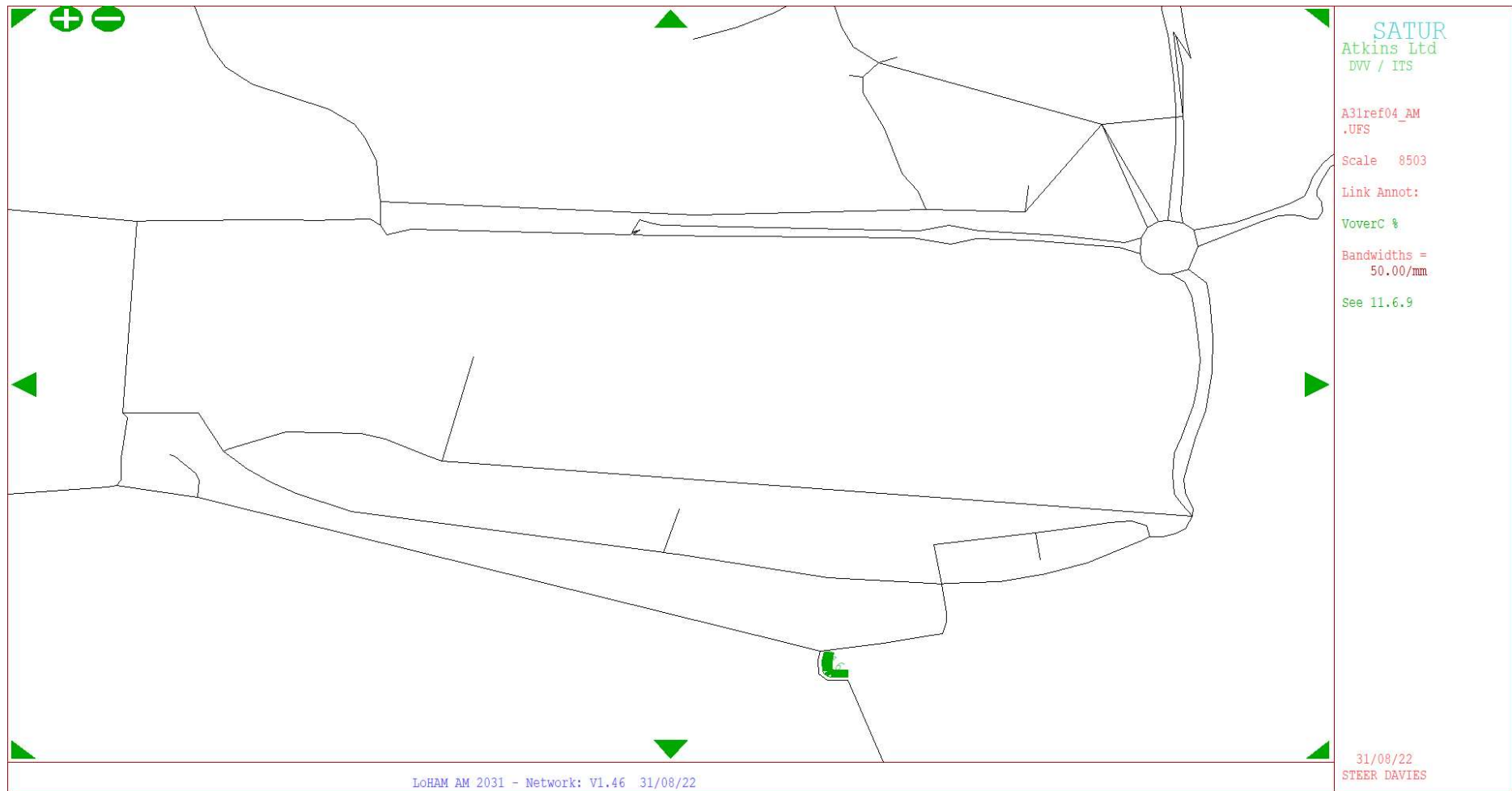


Fig D6: LoHAM Modelling 2031 PM Peak- Actual Flow in PCU/ HR change (9.0mppa- 6.5mppa) in local area

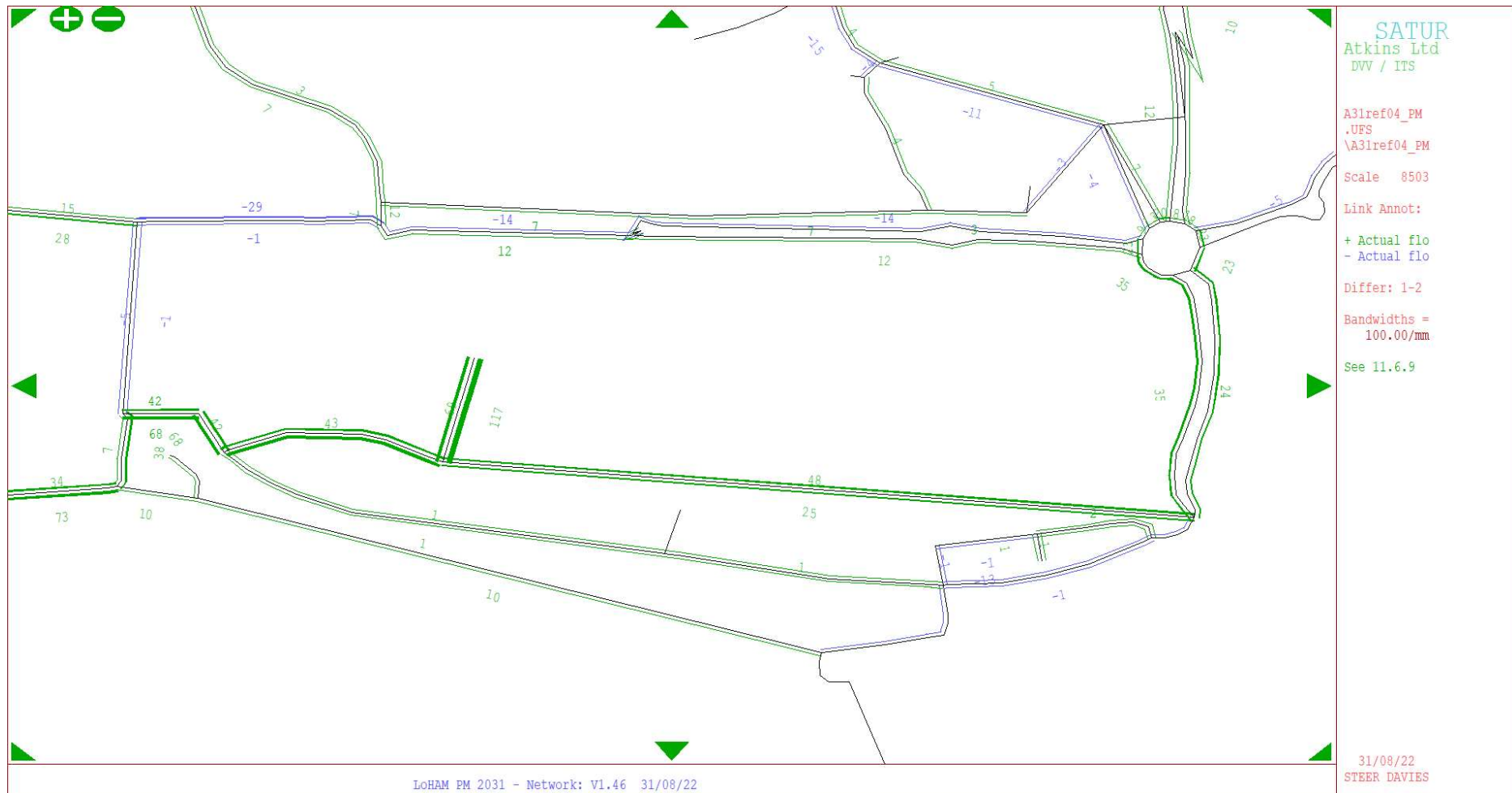
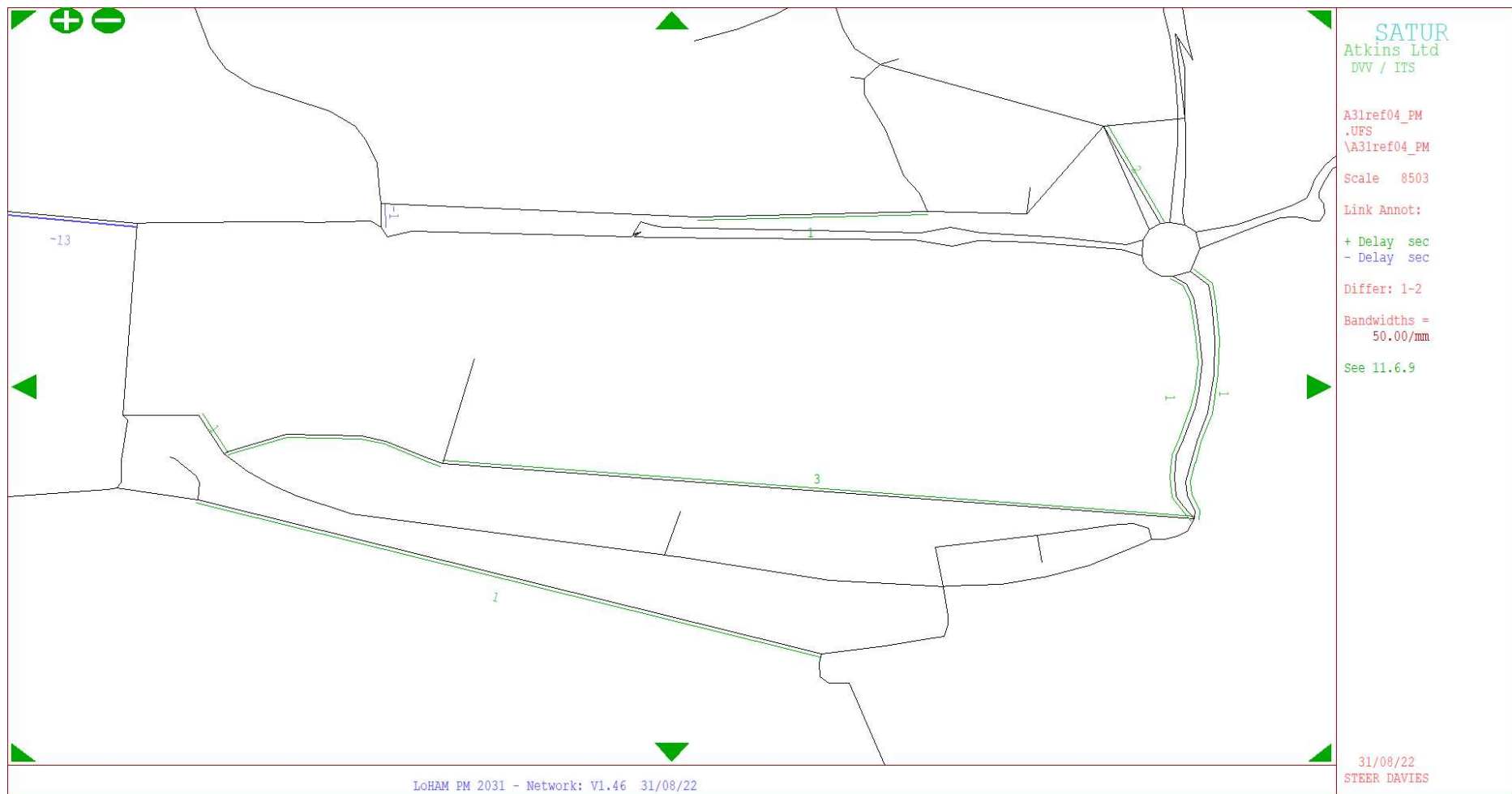


Fig D7: LoHAM Modelling 2031 PM Peak- Average Link delay in Seconds change (9.0mppa- 6.5mppa) in local area



SATUR
Atkins Ltd
DWV / ITS

A31ref04_PM
.UFS
\A31ref04_PM

Scale 8503

Node data:
Delay_Diff

See 11.6.9

LoHAM PM 2031 - Network: V1.46 31/08/22

31/08/22
STEER DAVIES

Fig D9: LoHAM Modelling 2031 PM Peak- Link Volume over Capacity ratio – 6.5mppa scenario filtered to show VoC greater than 90%

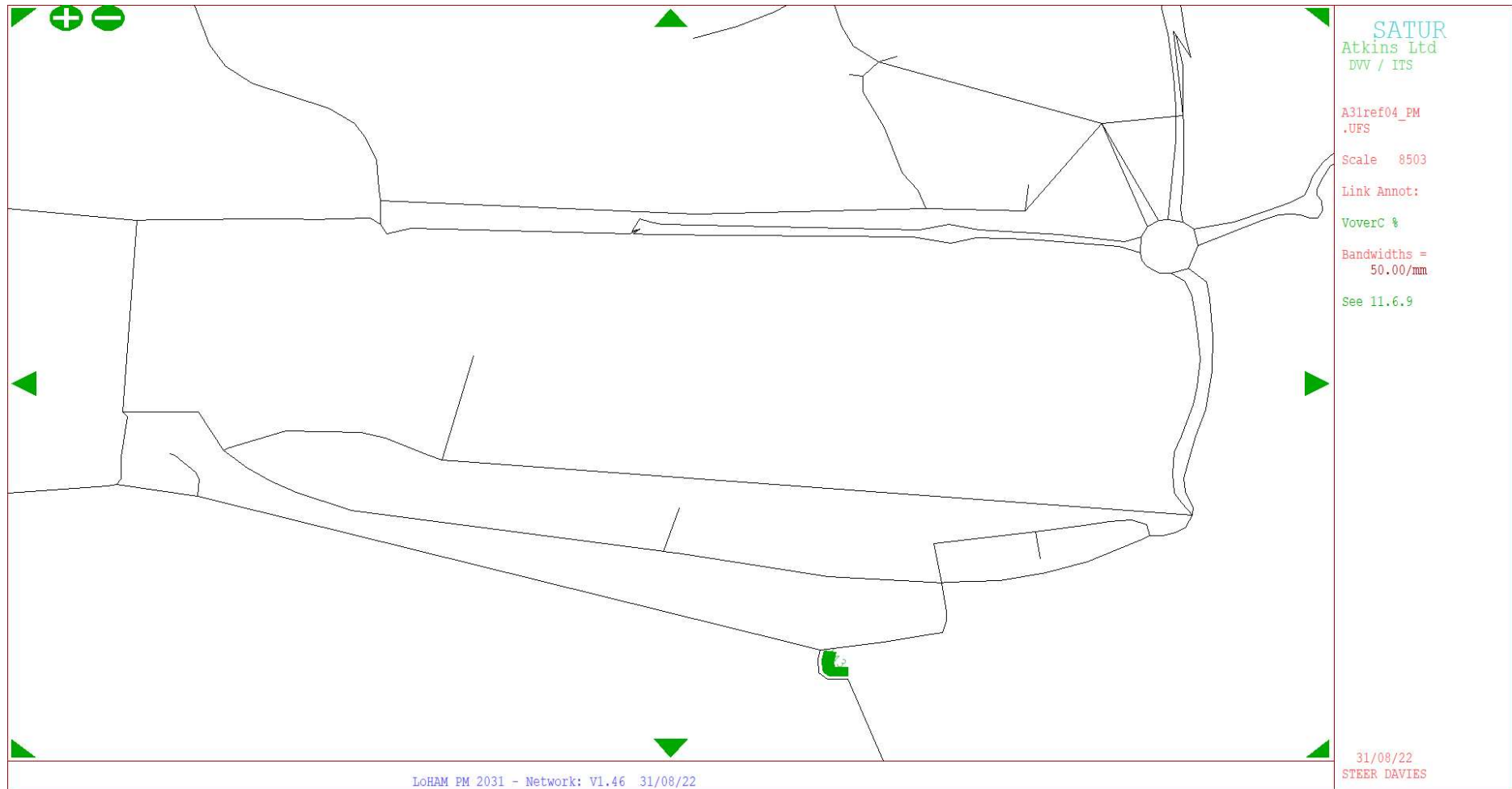
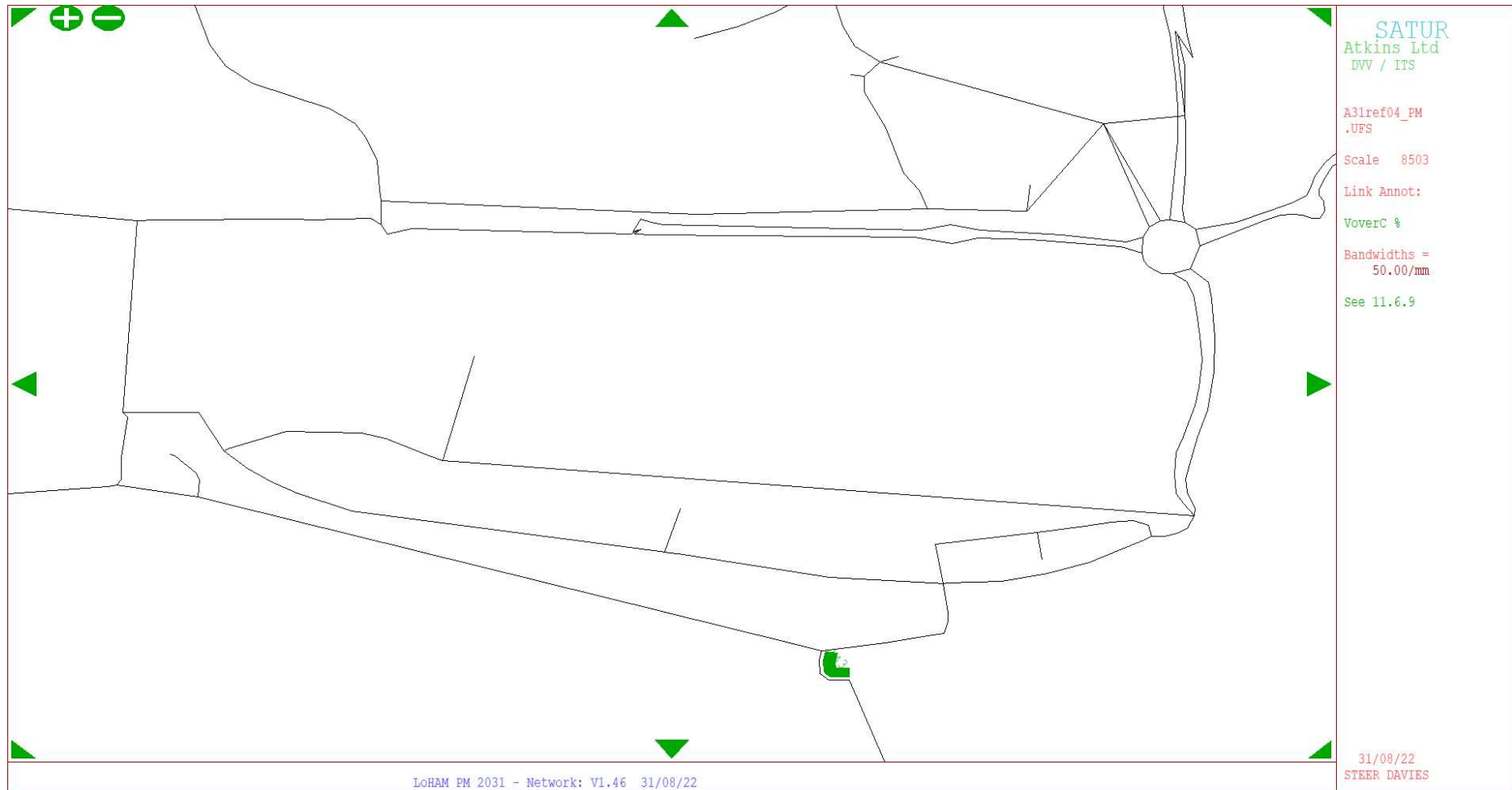


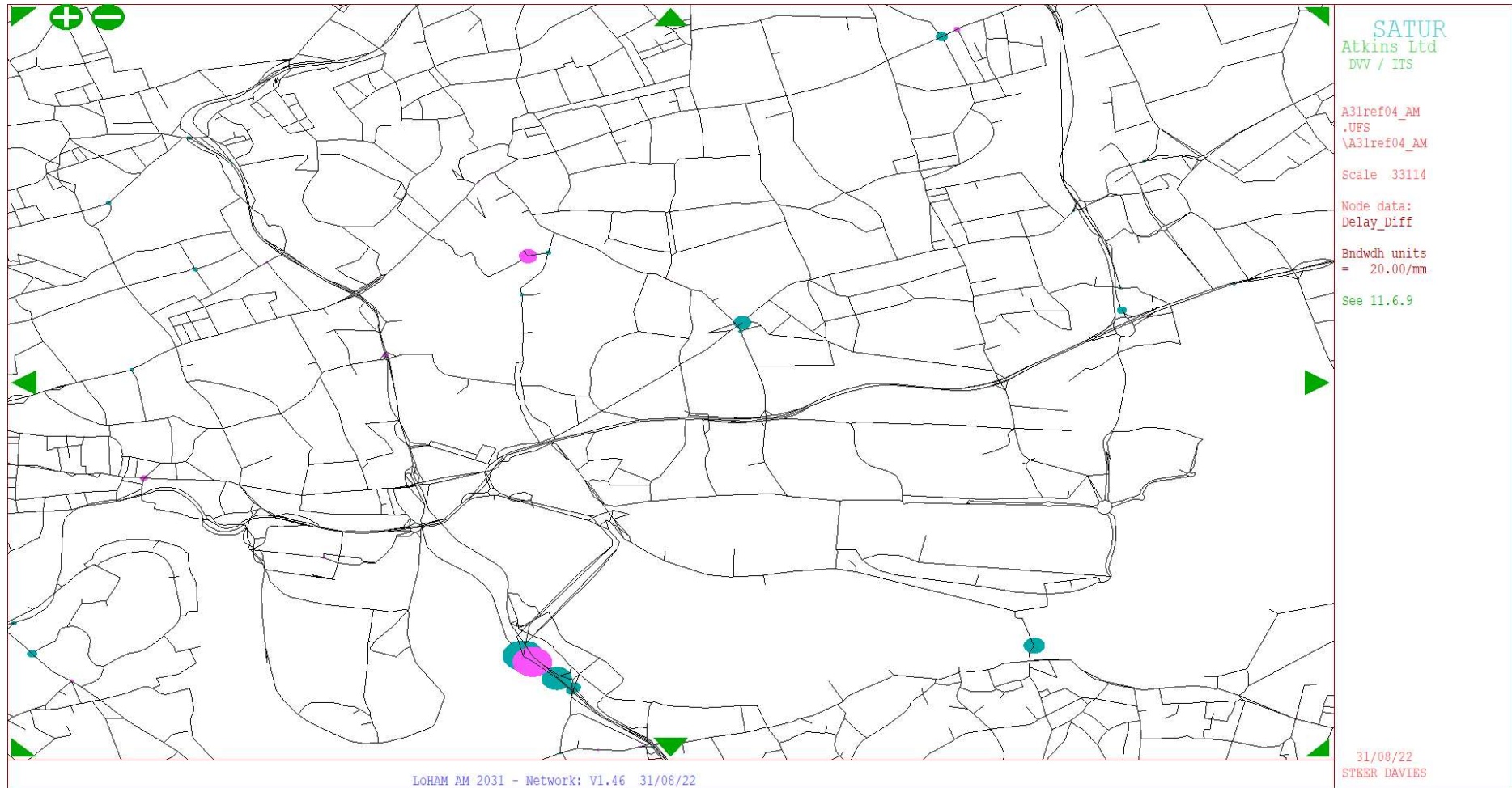
Fig D10: LoHAM Modelling 2031 PM Peak- Link Volume over Capacity ratio – 9.0mppa scenario filtered to show VoC greater than 90%



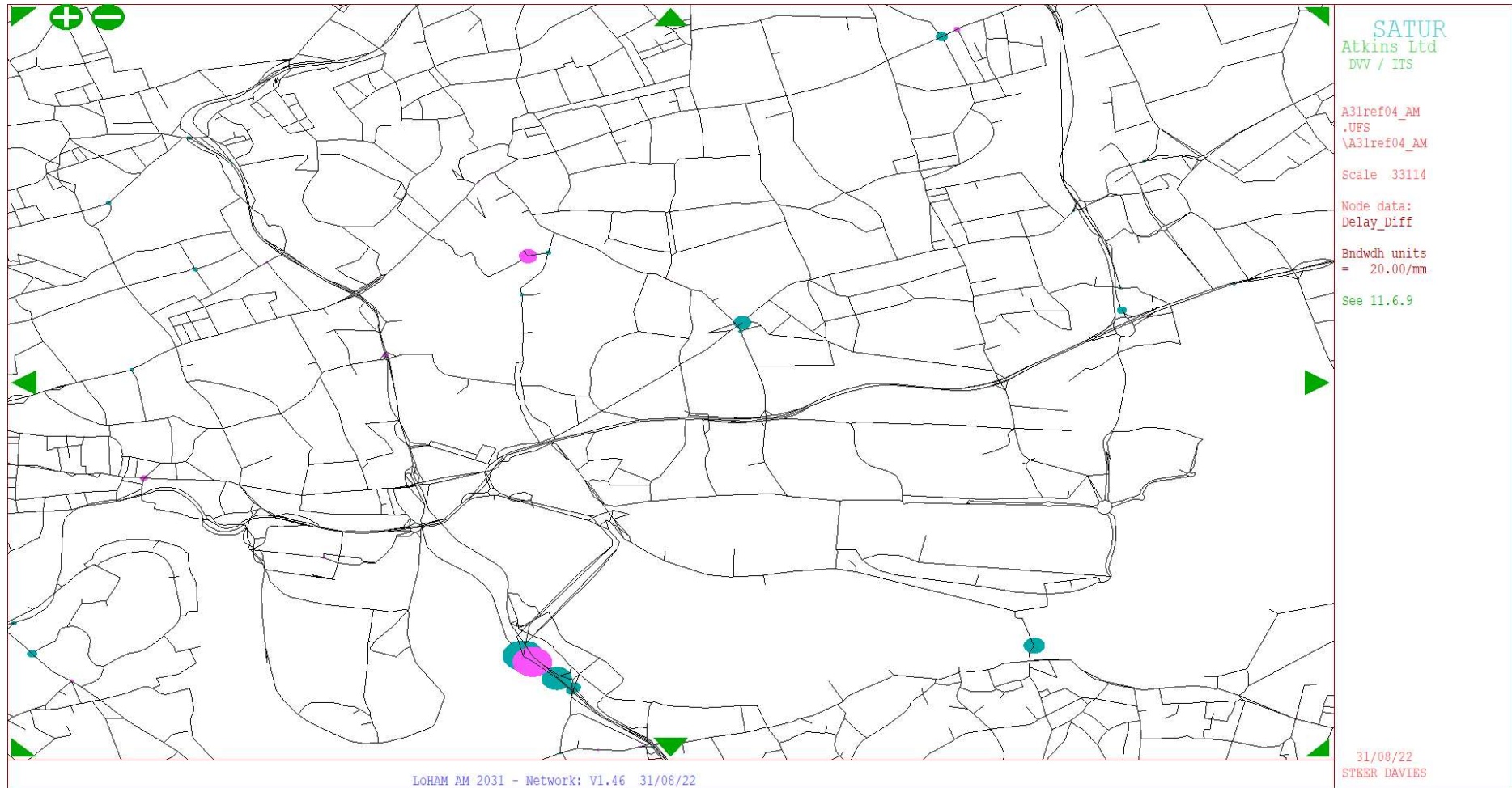
31/08/22
STEER DAVIES

LoHAM AM 2031 - Network: V1.46 31/08/22

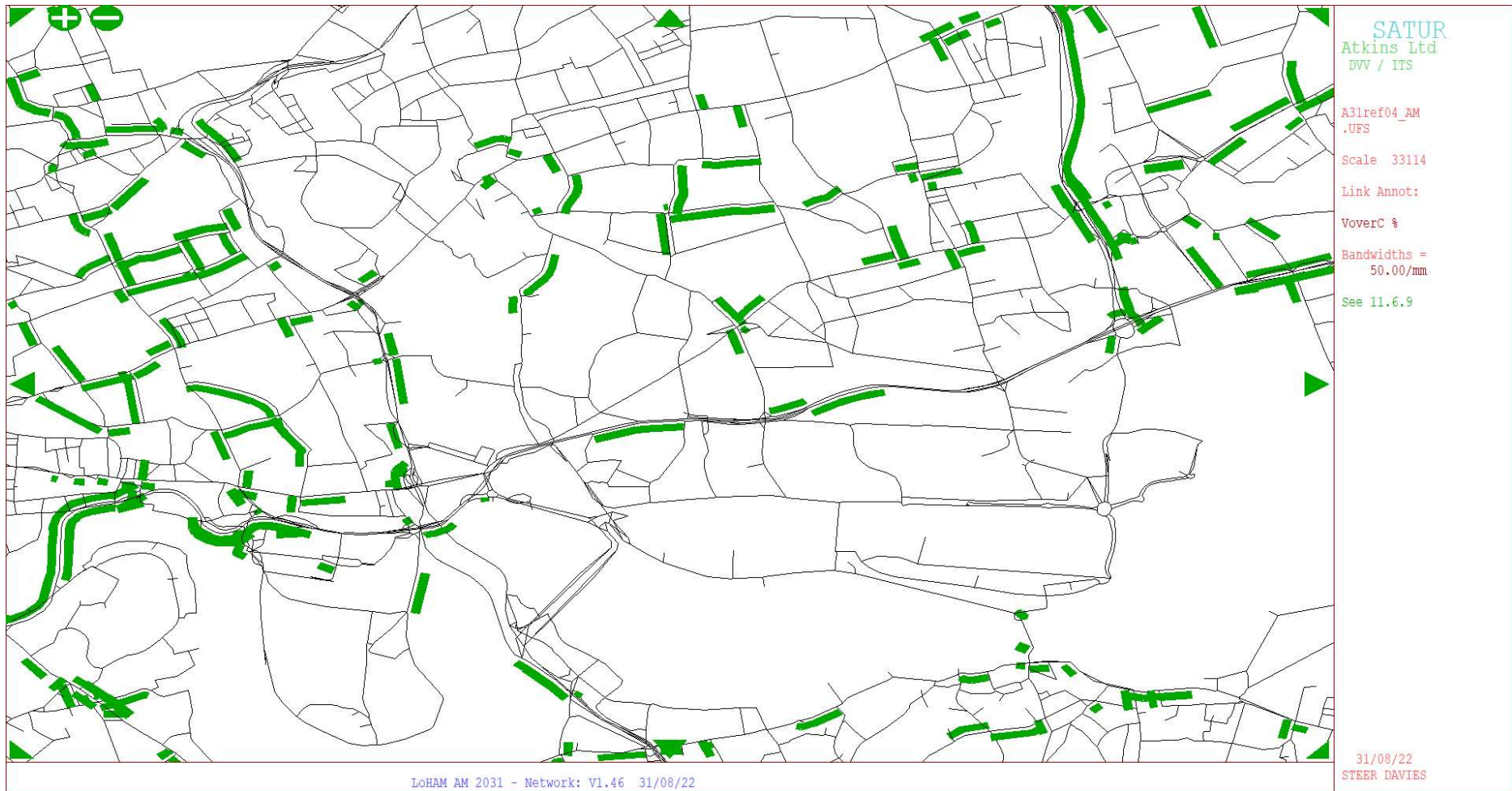
D12: LoHAM Modelling 2031 AM Peak-Link Delay Wider Area - Average Link delay in Seconds change (9.0mppa- 6.5mppa) in local area



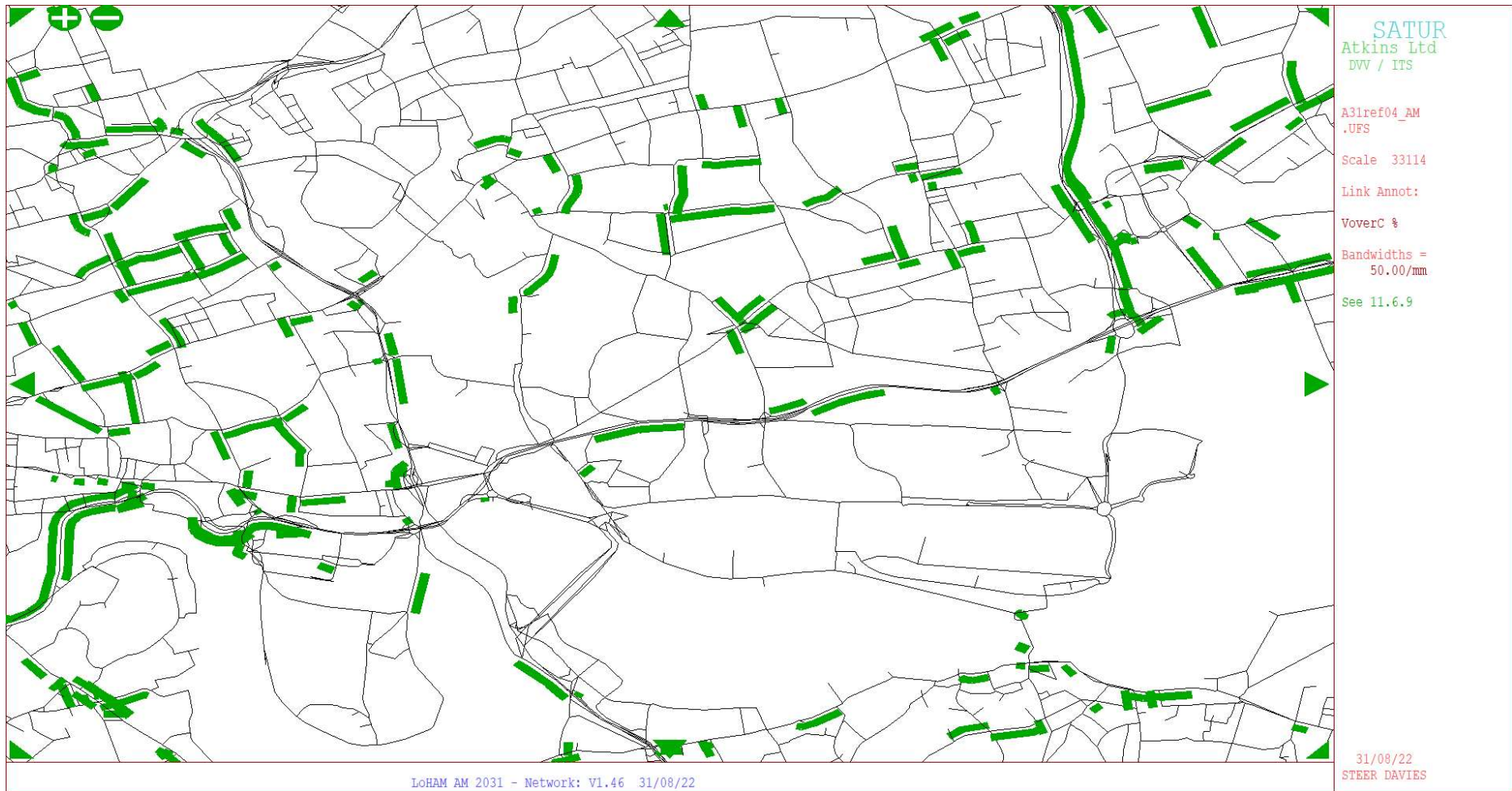
D13: LoHAM Modelling 2031 AM Peak- Wider Area - Average Junction Delay in Seconds Change (9.0mppa- 6.5mppa) in Local Area



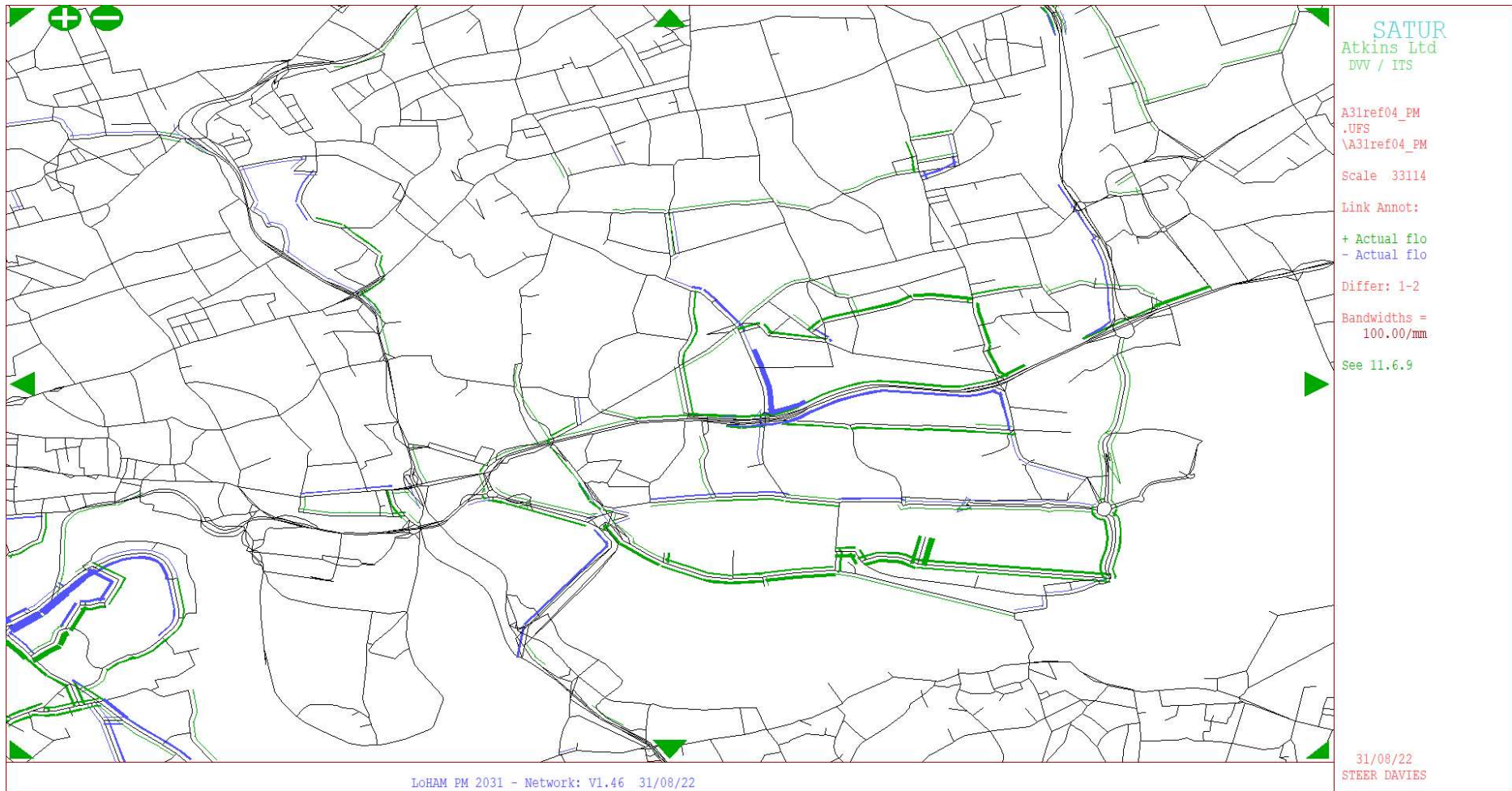
D14- LoHAM Modelling 2031 AM Peak- Wider Area – 6.5mppa Scenario Filtered to Show VoC Greater Than 90%



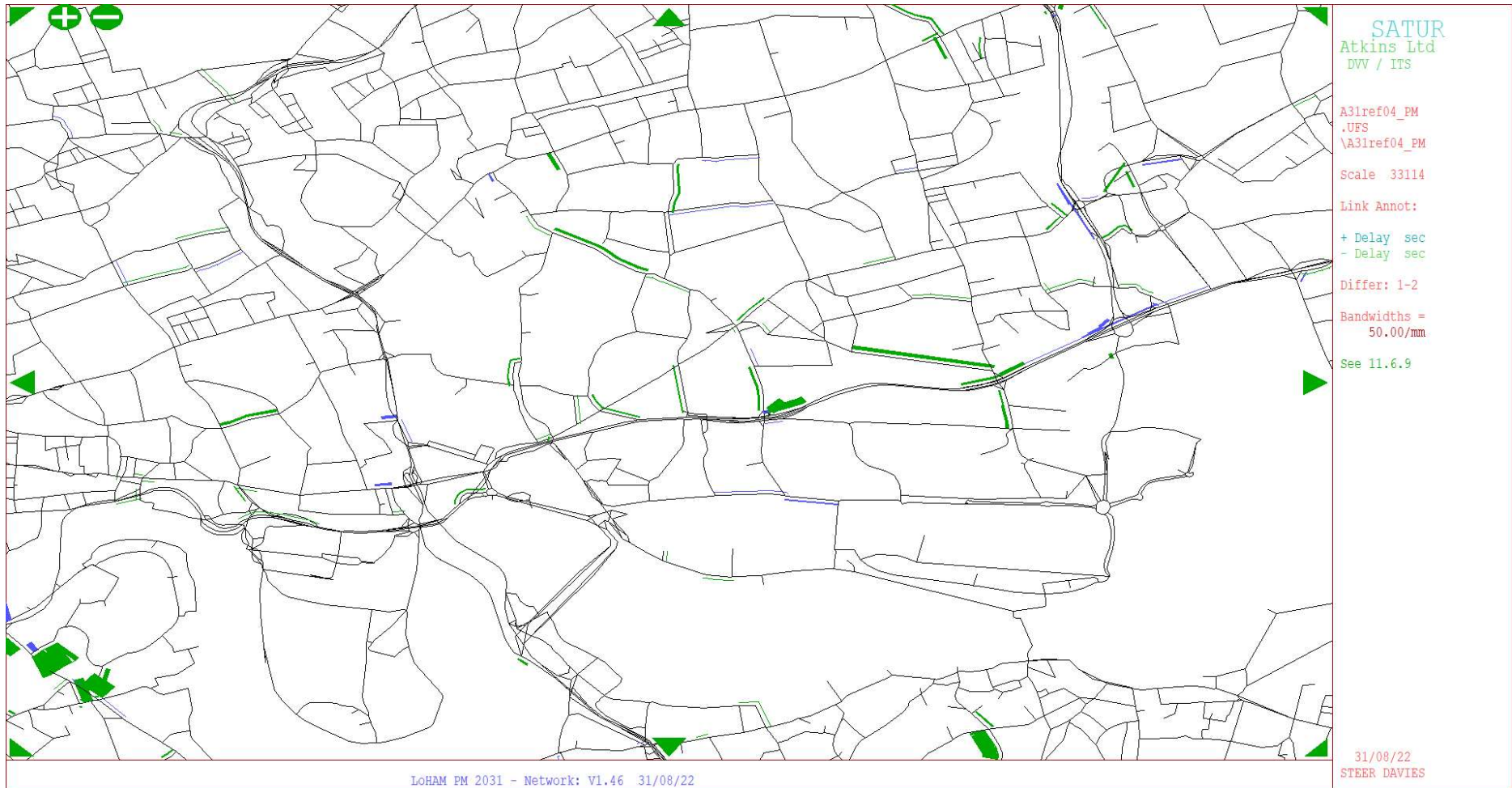
D15- LoHAM Modelling 2031 AM Peak- Wider Area – 9.0mppa Scenario Filtered to Show VoC Greater Than 90%



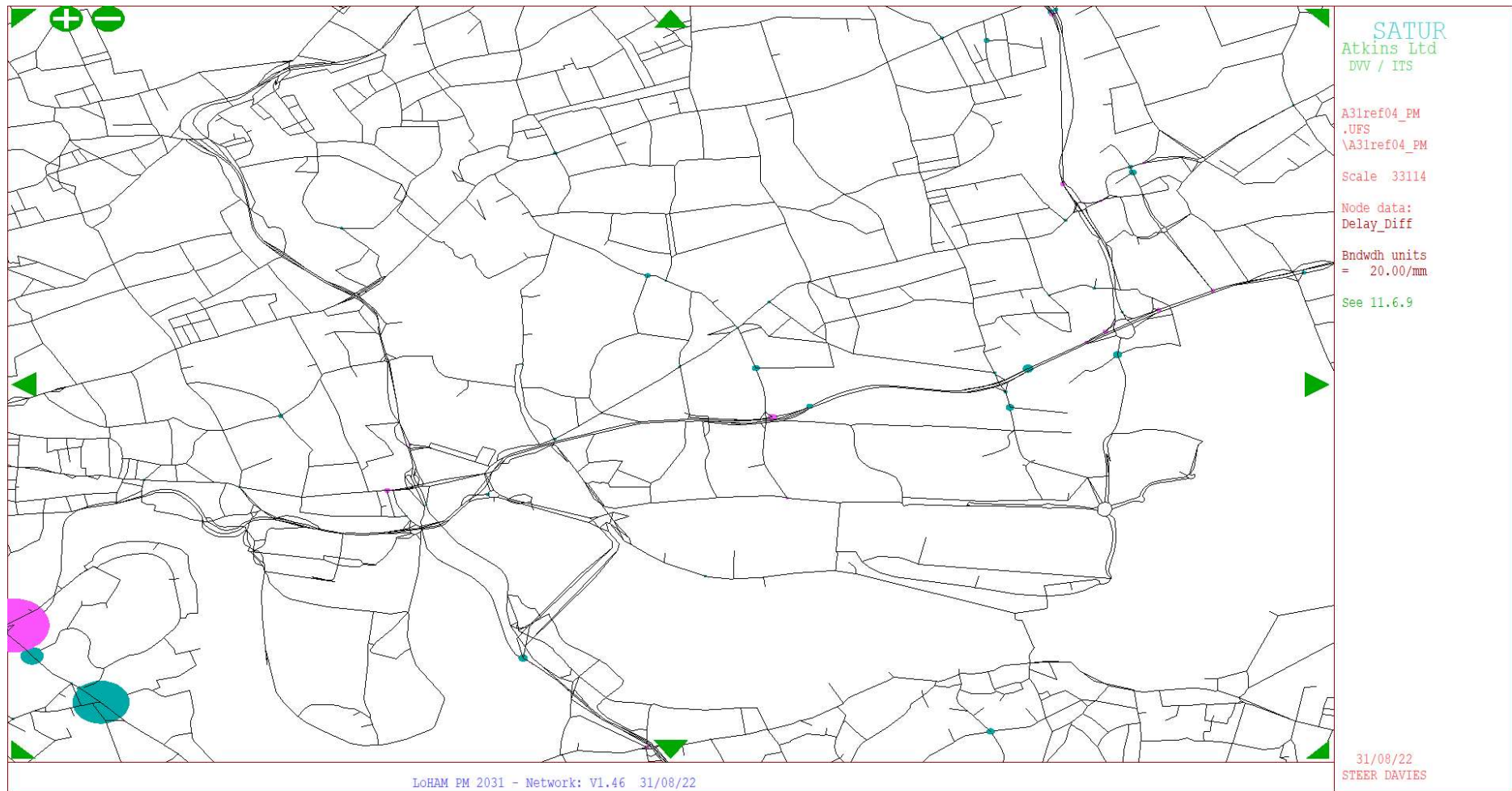
D16: LoHAM Modelling 2031 PM Peak – Wider Area - Actual Flow in PCU/ HR change (9.0mppa- 6.5mppa)



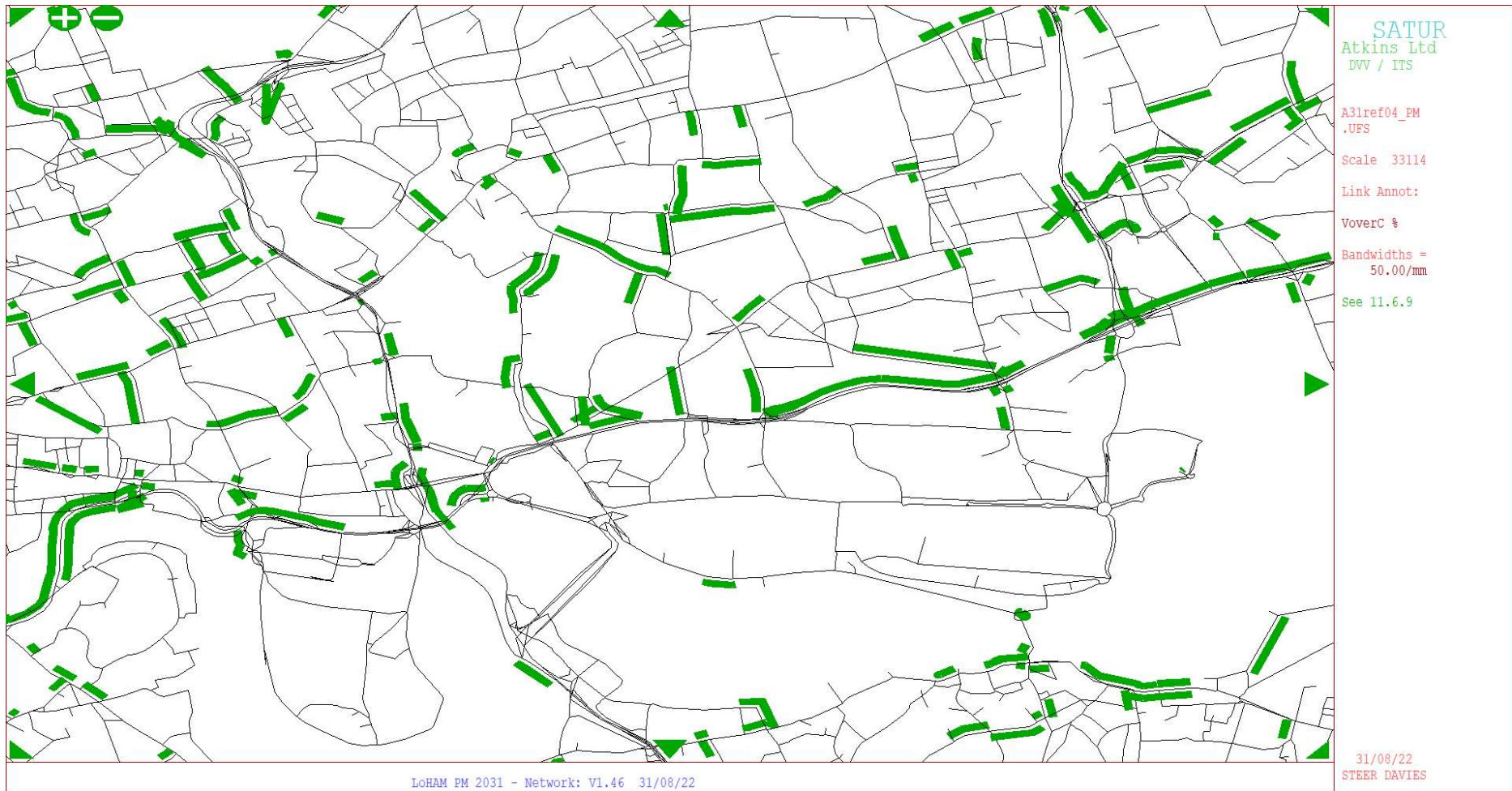
D17: LoHAM Modelling 2031 PM Peak-Link Delay Wider Area - Average Link delay in Seconds change (9.0mppa- 6.5mppa) in local area



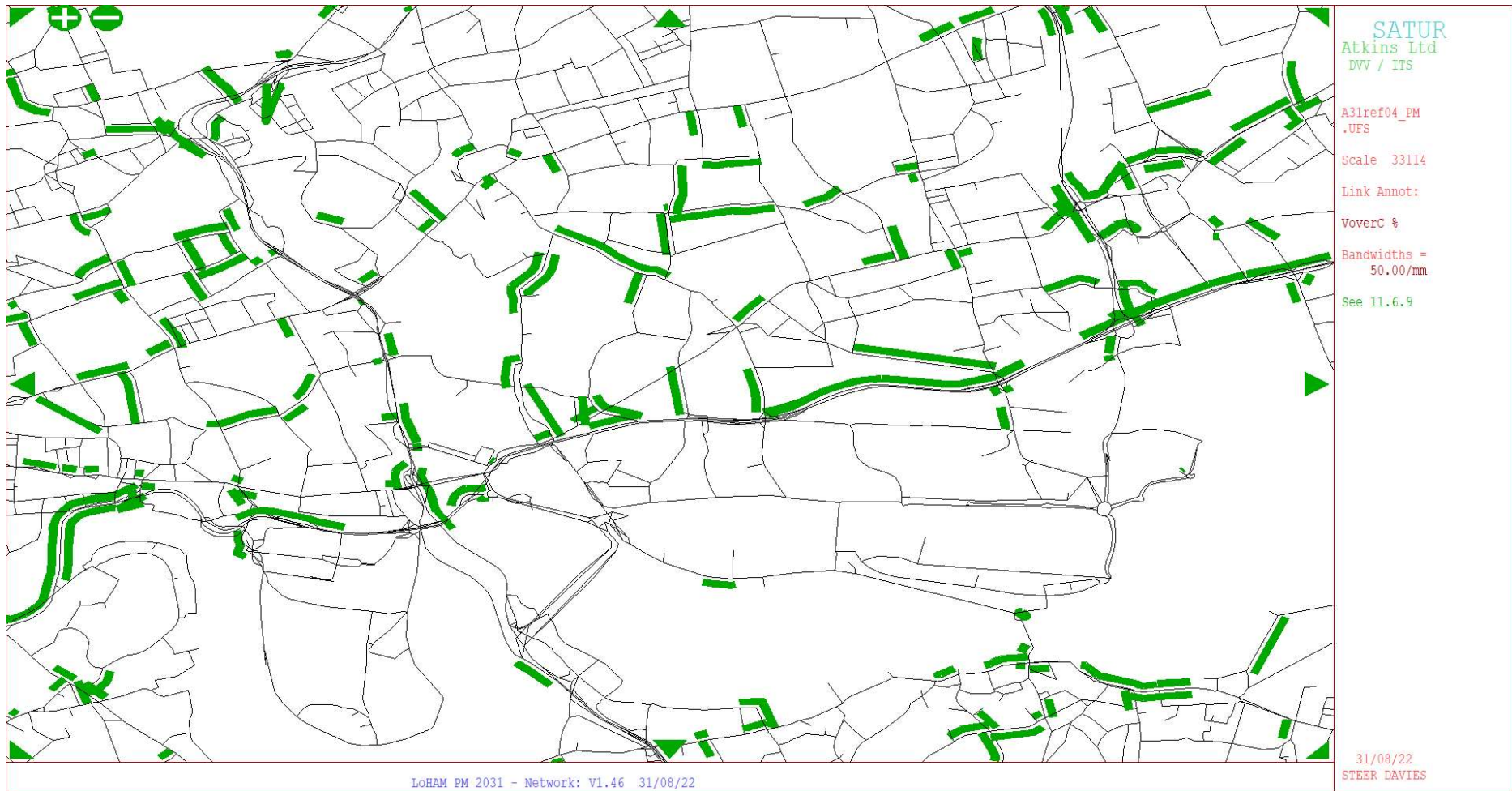
D18: LoHAM Modelling 2031 PM Peak- Wider Area - Average Junction Delay in Seconds Change (9.0mppa- 6.5mppa) in Local Area



D19- LoHAM Modelling 2031 PM Peak- Wider Area – 6.5mppa Scenario Filtered to Show VoC Greater Than 90%



D20- LoHAM Modelling 2031 PM Peak- Wider Area – 9.0mppa Scenario Filtered to Show VoC Greater Than 90%



E 2025-2031 Framework Travel Plan

2025-2031 Framework Travel Plan

Introduction and Overview

- 1.1 This Framework Travel Plan (FTP) has been prepared to accompany London City Airport's proposed amendments to the CADP1 Permission to allow for up to 9 million annual passengers (mppa) (currently limited to 6mppa).
- 1.2 The FTP is focussed on the period between 2025-2301, the former year being the assumed implementation of the changes and the latter year being forecast to reach 9mppa. Under the requirements of Condition 71 of the CADP1 Permission, the current Travel Plan is being reviewed and will run to 2025. Subject to approval, the FTP will replace the current Travel Plan and will be further developed and submitted to LBN for approval.
- 1.3 The proposed amendments set ambitious targets to improve and accelerate the sustainable mode share targets, such that, by 2031 80% of all passengers and 55% of staff will travel to the airport by public and sustainable transport.

Policy and Transport Context

Policy – London Borough of Newham Travel Plan Guidance (2022)

- 1.4 The LBN Travel Plan Guidance published 2022 considers Framework Travel Plans broad-scale and suitable for larger sites where the end occupants are to be confirmed. They are also suitable for developments which have a mix of land uses, occupiers, end users and/or development phases. They should contain high-level objectives, measures, targets, and monitoring and management principles (i.e., a framework) upon which Full Travel Plans can be developed, which can be conditioned.
- 1.5 The guidance specifies specific mode share targets should be agreed with LBN and otherwise includes a set of default targets to be achieved by Year 5 of its implementation, including:
 - At least 5% of all trips cycled;
 - Combined walk, cycle, and public transport mode share of at least 83%; and
 - 10% reduction in Single Occupancy Vehicle (SOC) trips (or 0% if baseline mode share is <10%).

Note: the targets denote % point changes and not % change from the previous.

Transport and Active Travel Infrastructure

- 1.6 Both the Transport Assessment and 2023-2025 Travel Plan provides the full context of Transport and Active Travel Infrastructure both locally and regionally. As such this Framework Travel Plan will provide an overview of anticipated infrastructural changes past this date.
- 1.7 The existing Ultra-Low Emission Zone which covers London City Airport bounded by the A1020 Royal Docks Road, is planned to be expanded in August 2023 to cover the entirety of Greater London. As a result, the zone will be embedded by 2025 and will have seen quantifiable results in reducing the emissions of vehicles entering Greater London.
- 1.8 The Silvertown Tunnel is a new 1.4km twin-bore road tunnel under the Thames running between North Greenwich in the south and Silvertown in the north. The new tunnel will

provide opportunities to access the airport by bus from South London of which includes an approximate 5 bus per hour route to be fully operational by 2025.

- 1.9 Additionally, by May 2023 the final timetable for full Elizabeth line services will be in place which will particularly improve service levels on services east of Liverpool Street to Shenfield and facilitate seamless, accessible and quick rail journeys to those areas of East London.

Mode Share Targets

- 1.10 The Mode Share targets for both passengers and staff presented in this Framework Travel Plan have been designed to consider the likely efficacy of the combination of travel plan measures and the wider delivery of transport infrastructure enabling sustainable travel.

Passengers

- 1.11 Surveyed passenger mode shares alongside targets for 2025 and 2031, are presented in Table 1.

Table 1: Passenger surveyed and targeted mode shares

Mode	2019 (CAA survey)	2025 (target)	2031 (target)
Sustainable and Public Transport (DLR, bus, walking, cycling, London Taxi)	65.9%	75%	80%
Car	11.4%	10%	10%
Minicab and Ride Sharing services (i.e., Uber)	22.8%	15%	10%
Other	0.0%	0%	0%
TOTAL	100%	100%	100%

N.B discrepancies due to rounding

- 1.12 The 2025 targets seek to both increase passenger sustainable transport mode shares (DLR, bus, walking, cycling and London Taxi) whilst concurrently reducing the car, minicab and ride sharing service mode shares. The final 2031 passenger mode share additionally looks to align with LCY's sustainability roadmap of 80% of all journeys to and from the airport to be made by sustainable transport modes by 2030.

Staff

- 1.13 Surveyed staff mode shares alongside targets for 2025 and 2031, are presented in Table 2.

Table 2: Staff surveyed and targeted mode shares

Mode	2019 (staff survey)	2025 (target)	2031 (target)
Train, underground, DLR, bus, walking, cycling, London Taxi, minicabs/uber, motorcycle	42%	47%	57%
Car (single occupancy vehicle)	56%	48%	35%
Car with passenger	2%	5%	8%
TOTAL	100%	100%	100%

- 1.14 The 2025 and 2031 targets seek to reduce single car occupancy mode share.

Mode Share Measures

- 1.15 The Mode Share Measures for both passengers and staff presented in Tables 1 and 2 of this Framework Travel Plan are designed to deliver the 2031 mode share targets. In order to achieve the 2031 mode share targets, it is recognised there will be a need to implement additional measures past 2025. The full range of potential measures is outlined in Table 3.

Table 3: Potential mode share measures post 2025

Measure	Description	Reference
General Measures		
Staff resources	<i>Providing travel planning/surface access support at the airport. Will provide increased momentum to the delivery of all stages of the travel plan. This is important for the effective implementation of the Travel Plan</i>	GM1
Direct bus link from Custom House Elizabeth line station	<i>Two existing TfL bus routes (473 and 474) operate between Custom House station and the airport. The airport will seek to promote this service and explore opportunities for improving this with TfL.</i>	GM2
Improved real-time public transport information on- site	<i>Real-time public transport information will be displayed on large screens at strategic locations, such as in the passenger terminal, in the DLR station entrance and at bus stops. Improved at-a-glance travel information will improve passenger travel confidence and allow them to make better, more informed decisions about which mode of travel is best for them at any given time.</i>	GM3
Improved wayfinding and guidance at stations and bus stops	<i>Improved information and wayfinding including airport branding and signage indicating travel times at the DLR station, Custom House station and bus stops. At-a-glance information will improve passenger travel confidence while improve brand reputation.</i>	GM4
Promote 'Mobility Hub' facilities at nearby station hubs	<i>Improvements made to the quality and amenability of cycle parking and hire facilities at nearby stations, such as Custom House. This will particularly enable staff to safely store cycles at the station and enable them to use the rail services offered at the station. The provision of cycle hire facilities will enable staff and passengers to make the final part of their journey to the airport by cycle.</i>	GM5
Cycle route to Connaught Bridge	<i>There are plans for a cycle route to be developed to the Connaught Bridge to improve active travel connectivity north towards Beckton, the ExCel and Custom House. However, this is unlikely to be in place until 2025. Despite this, LCY have made a S106 financial contribution towards this development and can play a key role in continuing to support this scheme throughout this period and promote to staff and passengers when it is open.</i>	GM6
Regular travel surveys	<i>To maintain a good understanding of how staff and passenger travel to the airport changes over time, LCY will carry out and review regular staff and passenger surveys.</i>	GM7
Enablement of new Silvertown Tunnel bus routes	<i>Marketing of new bus routes running through Silvertown Tunnel when these become operational to both passengers and staff, demonstrating new public transport links to South London.</i>	GM8

Measure	Description	Reference
Staff specific		
Improved Lift share system	<i>Further promote the lift share system for staff members via a marketing campaign and continue to provide rewards for its continued utilisation. Those lift sharing would be able to access priority parking for free, and benefit from £1 per day for each day they lift share.</i>	S1
Cycle to work scheme	<i>Improve the quality of the cycle to work scheme, including raising its value to cover more expensive electric bicycles, and integration of cycle hire schemes (Santander, Brompton and Buzzbike).</i>	S3
Cycle parking improvements	<i>Facilitate the development of high-quality secure and amenable staff cycle parking, increasing its attractiveness to use.</i>	S4
Private car restrictions for business travel	<i>Do not allow a mileage allowance for private cars undertaking business travel where public transport, active travel and car share usage is possible.</i>	S5
Personalised Travel Planning (PTP) services	<i>Make available PTP to all staff</i>	S6
Personalised Travel Planning (PTP) services	<i>Undertake 1-on-1 or group PTP sessions with staff members, to present various options for their commutes.</i>	S6
Staff Travel Planning Forum	<i>Requiring attendance from relevant staff members at both LCA and its partner organisations operating at the airport, to discuss issues, opportunities, and ideas for modal shift.</i>	S7
Sustainable travel incentives and gamification	<i>Improve the quality of the airport's Starpoints system to provide rewards to staff who have continually shifted to a sustainable travel mode. Explore the award of £1 per day for those who have switched.</i>	S8
Parking charges for staff	<i>Carry out feasibility study to examine benefits of implementing parking charges for staff and deliver recommendations of study. The measures could include some or all of the following:</i> <i>- Full blanket charge applicable across all staff</i> <i>- parking permit system (e.g., dispensations for those without viable alternative means or late shift patterns)</i>	S9

Measure	Description	Reference
	- Increasing the cost of parking to airport employers who currently lease parking from the airport and encourage further consideration of their staff parking policies - Parking “cash out” scheme where staff who voluntarily give up their parking space are provided with a reward for not using parking	
Passenger specific		
Customer Service Information Desk	LCY will provide improved face-to-face information and support to passengers looking for information regarding onward travel, prioritising sustainable transport modes. This is currently provided via the Information desk in the passenger terminal. The information provided through the desk will be improved, and training provided when new travel options become available.	P3
Increase short stay parking charges	Consider higher charges for pick-ups and drop-offs by car will be considered to decrease the attractiveness of car use, making some passengers reconsider more sustainable modes of travel to the airport.	P4
Increase provision of EV charging points	The airport will consider a limited increase in the numbers of EV charging points in passenger car parks in response to demand. However, this is a secondary measure as LCY does not wish to inadvertently encourage car use over sustainable modes of transport as a priority.	P5
Integrate public transport infrastructure into airline tickets	LCY will explore with airlines how they could improve information about the passenger’s journey to the airport to customers when they book flights to or from London City Airport, or ahead of checking in at the airport.	P6
Brompton cycle share	Adopting the Brompton Cycle hire scheme (operating across LBN) for passenger use would expand active travel options for passengers living locally. While uptake may be limited to those without luggage, the scheme could help LCA increase the numbers of passengers using bicycle for short trips when they arrive at the airport.	P7
Drop off charge for those travelling by minicab, ride sharing services and private car	Consider introduction of a drop-off charge for those arriving or departing by either minicab or ride sharing services, and those being dropped off by private cars (Kiss-and-fly), to encourage sustainable transport use.	P8
Increasing passenger short-stay (pick-up) parking costs	Undertaking a review of passenger short-stay pick-up parking costs across time bands seeking increases where most viable, in order to encourage sustainable transport use.	P9

Monitoring and Review

Monitoring

- 1.16 The progress of the 2025-2031 Framework Travel Plan will be monitored through the undertaking of surveys: annually for employees; and quarterly for passengers.

Review

- 1.17 The results of the surveys will be discussed with LBN officers quarterly (as appropriate) and within 2 months of completion of the annual staff survey a report (the **Annual Travel Plan Review**) will be submitted to LBN setting out the annual results, what has occurred in the previous calendar year, any challenges towards the mode share targets and any recommendations to adapt any of the Travel Plan measures.
- 1.18 If at the end of the Travel Plan period, the specific targets are not met the measures stipulated in this document should be reviewed and re-implemented if it is deemed necessary.

Control Information

Prepared by

Steer
14-21 Rushworth Street
London SE1 0RB
+44 20 7910 5000
www.steergroup.com

Prepared for

London City Airport
Royal Docks
London
E16 2PB

Steer project/proposal number

23699202

Client contract/project number

Author/originator

Ben Dance / Francesca Whitfield/ Philip Rust

Reviewer/approver

Philip Rust/Adrian Cole

Other contributors

Lisa Martin

Distribution

Client:

Steer:

Version control/issue number V0.12

Date 18/12/2022

