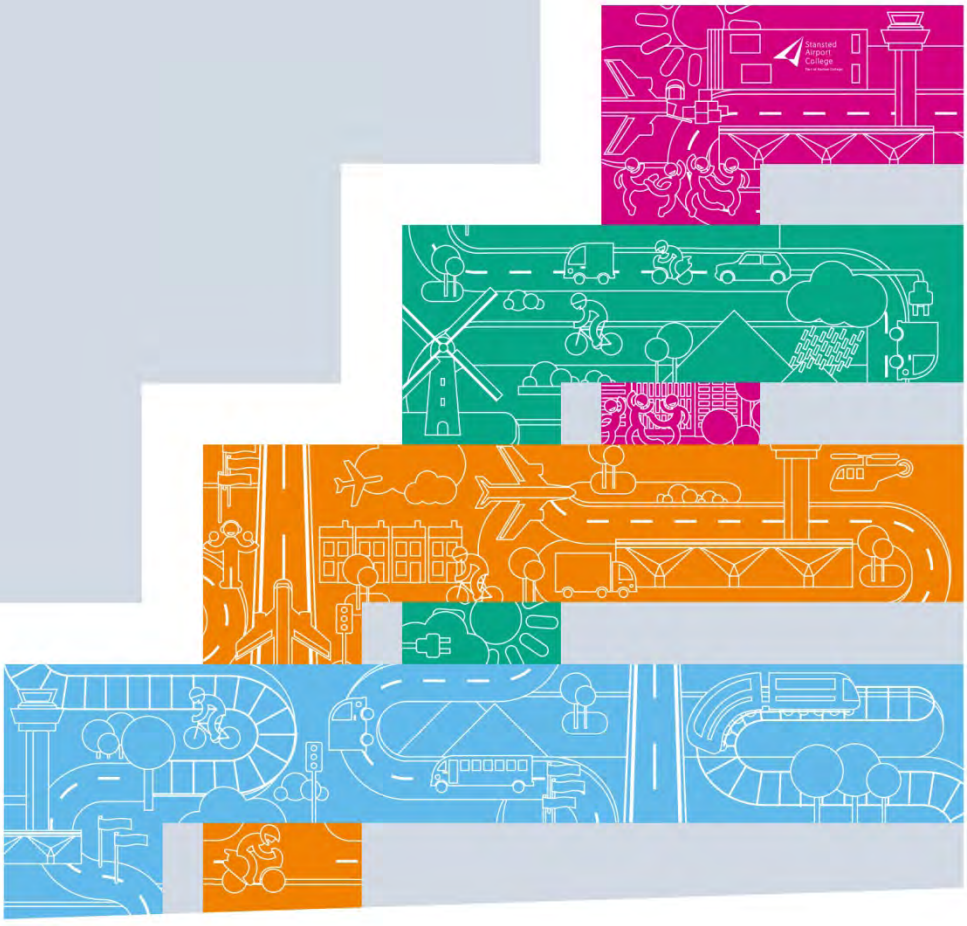
TRANSFORMING LONDON STANSTED AIRPORT

35+ PLANNING APPLICATION

Environmental Statement Volume 3



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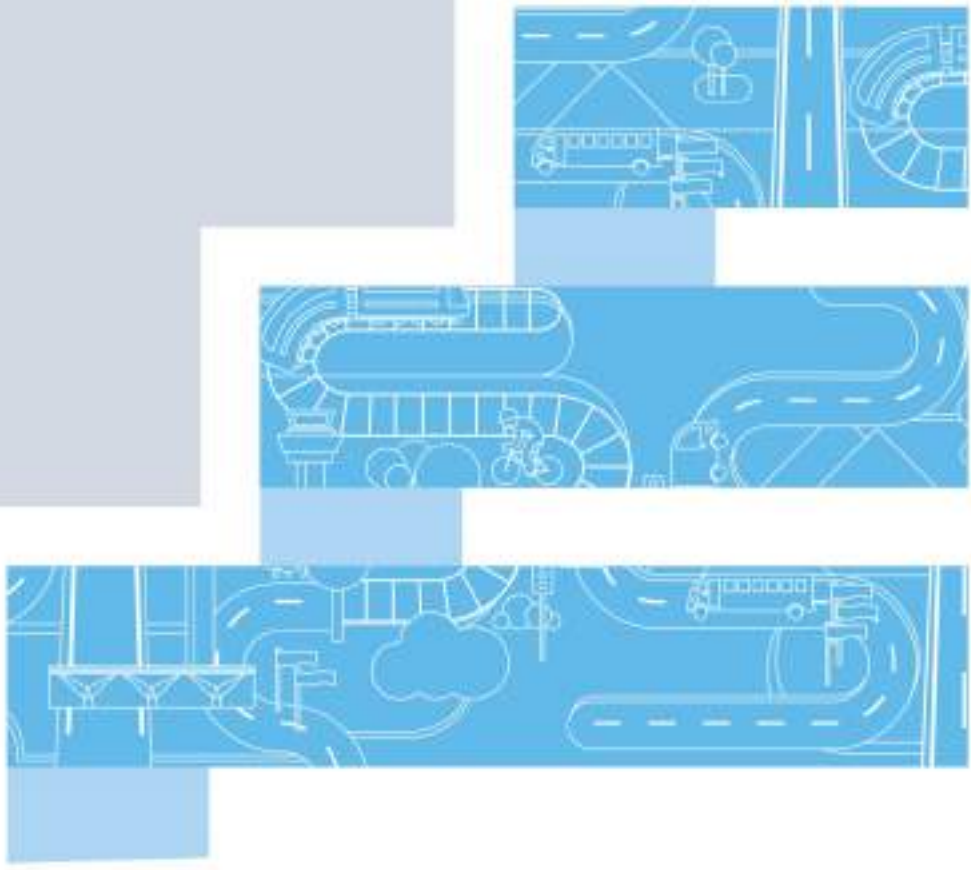

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Stansted Airport 35+ Project

Surface Access Transport Assessment
February 2018

Stansted Airport Limited

Our ref:23003401

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1 Introduction

Background

1.1 Steer Davies Gleave (SDG) has been instructed by Stansted Airport Limited (STAL) to prepare a Transport Assessment (TA) considering the surface access implications of the proposed development on the airport's surface access network and surrounding environment. The proposed development for airfield infrastructure will enable the airport to make the best and most efficient use of the existing single runway. This will support the forecast growth in passenger numbers from the existing planning limit of 35 million passengers per annum (mppa) to 43mppa by 2028.

1.2 Stansted Airport is a major international airport primarily serving London, the East of England and the South East. In 2016 it handled 24.4mppa and by 2017, 25.9mppa.

1.3 The planning application seeks permission for additional airfield infrastructure. This comprises: two new links to the runway; six additional stands on the mid airfield (Yankee Remote Stands); and three additional stands at the north-eastern end of the airport (Echo Stands). This infrastructure will allow for improved airfield efficiency and therefore in turn a higher annual passenger throughput. Further description of the proposed works is provided at Chapter 5 of the Environmental Statement (ES).

1.4 This TA forms a technical appendix to the ES which supports the planning application. The impacts have been assessed for all relevant modes of transport during the construction of the new airfield infrastructure required to facilitate the expanded operations (expected to occur in the period 2021-2022) as well as the Development Case when the uplifted annual passenger numbers are reached in 2028.

1.5 The proposed development is called 'Stansted Airport 35+' (hereafter referred to as '35+').

Transport Assessment

1.6 The proposed development will enable the airport to handle up to 43mppa from the existing runway, an increase of 8mppa above the 2008 planning permission limit of 35mppa.

1.7 In order to assess the anticipated surface access transport changes and associated environmental effects of the proposed development, two development cases have been examined. The 2028 'Do Minimum' (35mppa) scenario is the permitted development and passenger throughput limit. The 2028 'Development Case' (43mppa) refers to the proposed development with an increased passenger throughput. This TA provides an assessment of the transport impacts arising from the increased movement of air passengers and employees to and from the airport following the development. It also considers the construction phase of the infrastructure subject to the application.

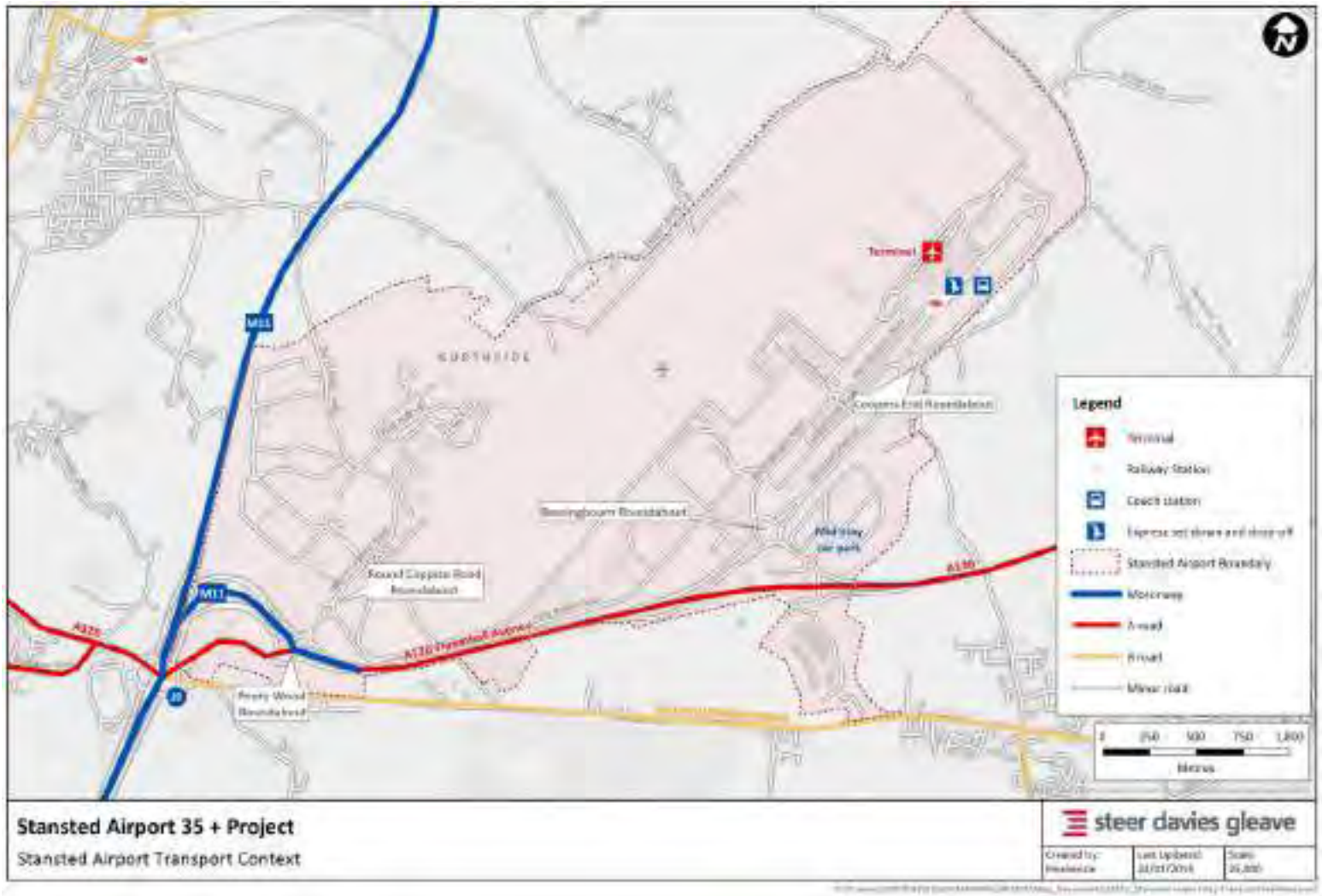
1.8 Figure 1.1 shows the local transport context of Stansted Airport.

Structure of Report

1.9 This report is divided into 11 chapters, of which this chapter forms the Introduction. The structure of the remaining chapters is as follows:

- Chapter 2: summarises the existing transport policy framework including national, regional, county and district plans, and transport policies;
- Chapter 3: describes the TA methodology and response to the scoping report and public consultation;
- Chapter 4: provides details of the existing air passenger, airport employee and other airport-related travel demands;
- Chapter 5: provides a description of existing rail, bus and coach services and use, traffic flows on the strategic and local road network, on-airport parking and access by the main modes;
- Chapter 6: presents the forecast travel demand for air passengers and employees by all modes of transport;
- Chapter 7: focusses on the road traffic demand and considers the impacts of 35+ Project on the highway network;
- Chapter 8: examines the forecast public transport demand and assesses the impacts of 35+ Project on public transport services;
- Chapter 9: discusses walking and cycling demand and the impact of 35+ Project;
- Chapter 10: details the construction traffic, routing and measures to mitigate any impact;
- Chapter 11: identifies the mitigation measures which will be introduced or continued to reduce the impacts of the proposed development; and
- Chapter 12: provides the summary and conclusion of the Transport Assessment.

Figure 1.1: Stansted Airport Transport Context



2 Transport Policy Framework

Introduction

2.1 This chapter considers the national, regional and local planning policy and best practice guidance that is relevant to the proposed development, including:

National Policy

- National Planning Policy Framework (NPPF) (2012);
- Aviation Policy Framework (March 2013); and

Regional Policy

- Essex Parking Standards – Design and Good Practice (2009)
- Essex Local Transport Plan (2011);
- Essex Highways and Transportation Policies – Development Management Policies (2011);
- Vision for Essex (2013 - 2017);
- Getting Around in Essex – A Bus and Passenger Transport Strategy (2015);
- Essex County Council's Sustainable Modes of Travel Strategy (2016);
- Essex Cycling Strategy (2016)
- Hertfordshire's Local Transport Plan (2011 – 2031);
- Highways England East of England Route Strategy (2017)

Local Policy

- Uttlesford Adopted Local Plan (2005);
- Uttlesford Emerging Local Plan (Regulation 18 Local Plan) (2017); and
- Uttlesford Local Plan Transport Study (2016);

Stansted Airport Policies

- Sustainable Development Plan (including Surface Access Strategy) (2015); and associated Bus & Coach and Walking & Cycling Strategies

National Planning Policy

National Planning Policy Framework (NPPF)

2.2 The NPPF (2012) sets out the Government planning policies for England.

2.3 The NPPF encourages, where possible, solutions supporting the reduction of greenhouse gas emissions. The planning system should therefore support a pattern of development that makes best use of sustainable modes of transport.

2.4 Paragraph 31 states that local authorities and transport providers should seek to develop strategies for the provision of viable infrastructure necessary to support sustainable growth of ports, airports or other major generators of travel demand in their areas.

2.5 Paragraph 33 states that the principles of the NPPF applies to airports along with any relevant National Policy statements. The key tenets of the NPPF in terms of transport are dealt with in Section 4 'Promoting Sustainable Transport'. This section emphasises the need for "*the transport system to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel.*"

2.6 This Transport Assessment addresses Paragraph 32, which states that:

"All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- *the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- *safe and suitable access to the site can be achieved for all people; and*
- *improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe."*

2.7 Paragraph 34 states that plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. Whilst Paragraph 35 encourages development that protects and exploits opportunities for the use of sustainable transport modes for the movement of goods or people. The current and future opportunities for passengers and employees to access the airport by sustainable modes is set out in this TA.

National Planning Practice Guidance (NPPG) (2014)

2.8 In March 2014, the Department for Communities and Local Government (DCLG) launched this web-based resource for the NPPG. It provides advice on Travel Plans, Transport Assessments and Transport Statements, including guidance on when they are required, and what they should contain.

2.9 Paragraph 006 of the 'Overarching Principles on Travel Plans (TPs), Transport Assessments (TAs) and Statements' states that: *"Travel Plans, Transport Assessments and Statements can positively contribute to:*

- *encouraging sustainable travel;*
- *lessening traffic generation and its detrimental impacts;*
- *reducing carbon emissions and climate impacts;*
- *creating accessible, connected, inclusive communities;*
- *improving health outcomes and quality of life;*
- *improving road safety; and*
- *reducing the need for new development to increase existing road capacity or provide new roads."*

2.10 The resource goes on to explain that TPs and TAs "support national planning policy which sets out that planning should actively manage patterns of growth in order to make the fullest

possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable."

Aviation Policy Framework (March 2013)

2.11 The Aviation Policy Framework (APF) sets out the government's policy to allow the aviation sector to continue to make a significant contribution to economic growth across the country. It provides the baseline for the Airports Commission to take into account on important issues such as aircraft noise and climate change. It sets out government's objectives on the issues which will challenge and support the development of aviation across the UK.

2.12 Paragraphs 1.96 and 1.97 of the Aviation Policy Framework states that:

"High quality, efficient and reliable road and rail access to airports contributes greatly to the experience of passengers, freight operators and people working at the airport. Greater use of low carbon modes to access airports also has the potential to reduce CO_2 emissions, as well as leading to less congestion and improved air quality.

We are committed to working with airport operators, transport operators, local authorities and LEPs to improve surface access to airports across the country, whilst taking into account the associated environmental impacts. We are already contributing funding to make this happen."

2.13 In relation to airport surface access strategies and Airport Transport Forums (ATFs), paragraph 4.20 states:

"Government attaches a high priority to effective public involvement in local transport policy. Local people, town and parish councils which have qualifying airports within their boundaries, business representatives, health and education providers, environmental and community groups should be involved in the development of airport surface access strategies… We recommend that ATFs produce airport surface access strategies to set out:

- *targets for increasing the proportion of journeys made to the airport by public transport for both airport workers and passengers*
- *the strategy to achieve those targets."*

2.14 Paragraph 5.11 states that:

"All proposals for airport development must be accompanied by clear surface access proposals which demonstrate how the airport will ensure easy and reliable access for passengers, increase the use of public transport by passengers to access the airport, and minimise congestion and other local impacts."

Regional Policy

Essex Parking Standards – Design and Good Practice (2009)

2.15 Essex 'Parking Standards Design and Good Practice' was published in September 2009 to support the aspirations to provide the highest quality parking advice to local authorities to:

- assist the LPA's in determining appropriate standards for their areas;
- advise members of the public in a readily comprehensible manner;
- assist intending developers in preparing plans for the development of land; and

- expedite the determination of planning applications by ensuring that applications submitted include an appropriate level and location of car parking provision that also contributes to the public realm.

2.16 It is a guide recommended to Essex Planning Authorities and others as providing quality advice and guidance on the provision and role of parking within residential, commercial and leisure areas in Essex, and can be appended to a Local Authority's Local Development Framework (LDF) as a Supplementary Planning Document (SPD). It sets out the required parking standards equivalent to land use for developer use.

Essex Local Transport Plan (2011)

2.17 The Essex Local Transport Plan (2011-2026) (LTP3) summarises Essex County Council's (ECC) transport strategy, outlining its approach to all travel modes for the period of 2011-2026. The LTP3 divides Essex into four areas, for which specific priorities will be identified via dedicated area plans. The transport priorities for West Essex are identified as:

- *"improving access to and from the M11 corridor;*
- *tackling congestion and improving the management of traffic in Harlow town centre;*
- *providing the transport improvements needed to support housing and employment growth;*
- *improving the attractiveness of bus services;*
- *improving cycling networks and walking routes end encouraging their greater use;*
- *improving the attractiveness of public spaces and their ease of use;*
- *working with Transport for London to improve the journey experience of Essex residents using the Central Line underground services; and*
- *improving access to Stansted Airport by low carbon forms of transport."*

2.18 The LTP3 outlines 15 transport policies, many of which are relevant to the airport site and proposed development. These policies cover key issues such as integrating land-use and transport planning, public transport, connectivity, carbon reduction, promoting sustainable travel choices, the historic built environment, access to services, and cycling and walking.

Essex Highways and Transportation Policies – Development Management Policies (2011)

2.19 The policies within this document reflect the balance between the need for new housing and employment opportunities, the regeneration and growth agenda, and protecting the transport network for the safe movement of people and goods and have the following aims.

- Protect and maintain a reliable and safe highway infrastructure.
- Improve access to services in both rural and urban locations.
- Offer where possible alternative travel options to the private car.
- Support and enhance public transport provision.
- Address the impact of commercial vehicles on the highway network and communities.
- Support the aims and objectives of the County Council as the Highway Authority.

2.20 The below policies have specific reference to Stansted Airport.

- **DM 1 General Policy** – this policy sets out that all proposals will be assessed and determined against current standards for the category of road having regard to the capacity, safety and geometry of the highway network, and safe and convenient access for sustainable transport modes should be provided commensurate to its location. It is also noted that proposals should not create a significant potential risk or be detrimental to the safety of the highway network.

- **DM 9 Accessibility and Transport Sustainability** - HA will ensure that developers will minimise private vehicle trips through the provision of alternative transport modes by in assessing travel impacts and mitigation of alternatives to private car use on the transportation network and assessing all development proposals against the Essex Road Passenger Transport Strategy, Cycle Strategy, Walking Strategy.
- **DM 10 Travel Plans** - HA will require the provision of a Travel Plan and monitoring fee as part of any development proposal where a non-residential development is proposed with 50 employees.
- **DM 13 Transport Assessments** – A TA is required to accompany a planning application in accordance with land use guidance thresholds or when the HA deem necessary.
- **DM 15 Congestion** – HA will protect the safety and efficiency of the public highway by requiring the developer to both demonstrate that the development proposal will have no detrimental impact upon the existing or proposed highway in congestion terms, as measured by assessing existing and proposed link/junction capacity relevant to the development site; and provide appropriate mitigation measures to ensure that there is no detrimental impact to the existing highway.
- **DM 17 Securing Mitigation** – HA will consider each development proposal on its merits by assessing supporting information and will require appropriate highway and/or transportation mitigation in accordance with ODPM Circular 05/2005 Planning Obligations guidance and Community Infrastructure Regulations 2010 document. Mitigation will be delivered by way of:
    - highway/transportation mitigation measures to be undertaken by the developer;
    - payment by the developer of an agreed financial contribution to enable HA to implement highway/transportation mitigation measures; and
    - payment by the developer of an agreed financial contribution where an approved, pooled contribution system is in place.
- **DM 18 Maintenance Contributions for New Infrastructure** – HA will require maintenance payments to be deposited with the County Council to maintain new specialist/additional infrastructure directly related to the proposed development site for a period of 15 years; and to agree an amount on a case by case basis where new structures directly related to the proposed development site and its associated highway works.
- **DM 19 HGV Movement** – this policy sets out objectives to protect the safety and efficiency of the highway network by ensuring that any proposals which generate a significant number of HGV movements are located in close proximity to strategic routes, main distributors and secondary distributors; or connected to such by short sections of other roads. The developer will be required to submit and agree with HA a routing management plan in relation to heavy goods vehicle movements.

Vision for Essex (2013-2017)

2.21 This document sets out a new vision for Essex, articulating the commitment and principles that will guide future work and priorities.

2.22 The overall vision of this document is for Essex to be a county where "*innovation brings prosperity*".

2.23 The following objectives for ECC are identified to meet future challenges:

- increase educational achievement and enhance skills;

- develop and maintain the infrastructure that enables our residents to travel and our businesses to grow;
- support employment and entrepreneurship across our economy;
- improve public health and wellbeing across Essex;
- safeguard vulnerable people of all ages;
- keep our communities safe and build community resilience; and
- respect Essex's environment We look to our partners, to business and to communities across Essex to play their part in securing a more prosperous county where residents and communities can flourish, live well and achieve their ambitions.

Getting around in Essex – A Bus and Passenger Transport Strategy (2015)

2.24 This strategy sets out how ECC plans to grow and improve the bus network and how to engage with the public in future proposals. It sets out the benefits of bus travel on the economy, movement and accessibility and how such services can be improved to benefit passengers and the economy alike.

2.25 ECC want to deliver a long-term strategy for improving passenger transport (bus, minibus, taxi and community transport) services in Essex.

- Increase passenger numbers, by working with the commercial, public and voluntary sectors, businesses and people who live and work in Essex to strengthen ECC's ability to deliver an attractive, comprehensive, resilient and high quality bus network.
- Maximise the economic and social benefits to people, businesses and communities across Essex.
- Ensure what is delivered is cost effective and good value for money.

Essex County Council's Sustainable Modes of Travel Strategy (2016)

2.26 This document sets out how ECC aims to effectively target and adopt different methods of successfully encouraging modal shift, and facilitate the associated environmental, social and health benefits of better managed congestion. Walking and cycling are a high priority, as essential and highly sustainable means of transport which also support a healthy lifestyle. Councils can make improvements to the network to remove barriers to pedestrians and cyclists and enhance the environment to provide people-friendly streets which give priority to sustainable modes of transport.

Strategy Objectives:

- To consolidate and build on the existing Travel Plans developed within the County;
- Promote and support the development and enablement of a range of travel alternatives being used to access employment, health and education;
- Contribute to meeting the ECC's performance indicator targets for the Local Transport Plan;
- Better management of congestion during peak travel times;
- Improve the environment by introducing high quality choices thereby reducing the need to travel by car and potentially reducing CO2 and other emissions;
- Help to improve the health, welfare and safety of all Essex residents by encouraging an active lifestyle through increased walking and cycling;
- Allow and enable residents to make an informed choice about how they travel for work, school and leisure; and
- To help shape future planned growth and development in Local Plans with a range of sustainable travel choices for the movement of goods or people.

Essex Cycling Strategy (2016)

2.27 This document sets out the long-term strategy for Essex to develop significant and sustained growth in cycling in Essex. The vision of the document is "*to see more people cycling in Essex, more safely, more often*". This vision is broken down into the following objectives:

- Double the number of cycling stages (trips) in Essex from 2014 levels by 2025 at our monitored counter sites and other key routes.
- Cultivate a mind-set that sees cycling as a normal, enjoyable and everyday activity for the majority of short journeys.
- Establish cycling as an enjoyable participation activity for health gain and a popular competitive sport.

2.28 The strategy promotes three key elements to achieve these objectives.

- Enable – a focus on leadership that will drive the strategy forward.
- Promote – a targeted increase in the promotion of cycling.
- Provide – a step-change in the extent and quality of cycling infrastructure.

2.29 A set of strategic actions are identified within the document to deliver the growth in cycling. All of which are underpinned by the intention to make cycling safer and accessible for all through audit, design, promotion and training.

Hertfordshire's Local Transport Plan (2011 – 2031)

2.30 Hertfordshire's Local Transport Plan (2011 – 2031) (LTP3) sets out Hertfordshire County Council's (HCC) vision and strategy for the long-term development of transport in Hertfordshire. The vision for transport in the County is set out as follows:

"To provide a safe, efficient and resilient transport system that serves the needs of business and residents across Hertfordshire and minimises its impact on the environment".

2.31 To support the vision, the transport strategy will:

- "*support economic development and planned dwelling growth;*
- *improve transport opportunities for all and achieve behavioural change in mode choice;*
- *enhance quality of life, health and the natural, built and historic environment for all Hertfordshire residents;*
- *improve the safety and security of residents and other road users; and*
- *reduce transport's contribution to greenhouse gas emissions and improve its resilience."*

Highways England – East of England Route Strategy (2017)

2.32 The East of England Route Strategy provides a statement on the current performance and perceived pressures upon the East of England route to inform the planning of future investment. The route encompasses the A11, A12, A47 and A120 and connects the urban centres of Peterborough, Norwich, Cambridge, Ipswich and Chelmsford, and the towns of Braintree, Colchester, King's Lynn, Great Yarmouth, Lowestoft and Thetford.

2.33 The Route Strategy comprises a key component of research required for developing the Road Investment Strategy (RIS), and builds upon the previous route strategies of 2013-2015, which provided the first comprehensive assessment of the network.

This document aims to:

- bring together information from key partners, motorists, local communities, construction partners, environmental groups and across the business;
- achieve a better understanding of the condition and performance of our roads, and local and regional aspirations;
- shape our investment priorities to improve the service for road users and support a growing economy; and
- help inform the next RIS.

2.34 Current issues and challenges identified for the route include:

- **A safe and serviceable network**: Safety issues arise as a result of poor alignment and visibility; junction design; layby design; insufficient capacity; and a lack of facilities for motorised users.
- **More free-flowing network**: congestion affects various parts of the route, which lead to delays and journey time unreliability. Congestion is caused by high traffic demand (for example on the A120 between its junctions with the A133 and A1232), queuing back from junctions onto the mainline, at grade junctions and roundabouts, and pinch points.
- **Supporting economic growth**: Performance issues are a potential constraint on economic growth. The A120 is identified as strategically important to the local and regional economy, on account of its connection to the shipping industry. It is considered that the lack of capacity on the route leads to longer trips between the A133 and A1232, which is negatively affecting growth in the surrounding area.
- **An improved environment**: Environmental issues primarily concern damage to properties, verges and roads; noise pollution; air pollution; and safety incidents. The density of traffic on the A120 results in significant negative environmental impacts for local residents, most notably near to Marks Tey and Bradwell, where concentrations of poor air quality are identified. The highway surface in this area also creates local noise issues.
- **A more accessible and integrated network**: Issues revolve around lack of local accesses and community severance.

2.35 This Route Strategy forms part of the first phase of works to develop the next RIS (Post 2020).

2.36 HE is investigating options for significant improvement to the A120 route east of Stansted that should see the route being fully grade separated dual carriageway through to the A12, west of Colchester.

Road Investment Programme 2015-2020.

2.37 The RIS outlines how to transform both the roads and user experience, whilst addressing economic growth and climate change. It sets out a vision for smooth, safe and reliable motoring, more sustainable roads, and how to adopt cutting-edge technologies.

2.38 The ambition over the next 25 years is to revolutionise and create a modern Strategic Road Network (SRN) by 2040, to deliver safer, stress-free journeys and enhanced reliability and predictability. The objectives are as follows:

- **Smoother:**
  - The number of people killed or seriously injured on the SRN approaching zero;
  - More users, happier with more journeys, achieving 95% road user satisfaction levels; and
  - A free-flow core network, with increasingly typical mile-a-minute speeds.
- **Smarter**:

  - A network that enhances the UK's global competitiveness, and is recognised as one of the top 10 global road networks by business; and
  - A step change in efficiency, with roads projects and maintenance delivered 30% to 50% cheaper than today.
- **Sustainable:**
  - A better neighbour to communities, with 90% fewer people impacted by noise from the SRN;
  - Zero breaches of air quality regulations and major reductions in carbon emissions across the network; and
  - Improved environmental outcomes, including a net gain in biodiversity from the Company's activities.

2.39 The document states that in planning for the long-term, the SRN should continue to support and improve access to existing airports across England and respond to the forecast increase in demand for air travel, which shows 1% to 3% growth per year to 2050.

2.40 The Company will help deliver the requisite surface access capacity following any decision on the future expansion of South East airport capacity.

2.41 Highway schemes identified for development include:

- **A14 Cambridge to Huntingdon** – a major upgrade to the A14 between the A1 and north Cambridge, widening the road to three lanes, providing a new bypass around Huntingdon, creating distributor roads for local traffic and remodelling key junctions along the route. This scheme supports a number of local developments, and a series of developer contributions have been agreed – provided these contributions stand, the scheme is fully committed.
- **M11 Junctions 8 to 14 Technology Upgrade –** addition of several elements of the Smart Motorway package on the M11 between Stansted Airport and the Girton interchange north of Cambridge to help deal with congestion**.**

Local Policy

Uttlesford Adopted Local Plan (January 2005)

2.42 The Uttlesford Local Plan was adopted in January 2005 and is the current Development Plan for the district. Two policies of relevance to the transport elements of the proposed development were 'saved' in December 2007 (along with other policies): Policy GEN1 Access and Policy GEN6 Infrastructure Provision to Support Development.

2.43 Policy GEN1 states that development will only be permitted if it meets the following criteria:

- access to the main road network must be capable of carrying the traffic generated by the development safely;
- traffic generated by the development must be capable of being accommodated on the surrounding transport network;
- design of the site must not compromise road safety and must take account of the needs of cyclists, pedestrians, public transport users, horse riders and people whose mobility is impaired; and
- the development encourages movement by means other than driving a car.

2.44 Policy GEN6 states that development must make appropriate provision for the required supporting infrastructure, including transport. Where the cumulative impact of developments

necessitates infrastructure provision, developers may be required to provide a financial contribution.

2.45 In relation to vehicle parking standards, policy GEN8 seeks to discourage the provision of unlimited parking spaces in line with guidance contained within PPG13, but seeks to ensure parking provision is adequate for the proposed use. It states that development will not be permitted "*unless the number, design and layout of vehicle parking places proposed is appropriate for the location, as set out in Supplementary Planning Guidance (SPG) 'Vehicle Parking Standards'*".

2.46 Chapter 9 within the Local Plan, *Transport and Telecommunications*, sets out UDC's position regarding airport parking. Policy T3 – *Car Parking Associated with Development at Stansted Airport* states that proposals for car parking associated with any use at Stansted Airport *"will be refused beyond the Airport boundaries, as defined in the Stansted Airport Inset Map."*

2.47 The supporting text to Policy T3 stipulates that adequate space exists inside the boundary of Stansted Airport for air passengers to park. The policy is intended to protect the character of villages and countryside around Stansted Airport to ensure that residential amenities are not damaged by car parking compounds. It continues by saying that the scale and management of airport car parking needs to be carefully controlled to maximise the number of passengers using public transport to get to or from the airport.

Uttlesford Emerging Local Plan (Regulation 18 Local Plan)

2.48 The emerging Uttlesford Local Plan will be the statutory planning framework for the District up until 2033 guiding decisions on all aspects of development. The Local Plan will set out how and where new homes, jobs, services and infrastructure will be delivered and the type of places and environment that will be created.

2.49 The emerging Local Plan has been prepared in compliance with the NPPF, the Uttlesford District Council Corporate Plan 2017-2021 and the Uttlesford Community Strategy. The first draft was published in July 2017.

2.50 The overarching Spatial Vision for the Local Plan is that *"by 2033, Uttlesford will continue to be one of the most desirable places to live and work in the UK".* Ten Spatial Objectives have been identified to support the vision which are categorised in the following themes:

- promote thriving, safe and healthy communities;
- support sustainable business growth; and
- protect and enhance heritage and character.

2.51 Objective 2c considers supporting sustainable business growth at Stansted Airport. The objective is to accommodate development by:

- *"utilising the permitted capacity of the existing runway and provide for the maximum number of connecting journeys by air passengers and workers to be made by public transport; and*
- *ensuring that appropriate surface access infrastructure and service capacity will be provided without impacting on capacity to meet the demands of other network users."*

2.52 Policy SP2 - The Spatial Strategy 2011-2033, states that:

"The growth of London Stansted Airport will be supported subject to conformity with the environmental and transport framework set out in Policy SP11".

2.53 In terms of Transport, Policy SP11 states:

"London Stansted Airport's role as a national, regional and local transport interchange will be maintained. The necessary public transport infrastructure and service capacity to serve the airport and meet permitted passenger numbers must be maintained and improved to accommodate passenger movements. An integrated approach must be demonstrated within the framework of a surface access strategy."

2.54 Policy SP11 also states that any proposals need to meet the following criteria:

- *"incorporate sustainable transportation and surface access measures in particular which minimise use of the private car, maximise the use of sustainable transport modes and seek to meet modal shift targets, all in accordance with the London Stansted Airport Sustainable Development Plan; and*
- *incorporate suitable road access for vehicles including any necessary improvements required as a result of the development."*

2.55 In terms of airport-related Car Parking SP11 states:

"Proposals for airport related car parking should be located within the Airport Strategic Allocation, as shown on the Policies Map (excluding North Stansted Employment Area) and will need to demonstrate that the proposals do not adversely affect the adjoining highway network; and will not lead to detriment to the amenity of the area and neighbouring occupiers. Appropriate mechanisms will be sought to make sure that all on airport car parking is integrated into and contributes to funding of the airport surface access strategy."

2.56 Policies TA1 and TA2 set out the need for development to come forward with travel patterns encouraged by the ability to access development by sustainable modes of transport.

2.57 Policy TA5 - New Transport Infrastructure or Measures, supports the principle of working with transport providers, including amongst other schemes for West Anglia Mainline-Cambridge to Stansted Improvements and working with Essex County Council in conjunction with Highways England (HE) to produce a short to medium term improvement to increase traffic capacity at M11 Junction 8.

Other Relevant Guidance

Uttlesford Local Plan Transport Study (2016)

2.58 WYG Transport Planning published a Transport Study in December 2016 to assist UDC in the preparation of the new Local Plan. The study examines the likely transport implications of different spatial distribution options for future Local Plan development within the district. It examines potential development locations and presents a high level comparative appraisal of the transport implications of a range of possible development scenarios.

2.59 The study identifies a series of transport mitigation requirements to address the cumulative effects of all Local Plan development. These include improvements to the M11, A120, M11 Junction 8 and A120/Round Coppice Road.

Stansted Airport Sustainable Development Plan (2015)

2.60 STAL has produced a Sustainable Development Plan ('2015 SDP') for Stansted Airport which sets out how the airport will grow in a responsible and sustainable way. The plan looks at ways to make best use of the current single runway, develop and improve surface access links, and

strengthen their community engagement programme while at the same time being mindful of the environmental impacts, ensuring a balance is stuck between growth and sustainability.

2.61 The 2015 SDP comprises four detailed plans that cover the economic context and the surface access proposals for developing the single runway growth strategy, the land use implications and how to develop the environmental and community programmes.

2.62 The Economy and Surface Access Plan sets out how the airport can support sustainable growth of the local, regional and national economy and how STAL can capitalise on and enhanced economic strength of the local area. It also sets out a detailed strategy to maximise the connectivity of the airport ensuring that it is fully accessible for the catchment it serves with a focus on behavioural change and promoting travel by sustainable modes.

2.63 STAL regularly produce public transport and cycling/walking strategies in association with the SDP. These provide further detail of facilities and services pertinent to sustainable travel options and are updated regularly to reflect current initiatives.

The Stansted Area Transport Forum (SATF)

2.64 The Surface Access Plan has been shaped by the SATF who are also responsible for its delivery. The SATF has been recognised nationally and internationally for the successful way in which it has delivered new transport initiatives, forged strong partnerships and changed the way that people travel.

2.65 The Forum is driven by a Steering Group which meets quarterly and includes representatives from Stansted Airport Consultative Committee (STACC), local authorities, Network Rail, Transport for London (TfL) and HE, who have identified a series of transport investment priorities designed to improve access to the airport.

Modal Share

2.66 The airport is among the best performing airports in the UK and Europe for the percentage of trips by public transport. The SDP (2015) was based on the latest available data at the time which included the Civil Aviation Authority (CAA) survey (2015). This showed that 51.2% of air passengers use public transport. Public transport use among employees has also increased to around 27%.

2.67 Within the SDP, a set of mode share targets have been set for passenger and staff travel which cover the period from 2015 to 2019. The targets are as follows:

- maintain at least 50% mode share to public transport and provide sufficient capacity to facilitate growth to the end of 2019;
- grow rail mode share from 22% to 25% by the end of 2019 and secure an enhanced timetable of services;
- reduce single car occupancy for staff travel to no more than 65% by end of 2019; and
- reduce 'Kiss and Fly' to below 30% by 2019.

Policy

2.68 The Surface Access Plan identifies a number of airport policies which have been developed to support the aims of the plan in relation to travel by road, bus and coach, rail and cycling, as well as the Airport Travel Plan (ATP), accessibility, car parking and funding transport improvements.

2.69 A summary of the aims and targets for each mode are summarised in Table 2.1.

Table 2.1: Surface Access Plan Aims and Targets

Mode	Aims	Targets
Road	• To review and where deemed relevant implement the highway options for actively discouraging 'kiss and fly' traffic; • To make best use of the road network and work with others to identify the infrastructure needed to support increased demands for road access; and • We will work with these parties to introduce capacity improvements as necessary, and in line with previous obligations agreed.	• To deliver the highway-related planning obligations related to the permitted growth of the airport.
Bus and Coach	• To work with bus and coach operators to identify opportunities for new and improved regional and local bus and coach services and provide financial support where justified; • To improve the environmental performance of bus and coach services (including charter services) operating to and from the airport through the introduction of Euro 5 standard vehicles or alternatively fuelled vehicles; • To encourage improvements in environmental performance through differential charging and Euro 6 vehicle introduction; • To introduce a real-time information system for local buses to the Bus and Coach Station; • To investigate the feasibility for passenger shelter and improved waiting facilities for the charter bus and coach bays; and • Liaise with TfL and London boroughs to improve the passenger experience travelling by coach to and from London.	• To review and update the Bus and Coach Strategy in 2017; • To work with operators to achieve a quality score in the Bus and Coach Station of 4 with a stretch target of 4.25 by 2015 (scale 1-5, where 5 is highest); and • Develop and implement an airport customer service training package for coach operators during 2015.
Rail	• Secure Government commitment through the new West Anglia Task Force to deliver a significantly faster journey time from the airport to Central London, as the first phase in a long-term programme of infrastructure investment on the WAML; • Introduce earlier services every morning from London Liverpool Street to Stansted Airport to cater for increasing passenger demand during peak departure times (05:00 – 06:00). Ultimately introduce a 24 hour, 7 day a week rail service to Stansted Airport; • Work with train operators to improve the passenger experience; • Introduce better rail connections to Cambridgeshire, and beyond including two trains per hour to the City of Cambridge; • Support regional stakeholder aspirations to improve links from the WAML to Stratford, supporting regeneration in the Upper Lea Valley and opening up Stansted Airport to new communities; • Support the extension of Crossrail 2 to Stansted Airport; and • Improve the customer experience at the airport, London Liverpool Street, Stratford, Tottenham Hale and Cambridge and provide improved on-train information for departing air passengers.	• Work with Network Rail and train operators on improving reliability with the aim of at least 93% of trains running on time by 2019 and 95% as a long-term target with suitable long-term investments on the network; • Encourage the Greater Anglia franchise operator (Stansted Express) and CrossCountry Trains to achieve a quality score of 4 with a stretch target of 4.25 by 2015 (scale 1-5, where 5 is highest); and • Increase rail's mode share from 22% to 25 % by 2019.

Mode	Aims	Targets
Cycling	• STAL aim to reduce car use by encouraging sustainable modes of transport. For airport staff living locally, and recreational use, they are improving cycle routes and facilities. • Continue to seek improved, safe routes to key local settlements. Priorities are to the west and north to Bishop's Stortford, Birchanger, Stansted Mountfitchet and Elsenham; • extend the Sawbridgeworth – Bishop's Stortford link; and • Storage, shower and secure parking at key locations on site, including North Side.	• In 2013, c 0.1 % of employee trips were made by bike. STAL's target is to increase this to 0.5% by 2019.

Airport Travel Plan

2.70 Stansted Airport has a very successful track record of encouraging sustainable travel to and from the airport. It continues to be an example of best practice, with successive Travel Plans delivering behavioural change and a reduction in employee car use.

2.71 Incentives which are set out in the ATP which have been successful in reducing car use include the airport travelcard offer to employees which can reduce the cost of travel by up to 80%, carnet style tickets, employee shuttle service, car share scheme, travel planning advice during the induction process and personalised journey planning.

2.72 The current ATP established several targets as follows:

- increase the number of companies signed up to the ATP to 90% by 2015;
- undertake employee travel surveys in 2015, 2017 and 2019;
- grow car sharing by 10% a year over the next 5 years; and
- increase the awareness to over 90% of Airport Travelcard and Car Share Schemes over the next 5 years.

2.73 The ATP is currently in the process of being updated following the latest employee survey (2017) results. A new ATP will be published in early 2018 and cover a period of 2017 to 2022.

Car Parking

2.74 Local planning controls means that the airport needs to be self-sufficient in its provision of car parking. STAL's strategy is to ensure that a sufficient range of suitable parking is provided in convenient locations to meet passenger demand. For long-stay parking, peak demand generally arises in the summer months and peak holiday times. Demand for short-stay parking fluctuates significantly, with daily peaks related to flight arrivals and departures as passengers get picked up and dropped off.

2.75 The airport provides the bulk of the car parking to meet demand. There is limited provision in off-site car parks, including some associated with local hotels etc. Planning policies continue to encourage this approach.

Funding Transport Improvements

2.76 To support the Airport Surface Access Strategy, Stansted Airport has created a transport fund which provides the means to fund local transport development and increase public transport use by passengers and employees.

2.77 The Passenger Transport Levy currently provides £500,000 - £700,000 per annum and is funded by a levy per public car park transaction (generating on average 25p per transaction) plus £10 per employee parking pass issued. The use of the fund is overseen by the SATF and is used for a wide range of activities including supporting out-of-hours local bus services and employee shuttles, the Airport Commuter Centre, the Airport Travelcard and Car Share Scheme, new cycle and motorcycle shelters, as well as onward travel information and marketing.

Compliance with Policy

2.78 In considering whether the proposed development accords with national policy, it is relevant to note that the airport has a well-developed approach to support and develop surface access. This has delivered industry leading mode share travel patterns for both employees and passengers. STAL remain committed to a comprehensive Surface Access Strategy which is regularly reviewed and updated in line with Government policy.

2.79 The airport is well served by strategic transport infrastructure with direct rail, coach and bus services and highway connections direct to the strategic road network. Detailed analysis, set out in this TA, of future passenger and employee travel patterns has demonstrated that the expanded use of the airport is capable of being accommodated on the surrounding transport network and growth is anticipated to lead to further enhancement of the coach and bus networks in response to greater demand and potentially further encourage rail access improvements.

2.80 At a formal level, the proposals have been developed with cognisance of the NPPF, and offer the opportunity for expansion of a major airport that provides the highest proportion of non-car travel in the UK. At a local policy level, the proposed development accords with ECC's and HCC's LTP3's and UDC's (Adopted and Emerging) Local Plan, sustainable travel and airport specific policies.

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 summaries the baseline and future assessment years. The formal response from ECC and HE on the proposed TA methodology is presented and incorporation of suggested changes to the approach is discussed.

Baseline

3.2 This assessment uses 2016 as the baseline year, drawing on the most up to date and validated full calendar year data. Baseline conditions around the airport have been established by means of desktop research, site visits and a range of traffic surveys and publicly available data. The following have been undertaken to assess the baseline conditions:

- The existing local highway network within the immediate vicinity of the airport has been analysed;
- Existing traffic survey data has been obtained for a range of roads throughout the study area;
- Historical accident data for the latest five-year period for all roads within the vicinity of the airport has been analysed;
- Existing public transport services and associated capacity for rail, coach and bus travel has been assessed where feasible by reference to the operators published data;
- The ease of access to public transport facilities has been reviewed; and
- Existing travel patterns and mode share data for passengers and employees obtained from published CAA and Stansted employee surveys respectively, has been reviewed.

Baseline Traffic Data

3.3 Baseline traffic data was derived from traffic surveys obtained from the following sources and dates:

- A range of commissioned Automated Traffic Counts (ATCs) supplied from ECC (2013 to 2017);
- Manual Classified Counts (MCCs) conducted by Intelligent Data Collection in 2015;
- HE TRIS data traffic counts (2016) Annual Average Daily Traffic Flows (AADT); and
- ATC and MCC conducted by Nation Wide Data Collection in 2017.

3.4 The industry standard tool for estimating traffic growth, TEMPro (v7.2) growth rates have been applied to surveyed traffic to establish equivalent 2016, baseline flows. In addition, to

provide a robust baseline, 2016 passenger and employee information for Stansted Airport was added to account for the growth of airport traffic, not captured using TEMPro v7.2. Further details on traffic growth and the future year traffic modelling process is provided in Chapter 7.

Baseline Pedestrian, Cycle and Public Transport Data

3.5 For travel on foot and on cycle, desktop studies have been undertaken to review accessibility to and from the airport using existing infrastructure. For travel by public transport modes, information on service capacities and frequencies has been obtained from a range of sources as follows:

- Stansted Airport Sustainable Development Plan 2015;
- Stansted Airport Employee Survey 2015;
- Stansted Airport Corporate and Social Responsibility Report 2015-16;
- Stansted Airport Bus and Coach Strategy 2016;
- Stansted Airport Cycling and Walking Strategy 2016;
- Stansted Airport Travel Plan 2014-2019;
- Civil Aviation Authority (CAA) Annual Passenger Survey 2016 – Detailed Data;
- CAA data: London Stansted Airport Passenger Origin and Destination 2016;
- ICF Stansted Airport (Air) Traffic Forecasts, 2017;
- Rail loadings from train operators – CrossCountry and Abellio Greater Anglia Autumn 2016;
- Network Rail London and South East Market Study, 2013;
- Network Rail East Midlands Route Study, 2016;
- Local bus services, 2017; and
- Coach services and loadings from Airport Bus Express and National Express, 2017.

Assessment Scenarios

3.6 The following scenarios have been considered within the assessment:

- 2016 Baseline Year;
- 2021/22 12 Month Construction Period;
- 2028 Do Minimum (35mppa) scenario; and
- 2028 Development Case (43mppa).

3.7 Transport impact will increase as passenger numbers grow and hence the greatest impact arises when the airport reaches its operational limit. The likely significant operational effects of the proposed development have been assessed against the 2028 Do Minimum (35mppa) scenario as this is the anticipated year that 43mppa would be reached, based on forecast growth projections.

Methodology and Response to Scoping Report

3.8 The detailed methodology for surface access trip modelling adopted for this TA is set out within a TA scoping report prepared by SDG, which are presented at **Appendix A**.

3.9 The TA scoping report was issued to all relevant parties, including UDC, ECC, HE and HCC. More detailed Technical Notes were issued to ECC as the local highway authority, through the formal pre-application process and the information included in the Technical Notes has subsequently been included in this TAA. ECC and HE provided co-ordinated responses on 7th September 2017 and 4 October 2017 respectively, as provided at **Appendix B**.

Comments that were made in response to the submission of the ES Scoping Report (June 2017) are also provided in detail at **Appendix B.** Where applicable SDG has incorporated the comments received and updated the methodology for assessment especially relating to traffic modelling. A detailed response schedule to all the points raised has been prepared and is included at **Appendix B**.

4 Existing Travel Demand

Introduction

4.1 This chapter provides a summary of existing surface access travel demand and characteristics of people travelling to and from the airport.

4.2 Demand has 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 developments on-site; and
- Miscellaneous – additional trips including business, cargo 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 demand. A total of 24.3m passengers were recorded at Stansted Airport in 2016. As this was a leap year an allowance for this including an extra day in February has been included (assumed as being 0.66 of an average day to take into account this being a quiet time of the year). The Transport Assessment has hence been based on a 2016 annual passenger total of 24,273,000 rather than the reported 24,317,000.

4.4 Travel demand at Stansted Airport is at the largest annual usage to date, exceeding the previous peak numbers around 2008. There has been a steady growth in passenger numbers in recent years as shown in Table 4.1.

Table 4.1: Annual Passenger Counts at Stansted Airport (2012 – 2017)

Year	Annual Passengers
2012	17,410,000
2013	17,781,000
2014	19,899,000
2015	22,432,000
2016	24,273,000
2017	25,900,000

4.5 Table 4.1: illustrates that the volume of passengers has grown from 17.4m to 25.9m in the six years to 2017, reflecting a 39.4% growth.

Transfer Passengers

4.6 Recent surveys (2016) have indicated that around 1.6 million passengers make internal transfers between arriving and departing flights and therefore do not leave the airport terminal. There is no predicted model of how the proportion of transfer passengers may change in the future and there is no planned transfer processing at the airport. Therefore, for the purposes of ensuring a robust assessment, no allowance for internal passenger transfers has been included in the future year passenger surface access modelling. Ultimately, this will ensure that the assessment is a potential "worst case", as it reflects an overestimate of external travel trends on the local highway and public transport networks.

Air Passenger Travel Modes

4.7 There has been a long-term trend of increasing public transport use. This is set out in Table 4.2: .

Table 4.2: Mode of Travel to Stansted Airport 2007-2016

Year	Public Transport Car	Traffic (car driver, car passenger, taxi/minicab)
2007	55.1%	44.6%
2008	52.7%	46.9%
2009	52.2%	47.3%
2010	51.7%	47.8%
2011	50.9%	48.9%
2012	48.8%	50.9%
2013	48.3%	51.5%
2014	48.5%	49.6%
2015	50.7%	49.3%
2016	50.9%	49.1%

4.8 As Table 4.2: illustrates, the proportion of passengers travelling by private vehicle has fallen by around 10% during the last 10 years. The 2015 SDP sets out STAL's long term commitment to sustainable travel and the following targets were set for the period between 2015 and 2019 for passenger surface access:

- maintain at least 50% mode share to public transport and provide sufficient capacity to facilitate growth to the end of 2019;
- grow rail mode share from 22% to 25% by the end of 2019 and secure an enhanced timetable of services; and
- reduce 'Kiss and Fly' to below 30% by 2019.

4.9 The full validated CAA 2017 passenger survey data is not yet available but the most recent (2nd Quarter) figures indicates public transport share has increased further, to 53.3%.

4.10 For the purposes of this Transport Assessment, the surface access travel modes for air passengers at Stansted Airport have been derived from the most recent validated CAA passenger survey data (2016) and are shown in Table 4.3 below.

Table 4.3: 2016 Passenger Mode Share (CAA, 2016)

Mode	2016
Car	15%
Car Passenger	22%
Taxi/Rental Car	13%
Bus/coach	23%
Rail	27%
Other	0%
Total	**100%**

Any discrepancies are due to rounding.

4.11 Table 4.3 illustrates that private road traffic (private car, car passengers, taxis/rentals) accounts for greater than 50% of total mode split and public transport (bus/coach and rail) comprise the other 50% of transport modes.

4.12 This is significantly higher than the alternative major London airports. The 2016 public transport shares being:

- Gatwick 43.6%
- Heathrow 39.1%
- Luton 31.4%

Air Passenger Types

4.13 The air passenger modal split is influenced by journey purpose:

- UK Leisure;
- UK Business;
- Foreign Leisure; and
- Foreign Business.

4.14 Table 4.4: sets out the following proportions of passenger trips per category per year and illustrates that the largest proportion of passengers at the airport are 'UK Leisure', i.e. UK based residents travelling for leisure purposes. Foreign Business trips currently comprise 6% of total trips.

Table 4.4: Volume of Passengers by Type (2016)

	Passenger Type (000's)				Total
	UK Leisure	UK Business	Foreign Leisure	Foreign Business	
Total Numbers	13,065	2,086	7,708	1,414	24,273

4.15 The CAA passenger surveys indicate that different types of passengers at Stansted Airport have different characteristics of surface travel to and from the airport. Table 4.5: below sets out the modal differences according to the passenger typologies above.

Table 4.5: Mode Share According to Passenger Type

Mode of Travel	Percentage Split (%)				Total
	UK Leisure	UK Business	Foreign Leisure	Foreign Business	
Private Car	10%	2%	3%	0%	15%
Car Passenger	16%	2%	4%	0%	22%
Taxi/Rentals	6%	1%	4%	1%	13%
Bus/Coach	10%	1%	11%	2%	23%
Rail	11%	2%	11%	2%	27%
Other	0%	0%	0%	0%	0%
Total	**54%**	**9%**	**32%**	**6%**	**100%**

Any discrepancies are due to rounding.

UK Leisure

4.16 UK Leisure passengers account for UK residents travelling to and from Stansted Airport for personal leisure purposes, for example holidays. As Table 4.5: illustrates, the largest proportion of private car trips (car driver, car passenger and taxi/rentals) are made by UK Leisure passengers accounting for 32% of total mode share. The remaining 21% of travel is made via public transport modes.

UK Business

4.17 UK Business passengers are UK residents travelling to and from Stansted Airport for business purposes. The mode split is typically 50% private car travel (4% of total mode share) due to taxi trips to and from Stansted Airport. Public transport trips comprise the other 50% of UK Business trips (4%).

Foreign Leisure

4.18 Foreign Leisure trips account for non-UK residents who use Stansted Airport for leisure purposes, most commonly holidays and visiting friends and relatives. The proportion of trips made by public transport are significantly higher than those made by private car, 22% of the total mode share. This is helped the good connections between Stansted Airport and London. Private car travel comprises 11% of the total mode share.

Foreign Business

4.19 Foreign Business trips comprise the smallest proportion of total passenger trips made in 2016 (6%). Public transport is the dominant method of travel of foreign business passengers.

Air Passenger Surface Origins

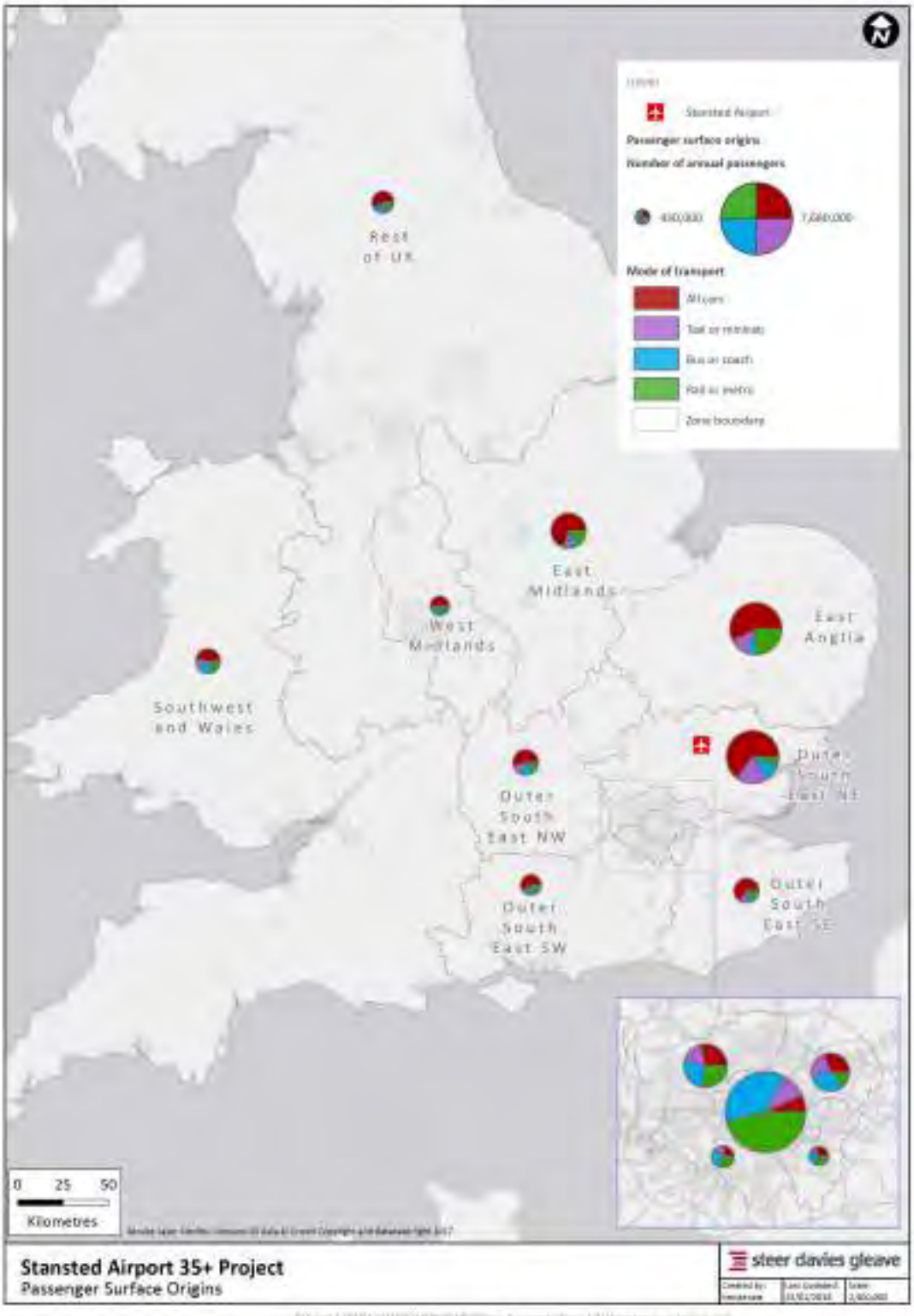
4.20 The surface origins of air passengers for 2016 (derived from the CAA data) are set out in Table 4.6: below.

Table 4.6: Passenger Surface Origins (2016)- Assumed Annual Total

Residence	Mode						
	Bus/coach	Rail	Car Driver	Car Passenger	Taxi/Minicab	Tube	Total
Inner London	2,825,414	3,531,564	274,337	270,149	762,755	13,929	7,678,149
Outer London NE	569,941	234,598	352,156	176,421	382,712	0	1,715,829
Outer London SE	125,137	135,634	56,798	74,003	43,297	0	434,870
Outer London SW	178,044	177,429	41,474	91,427	82,278	0	570,652
Outer London NW	576,666	609,775	291,558	340,932	383,994	0	2,202,925
Outer South East NE	339,318	187,149	1,164,728	971,872	658,124	0	3,321,191
Outer South East NW	130,256	80,564	138,210	288,862	95,953	29,211	763,056
Outer South East SW	77,776	87,586	65,149	229,607	36,465	3,918	500,502
Outer South East SE	63,876	102,196	183,886	284,574	80,474	0	715,006
Southwest & Wales	176,431	116,241	80,312	260,361	89,908	0	723,253
West Midlands	82,036	98,565	47,024	180,602	24,482	0	432,710
East Midlands	101,320	216,156	222,667	804,619	123,017	0	1,467,780
East Anglia	186,255	801,761	634,633	1,195,617	369,919	0	3,188,184
Rest of UK	94,830	98,241	94,770	229,042	35,774	0	552,657
Residence not reported	1,274	3,290	217	1,457	0	0	6,238
Foreign	0	0	0	0	0	0	0
Total	**5,528,575**	**6,480,749**	**3,647,921**	**5,399,545**	**3,169,152**	**47,058**	**24,273,000**

4.21 As shown in the table above and Figure 4.1 below, the majority of passengers come from Inner London, Outer South East NE and East Anglia. The passengers travelling from Inner London have a greater propensity to use public transport compared to those travelling from South East NE and East Anglia that rely on car as their main mode. This reflects the availability of public transport services.

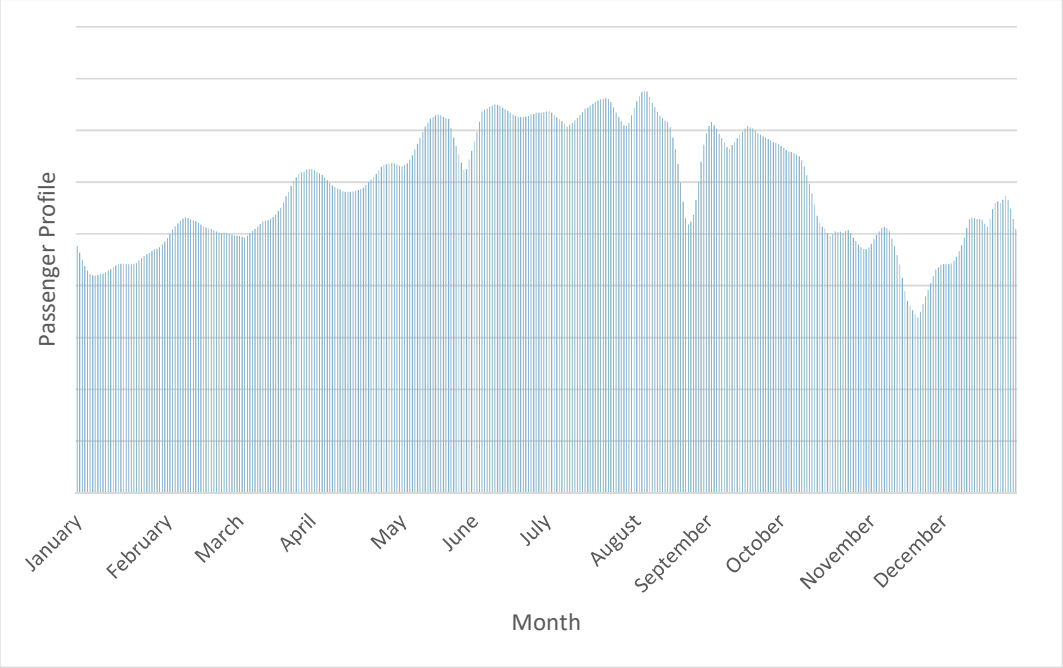
Figure 4.1: Passenger Surface Origins



Air Passenger Annual Demand Profiles

4.22 Daily passenger flows fluctuate according to season and time of day. A typical annual profile for the airport shows a significant summer peak period. This relates to school holiday periods and coincides with generally lower demands on off-site transport infrastructure, such as the highway network.

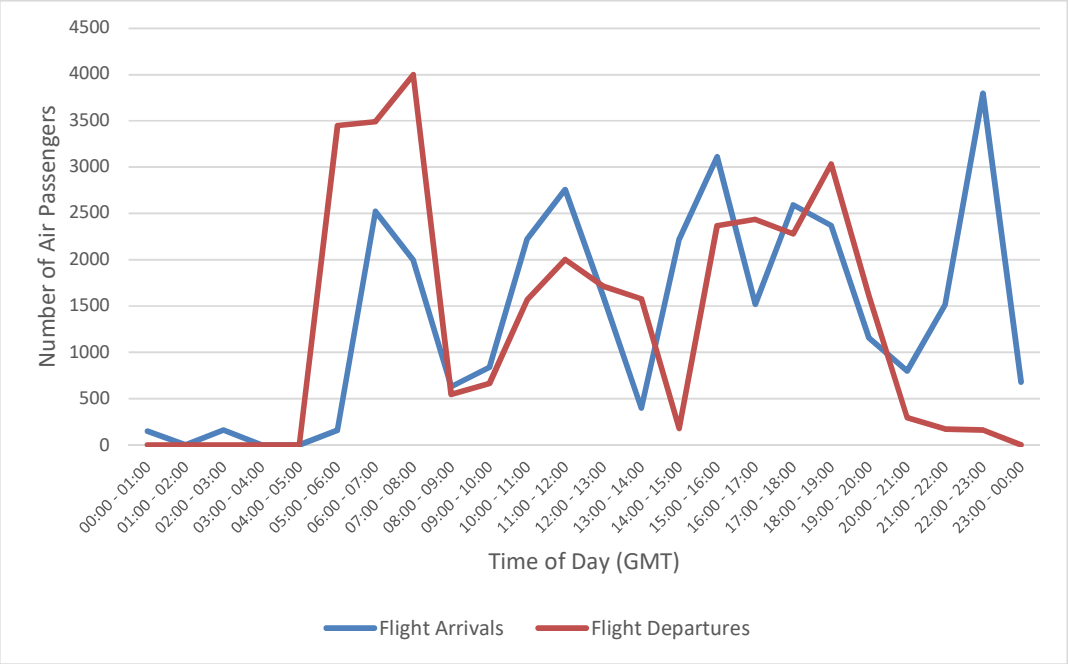
Figure 4.2: Typical Annual Passenger Profile



Air Passenger Daily Demand Profile

4.23 The current air passenger flight arrival and departure profile has been examined based on take-off and landing times information provided by STAL for an average weekday in October 2016 (consistent with assessing impact on the highway network during a neutral month). The profile is shown in Figure 4.3: .

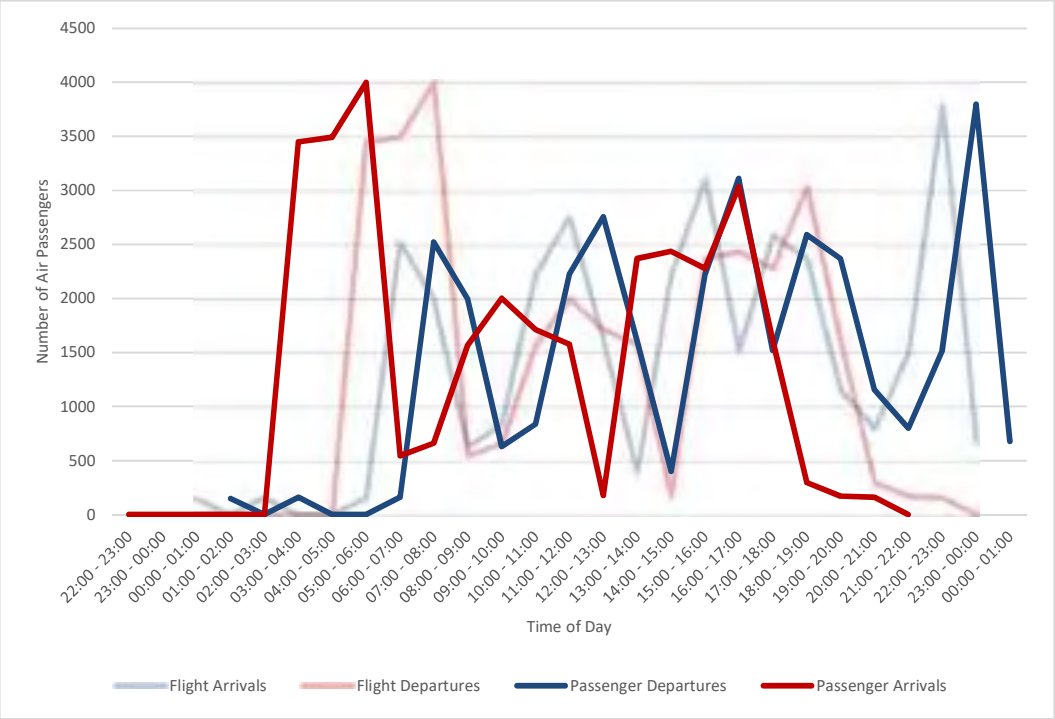
Figure 4.3: 2016 Daily Flight Profiles – Arrivals and Departures



4.24 The profile in Figure 4.3: illustrates that peak flight departure activity occurs between 07:00 and 08:00 in the morning, and peak flight arrivals occur between 22:00 and 23:00 at night.

4.25 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. Analysis of operational data and traffic on Thremhall Avenue, as shown in Figure 4.4: below, indicate that typically passengers arrive two hours prior to their flight departure, and leave the airport within the hour post flight arrival.

Figure 4.4: 2016 Surface and Flight Arrivals and Departure Profiles

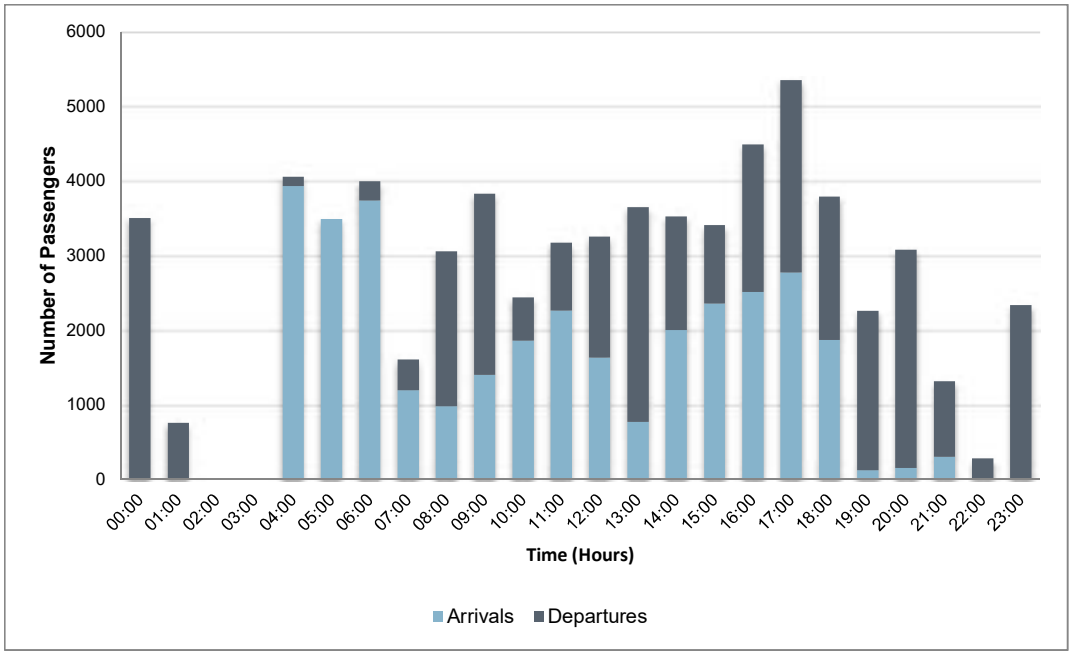


4.26 Figure 4.4: illustrates that currently peak airport surface access activity takes place between 05:00 – 06:00 for passengers travelling to the airport and 23:00 – 00:00 for passengers leaving the airport. This pattern has remained unchanged and matches that of non-London airports.

Air Passenger Surface Access Travel Demand

4.27 Combining the patterns described above produces an 'average' daily profile for surface airport arrivals and departures for 2016 as shown in Figure 4.5: .

Figure 4.5: Average Daily Profile for Surface Airport Arrivals and Departures (2016)



4.28 Table 4.7: below sets out the peak airport surface access demand for 2016 by car/taxi, rail and bus/coach, based on the application of CAA annual surveys of modes of travel and the daily passenger profiles set out above.

Table 4.7: Typical Daily Airport Passenger Surface Access Arrivals and Departures Profile by Mode (2016)

Time Band	Arrivals to Airport				Departures from Airport				Total
	Cars / Taxis	Rail	Bus / Coach	Total	Cars / Taxis	Rail	Bus / Coach	Total	
00:00	0	0	0	0	1,754	947	807	3,508	**3,508**
01:00	0	0	0	0	378	204	174	755	**755**
02:00	0	0	0	0	0	0	0	0	**0**
03:00	0	0	0	0	0	0	0	0	**0**
04:00	1,967	1,062	905	3,935	63	34	29	126	**4,061**
05:00	1,748	944	804	3,495	0	0	0	0	**3,495**
06:00	1,871	1,010	860	3,741	129	70	59	258	**3,999**
07:00	595	321	274	1,190	209	113	96	419	**1,609**
08:00	489	264	225	979	1,039	561	478	2,077	**3,056**
09:00	701	379	322	1,402	1,216	657	559	2,431	**3,834**
10:00	929	502	427	1,858	292	158	134	583	**2,442**
11:00	1,130	610	520	2,260	458	247	210	915	**3,175**
12:00	816	440	375	1,631	812	439	374	1,624	**3,256**
13:00	384	207	177	768	1,441	778	663	2,883	**3,651**
14:00	1,000	540	460	2,000	763	412	351	1,525	**3,525**
15:00	1,179	636	542	2,357	527	284	242	1,053	**3,410**
16:00	1,255	678	578	2,511	993	536	457	1,987	**4,498**
17:00	1,388	750	639	2,776	1,290	697	593	2,580	**5,356**
18:00	934	504	429	1,867	964	521	443	1,928	**3,795**
19:00	61	33	28	123	1,067	576	491	2,134	**2,257**
20:00	74	40	34	149	1,464	791	673	2,928	**3,077**
21:00	149	80	69	298	507	274	233	1,014	**1,312**
22:00	0	0	0	0	139	75	64	278	**278**
23:00	0	0	0	0	1,167	630	537	2,334	**2,334**
Daily	**16,671**	**9,002**	**7,669**	**33,342**	**16,671**	**9,002**	**7,669**	**33,342**	**66,684**

*Please note – the numbers above do not account for 'other' modes such as walking and cycling.

4.29 Table 4.7: illustrates that the following hours represent the peak airport passenger arrivals and departures at Stansted Airport:

- Airport Passenger Arriving by surface access: 04:00 – 05:00;
- Airport Passenger Departing by surface access: 00:00 – 01:00; and
- Airport Passenger combined Arrivals and Departures: 17:00 – 18:00.

Employee Surface Access

Employee Demand

4.30 In addition to air passengers, employees form a significant proportion of travel to and from Stansted Airport. The airport employed 10,963 members of staff in 2015.

4.31 The employee population takes account of employees within the airport building and airport related development within the airport's operational area. Table 4.8: sets out the distribution of workplace location at Stansted Airport (2015 Employee Travel Survey).

Table 4.8: Proportion of Employees broken down by Place of Work (On-Airport)

Place of Work	Number of Employees
Cargo Area	948
Endeavour House and Cooper's End	448
Enterprise House	1,346
Northside	734
Southgate	245
Taylors End and Long Border Road	491
Terminal Area	6,225
Elsewhere (On-Airport)	465
Elsewhere (Off-Airport)	60
Total	**10,963**

Employee Travel Modes

4.32 Mode of travel for employees has been derived from the biennial Employee Survey undertaken by STAL. The most recent survey was undertaken in 2015, and has been used to inform this assessment.

4.33 The 2015 Employee Survey captured a sample of employees (3,037 or 28.4% in total). The observed modes of travel were applied to all employees at the airport (c.11,000 in 2015).

4.34 The existing and historical modal split for employee travel at Stansted Airport is set out in Table 4.9: below, dating back to 2002, according to the 'last mode' of travel (arrival at Stansted Airport).

Table 4.9: Historic Employee Mode Split (2002 – 2015)

Mode of Transport	Year						
	2002/3	2005	2007	2009	2011	2013	2015
Car Driver	87.6%	78.6%	73.1%	71.7%	69.9%	68.8%	64.9%
Car Passenger	4.1%	5.5%	6.3%	6.4%	7.1%	5.7%	5.7%
Public Transport (rail and public bus)	7.0%	12.5%	16.4%	18.3%	19.8%	22.8%	26.9%
Other	1.3%	3.25	4.2%	3.6%	3.2%	2.7%	2.5%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

4.35 Table 4.9: illustrates that car trips comprise the main mode of transport to Stansted Airport but there has been a significant change since 2002, with car use declining from 87.6% to 64.9% in 2015. This is a 22% decrease in the number of car driver trips from 2002 to 2015, and reflects a strong uplift in employees opting to use public transport and other modes to travel to work.

SDP Target and Initiatives

4.36 In order to sustainably maintain a reduction in staff car driver trips to Stansted Airport, the 2015 SDP sets out targets for 2015 to 2019. The following target has been set for employee travel:

- Reduce single car occupancy for staff travel to no more than 65% by the end of 2019.

4.37 The 2015 SDP was based on 2013 employee survey results. The latest published survey was undertaken in 2015 and illustrates that this target has been met. The aim is to maintain and improve upon this trend of reduced single car trips to and from the airport. The latest employee survey in 2017, is being finalised. Once the data is validated, the ATP will be updated and a new ATP will be published in 2018 and cover a period of 2017 to 2022.

Liftshare Scheme

4.38 The Liftshare scheme is a transport initiative set up in 2002 to link airport employees with similar work patterns and preferences to travel to work together.

4.39 In return for reducing the number of single car trips, for Liftshare members have prioritised parking in over 50 parking bays in close proximity to Enterprise House. An emergency ride home facility is also provided if needed and a variety of discounts are offered for Liftshare scheme members.

4.40 In 2017, 2,000 employees are registered as Liftshare members, which constitutes approximately 17.3% of all airport employees. STAL continue to promote this initiative.

Travelcard Scheme

4.41 Stansted Airport also operate a Travelcard scheme which provides unlimited journeys for all on-airport employees across airport public transport services per month within four price zones as follows: £55, £68, £96 and £136.

4.42 An 80% discount is applied on all bus, coach and rail services with the travelcard, with cost savings of up to £6,000 a year compared to private car travel. A map of the routes is provided in **Appendix C**.

Employee Place of Residence

4.43 Place of residence is an important factor which determines travel patterns. Employees living in closer proximity to Stansted Airport and in London have the best options to travel more sustainably and are generally less dependent on private car trips.

4.44 The 2015 Employee Survey includes information on place of residence. The distribution of employees is illustrated in Table 4.10: by county and Table 4.11: for the main local authorities.

Table 4.10: Employee Place of Residence (2015) by County

County	Count	%
Essex	5,631	51.3%
Hertfordshire	2,966	27.0%
Greater London	1,042	9.5%
Cambridgeshire	329	3.0%
Suffolk	279	2.5%

Rest of UK	181	1.7%
Unitary Authorities	198	1.8%
Outside UK/Unknown	342	3.2%
Total	**10,968**	**100.0%**

Table 4.11: Employee Place of Residence (2015) for key Local Authorities

County	Count	%
East Hertfordshire	2,684	24.5%
Uttlesford	2,007	18.3%
Braintree	1,650	15.0%
Harlow	809	7.4%
Chelmsford	398	3.6%
Colchester	257	2.3%
Epping Forest	188	1.7%
Newham	167	1.5%
Redbridge	145	1.3%
Waltham Forest	144	1.3%

4.45 As Table 4.11: illustrates, the largest proportion of employees live locally to the airport, with 2,684 employees from East Hertfordshire and 2,007 from Uttlesford (the home district of Stansted Airport). Significant clusters of employees also exist in the Bishop's Stortford, Harlow, Braintree and Haverhill areas and in locations along the rail corridor to London Liverpool Street.

Working patterns

4.46 The type of employment varies from office based staff to 24 hour operations, including air crew, check-in and baggage handling etc. As a result, the trends in employee travel is dependent on both regular (09:00 – 17:00) employment and shift work, which includes night working.

4.47 Working patterns have been derived from the 2015 Employee Travel Survey using an average day to represent typical travel modes and trends.

4.48 In accordance with the 2015 Employee Survey, Table 4.12: illustrates the typical working pattern for employees.

Table 4.12: Proportion of Employees by Commute Frequency (Employee Travel Survey, 2015)

Typical Week	% of Employees
1 – 2 days	2.0%
3 – 4 days	25.2%
5 days	66.2%
6 days or more	6.0%
Never work a typical week	0.6%
Total	**100.0%**

4.49 In addition to the patterns in Table 4.12: above, several factors influence the number of employees working at Stansted Airport per day. Such factors include:

- Annual leave: On average, one full-time employee spends approximately 37 weeks or 186 days at work per year.
- Full time vs Part time employees: As Table 4.12: demonstrates, only 66.2% of employees work five days a week (the equivalent of full time).
- Sick leave: Illness results in additional days off work, impacting the number of staff at work per day.
- Remote working: Increase in flexible working times and locations means that some employees are no longer required to travel to Stansted Airport but work remotely. Remote working has increased year-on-year.
- Flight crews who stay abroad at the end of a day's work.

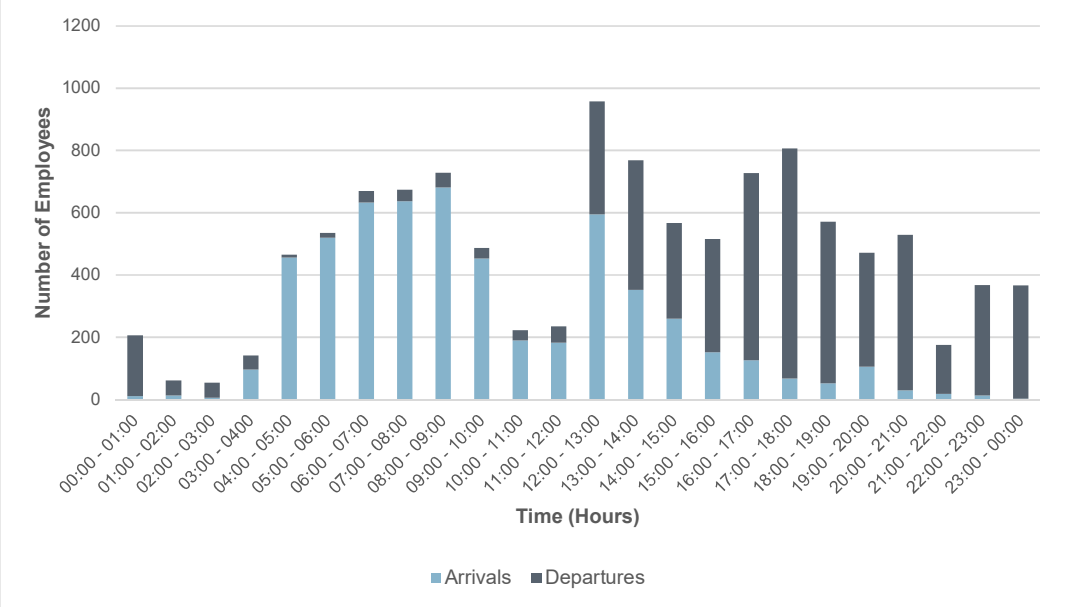
4.50 As a result of the factors listed above, it has been assumed that there is an average attendance rate of 0.5 employees per day. This figure has been agreed in principle for the purposes of the assessment with UDC and ECC.

Employee Surface Access Travel Demand

4.51 The 2015 Employee Survey also provides an insight into the variation in modes of travel by time of day. Optimal Economics has supplied current and forecast airport employee totals, as described in more detail in Chapter 6. The travel characteristics from the 2015 Employee Survey has been applied to the employee population data provided by Optimal Economics to derive a consistent 2016 baseline.

4.52 Figure 4.6 illustrates the 2016 employee profiles for surface arrivals and surface departures.

Figure 4.6: Employee Average Day – Surface Arrivals and Departures Profile (2016)



4.53 Figure 4.6 illustrates that employee arrivals tends to occur between 04:00 and 09:00 in the morning. There is a large surge in employee arrivals at 12:00 which is representative of shift changeover times.

4.54 Similarly, the employee departures profile illustrates that a dominant proportion of employee departures take place between 16:00 and 19:00. Employee departures continue overnight between 22:00 and 02:00, representative of airport shift work.

4.55 Table 4.13 below sets out the proportion of employee surface arrivals and departures by mode.

Table 4.13: Typical Daily Airport Employee Surface Access Arrivals and Departures Profile by Mode (2016)

Time Band	Arrivals to Airport					Departures from Airport					Total
	Car Driver	Car Passenger	Rail	Bus / Coach	Total	Car Driver	Car Passenger	Rail	Bus / Coach	Total	
00:00	11	0	0	0	**11**	98	3	58	37	**196**	**207**
01:00	13	0	0	0	**13**	39	2	2	6	**49**	**61**
02:00	6	0	0	0	**6**	44	3	0	0	**48**	**54**
03:00	71	9	0	17	**97**	41	2	2	0	**44**	**141**
04:00	300	36	5	116	**456**	8	0	0	2	**10**	**466**
05:00	279	50	21	170	**520**	16	0	0	0	**16**	**535**
06:00	431	52	83	67	**633**	19	3	5	10	**37**	**670**
07:00	495	34	71	37	**637**	28	2	2	6	**38**	**674**
08:00	576	31	32	42	**681**	35	5	2	6	**47**	**728**
09:00	361	22	35	35	**453**	28	2	2	2	**34**	**487**
10:00	120	12	22	35	**189**	27	2	0	6	**34**	**223**
11:00	87	14	42	40	**183**	33	2	2	15	**52**	**235**
12:00	304	33	152	106	**595**	252	30	14	66	**362**	**957**
13:00	178	26	64	85	**353**	208	35	14	158	**415**	**768**
14:00	172	7	37	44	**260**	210	23	30	44	**307**	**567**
15:00	69	7	35	40	**152**	224	21	58	62	**364**	**516**
16:00	68	3	35	19	**126**	487	35	35	44	**602**	**727**
17:00	33	9	14	12	**68**	575	42	63	60	**740**	**807**
18:00	28	3	5	15	**52**	416	40	35	27	**519**	**571**
19:00	90	7	5	4	**105**	254	31	38	42	**366**	**472**
20:00	22	3	2	2	**29**	241	23	119	118	**500**	**529**
21:00	11	0	3	4	**18**	88	10	34	25	**157**	**176**
22:00	8	0	3	2	**13**	197	31	59	67	**355**	**368**
23:00	2	2	0	0	**3**	166	12	95	91	**363**	**366**
Daily	**3,734**	**360**	**667**	**892**	**5,654**	**3,734**	**360**	**667**	**892**	**5,654**	**11,307**

*Please note – the numbers above do not account for 'other' modes such as walking and cycling.

4.56 Table 4.13 shows the peak employee arrivals and departures being:

- Employee Arrivals: 08:00 – 09:00;
- Employee Departures: 17:00 – 18:00; and
- Employee combined Arrivals and Departures: 12:00 – 13:00.

4.57 Car driver trips form the dominant mode of transport for employees arriving at the airport, where peak activity is experienced between 08:00 – 09:00 on the local highway network. The proportion of rail and bus/coach trips are significantly lower, where the peak rail arrivals occur

between 12:00 – 13:00 and bus/coach arrivals are more prominent earlier in the morning, between 05:00 – 06:00.

4.58 A similar trend is shown for employee departures with the dominant mode of travel comprising car driver trips. Car driver employee departure trips are highest during the typical highway network PM peak of 17:00 – 18:00. The peak period for employee rail departures is between 20:00 – 21:00 and 13:00 – 14:00 for bus/coach departures. The proportion of car driver trips declines considerably by 23:00 – 00:00 where rail and bus/coach mode shares for employee departures increases.

Miscellaneous Airport-related Road Demand

4.59 In addition to air passenger and employee-related road traffic, a number of road traffic movements are generated from miscellaneous airport-related activities. These include:

- employee personal and employer business trips;
- external business visitors; e.g. to Enterprise House including the Essex Police, Immigration Offices, Job centres etc.;
- visitors to the Aerozone
- non-scheduled air transport passenger movements;
- non-airport-related users of the airport hotel facilities, for example the local members of the Hilton Hotel Living Well health club, visitors attending meeting and conferences, casual users of the bar and restaurant facilities;
- Stansted Express season ticket holders who have, by arrangement with STAL, passcards enabling them to park in the short-stay car park;
- bus and coach movements to the coach stations;
- Various minibus services from off-airport car park operators to the short-stay car park;
- non-airport-related coach movements from the temporary coach parks in the Northside area of the airport;
- service and delivery trips; and
- cargo trips.

4.60 This activity will be accounted for within the 'background' growth of traffic at Stansted Airport, as it does not directly translate to passenger and employee travel, which are the main quantifiable assessment criteria for 35+ Project.

5 Surface Access Networks, Services and Usage

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 Stansted Airport, and facilities for pedestrians and cyclists.

Public Transport Interchange

5.2 The Public Transport Interchange (PTI) facility at Stansted Airport allows for easy and convenient access between the terminal building and all forms of public transport. The rail terminal at the airport comprises three platforms, located beneath the terminal building and forecourt. The bus and coach station is adjacent to the terminal, located between the red and orange short stay car parks. Figure 1.1 in Chapter 1, shows the location of the public transport infrastructure. Both the rail and bus/coach stations are connected to the terminal by escalators, ramps, walkways and lifts. STAL works closely with transport operators to ensure there are clear, direct and accessible routes to, from and within the terminal building ensuring high quality access for passengers, including persons with restricted mobility.

5.3 Stansted Airport manage the bus and coach station and determine quality standards required by service operators for them to have access to the facilities. All bus and coach operators are required to obtain a license to operate to and from the airport and all agreed services have non-exclusive access into the airport bus and coach station, where a specific departure bay is allocated to all services.

Rail Network and Services

5.4 Stansted Airport rail station is the terminus of a three-mile branch line stemming from the West Anglia Main Line (WAML). The spur runs under the airport runway in a 1.1-mile long single bore tunnel. The total length of the single track is 1.25 miles.

5.5 At the western end of the branch there are separate connections with the WAML towards London Liverpool Street and Cambridge. Rail services connect Stansted Airport directly to London Liverpool Street (with interchange to underground services at Tottenham Hale and Liverpool Street stations), Birmingham and transport interchanges at Cambridge and Peterborough.

5.6 Stansted Airport rail station is managed by Abellio Greater Anglia (AGA) on behalf of Network Rail. Ticketing facilities are available on the station concourse, in the terminal, on trains and at

key stations. A number of improvements have recently been made, including new information displays, ticket machines and improved waiting facilities on Platform 2.

5.7 Travel surveys show that rail has been the second most popular form of public transport for access to the airport, used by over a quarter of passengers (though early indications are that in 2017, this is likely to exceed coach use). There are currently three train services operated by two train operator companies (TOCs) to and from Stansted Airport: the Stansted Express from London, services from Cambridge (both operated by AGA); and services from Birmingham New Street by CrossCountry.

5.8 To assist with the assessment of rail capacity, baseline rail loading data has been provided by the TOCs. Due to the commercially sensitive nature of rail passenger data, the TOCs have stipulated limitations on the level of information and analysis that can be presented within the TA and ES Chapter. The analysis and presentation of the baseline and future rail capacity data contained within this assessment has been reviewed and agreed in principle by the TOCs.

5.9 The TOCs have stipulated that any existing or forecast rail loading information should be presented as a percentage of available seats and as a percentage of total capacity, which includes an allowance for standing passengers.

5.10 The analysis provided in the TA summarises the impact of forecast increases in passenger numbers on the level of service provided, both for Passengers and other rail users on these services.

Stansted Express Service

5.11 AGA was awarded originally awarded the Stansted Express rail franchise in 2012. The service runs from London Liverpool Street to the airport. AGA's was renewed in October 2016 and now runs until 2025.

5.12 During the morning peak period, defined as trains arriving or leaving London between 07:00-09:59, 12 trains operate in each direction. In addition to stopping at Tottenham Hale, these services also stop at other intermediate stations including: Bishop's Stortford, Harlow Town and Stansted Mountfitchet.

5.13 A summary of the Stansted Express services departing from London Liverpool Street towards Stansted Airport during the morning peak are set out below:

- seven services stop at Bishop's Stortford only;
- three services stop at Harlow Town and Stansted Mountfitchet; and
- two services stop at Harlow Town.

5.14 A summary of the Stansted Express services departing from Stansted Airport towards London during the morning peak are presented below:

- three services stop at Bishop's Stortford only;
- two services stop at Bishop's Stortford and Harlow Town;
- two services stop at Stansted Mountfitchet and Harlow Town;
- two services stop at Bishop's Stortford, Sawbridgeworth and Harlow Town;
- one service stops at Harlow Town only;
- one service stops at Bishop's Stortford, Harlow Town, Enfield Lock and Brimsdown; and
- one service stops at Stansted Mountfitchet, Bishop's Stortford, Harlow Town, Waltham Cross and Brimsdown.

5.15 Although the frequency of departures is the same in both directions (i.e. every 15 minutes), there are more calling points on route to London to serve commuters who live in local towns and travel to London. Depending on the number of calling points in either direction, journey times between Stansted Airport and London Liverpool Street can vary from between 45 minutes to 57 minutes.

5.16 AGA also operate a service between Stansted Airport and Cambridge during off-peak periods. The first train departs from the airport at 10:05, with hourly services provided until 16:05. The first AGA train departing Cambridge for the airport leaves at 09:31 with hourly services until 15:26. All services also call at Audley End and Whittlesford Parkway.

Stansted Airport – London Liverpool Street

5.17 AGA supplied Stansted Express loading data for Autumn 2016 (representing a period with high commuter demand). Average weekday loadings at Stansted Airport for services towards London Liverpool Street was 10,011 rail passengers per day. From London Liverpool Street, average weekday loadings for services towards Stansted Airport was 11,329 passengers per day.

5.18 Train loadings, expressed as a percentage of available seats and as a percentage of total capacity (including standing allowance) have been assessed for the following time periods:

- AM Peak – 07:00 – 10:00;
- PM Peak – 16:00 – 19:00; and
- Daily – 00:00 – 23:59.

5.19 Seating and standing capacities on each service are determined by the class of train used and the number of carriages. As the Stansted Express train formations vary across the day, capacities have been averaged to provide the mean peak hour and daily capacities. A summary of the various Stansted Express train formations, operating as of 2017, is provided in Table 5.1:

Table 5.1: Stansted Express Train Formations and Capacities

Stock Type	Carriages	Seating Capacity	Standing Capacity	Total Capacity
Class 379 (2011)	4	209	136	**345**
	8	418	272	**690**
	12	627	408	**1,035**
Class 317/5	8	584	380	**964**

Source: Abellio Greater Anglia

5.20 Table 5.2: provides the 2016 Baseline Stansted Express line loadings in each direction on the point of critical loading of the route which occurs between Tottenham Hale and Harlow and is dominated by commuters traffic to and from London.

Table 5.2: Stansted Express Line Loadings (2016 Baseline)

	Depart Liverpool Street - Stansted Airport			Depart Stansted Airport - Liverpool Street		
	AM Peak	PM Peak	Daily	AM Peak	PM Peak	Daily
Line Loading (Seating Capacity Only)	23%	94%	40%	75%	37%	39%
Line Loading (Total Capacity, incl. Standing)	14%	57%	24%	45%	22%	23%

Source: Abellio Greater Anglia

5.21 The data presented in Table 5.2: indicates that there is generally spare capacity on Stansted Express services between the airport and London. Average line loadings are nearing average seating capacity during the PM peak on services departing from London Liverpool Street (94%) however spare seats are available and average demand is well below the total available capacity.

5.22 It should also be noted that Stansted Express generally operate longer trains to accommodate demand on the busiest services. This includes the provision of 12-car trains which have a total capacity of 1,035 passengers.

Stansted Airport - Cambridge

5.23 AGA has also provided train loading data for the Stansted Airport to Cambridge service which runs during off-peak periods. Average weekday loadings at Stansted Airport for services towards Cambridge was 286 rail passengers per day in 2016. From Cambridge, average weekday loadings for services towards Stansted Airport was 149 passengers per day.

5.24 AGA have only provided data showing arrivals and departures at Cambridge. Although all services also call at Audley End and Whittlesford Parkway, in the absence of further detail and to ensure a robust future year assessment, the figures have been assumed to represent journeys to and from the airport.

5.25 Given that services do not operate during the peak hours, a summary of the 2016 Baseline train loadings, expressed as a percentage of available seats and as a percentage of total capacity, is presented in Table 5.3: .

Table 5.3: AGA Line Loadings (2016 Baseline)

	Daily	
	Depart Stansted Airport - Cambridge	Depart Cambridge – Stansted Airport
Line Loading (Seating Capacity Only)	15%	8%
Line Loading (Total Capacity, incl. Standing)	9%	5%

Source: Abellio Greater Anglia

5.26 The data presented in Table 6.3 shows that there is significant spare seating capacity on AGA services between Stansted Airport and Cambridge throughout the day and with additional capacity available if longer train formations were to be adopted.

West Anglia Main Line

Rail Infrastructure

5.27 The West Anglian Main Line is double track for most of its length, with small sections of single track on the Stansted branch and at Ware and quadruple track between Hackney Downs and Liverpool Street. At Stansted the spur from the main line passes under the runway as a single track.

5.28 Long term proposals include four-tracking between Coppermill Junction and Broxbourne junction but there is no current commitment to this upgrade. A third track is being introduced between Tottenham Hale and Angel Road Station (to be re-named Meridan Water) to enable

additional services to be introduced at the London end of the line, without impacting on the longer distance services, including Stansted Express.

Service patterns

5.29 The arrangement of tracks and platforms at Stansted Airport provides spare capacity above the current operation of train services. 3.5 minutes is allowed in the timetable for trains to traverse the 2.9km (1.8 miles) between the Tye Green junction and the station, limiting the capacity of the tunnel to 14 movements per hour (seven per direction). Stansted Express currently runs on a 'clockface' 15-minute headway, so the practical limit of the rail line is six trains per hour (tph) in each direction.

5.30 The 'Anglia Route Study' (March 2016) produced by Network Rail indicates that there is expected to be a capacity gap of approximately 1,000 passengers by 2023 and 2,100 by 2043 in the peak hour on Cambridge and Stansted Airport services into London Liverpool Street.

5.31 The study concluded that lengthening two of the Cambridge and Stansted Airport services from eight carriages to 12 carriages between 08:00 and 08:59 would meet the capacity gap by the end of Control Period 6 (CP6: 2019 – 2024).

5.32 The need for longer trains identified by the study also fed into the East Anglia Franchise process and was shared with the shortlisted bidders. AGA was awarded the franchise to operate the Stansted Express and other rail services between London, Stansted Airport and Cambridge from October 2016. The nine year franchise will see over £1.4 billion invested into the railway which will include a new fleet of Stansted Express trains from 2020. These will all be 12 carriages long to address the capacity gap identified in the study. The platforms at Stansted Airport are designed to cater for 12 carriage trains.

Demand Growth

5.33 The future rail demand which is forecast as the airport continues to grow to 2028 has been assessed. To forecast the future baseline demand in 2028 at 35mppa and 2028 at 43mppa, data from the 'London and South East Market Study' (October 2013) has been used.

5.34 The study forecast future demand on the West Anglia Main Line included the 35mppa cap on passenger movements. The forecast passenger demand is presented in Table 5.4: .

Table 5.4: Forecast West Anglia Main Line Passenger Growth

Service Group	2011 total passengers	2023 forecast passengers	2023 demand increase	2043 forecast passengers	2043 demand increase
West Anglia	15,700	18,500	18%	21,800	39%

Source: Long Term Planning Process: London and South East Market Study (October 2013)

5.35 The data presented in Table 5.4: indicates that demand on the West Anglia Main Line is likely to increase by 18% from 2011 to 2023. This represents an average growth rate of 1.5% per annum which accounts for committed developments, background commuter growth and the continued growth of the airport to 35mppa.

5.36 The study identifies that growth on the West Anglia Main Line is likely to be slower after 2023, continuing at a rate of less than 1% per annum to 2043. However, to provide a robust assessment of future demand, a growth rate of 1.5% per annum has been applied to forecast the background growth (i.e. excluding passenger traffic) between the 2016 Baseline data and the 2028 future scenarios.

5.37 AGA is set to introduce a new fleet of Class 745/1 trains in 2020 which will increase passenger capacity above the existing Class 379 fleet. AGA have identified that 12-car trains will be used to address the forecast increase in demand. These trains have a nominal capacity of 1115 passengers, 80 greater than the current 12 carriage trains.

5.38 The 2028 Do Minimum (35mppa) train loadings for Stansted Express services towards the airport and London Liverpool Street respectively, expressed as a percentage of seating capacity and total available capacity (accounting for the new train fleet), are presented in Table 5.5: .

Table 5.5: Forecast Stansted Express Line Loadings (2028 Do Minimum 35mppa)

	Depart Liverpool Street - Stansted Airport			Depart Stansted Airport - Liverpool Street		
	AM Peak	PM Peak	Daily	AM Peak	PM Peak	Daily
Line Loading (Seating Capacity Only)	16%	68%	29%	56%	26%	28%
Line Loading (Total Capacity, incl. Standing)	11%	48%	20%	39%	18%	19%

5.39 The data presented in Table 5.5: shows that there will generally be spare capacity on Stansted Express services by 2028. Due to the introduction of the new fleet and 12-car trains during the peak periods, the percentage of available seats is likely to increase when compared to the 2016 Baseline scenario.

Longer Term Improvements

5.40 In the longer term, the Anglia Route Study identified that significant intervention such as Crossrail 2, together with additional track capacity, additional platform capacity and additional services will be required to meet connectivity and capacity outputs on the West Anglia Main Line corridor by 2043.

5.41 In February 2015, the West Anglia Taskforce was announced by the Chancellor and the Mayor of London to work with the Department for Transport, Network Rail, Transport for London and LEPs to look at opportunities to improve rail connections to Stansted Airport and Cambridge from London Liverpool Street and Stratford stations. In October 2016, the Taskforce published a report with a five-point call for action:

- Cambridge in 60 minutes and Stansted Airport in 40 minutes from London Liverpool Street;
- Improving service levels to other communities along the route to support growth;
- A new timetable by 2020 to take advantage of new, faster and longer trains;
- Four-tracking the railway in the mid-2020s as a precursor to Crossrail 2 opening in 2033; and
- Progressing Crossrail 2.

CrossCountry Services

5.42 CrossCountry operate services to and from Stansted Airport to Birmingham New Street at a frequency of one train per hour. Between 07:00-09:59 there are three services in either direction which call at a number of stations including: Cambridge, Ely, Peterborough, Leicester and Nuneaton. Typical journey times between these major towns/cities and Stansted Airport are presented in Table 5.6: , as well as the onward rail connections which are available.

Table 5.6: CrossCountry Trains Journey Times and Connections

Origin	Destination	Journey Time	Train Connections
Cambridge	Stansted Airport	37 minutes	Norwich, King's Lynn, Bury St Edmunds and Ipswich
Peterborough		1 hour, 29 minutes	Destinations on East Coast Mainline
Leicester		2 hours, 25 minutes	Destinations on Midland Mainline
Nuneaton		2 hours, 45 minutes	Destinations on West Cost Mainline
Birmingham		3 hours, 17 minutes	

5.43 The Department for Transport (DfT) supplied loading data for Autumn 2016 on behalf of CrossCountry. DfT do not hold data for passenger loadings at Stansted Airport, therefore the data shows the average weekday passengers on each service and seating and standing capacities on trains to and from Stansted Airport at Cambridge Station only.

5.44 Seating and standing capacities on each service are determined by the number of carriages used. A summary of the CrossCountry train formations and associated capacities is presented in Table 5.7: .

Table 5.7: CrossCountry Train Formations and Capacities

Stock Type	Carriages	Seating Capacity	Standing Capacity	Total Capacity
Class 170	2	120	28	148
	3	200	48	248

5.45 Table 5.8: provides the 2016 Baseline CrossCountry line loadings in each direction, expressed as a percentage of available seats in the 3-hour AM and PM peaks, and daily periods.

Table 5.8: CrossCountry Line Loadings (2016 Baseline)

	Arrive at Cambridge – from Stansted Airport			Depart from Cambridge - to Stansted Airport		
	AM Peak	PM Peak	Daily	AM Peak	PM Peak	Daily
Line Loading (Seating Capacity Only)	39%	54%	29%	33%	77%	35%
Line Loading (Total Capacity, incl. Standing)	32%	43%	23%	27%	62%	28%

5.46 The data presented in Table 5.8: indicates that there is spare capacity on CrossCountry services between the airport and Cambridge. The busiest services are those departing Cambridge during the PM peak towards Stansted Airport with 77% of seats occupied.

5.47 Growth forecasts have not been reported for CrossCountry services on the Midlands to Stansted Airport route, however the *East Midlands Route Study (2016)* identifies that demand for travel on CrossCountry services will continue to increase. The study identifies train lengthening from the current 2 carriage arrangement is required to ensure that suitable capacity is provided to 2043.

5.48 The 2028 Do Minimum (35mppa) train loadings for CrossCountry services towards the airport and Cambridge respectively, expressed as a percentage of seating capacity and total available capacity, are presented in Table 5.9: .

Table 5.9: Forecast CrossCountry Line Loadings (2028 Do Minimum 35mppa)

	Arrive at Cambridge – from Stansted Airport			Depart from Cambridge - to Stansted Airport		
	AM Peak	PM Peak	Daily	AM Peak	PM Peak	Daily
Line Loading (Seating Capacity Only)	46%	63%	34%	39%	91%	41%
Line Loading (Total Capacity, incl. Standing)	38%	51%	27%	31%	74%	33%

5.49 As shown in Table 5.9: , there will be spare seating capacity on CrossCountry services between Stansted Airport and Cambridge by 2028. The forecasts indicate that 91% of seats will be occupied on PM peak services departing Cambridge towards the airport, although, with standing, 26% total reserve capacity will be available.

5.50 As part of their East Anglian rail franchise commitments, AGA has also committed to extending Norwich to Cambridge services to Stansted Airport to every hour. This will provide alternative services which may reduce forecast loadings on CrossCountry services between the airport and Cambridge.

Coach Services

5.51 Over time, a comprehensive and very well used coach and bus network has been developed, helping Stansted Airport achieve one of the highest public transport mode shares of any UK airport and with a similar market share to rail. Through sustained investment, by STAL and operators, an extensive bus and coach network is now in place that is attractive to both air passengers and employees. This provides a flexible, sustainable and cost-effective way of connecting the airport to key destinations.

5.52 To handle the increase in bus and coach use, new infrastructure improvements have been necessary to accommodate the number of passengers and improve customer service. New waiting and ticketing facilities have been installed and passengers are protected from adverse weather conditions by a roof that incorporates solar shading technology. Changes have also been made to the vehicle operating area, with 39 bays for scheduled bus and coach services, internal hotel shuttle buses and charter coaches, plus a further 30 bays used as a layover area. New driver facilities, health and safety improvements, offices for coach companies and station management have also been introduced.

5.53 There are currently two main operators, National Express and Airport Bus Express, serving London and providing 16 coaches per hour at peak times to London Liverpool Street, Victoria, Stratford, Golders Green, Paddington, Waterloo and Marble Arch. A summary of the services and their frequencies is provided in Table 5.10: .

Table 5.10: Express Coach Services - London

Service	Destination	Frequency	Journey Time
National Express A6	Golders Green/Paddington	Up to every 15 mins	90 mins
National Express A7	Waterloo/Victoria	Up to every 15 mins	100 mins
National Express A8	London Liverpool St	Up to every 20 mins	65-85 mins
National Express A9	London Stratford	Up to every 30 mins	40-65 mins
Airport Bus Express A20	Victoria via Baker St	Up to every 30 mins	120 mins
Airport Bus Express A21	London Bridge & Stratford	Up to every 30 mins	110 mins

5.54 National Express coach services also operate between the airport and other UK towns and cities. Most services run to and from the airport at a frequency of one bus every two hours. A summary of these coaches and the destinations served is presented in Table 5.11: .

Table 5.11: Express Coach Services – Regional

Service	Destination	Frequency
National Express 727	Cambridge/Thetford/Norwich	Every two hours
National Express 727	Heathrow/Gatwick/Brighton	Every two hours
National Express 737	Luton/Oxford	Every two hours
National Express 250	Ipswich/Colchester/Heathrow	Every two hours
National Express 777	Luton/Coventry/Birmingham	Every two hours
National Express 349/50	Cambridge/Nottingham/Liverpool	Two per day

5.55 There are also three on-airport hotel shuttle services operating from the coach station for use by air passengers and employees.

5.56 A Stansted Night Run shuttle serves Golders Green, Tottenham Hale, Edmonton Green and Enfield and provides Airport Travel Card holders with a free service that arrives at the airport at 03:40, ready for a 04:00 shift time. Shuttles are also provided from staff car parks to the terminal.

Coach Demand

5.57 Data showing the current demand for Stansted Airport coach services has been provided by the two operators using the station in 2017. The data shows the number of passenger arrivals and departures by month from April 2016 to March 2017.

5.58 Passenger data for National Express services has been divided into two categories, 'A' services and 'regional' services to represent those coaches operating between the airport and London and those serving other regional destinations.

5.59 The passenger arrivals and departures by each operator are presented in Figure 5.1: and Figure 5.2: respectively.

Figure 5.1: Stansted Airport Coach Passengers – Arrivals

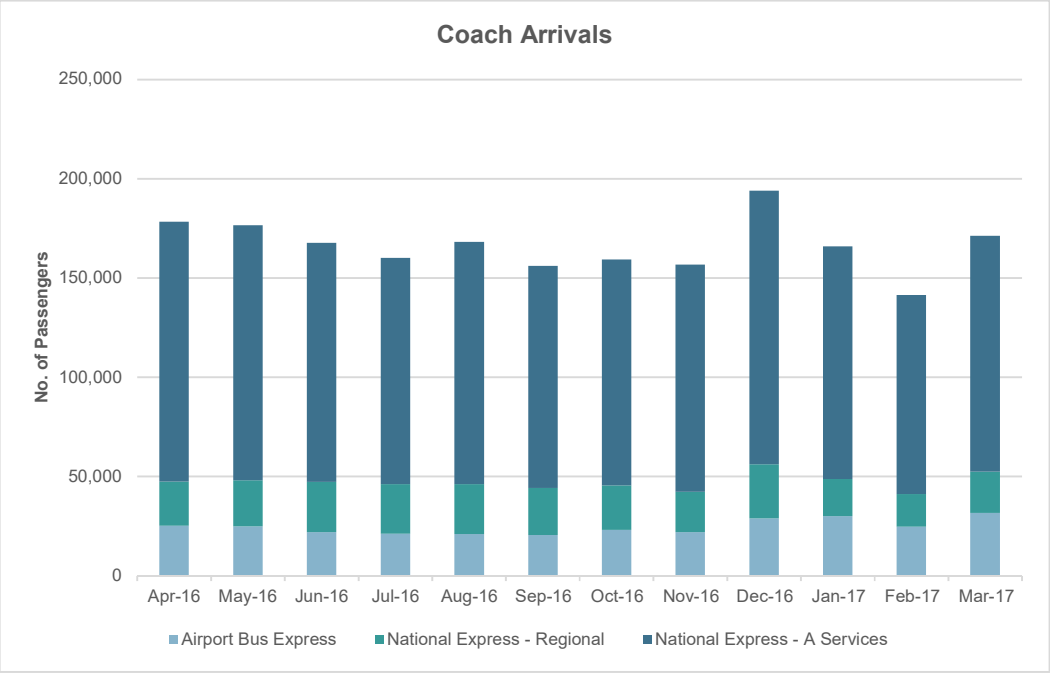
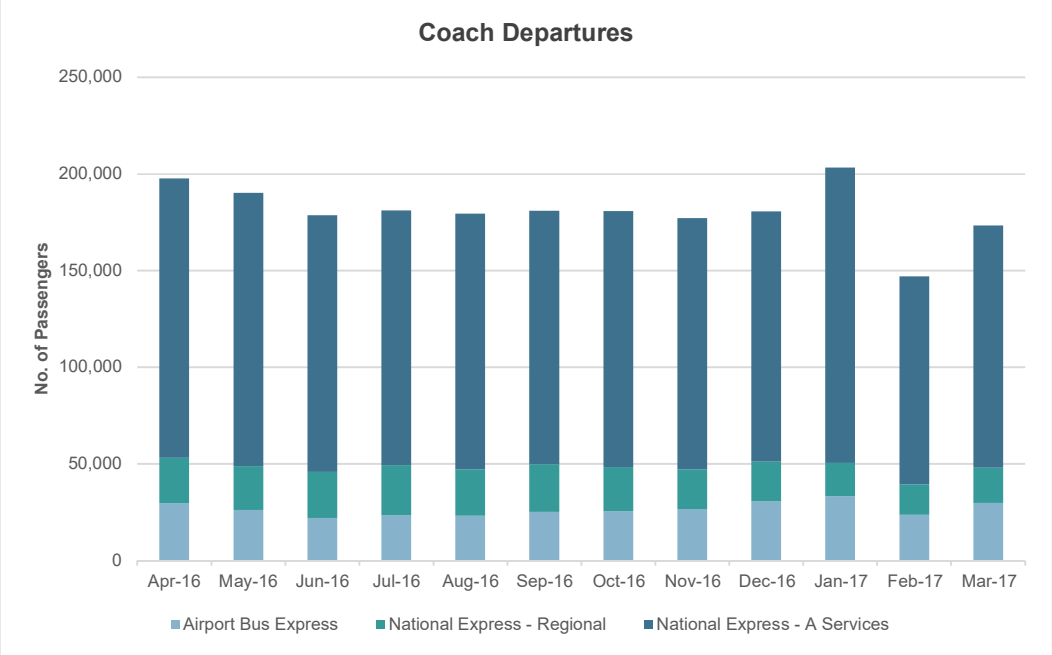


Figure 5.2: Stansted Airport Coach Passengers – Departures



5.60 The data presented in Figure 5.1: and Figure 5.2: shows that coach services are a popular choice of travel to and from the airport throughout the year. The greatest number of passenger arrivals by coach occurred in December 2016 with 194,220 passengers and the greatest number of departures occurred in January 2017 with 203,294 passengers.

5.61 National Express 'A' services to London account for the greatest proportion of passenger trips by coach. The coach operators have increased services as demand has increased and the coach station has been reconfigured in recent years to best handle peak demands.

5.62 It is anticipated that as demand increases, coach operators will review existing services, increasing frequency and potentially introducing more London destinations. Their business model is clearly based on maximising loadings. Unlike rail operators they have the ability to react quickly to demand changes so as to mage levels of service that are attractive to potential customers.

Local Bus Services

5.63 The local bus services provide comprehensive public transport links between the airport and surrounding area. These services provide a real alternative to the car and enhancing accessibility for airport users (i.e. employees and air passengers) and local residents – either using Stansted Airport as a transport interchange or as a link between local towns and villages.

5.64 The frequencies of local bus services operating to and from the airport are summarised in Table 5.12: .

Table 5.12: Local Bus Service Frequency

Service	Destination	Frequency (Buses Per Day)		
		Monday - Friday	Saturday	Sunday
First X10	Basildon	18	18	18
First X30	Southend	22	22	22
First 42A	Chelmsford	14	13	7
Stephenson's 5	Bishop's Stortford	12	12	0
Stephenson's 6	Saffron Walden	14	13	0
Acme 7	Bishop's Stortford	7	7	0
Acme 7A	Bishop's Stortford	5	5	0
Arriva 133	Colchester	17	17	17
Arriva 309	Bishop's Stortford	10	10	22
Arriva 508	Harlow Town via Takeley	22	23	0
Arriva 509	Harlow Town via Heath Row	24	23	0
Arriva 510	Harlow Town via Forest Hall	39	36	32
	Total	**204**	**199**	**118**

5.65 As can be seen from Table 5.12: , there are around 200 daily departures from the airport on weekdays and Saturdays, with 118 departures on Sundays. These routes serve key local towns including Bishop's Stortford, Harlow Town, Colchester and Chelmsford.

5.66 The first arrival and last departure times of each service at Stansted Airport are presented in Table 5.13: . The early morning services are particularly important for staff access given the early shift patterns in force.

Table 5.13: Local Bus Service Operating Periods

Service	Days of operation	Buses per hour	First bus arriving at Stansted (weekday)	Last bus departing Stansted (weekday)
First X10 – Basildon – Chelmsford	Mon-Sun	1	03:55	00:15
First X30 – Southend – Chelmsford	Mon-Sun	1	03:30	01:30
First 42A – Chelmsford – Great Dunmow	Mon-Sun	1	06:15	19:30
Stephenson's 5 – Bishop's Stortford	Mon-Sat	1	09:53	20:23
Stephenson's 6 – Saffron Walden	Mon-Sat	1	07:07	21:03
Acme 7 – Bishop's Stortford	Mon-Sat	0.5	06:57	18:20
Acme 7A – Bishop's Stortford	Mon-Sat	0.5	10:06	17:05
Arriva 133 – Colchester – Braintree	Mon-Sun	1	03:50	22:15
Arriva 309 – Bishop's Stortford	Mon-Sun	1	03:40	23:43
Arriva 508 – Harlow – Sawbridgeworth	Mon-Sat	2	07:14	18:18
Arriva 509 – Harlow – Sawbridgeworth	Mon-Sat	2	06:53	18:54
Arriva 510 – Harlow – Bishop's Stortford	Mon-Sun	2	01:40	23:50

Cycle and Pedestrian Access

5.67 Local access includes cycling and walking. Given its rural location, few passengers travel to Stansted Airport via these modes, with some staff living locally able to walk and cycle to work. Pedestrian infrastructure within the terminal area includes footways and crossings to facilitate safe movement around the vehicle and taxi pick-up and drop-off areas. The main terminal is also connected to the PTI facility via escalators, ramps, walkways and lifts for access to coach, bus and rail services.

5.68 There are some demarcated cycle lanes on airport roads and routes to and from the airport which provide connections to and from local towns and villages. To the south of the airport, there is a shared use footway/cycleway along the northern side of Long Border Road. This extends from Round Coppice Roundabout to the west, to Diamond Hanger at its eastern extent where it then becomes an on-road cycle lane.

5.69 West of Round Coppice Roundabout, the cycleway passes over the M11 and connects the airport with Birchanger and onwards to Bishop's Stortford, a potential key route with ample capacity for accommodating predicted future demands.

5.70 South of the airport, National Route 16 connects Stansted Airport with Braintree via Great Dunmow. The route generally comprises a traffic-free railway path known as Flitch Way. To the east of the airport, regional route 50 provides an on-road cycle connection between the airport and local villages including Mole Hill Green, Henham, Takeley and High Roding. This route follows predominantly quiet rural roads.

5.71 Cycle parking shelters are located throughout the airport, with four key locations being Enterprise House, Cargo Area, Bus/Coach station and at the Short Stay Red car park.

5.72 Stansted Airport's Cycling and Walking Strategy (2016) is part of the wider Surface Access Strategy and a 'daughter document' to the 2015 SDP for the airport and sets out the target to increase the number of employees walking and cycling to and from work. Significant enhancements to improve walking and cycling links to and from local communities have been implemented since MAG took ownership of the airport, together with improvements in

facilities and campaigns to raise awareness. Employee cycling is currently at its historically highest proportion, haven risen from 0% to 0.4% between 2002 and 2015. Equally, the proportion of employees recorded as walking to the airport has risen from 0.1% to 0.6% over the same period. STAL is aiming for a further 20% increase and to reach the target of 0.5% of employees cycling to work by 2020.

5.73 The 2015 SDP identifies the potential for significant future increases in the proportion of employees who cycle to work as 35% of employees (4,070 people) live within 10km of Stansted Airport. Initiatives have been put in place to increase the number of sustainable trips by staff. The cycling strategy includes the following measures:

- improve cycle access from the west and north to Bishop's Stortford, Birchanger, Stansted Mountfitchet and Elsenham;
- cycle crossing facilities at M11, J8;
- extend the Sawbridgeworth – Bishop's Stortford link; and
- storage, shower and secure parking at key locations on site, including North Side.

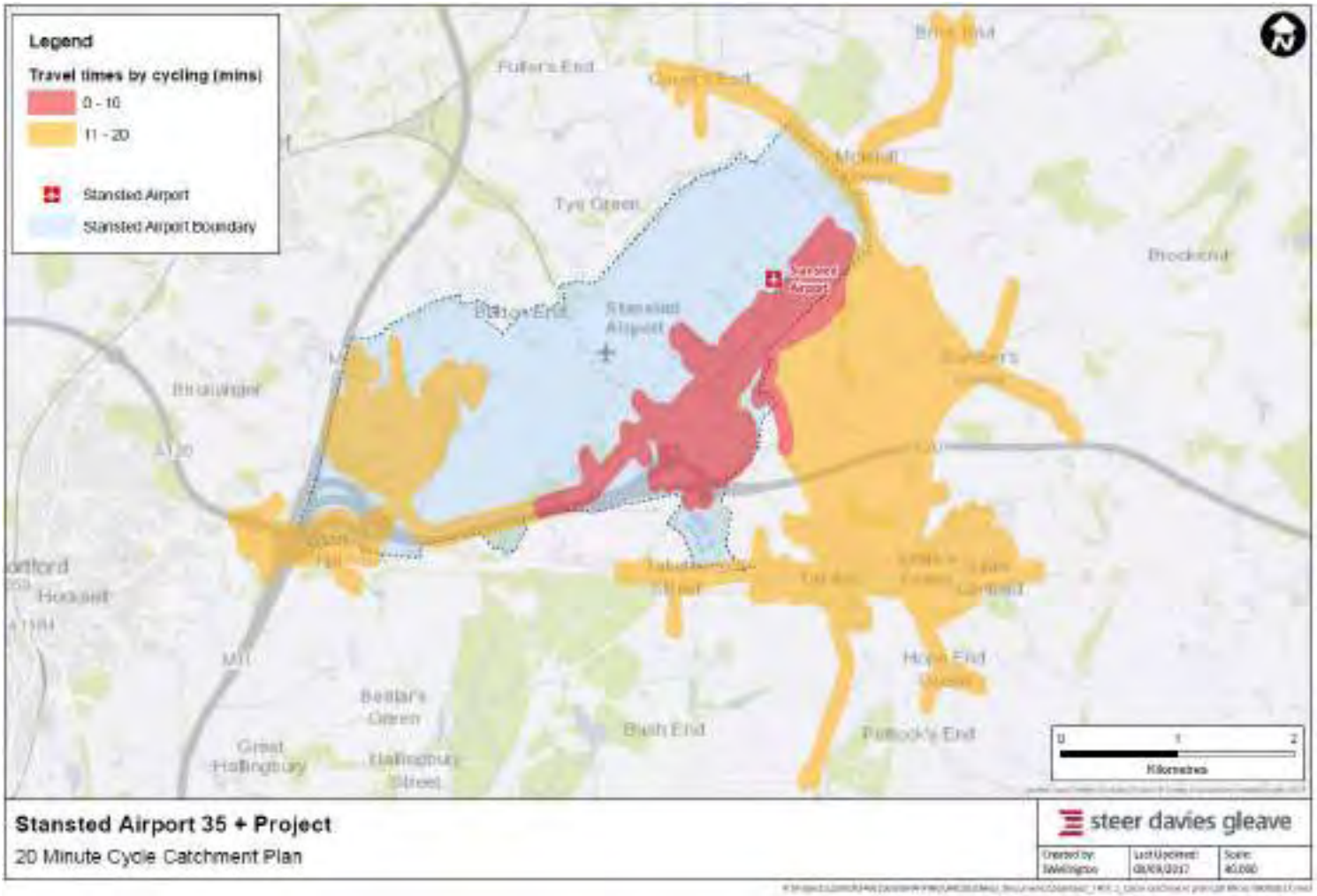
5.74 Stansted Airport also joined the Government's 'Ride2Work' initiative in 2007 to encourage employees to purchase new cycles at a discounted rate of 15% at Halfords stores as an incentive to travel more sustainably to work.

5.75 STAL is committed to sustainable transport and is working jointly with the SATF to support the deliverance of national/local policy to encourage travel by sustainable modes. A target of the SPD is set out below:

- In 2013, circa 0.1 % of employee trips were made by bicycle. Our target is to increase this to 0.5%.

5.76 The core catchment area for cycle trips is considered to be within a six kilometre radius and 20 minute cycle time of the airport as shown in Figure 5.3: . This assumption is based on data within the 2016 National Transport Statistics which shows that the average length of a cycle trip in 2016 was approximately 5.6 kilometres (3.5 miles).

Figure 5.3: 20 Minute Cycle Catchment



Vehicle Access

Highway Network

5.77 The main road network around Stansted Airport is shown in Figure 1.1 at Chapter 1. The main terminal is located approximately 3.5 kilometres east of the M11 London to Cambridge motorway and immediately north of the A120. These trunk roads form part of the strategic road network and are the responsibility of Highways England.

5.78 Access from the strategic road network to the terminal is provided from the A120. Traffic travelling to and from the long-stay car park and the north side of the airport passes through Priory Wood Roundabout from all directions. Traffic to and from the terminal area passes through Bassingbourn Roundabout. The majority of traffic reaches Bassingbourn Roundabout from Thremhall Avenue, excluding traffic from the A120 East, which uses a direct link from the A120, passing by the mid-stay car park.

5.79 Traffic travelling via the M11 to and from the south has direct free-flow slip roads between the M11 and A120 (J8a), whilst traffic from the A120 west or from the M11 north passes through Junction 8.

5.80 To the south of the M11 Junction 8, the motorway has three lanes in each direction, whilst to the north the M11 has two lanes in each direction. In 2016, average two-way traffic flows on the M11 were around 107,00 vehicles per day (vpd) between M11 Junction 7 and Junction 8, and 71,000 vpd between M11 Junction 8 and Junction 9.

5.81 The main east-west route serving Stansted Airport is the A120, which runs between Harwich (85 kilometres east of the M11) and the A10 (around 15 kilometres to the west of the M11). Between the M11 and Braintree, the A120 is a two-lane dual carriageway. In 2016 two-way traffic flows on the A120 were recorded around 48,000 vpd east of Stansted Airport and 15,000 vpd west of Bishop's Stortford.

5.82 As noted above, from the east, airport traffic can access and leave the A120 via a grade separated junction and link road that leads to Bassingbourn Roundabout. From the west, the A120 provides direct access to and from the airport via free flow link roads.

Other Main Roads

5.83 The A130, which runs south eastwards from the A120 at Great Dunmow, provides the primary route to Chelmsford and South Essex. The A414 (located 10-15 km south of the A120) forms another principal east-west route linking St Albans, Hatfield, Hertford, Harlow, and Chelmsford. Another key route to Chelmsford is the B1008 Chelmsford Road- but relies on the A120 for its connection to the airport.

5.84 The A1184 which runs south from Bishop's Stortford to Harlow and the A1060 southeast to Chelmsford have two-way traffic flows of approximately 21,000 vpd, and 5,000 vpd respectively (2016).

5.85 All of the roads noted above link to the A120/M11 road network for access to airport.

Local Minor Roads

5.86 In addition to the main road access points that feed the airport from the Strategic Road Network, there are two access points from local roads. The first is a small connector road that links from Parsonage Road to Coopers End Roundabout, immediately to the west of the terminal and its associated carparks and drop-off zone.

5.87 Parsonage Road is an unclassified Road that leads to Takeley and the B1256 to the south and to Molehill Green and onwards towards Elsenham to the north. A 2017 traffic survey at the mini roundabout and the Parsonage Road entry to the Coopers End Roundabout junction suggests around 34% of the total traffic on the two sections of Parsonage Road east and west of the mini roundabout is associated with the airport, with a similar proportion of non-airport through traffic using the link from Parsonage Road via the airport roads at Coopers End Roundabout to continue through to the strategic road network.

5.88 The second connection of airport roads with the local highway network is via Bury Lodge Lane to the north west of the airport. This road continues northwards indirectly to Elsenham and provides a connection to Church Road which passes over the M11 and connects through to Stansted Mountfitchet and the B1383.

5.89 Traffic flows on Bury Lodge Lane are of the order of 5,000 vpd immediately north of the airport car parks. Church Road carries around 6,000 vpd as it crosses the M11. The route is used as a convenient means of access to the M11 and A120 from Stansted Mountfitchet direction as well as a means of accessing the airport.

M11 Junction 8

M11 Junction 8 Improvement Scheme

5.90 A key junction is Junction 8 of the M11. This grade separated junction provides interconnection with the A120 and access to Birchanger Service Area and incorporates the B1256 as its eastern arm. The signalised roundabout that sits above the M11 has been modified a number of times and handles all traffic passing through the junction with the exception of south to east and east to south movements between the M11 and the A120, which are accommodated by free flow slips. The operation of the junction also interrelates with the roundabout junction of the A120 and the A1250, immediately west of the main junction.

5.91 ECC have developed an improvement scheme that is designed to enhance the capacity of the signalised section of Junction 8 and modifications to the A120/A1250 roundabout to address existing shortcomings of the junction and provide additional capacity. The scheme has committed partial funding through the Local Growth Fund initiative. Further funding commitment from ECC along with Existing S106 commitments associated with the current permission for the Airport are in place and the scheme is anticipated to be delivered in the next two years.

5.92 The three elements of this junction improvement scheme are summarised in Table 5.14.

Table 5.14: ECC M11 Junction 8 Improvement Scheme

Improvement	Summary
M11 to A120 east left turn slip	A dedicated left turn slip lane provided from the M11 southbound to the A120 eastbound. Provided by utilising the verge to the east of the junction. A physical island separating the left turn lane from other movements.
M11 northbound exit slip widening	Widening the M11 northbound exit slip to provide a four-lane approach and a designated left turn lane to the Services. Two-lane entrance into the services to be retained.
A120 west widening and Birchanger Lane/A1250 signalisation	Widening of the A120 westbound arm to provide a three-lane exit. Remove the Birchanger Lane/A1250 roundabout to provide a signalised staggered junction arrangement. Right turn islands from A120 to Birchanger Lane and A1250 respectively. Left turn only from Birchanger Lane to A120. Uncontrolled left turn lane from A1250 to A120. A120 eastbound approach to signalised staggered junction becomes three-lanes.

5.93 Preliminary design drawings (produced by Jacobs Ringway on behalf of ECC) for the M11 J8 Improvement Scheme are provided at **Appendix D**.

Little Hadham Bypass

5.94 Little Hadham is located to the west of Bishop's Stortford on the A120 Hadham Road. The centre of the village is based around a 4-way signal controlled junction that causes significant delays to east-west movement journeys on the A120.

5.95 Planning permission was granted in January 2017 (Reference: PL/0744/15) for a new bypass around the village of Little Hadham. Benefits of the scheme include reduced journey times in addition to a reduction in flood risk.

5.96 The proposals include a 3.9km new single carriageway of national speed limit (60 mile per hour), consisting of two lanes and two new roundabouts; located at each end of the new scheme: Tilekiln roundabout and Hadham Park roundabout. Hertfordshire are current progressing and assembly and taking the scheme through the planning stages and We expect construction to begin in 2019 and finish in 2020.

Harlow Northern Relief Road

5.97 The Harlow Northern bypass is planned for implementation in the near future. It involves a new junction on the M11 (Junction7a) and a new link to service new employment sites and reduce the volume of traffic travelling through the centre of Harlow.

5.98 The scheme has been designed to future-proof the accommodation of a Northern bypass, to ultimately reduce the volume of traffic travelling through the centre of Harlow. Previous studies have suggested that a new road link is necessary to support the population and employment growth projected for Harlow in the emerging Local Plan.

5.99 At present, it is anticipated that following the improvement and redesign of Junction 7a, ECC will monitor the growth in Harlow and will take forward the 'Northern bypass' scheme (a dual carriageway link from Junction 7a through to the A414 at Eastwick, and an additional single carriageway access into Harlow via River Way) post 2033.

Airport Road Network

5.100 Stansted Airport has some 37km (23 miles) of on-site roads within the airport boundary, for which STAL is the Highway Authority. The airport roads are shown in Figure 5.4.

Figure 5.4: Stansted Airport Road Ownership

On-Airport Air Passenger Parking

5.101 Currently (December 2017), Stansted Airport has approximately 30,750 car parking spaces on-site for passenger use. These are divided into the following:

- **Long-stay**: Dedicated long-stay car parks (currently operated as Long Stay and Jet Parks) are provided in the north west zone, accessed from Bury Lodge Lane. These car parks operate on a 'self-park' basis, with free bus services to and from the terminal at 15 minute intervals. The total transfer time is approximately 8 – 10 minutes.
- **Mid -stay**: This is provided at South Gate, in the southern part of the airport. A bus transfer is provided every 10 minutes to and from the main terminal building with a transfer time of 4 – 5 minutes.
- **Short-stay**: Four short-stay car parks are located adjacent to the terminal building. The 'orange' and 'red' zones are located in closest proximity to the airport, and are considered 'Short-Stay Premium'. The 'green' and 'blue' zones are a short walking distance from the terminal building and are considered to be 'Short-stay' and 'Short-stay Economy' parking respectively.

5.102 The current (end of 2017) approximate number of spaces per car park, are set out in Table 5.15.

Table 5.15: Car Parking at Stansted Airport

Car Park	Number of Parking Spaces
Long-stay Parking (including Meet and Greet storage)	21,950
Mid-stay Parking	5,100
Short-stay Parking	3,700
Total	**30,750**

5.103 'Meet & Greet' services are a relatively recent car parking product which were first introduced in 2013. They provide an additional option for passengers without a bus transfer, thus matching the convenience of taxi and 'drop off'. A key objective, alongside improved choice, is to reduce the percentage of 'Kiss and Fly' trips, and hence the total number of car trips, by providing an effective and attractive premium parking location at a lower cost. This is in line with the objectives set out in the 2015 SDP. These services operate as follows:

- **Meet & Greet**: Drivers park adjacent to the front of the terminal building; and unload passengers/bags and depart. The vehicle is transferred to a remote storage area by airport employees for the duration of the passenger's trip, and returned to the terminal pick up area upon the passenger's return. The service has seen significant success in matching the convenience of taxis and kiss and fly, whilst halving the number of vehicle trips from 4 per round air trip to two per round trip.

5.104 Meet and Greet cars are stored in various locations on the airport site depending on the time of year.

Car Park Usage

5.105 The use of the various car park and meet and greet facilities has been assessed by examining barrier movements. The distribution of traffic movements between facilities close to the terminal and the remote, mid stay and long stay car parks has been calculated from this data

to provide traffic routing. Across an average day, the following movements were identified (based on 2015 data).

Table 5.16: Passenger Movements – Car Use

Car Parking Service	Proportion of Entries per Day	Proportion of Exits per Day	Total Entries/Exits per Day
Long-stay Parking/Jet Parks	16%	13%	15%
Mid-stay Parking	15%	12%	14%
Short-stay Parking/Meet & Greet (Accessed from Terminal Road South)	25%	26%	25%
Kiss & Fly (using Express Drop off Lane)	44%	48%	46%
Total	100%	100%	100%

5.106 Table 5.16 illustrates that, at present, the largest proportion of trips per day are 'Kiss and Fly' to the terminal forecourt with 46% of total trips per day. The most popular car parks are Meet and Greet and short-stay parking which are located adjacent to the terminal building.

Offsite parking

5.107 There are very few authorised car parks off-site, but a number of unauthorised parking operations. These are subject to enforcement action by the relevant local authority. Both Uttlesford and East Herts' Local Plans have planning policies that restrict such parking and it is anticipated that no significant change in provision is likely.

5.108 Analysis of traffic movements associated with this limited number of car parking locations has not been included within the traffic modelling undertaken in the TA, as some of the operations are unlawful, and unquantifiable due to the unofficial nature of their operation. However, the traffic movements associated with such operations will have been included in observed base traffic flows on local roads and are hence also included in future traffic modelling.

Future Passenger Parking Capacity

5.109 The current intention is that additional parking will be concentrated on short stay provision and increased capacity for meet and greet services. This is considered by passengers as the most convenient offer and such increase in parking, combined with an increased proportion of UK passenger leisure trips, is anticipated to reduce the proportion of passengers using the Kiss and Fly services, and subsequently reduce the number of vehicle trips per air passenger trip.

5.110 Overall, the quantum of car parking spaces on-site is anticipated to increase from around 30,000 at present to between 45,000 – 55,000 at 43mppa. Provision for these spaces is made at a number of locations on site, as set out in the Land Use section of the SDP.

Employee Parking

5.111 There is currently a total of 2,230 car parking spaces for employees across the site. Several of the car parks are communal facilities for use by multiple employers. STAL control approximately 50% of all employee parking. These car parks are located adjacent to Enterprise House, the Cargo Area and Coopers End Road.

5.112 Communal provision is the most efficient form of provision, especially in the main employment areas. Staff parking charges apply for employee spaces within all STAL-controlled staff car parks. Employers pay for each staff parking permit; some employers pass this charge

on to their staff. Some staff parking has been moved to peripheral locations, with a bus transfer to the terminal area. This is designed to lessen the convenience of car use and increase the attractiveness of public transport services. Dedicated car-share spaces are provided close to Enterprise House as an incentive to encourage take up of the car-share scheme and reduce single car occupancy.

5.113 The Travel Plan and its associated incentives to encourage staff to use public transport has resulted in employee car parking numbers increasing at a lower rate, delivering a reduction in proportion of private car employee trips.

Future Employee Parking Capacity

5.114 The 2015 SDP sets out estimates of future staff demand. The aim is to provide a mix of large, communal sites, mainly to serve the terminal area where the greatest number of employees are based (including air crew). The number of employee spaces are expected to increase to around 5,000 as the airport expands, in locations set out in the Land Use Plan.

Road Accidents

5.115 Personal Injury Accident (PIA) data has been obtained from ECC for the roads in the vicinity of the airport, for the five year period between July 2012 and June 2017. Figure 5.5: shows the recorded five-year PIA data.

5.116 Analysis indicates that there has been a total of 73 personal injury accidents recorded near the airport between July 2012 and June 2017, of which 62 accidents have been recorded as slight and 11 as serious. No accidents have had a fatal outcome as shown in Table 5.17: below. None of the accidents involved pedestrians and only three accidents over the five-year period involved cyclists.

Table 5.17: Road Accidents by Severity (July 2012 – June 2017)

Year	Number of collisions			
	Slight	Serious	Fatal	Total
2012	5	0	0	**5**
2013	13	1	0	**14**
2014	19	2	0	**21**
2015	10	3	0	**13**
2016	11	2	0	**13**
2017	4	3	0	**7**
Total	**62**	**11**	**0**	**73**
Average/Year	10	2	0	12

5.117 Analysis of the accidents indicate the accident causation as set out in Table 5.18: .

Table 5.18: Road Accidents by Causation (July 2021 – June 2017)

Causation	Year						Total
	2012	2013	2014	2015	2016	2017	
Failed to look properly	2	5	12	11	3	3	**36**
Careless/reckless/in a hurry	0	2	8	4	3	0	**17**
Failed to judge other person's path or speed	0	2	8	4	3	0	**17**
Poor turn or manoeuvre	1	3	2	4	3	3	**16**
Loss of control	1	3	5	1	0	1	**11**
Sudden braking	0	1	3	1	2	0	**7**
Travelling too fast for conditions	0	1	2	2	1	0	**6**
Slippery road (due to weather)	0	1	3	1	1	0	**6**
Following too close	0	0	1	1	3	0	**5**
Exceeding speed limit	0	2	0	1	0	0	**3**
Collision from behind	1	0	1	0	1	0	**3**
Other - collision into oncoming vehicle	0	3	0	0	0	0	**3**
Impaired by alcohol	0	1	0	0	0	1	**2**
Disobeyed double white line	0	0	1	0	0	0	**1**
Junction overshoot	0	0	1	0	0	0	**1**
Driver using mobile phone	0	0	1	0	0	0	**1**
Junction restart	0	0	1	0	0	0	**1**
Failed to signal/misleading signal	0	0	1	0	0	0	**1**
Disobeyed Give Way or Stop sign or markings	0	0	0	1	0	0	**1**
Tyres illegal, defective or under inflated	0	0	0	1	0	0	**1**
Aggressive driving	0	0	0	1	0	0	**1**
Nervous/uncertain/panic	0	0	0	1	0	0	**1**
Spray from other vehicles	1	0	0	0	0	0	**1**
Inexperience with type of vehicle	0	1	0	0	0	0	**1**
Uncorrected, defective eyesight/Fatigue	0	1	0	0	0	0	**1**
Illegal turn or direction of travel	0	0	1	0	0	0	**1**
Inexperience of driving on the left	0	0	1	0	0	0	**1**
Illness or disability, mental or physical	0	0	0	1	0	0	**1**
Other - collision into stationary vehicle	0	0	0	0	0	1	**1**
Swerved	0	0	0	0	1	0	**1**
Total	**6**	**26**	**52**	**35**	**21**	**9**	**149**

5.118 As Table 5.18: illustrates, the following three causes were most common in the study area:

- failed to look properly;
- careless/reckless/in a hurry; and
- failed to judge other person's path or speed.

5.119 The statistics illustrate that all accidents recorded in the past five years are a result of driver/rider error. Such main causes are the norm across the UK and neither the number or pattern of these statistics are considered to have identified any particular accident pattern or safety problem.

Category Type

5.120 The accidents recorded between July 2012 and June 2017 can be broken down by vehicle type, as shown in Table 5.19: .

Table 5.19: Road Accidents by Vehicles Involved (July 2012 – June 2017)

Year	Category affected							Total affected
	Pedestrian	Cyclist	MC	Car	HGV	LGV	Bus	
2012	0	0	0	9	1	0	0	**10**
2013	0	0	2	22	2	0	0	**26**
2014	0	1	2	38	2	4	1	**48**
2015	0	1	1	19	2	3	1	**27**
2016	0	1	2	29	3	2	0	**37**
2017	0	0	2	12	1	0	1	**16**
Total	**0**	**3**	**9**	**129**	**11**	**9**	**3**	**164**
Average/Year	0	1	2	22	2	2	1	27

5.121 As Table 5.19: illustrates, none of the accidents recorded involved pedestrians. A total of 164 vehicles were involved in an accident between July 2012 and June 2017, with 129 involving cars. A total of three accidents involving pedal cycles were recorded, and three bus/coach accidents. 20 accidents involved goods vehicles (LGVs and HGVs).

Serious Accidents

M11 Junction 8

5.122 Analysis indicates that a total of eight serious accidents were recorded at M11 Junction 8 between July 2012 and June 2017, involving eleven casualties. A total of eight cars were involved, two LGVs, two HGVs and four motorcyclists. Table 5.20: sets out the proportion of accidents per vehicle type. The number of accidents is lower than may be anticipated for such a busy junction and probably reflects relatively low speeds associated with the signalised operation.

Table 5.20: Junction 8 Accidents (July 2012 – June 2017)

Date	Vehicles Involved		Number of Casualties	Injured Party		Cause
2013	Car	Car	1	Car Driver	-	Inexperience with type of vehicle / Poor turn or manoeuvre
2014	LGV	Car	2	LGV Driver	LGV Passenger	Careless/reckless/in a hurry / Failed to look properly / Failed to judge other person's path or speed / Travelling too fast for conditions
	Car	Motorcycle	1	Motorcyclist	-	Careless/reckless/in a hurry / Failed to look properly / Junction restart / Slippery road (due to weather)
2015	LGV	Motorcycle	1	Motorcyclist	-	Failed to look properly / Failed to judge other person's path or speed / Exceeding speed limit
2016	HGV	Car	2	Car Driver	Car Passenger	Failed to look properly
2017	Car	HGV	2	Car Driver	Car Driver	Collision into stationary vehicle
	Car	Motorcycle	1	Motorcyclist	-	Failed to look properly
	Car	Motorcycle	1	Motorcyclist	-	Poor turn or manoeuvre

5.123 As Table 5.20: shows, the cause of the accidents was a result of driver/rider error. Four motorcyclists, four car drivers, a car passenger, LGV driver and LGV passenger were injured. The level of accidents has not been identified by the highway authorities as being particularly unusual at this very busy junction.

Priory Wood Roundabout

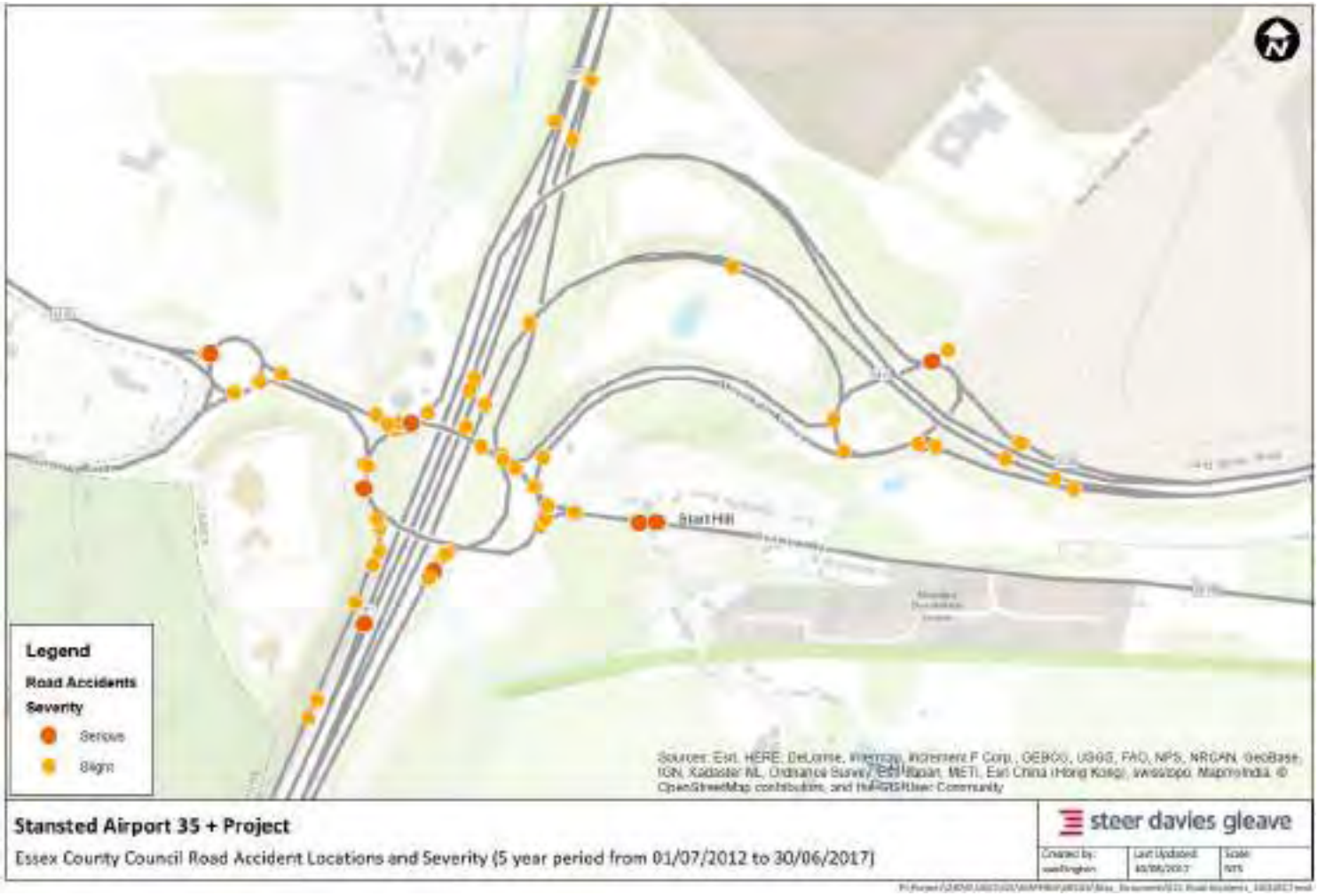
5.124 A total of two serious accidents occurred at this junction between 2012 and 2017, affecting a car and LGV, and a motorcyclist respectively. In each instance, the LGV driver and motorcyclist were seriously injured. The accidents were caused by following too closely and sudden braking in the first instance, and a slippery road (due to bad weather) in the second.

Birchanger Roundabout

5.125 One serious accident was recorded at Birchanger roundabout in 2015, affecting an LGV and a pedal cyclist. A pedal cyclist was seriously injured. The accident causation was a combination of the following:

- failure to look properly;
- careless/reckless/in a hurry; and
- poor turn or manoeuvre.

Figure 5.5: Road Accidents Map



6 Forecast Travel Demand

Introduction

6.1 This chapter presents the forecast air passenger and employee surface access travel demand for the future year airport capacity increase scenarios. It provides the forecasts of travel demand by all modes of transport for the 2028 Do Minimum (35mppa) scenario and the 2028 Development Case (43mppa).

Background

6.2 A baseline (2016) scenario was selected to assess the overall impact of the application upon existing conditions and to assess the relative impact of the application compared to the consented 35mppa scheme.

6.3 Without development, the airport would reach the maximum consented capacity of passengers by 2023, and remain constant at 35mppa for the following future years.

6.4 Under the application for a capacity increase to 43mppa, the passenger growth data forecast is for growth to continue after 2023 and 43mppa to be reached by 2028.

6.5 To assess the impact of the increase in passenger capacity at Stansted Airport from the approved 35mppa, the following assessment years were selected for analysis:

- **2016 Existing Baseline** – This reflects existing transport conditions around the airport.
- **2028 Do Minimum (35mppa) Scenario** – This is the forecast assessment year when a throughput of 43mppa is anticipated to be reached. Assessment of the 2028 future year with 35mppa allows for a direct comparison of the 43mppa application from permitted conditions.
- **2028 Development Case (43mppa) Scenario**– The assessment year when 43mppa is reached at Stansted Airport.

6.6 The travel demand associated with employees has also been assessed. The existing baseline travel demand is derived from the most recently published and validated 2015 Employee Survey.

6.7 Future year predictions have been developed taking into account increases in employees as the airport operations expand and future predicted employee mode of travel.

6.8 The following peak hours have been used, as agreed in principle with ECC, to inform the assessment of the impact of the passenger and employee capacity increase on the transport networks:

- Highway AM Peak: 07:00 – 08:00;
- Highway PM Peak: 17:00 – 18:00;

- Airport Passenger AM Peak Arrivals: 05:00 – 06:00; and
- Airport Passenger PM Peak Departures: 16:00 – 17:00.

6.9 The peak hours selected are representative of both the peak hours on the highway network and the airport peak passenger arrivals and departures. In order to derive future air passenger arrival and departure peaks, daily passenger profiles were produced for an 'average' day at the airport per assessment year. The profile illustrates that the peak arrival time for passengers in 2028 is 06:00 – 07:00, and conversely, the PM peak departure period is 16:00-17:00 accounting for the growth in passengers and uplift in flights occurring during the day.

Air Passenger Forecasts

6.10 Baseline passenger numbers have been derived from the 2016 STAL/ICF passenger outputs as discussed in Chapter 4 of this report. The baseline passenger numbers have been uplifted to represent future year assessment scenarios as presented in Table 6.1: .

Table 6.1: Total Passengers per Assessment Year

Scenario	Number of Passengers per annum
2016 Existing Baseline Scenario	24,273,000
2028 Do Minimum (35mppa)	35,000,000
2028 Development Case (43mppa)	43,000,000

Air Passenger Mode Share

6.11 Air passengers can be broken down into four different typologies as set out in Chapter 4. The future proportions of travel by each typology for the 2028 Do Minimum (35mppa) scenario and the 2028 Development Case (43mppa) are presented in Table 6.2: .

Table 6.2: Future Air Passenger Type Proportions

Assessment Year	Passenger Proportions (%)				Total
	UK Leisure	UK Business	Foreign Leisure	Foreign Business	
2016	54%	9%	32%	6%	100%
2023	55%	9%	30%	6%	100%
2028 (35mppa)	58%	9%	27%	6%	100%
2028 (43mppa)	58%	9%	27%	6%	100%

6.12 As Table 6.2: illustrates, variance in passenger type is anticipated for the future assessment years with a growth in UK Leisure passengers (from 54% to 58%) and a shift in Foreign Leisure (from 32% to 27%).

6.13 There has been a history of decreasing share of car use for travel to and from Stansted Airport. The most recent CAA survey data indicate that 50% of travel to the airport is by public transport; the highest for any major airport in the UK. Despite the historic trend of growth for the public transport mode shares, it is considered prudent for the purposes of assessing a robust case for potential highway impact, to assume that the current modal shares will remain constant.

6.14 Accordingly, the existing 2016 mode shares derived from the CAA passenger survey have been applied to forecast passenger data for the future year scenarios. Whilst overall mode share has been assumed to remain consistent during future year scenarios, there is expected to be a

very slight shift in future passenger mode shares based on the future passenger type variations as shown in Table 6.3: .

Table 6.3: Existing and Future Air Passenger Mode Split

Passenger Travel Mode Share	2016	2028 35mppa	2028 43mppa
Car Driver	15%	15%	15%
Car Passenger	22%	23%	23%
Taxis/Rentals	13%	13%	13%
Bus/Coach	23%	22%	22%
Rail	27%	26%	26%
Other	0%	0%	0%
Total	**100%**	**100%**	**100%**

Air Passenger Surface Access

Air Passenger Daily Demand

6.15 To forecast the quantum of passenger trips generated by each mode of transport in the 2028 (35mppa) and 2028 (43mppa) future year scenarios, the forecast number of passengers per annum has been applied to the passenger mode split presented in Table 6.3: and passenger type set out in Table 6.2: .

6.16 The anticipated total number of passengers travelling by the alternative modes for the existing baseline and two 2028 scenarios are set out in Table 6.4: .

Table 6.4: Annual Total Passenger Demand by Mode

Passenger Travel Mode	2016 Existing Baseline Scenario	2028 Do Minimum (35mppa) Scenario	2028 Development Case (43mppa) Scenario
Car	9,047,000	13,424,000	16,506,000
Taxi	3,169,000	4,548,000	5,588,000
Bus/Coach	5,529,000	7,773,000	9,539,000
Rail	6,481,000	9,188,000	11,286,000
Other	47,000	67,000	82,000
Total	**24,273,000**	**35,000,000**	**43,000,000**

6.17 To calculate the average number of daily trips, yearly passenger flows have been divided by 364.66; as the airport operates all year but with very limited flights and passengers on 25 December. The existing and predicted average daily trips, derived on this basis, are shown in Table 6.5: by mode.

Table 6.5: Average Daily Passenger Demand by Mode

Passenger Travel Mode	2016 Existing Baseline Scenario	2028 Do Minimum (35mppa) Scenario	2028 Development Case (43mppa) Scenario
Car	24,856	36,878	45,346
Taxi	8,706	12,494	15,351
Bus/Coach	15,188	21,355	26,205
Rail	17,804	25,243	31,005
Other	129	183	225
Total	**66,684**	**96,154**	**118,132**

Air Passenger Daily Profile

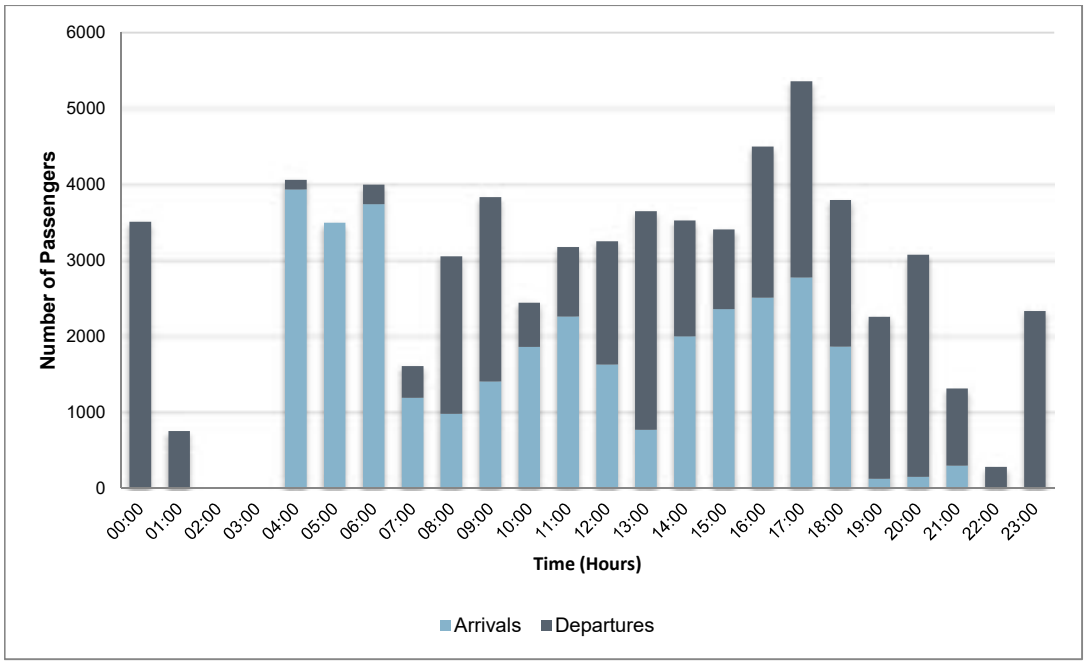
6.18 The daily profile of trips is predicted to alter as the airport operations expand. At present, for the first couple of hours of runway operations, there is a dominant flight departure peak with few arriving aircrafts. Similarly, there is a late evening flight arrivals peak. During the rest of the day there continues to be considerable variation in hourly throughput but with a more even distribution of arriving and departing flights.

6.19 As airport operations expand, as well as a general increase in flight numbers, there will be a more even distribution of flights throughout the day as runway capacity is taken up.

6.20 Analysis of traffic flows for Thremhall Avenue in comparison with the passenger flight profiles indicate that the surface access profile is typically offset by a preceeding two hours for flight departures and by one hour following flight arrivals. For the purposes of modelling, these offsets have been asumed for the both existing and future year analysis.

6.21 The 2016 baseline passenger surface access arrival and departure profile is presented in Figure 6.1: .

Figure 6.1: 2016 Existing Baseline Air Passenger Surface Access Arrivals and Departures



6.22 Applying the predicted increase in passenger number and future flight and passenger profiles to the two future year scenarios provides the basis of understaning future demand as shown in Figure 6.2 and Figure 6.3.

Figure 6.2: 2028 Do Minimum (35mppa) Scenario – Air Passenger Surface Access Arrivals and Departures

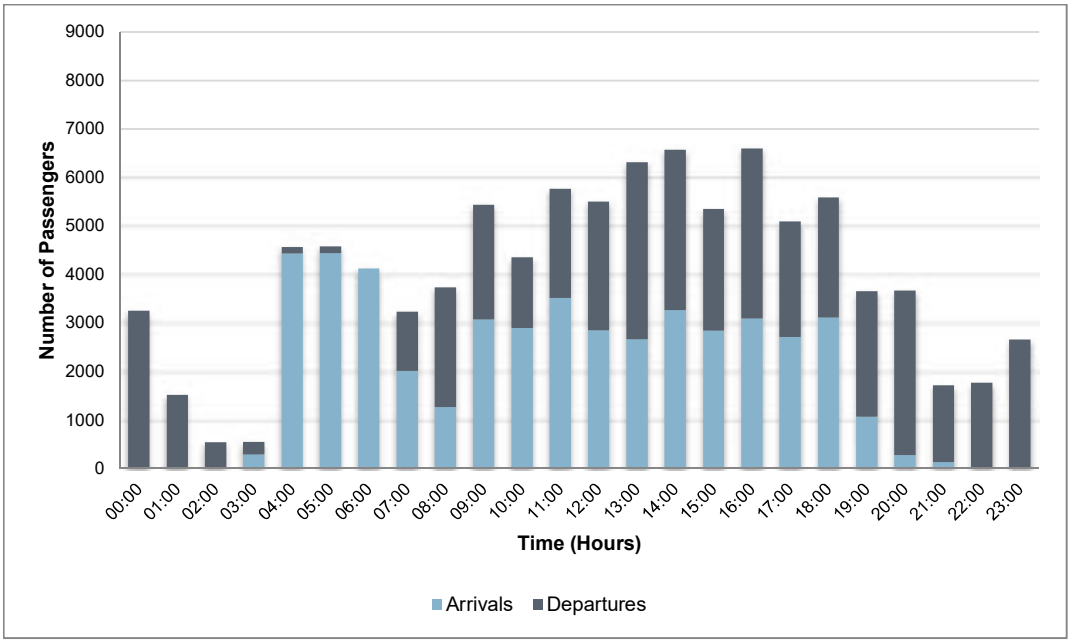
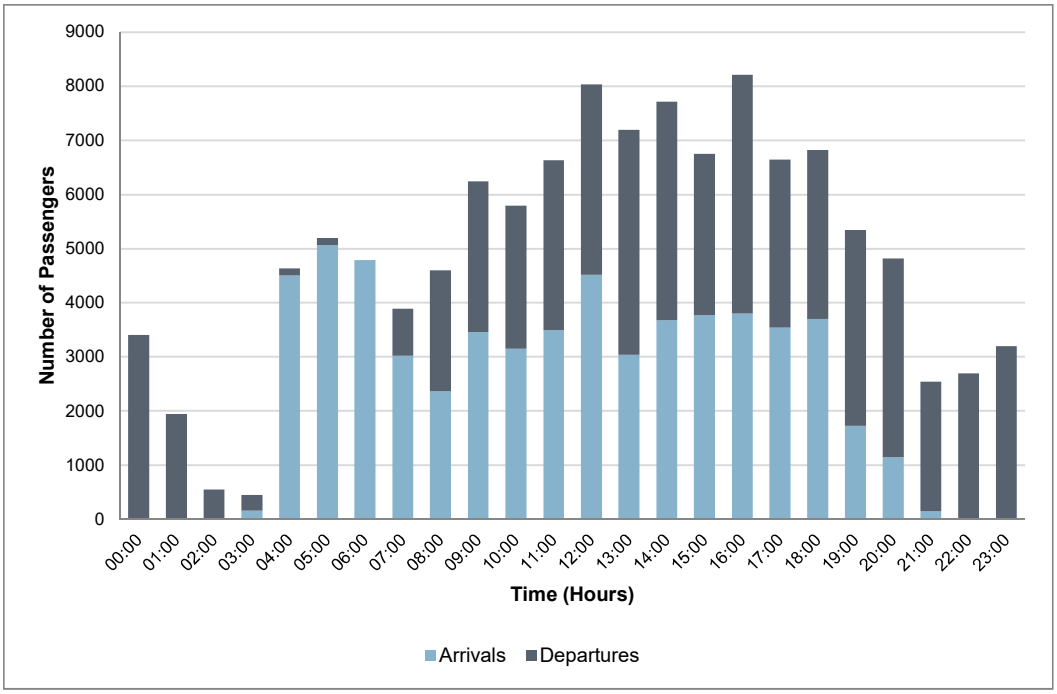


Figure 6.3: 2028 Development Case (43mppa) – Air Passenger Surface Access Arrivals and Departures



6.23 The passenger forecasts in Figure 6.1, Figure 6.2 and Figure 6.3 show that the highest volume of airport departures take place between 17:00-18:00 in 2016 and 16:00-17:00 in 2028. The highest volume of airport arrivals take place between 04:00-05:00 in 2016 and 05:00-06:00 in 2028.

Air Passenger Peak Hour Demand

6.24 Broken down by peak hour, the following tables Table 6.6 to Table 6.8 illustrate air passenger arrival and departure by mode and assessment year, based on the airport and highway network peaks.

Table 6.6: 2016 Existing Baseline Air Passenger Travel Demand

	07:00 – 08:00		17:00 – 18:00		05:00 – 06:00		16:00 – 17:00	
	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)
Car Driver	179	63	417	388	525	0	377	299
Car Passenger	265	93	618	574	778	0	559	442
Taxi	155	55	363	337	456	0	328	259
Bus/Coach	271	95	632	588	796	0	572	453
Rail	318	112	741	689	933	0	670	530
Other	2	1	5	5	7	0	5	4
Total	**1,190**	**419**	**2,776**	**2,581**	**3,495**	**0**	**2,511**	**1,987**

Table 6.7: 2028 Do Minimum (35mppa) Scenario – Air Passenger Travel Demand

	07:00 – 08:00		17:00 – 18:00		05:00 – 06:00		16:00 – 17:00	
	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)
Car Driver	303	184	408	359	667	21	465	527
Car Passenger	448	272	604	531	988	31	688	780
Taxi	263	159	354	311	580	18	404	458
Bus/Coach	459	278	618	543	1,012	32	704	799
Rail	538	326	724	637	1,186	37	825	937
Other	4	2	5	5	9	0	6	7
Total	**2,015**	**1,222**	**2,713**	**2,386**	**4,441**	**139**	**3,091**	**3,508**

Table 6.8: 2028 Development Case (43mppa) Scenario – Air Passenger Travel Demand

	07:00 – 08:00		17:00 – 18:00		05:00 – 06:00		16:00 – 17:00	
	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)
Car Driver	454	131	532	468	761	20	572	662
Car Passenger	671	194	787	692	1,126	30	846	980
Taxi	394	114	462	406	661	18	497	575
Bus/Coach	687	199	806	709	1,153	31	867	1,004
Rail	806	233	945	831	1,352	36	1,016	1,177
Other	6	2	7	6	10	0	7	9
Total	**3,018**	**872**	**3,539**	**3,111**	**5,064**	**136**	**3,804**	**4,407**

Employee Forecasts

6.25 Optimal Economics has supplied the current and forecast airport employee totals.

6.26 Table 6.9: outlines the number of employees at the airport for the 2016 baseline and future scenarios, 2028 Do Minimum (35mppa) and 2028 Development Case (43mppa).

Table 6.9: Employee Population Forecasts for Stansted Airport

Year	Number of Employees
2016 Baseline	11,600
2028 Do Minimum (35mppa)	13,200
2028 Development Case (43mppa)	16,200

Employee Mode Share

6.27 The baseline modal split for employees has been forecast from information taken from the 2015 Employee Survey, as presented in Chapter 4. In contrast to air passenger travel, the future mode share for employees is anticipated to vary in the future scenarios in accordance with the targets outlined in Stansted Airport's 2015 SDP to reduce the number of single car occupancy trips for employees at Stansted Airport. The document sets out the expected growth at the airport, responsibilities and sustainable management strategies to make more efficient use of its existing runway. The target for employee private vehicle trips is to reduce single car occupancy for staff travel to no more than 65% by the end of 2019.

6.28 The airport actively manages staff travel initiatives and the current, highly effective ATP is frequently updated which promotes and informs employees of transport initiatives including staff travel discounts, public transport fares, routes and timetables, cycle routes to the airport, and the 'Airport Liftshare' scheme. There is an ongoing commitment to promote the staff ATP and with restricted staff parking provision it is reasonable to assume that the mode share for car usage will continue to fall in the future.

6.29 There has been a 23% reduction in employee car driver mode share between 2002 and 2015, representing, on average, a 1.8% reduction per year over the 13 years. Based on this evidence and to adhere with these aims and objectives of the SDP, a 10% reduction in car driver trips remains a realistic target and has been assumed between 2016 and 2028 (to illustrate a maintained reduction in car trips from 2019 onwards). All 10% of trips have been distributed to public transport modes.

6.30 The existing and future mode shares for employees at Stansted Airport are set out in Table 6.10: .

Table 6.10: Existing and Future Employee Mode Shares

Mode	2016 Existing Baseline Scenario	2028 Do Minimum (35mppa) Scenario	2028 Development Case (43mppa) Scenario
Car Driver	65%	55%	55%
Car Passenger	6%	9%	9%
Bus/Coach	15%	19%	19%
Rail	12%	14%	14%
Motorcycle	1%	1%	1%
Taxi	0%	1%	1%
Pedal Cycle	0%	1%	1%
Walk	1%	1%	1%
Works bus/other company transport	0%	0%	0%
Other	0%	0%	0%
Total	**100%**	**100%**	**100%**

Any discrepancies are due to rounding.

6.31 As illustrated in Table 6.10: , a continued decline in the proportion of car drivers is forecast between 2016 and 2028.

Employee Surface Access Trips

Employee Daily Demand

6.32 To forecast the quantum of employee trips generated by each mode of transport in the 35mppa and 43mppa future year scenarios, the employee forecasts have been applied to the employee mode split presented in Table 6.10: .

6.33 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 0.5 has been applied to the total workforce to account for the likelihood of travelling on any given day, taking into account the following factors:

- only 6% of employees work more than 5 days out of 7;
- around 27% of employees are part time working four days or less per week;
- some airline staff will have overnight stays abroad; and
- leave and other non-working days would typical account for 1 in 10 days.

6.34 The daily total travel demands by mode are determined assuming that an employee will make two trips per day and hence the daily average total travel demand for the three scenarios is as set out in Table 6.11: .

Table 6.11: Existing and Future Employee Daily Travel

Mode	2016 Existing Baseline Scenario	2028 Do Minimum (35mppa) Scenario	2028 Development Case (43mppa) Scenario
Car Driver	7,468	7,403	9,086
Car Passenger +Taxi	763	1,422	1,745
Bus/Coach	1,784	2,545	3,123
Rail	1,334	1,558	1,912
Motorcycle	100	101	124
Other	151	172	211
Total	**11,600**	**13,200**	**16,200**

Employee Peak Hour Demand

The network and airport peak hour demand profiles for employees by all modes of transport are presented in Table 6.12: , Table 6.13: and

6.35 Table 6.14: for the 2016 Existing Baseline, 2028 Do Minimum (35mppa) and 2028 Development Case (43mppa) scenarios respectively.

Table 6.12: 2016 Existing Baseline Employee Travel Demand

	07:00 – 08:00		17:00 – 18:00		05:00 – 06:00		16:00 – 17:00	
	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)
Car Driver	495	28	33	575	279	16	68	487
Car Passenger	34	2	9	42	50	0	3	35
Bus / Coach	37	6	12	60	170	0	19	44
Rail	71	2	14	63	21	0	35	35
Other	0	0	0	0	0	0	0	0
Total	**637**	**38**	**68**	**740**	**520**	**16**	**126**	**602**

Table 6.13: 2028 Do Minimum (35mppa) Scenario – Employee Travel Demand

	07:00 – 08:00		17:00 – 18:00		05:00 – 06:00		16:00 – 17:00	
	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)
Car Driver	491	28	33	570	277	16	67	483
Car Passenger	58	3	15	71	84	0	6	59
Bus/Coach	52	8	16	85	242	0	27	63
Rail	82	2	17	73	24	0	41	41
Other	0	0	0	0	0	0	0	0
Total	**684**	**41**	**81**	**799**	**627**	**16**	**142**	**646**

Table 6.14: 2028 Development Case (43mppa) – Employee Travel Demand

	07:00 – 08:00		17:00 – 18:00		05:00 – 06:00		16:00 – 17:00	
	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)
Car Driver	602	35	40	700	340	19	82	593
Car Passenger	71	4	18	87	104	0	7	72
Bus/Coach	64	10	20	105	297	0	34	78
Rail	101	2	21	90	30	0	51	51
Other	0	0	0	0	0	0	0	0
Total	**839**	**51**	**99**	**981**	**770**	**19**	**174**	**793**

Combined Peak Hour Demand

6.36 The combined passenger and employee, average daily demand for travel for the three scenarios is set out in Table 6.15: .

Table 6.15: Existing and Future Employee and Passenger Daily Travel

Mode	2016	2028 Do Minimum (35mppa)	2028 Development Case (43mppa)
Car/ Taxi	41,751	57,991	71,323
Bus/Coach	16,972	23,900	27,407
Rail	19,138	26,801	34,333
Other	422	662	1,269
Total	**78,283**	**109,354**	**134,332**

6.37 The peak hour demand profiles for passengers and employees by all modes of transport are presented in Table 6.16: , Table 6.17: and Table 6.18: for the 2016 Existing Baseline, 2028 Do Minimum (35mppa) and 2028 Development Case (43mppa) scenarios respectively.

Table 6.16: 2016 Existing Baseline – Combined Travel Demand

	07:00 – 08:00		17:00 – 18:00		05:00 – 06:00		16:00 – 17:00	
	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)
Car Driver	674	91	450	963	804	16	445	786
Car Passenger	299	95	626	616	778	0	562	477
Taxi	155	55	363	337	456	0	328	259
Bus/Coach	308	101	644	647	966	0	591	497
Rail	388	113	756	751	954	0	706	566
Other	2	1	5	5	7	0	5	4
Total	**1,827**	**456**	**2,844**	**3,320**	**3,965**	**16**	**2,637**	**2,588**

Table 6.17: 2028 Do Minimum (35mppa) Scenario – Combined Travel Demand

	07:00 – 08:00		17:00 – 18:00		05:00 – 06:00		16:00 – 17:00	
	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)
Car Driver	794	212	441	929	944	37	532	1,010
Car Passenger	506	275	618	602	988	31	693	839
Taxi	263	159	354	311	580	18	404	458
Bus/Coach	511	286	634	629	1253	32	732	862
Rail	620	328	741	710	1210	37	866	978
Other	4	2	5	5	9	0	6	7
Total	**2,699**	**1,263**	**2,794**	**3,185**	**4,984**	**155**	**3,233**	**4,154**

Table 6.18: 2028 Development Case (43mppa) Scenario – Combined Travel Demand

	07:00 – 08:00		17:00 – 18:00		05:00 – 06:00		16:00 – 17:00	
	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)	Inbound (Air Depart)	Outbound (Air Arrival)
Car Driver	1,056	166	572	1,167	1,101	40	654	1,255
Car Passenger	743	198	805	779	1,230	30	853	1,053
Taxi	394	114	462	406	661	18	497	575
Bus/Coach	752	209	826	813	1,450	31	900	1,081
Rail	907	235	966	920	1,382	36	1,066	1,227
Other	6	2	7	6	10	0	7	9
Total	**3,857**	**922**	**3,638**	**4,092**	**5,834**	**155**	**3,978**	**5,200**

6.38 The combined forecast show that car driver trips form the largest quantity of trips made in the AM and PM peak periods.

7 Highway Impact Assessment

Introduction

7.1 This chapter focuses on the surface access travel demand and impact upon the strategic and local highway network. The highway impact assessment takes on board comments raised by ECC and HE during the pre-application process and, where required, changes have been made to the methodology and approach.

7.2 This chapter provides a summary of the methodology used to determine the highway impact assessment and then presents the traffic impact during the highway network peak hours and the airport peak hours of operation.

Methodology

Data sources

7.3 As set out in Chapter 4, private vehicle trips account for 50% of passenger trips per annum. Increased passenger throughput at Stansted Airport will result in an uplift in passenger and employee trips on the external highway network. The extent of this traffic impact has been calculated based on the following:

- **Traffic Survey Data**: Daily observed traffic flows have been derived from the following sources and have been factored up to a common 2016 baseline to better understand the existing traffic conditions within the local highway network:
  - Highway England TRIS data traffic counts have been used for AADT 2016 baseline data for A120 West and East of the Airport and for M11 north and south of J8.
  - DfT traffic count database (www.dft.gov.uk/traffic-counts) – used to provide a more detailed and reliable breakdown of vehicle types to complement the TRIS data.
  - ECC supplied traffic counts (2013 – 2017): Additional 'local borough' ATCs have been derived from ECC to account for localised roads around Stansted Airport.
  - 2015 on-airport road ATC and MCC traffic surveys supplied by Intelligent Data Collection.
- **Mode Shares:** The latest passenger survey carried out by the CAA (2016) was interrogated to establish the existing mode share for air passenger trips. The 2015 Employee Survey was used to establish employee mode shares.
- **Vehicle Occupancy:** A car occupancy of 1.6 was applied to car passengers based on the outputs from the 2016 CAA passenger survey.
- **Place of Origin:** Passenger and Employee place of origin has been used to inform the assignment of vehicle trips to the strategic and local highway network. This information was derived from passenger origin-destination data from STAL (2015/16) and the 2015 Employee Survey.

7.4 The data above helps to provide a robust representation of existing and future traffic flows. In order to assess the relative impact of the proposed application compared to existing and consented conditions, analysis has been undertaken for each of the assessment scenarios:

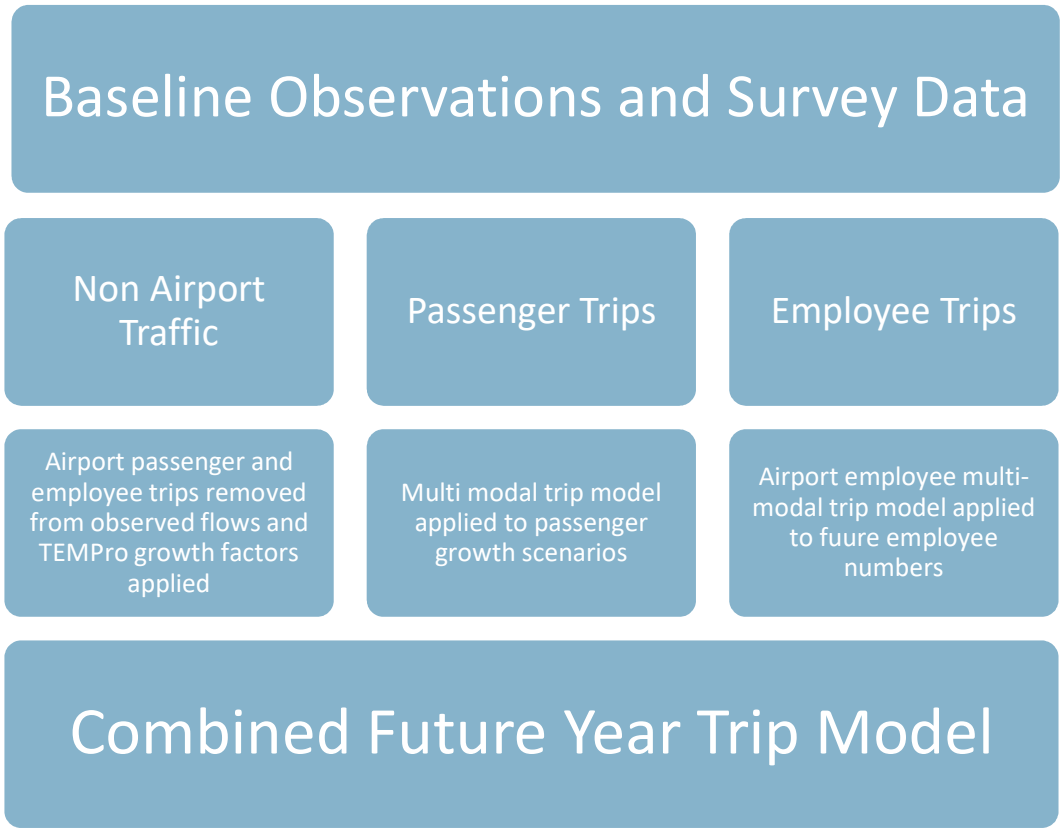
- **2016 Baseline** – This reflects existing traffic conditions around Stansted Airport.
- **2028 Do Minimum (35mppa) Scenario** – An assessment of traffic impact assuming the existing passenger cap of 35mppa remains in place.
- **2028 Development Case (43mppa) Scenario** – The same assessment year, but with 43mppa.

Traffic Growth

7.5 To determine future non-airport traffic growth (i.e. background growth associated with housing delivery and general growth on the local and strategic road network) TEMPro (Version 7.2) has been used to factor up the survey information derived from HE, DfT, ECC and Intelligent Data Collection. TEMPro v7.2 is a tool for viewing National Trip End Model forecasts published by the Department of Transport. TEMPro v7.2 considers local planning data, including assumed housing allocations, to provide local traffic growth projections.

7.6 Uttlesford specific TEMPro v7.2 growth rates have been adopted to reflect future predicted local housing and employment. These factors have been applied to the traffic flows on local road calculated as not being associated with the airport. The predicted growth in traffic associated with alternative assumptions for the future operation of the airport have then been added to this background growth.

Figure 7.1: Future Year Traffic Modelling Process



7.7 Table 7.1: sets out the TEMPro v7.2 growth factors which have been applied to the various data sources to predict future traffic levels. Full details of the TEMPro calculations are provided at **Appendix E**.

Table 7.1: TEMPro v7.2 Growth Factors

Growth Years	TEMPro v7.2 Growth Factor
2013 to 2016	1.0615
2014 to 2016	1.0409
2015 to 2016	1.021
2017 to 2016	0.985
2016 to 2023	1.1172
2016 to 2028	1.1782
2016 to 2033	1.2222

7.8 For the 2028 analysis, the 'With Airport' and 'Without Airport' trips also account for predicted additional trips from Northside, a local plan allocated site within the airport, that has been included as cumulative development in addition to the TEMPro growth factors that also include new local housing and employment.

Daily Traffic Flows

7.9 Analysis was undertaken for the two assessment scenarios to produce AADT flows (24 hour, 18 hour and 16 hour) for an extensive external road network. The peak hour analysis has been further assessed for the immediate road network in accordance with the agreed scoping for the TA.

7.10 The AADT flows have also been used for the purposes of the air quality and road traffic noise impact assessments. They provide a robust indicator of traffic impact on the wider strategic study area to determine which links and junctions are likely to experience the greatest impact.

Peak Hour Traffic Flows

7.11 Peak hour analysis of the strategic and local road network is important to determine the impact of the growth in passengers upon the existing road and junction capacities to ensure that the road can support the growth in traffic anticipated.

7.12 The peak hours selected are to representative of both the peak hours on the highway network and the airport peak passenger and employee arrivals and departures. These have been assessed separately in the following sections:

- highway network peak hours; and
- airport traffic peak hours.

Highway Network Peak Hours

7.13 The peak periods on the highway network reflect typical commuter travel patterns, where persons typically work between 09:00-17:00, and therefore travel in the intervals preceding and following their working hours. Analysis of the four-hour AM and PM peak periods (06:00 – 10:00 and 15:00 – 19:00 respectively) was undertaken to determine the AM and PM highway network peak hours in the study area. This approach was requested and agreed by ECC.

7.14 The analysis is based on the ECC (2014) data that has been used for the M11 J8 modelling, grown using TEMPro (v7.2) to the chosen assessment years. Increased passenger and

employee numbers were used to produce the future 2028 Do Minimum (35ppa) and 2028 Development Case (43mppa) scenarios. In order to maintain consistency with the ECC supplied data, the analysis was conducted using the ECC supplied matrix, which provided traffic movements to and from each of the following six locations:

- Birchanger Motorway Services;
- A120 (West);
- M11 (North);
- A120 (East);
- B1256; and
- M11 (South).

7.15 A summary of the total flows into the junction in each peak hour and for each assessment scenario are presented in Table 7.2: .

Table 7.2: Peak Period Flows – AM and PM Highway Peak Hours

Peak Period	Hour Interval	2016 Existing Baseline		2028 Do Minimum (35mppa)		2028 Development Case (43mppa)	
		Without Airport	With Airport	Without Airport	With Airport	Without Airport	With Airport
AM Peak	06:00 – 07:00	4,973	6,361	5,861	7,629	5,861	8,093
	07:00 – 08:00	**7,778**	**8,570**	**9,178**	**10,485**	**9,178**	**10,740**
	08:00 – 09:00	6,865	7,870	8,259	9,430	8,259	9,716
	09:00 – 10:00	6,283	7,401	7,405	9,158	7,405	9,727
PM Peak	15:00 – 16:00	6,620	7,720	7,802	9,559	7,802	9,834
	16:00 – 17:00	7,217	8,680	8,505	10,546	8,505	10,884
	17:00 – 18:00	**7,038**	**9,203**	**8,429**	**10,623**	**8,429**	**11,353**
	18:00 – 19:00	6,581	7,765	7,756	9,406	7,756	9,718

7.16 Based on Table 7.2: , the AM and PM peak hours on the highway network are:

- AM Peak: 07:00 – 08:00; and
- PM Peak: 17:00 – 18:00.

Airport Surface Access Peak Hours

7.17 Peak airport operations do not generally coincide with highway network peaks with a notable early morning peak of airport traffic arising significantly before 7:00 AM, associated with an early morning wave of aircraft departures. For highway impact purposes, it has been agreed with HE and ECC through the scoping process, that the key test is the highest two-way traffic movements to and from the airport that arise during the general highway network AM and PM peak periods.

7.18 Peak vehicle arrival and departures from the airport have been assessed based on the 'busy day' schedules for the airport in 2016 and forecasts for 2028 Do Minimum (35mppa) and 2028 Development Case (43mppa) scenarios, provided by ICF/STAL. Figure 7.2: , Figure 7.3: and Figure 7.4: illustrate the passenger and employee trips for each scenario, enabling the peak periods to be identified for further analysis.

Figure 7.2: 2016 Existing Baseline Air Passenger and Employee Arrivals and Departures

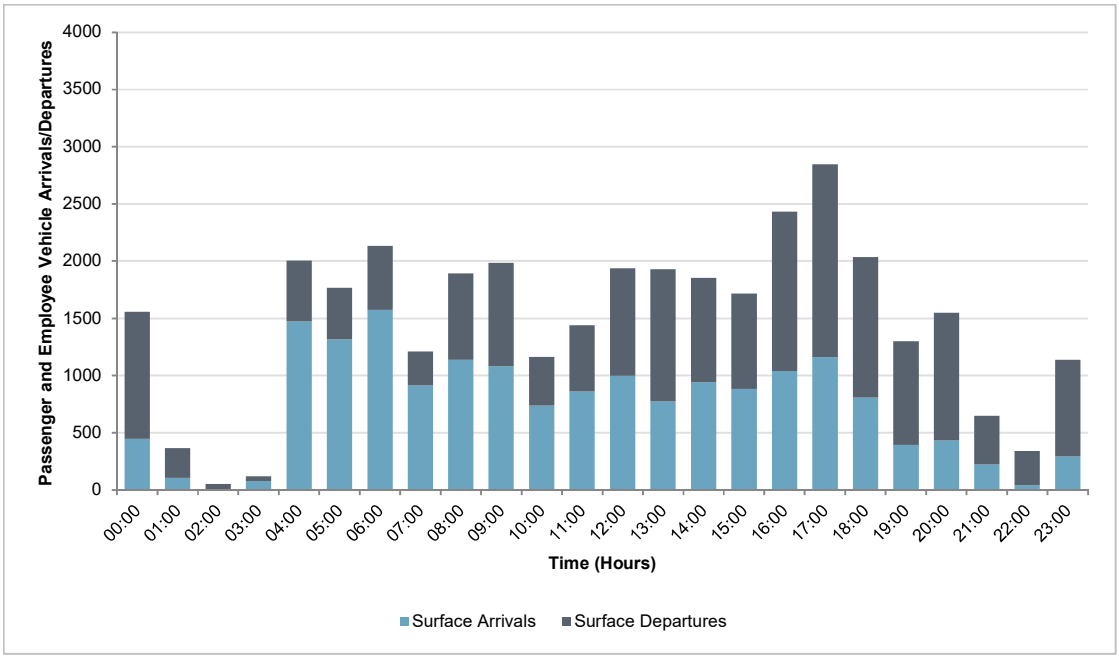


Figure 7.3: 2028 Do Minimum (35mppa) Scenario – Air Passenger and Employee Arrivals and Departures

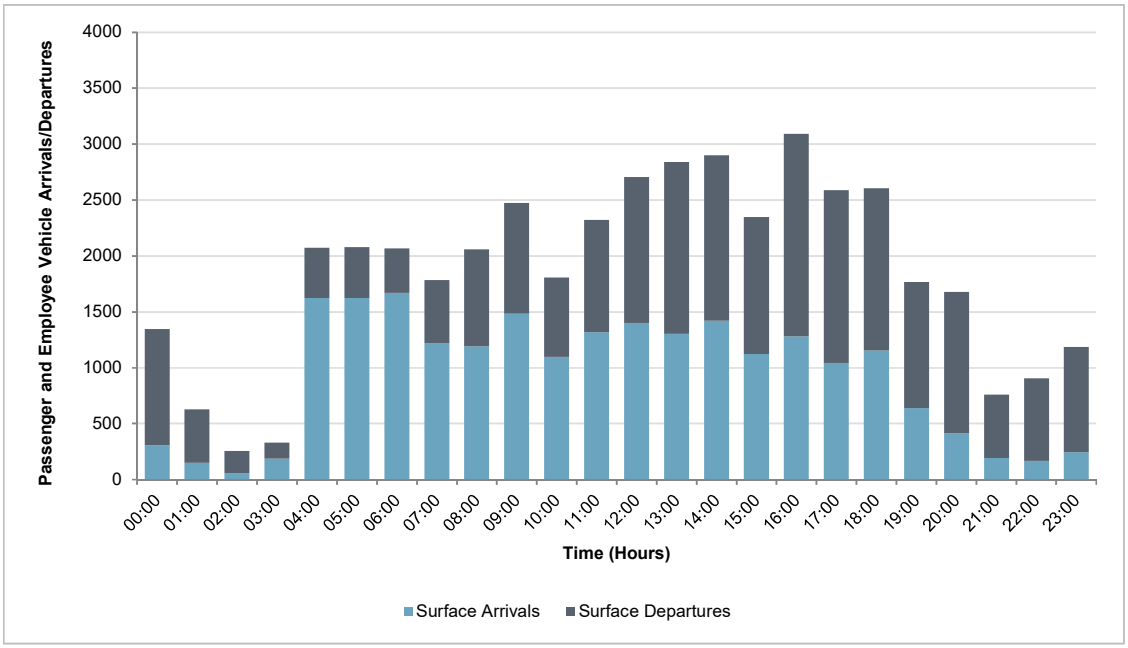
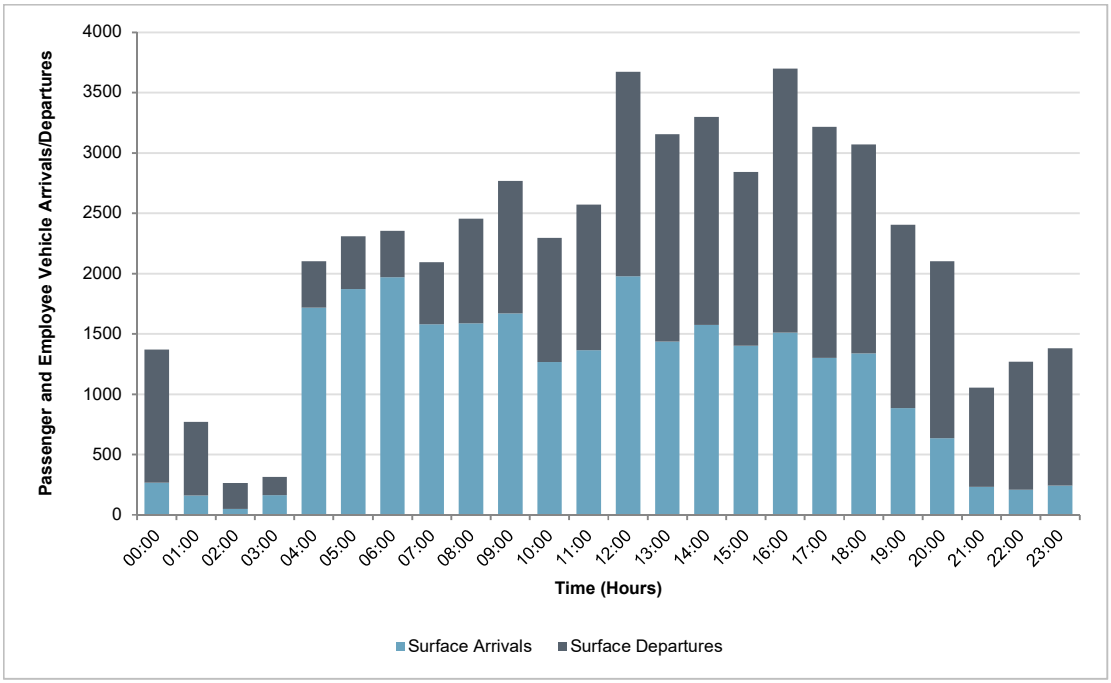


Figure 7.4: 2028 Development Case (43mppa) – Air Passenger and Employee Arrivals and Departures



7.19 The peak hours for airport surface trips are presented in Table 7.3: .

Table 7.3: Peak Surface Access Airport Arrivals and Departures

Assessment Scenario	Peak Airport Traffic
2016 Existing Baseline	17:00 – 18:00
2028 Do Minimum (35mppa)	16:00 – 17:00
2028 Development Case (43mppa)	16:00 – 17:00

Peak Network Demand

7.20 Peak hour analysis has been undertaken to compare the 'busiest hour' for surface airport arrivals and departures, combined with background traffic. The analysis was tested on Thremhall Avenue as it is the main road leading to the terminal building and carries little other background traffic.

7.21 The results are shown in Figure 7.5: , Figure 7.6 and Figure 7.7 per scenario.

Figure 7.5: Peak Hour Analysis – 2016 Existing Baseline

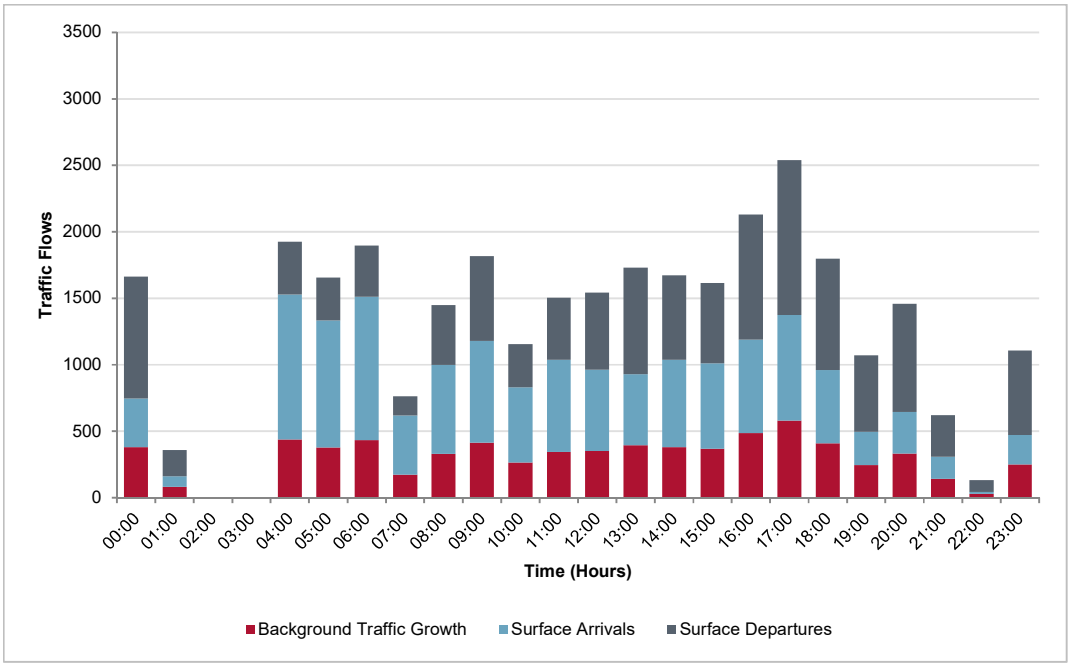


Figure 7.6: Peak Hour Analysis – 2028 Do Minimum (35mppa) Scenario

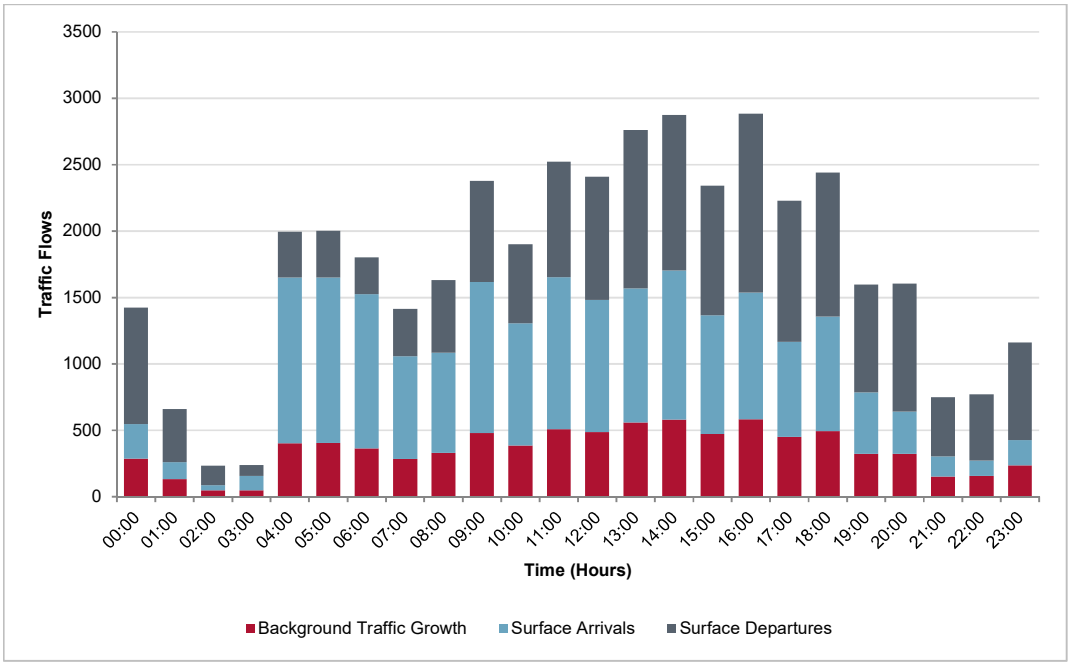
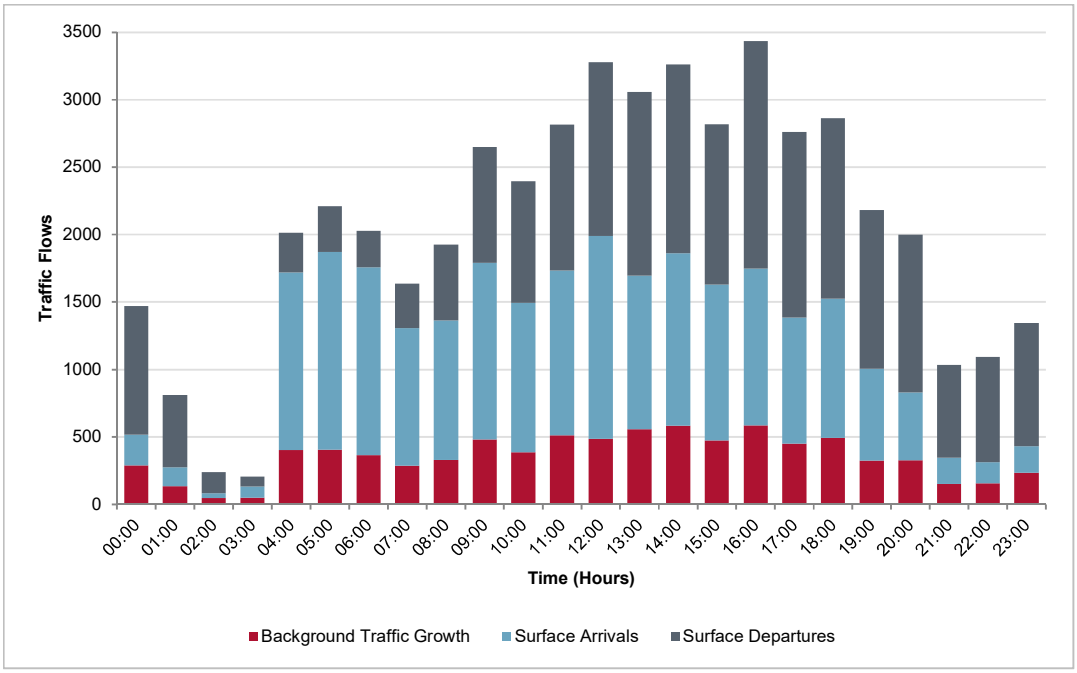


Figure 7.7: Peak Hour Analysis – 2028 Development Case (43mppa)



7.22 All analysis has been compared to ATC survey data on Thremhall Avenue (October 2015) to illustrate that in both the future scenarios, compared to the baseline, there is a change in daily profiles of surface airport arrivals and departures. In combination with the background traffic, the identified busiest hour two-way network peak periods for the alternatives scenarios are set out in Table 7.4: .

Table 7.4: Peak Network Hours (two-way flows)

Assessment Scenario	Peak Network Hour
2016 Baseline	17:00 – 18:00
2028 Do Minimum (35mppa)	16:00 – 17:00
2028 Development Case (43mppa)	16:00 – 17:00

Car Occupancy Factor

7.23 In order to calculate individual vehicle trips a car occupancy factor has been derived from 2016 CAA passenger survey. This sets out the proportion of persons travelling in private cars by group size. It is assumed that all respondents who answered '0' as their group size represent a single passenger trip (i.e. one car driver trip) to the airport. A group size of '1' is representative of the passenger surveyed plus one additional car passenger, a group size of '2' is representative of the passenger surveyed plus two additional car passenger and so on.

7.24 The proportion of car driver and car passenger trips (including taxi/rental) have been factored to obtain the number of vehicle trips per location by the following factors:

- Car Driver Trips: Division by a Factor of 1.
- Car Passenger Trips: Division by a Factor of 1.6.

7.25 An average car occupancy was derived for all car passenger journeys of 1.6 passengers per vehicle and has been agreed by ECC and HE and has been applied as a conversion from

passengers to car movements. A Car Occupancy Technical Note is provided at **Appendix F**, and includes further information on the analysis.

Air Passenger Distribution

7.26 A place of origin/destination has been determined for the passenger trips made to and from the airport. As this was not obtainable for foreign passengers, the total passenger trips have been broken down by the UK residences supplied by STAL based on 2016 survey data. This has been aggregated with ICF supplied passenger forecasts.

7.27 Origin and destination of passenger trips is a significant factor in determining the impact of traffic growth on the highway network. The future year predicted market share and trip purpose have hence been considered to determine distance travelled and mode of travel to and from Stansted Airport for the future assessment scenarios.

7.28 The resultant proportion of daily vehicle trips for passengers per scenario is presented in Table 7.5: .

Table 7.5: Air Passenger Origin and Total Daily Vehicle Trips per Scenario

Residence	2016 Existing Baseline	2028 Do Minimum (35mppa)	2028 Development Case (43mppa)
Inner London	2,527	3,684	4,780
Outer London NE	1,928	2,825	3,538
Outer London SE	357	526	641
Outer London SW	412	605	757
Outer London NW	2,046	3,002	3,743
Outer South East NE	5,999	8,838	10,721
Outer South East NW	1,040	1,536	1,850
Outer South East SW	636	941	1,119
Outer South East SE	1,132	1,672	2,000
Southwest & Wales	822	1,211	1,469
West Midlands	481	712	845
East Midlands	2,205	3,262	3,877
East Anglia	4,432	6,543	7,858
Rest of UK	715	1,058	1,255
Residence not reported	3	5	5
Foreign	0	0	0
Total	**24,734**	**36,420**	**44,458**

Any discrepancies are due to rounding.

7.29 As Table 7.5: illustrates, the largest proportion of passengers are from 'Outer South East NE' which is an aggregate of daily vehicle trips made from Essex and Hertfordshire, with 24% of total passenger vehicle trips. A high proportion of trips are also made from East Anglia (18%) and Greater London (30%).

Road Assignment

7.30 Place of origin of air passengers is applied to the highway network to consider the impact on specific road links. Passengers were assigned to the strategic road network according to direction of travel. For example, it is considered more likely that passengers from London would travel to Stansted Airport northbound on the M11 rather than on local A and B Roads through Bishop Stortford. The resultant road assignments are shown in Table 7.6: .

Table 7.6: Assignment of Air Passenger Vehicles to Road Network

Road	Proportion of Total Passengers (%)
M11 North of J8	28%
M11 South of J8	55%
A120 East of J8	12%
A120 West of J8	5%
Total	**100%**

7.31 The derived traffic flows for the passenger trips were assigned onto the road network using these proportions for the daily and peak hour periods.

Employee Distribution

7.32 Baseline place of origin and employee mode shares were derived from the 2015 Employee Travel Survey reported in the most recently published staff travel monitoring report. The assumptions made for passenger car occupancy (1.6 persons per vehicle for car passengers) were also used for employee trips. Employee place of residence is assumed to remain broadly unchanged. Table 7.7: illustrates the number of vehicle trips anticipated per day, per place of origin and assessment scenario.

Table 7.7: Employee Origin and Vehicle Trips per Scenario

Residence	Baseline 2016	2028 Do Minimum (35mppa)	2028 Development Case (43mppa)
Inner London	53	55	67
Outer London NE	423	428	526
Outer London SE	30	31	38
Outer London SW	14	15	19
Outer London NW	133	136	167
Outer South East NE	6,315	6,450	7,915
Outer South East NW	93	97	120
Outer South East SW	42	48	59
Outer South East SE	58	58	71
Southwest & Wales	13	16	20
West Midlands	17	19	23
East Midlands	44	45	55
East Anglia	638	644	790
Rest of UK	20	22	26
Residence not reported	0	0	0
Foreign	0	0	0
Total	**7,893**	**8,065**	**9,897**

Any discrepancies are due to rounding.

7.33 The vehicle trips presented in Table 7.7: have been assigned to the road network in accordance with the methodology used for passenger trips. The results are shown in Table 7.8: .

Table 7.8: Assignment of Employee Vehicles to Road Network

Road	Proportion of Total Employees
M11 North of J8	7%
Church Road	14%
A120 East of J8	33%
Parsonage Road	2%
A1250	4%
M11 South of J8	19%
A120 West of J8	14%
Bury Lodge Lane	7%
Total	**100%**

Any discrepancies are due to rounding.

7.34 Table 7.8: illustrates that the highest proportion of vehicle trips are anticipated from the east, along the A120 (33%). A small proportion of trips (2-7%) are derived from Bury Lodge Lane and Parsonage Road.

Highway Impact Analysis

Daily link Flows

7.35 Traffic analysis was undertaken for 2016 and the 2028 assessment years using the passenger and employee information set out above, to determine the impact of the proposed development on the local road network. Figure 7.8: shows the 2016 Existing Baseline daily traffic flows for the strategic study area. Figure 7.9: shows the percentage increase in traffic growth on the highway network between the 2016 Existing Baseline and 2028 Do Minimum (35mppa) scenario.

7.36 Figure 7.9: shows the future Do Minimum scenario, the increase in traffic flows arise both from the Airport growth and as a result of background growth in traffic. With the exception of roads immediately feeding the airport, the majority of the increase from the 2016 baseline relates to the background growth. The highest increase close to the airport is the 38% increase in daily traffic predicted on Thremhall Avenue.

7.37 Figure 7.10: shows a comparison in daily traffic flows between the 2028 Do Minimum (35mppa) scenario and the 2028 Development Case (43mppa) to determine the additional impact of an increase in passengers from 35mppa to 43mppa. The largest increases in daily vehicle flows is predicted for the roads nearest the airport. Thremhall Avenue is predicted to increase by 17.8%; the link towards to the A120 eastbound to increase by 13.4%; and the A120 (east of Junction 8) by 8.4%.

7.38 None of the predicted future year daily flows exceed the capacity of the individual links and no upgrades have been identified as being necessary to cater for the predicted increases. Full calculations and analysis are provided in **Appendix G**.

Figure 7.8: 2016 Existing Baseline AADT Flows

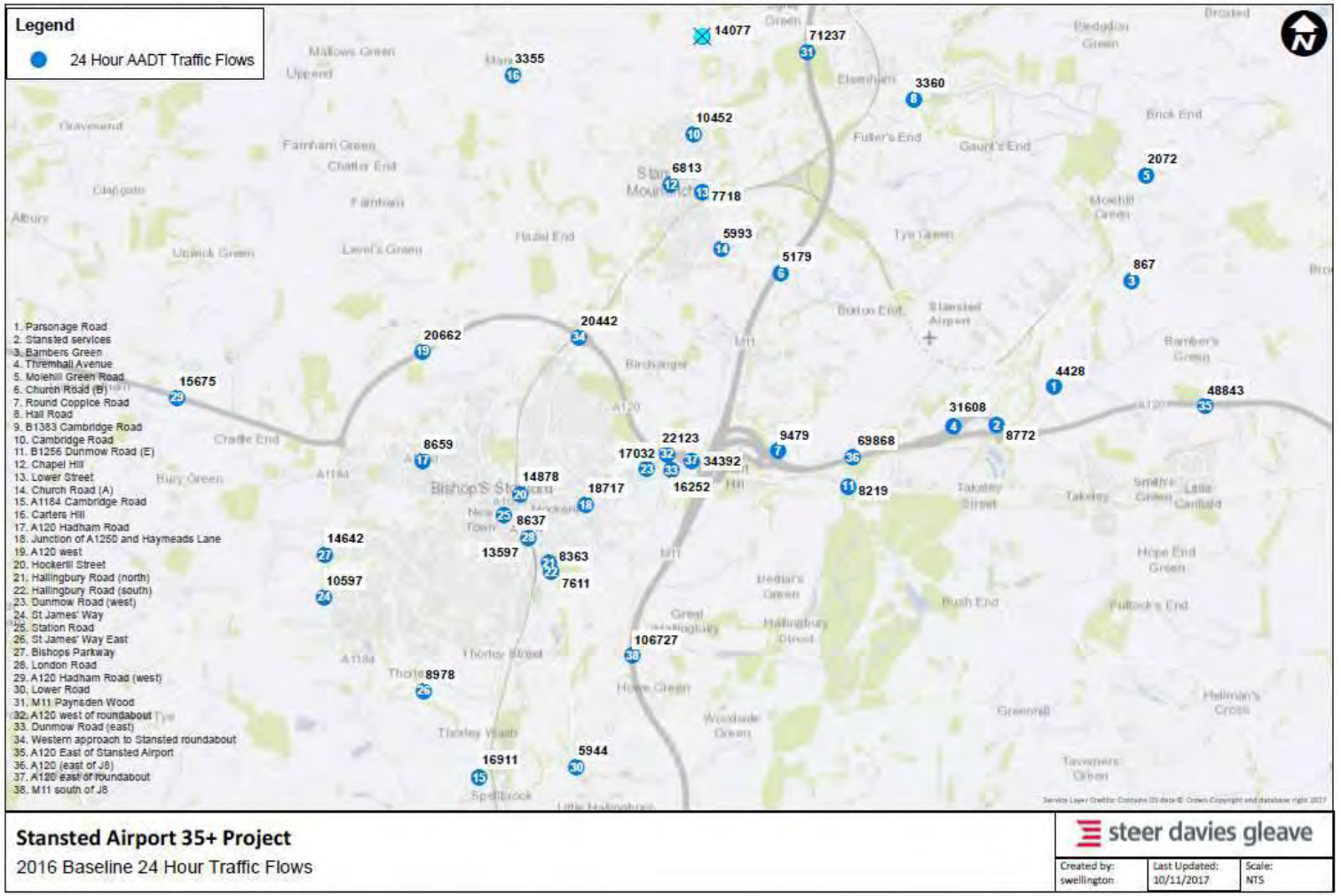


Figure 7.9: Percentage Traffic Increase between 2016 Existing Baseline and 2028 Do Minimum (35mppa) Scenario

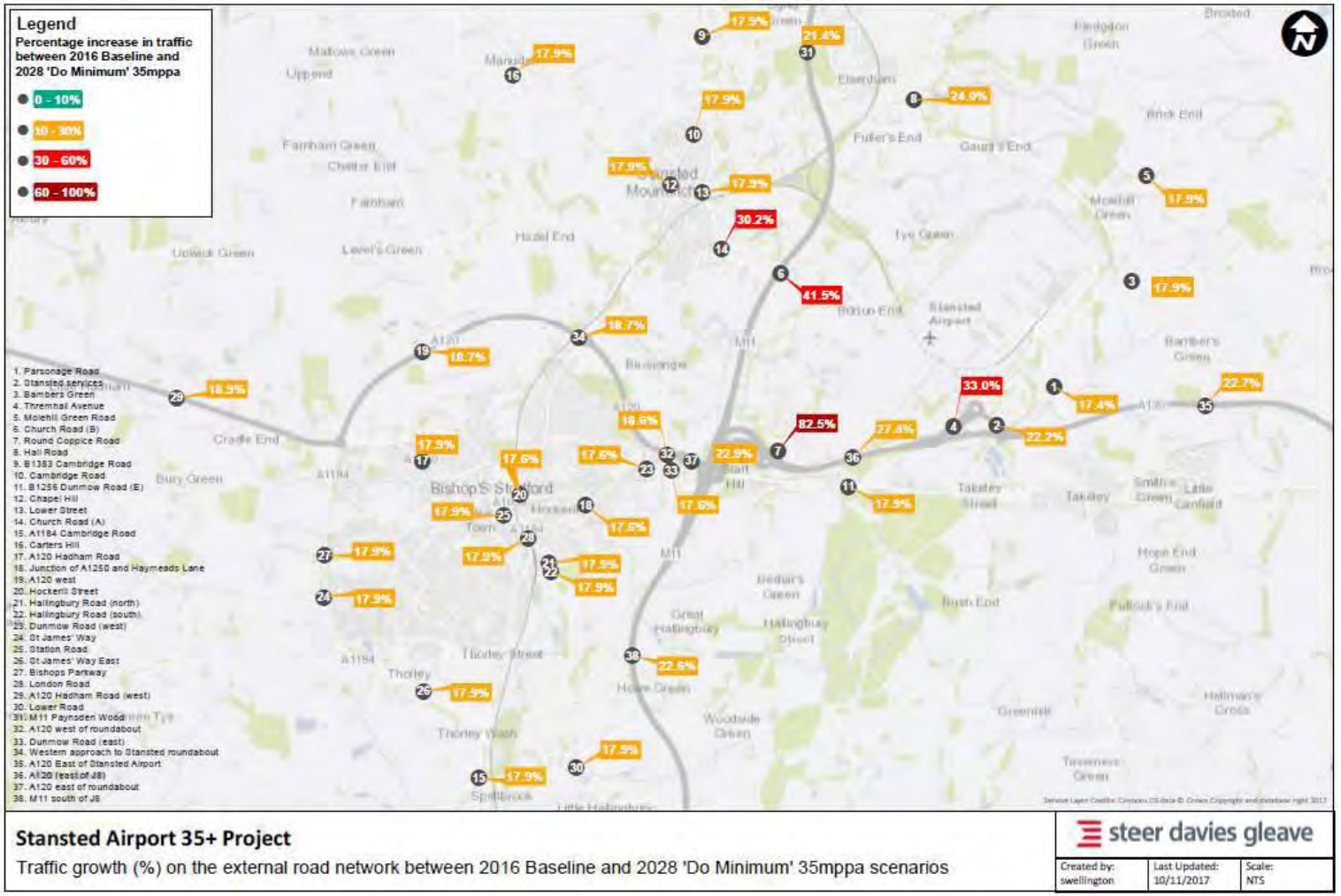
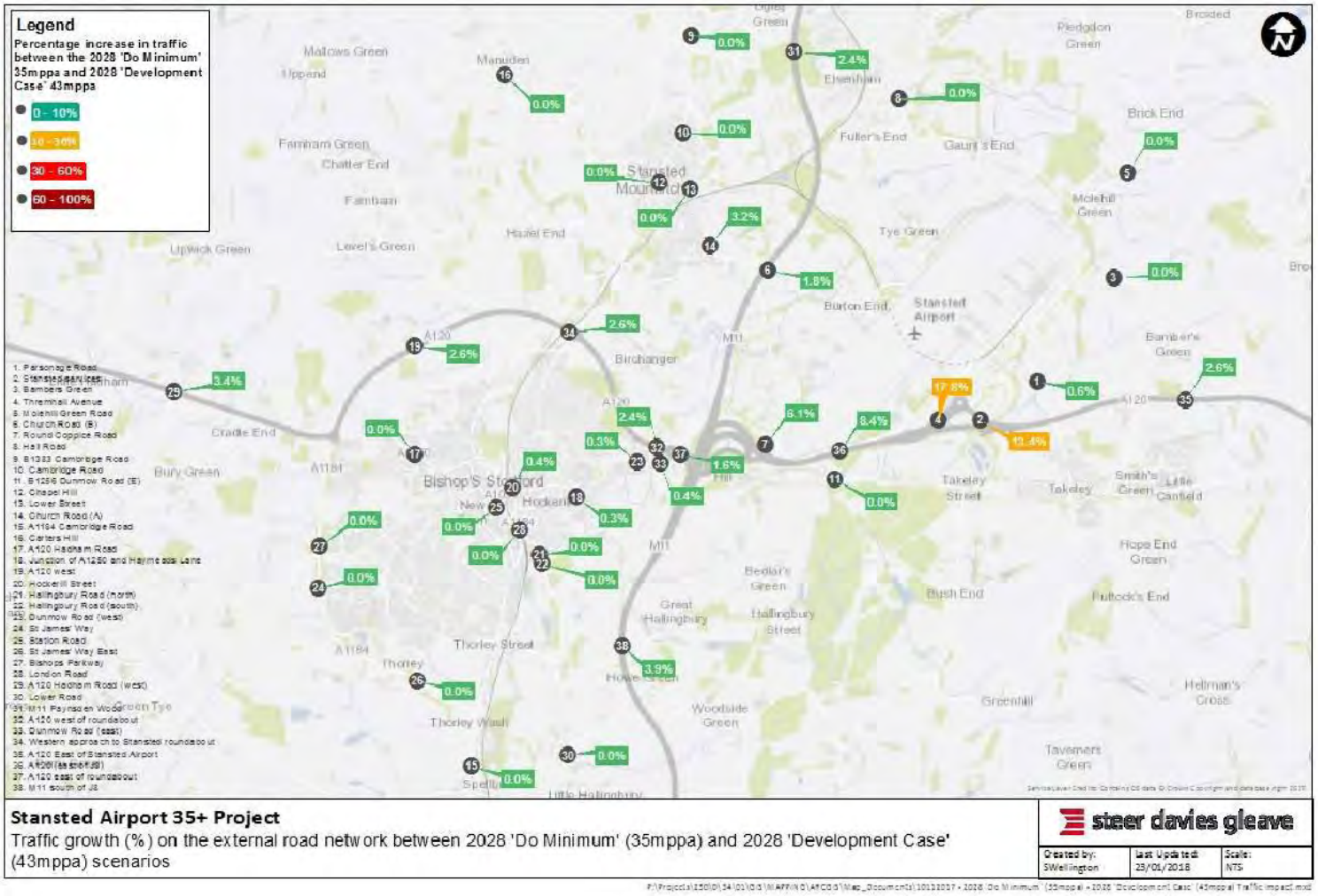


Figure 7.10: Percentage Traffic Increase between 2028 Do Minimum (35mppa) Scenario and 2028 Development Case (43mppa) Scenario



Highway Network: Peak Hour Analysis

7.39 The AM peak hour for the highway network surrounding the airport has been identified by Essex County council as being between 07:00 and 08.00. Similarly, the PM peak has been identified between 17:00 and 18:00.

7.40 Table 7.9: sets out the assignment of two-way trips for the AM peak period (07:00 – 08:00) for the three scenarios:

- 2016 Existing baseline;
- 2028 Do Minimum (35mppa); and
- 2028 Development Case (43mppa).

Table 7.9: Traffic Impact – AM Network Peak (07:00 – 08:00)

Link	2016 Existing Baseline	2028 (35mppa)	% Increase (2016 to 2028 35mppa)	2028 (43mppa)	% Increase (2028 35mppa to 2028 43mppa)
Parsonage Road	233	281	20.6%	282	0.3%
Stansted services	458	600	31.0%	624	0.4%
Bamber's Green	47	55	17.0%	55	0.0%
Thremhall Avenue	1,273	1,749	37.4%	1,954	11.7%
Molehill Green Road	139	163	17.3%	163	0.0%
Church Road (B)	332	361	8.7%	368	1.9%
Round Coppice Road	533	1,050	97.0%	1,069	1.8%
Hall Road	202	238	17.8%	238	0.0%
A120 (east of Stansted Airport)	2,916	3,610	23.8%	3,669	1.6%
A120 (east of M11 J8)	4,171	5,228	25.3%	5,433	3.9%

7.41 For the AM peak, as a result of background growth and the increased airport activity between the baseline and the 2028 Do Minimum (35mppa) scenarios, traffic is predicted to grow in the range of 8.7% and 97%. The highest increase being on Round Coppice Road (mainly associated with the traffic predicted to arise from the employment development at Northside and the opening of the new Harlow College).

7.42 In comparison, the predicted additional increase in AM peak traffic flows for the 2028 Development Case (43mppa) is experienced on Thremhall Avenue with an uplift of 11.7% of traffic compared to the 2028 Do Minimum (35mppa) scenario. All other links in the network have less than a 5% increase in traffic, and in some cases, no change. The higher growth on Thremhall Avenue is to be expected as this forms the main access route for passenger traffic to and from the terminal and associated car parks.

7.43 The same analysis was undertaken for the PM highway network peak (17:00 – 18:00) and the results are presented in Table 7.10: .

Table 7.10: Traffic Impact – PM Network Peak (17:00 – 18:00)

Link	2016	2028 (35mppa)	% Increase (2016 to 2028 35mppa)	2028 (43mppa)	% Increase (2028 35mppa to 2028 43mppa)
Parsonage Road	368	432	17.4%	435	0.7%
Stansted services	604	623	3.1%	687	10.3%
Bamber's Green	79	93	17.7%	93	0.0%
Thremhall Avenue	1,786	2,509	40.5%	2,958	17.9%
Molehill Green Road	180	212	17.8%	212	0.0%
Church Road (B)	479	637	33.0%	647	1.6%
Round Coppice Road	686	1,172	70.8%	1,227	4.7%
Hall Road	291	355	22.0%	355	0.0%
A120 (east of Stansted Airport)	3,725	4,379	17.6%	4,497	2.7%
A120 (east of M11 J8)	5,329	5,818	9.2%	6,266	7.7%

7.44 For the PM peak hour traffic is predicted to grow in the range of 3.1% and 70.8% between the baseline and the 2028 Do Minimum (35mppa) scenarios. The highest increase is again on Round Coppice Road (mainly associated with the traffic predicted to arise from the employment development at Northside and the opening of the new Harlow College).

7.45 In comparison, the predicted additional increase in PM peak traffic flows for the 2028 Development Case (43mppa) is experienced on Thremhall Avenue with an uplift of 17.9% of traffic compared to the 2028 Do Minimum (35mppa) scenario.

7.46 The additional overall impact of the proposed development (2028 Development Case (43mppa) is significantly less than the change from the baseline condition to the 2028 Do Minimum (35mppa) scenario.

Highway Network: Peak Hour Junction Impacts

Highway Network AM Peak

7.47 The percentage increase in traffic between the 2028 Do Minimum (35mppa) and the 2028 Development Case (43mppa) scenarios is shown in Table 7.11: .

Table 7.11: Percentage Increase in Junction Link Traffic Flows (07:00 – 08:00)

Road Link	% Increase	
	2016 Baseline to 2028 35mppa	2028 35mppa to 2028 43mppa
M11 Junction 8 Motorway Services	20%	3%
A120 West (Bishop's Stortford Bypass)	24%	1%
M11 North of Junction 8	18%	1%
A120 East of Junction 8	23%	3%
B1256 Dunmow Road	18%	0%
M11 South of Junction 8	25%	2%
Priory Wood West	51%	3%
Priory Wood East	17%	0%
Round Coppice Road South	50%	2%
Long Border Road	18%	0%
Round Coppice Road North	35%	2%

7.48 As Table 7.11: displays, the percentage increase in traffic between the 2016 Existing Baseline and 2028 Do Minimum (35mppa) scenario is significant, with 51% growth in traffic on Priory Wood West, 50% growth on Round Coppice Road South and 35% growth on Round Coppice Road North. Full calculations are provided at **Appendix G**.

7.49 In comparison, the percentage growth in traffic between the 2028 Do Minimum (35mppa) and the 2028 Development Case (43mppa) scenarios is minor, with less than 5% impact experienced on all links assessed. Relative to the percentage increase between the 2016 Existing Baseline and 2028 Do Minimum (35mppa) scenario, the proposed development is anticipated to have a minimal impact on junction link flows.

Highway Network PM Peak

7.50 Table 7.12: sets out the inbound traffic flows for the various entry points to M11 Junction 8 for the alternative scenarios for the PM network peak (17:00 – 18:00).

Table 7.12: 17:00 – 18:00 Junction Flow Analysis

Road Link	2016 Existing Baseline		2028 Do Minimum (35mppa)		2028 Development Case (43mppa)	
	To	From	To	From	To	From
M11 Junction 8 Motorway Services	413	402	464	451	504	490
A120 West (Bishop's Stortford Bypass)	1,794	1,732	2,185	2,061	2,239	2,097
M11 North of Junction 8	2,627	2,701	3,030	3,122	3,160	3,257
A120 East of Junction 8	1,609	1,295	1,850	1,502	2,032	1,723
B1256 Dunmow Road	584	605	688	713	688	713
M11 South of Junction 8	2,177	2,470	2,398	2,773	2,685	3,074
Priory Wood West	125	134	155	148	172	167
Priory Wood East	1,299	1,659	1,557	1,944	1,562	1,959
Round Coppice Road South	502	336	611	533	650	559
Long Border Road	206	144	243	170	243	170
Round Coppice Road North	504	402	581	537	619	563

7.51 The percentage increase in traffic between the 2016 Existing Baseline and the 2028 Do Minimum (35mppa) scenario, and the percentage change between the 2028 Do Minimum (35mppa) and the 2028 Development Case (43mppa) scenarios are presented in Table 7.13: .

Table 7.13: Percentage Increase in Junction Link Traffic Flows (17:00 – 18:00)

Road Link	% Increase	
	2016 Baseline to 2028 35mppa	2028 35mppa to 2028 43mppa
M11 Junction 8 Motorway Services	12%	9%
A120 West (Bishop's Stortford Bypass)	20%	2%
M11 North of Junction 8	15%	4%
A120 East of Junction 8	15%	12%
B1256 Dunmow Road	18%	0%
M11 South of Junction 8	11%	11%
Priory Wood West	17%	12%
Priory Wood East	18%	1%
Round Coppice Road South	37%	6%
Long Border Road	18%	0%
Round Coppice Road North	23%	6%

7.52 Table 7.13: illustrates that a significant growth in traffic is generated between the 2016 Existing Baseline and the 2028 Do Minimum (35mppa) scenario, with up to 37% growth in traffic experienced on Round Coppice Road South and 23% growth on Round Coppice Road North.

7.53 In comparison, the percentage growth in traffic between the 2028 Do Minimum (35mppa) and the 2028 Development Case (43mppa) scenarios is considerably less. A maximum 12% impact is experienced on two of the entries; Priory Wood West and the A120, East of Junction 8.

Airport Peak Hour Analysis

Airport Peak

7.54 As previously set out, the operations at eth airport result in unique peak periods that differ from normal observed highway peak periods. The airport peak hours have been identified from the 'busy day' passenger movement schedules for the airport and indicate that the peak hour for two-way air passenger and employee surface vehicle trips is expected to shift from 17:00 – 18:00 in 2016 to 16:00 – 17:00 in 2028 for both the 2028 Do Minimum (35mppa) and 2028 Development Case (43mppa) scenarios.

7.55 The time interval of 16:00 – 17:00 has therefore been selected to compare and analyse the impact upon local traffic conditions as a result of the change from Do Minimum (35mppa) and the 2028 Development Case (43mppa) scenarios. The two-way results are presented in Table 7.14: .

Table 7.14: Traffic Impact – Airport PM Peak (16:00 – 17:00)

Link	2016	2028 Do Minimum (35mppa)	% Increase (2016 to 2028 35mppa)	2028 Development Case (43mppa)	% Increase (2028 35mppa to 2028 43mppa)
Parsonage Road	310	371	19.7%	373	0.5%
Stansted services	556	698	25.5%	761	9.0%
Bamber's Green	73	86	19.2%	86	0.0%
Thremhall Avenue	1,707	2,706	58.5%	3,137	15.9%
Molehill Green Road	159	187	17.6%	187	0.0%
Church Road (B)	368	460	25.0%	469	2.0%
Round Coppice Road	591	1,158	95.9%	1,212	4.7%
Hall Road	254	299	17.7%	299	0.0%
A120 (east of Stansted Airport)	3,774	4,607	22.1%	4,717	2.4%
A120 (east of M11 J8)	5,398	6,684	23.8%	7,115	6.4%

7.56 Table 7.14: illustrates that the growth in traffic between the 2016 Existing Baseline scenario and the 2028 Do Minimum (35mppa) scenario is significant, due to a shift in peak surface departures to 16:00 – 17:00 in the future scenarios. A maximum 95.9% growth in traffic is experienced on Round Coppice Road, a result of existing low traffic volumes and the future Northside development (accessed from Round Coppice Road) and increased airport travel. 58.5% growth in traffic is experienced on Thremhall Avenue. Despite high percentage increases, absolute traffic volumes remain low and the growth in traffic is not anticipated to impact upon the road's operation.

7.57 In comparison, the highest impact on AM peak traffic flows in the 2028 Development Case (43mppa) is experienced on Thremhall Avenue with an uplift of 15.9% of traffic compared to the 2028 Do Minimum (35mppa) scenario. Additional traffic growth associated with the increase to the 2028 Development Case (43mppa) from the 2028 Do additional Minimum (35mppa) scenario is small.

Local Road Impact Assessment

7.58 In addition to the main road access points that feed the airport from the Strategic Road Network, there are two access points from local roads. The first is a small connector road that links from Parsonage Road to Coopers End Roundabout west of the terminal.

7.59 Parsonage Road is an unclassified road that leads to Takeley and the B1256 to the south and to Molehill Green and onwards towards Elsenham to the north. A September 2017 traffic survey at the mini roundabout and the Parsonage Road entry to the Coopers End Roundabout junction suggests that around 34% of the total traffic on the two sections of Parsonage Road east and west of the mini roundabout is associated with airport operations, with a similar proportion of traffic using the link from Parsonage Road onto the private airport roads at Coopers End Roundabout to continue through to the strategic road network.

7.60 The second connection of airport roads with local highway network is via Bury Lodge Lane to the north west of the airport. This road continues northwards indirectly to Elsenham and provides a connection to Church Road which passes over the M11 and connects through to Stansted Mountfitchet and the B1383.

7.61 Traffic flows on Bury Lodge Lane are of the order of 5,000 vpd immediately north of the airport car parks. Church Road carries around 6,000 vpd as it crosses the M11. The route is used as a convenient means of access to the M11 and A120 from Stansted Mountfitchet direction as well as a means of accessing the airport.

7.62 It appears reasonable to assume that the volume of airport related traffic on these local roads may increase in the same proportions as the strategic road network traffic flows. On this basis the airport related traffic on Parsonage Road is forecast to grow from 3,900 vpd to around 5,500 vpd (2028/35mppa) or 6,700 vpd (2028/43mppa) for the two assessed scenarios. Non-airport related traffic would be expected to grow by a factor of 1.17 in the same period. Future total traffic in 2028 would hence be expected to be of the order of 14,300 vpd (35mppa) or 15,600 vpd (43mppa).

7.63 The impact of airport growth is hence an increase in future traffic of around 1,300 vpd or 9%. Airport traffic on Bury Lodge Lane is a lower proportion than on Parsonage Lane and hence impact from growth will be lower.

7.64 In summary, it is acknowledged that a notable proportion of traffic on some local roads is associated with the airport and airport growth will be expected to increase traffic on these local roads. However, the total volume of traffic will remain low and well within capacity, and the degree of increase is below the 10% impact threshold previously identified.

Epping Forest SSSI Sensitivity Test

7.65 At the request of Natural England, a specific assessment of the potential impact on Epping Forest SSSI associated with 35+ Project (additional 8 million passengers) and the increase in vehicular traffic on the M25, Junction 26-27 link has been undertaken. The traffic analysis is provided at **Appendix H** and further details of the assessment are provided at ES Appendix 16.1: Preliminary Ecological Appraisal.

7.66 It is anticipated that a small number of vehicle trips originating in and around north-east London may be expected to access the airport using local and non-trunk roads that pass through Epping Forest. However, it is reasonable to assume that the same local roads would be used for access to the strategic road network even if these trips were diverted to other airports. Any such impact on these local roads is therefore considered to be neutral.

Busy Hour Junction Capacity Analysis

7.67 Detailed operation analysis has been undertaken at the following key junctions on the main strategic links as these have been identified as experiencing the greatest growth in traffic and having potential capacity issues:

- M11 Junction 8;
- Priory Wood roundabout; and
- Round Coppice Road roundabout.

7.68 The methodology for the peak hour assessment of these road links and junctions was discussed and agreed in principle with ECC and HE through the TA scoping process.

7.69 A copy of the peak hour turning movements at each junction are provided in **Appendix I**.

M11 Junction 8

7.70 ECC has developed a highway network model that encompasses Junction 8 and the surrounding main roads, in association with studies into Junction 7A of the M11 and a new link

to the north of Harlow. This modelling has been further used by ECC for a study into potential improvements at Junction 8 of the M11. It was agreed with ECC that in order to complete a robust test of the junction capacity at M11 Junction 8, SDG should use the ECC developed LinSig model for the future scenario testing.

7.71 The Adopted ECC modelling provides an assessment tool for both the existing junction layout arrangements and a proposed improvement scheme being promoted by ECC at M11 Junction 8, including widening of the M11 off-slips and lane marking changes. This scheme also includes replacing the current A120/A1250 roundabout to the west of Junction 8 with a staggered signalised crossroads.

7.72 It should be noted that both models were used "as provided" by ECC and that whilst signal timings were optimised as part of the SDG analysis, no attempt was made to verify any of the other data included in the model such as signal plans or saturation flows.

7.73 The peak hour traffic flows used in the model were derived by factoring existing count data based on growth forecasts, as previously discussed in this TA.

7.74 As the original count data for M11 Junction 8 did not include information on the composition of traffic, traffic counts for the surrounding junctions were examined, which showed that HGV's accounted for approximately 5% of existing traffic. Therefore, a factor of 1.05 was applied to all flows to convert them into PCU for use in LinSig.

7.75 It was also assumed that where dedicated slip roads for particular movements were available, traffic would use those slip roads rather than the main roundabout. Hence there is zero demand between the M11 South approach and the A120 East, as there are dedicated slip lanes for this movement.

7.76 At the request of ECC, a 2033 sensitivity test was also undertaken to examine the potential operation of the junction with a further 5 years of background traffic growth.

7.77 The table below shows a comparison between the total number of movements at each junction during the AM and PM peak hours, with the second row indicating whether the flows came from SDG or ECC. The totals are in Passenger Car Units (PCU) and only include vehicles which use the roundabout itself. Traffic on the main carriageway of the M11 or traffic using the dedicated slip roads between the M11 and the A120 is not included in this analysis.

Table 7.15: Model Total Demand Flow Comparison (PCUs)

Scenario	2014	2016	2021 Do Min	2021 Do Something	2028 35mppa	2028 43mppa	2036 Do Min	2036 Do Something
From	ECC	SDG	ECC	ECC	SDG	SDG	ECC	ECC
07:00-08:00	5139	5910	6465	6556	7229	7344	8578	8743
17:00-18:00	5537	6413	6830	6950	7448	7937	8825	8861

7.78 Table 7.15: shows that the SDG flows are comparable with the predicted flows from the ECC model.

7.79 A summary of the results from the modelling is presented below in Table 7.16: . These results show the maximum degree of saturation for each set of signals, after optimisation of the signal timings in the model. A value above 90% indicates that the signals are becoming congested and a value over 100% indicates that a junction entry is above capacity. The results from the LinSig modelling are provided at **Appendix J**.

Table 7.16: Maximum Degree of Saturation Results – M11 J8 Improvement Scheme

Signals	AM 07:00-08:00			PM 17:00-18:00		
	2016*	2028 35mppa	2028 43mppa	2016	2028 35mppa	2028 43mppa
M11 NB Offslip	77%	79%	82%	80%	92%	103%
Services	80%	79%	82%	84%	95%	103%
A120 W	78%	102%	114%	85%	94%	103%
M11 SB Offslip	85%	104%	117%	82%	84%	101%
A120E	59%	69%	73%	54%	67%	75%
Dunmow Road	71%	82%	83%	54%	62%	76%
M11 SB Exit/ Internal junction	91%	105%	100%	73%	85%	90%

*Based on the existing junction layout

7.80 Table 7.16: demonstrates that in 2016 Baseline the A120 West is currently over capacity in the PM peak.

7.81 The results show that even in the 2028 Do Minimum (35mppa) scenario the junction will be operating over capacity on some arms. In the 2028 Development Case (43mppa) the situation is worsened.

7.82 The Degree of Saturation value improves in the 2028 Development Case (43mppa) at M11 SB Exit/Internal Junction signals in the AM peak because the increased congestion at other junctions within the model is preventing the full traffic demand from reaching this location. Therefore, the flows are lower which leads to a slightly more balanced lane usage at this junction and hence higher capacity.

M11 J8 Further Improvements

7.83 Further testing with a modified junction model suggests that the following improvements could be made to allow the junction to operate at nil-detriment at 2028 Development Case (43mppa) when compared with the 2028 Do Minimum (35mppa) scenario:

- M11 NB Off-slip- extend the righthand flare (lane 4) of the M11 Off-slip
- Services:
  - Add an extra lane to the service station exit; and
  - change lane allocation to allow three exit lanes from main carriageway.
- A120 West:
  - Extend A120 entry lane flare to 75m and change lane allocation; and
  - Add additional lane on the M11 On-slip, connected to lane 3 of the circulating carriageway. Downstream merge to bring the three lanes down to the existing two.
- M11 SB Off-slip- extend lane 2 of the Off-slip back to the bridge on the approach
- A120 East Junction- Added extra lane to Dunmow Road, with downstream merge
- M11 Southbound On-slip- add additional lane to circulating carriageway (on the "cut through") for traffic heading for the M11 Southbound On-slip

7.84 Indicative plans showing these proposed works - *'M11 J8 Further Improvement Scheme',* are presented in **Appendix K**.

7.85 Table 7.17: shows how the modelling results would improve if these mitigation measures were implemented.

Table 7.17: Maximum Degree of Saturation – M11 J8 Further Improvement Scheme

Signals	AM 07:00-08:00		PM 17:00-18:00	
	35mppa under current M11 J8 Improvement Scheme	43mppa under M11 J8 Further Improvement Scheme	35mppa under current M11 J8 Improvement Scheme	43mppa under M11 J8 Further Improvement Scheme
M11 NB Offslip	79%	67%	92%	83%
Services	79%	81%	95%	90%
A120 W	102%	84%	94%	89%
M11 SB Offslip	104%	95%	84%	84%
A120E	69%	63%	67%	67%
Dunmow Road	82%	76%	62%	66%
M11 SB Exit/Internal junction	105%	98%	85%	82%

7.86 In the M11 J8 Further Improvement Scheme (43mppa) AM model, two sets of signals operate close to capacity. In the PM, although the junction operates within capacity, two signals are likely to experience operational issues.

7.87 In both peaks, the M11 J8 Further Improvement Scheme will allow the junction to operate better than is currently predicted for the 2028 Do Minimum (35mppa) scenario.

7.88 Whist there is a slight detriment to the Dunmow Road junction in the PM peak, the junction would still be well within capacity. It would be hard to increase capacity at this junction through physical changes due to the downstream capacity constraint of the M11 bridge. Similarly, there is a small detriment to the services junction in the AM peak, but the signals will still operate within capacity.

7.89 The cycle time at the proposed signalised junction between the A120 and the A1250 has been increased to ensure all traffic is able to access the M11 junction in order to allow a fair comparison. The results from the M11 J8 Further Improvement Scheme LinSig modelling are provided at **Appendix L**.

M11 J8 2033 Sensitivity Test

7.90 At the request of ECC, a specific sensitivity test was undertaken for M11 J8 to see how the junction would perform in 2033 under the different scenarios. The total flows used in the 2033 scenarios are shown in Table 7.18.

Table 7.18: Total Demand Flow – 2033 Sensitivity Test (PCUs)

Scenario	2028 35mppa	2028 43mppa	2033 35mppa	2033 43mppa
From	SDG	SDG	SDG	SDG
07:00-08:00	7229	7344	7472	7797
17:00-18:00	7448	7937	7674	8164

7.91 The results of the 2033 sensitivity test are displayed in Table 7.19.

Table 7.19: Maximum Degree of Saturation Results - 2033 Sensitivity Test

Signals	AM 07:00-08:00			PM 17:00-18:00		
	35mppa under current M11 J8 Improvement Scheme	43mppa under current M11 J8 Improvement Scheme	43mppa under M11 J8 Further Improvement Scheme	35mppa under current M11 J8 Improvement Scheme	43mppa under current M11 J8 Improvement Scheme	43mppa under M11 J8 Further Improvement Scheme
M11 NB Offslip	87%	92%	76%	102%	105%	85%
Services	108%	90%	81%	98%	102%	93%
A120 W	112%	117%	91%	101%	106%	94%
M11 SB Offslip	118%	121%	102%	100%	102%	87%
A120E	70%	70%	67%	70%	82%	70%
Dunmow Road	80%	83%	83%	66%	73%	69%
M11 SB Exit/Internal junction	105%	102%	100%	97%	105%	97%

7.92 The results demonstrate that under the permitted level of 35mppa with the current M11 J8 Improvement Scheme, several sets of signals at the junction will be over capacity in both peaks by 2033. As expected, if the airport growth reaches 43mppa, it will cause increases in the degree of saturation at the signals.

7.93 However, the M11 J8 Further Improvement Scheme previously described provides additional resilience in capacity and allows the junction to operate with a lower degree of saturation compared with the current M11 J8 Improvement Scheme. The Dunmow Road junction shows a very small increase in degree of saturation under the M11 J8 Further Improvement Scheme compared to the current M11 J8 Improvement Scheme, however this does not cause a capacity issue.

Round Coppice Road

7.94 An ARCADY model of the Round Coppice roundabout was created to assess the capacity of the roundabout against the predicted growth in traffic flows for both the 2028 Do Minimum (35mppa) and 2028 Development Case (43mppa) scenarios. The results from the ARCADY modelling are provided at **Appendix L.**

7.95 The results of the analysis are summarised in Table 7.20Table 7.20: . The table depicts the maximum ratio of flow to capacity (RFC) result for each scenario.

Table 7.20: Maximum RFC Results for Round Coppice Roundabout

Time Period	2016 Base	2028 35mppa	2028 43mppa
07:00-08:00	0.24	0.32	0.33
17:00-18:00	0.25	0.35	0.36

7.96 The results demonstrate that even under the 2028 Development Case (43mppa) demand, the roundabout will still be operating at less than 40% capacity and therefore will be able to accommodate the predicted demand easily.

Priory Wood Roundabout

7.97 An ARCADY model of the Priory Wood roundabout was also created and tested using the predicted future year traffic flows. The results from the ARCADY modelling are provided at **Appendix M**.

Table 7.21: Maximum RFC Results for Priory Wood Roundabout

Time Period	2016 Base	2028 35mppa	2028 43mppa
07:00-08:00	0.78	0.96	0.96
17:00-18:00	0.82	1.02	1.04

7.98 Table 7.21Table 7.21: shows that while the roundabout operates within capacity during the 2016 Baseline, it will be operating over capacity at the 2028 Do Minimum (35mppa) scenario. Increasing demand to 43mppa will have negligible impact on the performance of the junction.

7.99 The detailed outputs of the model show the capacity issues are arising from the demand for traffic going from the A120 Westbound Off-slip to the A120 link to M11 Junction 8. A potential mitigation measure would be to provide a dedicated lane for this movement which avoids the roundabout, therefore removing this dominant demand and improving the operation of the roundabout. Alternatively, tests using LinSig demonstrate that signalising just this arm of the roundabout would allow the junction to operate within capacity. An indicative plan showing the signalised arm, together with the LinSig results are provide at **Appendix M**.

Priory Wood Roundabout 2033 Sensitivity Test

7.100 At the request of ECC, a specific sensitivity test was undertaken for Priory Wood Roundabout to see how the junction would perform in 2033 under the different scenarios.

Table 7.22: Maximum RFC Results for Priory Wood Roundabout - 2033 Sensitivity Test

Time Period	2033 35mppa	2033 43mppa
07:00-08:00	0.99	1.00
17:00-18:00	1.06	1.08

7.101 The results in Table 7.22 demonstrate that the Development Case (43mppa) will have negligible change in the AM peak compared with the Do Minimum (35mppa) scenario. In the PM peak, there would be a minor increase in delay at 43mppa, however, the junction would already be operating over capacity at 35mppa in the PM peak. These potential capacity issues are associated with the modelled additional traffic included within the future year scenario (in particular the assumption of full emerging local plan allocation development at Northside) and are not related to the expansion of operations at the airport. It is considered that any mitigation measures would be appropriate associated with a planning permission for the development of Northside and not this application.

7.102 As demonstrated in the 2028 scenario, the junction would continue to operate within capacity at 2033 if the approach from the A120 Westbound Offslip was signalised, as it is this arm which is causing the junction to be over capacity.

8 Public Transport Impact Assessment

Introduction

8.1 This chapter provides an assessment of the impact which airport growth may have on public transport travel demand. It includes an analytical assessment of the impact on Stansted Express and CrossCountry rail services and a qualitative review of the impact on bus and coach services and infrastructure.

Rail

Demand

8.2 Analysis of the 2016 Existing Baseline rail loading data and the 2028 Do Minimum (35mppa) forecasts based on airport and background growth is presented in Chapter 4. To assess the impact on future rail capacity, the 3-hour AM and PM peak and daily rail demand has been used. A summary of the airport passenger and employee demand forecasts during these periods are presented in Table 8.1: and Table 8.2: respectively.

Table 8.1: Passenger Rail Demand

	AM Peak (07:00 – 10:00)		PM Peak (16:00 – 19:00)		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
2016 Baseline	964	1,330	1,932	1,754	9,002	9,002
2028 (35mppa)	1,691	1,609	2,372	2,225	12,788	12,788
2028 (43mppa)	2,351	1,567	2,938	2,831	15,711	15,711

Table 8.2: Employee Rail Demand

	AM Peak (07:00 – 10:00)		PM Peak (16:00 – 19:00)		Daily	
	Arrive	Depart	Arrive	Depart	Arrive	Depart
2016 Baseline	138	5	55	133	667	667
2028 (35mppa)	161	6	64	155	779	799
2028 (43mppa)	198	7	78	191	956	956

8.3 To ensure that the data accurately reflects the forecast rail passenger demand, the baseline 2016 rail demand has been compared to the combined 2016 train loading information provided by the TOCs.

8.4 The baseline 2016 rail demand forecasts indicate that 19,138 two-way rail trips associated with the airport occur daily. The loading data provided by the train operating companies

suggest that 22,130 two-way trips occur daily across all services arriving at and departing from the airport.

8.5 Although there is a slight discrepancy in daily two-way trips between both datasets, the data provided by the TOCs also captures those using Stansted Airport rail station to commute and for other purposes.

Distribution

8.6 There are three train services to and from Stansted Airport. These include the Stansted Express service to London Liverpool Street, AGA service to Cambridge and CrossCountry service to Birmingham via Cambridge and Peterborough.

8.7 To determine the airport related usage of each service, the likely distribution of air passenger and employee trips has been assessed. A place of origin for air passenger trips made to the airport has been obtained from STAL based on passenger trips in 2016. Place of origin information for employees has been derived from the 2015 Employee Survey (see Chapter 4).

8.8 The likely service/route distribution of rail trips has been assigned based on the quickest route to each output area for air passengers and employees using rail. A summary of the assumed rail distribution is presented in Table 8.3: . The distribution assumptions are contained in **Appendix N**.

Table 8.3: Rail Distribution – Based on Trip Origin

Rail Service	Distribution	
	Passengers	Employees
Stansted Express – London	87%	76%
Abellio Greater Anglia – Cambridge	4%	12%
CrossCountry	9%	12%
Total	**100%**	**100%**

8.9 To assess whether the proportions presented in Table 8.3: are appropriate, the quantum of daily departures from Stansted Airport via each service have been taken from the baseline 2016 rail data. A summary of the total daily departures by each service and resulting proportions is presented in Table 8.4: .

Table 8.4: Rail Distribution – Based on Service Utilisation

Rail Service	Daily Departures from Stansted	Proportion of Total Rail Trips
Stansted Express – London	10,011	89%
AGA – Cambridge	286	3%
CrossCountry	933	8%
Total	**11,230**	**100%**

8.10 The daily service utilisation proportions presented in Table 8.4: are similar to the service split assumptions for passengers presented in Table 8.3: . As airport passengers account for significantly more trips to the airport than employees, the rail distributions assumptions presented in Table 8.3: are considered to be appropriate and suitable for assessing future year demands.

Stansted Express

8.11 To determine the impact of growth on Stansted Express rail services, the 2028 Development Case (43mppa) additional airport passenger and employee rail demand has been assigned in accordance with the rail distribution assumptions presented above and added to the 2028 Do Minimum (35mppa) scenario.

8.12 The 3-hour AM and PM peak periods and daily trips have been assessed. The forecast hourly increases in trips from 35mppa to 43mppa have been assigned proportionately to each 15-minute service within the corresponding hour in accordance with the 2016 baseline load data provided by the TOCs.

8.13 The 2028 Do Minimum (35mppa) and 2028 Development Case (43mppa) predicted train loadings for Stansted Express services, show as a percentage of seating capacity and as a percentage of total capacity (including standing). The results are presented in Table 8.5: and Table 8.6: respectively. It should be noted that the Stansted Express services all have intermediate stops and the predicted maximum loading points are never at the airport but are consistently between Tottenham Hale and Harlow.

Table 8.5: Forecast Stansted Express Line Loadings (2028 Development Case 43mppa) – Seating Capacity

	Depart Liverpool Street - Stansted Airport			Depart Stansted Airport - Liverpool Street		
	AM Peak	PM Peak	Daily	AM Peak	PM Peak	Daily
2028 (35mppa)	16%	68%	29%	56%	26%	28%
2028 (43mppa)	23%	73%	34%	56%	32%	32%
% Increase	**7%**	**5%**	**5%**	**0%**	**6%**	**4%**

Table 8.6: Forecast Stansted Express Line Loadings (2028 Development Case 43mppa) – Total Capacity (incl. Standing)

	Depart Liverpool Street - Stansted Airport			Depart Stansted Airport - Liverpool Street		
	AM Peak	PM Peak	Daily	AM Peak	PM Peak	Daily
2028 (35mppa)	11%	48%	20%	39%	18%	19%
2028 (43mppa)	16%	51%	24%	39%	23%	22%
% Increase	**5%**	**3%**	**4%**	**0%**	**5%**	**3%**

8.14 The line loading forecasts presented in Table 8.5: indicate that there will be spare seating capacity on peak hour and daily Stansted Express services in both directions by 2028 in the Development Case (43mppa).

8.15 The increase in seating demand to capacity ratio between the 2028 Do Minimum (35mppa) and 2028 Development Case (43mppa) scenarios is below 8% in both directions for all time periods. Given both lines operate within capacity and show less than an 8% increase in demand to capacity ratio, the effects of the proposed development on Stansted Express rail services is considered minimal.

AGA Trains

8.16 Detailed analysis of future capacity on AGA services between the airport and Cambridge has not been conducted. These services operate hourly, outside peak periods and do not therefore attract commuters like the London Liverpool Street services.

8.17 The 2016 baseline daily line loadings accounted for 14% of available seats on services departing from Stansted Airport and 7% of available seats departing from Cambridge. In accordance with the service distribution assumptions, just 4% of all air passengers travelling by rail and 12% of all employees travelling by rail are expected to use this service. This equates to total additional 177 inbound daily passengers and 177 outbound daily passengers at the airport in the 2028 Development Case (43mppa). This will have a negligible impact on capacity on this line.

CrossCountry

8.18 To determine the impact on CrossCountry rail capacity, the 2028 Development Case (43mppa) additional airport passenger and employee rail demand has been assigned in accordance with the rail service distribution assumptions presented above and added to the 2028 Do Minimum (35mppa) scenario.

8.19 The 3-hour AM and PM peak periods and daily trips have been assessed. The forecast hourly increase in trips from 35mppa to 43mppa has been assigned to the corresponding hourly service.

8.20 The 2028 Do Minimum (35mppa) and 2028 Development Case (43mppa) predicted train loadings for CrossCountry services, shown as a percentage of seating capacity and as a percentage of total capacity (including standing), are presented in Table 8.7: and Table 8.8: respectively.

Table 8.7: Forecast CrossCountry Line Loadings (2028 Development Case 43mppa) - Seating Capacity

	Arrive at Cambridge – from Stansted Airport			Depart from Cambridge - to Stansted Airport		
	AM Peak	PM Peak	Daily	AM Peak	PM Peak	Daily
2028 (35mppa)	46%	63%	34%	39%	91%	41%
2028 (43mppa)	46%	77%	42%	53%	105%	50%
% Increase	**0%**	**14%**	**8%**	**14%**	**14%**	**9%**

Table 8.8: Forecast CrossCountry Line Loadings (2028 Development Case 43mppa) - Total Capacity (incl. Standing)

	Arrive at Cambridge – from Stansted Airport			Depart from Cambridge - to Stansted Airport		
	AM Peak	PM Peak	Daily	AM Peak	PM Peak	Daily
2028 (35mppa)	38%	51%	27%	31%	74%	33%
2028 (43mppa)	38%	62%	34%	43%	85%	40%
% Increase	**0%**	**11%**	**7%**	**12%**	**11%**	**7%**

8.21 The line loading forecasts presented in Table 8.7: indicate that there will be spare seating capacity on most CrossCountry services during peak periods by 2028 in the Development Case (43mppa). Some services during the PM peak are likely to operate above seating capacity, at 105%.

8.22 The increase in demand to seating capacity ratio between the 2028 Do Minimum (35mppa) and 2028 Development Case (43mppa) scenarios is between 0% and 14% on lines in both directions for all time periods assessed. Services are forecast to operate with spare standing capacity, including during the PM peak where 15% spare standing capacity is likely to be available on services departing Cambridge to Stansted Airport.

8.23 To address current and forecast capacity issues across their network, CrossCountry consulted between November 2016 and January 2017 on proposed timetable changes. The consultation document set out their vision for shaping passenger services to meet increasing demand. This includes providing an extra 1800 extra seats per day into/out of Birmingham New Street.

8.24 The continued growth of the airport to 43mppa by 2028 is likely to provide a driver for further capacity increases on CrossCountry services to accommodate future demand.

8.25 Ben Hall, Franchise Manager at CrossCountry has provided the following comment in relation to the proposals to increase passenger numbers at Stansted Airport:

"*CrossCountry recognises the benefits of the proposed increase in air passenger throughput at Stansted Airport by maintaining and enhancing the airport's excellent rail connections. This approach would ensure future growth maintains Stansted's intermodal connectivity, while expanding journey opportunities for its passengers and employees.*"

Bus and Coach

8.26 Coach services cater for around half of all public transport use, whilst local bus services provide a key means of access for employees. Local bus and coach service operators can respond quickly to new and changing demand, with relatively short lead in times for adding capacity, new services and new products. A comprehensive Bus & Coach strategy is overseen by the SATF and there are well-established processes for consultation and a commitment to working with operators to identify opportunities for new and improved regional and local bus and coach services and to provide funding to help establish and promote new services.

8.27 For buses and coaches, in almost every case where demand exceeds capacity, past experience shows that there is a commercial incentive to provide increased frequencies, larger vehicles, a new service or to change the stopping pattern of existing services. New services have been successfully introduced in recent years reflecting growing passenger demands. STAL is working with operators to explore new services. Current thoughts include additional routes from Peterborough, North Kent, Thurrock and Grays, Haverhill, Bury St Edmunds, Epping and Watford/Hemel Hempstead/Hatfield/St Albans/Hertford.

8.28 London routes dominate the coach market with a number of separate destinations. Past experience suggests that growth will bring forward further services providing both increased frequency and capacity on existing routes and additional destinations within London.

8.29 The forecast peak hourly increases in total bus and coach travel demand between the 2028 Do Minimum (35mppa) scenario and the 2028 Development Case (43mppa) are presented in Table 8.9: . The increases in daily and annual bus and coach demand between the two scenarios is presented in Table 8.10: .

Table 8.9: Forecast 2028 Bus and Coach Demand – Peak Hours

Bus/Coach	07:00 – 08:00		17:00 – 18:00		05:00 – 06:00		16:00 – 17:00	
	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart
2028 35mppa	509	285	632	627	1,250	32	729	859
2028 43mppa	749	208	823	811	1,446	31	897	1,078
Increase	**240**	**-77**	**191**	**184**	**196**	**-1**	**168**	**219**

Table 8.10: Forecast 2028 Bus and Coach Demand – Daily and Annual

Bus/Coach	Daily		Annual	
	Arrive	Depart	Arrive	Depart
2028 35mppa	12,183	12,183	4,434,612	4,434,612
2028 43mppa	14,966	14,966	5,447,624	5,447,624
Increase	**2,783**	**2,783**	**1,013,012**	**1,013,012**

8.30 Increases in demand between 35mppa and 43mppa are capable of being met by the route network. Indeed, growth is likely to be the catalyst for a range of public transport improvements as identified in Chapter 11.

8.31 The location of the bus and coach station directly adjacent to the terminal building will not change. However, its capacity will need to increase to accommodate future demand and new services. Options for this are being considered by STAL, and will be delivered as demand requires.

9 Walking and Cycling

Introduction

9.1 As mentioned previously, due to the rural location of the airport few employees or passengers travel to Stansted Airport via these modes. Influencing travel behaviour to encourage more walking and cycling is challenging, especially for walk trips as at present barriers exist to pedestrian movement, most notably, high traffic links including the M11 motorway and A120.

Encouraging Walking and Cycling

9.2 However, STAL is committed to promoting walking and cycle as a viable means of travel to the airport by local employees. Stansted Airport's Cycling and Walking Strategy (2016) forms part of the overarching 2015 SDP for the airport and sets out the vision to increase the number of employees walking and cycling to and from work. Employee cycling is currently at its highest proportion rising from 0% to 0.4% between 2002 and 2015. Equally, the proportion of employees walking to the airport has risen from 0.1% to 0.6% over the same period. STAL is aiming to reach the target of 0.5% of employees cycling to work by 2020.

9.3 Significant enhancements to improve walking and cycling links to and from local communities have been implemented since MAG took ownership of the airport in 2013, together with improved facilities and raising awareness.

9.4 The 2015 SDP also identifies the potential for significant future increases in the proportion of employees who cycle to work, as 35% of employees (4,070 people) live within 10km of Stansted Airport. Transport initiatives have been put in place to try and increase the number of sustainable trips, predominantly with employees. Stansted Airport's cycling strategy includes the following measures:

- improve cycle access from the west and north to Bishop's Stortford, Birchanger, Stansted Mountfitchet and Elsenham;
- cycle crossing facilities on J8 of the M11 motorway;
- extend the Sawbridgeworth – Bishop's Stortford link; and
- storage, shower and secure parking at key locations on site, including North Side.

9.5 In addition, Stansted Airport joined the Government's 'Ride2Work' initiative in 2007 to allow and encourage employees to purchase new cycles from Halfords stores at a 15% discounted rate as an incentive to travel more sustainably to work.

9.6 STAL is committed to sustainable transport and is working jointly with the SATF to support the deliverance of national/local policy to encourage travel by sustainable modes.

9.7 Given the relatively low walk and cycle mode share, the forecast increases in these trips between the 2028 Do Minimum Baseline (35mppa) scenario and the 2028 Development Case

(43mppa) are considered negligible and any improvements to infrastructure and quality of access will occur gradually over time through the implementation of the walking and cycling strategy measures.

10 Construction

Construction Vehicle Movements

10.1 Enabling works and construction activity will generate short to medium-term increases in vehicle movements on some airport roads and strategic highways. These increases will not be constant throughout the construction period and so consideration has only been given to the peak period for vehicle movements.

10.2 The number of construction vehicles has been derived based on the anticipated quantity and type of materials required for the construction of the airfield infrastructure.

10.3 A total of around 27,700 construction vehicles movements (two-way) are estimated across the entire construction programme (12 months). The average and peak daily construction traffic flows (two-way) would be of the order of 100 and 200 respectively. As such, the HGV traffic would be highly unlikely to exceed a peak of around 20 two-way movements per hour at any point of the day. This represents a worst-case assessment as it considers only the peak operational periods; at other times, construction traffic movements would be less.

Construction Vehicle Distribution

10.4 All construction vehicles would enter and exit the airport via Long Border Road and Bassingbourn Roundabout directly from the A120 and the strategic highway network. Heavy vehicles will be prohibited from using from local roads where the impact of construction vehicle movements would be more noticeable. Chapter 5 (Development Programme and Construction Environmental Management) of the Environment Statement, provides a plan showing the location of the proposed construction compound.

Impact of Construction Vehicles

10.5 Construction traffic volumes are minimal compared with overall airport traffic. Using professional judgement, it is clear that detailed junction and link road capacity assessments are not required, and the network is capable of accommodating construction traffic.

10.6 As set out above any impact during construction in the study area is limited to the strategic road network and the volumes of construction traffic will similarly be minimal compared with background traffic levels on these roads. The existing access roads currently accommodates HGV movements (e.g. for deliveries and other construction activity) and would therefore be a suitable access point for construction traffic related to this development.

10.7 When considering the existing (2016) traffic flows to and from the airport, which is in the order of 30,000 vehicles per day, the projected overall daily increase in vehicle movements (0.7%) generated by the construction of the proposed development on the wider road

network is expected to be negligible in terms of total vehicles or HGV traffic and would be within the normal daily variation of traffic.

10.8 Potential traffic and transportation related effects could arise causing temporary disruption to road users and pedestrians from vehicles (particularly HGVs) entering and leaving the works site. These could include temporary footway closures and diversion of pedestrian and cyclist movements. However, no road closures or diversions are expected to be needed.

10.9 During the construction period there would be a small increase in the number of workers in the local area, who would generally use the public transport network to access the site. The main Contractor appointed for the work, will be responsible for producing a Construction Transport Management Plan. Based on the proposed working hours stated in Chapter 5 (Development Programme and Construction Environmental Management) of the Environmental Statement, the majority of the construction workers would be travelling outside of the airport and network peak periods. Therefore, the significance of effects on the bus and rail network would be negligible.

Mitigation Measures

10.10 Standard and 'best practice' construction mitigation will be adopted throughout the construction works as described in Chapter 5 of the ES (Development Programme and Construction Environmental Management). These include the following considerations, which will be set out more fully in the Construction Environmental Management Plan (CEMP):

- safety and environmental standards and programmes;
- adherence to designated construction vehicle routes;
- delivery scheduling of equipment and materials;
- collaboration with other work sites in the area;
- implement a Construction Workers travel plan;
- rescheduling for out of peak deliveries;
- use of holding and vehicle call off areas;
- reuse of material on site;
- efficient 'SMART' procurement; and
- materials handling.

11 Mitigation Measures

Introduction

11.1 This chapter describes the new measures which will be introduced, or existing measures to continue, in order to mitigate the impacts of the development proposals.

11.2 There are existing transport related planning conditions and S106 agreement obligations associated with previous permissions. A list of the 2008 permission transport related planning conditions and S106 agreement obligations are set out in **Appendix O**. These will be reviewed, in consultation with UDC, ECC, HCC and HE and, where appropriate, revised, updated or replaced.

Incorporated Mitigation

11.3 "Incorporated mitigation" covers any measures assumed to continue, including those required under extant and/or relevant planning conditions, S106 agreement obligations and commitments made under the 2015 SDP.

Highway Improvements

11.4 The 2008 planning permission (growth to 35mppa) commits STAL to contribute towards offsite highway improvements, in particular to help deliver capacity enhancements at Junction 8 of the M11.

11.5 ECC have identified improvements to Junction 8 that are being promoted for implementation in the short to medium term due to the increases in traffic flow as result of traffic growth and committed development, including the expansion of the airport operations up to its current permitted maximum of 35mppa. For the purposes of this assessment it is assumed that the short to medium term improvement will be in place by the assessment year (2028).

11.6 The junction analysis set out in Section 8 indicates that the addition of further traffic associated with the expansion of operations to 43mppa would mean that the currently promoted scheme would benefit from further enhancement to mitigate the impact of the additional traffic. These further improvement works are considered to be suitable mitigation measure that would accord with the requirement of NPP paragraph 32:

All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature *and location of the site, to reduce the need for major transport infrastructure;*
- *safe and suitable access to the site can be achieved for all people; and*

- *improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.*

Stansted Airport Travel Initiatives

11.7 STAL will maintain a comprehensive surface access strategy for passengers and staff, as detailed in the current 2015 SDP. This includes a wide range of initiatives to improve public transport services; secure increased use of sustainable modes and targeted improvements to the highway network. Some of these are contained in existing S106 commitments and planning conditions.

11.8 Chapter 2 of this TA sets out the policies which are specific to surface access at the airport. This includes policies concerning travel by road, bus and coach, rail and cycling, as well as the ATP, accessibility, car parking and funding transport improvements.

11.9 The SATF has been integral in shaping the Surface Access strategy within the 2015 SDP and has been recognised nationally and internationally for the successful way in which it has delivered new transport initiatives, forged strong partnerships and changed the way that people travel to and from Stansted Airport. This has led to Stansted enjoying the highest public transport mode share of any UK airport.

11.10 STAL will continue to commit the appropriate resource to the SATF, its Steering Group and Working Groups to ensure collaboration between local transport stakeholders and operators and deliver the targets set out in the 2015 SDP.

Local Funds

11.11 Stansted Airport currently provides a number of funds for local transport development, to increase public transport use by passengers and employees, and to enhance the social, economic and environmental well-being of the communities within the vicinity of the airport.

11.12 The Passenger Transport Fund provides £500,000 - £700,000 per annum from a levy on each car park transaction. The money goes towards activities including supporting out-of-hours local bus services, the Airport Commuter Centre, the Airport Travelcard and Car Share Scheme, new cycle and motorcycle shelters, as well as onward travel information and marketing.

11.13 STAL airport intends to continue these funding mechanisms to ensure that the impacts of the airport's sustained growth continue to be mitigated into the future. In particular, the Passenger Transport Fund will increase in line with any additional car parking capacity that is provided on site (be it for passengers or staff).

Further Mitigation

11.14 "Further mitigation" describes any additional measures which may be required to offset or reduce the impact of growth from 35mppa to 43mppa.

Highway Improvements

11.15 The cumulative impact of additional traffic arising from growth to 43mppa, along with other development in the area and background traffic growth, will require further enhancement to Junction 8 of the M11. Potential works that would offset any adverse impacts have been identified. However, it is likely that a more comprehensive a scheme may come forward, promoted by ECC and HE, before 2028, that would negate the need for the suggested

mitigation in this TA. As a result, a direct contribution towards such an approach, committed via a Section 106 agreement may be appropriate as an alternative mitigation solution.

Local Road Fund

11.16 It is clear that there will be some increases in traffic on local roads, albeit not to levels that would create unacceptable traffic volumes or congestion. To mitigate any impact, STAL propose to establish a Local Road Fund to contribute towards local infrastructure schemes. The allocation of these funds will be determined by the Highways Working Group of the STAF, in conjunction with ECC and HCC (as local highway authorities).

Public Transport Improvements

Rail

11.17 STAL will continue to work with the DfT, Network Rail and the Train Operators to ensure an understanding of likely future demand and opportunities. This TA has identified that services can accommodate growth to 43mppa through the already committed train lengthening to increase capacity.

11.18 This conclusion has been endorsed by Network Rail through the Anglia Route Study (March 2016), which identified a capacity gap of approximately 2,100 passengers by 2043 in the peak hour on Cambridge and Stansted Airport services into London Liverpool Street. These conclusions fed into the East Anglia Franchise process and AGA have committed to introducing a new fleet of trains from 2019. These will be configured as 12 carriages long as necessary to address the capacity gap identified in the study.

11.19 CrossCountry also endorse the TA conclusion that train lengthening on some services may be required to accommodate likely future demand to 43mppa. Their recent consultation on timetable and train composition changes has resulted in capacity increases on some of the most crowded services across the network, including services to and from Stansted Airport.

11.20 The East Anglia Franchise and CrossCountry franchise will be renewed in 2025 and 2019 respectively and STAL will actively participate in this process to ensure that the interests of air passengers and airport employees are fully taken into account in developing the service specification.

11.21 As established in section 4 the Existing rail infrastructure places limitations on the level of services that can be provided to serve the airport. STAL will also continue to lobby for further strategic rail improvements which includes four-tracking of the railway in the mid-2020s, supporting the extension of Crossrail 2 to Stansted Airport and further upgrades of the West Anglia mainline.

Bus and Coach

11.22 To date, significant and successful improvements to bus and coach services have resulted from a collaborative approach between STAL, operators and local authorities and STAL's funding. Services and infrastructure are discussed and developed by the Bus and Coach Working Group which consists of a range of members including; STAL, ECC, HCC, TfL, UDC, East Herts District Council, Braintree District Council, Suffolk County Council and service operators.

11.23 One of the key aims of the 2015 SDP is:

"*to work with bus and coach operators to identify opportunities for new and improved regional and local bus and coach services and provide financial support where justified*."

11.24 It is likely that as the airport continues to expand to 43mppa, demand for some services will exceed capacity. In almost every case the evidence shows that where demand exceeds capacity, the solution is to provide an additional vehicle, larger vehicles, a new service or to change the stopping pattern of an existing service.

11.25 The areas currently identified by the Bus and Coach Working Group for the introduction of new services during the life of the 2015 SDP are set out in Chapter 8. The Bus and Coach Strategy also sets out the following enhancements to existing services which would be developed as a result of increased demand:

- *"We see scope to improve services as a result of growth with greater frequency to: Norwich, Oxford, Birmingham, Colchester and Cambridge; and London (including services extended into West London);*
- *We will work closely with Transport for London (TfL) and London Boroughs as this will need to take into account availability of capacity at key London interchanges such as London Victoria. More widely, congestion and delays on the strategic road network impact on the performance of our services and could act as a constraint on future growth;*
- *We will continue to work with local authorities and TfL to address key bottlenecks; and*
- *We will seek to introduce more demand responsive services in areas with lower demand or further away, when conventional scheduled services would not be financially viable. These services operate like a shared taxi and require pre-booking."*

11.26 A number of locations have also been identified where STAL seek to increase patronage on existing public transport services, which include: Cambridge, Chelmsford, Colchester, Southend, Ipswich, London, Harlow, Bishop's Stortford and Braintree. These are locations where a significant number of air passengers get dropped off and picked up by private car ('kiss and fly' journeys). Generating a shift in mode share from private car to public transport will significantly reduce the impact of traffic on roads surrounding the airport and mitigating the impact which the 35+ Project is likely to have on local junctions.

11.27 STAL will continue to provide sufficient resource to the Bus and Coach Working Group to ensure that this collaborative approach to service and infrastructure provision allows the demand generated by the airport to be accommodated up to and beyond 2028.

12 Summary and Conclusions

Summary

12.1 This TA has been prepared by SDG in support of the planning application by STAL for proposals to enable Stansted Airport to grow beyond the current 35mppa cap to 43mppa.

12.2 The main proposals for Stansted Airport are as follows:

- two new links to the runway: Rapid Exit Taxiway (RET) to the south-west and Rapid Access Taxiway (RAT) to the north-east;
- six additional stands in the mid-airfield: Yankee Remote Stands;
- three additional stands at the north-eastern end of the airfield: Echo Stands; and
- an increase in the annual number of passengers of 8mppa, from the existing permitted level of 35mppa to 43mppa.

12.3 In undertaking this work, SDG has consulted with and taken into account the views of UDC, ECC, HCC, Chelmsford CC, HE and Network Rail. This has contributed to the development of the TA methodology which is outlined in Chapter 4.

12.4 In summary, this report has analysed the following key areas:

- policy considerations;
- development of the TA methodology;
- existing Stansted Airport travel demand;
- existing baseline transport conditions and service utilisation;
- the proposed development;
- forecast travel demand;
- highways and public transport operation analysis; and
- mitigation measures.

Conclusions

12.5 The conclusions of this TA are as follows:

- **Analysis of the policy context concludes that the proposed development is consistent with and supports policy aims and objectives at a national, regional and local level**. The principle of the expansion of the operation at Stansted Airport is supported at a national policy level. The airport is in a sustainable location and has a well-developed ATP. STAL is committed to promoting sustainable surface access which the proposals commit to supporting.
- **Stansted Airport enjoys excellent access to public transport networks and the strategic road network, with among the highest use of public transport of UK airports.** Analysis of

existing travel demand and service utilisation identifies that the surrounding transport network currently operates within capacity.

- **Accident data analysis illustrates that there is not a history or pattern of traffic collisions** which would present concerns with regard to the local road network layout. There has been an average of 12 accidents per year, with only 8 serious accidents which can all be attributed to driver/rider error.
- **A comprehensive exercise to forecast travel demand has been conducted.** Future demand has been based on passenger and employee forecasts provided by STAL, whilst future mode share assumptions for employees have been based on the objectives of the 2015 SDP. No allowance for internal passenger transfers has been included in the future year passenger surface access modelling. Therefore, the assessment is a worst case as it reflects an overestimate of external travel trends on the local highway and public transport networks.
- **A highway impact assessment has been conducted to determine the impact of growth to 43mppa on the highway network surrounding the airport.** Forecasts for background traffic growth have been agreed with ECC and HE. Peak hours have been assessed to account for the busiest periods on the highway and the busiest airport periods. This analysis has concluded that the largest traffic increases associated with growth to 43mppa will be on the roads nearest the airport, Thremhall Avenue and A120. None of the predicted future year daily flows exceed the capacity of the individual links and no upgrades have been identified as being necessary to cater for the predicted increases.
- **Analysis has been undertaken of the capacity and performance of the main highway junctions and links within the vicinity of the airport.** The analysis shows that Round Coppice Roundabout will be operating within capacity at 2028 Development Case (43mppa). Both M11 J8 and Priory Wood Roundabout develop capacity issues in both the 2028 future scenarios, however with mitigation Priory Wood Roundabout would operate within capacity and M11 J8 would operate close to capacity at 2028 Development Case (43mppa).
- **In general, rail services to and from Stansted Airport would continue to operate within capacity during the 2028 assessment year.** Some peak hour trains on Stansted Express and CrossCountry services may exceed seating capacity, although there would be sufficient standing capacity to comfortably accommodate demand. This assessment has identified that committed train lengthening will address any capacity shortfall.
- **There will be a continued growth in demand for bus and coach services to and from the airport**. STAL has a successful track record in facilitating additional or new bus and coach services to meet demand as it arises. Through a commitment to the 2015 SDP and the Bus and Coach Working Group, this collaborative approach will continue to 2028 and beyond.
- **The forecast increases in these trips between the 2028 Do Minimum Baseline (35mppa) scenario and the 2028 Development Case (43mppa) are considered negligible**. Any improvements to infrastructure and quality of access will occur gradually over time through the implementation of the walking and cycling strategy measures.
- **Enabling works and construction activity will generate short to medium-term increases in vehicle movements.** The construction traffic volumes are minimal compared with overall airport traffic and the impact of construction traffic is considered negligible.
- **The TA has identified a number of mitigation measures which will be implemented or continued in order to offset or reduce the impacts of growth to 43mppa**. Such measures include contributions towards highway improvements, a local roads fund, an increased

Public Transport Fund (from a levy on car parking) as well as public transport improvements and an ongoing commitment to the measures in the 2015 SDP.

12.6 Overall, this TA demonstrates that the proposed development will not have a significant adverse impact on the operation of the local highway and public transport network, and complies with policy at all levels. The application is therefore considered to be acceptable in transport and highways terms.

A Transport Assessment Scoping Report (June 2017)

steer davies gleave

Stansted 35 MPPA + Project

Transport Assessment - Scoping Report
June 2017

Stansted Airport Limited

Our ref: 23003401

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1 Introduction

1.1 Steer Davies Gleave (SDG) has been commissioned by Stansted Airport Limited (STAL) to provide surface access transport consultancy advice in support of a planning application to increase the passenger capacity at Stansted Airport from 35 million passengers per annum (mppa) to 44.5 mppa.

1.2 A planning application planning application is to be submitted to Uttlesford District Council in 2017, supported by a range of technical analysis including an Environmental Impact Assessment (EIA) and Transport Assessment (TA).

1.3 This scoping report sets out the approach of the TA, and the proposed methodology that will be adopted in forecasting future travel demands at the airport.

Background

1.4 Stansted Airport is located close to the M11/A120 and is directly accessible from the trunk road and local road network. Highway infrastructure serving the airport was built around 1990 when the airport was developed in its current form. The airport is connected to the national rail network, and is the terminal point for services to/from London, Cambridge and Birmingham. A bus and coach station accommodates extensive regional and national services while frequent public buses serve the local population.

1.5 In recent years airport operations have been expanding at round 10% per annum and total passenger numbers were recorded in the order of 23.5 mppa for the year ending June 2016.

Application Proposals

1.6 Planning permission was granted in October 2008 for a capacity increase at the airport from 25 mppa to 35 mppa. This application is for an additional 9.5 mppa taking throughput up to 44.5 mppa. The TA will adopt predicted future passenger forecasts and daily profiles used in the EIA in order to model the transport implications.

1.7 The planning application will seek a change to the passenger and movement limits, along with implications of the proposed increase in passengers and air transport movements however, it will be formed of some modest airfield infrastructure required to handle the forecast growth. air traffic. No additional landside infrastructure is proposed as part of this application. The TA will however set out the assumption of the likely changes to car parking numbers that may be necessary to handle the increased passenger numbers.

2 Impact Assessment Methodology

Trip Modelling

2.1 The planning application will seek to vary the current planning permission (UTT/0717/06) for 35 mppa to a new limit of 44.5 mppa. This TA will draw upon the forecast levels of road traffic that were considered as part of the existing planning permission and will be used to help inform the baseline assumptions and data choices for this TA.

2.2 Forecast surface access mode share and vehicle movements at 35 and 44.5 mppa will be broken down into four categories as outlined below:

- UK Leisure;
- UK Business;
- Foreign Leisure; and
- Foreign Business

2.3 A separate mode share model will be adopted for each of the four categories of passenger informed by the most recently available CAA survey data.

2.4 Detailed aviation forecasts have been produced by Manchester Airport Group and will be adopted as the basis of the TA and the EIA. The key dates for future demand modelling are:

- 35 mppa (the current passenger cap) by 2023 and
- 44.5 mppa (the proposed new passenger cap) by 2029.

Trip Characteristics

2.5 Past trends demonstrate a consistent reduction in the proportion of car based access to the airport for both passengers and employees with time. Employee travel is monitored and reported bi-annually and past initiatives have been successful in consistently reducing both car mode share and the number of single car occupancy trips. CAA surveys have shown a similar, albeit slower, decrease in passenger car travel as a proportion of total trips. Future initiatives can be expected to continue to reduce further the proportion of single car occupancy trips to meet Stansted's agreed Surface Access targets (as contained within the airport's Sustainable Development Plan).

2.6 For the purposes of ensuring a robust, worst case, assessment of highway traffic impact , the assumption for the TA is that current passenger mode share for future year scenarios will remain as per 2016 surveyed data.

2.7 However, a reduction in kiss-and-fly and taxi usage is predicted as the number of longer haul and UK leisure trips increase. Details will be provided in the TA of the assumptions to be

adopted with a conservative assumption of 10% transfer to parking from drop-off/pick-up being adopted.

2.8 It is also proposed that a modest reduction in staff single occupancy car use will be adopted for 2030 compared with 2016, based on past trends and ongoing initiatives for staff travel.

2.9 Detailed data for passenger and employee travel will be considered separately to account for any changes to travel patterns resulting from the forecast increase in throughput.

Passengers

2.10 Passenger flows account for the largest proportion of travel at the airport. Recent surveys have indicted a small proportion of transfer passengers using the airport, i.e. passengers not leaving the airport between flights. There is no predicted model of how this may change in the future, so for the purposes of ensuring a robust assessment within the surface access analysis, an assumption of zero transfer passengers will be adopted for the future year assessment. Based on current figures, this may mean that future external travel demand estimates to be used in the TA and EA are of the order of 2-3 % higher than likely.

2.11 Future year passenger forecasts will be broken down into four passenger types:

- UK Leisure;
- UK Business;
- Foreign Leisure; and
- Foreign Business

2.12 A total of 23,182,000 passengers were recorded at Stansted Airport in 2015. The current volumes for the four separate passenger types are from the 2016 CAA passenger survey data. A further breakdown for UK and Foreign passenger will be used for the base case and for future years to best distribute surface travel demands to and from the airport.

2.13 All categories listed (UK Business/Leisure and Foreign Business/Leisure) demonstrate a contrasting trend in travel and mode share. 2015 mode shares per user group have been derived from CAA data as shown in Table 2.1.

Table 2.1: Baseline Mode Split (2015) – Passengers

Mode	UK Business	UK Leisure	Foreign Business	Foreign Leisure	Total
Private car	51%	48%	15%	20%	38%
Hire car	4%	0%	11%	4%	2%
Taxi/Minicab	13%	11%	14%	7%	10%
Bus/Coach	8%	21%	22%	40%	26%
Rail	23%	19%	36%	29%	23%
Other	0%	0%	2%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Source: 2013 CAA Data (SDG Input)

2.14 Table 2.1 illustrates that private car is the dominant mode of UK Leisure and Business passenger travel, comprising 50% mode share. Conversely, public transport (rail and bus/coach trips) is the dominant mode for Foreign Leisure and Business passengers with approximately 50% mode share. The 2013 data will be updated with 2016 passenger mode split information.

2.15 Existing mode shares will be applied to forecast passenger data for 2029 to determine the total number of trips made by mode under the 35 and 44.5 mppa scenarios.

2.16 An adjustment will be made to overall modal splits based on 2015 modal share for passenger types to take account of a predicted increase in the proportion of UK leisure trips and a decrease in the proportion of foreign passenger trips.

Employees

2.17 Existing employee travel was last analysed in detail in 2015 and set out in the 2015 Employee Survey Report, at which time 10,963 employees worked at the airport. The results of the 2015 Employee Survey report will therefore be used to inform the baseline travel conditions for employees at the airport unless the 2017 data becomes available.

2.18 The Stansted Development Plan (SDP) (2015) sets out how the airport will grow in a responsible and sustainable way to make the best use of its existing runway. Detailed employment forecasts will be produced for the planning application. In advance of having detailed figures finalised, a figure of 19,000 employees at 2029 (44.5 mppa) has been agreed with STAL and their economic advisers as providing a robust (high) assumption for the purposes of the surface access assessment. Accordingly, a constant growth rate of 576 employees per year will be applied between the employee survey baseline year (2015) to predict employee numbers for the 2023 (35 mppa) and 2029 (44.5 mppa) scenarios. Table 2.2 outlines the number of employees estimated at the development for 2023 and 2029, and will be used to inform our calculations for mode share and trip distribution.

Table 2.2: Employee Forecasts

Year	Number of Employees
2015	10,963
2023- (35mppa)	15,569
2029- (44.5mppa)	19,024

2.19 Proposals for the assessment year (2029) illustrate that 19,024 employees are anticipated to work at Stansted Airport with a 44.5 mppa figure and 15,569 with a 35 mppa scenario.

2.20 The overall current mode share for employees at Stansted Airport is set out in Table 2.3.

Table 2.3: Baseline Mode Split (2015) – Employees

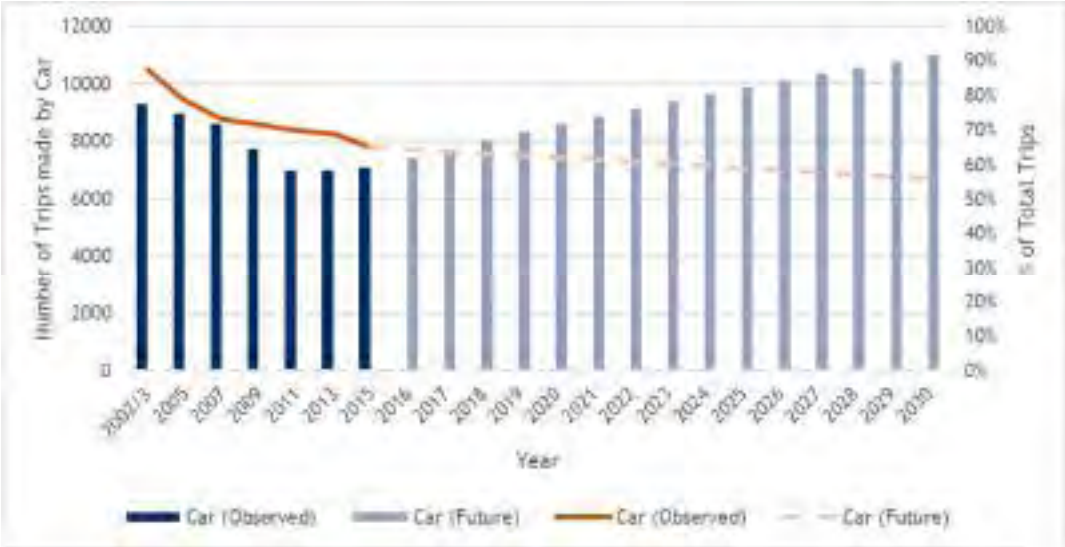
Mode	Total Trips	Proportion of Trips (%)
Air	0	0%
Bicycle	41	0%
Car Driver	7,113	65%
Car Passenger	626	6%
Motorcycle	95	1%
Other	22	0%
Public Bus or Coach	1,650	15%
Rail	1,299	12%
Taxi	36	0%
Walk	67	1%

Works bus/other company transport	13	0%
Total	**10,963**	**100%**

Source: 2015 Employee Survey Report

2.21 Table 2.3 illustrates that Car Driver trips comprise the largest proportion of trips by employees with 65% mode share. This figure has reduced in every survey since 1990. A future figure of 55% car drivers is considered to be a reasonable assumption, based on a modest extrapolation of the past trend as shown in Figure 2.1. Using the proportions above, it is possible to establish the proportion of journeys made by mode in the future scenarios.

Figure 2.1: Car Driver Trips – Existing and Proposed Modal Shift



2.22 The distribution of employees will use the latest available Employee Survey Report for all scenarios. Table 2.4 below illustrates the proportion of employee trips by location as of the 2015 survey.

Table 2.4: Baseline Employee Distribution (2015)

Location	Count	% of Trips
Essex	5,631	51.3%
Hertfordshire	2,966	27.0%
Greater London	1,042	9.5%
Cambridgeshire	329	3.0%
Suffolk	279	2.5%
Rest of UK	181	1.7%
Unitary Authorities	198	1.8%
Outside UK/Unknown	342	3.2%
Total	**10,968**	**100.0%**

Source: 2015 Employee Survey Report

2.23 The TA will set out the range of employee travel and mode share initiatives set out in the current Travel Plan for airport employees. The new application will re-commit to these initiatives and include a package of measures and a target to reduce the number of single car driver trips to the airport.

2.24 The future target will be to reduce single car driver trips from 65% to 55% by 2030 through public transport and car sharing initiatives.

Highway Impact Assessment

2.25 2015 has been selected as the baseline year for traffic flows as a set of comprehensive traffic surveys were undertaken in October 2015 that have been cross referenced to parking demands, drop off observations and the most recent travel survey data. Baseline traffic conditions for the off-airport highway network will also be based on 2015 traffic data sourced from Essex County Council (ECC), Hertfordshire County Council (HCC) and the Department for Transport (DfT). Similarly, the latest DfT ATC data is 2015 across all of the links assessed.

2.26 The following growth factors will be applied to forecast traffic growth/movement for the offsite highway network for the future year scenarios using TEMPro (version 7), as shown in Table 2.5. The TEMPro growth rates will be based on an average of rural factors for car driver trips per day at county and district level.

Table 2.5: TEMPro Growth Factors

Future Year	Localised Growth Factor
2023	1.06695
2029	1.1251

2.27 The proportion of passenger and employee trips by car driver mode share will be applied to the traffic flow data derived from ECC and HCC to determine the number of trips to Stansted airport in the base and future scenarios. This information will then form the basis for determining the likely impact of the airport capacity increase upon existing transport infrastructure, in particular to examine:

- On airport car parking demand;
- meet and greet services;
- kiss and fly drop-off zones; and
- bus, coach and rail facilities.

Car Parking Provision

2.28 The TA will set out existing parking demands based on peak demand and also set out anticipated future provision based on the predicted increase in demand. Daily entry and exit profiles for the current operations are shown in Figure 2.2 and Figure 2.3 respectively.

Figure 2.2: Daily Profile: Car Park Entries

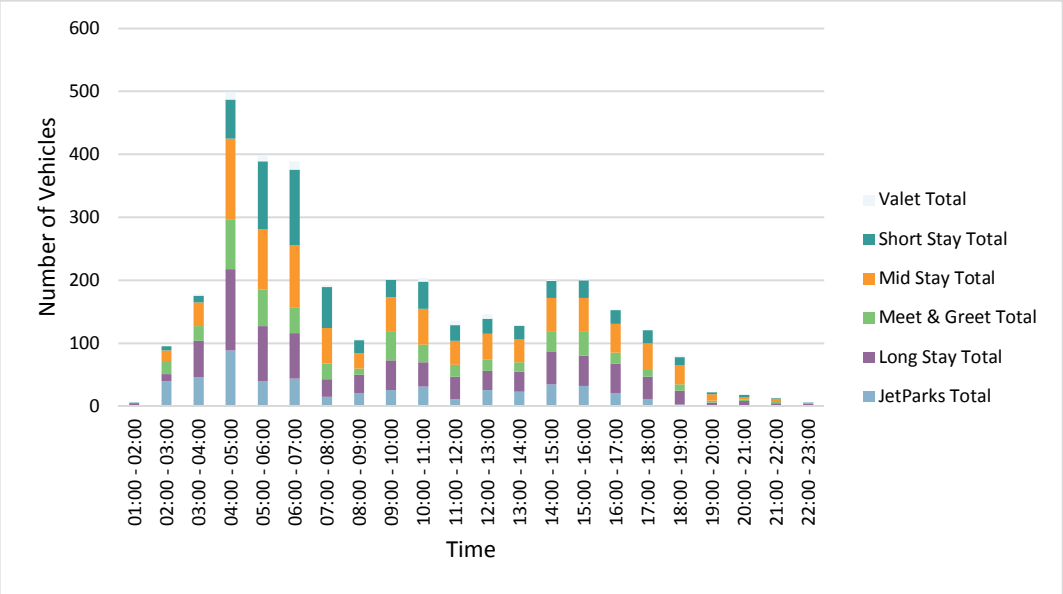
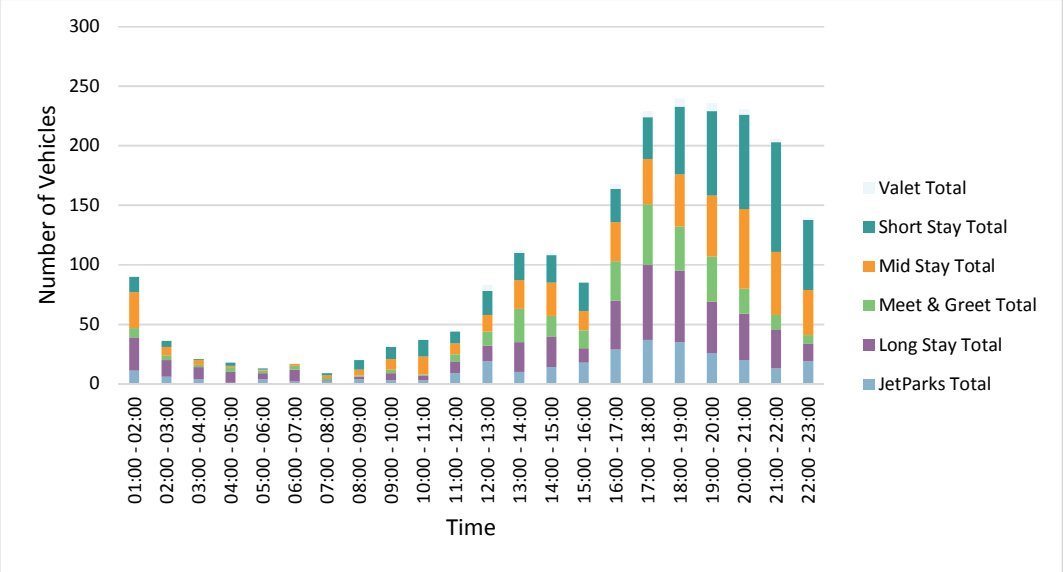


Figure 2.3: Daily Profile: Car Park Exits



Meet and Greet Services

2.29 The Meet and Greet service at Stansted Airport is a valet parking service, located to the front of the airport (adjacent to the bus station) where customers can drop off and pick up their vehicle.

2.30 Self-service key drop-off machines are available in the Meet and Greet reception area for customers to deposit their keys. Vehicles in the Meet and Greet area are then transferred to a storage site adjacent to the Long Stay car park for the duration of each passenger's trip. Vehicles are returned to the Meet and Greet reception car park no less than six hours prior to the customer's return.

Kiss and Fly Drop-off Zones

2.31 Existing 'kiss is charged, and vehicle stoppage time is limited to 10 minutes per drop-off with no return within half an hour. Security is present at the kiss and fly zone, and penalties are issued for vehicles which do not conform to the rules.

2.32 Details of future facilities for kiss and fly and drop off and a separate arrivals pick-up zone will be outlined in the TA.

Junction Assessment

2.33 A 2015 origin and destination analysis was undertaken for the airport roads and a Vissim model of the airport and immediately surrounding roads produced, based on a cordon of surveys and junction counts. The model represents a base-case scenario where Stansted was operating at 23.5 mppa. The model will be used in order to determine forecast car traffic on the airport roads using forecast mode shares and origin-destination data for passengers and employees at Stansted.

2.34 A separate work stream is being undertaken by MAG jointly with Essex County Council (ECC) and Highways England (HE) to evaluate M11 Junction 8's operation and identify potential major and long term improvements.

2.35 An interim junction improvement scheme has been developed by ECC that enhances the capacity of the existing junction and has committed funding. This scheme will be adopted as the future scenario for assessing the impact of additional traffic on Junction 8 for the purposes of the TA as that is considered the likely network that will be in place by 2029.

2.36 Predicted changes to the operation of Junction 8 will be reported in the TA and any further modifications to the interim scheme that may be appropriate to mitigate impact will be identified.

2.37 The analysis will reflect road network peak demands and will take account of changes in the forecast daily passenger profile as well as growth in passenger and employee numbers. A 2-hour pre-flight departure 'turn up' factor and 1-hour post- flight arrival exiting trip factor will be applied for car trips, derived from observed patterns.

Public Transport Assessment

2.38 Public transport is the main mode of transport for passengers travelling to Stansted Airport. The method for assessing future demand and capacity for various public transport modes, divided into bus, coach and rail trips, is set out below.

Bus & Coach Travel

2.39 Stansted bus and coach services provide a cost effective and efficient option to travel to/from the Airport. The most heavily used are those coach routes to London. They also provide services to destinations currently unserved by rail links both locally and across the region. Bus and coach passenger mode share was recorded as 26% in 2015. It is anticipated that an increase in passengers at Stansted Airport will increase the viability of bus and coach services serving the Airport and that this could increase frequencies, the pattern of services and hence enhance attractiveness of this mode of travel.

2.40 Employee bus/coach mode share comprises 15% of trips (2015). Increased use could be reasonably expected to encourage new services and thus further uptake in bus/coach trips for employees.

2.41 The TA will review the existing frequency, number, service provider and efficiency of existing bus/coach services and analyse coach movements and service origin and destination using GIS.

Rail Travel

2.42 There are three train services to and from Stansted Airport at present: the Stansted Express and Abellio Greater Anglia services (both connect to Tottenham Hale, Liverpool Street and Stratford and Cambridge) and Cross Country Trains services to Birmingham. Rail currently comprises 12% of employee and 23% of passenger travel to/from the airport.

2.43 At present, capacity on trains is considered more than sufficient to meet passenger and employee demand at Stansted Airport, as spare capacity has been recorded on services entering/exiting the airport. Past analysis has indicated that an increase to 44.5 mppa will not require additional rail service capacity but detailed analysis will be undertaken to confirm the future demand and capacity of rail services (though provision of full loading data on the services is reliant on agreement with train operating companies, and may be withheld due to commercial sensitivities).

2.44 Significant changes in rail infrastructure are required to deliver a step change in rail journey times and reliability to Stansted. This is a shared priority for Stansted and a wide range of regional bodies. Any improvements to the rail network and services is likely to have a beneficial impact on rail's mode share. In the absence of any commitment to such improvements, the TA will assume the current rail mode share remains the same in the future.

Cumulative Developments

2.45 There are limited permitted housing schemes near the airport and Uttlesford does not have an adopted housing growth allocation strategy. Accordingly, local TEMPro growth factors will be adopted to provide a proxy for the residential development that can be expected to come forward in and around Stansted by 2029.

2.46 The Northside Development being investigated at Stansted, will potentially deliver a significant proportion of planned employment growth for Uttlesford. Due to the proximity to the airport and the likely direct impact on roads serving the airport, these employment trips will be considered as additional committed development in the future year traffic modelling above TEMPro growth even though TEMPro makes an allowance for local employment growth.

3 Proposed Application Documents

3.1 The following transport documents are proposed for submission in support of the planning application.

Transport Assessment

3.2 A TA will be produced in support of the planning application and in accordance with national, regional and local policy guidance. It is likely to include:

- **Introduction**: This provides a general background to the project including planning history, a summary of current planning conditions and S106 requirements.
- **Policy Review**: A review of relevant national, regional and local policy documents.
- **Transport Assessment Methodology**: Will set out the approach which has been adopted to assess the impact of the proposed development on the surface access networks.
- **Existing Travel Demand**: A summary of existing Stansted travel demand with the three main components; air passengers, employees and other miscellaneous airport-related travel generators.
- **Surface Access Networks**: This section will explore existing modes of travel, public transport accessibility; highway access and on airport parking.
- **Description of Proposals**: Outline the increase in passenger numbers and assumptions that are adopted within the subsequent TA analysis.
- **Revised Demand Trip Characteristics**: Passenger and employment profiles; trip rates; multi modal trip generation (derived from existing travel patterns); assessment and analysis of existing permitted patterns versus proposed.
- **Highway Impact Assessment**: Junction modelling; baseline-existing permitted – proposed; highway safety.
- **Public Transport Assessment**: Rail capacity; bus and coach opportunities and capacity.
- **Mitigation**: Any mitigation required after capacity and impact assessments.
- **Summary and Conclusions**.

Travel Plan

3.3 Stansted Airport operates a highly effective employee travel plan. A TP statement will be submitted with the application in conjunction with the TA, building upon the existing Travel Plan and the Sustainable Development Plan. It will set out future travel mode targets and a range of practical measures to promote travel by non-car modes.

3.4 Forecast passenger and employee trip generation and mode shares for the airport will be derived from the Transport Assessment to help inform travel targets and measures in the TP. The TP will be constructed from targets and measures outlined in the existing and highly successful Airport Surface Access Strategy 2008-2015 (ASAS) which contained 36 challenging

targets across a variety of surface access modes. Further practical travel measures will be drawn out from liaison with operational staff at Stansted. Opportunities to introduce Personal Travel Planning initiatives will also be explored for employees based at the airport.

3.5 The TP statement will form the basis of an extension to the 2015 Sustainable Development Plan.

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Version control/issue number	Date

B ECC and HE Pre-application Response and SDG's Comments Schedule Summary

Essex County Council

	ECC Comments	SDG Response
1.0 General		
1.1	Include an assessment of the accident data for the study area and any implications of the proposals on accident hot spots	Personal Accident analysis has been carried out for all road links anticipated to have a traffic growth of 10% or greater, as set out in the TA and ES chapter.
1.2	Include assessment of impacts on the cycling network and how the network can be enhanced to mitigate the impact of local trips	The impact of 35+ Project on the local cycle network is likely to be negligible. Options for improving cycle routes and crossings are being considered as part of the planned M11 Junction 8 improvements and Highways England has been given a remit to retrofit cycle infrastructure to its network where appropriate. As part of the 2015 SDP, the Stansted Cycling and Walking Strategy sets out opportunities to improve the walking and cycling environment. This includes routes connecting Flitch Way to the Airport and Stansted Mountfitchet to the Airport, as well as providing storage, shower and secure parking at key locations on site.
1.3	The study area should be defined when the distribution has been ascertained. That notwithstanding key junctions on the strategic network along the M11, and A120 as far east as Galleys Corner should be included as well as junction on the local network including, but not limited to those in Takeley, Stansted Mountfitchet, Elsenham, Great Dunmow, Hatfield Heath and junctions along the B1256. Study area probably needs two levels: wider strategic and localised area. It is assumed that Hertfordshire County Council, Highways England and Network Rail have been consulted for their input into the study area.	Link capacity and junction capacity assessments have been carried out where the 35+ Project results in an increase of 10% on future baseline traffic flows. Traffic flows on links and junctions on the local network including those in Takeley, Stansted Mountfitchet, Elsenham etc. are expected to increase by no more than 2%. Assessment of the A120 as far east as Galleys Corner is not considered necessary as traffic flows on the A120 east of the airport are forecast to increase by just 2.5%. The TA scoping report was submitted to HCC, HE and Network Rail and their comments are addressed later within this appendix.
1.4	Within the TA and its appendices all assumptions made should be clearly stated. We should be able to trace back final figures from their sources and a clear trail should be provided showing how figures have been derived. The TA should clearly tell the story showing how impact of the growth is derived, what mitigation is required and the final impact of the development and mitigation. There should be consistency between the various papers, cross referencing and maps showing where the assessed junction are situated, cross referenced with the data and results.	Noted – all assumptions used are appended to the TA.
1.5	**2.28 TASR**: Car parking demands show existing arrival and departure profiles but do not show any parking accumulations/capacity. Parking accumulation should be shown in the TA. While we understand that parking is under permitted development, it is an important part of the scheme and will certainly be of interest to the general public in any consultation.	Car parking provision will be delivered under Permitted Development Rights and does not form part of the scheme. Parking demand is reviewed on a constant basis by STAL and capacity is adjusted accordingly, which falls within the commercial interests of the airport.
1.6	Not able to check the trip origin data/assignment, more technical supporting information should be provided. This methodology is fundamental to the assumptions used in TN2 and, until available, it is not possible to comment fully on TN2.	Noted – the methodology used to derive trip origin data/assignment is set out within the TA and all assumptions used are appended.
1.7	**TN1 Page 9**: Insufficient detail to check assignment/distribution assumptions. Table 11 lists local roads, including both Bury Lodge Ln (17% proportion) and Church Rd (14% proportion), which implies 3% of staff would have an origin between these two roads …. The table excludes Hall Rd/Broxted/Elsenham/Thaxted direction network links. Need more technical supporting information.	The local road distribution has been reconsidered within the TA which demonstrates fewer trips on local roads than those specified in TN1. In relation to Hall Road/Broxted/Elsenham/Thaxted direction network links – see the response to comment 1.3.

	ECC Comments	SDG Response
2.0 Traffic Growth		
2.1	**2.26 TASR**: TEMPro traffic growth factors, refer to daily county and district level factors, presumably ECC and UDC. Given proximity to HCC/EHDC, consideration should be given to their relative growth factors. Also, consideration should be given to use of peak hours rather than daily growth factors.	UDC growth factors have been adopted which are set out fully in the TA. These have been compared with ECC, HCC and EHDC growth factors which are broadly similar. A full comparison of growth factors is included within the TA.
2.2	**2.45 TASR**: Cumulative developments which we assume means committed developments refers to permitted housing near airport, and lack of UDC Local Plan, and states they will use TEMPro 7 as proxy for all residential dev up to 2029. The localised impacts of Bishops Stortford large housing sites, should be considered as they would not be captured by this method. Recommend reporting (and possible combined use) of adjacent authority growth factors, and possible inclusion of site specific traffic for of Bishops Stortford North etc.	Cumulative developments incorporate committed developments but also developments which have not received planning permission such as Northside and those not allocated within the UDC Local Plan. As set out above, local district growth factors have been compared and the highest factors adopted to provide a robust assessment of future background traffic growth.
2.3	**TN1 – Page 2**: 'background/non-airport' traffic has been separated out on the local network, and TEMPro used to forecast the future background traffic levels. This is reasonable, given that passenger trips are not included in Tempro. However, airport employee trips could be assumed to be within the background growth projections, so this methodology may double-count employment trips. SDG should clarify this, and possibly revise their methodology, ie use Alternative Planning Assumptions for forecast jobs, to remove these from the background growth factors (possibly in combination with Northside impacts). Additional supporting technical information is required in order to check the method and derivation of the 'background' ie non-airport base flows etc.	Airport employee growth projections are not included within the DfT TEMPro growth factors. Separating the background/non-airport traffic flows and applying TEMPro growth factors is therefore considered appropriate and avoids double-counting any passenger or employment trips associated with the airport. The Northside development is an exception as employment growth may be considered within the background growth factors, however adding the Northside traffic flows to the background growth is considered a robust approach.
2.4	**TN1 – Page 3**: Airport pax and employee trips added to main distributor links in the area as per distribution, and TEMPro growth applied to 'all links which are not affected by pax and employee traffic.' Are there any such links on the study area network? Please clarify that methodology is to apply TEMPro to the derived background traffic and then add on forecast airport-related trips, and that this applies to all the links in the area, given the probable distribution of employee trips.	
2.5	**TN1 – Page 9:** states employee trip distribution used accords with both the 25mppa+Cap increase application in 2008 and that proposed for the Northside application which 'have been agreed in principle by ECC and HE.' I am not aware that these have been agreed.	Noted. A similar approach using employee trip origin data has been applied to derive Northside traffic flows. The assumptions used to derive Northside traffic flows will be set out in the TA which supports any forthcoming planning application for Northside.

	ECC Comments	SDG Response
3.0 Mode Share		
3.1	**2.7 TASR**: Refers to 10% transfer to parking from drop-off/pick-up ie reduction in kiss and ride and/or taxi, due to increase in predicted longer haul UK leisure trips. This is aspect is not mentioned in TN1. And it is not clear how this figure has been reached, as it is likely that with long haul flight customers are likely to be away for longer and therefore kiss and ride or taxis become a more cost effective option that a long stay in a carpark.	A transfer to parking from kiss and fly and/or taxi has been assumed within the traffic flow forecasts. This equates to a 10% reduction in two-way trips i.e. vehicle arrives at the airport and parks instead of departing after drop-off. A primary aim of the 2015 SDP is to implement the highway options to actively discourage kiss and fly traffic, this includes increasing charges to drop-off at the terminal, new products such as 'meet and greet' and competitive parking charges.
3.2	**2.8 TASR**: Reduction in staff single occupancy car use expected, again not mentioned in TN1. It is not clear why this drop is expected. From the graph it looks as though the number of staff car driver trips has stabilised since 2011 – the TA will have to show what specific new initiatives will be put in place to change this trend. It would be more robust to keep the existing 65% car driver proportion	The airport has seen a steady reduction in single occupancy car use as a result of measures and initiatives to encourage the use of public transport. The Stansted Airport SDP commits to further reducing the proportion of employees who drive by 10% to 55% by 2029. This modest assumption has been adopted within the TA.
3.3	**TN1 – Page 7**: Employee mode share, aims of SDP is to reduce employee car driver trips by 10% to 55% by 2029. 'All 10% of [these] trips have been distributed to PT modes.' But Table 9 shows the 10% switch as car pass (+3%), bus (+5%) and taxi (+2%), so there would be less reduction in car travel than stated. As stated above if a reduction percentage of employee mode share for single use car driver is to be assumed the specific interventions to achieve this should be provided.	The reduction in single occupancy staff car trips have been redistributed across all modes. Specific interventions to achieve the targets set out in the SDP are set out in the TA.
3.4	**TN1 Page 4**: mode share/split: Table 4 data results in 50.3% vehicles, and 49.7% PT, which is at variance with Table 2 which has 49% and 51% respectively.	Discrepancies are due to rounding. The mode share/split has been adjusted to correspond in the TA.
3.5	**TN1 Page 4**: Origin: Destination information: applied same car occupancy factors to car passenger trips as to taxi trips (1.6), please justify this. 50% of taxi trips would be single occupancy ('empty' arrival or departure trip). P4 Footnote refers to 'all detailed workings are provided in a subsequent technical note' not yet received by ECC and should be included in the application.	The increasing presence of Uber and other smart taxi services at the airport is resulting in less 'empty' arrival or departure trips. All taxi trips have therefore been assumed to be two-way which provides a robust assessment. The detailed occupancy rate workings are appended to the TA.
3.6	**TN1 Page 8**: Table 9: employee car driver and passenger data indicates a 2015/16 vehicle occupancy of ~1.1, which by 2029 would be ~1.16. It's not possible to check if this meets the aspiration on p7 to reduce staff single car occupancy 'to no more than 65% by end of 2019'. Also final para on p8 states assumption of vehicle occupancy of 1.6, which differs from the tabulated data.	

	ECC Comments	SDG Response
4.0 Peak Hour		
4.1	**TN2 Page 2:** links listed differ from those in TN1 table 11. Description of links insufficient to identify where they are on network, and many links may need several points analysing, eg Thremhall Ave: north (airport road) and south of Bassingbourn roundabout (highway network); A120 east of J8 should include: between J8 and Priory Wood roundabout, between Priory Wood roundabout and Thremhall Ave merge/diverges; A120 east of airport – is this east of the eastern access to mid-stay? And how far east should this extend? Etc etc, maps should be provided to make this clear.	Noted – maps are provided within the TA to provide clarity.
4.2	**TN2 Page 2 & 3**: Peak hours: SDG state that peak hours be representative of accumulation of both highway network and airport traffic. In order to demonstrate this is the case SDG should list out observed highway network flows across the day together with existing and forecast airport traffic to show that cumulative worst case(s) are being analysed (I think this has been attempted in figs 4-6, but it is not clear). This would also illustrate the absolute cumulative peak hour, ie whether this would be the AM peak or the PM peak hour; at J8, the 2014 network absolute peak hour is 1700-1800.	Noted – figures have been amended to demonstrate the accumulation of observed highway network flows and existing and forecast airport traffic. The peak hours and cumulative peak hour have been identified.
4.3	**TN2 Page 2**: shows misunderstanding of highway network flows in vicinity of airport and the peak periods, which are greatly influenced by long distance commuting patterns, as would be expected on such strategic links. As already reported to SDG on delivery of ECC traffic data, the AM peak hour on the A120 and at J8 is 0700-0800 and NOT 0800-0900, although the evening 1700-1800 is (currently) correct. The peak hour is likely to extend as the airport operation extends and also there is peak spreading across the network. This should be taken into account in the TA.	Noted – the 0700-0800 peak has been incorporated. The junction and link capacity assessments account for the busiest forecast peak hours during the 2029 'Do Something' (44.5mppa) scenario.
4.4	**TN2 Page 3**: Junctions: SDG propose assessing only J8, Priory Wood and Round Coppice junctions. Strongly suggest that Thremhall/Bassingbourn roundabout is done too, to ensure tailbacks onto A120 (which currently occur pre-AM peak) would not result. Impacts on other junctions in the area should be reported, and the need for their forecast capacity analysis informed by this. (This is attempted from p13 onwards, but I have methodological reservations/queries, not least as the assessment hours reported are questioned)	Noted – the Thremhall/Bassingbourn roundabout has been assessed. Other junctions in the area which meet the 10% threshold for likely traffic flow increases are located on airport land. Any improvements to mitigate the impacts of the 35+ Project at these junctions will be made as demand arises under the airport's Permitted Development Rights and are not included within this planning application. Improving these junctions should the need arise makes commercial sense for the airport to continue its operation and enhance the its client experience.
4.5	**TN2 Page 3 & 4**: Airport trip profiles: use of busy day schedules is acceptable; Figs 1-3 use differing 'y' axes, which makes visual comparison more onerous. It is not clear whether the figs include the 2 hour arrival and 1 hour departure 'lags' to allow for the check-in/check-out etc processes (TASR para 2.37 states this will be applied, but neither TN1 nor TN2 make any reference to this fundamental aspect).	The figures include the arrival and departure 'lags' which is described in the TA.
4.6	**TN2 Page 5**: Sensitivity test: more clarification is needed for this section, I have struggled to try and understand what is being presented … SDG report link flows on Thremhall Ave (exact location unspecified) to 'assess whether growth in background traffic would affect peak distribution of vehicles'. I think it's an effort to assess the cumulative impact and daily profile of traffic, but I could be wrong. The use of Thremhall Ave for this evaluation is not recommended as it is primarily an airport road (ie not highway), so it would be more realistic to use one or more sections of the A120, ie that between Priory Wood and Thremhall, and to the east of the eastern access, to illustrate highway network impacts.	The sensitivity test was undertaken to understand which hour represents the peak two-way traffic on the local highway network when considering airport-related traffic and background growth. Thremhall Avenue and the A120 (East of Junction 8) were both tested to ensure consistency between the road links. Thremhall Avenue was selected as it represents the main terminus for airport-related trips. The A120 (east of Junction 8) was selected as it is a strategic road link and therefore accounts for highway background traffic, and it also picks up airport-related traffic within the vicinity. Thremhall Avenue was also tested against ATC data to ensure consistency with observed traffic data counts.

ECC Comments		SDG Response
4.7	**TN2**: Fig 4 shows 2016 airport arrival and departure bars (as per fig 1) with the addition of 'background traffic growthed to 2016', and then overlays Oct '15 ATC data as a dataline. First of all the Fig 4 ATC dataline profile doesn't follow the pattern of the 'background traffic growthed to 2016' profile. If the ATC dataline is supposed to represent existing total flows on the link, I would expect the underlying data bars to more closely correspond to its profile, as a sense-check, but is a little 'loose' in this respect.	Noted. The ATC data has been growthed to 2016 to represent 'baseline conditions'.The ATC data and background traffic data has been corrected and made uniform across all scenarios, and has been amended for inclusion in the TA.
4.8	**TN2**: In Figs 5 & 6, the above data is replicated for 35mppa and 44.5mppa. It is unclear why the background traffic growthed to 2029 (blue bars) differs in these two figures, I would expect them to be the same, as they are reported in TN1 p2 to be derived from growthed 2016 data ... The 'October 2015 ATC' dataline in each appears to have been growthed using single growth factors but which differ between Fig 5 and fig 6; dataline indicates max flow at 0500-0600 as ~1900 (in 2016, fig 4), ~2650 (35mppa, fig 5) and ~3200 (44.5mppa, fig 6). Again the ATC dataline profile does not correspond particularly well with that of the bars in either of the figures.	Noted – 'background traffic growthed to 2029' has been amended to correspond in in both figures.
4.9	**TN2 Page 7:** following on from my queries on the figs, I cannot confirm the content of table 2, indicating the peak hours. The 2nd para states 'This note will assess the additional impact of a seven mppa growth for the 2029 'do something' 44.5mppa scenario.' Surely this should be 9.5mppa?	Noted – amended to 9.5mppa.
4.10	**TN2:** A quick check of HATRIS data and the 2014 ECC ANPR data indicates that the A120 2016 flows reported in table 3 may significantly under-represent existing flows, as may several of the other links reported. Table 4 has similar discrepancies. From HATRIS, AM network 2-way peak hour flows on A120 between Priory Wood and Thremhall merge/diverge: 0700-0800=5,008, 0800-0900=4,358, table 3 gives 3,474.	SDG has interrogated the HATRIS data and agrees that the 2016 trunk road traffic flows are considerably higher than those presented in the DfT dataset. As such, the HATRIS datasets have superseded the DfT flows as they do appear to provide a reliable source.

Highways England

HE Comments		SDG Response
5.1	Growth – I would suggest that SDG liaise with ECC to see what growth they have applied in their LinSig model of the M11 J8 and that they use a consistent method (they would need details from Essex as to how much of the airport growth has already been accounted for).	Revised growth rates have been agreed with ECC/HE. Figures adopted within TA and calculations provided.
5.2	A junction assessment of the M11 J8 using VISSIM is welcomed; the scoping note states that the future model will take into account junction improvements proposed by ECC – the funding for these junction improvements would need to be confirmed by ECC to understand whether this has been secured or whether a scenario with and without the improvements would need to be assessed.	Scenarios with and without improvement and further improvement have been modelled and are reported within TA. The details of alternative improvement schemes are set out with the view that they will form basis of agreed highway improvement contributions to be delivered through a future planning agreement.
5.3	There is no mention of accidents in the scoping report – an accident analysis of the study area, including the M11 J8 slip roads and the A120 Priory Wood roundabout would need to be considered in the TA.	Personal Accident analysis has been carried out for all road links anticipated to have a traffic growth of 10% or greater, as set out in the TA and ES chapter.

Network Rail

Network Rail Comments		SDG Response
6.1	In order to fully assess the potential impacts, and the level of developer contribution required, it is essential that where a Transport Assessment is submitted in support of a planning application that this quantifies in detail, the likely impact on the rail network	The TA is to be submitted as part of the planning application, and considers the impact of the rail network with regard to demand and capacities for the scenario years identified.

Chelmsford City Council

Network Rail Comments		SDG Response
7.1	With regards to transport, the proposed TA (paragraph 7.2) should include consideration of the B1008, which is a key route from Chelmsford to the Airport.	B1008 impact considered within modelling nd reported within TA and EA. Impacts are minor.

Hertfordshire County Council

HCC Comments		SDG Response
	The response received provides many generic points that HCC raise for scheme within Hertfordshire.	HCC are a 3rd party consultee and ECC/UDC are the statutory authorities. The EA and TA content and modelling approach has been agreed with these authorities and hence if conflict occurs ECC views are deemed paramount.
8.1	The Applicant will need to ensure that the TA is prepared in accordance with the 'Roads in Hertfordshire Highways Design Guide' 3rd Edition.	Scope and form of TA has been confirmed by ECC and UDC as highway and planning authorities respectively. HCC are a 3rd part consultee so their guidance does not formally apply to this site, though the TA does accord with their guidelines
8.2	In addition to the trip generation, trip distribution assumptions for the Proposed Development traffic will need to be presented and agreed. The percentage directional distribution for vehicle arriving to and departing from the Proposed Development are required.	Trip generation and trip distributions have been presented in the TA scoping note and technical note releases thus far, including the directional percentages for vehicles arriving/departing Stansted Airport.
8.3	Traffic into and out of all site accesses and traffic through impacted existing junctions on the highway network will need to be considered. The Applicant will need to provide junction assessments for the new site accesses.	Traffic analysis has been carried out based on flows on the main road links into Stansted Airport, for passengers and employees alike. The proportion of passengers on Thremhall Avenue or Round Coppice Road is calculated based on the proportion of passengers using long-stay/jet park parking or short to mid-stay parking, and kiss and fly trips.
8.4	The Applicant should consider committed developments as part of their assessments.	Uttlesford do not have any housing allocations coming forward at present. Committed developments have therefore been encapsulated in TEMPro background growth. Northside is an exception, and has been included separately in the trip generation methodology.
8.5	The junction assessments should be undertaken for the following scenarios: • 2016 – Base conditions; • Forecast year – Base conditions; • Forecast year – Base + Committed Development; • Forecast year – Base + Committed Development + Proposed Development; • Forecast year + 5 years – Base conditions; • Forecast year + 5 years – Base + Committed Development; and • Forecast year + 5 years – Base + Committed Development + Proposed Development.	Junction assessments have been carried out for the following scenarios: • 2016 Existing Baseline Scenario; • 2029 'Do Minimum' (35mppa) Scenario; and • 2029 'Do Something' (44.5mppa) Scenario. These scenarios have already been agreed with ECC.
8.6	Use of HCC's COMET (Countywide Model) should be made in testing the impacts of any new/amended junctions.	Use of Hertfordshire County Council's COMET model is not necessary. Detailed analysis has been carried out at junctions in close proximity to the airport (Priory Wood roundabout, M11 Junction 8 and Round Coppice Road roundabout), which are not located within Hertfordshire County. VISSIM modelling is provided for Junction 8.
8.7	The Applicant will need to provide detailed collision data for the past five years as part of the TA for the surrounding Hertfordshire road network.	Detailed collision data for the past five years (2012 – 2016) has been provided. A traffic impact assessment was carried out which indicated that the impact of the Proposed Development on roads within Hertfordshire is less than 10%. Analysis was carried out on all roads with an impact of 10% or more, therefore it is not necessary to test the Hertfordshire road network.
8.8	New, diverted or extensions of existing public transport routes should be considered in order to enable all parts of the development to be easily accessible by sustainable modes.	Access to the airport is not a significant impact of the Proposed Development. Mitigation measures have been put in place to ensure that there is sufficient capacity.
8.9	A Stage 1 Road Safety Audit will be required to illustrate any proposed access alterations.	No scheme being promoted on HCC highways

HCC Comments		SDG Response
8.10	The assumption is that a full Travel Plan will be required to encourage sustainable transport modes.	The existing ATP covers the period 2008 to 2015. It is currently in the process of being updated following the latest employee survey (2017) result. A new ATP will be published in early 2018 and cover a period of 2017 to 2022.
8.11	It is likely that a Construction Traffic Management Plan (CTMP) will be required.	No CTMP has been produced as part of the planning application. Information on construction activity and traffic movements is set out in the TA and ES chapter.

Highways England (04/10/2017)

Highways England Comments		SDG Response
1.0 General		
2.1	It is recommended that if further parking provision is required that these plans are set out within the forthcoming TA or adequate evidence is provided to demonstrate that there is already sufficient parking capacity at the airport.	Car parking provision will be delivered under Permitted Development Rights and does not form part of the scheme. Parking demand is reviewed on a constant basis by STAL and capacity is adjusted accordingly, which falls within the commercial interests of the airport.
3.1	It is recommended that, for HE's requirements, in addition to a review of all relevant national, regional and local policy documents; reference is made to DfT Circular 02/2013, which provides guidance regarding how the impact of the proposed development on the SRN should be assessed, together with 'The strategic road network: Planning for the future (A guide to working with Highways England on planning matters)'.	The DfT Circular 02/2013 will be included in the policy/guidance chapter of the TA.
4.3	It is recommended that a breakdown of existing and forecast bus service frequencies and destinations is included in the forthcoming TA.	Noted. This has been provided in the TA.
4.5	SDG state that at present the capacity of trains is considered more than sufficient to meet passenger and employee demand to Stansted Airport, as spare capacity has been recorded on services exiting and entering the airport. It will be useful for the TA to provide evidence to demonstrate there is spare capacity.	Noted. This has been provided in the TA.
4.7	Existing cycle and walking routes should also be identified and reviewed to understand if these would provide sufficient networks to encourage such forms of sustainable travel. Although it is unlikely many passengers will use these modes to travel to/from the airport due to its location, SDG demonstrate that a number of employees either walk or cycle to work. The walking and cycle routes should therefore be reviewed to understand if there is a need and/or potential to extend or improve these networks to the airport.	The impact of 35+ Project on the local cycle network is likely to be negligible. Options for improving cycle routes and crossings are being considered as part of the planned M11 Junction 8 improvements and Highways England has been given a remit to retrofit cycle infrastructure to its network where appropriate. As part of the 2015 SDP, the Stansted Cycling and Walking Strategy sets out opportunities to improve the walking and cycling environment. This includes routes connecting Flitch Way to the Airport and Stansted Mountfitchet to the Airport, as well as providing storage, shower and secure parking at key locations on site.
4.8	AECOM recommend that Personal Injury Collision Data from the most recent five year period available is assessed for the highway network at the likely access points to the SRN. This is required to identify whether there are any existing safety issues that may be exacerbated by the proposed expansion.	Personal Accident analysis has been collected over a five year period for all road links anticipated to have a traffic growth of 10% or greater, as set out in the TA and ES chapter.

	Highways England Comments	SDG Response
5.4	Whilst AECOM consider that the CAA is likely to be a reliable source of information from which to establish forecast trip generation, it is unclear whether this data will represent Stansted Airport alone or whether it will encompass data from a number of airports across the country. There is a risk that the data may not be representative of future passenger patterns at Stansted. It is recommended that further details are provided as to how the increase in passengers will be spread across the four categories outlined above and evidence that this is thought to be representative of the potential passenger split at Stansted going forward.	The data derived from CAA is secondary data which has been filtered to account for Stansted Airport only. The increase in passengers per categories outlined has been derived from the ICF forecasts for passenger groups and populations at Stansted Airport. It is therefore considered representative of the potential passenger split at Stansted going forward.
5.5	It is important to understand how the increase in passenger numbers will be achieved. Assuming this is through the provision of additional flights, is this achieved through denser scheduling and/or a wider range of departure/arrival times. The impact of changes in flight patterns upon arrivals/departures to/from the airport landside should be considered against current transport provision and public transport availability.	All passenger numbers are based on the flight movement profiles provided by ICF/STAL. In the future scenarios, additional flight movements are included according to arrival and departure. Public transport and highway analysis has been undertaken based on the flight profiles provided, as provided in Chapters 6-8 of the TA.
5.6	AECOM note that passenger numbers vary significantly month to month with typically more passengers travelling during the summer months. It is recommended that details be provided within the TA of the trip generation that is represented and how this relates to the monthly variance in passenger numbers.	The air passenger numbers do vary per month with typically more passengers travelling during the summer months. Chapter 6 of the TA focuses on forecast air passenger demand and sets out how the yearly passenger profile is derived. All passenger numbers are based on the flight movement profiles provided by ICF/STAL.
5.7	Section 2.16 of the SR indicates that an adjustment will be made to overall mode splits (based on 2015 modal share for passenger types) to take account of a predicted increase in the proportion of UK leisure trips and a decrease in the proportion of foreign passenger trips. It is unclear where this information has come from and it is recommended that evidence is provided to support this approach.	The proportion of UK Leisure passengers is anticipated to grow in future years due to the increasing prevalence of package holidays. The predicted increase in the proportion of UK leisure trips and decrease in the proportion of foreign passenger trips was derived from ICF forecasts supplied to predict the quantum and type of passenger per future scenario tested.
5.9	The SR indicates that peak periods will be assessed within the TA, however further details of what these peak periods will be is not outlined. An association between peak flight times and peak hours on the highway network will need to be considered and how these two combine to be assessed within the TA. Evidence should be provided to demonstrate whether the current arrival and departure trip patterns will be maintained following the expansion or whether these could alter and therefore result in different peak hours for traffic on the highway network.	The TA sets out in Chapter 6 and 7 which peak periods have been assessed. The peak highway network periods have been assessed (AM: 08:00-09:00; PM: 17:00-18:00) in accordance with ECC discussions; and the peak periods for airport arrivals and departures were also analysed: Arrivals: 05:00-06:00; Departures: 16:00-17:00. Further details and methodology is set out in the TA.
5.10	SDG state that they will apply a 2-hour pre-flight departure 'turn up' factor and 1-hour post-flight arrival exiting trip factor to car trips. SDG state that these factors are derived from observed patterns. AECOM deem that both these assumptions appear reasonable, however evidence should be included in the forthcoming TA to support them and whether these vary depending upon passenger type for the four categories listed in paragraph 5.3.	Profile data provided in TA to demonstrate basis of assumption
5.13	The SR outlines that a combined 10% of existing 'kiss and fly' and taxi trips are expected to transfer to parking trips due to a predicted increase in longer haul and UK leisure Trips. SDG state that details of this assumption will be presented in the forthcoming TA. AECOM consider that SDG will need to present evidence for this assumption if applying a reduction to trips travelling to/from the airport.	The 10% reduction in Kiss & Fly trips has been incorporated to adhere to STAL's aims and Sustainable Development Plan (SDP) (2015) objectives to reduced Kiss & Fly trips by 10% by 2030.
5.14	AECOM also recommend that any trips associated with the 'kiss and fly' drop off zones are counted as both an arrival and departure (with an appropriate lag time) to ensure that the impact of the vehicle movements is accurately assessed.	Noted. This has been provided in the TA and traffic calculations.

	Highways England Comments	SDG Response
5.16	AECOM understand that passenger numbers recorded at Stansted during 2015 totalled 22.5m. The forecast increase in passenger numbers to 44.5mppa represents a 98% increase over the 2015 number. The anticipated increase in employees equates to a 73.5% increase. Whilst an increase in efficiency can be anticipated there is significant difference in the percentage growth with a concern that traffic impact from actual employee numbers could be greater than anticipated. It is recommended that further explanation is provided of how employee numbers have been derived or how efficiencies are expected to be achieved.	Since this issue, the passenger flows have been changed to account for a proposed uplift of passengers from 35mppa to 43mppa as opposed to 44.5mppa. In the previous iteration, the number of employees per year was based on a steady growth between 2016 and 2029. Since the new numbers have been released, all employee populations per scenario have been provided by Optimal Economics.
5.18	It is important that the TA and an associated Travel Plan provide justification for this through a proposed improvement in the public transport provision for employees, to encourage a shift away from car use. This will also need to be considered in the context of any additional car parking provision.	For the purposes on ensuring a robust test of the key highway impact – detailed modelling has assumed that the share of passenger travel by public transport remains at 2016 levels for future scenarios. However, there has been a trend of increasing mode share by public transport and measures are in place to encourage this. There is an ongoing commitment to encourage non-car travel to and from the airport. Parking provision is not subject to this planning application.
5.19	Further details regarding the trip generation predicted for specific peak hours on the network/for the airport have not been provided in the SR. It is recommended that the hours that are proposed to be assessed are outlined within the TA, along with justification as to why those hours have been chosen.	Noted. The peak periods have been selected and justified within the forthcoming TA.
6.1	The SR does not provide details of how passengers travelling to and from the airport via car could be distributed across the highway network. It is recommended that these details are provided within the forthcoming TA or further scoping documentation. Full details about the source of the distribution assumptions should be included within the TA for review.	Noted. This has been provided in the TA, TN01 and TN02.
6.3	Extracts from the employee survey presents high level staff origin/destination data. However, a more detailed breakdown of this data is not provided and it is not clear how the TA intends to apply this data to establish the distribution and assignment of trips to the highway network. It is recommended that this data is interrogated and presented further to gain a clear understanding of the impact of the development. If origin and destination employee distribution data can only be assessed to the county level, then 2011 Census Journey to Work Data could be used to provide a more detailed representation of staff distribution and how staff trips may affect the highway network.	We have access to the raw 2015 Employee Survey data which interrogates employee travel origin/destination at postcode level.
6.5	Consideration should also be given as to whether it is reasonable to assume that existing patterns will be maintained, or whether an alternative distribution may need to be applied. It is likely that some of Uttlesford's growth is intended to serve future Stansted employees, in which could the proportion travelling on the A120 may increase more so than on other routes. How the impact of new development could impact on the distribution of employees should be fully considered within the TA.	The existing patterns of employee distribution were used as no-one can predict where employees are to travel from in the future. As a worst-case, providing analysis for the existing distribution can be used to determine capacity constraints on the local highway and public transport network as a result of the uplift in passenger and employee travel.
7.1	It is recommended that a full assessment of all types of parking provision is assessed within the forthcoming TA. In addition to the availability of non-car modes, car parking pricing strategy is likely to have an influence in mode choice and should be discussed in the TA.	Car parking provision will be delivered under Permitted Development Rights and does not form part of the scheme. Parking demand is reviewed on a constant basis by STAL and capacity is adjusted accordingly, which falls within the commercial interests of the airport.
7.2	The SR provides details of the daily profile of car park entries and exits for current operations of the airport. Consideration should be given to how these existing profiles could vary with the increase in airport operations and variance in flight types and timing. A parking accumulation should be undertaken for the various types of car parks available.	

	Highways England Comments	SDG Response
8.3	The Uttlesford Emerging Local Plan period ends in 2033 and therefore AECOM recommend that an additional 'review period' assessment should be based on the year 2033 to gain an understanding of the airport passenger increase impact including the cumulative impacts of the surrounding developments identified within the plan period.	All peak hour assessments will include analysis of 2033.
8.4	SDG state that baseline traffic flows will be derived from traffic surveys undertaken in October 2015 that have been cross referenced against parking demands, drop off observations and the most recent travel survey data. In addition, the SR states that the off-airport highway network flows will also be based on 2015 traffic data sourced from Essex County Council (ECC), Hertfordshire County Council (HCC) and the Department for Transport (DfT). In an email from SDG to HE on 5th September 2017 an update was provided indicating that the TA will rely on 2016 TRIS data for the baseline of trunk road flows, as they appear considerably higher than DfT TRADS data. AECOM recommend that the evidence behind this is presented within the forthcoming TA.	Baseline traffic flows will be derived from traffic surveys undertaken in October 2015 that have been cross referenced against parking demands, drop off observations and the most recent travel survey data. Off-airport highway network flows are also based on 2015/2016 traffic data sourced from Essex County Council (ECC), Hertfordshire County Council (HCC) and TRIS data. The TRIS data has replaced all data obtained from the DfT for the baseline of trunk road flows, as they appear considerably higher than DfT TRADS data. This is set out in the TA.
8.5	In order to determine the scope of the highway network that requires baseline data, it is recommended that the extent to which the proposed development is predicted to have a material impact on the SRN is established and that baseline data is collected for all identified sections of the SRN where a material impact is anticipated.	In terms of the key environmental effects arising from changes in road traffic, the scale and extent of the assessment has been considered accordance with the IEMA guidelines for assessing highway impacts. The assessment has involved identifying the affected parties or locations which may be sensitive to changes in traffic conditions and identifying the scale of potential impact. With respect to road traffic, the IEMA guidelines suggest that the impacts of the traffic changes associated with proposed development on the highway where traffic flows are predicted to change by more than 30%, or, in sensitive areas local to the application site, where traffic flows have increased by 10% as a result of the development, should be assessed.
8.7	It is recommended that the methodology used to calculate the growth factors is fully outlined within the TA. Details of any adjustments that have been made within TEMPro to avoid double counting the impact of the Stansted expansion and any committed development should also be provided.	The methodology used to derive the TEMPro is provided in Chapter 7 of the TA.
8.9	It is recommended that SDG consult with Uttlesford District council and East Herts District Council to understand if there are any committed developments within the upcoming local plan periods in the area and agree upon which committed developments should be included within the assessment. It is recommended that a point impact assessment should be undertaken on the agreed upon committed developments to understand their impact on the network and include this within any assessment of the operation of the network following the airport expansion.	Uttlesford do not have any housing allocations coming forward at present. Committed developments have therefore been encapsulated in TEMPro background growth. Northside and Harlow college are exceptions, and have been included separately in the trip generation methodology.
8.10	SDG state that they will use a previously built VISSIM model that was developed in 2015. The model represents a base case scenario where Stansted was operating at 23.5 mppa. AECOM understand actual passenger numbers during 2015 was 22.5mppa. Further clarification should be provided on how the model has been developed to represent 23.5mppa. This model will be used to determine forecast vehicle traffic on the airport roads using forecast mode-share and origin-destination data for passengers and employees at Stansted. It is unclear if the VISSIM model extends to M11 Junction 8 and other sections of the SRN. It is requested that clarification over the scope of the model is provided by SDG. Furthermore, the status of the model and whether approval from HE for its use has been given should also be clarified. Details should also be provided of the date of the base survey data used to develop the model.	Junction 8A Modelling recently developed by ECC – (Viissim based) has been adopted by SDG for this TA to ensure consistency

	Highways England Comments	SDG Response
8.11	SDG state that a separate work stream is being undertaken by MAG jointly with Essex County Council (ECC) and Highways England (HE) to evaluate M11 Junction 8's operation and identify potential major and long term improvements. Further details of this should be provided within the TA to indicate the measures that are being proposed and how the junction is predicted to operate following the implementation of these measures and the proposed expansion of the airport.	Potential further enhancements to the ECC scheme have been modelled and are promoted as being suitable to offset the impact of additional traffic associated with is application. It is envisaged that they would form an element of an agreed planning package to be brought forward with this scheme. The analysis of this proposal has not indicated that major scheme is required to accomdaote predicted additional traffic.
8.12	If the impact of the increase to passenger numbers is found to be material on SRN junctions then it is recommended that junction capacity assessments be undertaken to understand the impact of the expansion on the operation of the SRN and establish whether mitigation measures are required (for the forecast year of 2029). In addition to M11 Junction 8, the expansion could also have a material impact on other junctions of the SRN, particularly the A120. If this is the case then capacity assessments should be undertaken at these junctions to determine whether mitigation measures are required at these locations to support the proposals.	Junction capacity analysis has been provided in Chapter 7 of the TA.

C Travelcard Scheme Routes Map


Kings Lynn
Norwich
Peterborough
Ely
Cambridge
Stansted Airport
Bishop's Stortford
Harlow Town
Chelmsford
Ipswich
Braintree
Colchester
Hertford
Hertford East
Ware
St Margarets
Broxbourne
Cheshunt
Waltham Cross
Enfield Town
Bush Hill Park
Southbury
Edmonton Green
Silver Street
White Hart Lane
Oakleigh Park
Crews Hill
Gordon Hill
Bramley
Hadley Wood
Potters Bar
Welwyn
Hatfield
Knebworth
Stevenage
Letchworth
Hitchin
Baldock
Royston
Shepreth
Foxton
Meldreth
Whittlesford
Great Chesterford
Audley End
Saffron Walden
Elsenham
Newport
Rayne
Takeley
Great Dunmow
Harlow Mill
Roydon
Broxbourne
Cheshunt
Theobalds Grove
Hatfield
Hatfield Heath
Bishop's Stortford
Sawbridgeworth
Harlow Mill
Roydon
Broxbourne
Cheshunt
Theobalds Grove
Enfield Lock
Tottenham Hale
Seven Sisters
Stamford Hill
Stoke Newington
Rectory Road
Clapton
Hackney Downs
London Fields
Cambridge Heath
Bethnal Green
Liverpool Street
Shoreditch
Whitechapel
Bow Church
Mile End
Stratford
Northumberland Park
Chingford
Walthamstow Central
Kings Cross
Euston
Euston Square
Marble Arch/Oxford Street
Baker Street
St John's Wood
Finchley Road
Golders Green
Paddington
Waterloo Station
Victoria Rail & Coach Stations
Southwark
Tooley Street
Wickford
Rayleigh
Basildon
Southend on Sea
Great Eastern Mainline
Stansted Express
Airport Link Express
A1
A10
A12
A13
A406
M11
M25

D M11 J8 Improvement Scheme Preliminary Design Plans

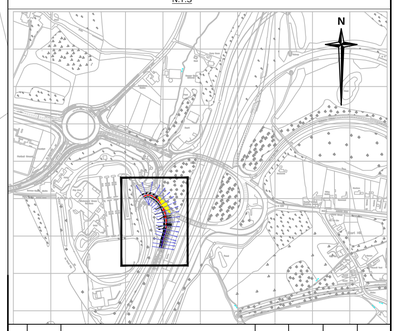
NOTES:

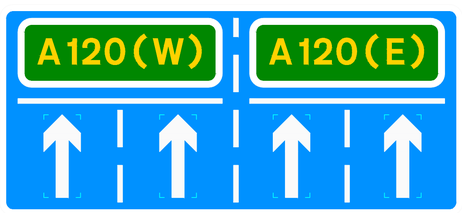
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. DO NOT SCALE FROM THE DRAWING.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DESIGN PACKAGE.
4. DESIGN DOES NOT SHOW LOCATION OF PROPOSED HIGH MAST ARM.

KEY

- KERB LINE
- CHANNEL DRAIN
- ROAD MARKING
- GRASS VERGE
- CARRIAGEWAY WORKS
- YELLOW BOX MARKING
- EXISTING CARRIAGEWAY TO BE RESURFACED
- POST & RAIL
- VEHICLE RESTRAINT SYSTEM
- LP — INDICATIVE LOCATION OF LIGHTING COLUMN
- TL — INDICATIVE LOCATION OF SIGNAL HEAD
- RS — ROAD SIGN

LOCATION PLAN
N.T.S





Scheme Ref.	M11		
Sign Ref.	ADS	x-height	200.0
Letter colour	WHITE	SIGN FACE	
Background	BLUE	Width	5040mm
Border	WHITE	Height	2300mm
Material	Class RA2 (12899-1:2007)	Area	11.60m²

Indicative Location of Secondary Signal Head

Illuminated No Entry Sign

Indicative Location of Primary Signal Head

Existing Illuminated End of Motorway Sign to be Relocated

Dedicated Lane Advanced Directional Sign

3.59m
3.70m
3.65m
3.89m

A120 (W) SERV / TKELEV

A120 (E) SERV / TKELEV

0 2.5 5 7.5 10 12.5 m
SCALE 1:250

Rev.	Date	Description of revision	Drawn	Checked	Review'd	Approv'd

DRAWING STATUS

STAGE 3A - PRELIMINARY DESIGN

RINGWAY JACOBS integrated expertise

Essex County Council

Mark Rowe, Service Director, Highways
Seax House, Victoria Road South, Chelmsford, CM1 1QH.
Tel: 0845 6037631

SCHEME TITLE

M11 JUNCTION 8 JUNCTION IMPROVEMENTS

DRAWING TITLE

GENERAL ARRANGEMENT LEFT TURN APPROACH LANE M11 NORTHBOUND EXIT SLIP PROPOSAL (LOCATION 1)

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
JS	GS	DL	PM	BS
DATE 03/05/17	DATE 03/05/17	DATE 03/05/17	DATE 03/05/17	DATE 03/05/17

DRAWING UNITS U.N.O.: DIMENSIONS IN METRES

SCALE AT A1 (841X594mm): 1:250

DRAWING No.: **B355308A-00-001**

REV.: -

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N

HARD STANDING AREA FOR SIGNALS MAINTENANCE

A120 (EAST LINK)

A120 (WEST LINK)

A120 (DUNMOW ROAD)

Ambulance Station

Depot

Pond

Sewage Works (disused)

Track

Amenity Tip

Peek Industrial Park

Floodlight

Stand

Football Ground

Co Const Bdy

Hotel

Play Area

Birchanger Green Services

El Sub Sta

Dunmow Road

92.0m

Stane Street

ROMAN ROAD

Woodlands Lodge

Club House

Drain

0 10 20 30 40 50 m

SCALE 1:1000

File Location P:\WIP\44I0XXXX Delhi Integrated Delivery Folder Assistance\M11 J8_B355308A\03_CAD\B355308A-00-002 GA L2.dwg Last saved by bhatiag1 on 4 May 2017 Printed By Bhatia, Gurpreet on 4 May 2017

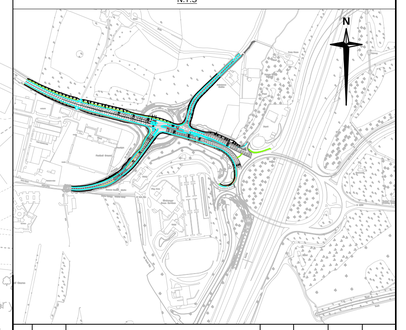
NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. DO NOT SCALE FROM THE DRAWING.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DESIGN PACKAGE.

KEY

- KERB LINE
- ROAD MARKING
- GRASS VERGE
- FOOTPATH / CYCLEWAY
- TACTILE PAVING
- PROPOSED CARRIAGEWAY
- TRAFFIC ISLAND
- EARTHWORKS
- EXISTING VERGE
- INDICATIVE LOCATION OF RELOCATED SIGN
- VEHICLE RESTRAINT SYSTEM
- HARD STANDING AREA

LOCATION PLAN
N.T.S



Rev.	Date	Description of revision	Drawn	Checked	Review'd	Approv'd

DRAWING STATUS

STAGE 3A - PRELIMINARY DESIGN

RINGWAY JACOBS integrated expertise

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Mark Rowe, Service Director, Highways
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SCHEME TITLE

M11 JUNCTION 8
JUNCTION IMPROVEMENTS

DRAWING TITLE

GENERAL ARRANGEMENT
A120 SIGNALISED STAGGERED JUNCTION ARRANGEMENT (LOCATION 2)

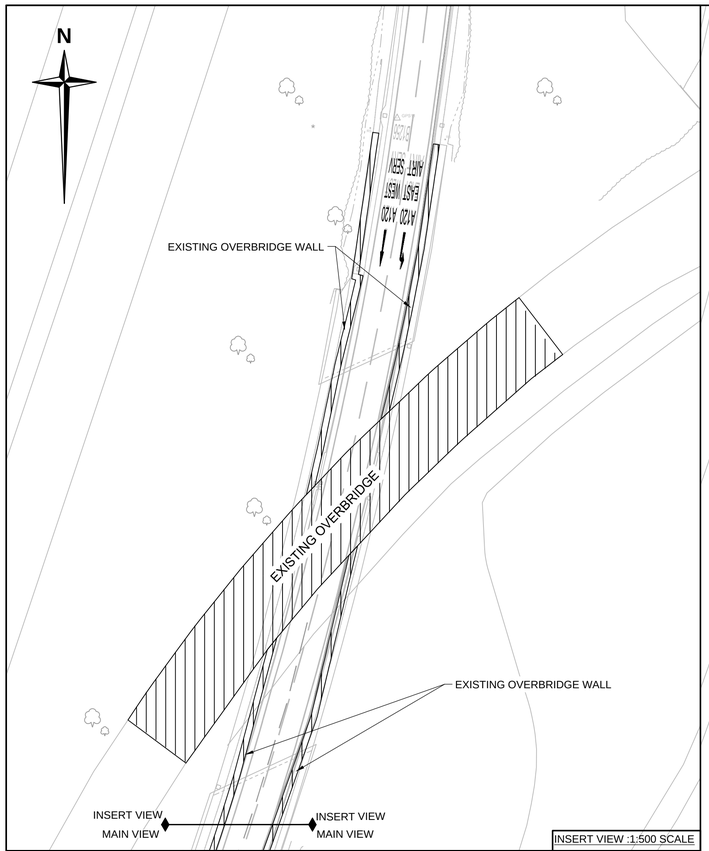
DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
JS	GS	DL	PM	BS
DATE	DATE	DATE	DATE	DATE
03/05/17	03/05/17	03/05/17	03/05/17	03/05/17

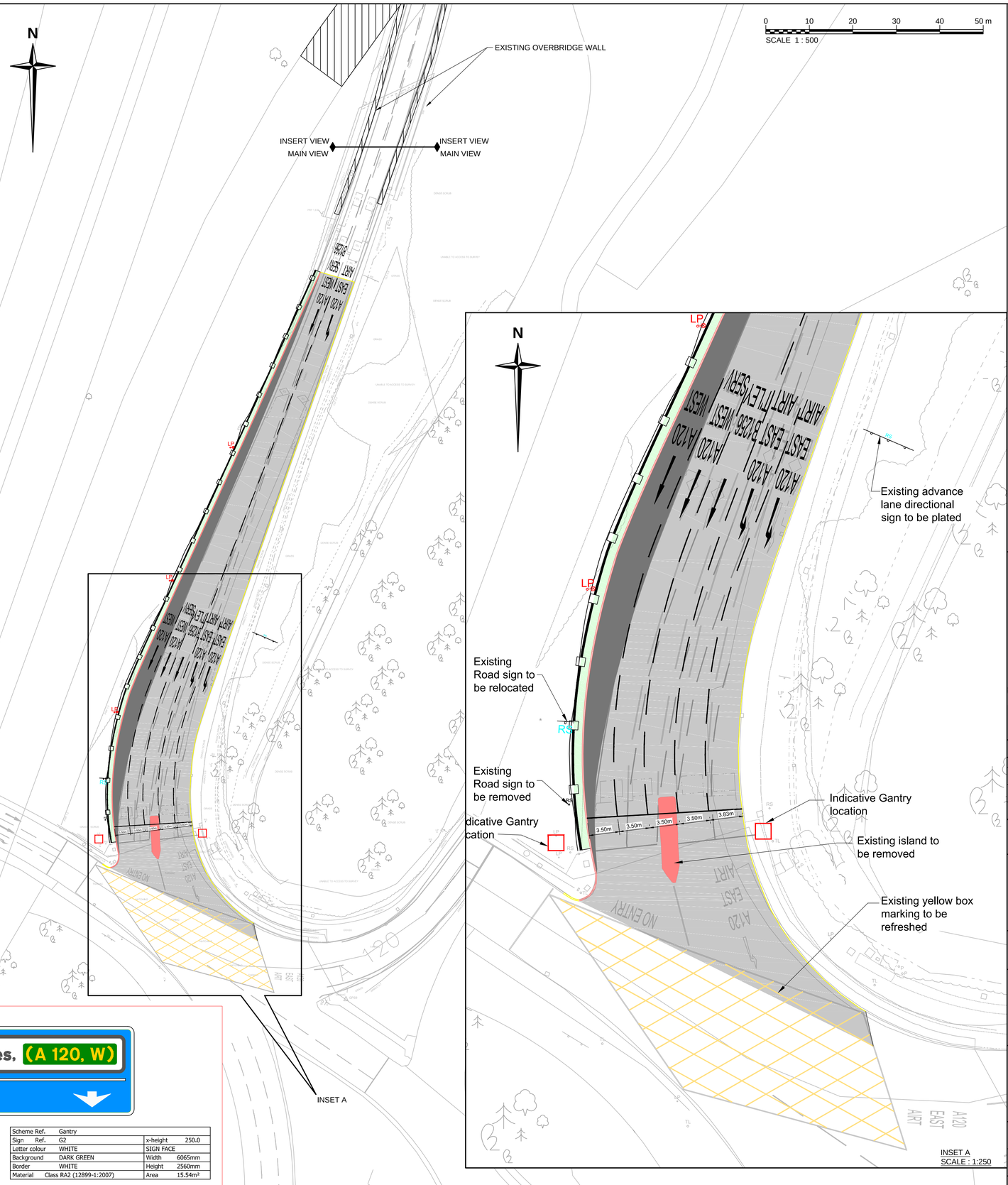
DRAWING UNITS U.N.O.: DIMENSIONS IN METRES

SCALE AT A1 (841X594mm): 1:250

DRAWING No.: **B355308A-00-002**

REV.: -





Scheme Ref.	Gantry		
Sign Ref.	G1	x-height	250.0
Letter colour	WHITE	SIGN FACE	
Background	DARK GREEN	Width	5605mm
Border	WHITE	Height	2565mm
Material	Class RA2 (12899-1:2007)	Area	14.36m²

Scheme Ref.	Gantry		
Sign Ref.	G2	x-height	250.0
Letter colour	WHITE	SIGN FACE	
Background	DARK GREEN	Width	2740mm
Border	WHITE	Height	2405mm
Material	Class RA2 (12899-1:2007)	Area	6.59m²

Scheme Ref.	Gantry		
Sign Ref.	G2	x-height	250.0
Letter colour	WHITE	SIGN FACE	
Background	DARK GREEN	Width	6065mm
Border	WHITE	Height	2560mm
Material	Class RA2 (12899-1:2007)	Area	15.54m²

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
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KEY

- KERB LINE
- ROAD MARKING
- SAFETY BARRIER
- EARTHWORKS
- CARRIAGEWAY WORKS
- GRASS VERGE
- EXISTING CARRIAGEWAY TO BE RESURFACED
- LP — INDICATIVE LOCATION OF LIGHTING COLUMN
- RS — ROAD SIGN

LOCATION PLAN
N.T.S

Rev.	Date	Description of revision	Drawn	Checked	Review'd	Approv'd

DRAWING STATUS

STAGE 3A - PRELIMINARY DESIGN

RINGWAY JACOBS integrated expertise

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Tel: 0345 6037631

SCHEME TITLE

M11 JUNCTION 8
JUNCTION IMPROVEMENTS

DRAWING TITLE

GENERAL ARRANGEMENT
M11 SOUTHBOUND EXIT SLIP
FIVE LANE APPROACH OPTION-1
(LOCATION 3)

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
JS	GS	DL	PM	BS
DATE	DATE	DATE	DATE	DATE
01/05/17	01/05/17	01/05/17	01/05/17	01/05/17

DRAWING UNITS U.N.O.: DIMENSIONS IN METRES

SCALE AT A1 (841X594mm): AS SHOWN

DRAWING No.: **B355308A-00-003**

REV.: -

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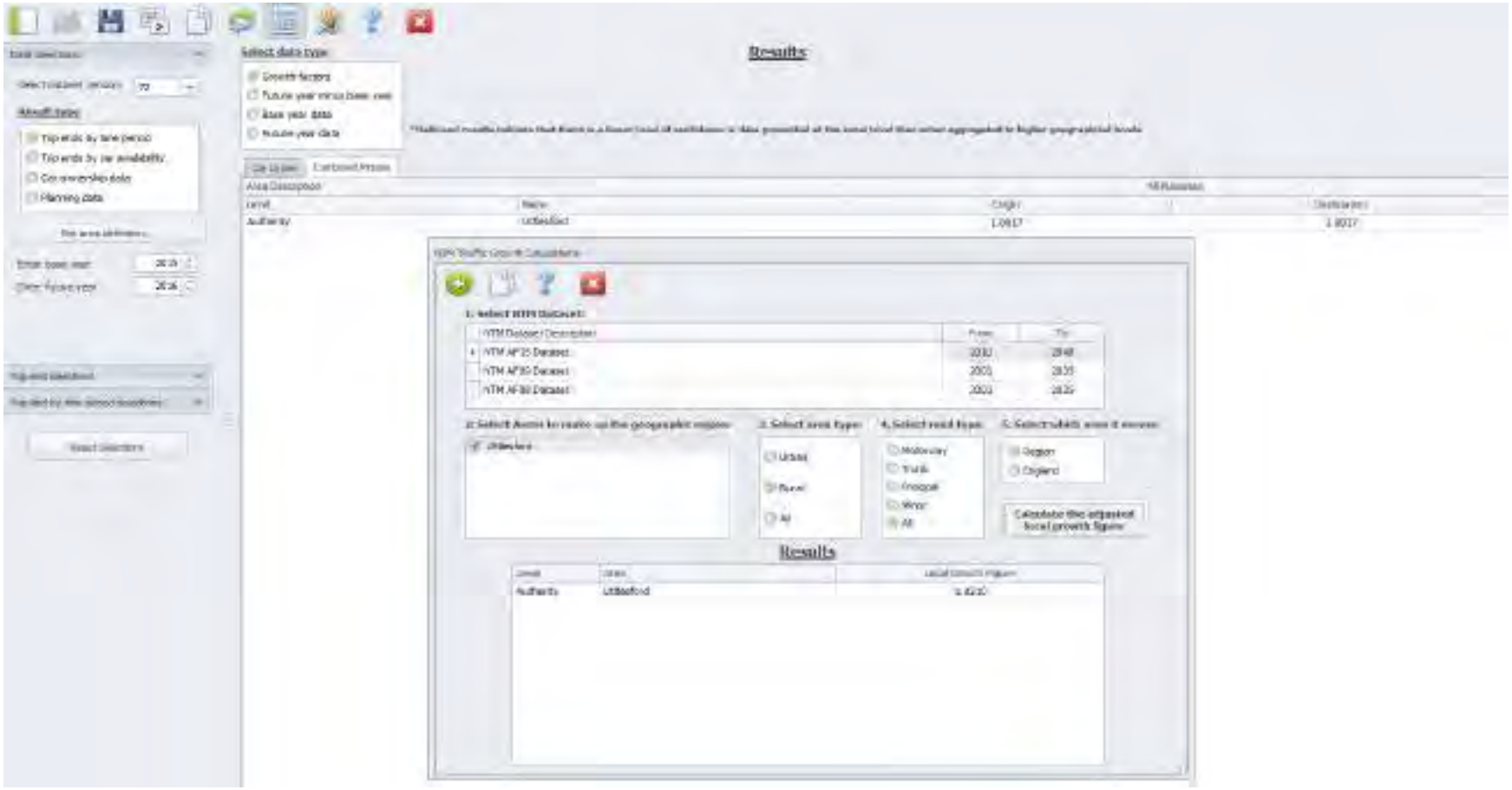
E TEMPro v7.2 Growth Factors

2013 – 2016

2014 – 2016

2015 – 2016

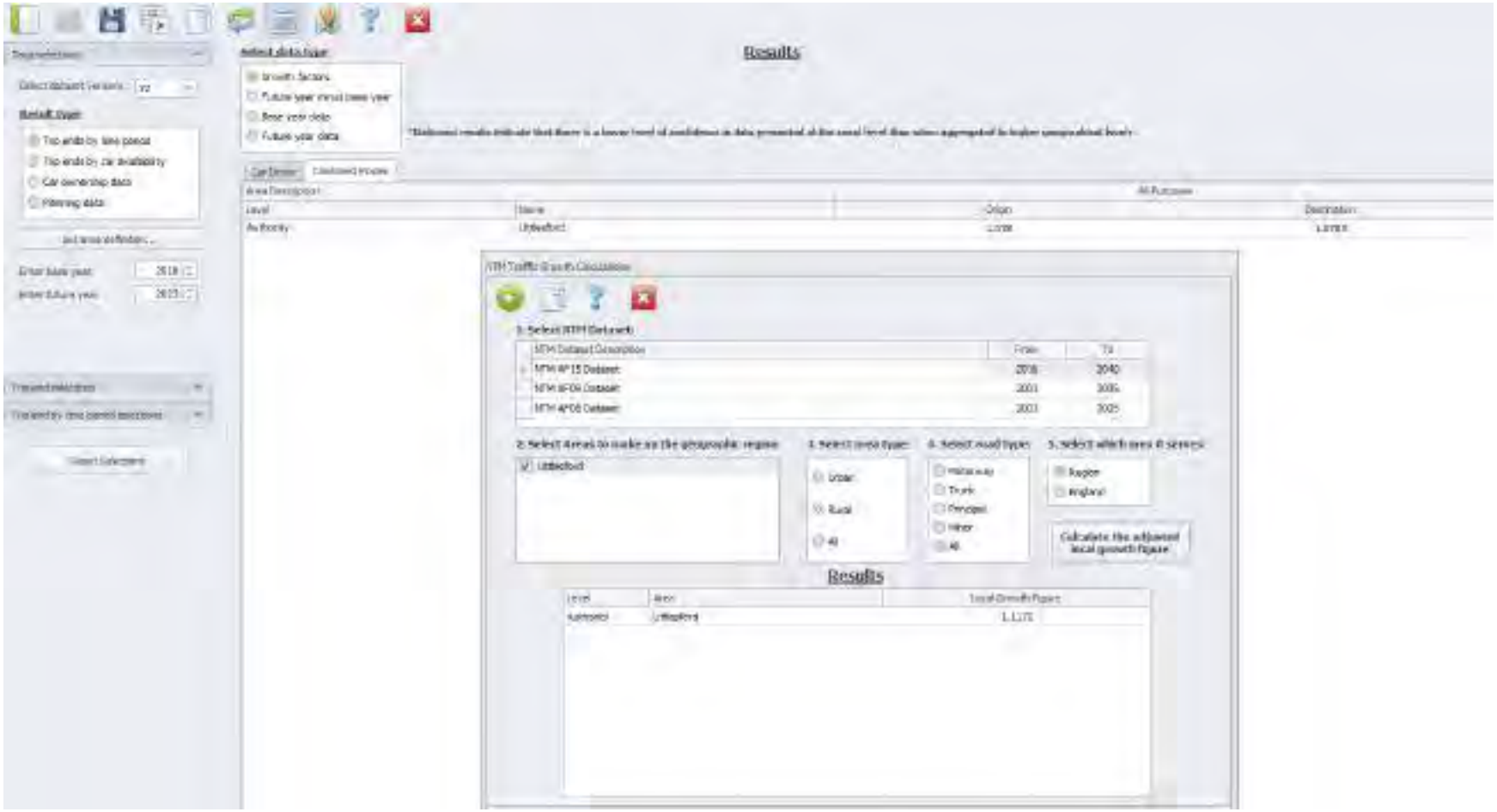

Results
Select data type
Growth factors
Base year data
Future year data
Trip ends by time period
Trip ends by car availability
Car ownership data
Planning data
Results

2017 – 2016

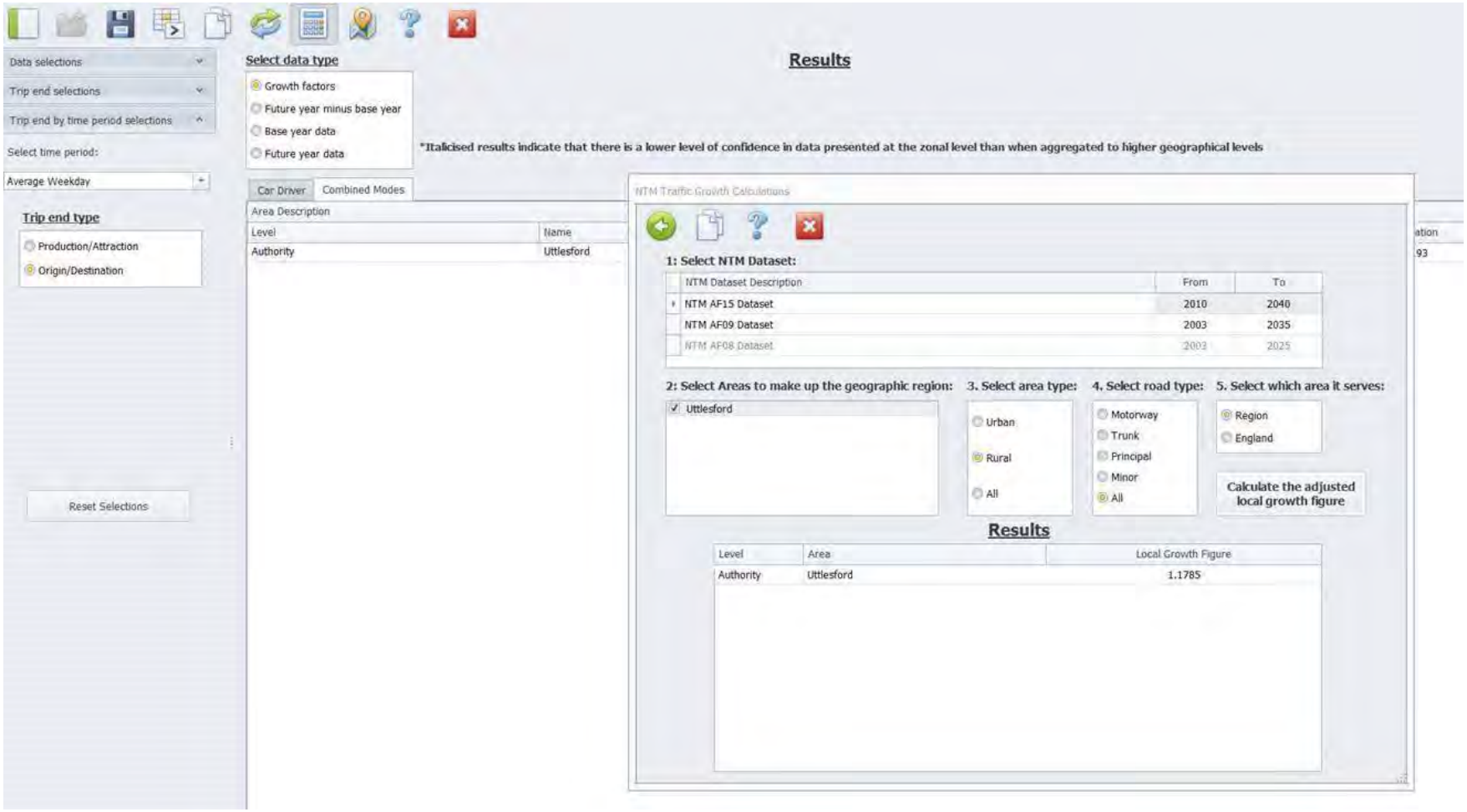
1.0146 – 1 = 0.0146

1 – 0.0146 = 0.9854 (2017-2016 Growth Factor)

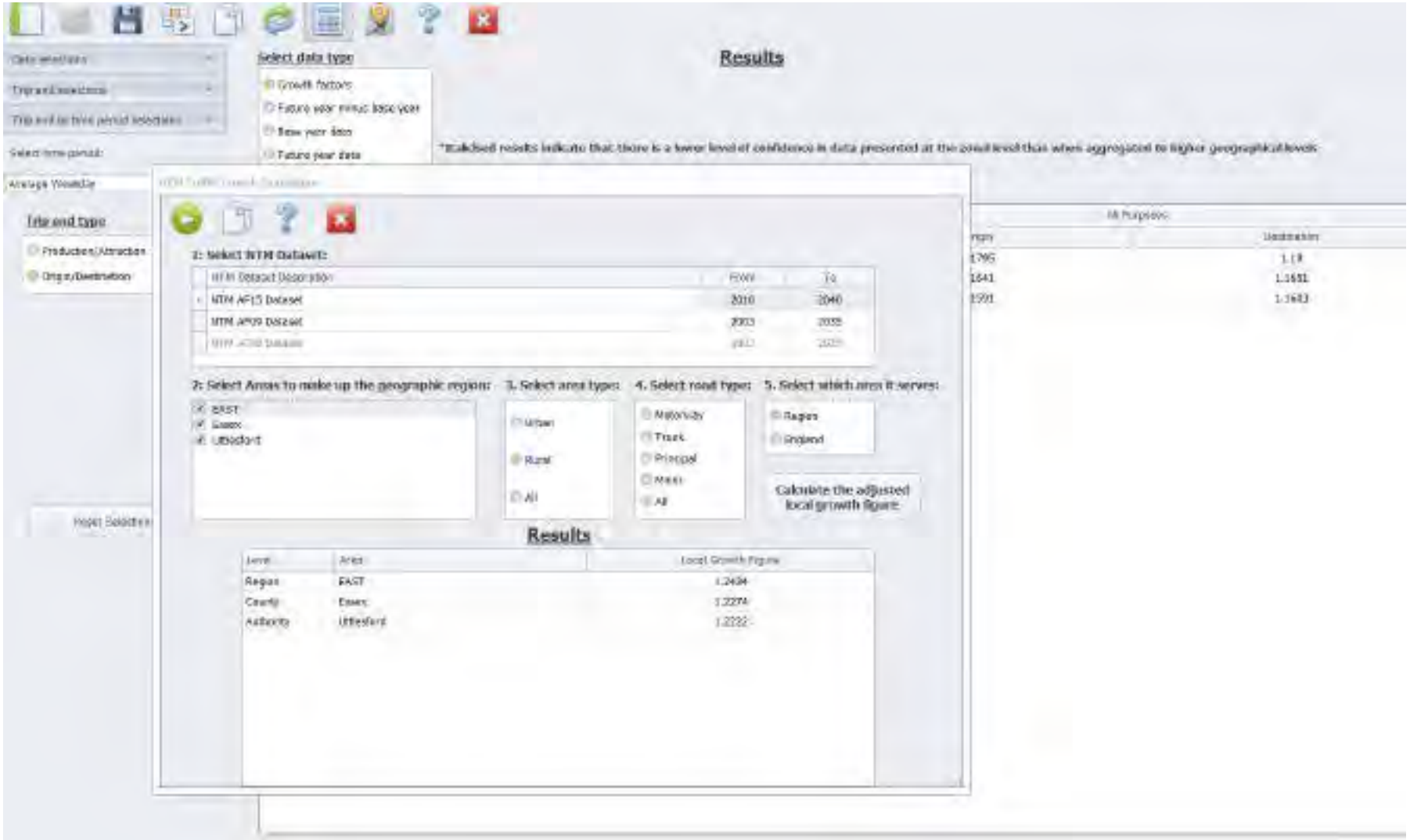
2016 – 2023



2016 – 2028


Data selections
Trip end selections
Trip end by time period selections
Select time period:
Average Weekday
Trip end type
Production/Attraction
Origin/Destination
Reset Selections
Select data type
Growth factors
Future year minus base year
Base year data
Future year data
Results
*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels
Car Driver
Combined Modes
Area Description
Level
Name
Authority
Uttlesford
NTM Traffic Growth Calculations
1: Select NTM Dataset:
NTM Dataset Description
From
To
NTM AF15 Dataset
2010
2040
NTM AF09 Dataset
2003
2035
NTM AF08 Dataset
2003
2025
2: Select Areas to make up the geographic region:
Uttlesford
3. Select area type:
Urban
Rural
All
4. Select road type:
Motorway
Trunk
Principal
Minor
All
5. Select which area it serves:
Region
England
Calculate the adjusted local growth figure
Results
Level
Area
Local Growth Figure
Authority
Uttlesford
1.1785

2016 – 2033


Select data type
Growth factors
Future year minus base year
Base year data
Future year data
Results
*Scaled results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels
Trip end type
Production/Attraction
Origin/Destination
2: Select NTM Dataset:
NTM Dataset Description
From
To
NTM AF15 Dataset
2010
2040
NTM AF09 Dataset
2003
2035
2: Select Areas to make up the geographic region:
EAST
Essex
Uttlesford
3. Select area type:
Urban
Rural
All
4. Select road type:
Motorway
Trunk
Principal
Minor
All
5. Select which area it serves:
Region
England
Calculate the adjusted local growth figure
Results
Level
Area
Local Growth Figure
Region
EAST
1.2434
County
Essex
1.2274
Authority
Uttlesford
1.2232

F Car Occupancy Technical Note

steer davies gleave

Technical Note

To	Stansted Airport Limited		
Cc			
From	Sarah Wellington / Phil Rust		
Date	3 July 2017		
Project	Stansted Airport 35+ Project	Project No.	23003401

Stansted Airport – Car Share and Occupancy Rates

Introduction

Steer Davies Gleave (SDG) has been commissioned by Stansted Airport Limited (STAL) to provide surface access transport consultancy advice in support of the potential increase of passenger throughput at Stansted Airport from 35 million passengers per annum (mppa) to approximately 43mppa.

As part of this assessment, this technical note sets out an assessment of the existing car occupancy for passenger trips to the airport under baseline (2016) conditions. Validation of the car occupancy rates under a baseline scenario are used to future anticipate and inform the number of vehicles and passenger occupancy in respect of the increase from 35mppa to 43mppa at Stansted Airport. This note considers the car passenger movements to the respective car parking facilities at the airport, based on 2016 Civil Aviation Authority (CAA) passenger survey data.

Modes of Travel

The number of passengers and car occupancy rates for Stansted Airport have been determined for the following assessment years:

- **Baseline 2016** – This reflects existing traffic conditions around Stansted Airport.
- **2023 (35mppa) –** This is the forecast date (supplied by ICF) where the consented maximum cap of 35mppa is expected to be reached.
- **2028 (35mppa) 'Do Minimum'** – 2028 is the forecast assessment year where an unconstrained scenario of 43mppa would be reached. Assessment of the year at 35mppa allows for a direction comparison of the 43mppa application from permitted conditions.
- **2028 (43mppa) 'Development Case'** – The assessment year where 43mppa is reached at Stansted Airport, lifting the existing cap of 35mppa.

A multi-step model has been produced where total annual passenger numbers have been derived from 2015/16 ICF data for the baseline year and uplifted for the future year scenarios. Annual Passenger numbers for the various scenarios is set out in **Table 1**.

Table 1: Stansted Airport Passenger Populations per Scenario

Scenario	Number of Passengers per annum
2016 Baseline	24,273,000
2023 (35mppa)	35,000,000
2028 (35mppa) 'Do Minimum'	35,000,000
2028 (43mppa) 'Development Case'	43,000,000

The average number of daily trips have been calculated by dividing annual passenger flows by 364 (the Airport operates all year excluding the 25th December).

Historically, private car trips to and from Stansted Airport are in decline. The most recent surveys indicate that 50% of travel to Stansted Airport is by public transport; the highest for any major airport in the UK. Although it may be expected that the public transport mode share could continue to grow, the current modal shares will remain constant under our assessments for the purpose of being robustness.

The mode share for passengers at Stansted Airport is shown in **Table 2**.

Table 2: Existing Passenger Mode Split (2016)

Passenger Mode Split	%
Car	15%
Car Passenger	22%
Taxi/Rental Car	13%
Bus/coach	23%
Rail	27%
Other	0%
Total	**100%**

Car Occupancy Rates

The CAA Passenger Survey has been undertaken on an annual basis since 1968 and comprises questions based on the following:

- journey purpose;
- final and intermediate surface origins and destinations;
- mode of transport to and from the Airport;
- route flown;
- country of residence; and
- income.

Analysis of 'mode of transport to and from the Airport' data can be used to determine the mode share of passengers arriving and departing from Stansted Airport, including the number of car trips.

Information regarding the number of trips made by car can be analysed against group size of the passenger surveyed to determine a car occupancy rate of passengers per private car to Stansted Airport.

Car occupancy rates can be used to further inform the number of vehicle arriving and departing from the Airport, and the distribution of private cars to the different parking facilities across the Airport.

The results of the car occupancy rate are useful to determine the baseline and future traffic forecasts and growth at the Airport and the subsequent impacts on air quality and noise pollution. Similarly, it can be used to calculate the impact of an increase in the passenger numbers from 35mppa to 43mppa upon existing car parking capacity at Stansted Airport.

The results of the analysis are shown in **Table 3** and **Table 4** overleaf for cars and taxis respectively, broken down by parking activity at the Airport. A total mode share is presented in **Table 5**.

It should be noted that it has been assumed that a group size of '0' represents a single passenger trip (aka one car driver trip) to the Airport. A group size of one is representative of the passenger surveyed plus one additional car passenger (and so on).

steer davies gleave

Table 3: CAA reported Car Travel Response - Car Occupancy Rates by Car Park

Number of Passengers	Group Size (Persons)																	Total	Total Passengers	Car Occupancy
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Private car - Driven away	2586	775	466	97	75	23	6	2	1	1	0	1	0	0	1	0	1	4,035	6,556	1.62
Private car - Short-term car park	605	171	86	22	24	2	2	0	0	0	1	0	0	0	0	0	0	913	1,450	1.59
Private car - Meet & Greet	445	44	106	19	25	5	0	0	0	0	1	0	0	0	0	0	0	645	1,093	1.69
Private car - Mid-stay car park	650	130	143	24	22	11	2	1	0	0	0	0	0	0	0	0	1	984	1,650	1.68
Private car - Private long-term car park	38	8	19	2	3	2	0	1	0	0	0	0	0	0	0	0	0	73	154	2.11
Private car - Airport long-term car park	810	90	176	36	30	15	4	0	0	0	0	0	0	0	0	0	0	1,161	1,930	1.67
Private car - Valet service - On Airport	56	8	10	2	2	2	1	0	0	0	0	0	0	0	0	0	0	81	139	1.72
Private car - Valet service - Off Airport	21	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	30	45	1.50
Private car - Staff car park	17	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	25	1.19
Private car - Hotel car park	84	10	14	5	1	0	0	0	0	0	0	0	0	0	0	0	0	114	171	1.50
Private car - Business car park	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	1.33
Private car - Type of car park unknown	39	5	9	0	1	0	0	0	0	0	0	0	0	0	0	0	0	54	81	1.50
Car unspecified	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	12	1.71
Total	**5357**	**1,251**	**1,035**	**208**	**183**	**60**	**15**	**4**	**1**	**1**	**2**	**1**	**0**	**0**	**1**	**0**	**2**	**8,121**	**13,310**	

Note: Reported Car travel is circa 50% of total passengers

Table 4: Taxi/Rental Car Occupancy Rates

Number of Passengers	Total Surveyed	Total Passengers	Car Occupancy
Taxi	52	83	1.60
Mini Cab	2,305	3,778	1.64
Rental Car - Hire car courtesy bus	132	217	1.64
Rental Car - Short-term car park	53	77	1.45
Rental Car - Used on-airport car hire	254	437	1.72
Rental Car - Bussed to off-airport car hire	72	112	1.56
Chauffeur	22	33	1.50
Taxi/Mini Cab Unspecified	5	33	6.60
Motorcycle	9	12	1.33
Total	**2,904**	**4,782**	

Table 5: Total Mode Share

Mode	Total Surveys	Proportion	Total Passengers	Proportion
Private Car	8,121	35%	13,310	37%
Taxi/Rentals	2,904	13%	4,782	13%
Bus/Coach	4,998	22%	7,515	21%
Rail	5,876	25%	8,786	25%
Other	1,277	6%	1,328	4%
Total	**23,176**	**100%**	**35,721**	**100%**

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Key Findings

- Circa 50% of total passengers are reported as traveling by car/taxi (CAA, 2016).
- Private cars accounted for 37% of total passenger travel and taxis accounted for 10% with 3% using rental in 2016.
- From the analysis presented in **Table 1**, an average car occupancy rate for private cars was derived of 1.6 passengers per vehicle. The highest occupancy rate was 2.1 for the long stay car park.
- An average occupancy rate for Taxis was derived of 1.57 passengers per vehicle.
- The analysis also illustrates that vehicle 'drop-offs' at the airport account for 49.7% of private car based trips to and from the airport.
- As of 2016, 18% of all passengers are using Stansted Airport car parks or Meet and Greet facilities.

G Traffic Analysis Calculations and Outputs

steer davies gleave

Memo

To	Stansted Airport Limited (STAL)		
Cc			
From	Sarah Wellington		
Date	19 January 2018		
Project	Stansted 35+ Project	Project No.	23003401

Derivation of Future Year Traffic Flows

The traffic impact of the proposed application at Stansted Airport has been calculated based on the following:

- **Traffic Survey Data**: Daily traffic flows have been derived from the following sources to better understand the existing traffic conditions within the local highway network:
  - Department for Transport (DfT) traffic count database (**www.dft.gov.uk/traffic-counts**) – 2015 traffic count data has been used to determine 2015 Annual Average Daily Traffic Flows (AADT).
  - Essex County Council (ECC) supplied traffic counts: Additional 'local borough' traffic counts have been derived from ECC to account for localised roads around the airport as shown in Figure 2.
  - 2015 on-airport road traffic surveys supplied by Intelligent Data Collection.

  These observed traffic flows have been factored up to a common 2016 baseline.

- **Mode Shares:** Vehicle trips to and from Stansted Airport comprise a dominant proportion of all trips made by passengers and employees. The latest passenger survey carried out by the Civil Aviation Authority (CAA) (2016) was interrogated to work out the existing mode share for air passenger travel to the Airport. The 2015 Employee Travel Survey was used to work out employee mode shares.

- **Place of Origin:** Passenger and Employee place of origin has been derived to inform the road assignment of vehicle trips specific to Stansted Airport on the local highway network. This information was derived from passenger origin-destination data from STAL (2015/16) and the 2015 Employee Travel Survey.

The data above helps to provide a robust representation of existing and future traffic flows at Stansted Airport. The Stansted Airport 35+ Project is a seven mppa increase compared to the consented 25mppa Cap Increase application approved in 2008. In order to robustly assess the relative impact of the proposed application compared to existing and consented conditions, we have analysed the following scenarios:

- Baseline 2016 – Without Airport
- Baseline 2016 – With Airport
- 2028 – Without Airport
- 2028 – With Airport (35mppa) 'Do Minimum'
- 2028 – With Airport (43mppa) 'Development Case'

Traffic growth has been assessed for each of the scenario years listed above, in order to forecast and compare the traffic impact of the Stansted Airport 35+Project.

TEMPro (Version 7.2) has been used to factor up the survey information derived from DfT, ECC and Intelligent Data Collection to account for local background traffic growth for the 2016 baseline, and 2028 assessment years. TEMPro is a Trip End Model Presentation Program which considers local planning data including housing allocations to provide factors which can produce local traffic projection factors when combined with traffic growth forecasts.

TEMPro it is not fully representative of future traffic growth that would be associated with Stansted Airport. It is not configured to account for the increase in passenger capacity for the consented 35mppa application, let alone the proposed capacity increase for 43mppa.Therefore, traffic generated by the Airport for each assessment year has been analysed separately to ensure that an accurate representation of forecast traffic growth is realised. This was achieved by using the passenger numbers by origin supplied by STAL and the employee travel survey.

The 'Without Airport' scenarios are represented by TEMPro growth on the external highway network, excluding all air passenger and employee trips. This was achieved by calculating the distribution and proportion of passenger and employee vehicle trips per assessment year and removing these from the road network. The 2016 baseline was then growthed by the following TEMPro factors derived for Uttlesford based on average weekday flows. The factors used are presented in Table 1.

Table 1: TEMPro v7.2 Growth Factors

Growth Years	TEMPro v7.2 Growth Factor
2013 to 2016	1.0615
2014 to 2016	1.0409
2015 to 2016	1.021
2017 to 2016	0.985
2016 to 2023	1.1172
2016 to 2028	1.1782

Passenger Growth and Impact

In addition to background traffic growth, the proportion of 'passenger only' trips have been calculated as this will represent the greatest growth of traffic anticipated on the local road network. Baseline and future trip distribution and the assignment of vehicles according to passenger mode share and place of origin has been determined with reference to most recent CAA passenger and Stansted employee surveys.

The number of passenger vehicle movements to and from Stansted Airport have been determined through a multi-step model where total annual passenger numbers have been derived from 2015/16 ICF data for the baseline year and uplifted for the future year scenarios. To calculate the average number of daily trips, yearly passenger flows have been divided by 364 as the airport operates all year except for the 25th December. Annual Passenger numbers for the various scenarios is set out in Table 2.

Table 2: Stansted Airport Passenger Populations per Scenario

Scenario	Number of Passengers per annum
2016 Baseline	24,317,000
2028 'Do Minimum' (35mppa)	35,000,000
2028 'Development Case' (43mppa)	43,000,000

Recent surveys at Stansted Airport have indicated that a small proportion of passengers use the airport for flight transfers, i.e. these passengers do not leave the airport between flights. There is no predicted model of the proportion of transfers and how this may change in the future and therefore, for the purposes of robustness, internal transfers have been excluded for the future year assessment. Based on current internal transfer rates, this may mean that reported future external travel demands estimates are of the order of 2-3 % higher than the likely outcome.

There has been a history of decreasing private car trips to and from Stansted Airport. The most recent surveys indicate that 51% of travel to Stansted Airport is by public transport; the highest for any major airport in the UK. Though it may be expected that the public transport mode share could continue to grow, it is considered prudent for the purposes of assessing potential highway impact to assume that the current modal shares will remain constant. Accordingly, the existing 2016 mode shares supplied by the CAA passenger survey have been applied to forecast passenger data for the future scenarios, as set out in Table 3.

Table 3: Passenger Mode Split (2016)

Passenger Mode Split	%
Car	15%
Car Passenger	22%
Taxi/Rental Car	13%
Bus/coach	23%
Rail	27%
Other	0%
Total	**100%**

Origin-Destination Information

To determine the impact of passenger growth on the external highway network, a place of residence has been determined for the passenger trips made to Stansted Airport. As this was not obtainable for foreign passengers, the total passenger trips have been broken down by the residences supplied by MAG for UK residents.

The total mode share was applied per scenario, and the proportion of car driver and car passenger trip (including taxi/rental) were factored by the following to represent vehicle trips:

- Car Driver Trips: Division by a Factor of 1; and
- Car Passenger Trips: Division by a Factor of 1.6.

Passenger growth is anticipated to arise from growth of existing markets and thus, existing passenger origin and destination distributions have been assumed to determine distances travelled to/from Stansted Airport in the future assessment scenarios.

Road Assignment

Place of origin of air passengers is applied to the highway network to consider the impact on specific road links. Passengers were assigned by professional judgement according to direction and the strategic road network. For example, it is considered more likely that passengers from London would travel to Stansted northbound on the M11 rather than on local A and B Roads through Bishop Stortford. The resultant road assignments are shown in Table 4.

Table 4: Assignment of passenger vehicles to road network

Road	Proportion of Total Passengers (%)
M11N	28%
M11S	55%
A120 E	12%
A120W	5%
Total	**100%**

The passenger road link assignments according to scenario are presented in Sheet 1.

Employee Growth and Impact

The methodology to derive employee trips to Stansted Airport is such the same as was applied to passenger travel. Firstly, the number of employees working at Stansted Airport per year was supplied by Optimal Economics for the current and forecast airport employee totals. Table 5 outlines the number of employees estimated at the development for the future scenarios.

Table 5: Employee Forecasts

Year	Number of Employees
2015	11,000
2016 Baseline	11,600
2028 'Do Minimum' (35mppa)	13,200
2028 'Development Case' (43mppa)	16,200

The baseline modal split for employees has been forecast from information taken from the 2015 Employee Survey. In contrast to air passenger travel, the future mode share for employees is anticipated to vary in the future scenarios in accordance with the targets outlined in Stansted Airport's 2015 SDP to reduce the number of single car occupancy trips for employees at Stansted Airport. The document sets out the expected growth at the airport, responsibilities and sustainable management strategies to make more efficient use of its existing runway. The target for employee private vehicle trips is to reduce single car occupancy for staff travel to no more than 65% by the end of 2019.

Stansted Airport actively manage staff travel initiatives and a highly effective travel plan has been put in place which promotes and informs employees of transport initiatives including staff travel discounts, public transport fares, routes and timetables, cycle routes to Stansted Airport, and the Stansted Airport Liftshare scheme. There is an ongoing commitment to promote the staff travel plan and with restricted staff parking provision it is reasonable to assume that the mode share for car usage will continue to fall in the future.

To adhere with these aims and objectives, a 10% reduction in car driver trips has been assumed between 2016 and 2028. All 10% of trips have been distributed to public transport modes.

The existing and future mode shares for employees at Stansted Airport are set out in Table 6.

Table 6: Existing and Future Employee Mode Shares

Mode	2016 Existing Baseline Scenario	2028 'Do Minimum' (35mppa) Scenario	2028 'Development Case' (43mppa) Scenario
Car Driver	65%	55%	55%
Car Passenger	6%	9%	9%
Bus/Coach	15%	19%	19%
Rail	12%	14%	14%
Motorcycle	1%	1%	1%
Taxi	0%	1%	1%
Pedal Cycle	0%	1%	1%
Walk	1%	1%	1%
Works bus/other company transport	0%	0%	0%
Other	0%	0%	0%
Total	**100%**	**100%**	**100%**

Baseline place of origin and employee mode shares were derived from the 2015 Employee Travel Survey. The assumptions made for passenger car occupancy (1.6 persons per vehicle for car passengers) and growth in existing place of origins for the future assessment years was similarly applied to our employee travel analysis.

Table 7 illustrates the number of vehicle trips anticipated per place of origin and assessment year.

Table 7: Employee Origin and Vehicle Trips per Scenario

Residence	Baseline 2016	2028 35mppa	2028 43mppa
Inner London	53	55	67
Outer London NE	423	428	526
Outer London SE	30	31	38
Outer London SW	14	15	19
Outer London NW	133	136	167
Outer South East NE	6,315	6,450	7,915
Outer South East NW	93	97	120
Outer South East SW	42	48	59
Outer South East SE	58	58	71
Southwest & Wales	13	16	20
West Midlands	17	19	23
East Midlands	44	45	55
East Anglia	638	644	790
Rest of UK	20	22	26
Residence not reported	0	0	0
Foreign	0	0	0
Total	**7,893**	**8,065**	**9,897**

**Please note: There may be small discrepancies due to rounding*

The vehicle trips presented are representative of employee two-way trips to/from Stansted Airport. The number of employees were multiplied by two to account for two-way trips and then multiplied by 0.5 to account for the average number of employees working at the Airport, taking into consideration full-time and part time staff, average working hours, annual leave etc. The trips have been assigned to the road network in accordance with the road assignment for consented 25mppa cap increase application approved in 2008, and the distributions proposed in the planning application for Northside which were agreed in principle by ECC and Highways England. The proportional assignment of trips on the road network is shown in Table 8.

Table 8: Assignment of employee vehicles to road network

Road	Proportion of Total Employees
M11 North of J8	7%
Church Road	14%
A120 East of J8	33%
Parsonage Road	2%
A1250	4%
M11 South of J8	19%
A120 West of J8	14%
Bury Lodge Lane	7%
Total	**100%**

**Please note: There may be small discrepancies due to rounding*

All workings which inform daily employee traffic flows per link and scenario are shown in Sheet 2.

Daily Traffic Flows

A series of traffic flow maps were produced to inform the iterative process of incorporating the airport traffic flows associated with the proposed development.

The daily baseline 24hr AADT traffic survey results are presented in Sheet 3 as derived from traffic survey data and Highways England TRIS data. It is reflective of the 2016 Baseline 'With Airport' as it reflects operating conditions at present. In order to understand the relative impact of the Airport, the 2016 passenger and employee numbers were subtracted from the 2016 AADT traffic counts. All background growth was applied from this scenario '2016 Without Airport' to derive the '2028 Without Airport' scenario.

The passenger and employee workings and road assignments as previously set out are what was used to inform the 2016 Without Airport, 2028 With Airport (35mppa) 'Do Minimum' and 2028 With Airport (43mppa) 'Development Case' scenarios where the number of vehicles (airport passengers and employees) was assigned per location of residence to a strategic road link within the vicinity of Stansted Airport. These were added to the 2028 'Without Airport' assessment to work out the number of additional trips anticipated on the road network due to the Stansted 35+ Project (43mmpa) and consented application (35mppa). All 24 Hour, 18 Hour and 16 Hour traffic flows are presented in Sheet 3.

Peak Hour Traffic Flows

A similar process was undertaken for the peak periods assessed: 07:00-08:00, 16:00-17:00 and 17:00-18:00.

Passenger hourly counts were derived from the flight air movement schedules supplied by STAL, as included in Sheet 4 per assessment scenario. A time factor was applied to the flight times and number of arrivals and departures, to account for passengers arriving prior to their flight or departing upon landing at Stansted Airport.

It was assumed that all outbound passengers would arrive by vehicle two hours prior to take-off, whereas all inbound passengers would leave the airport an hour after landing, to account for passport control and baggage collection. Once this time shift was applied, the inbound and outbound passenger information was applied to the mode share, and all car driver/passenger trips were derived and the appropriate vehicle occupancy factor for car passengers was applied (1.6). The time profile is shown in Sheet 5 per scenario. The passenger peak hours of travel were determined, and this information was then applied to the origins/destinations used in the daily traffic analysis.

Employee hourly counts were derived from the Employee Travel Survey (2015) where employees cited time of arrival, time of departure and mode of transport. All car driver trips and car passenger trips (assumed occupancy of 1.6 passengers) were recorded for each hour. The distribution of trips conforms to those presented in Table 11.

All results for passenger flows, employee flows, and assessment scenarios (2016/2028 (35mppa)/2028 (43mppa) for each peak period are shown in Sheets 6, 7 and 8 for each peak period (07:00-08:00, 16:00-17:00 and 17:00-18:00) respectively. The results of this analysis are also presented in Chapter 8 of the Transport Assessment.

Peak Hour Turning Movements

In order to assess the impact of the 35+ Project on strategic and local junctions, peak hour turning count data was derived for:

- M11 Junction 8;
- Priory Wood roundabout; and
- Round Coppice Road roundabout.

ECC supplied 2014 turning count movements for the M11 Junction 8 as provided for the peak periods in Sheet 9. In a similar way to the previous peak hour traffic flow assessments, TEMPro was used to growth the traffic to the 2016 baseline 'With Airport' scenario and passenger and employee movements were subtracted to the junction according to the road assignment links from the previous exercise (M11 North, M11 South, A120 West, A120 East) to derive a 2016 'Without Airport' scenario. This was then growthed to 2028 using TEMPRO to produce a 2028 'Without Airport' scenario, and 35mppa and 43mppa passenger and employee numbers were added according to scenario to form the 2028 'With Airport' scenarios.

The proportions of traffic travelling to and from each link on the gyratory was based on 2014 existing movements.

The turning counts were used to inform the LinSig and ARCADY modelling shown in **Appendices J**, **K**, **L** and **M**. The turning count projections for the M11 Junction 8are shown per peak period in Sheet 10.

A similar exercise was carried out for Priory Wood roundabout and Round Coppice Road roundabout, where the baseline data was supplied from MCC surveys from 2015 for the AM and PM peak periods. This data was growthed to 2016 using TEMPro to derive a 2016 'With Airport' scenario, as shown in Sheet 11. The distribution of employees and passengers travelling to/from Church Road, the long-stay airport car parking and to the main terminal were incorporated in the passenger and employee numbers, which were derived from the previous peak hour exercise. The passenger and employee distributions were subtracted from the 2016 baseline conditions to derive a 'Without Airport' scenario, and this scenario was growthed

using TEMPro to produce a 2028 'Without Airport' scenario. Employee and passenger numbers for each 2028 assessment (35mppa and 43mppa) were added to the 2028 'Without Airport' assessment.

Committed developments Harlow College and Northside were also included in 2028 forecast projections (all scenarios).

The junction diagram and turning count movements used per scenario are shown in Sheets 12, 13 and 14 for each peak period assessed (07:00-08:00, 16:00-17:00 and 17:00-18:00 respectively).

A sensitivity test was carried out for ECC to understand the impact of the development, five years after becoming operational. As a result, the junction diagram and turning count movement assessment was retested for 2033 for each peak hour assessment and each assessment scenario. The results are presented in Sheet 15.

1) Passenger Road Link Assignments

2016 Baseline Scenario Passengers

Annual Passenger Count		24,273,000

Passenger Mode Split		%
Car Driver	3647921	15%
Car Passenger	5399545	22%
Taxi / Rental	3169152	13%
Rental Car		
Bus/coach	5528575	23%
Rail	6480749	27%
Other	47058	0%
Total	**24273000**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Passengers	
Daily	66684
04:00 - 05:00	4061
08:00 - 09:00	3056
17:00 - 18:00	5356
20:00 - 21:00	3077

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	3374716
Taxi	1980720
Rental Car	0
Total	**5355436**

Number of Cars	9003356

Distribution of Passengers

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	274,337	270,149	841,646	0
Outer London NE	352,156	176,421	414,817	0
Outer London SE	56,798	74,003	42,444	0
Outer London SW	41,474	91,427	70,757	0
Outer London NW	291,558	340,932	418,243	0
Outer South East NE	1,164,728	971,872	680,305	0
Outer South East NW	138,210	288,862	79,380	0
Outer South East SW	65,149	229,607	30,258	0
Outer South East SE	183,886	284,574	68,678	0
Southwest & Wales	80,312	260,361	80,406	0
West Midlands	47,024	180,602	14,920	0
East Midlands	222,667	804,619	72,158	0
East Anglia	634,633	1,195,617	337,052	0
Rest of UK	94,770	229,042	18,089	0
Residence not reported	217	1,457	0	0
Foreign	0	0	0	0
Total	3,647,921	5,399,545	3,169,152	0

Distribution of Vehicles (Annual)

Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	274337	168843	526029	0
Outer London NE	352156	110263	259260	0
Outer London SE	56798	46252	26527	0
Outer London SW	41474	57142	44223	0
Outer London NW	291558	213083	261402	0
Outer South East NE	1164728	607420	425190	0
Outer South East NW	138210	180539	49612	0
Outer South East SW	65149	143505	18911	0
Outer South East SE	183886	177859	42923	0
Southwest & Wales	80312	162725	50254	0
West Midlands	47024	112876	9325	0
East Midlands	222667	502887	45099	0
East Anglia	634633	747260	210658	0
Rest of UK	94770	143151	11306	0
Residence not reported	217	911	0	0
Foreign	0	0	0	0
Total	3,647,921	3,374,716	1,980,720	0

Check

Distribution of Vehicles (Annual Daily Average)

Apply Occupany Factors

364

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	754	464	1445	0
Outer London NE	967	303	712	0
Outer London SE	156	127	73	0
Outer London SW	114	157	121	0
Outer London NW	801	585	718	0
Outer South East NE	3200	1669	1168	0
Outer South East NW	380	496	136	0
Outer South East SW	179	394	52	0
Outer South East SE	505	489	118	0
Southwest & Wales	221	447	138	0
West Midlands	129	310	26	0
East Midlands	612	1382	124	0
East Anglia	1743	2053	579	0
Rest of UK	260	393	31	0
Residence not reported	1	3	0	0
Foreign	0	0	0	0
Total	10,022	9,271	5,442	0

24,734

Distribution of Vehicles on the Road Network

Source: ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South						West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	2663										100%												
London North East	1983										100%												
London North West	2105										100%												
London South East	356										100%												
London South West	392										100%												
London Sub-total	7498																						
SE England - NE	6037																						
Essex	4476		50%								50%												
Hertfordshire	1561										25%							75%					
SE England - NW	1012																						
Bedfordshire	91	100%																					
Berkshire	286										100%												
Buckinghamshire	374										100%												
Oxfordshire	261										100%												
SE England - SE	1112																						
East Sussex	130										100%												
Kent	982										100%												
SE England - SW	625																						
Hampshire	362										100%												
Surrey	170										100%												
West Sussex	93										100%												
Rest of South East Sub-total	0										100%												
East Anglia	4375																						
Cambridgeshire	2237	100%																					
Norfolk	506	100%																					
Suffolk	1632	50%	50%																				
East Midlands	2117	100%																					
South West England and Wales	806										100%												
West Midlands	465	100%																					
Rest of UK	685	100%																					
Sub-total Rest of Country	685																						
Total All Areas	24731																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	2663	0	0	0	0	0	0	0	0	0	2663	0	0	0	0	0	0	0	0	0	0	0	0
London North East	1983	0	0	0	0	0	0	0	0	0	1983	0	0	0	0	0	0	0	0	0	0	0	0
London North West	2105	0	0	0	0	0	0	0	0	0	2105	0	0	0	0	0	0	0	0	0	0	0	0
London South East	356	0	0	0	0	0	0	0	0	0	356	0	0	0	0	0	0	0	0	0	0	0	0
London South West	392	0	0	0	0	0	0	0	0	0	392	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	7498																						
SE England - NE	6037																						
Essex	4476	0	2238	0	0	0	0	0	0	0	2238	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	1561	0	0	0	0	0	0	0	0	0	390	0	0	0	0	0	0	1170	0	0	0	0	0
SE England - NW	1012																						
Bedfordshire	91	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	286	0	0	0	0	0	0	0	0	0	286	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	374	0	0	0	0	0	0	0	0	0	374	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	261	0	0	0	0	0	0	0	0	0	261	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	1112																						
East Sussex	130	0	0	0	0	0	0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	0	0
Kent	982	0	0	0	0	0	0	0	0	0	982	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	625																						
Hampshire	362	0	0	0	0	0	0	0	0	0	362	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	170	0	0	0	0	0	0	0	0	0	170	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	93	0	0	0	0	0	0	0	0	0	93	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	4375																						
Cambridgeshire	2237	2237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	506	506	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	1632	816	816	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	2117	2117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	806	0	0	0	0	0	0	0	0	0	806	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	465	465	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	685	685	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	685																						
Total All Areas	24731																						
Residence not reported	3																						
Total		6917	3054	0	0	0	0	0	0	0	13590	0	0	0	0	0	0	1170	0	0	0	0	0

Road Link		
M11 N	6917	28%
M11 S	13590	55%
A120 E	3054	12%
A120 W	1170	5%
Total	**24731**	

2028 35mppa Scenario Passengers

Annual Passenger Count		35,000,000

Passenger Mode Split		%
Car Driver	5399391	15%
Car Passenger	8024258	23%
Taxi	4547805	13%
Rental Car		
Bus/coach	7773374	22%
Rail	9188402	26%
Tube	66769	0%
Total	**35000000**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Passengers	
Daily	95967
04:00 - 05:00	4553
08:00 - 09:00	3727
17:00 - 18:00	5089
20:00 - 21:00	3665

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	5015162
Taxi	2842378
Rental Car	0
Total	**7857540**

Number of Cars	13256931

Distribution of Passengers

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	406,054	401,469	1,207,782	0
Outer London NE	521,236	262,179	595,272	0
Outer London SE	84,069	109,976	60,907	0
Outer London SW	61,387	135,869	101,539	0
Outer London NW	431,544	506,659	600,188	0
Outer South East NE	1,723,947	1,444,298	976,253	0
Outer South East NW	204,569	429,278	113,912	0
Outer South East SW	96,429	341,219	43,421	0
Outer South East SE	272,176	422,905	98,554	0
Southwest & Wales	118,873	386,922	115,384	0
West Midlands	69,602	268,392	21,411	0
East Midlands	329,576	1,195,743	103,548	0
East Anglia	939,338	1,776,804	483,678	0
Rest of UK	140,271	340,379	25,958	0
Residence not reported	320	2,166	0	0
Foreign	0	0	0	0
Total	5,399,391	8,024,258	4,547,805	0

Distribution of Vehicles (Annual)

Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	406054	250918	754864	0
Outer London NE	521236	163862	372045	0
Outer London SE	84069	68735	38067	0
Outer London SW	61387	84918	63462	0
Outer London NW	431544	316662	375118	0
Outer South East NE	1723947	902686	610158	0
Outer South East NW	204569	268299	71195	0
Outer South East SW	96429	213262	27138	0
Outer South East SE	272176	264316	61596	0
Southwest & Wales	118873	241826	72115	0
West Midlands	69602	167745	13382	0
East Midlands	329576	747339	64717	0
East Anglia	939338	1110503	302298	0
Rest of UK	140271	212737	16224	0
Residence not reported	320	1354	0	0
Foreign	0	0	0	0
Total	5,399,391	5,015,162	2,842,378	0

Check

Distribution of Vehicles (Annual Daily Average)

Apply Occupany Factors 364

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	1116	689	2074	0
Outer London NE	1432	450	1022	0
Outer London SE	231	189	105	0
Outer London SW	169	233	174	0
Outer London NW	1186	870	1031	0
Outer South East NE	4736	2480	1676	0
Outer South East NW	562	737	196	0
Outer South East SW	265	586	75	0
Outer South East SE	748	726	169	0
Southwest & Wales	327	664	198	0
West Midlands	191	461	37	0
East Midlands	905	2053	178	0
East Anglia	2581	3051	830	0
Rest of UK	385	584	45	0
Residence not reported	1	4	0	0
Foreign	0	0	0	0
Total	14,833	13,778	7,809	0

36,420

Distribution of Vehicles on the Road Network

Source: ...\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South						West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	3879										100%												
London North East	2904										100%												
London North West	3086										100%												
London South East	524										100%												
London South West	576										100%												
London Sub-total	10970																						
SE England - NE	8892																						
Essex	6594		50%								50%												
Hertfordshire	2299										25%							75%					
SE England - NW	1495																						
Bedfordshire	134	100%																					
Berkshire	422										100%												
Buckinghamshire	552										100%												
Oxfordshire	386										100%												
SE England - SE	1643																						
East Sussex	192										100%												
Kent	1451										100%												
SE England - SW	925																						
Hampshire	535										100%												
Surrey	252										100%												
West Sussex	138										100%												
Rest of South East Sub-total	0										100%												
East Anglia	6462																						
Cambridgeshire	3304	100%																					
Norfolk	747	100%																					
Suffolk	2411	50%	50%																				
East Midlands		100%																					
South West England and Wales											100%												
West Midlands		100%																					
Rest of UK		100%																					
Sub-total Rest of Country	1014																						
Total All Areas	31401																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	3879	0	0	0	0	0	0	0	0	0	3879	0	0	0	0	0	0	0	0	0	0	0	0
London North East	2904	0	0	0	0	0	0	0	0	0	2904	0	0	0	0	0	0	0	0	0	0	0	0
London North West	3086	0	0	0	0	0	0	0	0	0	3086	0	0	0	0	0	0	0	0	0	0	0	0
London South East	524	0	0	0	0	0	0	0	0	0	524	0	0	0	0	0	0	0	0	0	0	0	0
London South West	576	0	0	0	0	0	0	0	0	0	576	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	10970																						
SE England - NE	8892																						
Essex	6594	0	3297	0	0	0	0	0	0	0	3297	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	2299	0	0	0	0	0	0	0	0	0	575	0	0	0	0	0	0	1724	0	0	0	0	0
SE England - NW	1495																						
Bedfordshire	134	134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	422	0	0	0	0	0	0	0	0	0	422	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	552	0	0	0	0	0	0	0	0	0	552	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	386	0	0	0	0	0	0	0	0	0	386	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	1643																						
East Sussex	192	0	0	0	0	0	0	0	0	0	192	0	0	0	0	0	0	0	0	0	0	0	0
Kent	1451	0	0	0	0	0	0	0	0	0	1451	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	925																						
Hampshire	535	0	0	0	0	0	0	0	0	0	535	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	252	0	0	0	0	0	0	0	0	0	252	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	138	0	0	0	0	0	0	0	0	0	138	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	6462																						
Cambridgeshire	3304	3304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	747	747	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	2411	1206	1206	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	3136	3136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	1189	0	0	0	0	0	0	0	0	0	1189	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	689	689	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	1014	1014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	1014																						
Total All Areas	36416																						
Residence not reported	5																						
Total		10230	4502	0	0	0	0	0	0	0	19959	0	0	0	0	0	0	1724	0	0	0	0	0

Road Link	
M11 N	10230
M11 S	19959
A120 E	4502
A120 W	1724
Total	**36416**

2028 43mppa Scenario Passengers

Annual Passenger Count 43,000,000

Passenger Mode Split		%
Car Driver	6302048	15%
Car Passenger	9333589	22%
Taxi	6475572	15%
Rental Car		
Bus/coach	8839394	21%
Rail	11801092	27%
Tube	248305	1%
Total	**43000000**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Passengers	
Daily	117902
04:00 - 05:00	4627
08:00 - 09:00	4586
17:00 - 18:00	6637
20:00 - 21:00	4813

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1.6 Occupancy →

Car Passenger	5833493
Taxi	4047232
Rental Car	0
Total	**9880725**

Number of Cars 16182773

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	473,937	466,977	1,719,748	0
Outer London NE	608,375	304,959	847,601	0
Outer London SE	98,123	127,921	86,725	0
Outer London SW	71,649	158,039	144,580	0
Outer London NW	503,688	589,331	854,602	0
Outer South East NE	2,012,152	1,679,966	1,390,076	0
Outer South East NW	238,769	499,323	162,197	0
Outer South East SW	112,550	396,897	61,827	0
Outer South East SE	317,677	491,911	140,330	0
Southwest & Wales	138,745	450,056	164,295	0
West Midlands	81,238	312,186	30,486	0
East Midlands	384,674	1,390,854	147,441	0
East Anglia	1,096,375	2,066,728	688,703	0
Rest of UK	163,721	395,920	36,961	0
Residence not reported	374	2,519	0	0
Foreign	0	0	0	0
Total	6,302,048	9,333,589	6,475,572	0

Distribution of Vehicles (Annual)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	473937	291861	1074842	0
Outer London NE	608375	190600	529750	0
Outer London SE	98123	79951	54203	0
Outer London SW	71649	98775	90362	0
Outer London NW	503688	368332	534126	0
Outer South East NE	2012152	1049979	868797	0
Outer South East NW	238769	312077	101373	0
Outer South East SW	112550	248060	38642	0
Outer South East SE	317677	307444	87706	0
Southwest & Wales	138745	281285	102684	0
West Midlands	81238	195116	19054	0
East Midlands	384674	869284	92150	0
East Anglia	1096375	1291705	430440	0
Rest of UK	163721	247450	23101	0
Residence not reported	374	1574	0	0
Foreign	0	0	0	0
Total	6,302,048	5,833,493	4,047,232	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors

364

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	1302	802	2953	0
Outer London NE	1671	524	1455	0
Outer London SE	270	220	149	0
Outer London SW	197	271	248	0
Outer London NW	1384	1012	1467	0
Outer South East NE	5528	2885	2387	0
Outer South East NW	656	857	278	0
Outer South East SW	309	681	106	0
Outer South East SE	873	845	241	0
Southwest & Wales	381	773	282	0
West Midlands	223	536	52	0
East Midlands	1057	2388	253	0
East Anglia	3012	3549	1183	0
Rest of UK	450	680	63	0
Residence not reported	1	4	0	0
Foreign	0	0	0	0
Total	17,313	16,026	11,119	0

44,458

Distribution of Vehicles on the Road Network

Source: _\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	5057										100%												
London North East	3650										100%												
London North West	3863										100%												
London South East	638										100%												
London South West	716										100%												
London Sub-total	13925																						
SE England - NE	10799																						
Essex	8008		50%								50%												
Hertfordshire	2792										25%							75%					
SE England - NW	1792																						
Bedfordshire	161	100%																					
Berkshire	506										100%												
Buckinghamshire	662										100%												
Oxfordshire	463										100%												
SE England - SE	1958																						
East Sussex	229										100%												
Kent	1729										100%												
SE England - SW	1097																						
Hampshire	635										100%												
Surrey	299										100%												
West Sussex	163										100%												
Rest of South East Sub-total	0										100%												
East Anglia	7743																						
Cambridgeshire	3959	100%																					
Norfolk	895	100%																					
Suffolk	2889	50%	50%																				
East Midlands		100%																					
South West England and Wales											100%												
West Midlands		100%																					
Rest of UK		100%																					
Sub-total Rest of Country	1193																						
Total All Areas	38507																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414	
Central London	5057	0	0	0	0	0	0	0	0	0	5057	0	0	0	0	0	0	0	0	0	0	0	0	
London North East	3650	0	0	0	0	0	0	0	0	0	3650	0	0	0	0	0	0	0	0	0	0	0	0	
London North West	3863	0	0	0	0	0	0	0	0	0	3863	0	0	0	0	0	0	0	0	0	0	0	0	
London South East	638	0	0	0	0	0	0	0	0	0	638	0	0	0	0	0	0	0	0	0	0	0	0	
London South West	716	0	0	0	0	0	0	0	0	0	716	0	0	0	0	0	0	0	0	0	0	0	0	
London Sub-total	13925																							
SE England - NE	10799																							
Essex	8008	0	4004	0	0	0	0	0	0	0	4004	0	0	0	0	0	0	0	0	0	0	0	0	
Hertfordshire	2792	0	0	0	0	0	0	0	0	0	698	0	0	0	0	0	0	2094	0	0	0	0	0	
SE England - NW	1792																							
Bedfordshire	161	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Berkshire	506	0	0	0	0	0	0	0	0	0	506	0	0	0	0	0	0	0	0	0	0	0	0	
Buckinghamshire	662	0	0	0	0	0	0	0	0	0	662	0	0	0	0	0	0	0	0	0	0	0	0	
Oxfordshire	463	0	0	0	0	0	0	0	0	0	463	0	0	0	0	0	0	0	0	0	0	0	0	
SE England - SE	1958																							
East Sussex	229	0	0	0	0	0	0	0	0	0	229	0	0	0	0	0	0	0	0	0	0	0	0	
Kent	1729	0	0	0	0	0	0	0	0	0	1729	0	0	0	0	0	0	0	0	0	0	0	0	
SE England - SW	1097																							
Hampshire	635	0	0	0	0	0	0	0	0	0	635	0	0	0	0	0	0	0	0	0	0	0	0	
Surrey	299	0	0	0	0	0	0	0	0	0	299	0	0	0	0	0	0	0	0	0	0	0	0	
West Sussex	163	0	0	0	0	0	0	0	0	0	163	0	0	0	0	0	0	0	0	0	0	0	0	
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
East Anglia	7743																							
Cambridgeshire	3959	3959	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Norfolk	895	895	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Suffolk	2889	1445	1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
East Midlands	3698	3698	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
South West England and Wales	1436	0	0	0	0	0	0	0	0	0	1436	0	0	0	0	0	0	0	0	0	0	0	0	
West Midlands	812	812	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rest of UK	1193	1193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sub-total Rest of Country	1193																							
Total All Areas	44453																							

Residence not reported	5

Total		12162	5448	0	0	0	0	0	0	0	24748	0	0	0	0	0	0	2094	0	0	0	0	0	44453
		27%	12%	0%	0%	0%	0%	0%	0%	0%	56%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	

Road Link	
M11 N	12162
M11 S	24748
A120 E	5448
A120 W	2094
Total	**44453**

2) Employee Road Link Assignments

2016 Baseline Scenario - Employees

Daily Employee Count	11,600

Employee Mode Split		%
Car Driver	7444	64%
Car Passenger	719	6%
Total	**8162**	**70%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	449
Total	**449**

Number of Cars	7893

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	49	7
Outer London NE	403	31
Outer London SE	27	4
Outer London SW	12	4
Outer London NW	125	13
Outer South East NE	5,960	568
Outer South East NW	84	14
Outer South East SW	33	14
Outer South East SE	55	4
Southwest & Wales	9	7
West Midlands	15	4
East Midlands	42	4
East Anglia	611	42
Rest of UK	18	4
Residence not reported	0	0
Foreign	0	0
Total	7,444	719

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	49	4
Outer London NE	403	19
Outer London SE	27	2
Outer London SW	12	2
Outer London NW	125	8
Outer South East NE	5960	355
Outer South East NW	84	9
Outer South East SW	33	9
Outer South East SE	55	2
Southwest & Wales	9	4
West Midlands	15	2
East Midlands	42	2
East Anglia	611	26
Rest of UK	18	2
Residence not reported	0	0
Foreign	0	0
Total	7,444	449

7,893

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	53						100%		
London North East	423						100%		
London North West	30						100%		
London South East	14						100%		
London South West	133						100%		
London Sub-total	652								
SE England - NE	6315								
Essex	4905								
Uttlesford	1653		40%	25%	5%				30%
Braintree	1530			100%					
Harlow	544						50%	50%	
Chelmsford	354			75%			25%		
Colchester	234			100%					
Epping Forest	173				25%		75%		
Basildon	87						100%		
Tendring	70			100%					
Maldon	59			100%					
Brentwood	58						100%		
Castle Point	28			50%			50%		
Rochford	25			50%			50%		
Southend-on-Sea	39						100%		
Thurrock	52						100%		
Hertfordshire	1410								
East Hertfordshire	1135		25%			25%		50%	
Broxbourne	125							100%	
North Hertfordshire	62							100%	
Welwyn Hatfield	25							100%	
St. Albans	16							100%	
Hertsmere	12							100%	
Stevenage	12							100%	
Watford	9							100%	
Dacorum	6							100%	
Three Rivers	6							100%	
SE England - NW	93								
Bedfordshire	62	100%							
Berkshire	14						100%		
Buckinghamshire	16						100%		
Oxfordshire	0						100%		
SE England - SE	58								
East Sussex	0						100%		
Kent	58						100%		
SE England - SW	42								
Hampshire	11						100%		
Surrey	15						100%		
West Sussex	17						100%		
Rest of South East Sub-total	0						100%		
East Anglia	638								
Cambridgeshire	308	80%							20%
Norfolk	51	100%							
Suffolk	279	50%	50%						
East Midlands	44	100%							
South West England and Wales	13						100%		
West Midlands	17	100%							

Rest of UK	20	100%							
Sub-total Rest of Country	20								
Total All Areas	7893								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	53	0	0	0	0	0	53	0	0
London North East	423	0	0	0	0	0	423	0	0
London North West	30	0	0	0	0	0	30	0	0
London South East	14	0	0	0	0	0	14	0	0
London South West	133	0	0	0	0	0	133	0	0
London Sub-total	652								
SE England - NE	6315								
Essex	4905								
Uttlesford	1653	0	661	413	83	0	0	0	496
Braintree	1530	0	0	1530	0	0	0	0	0
Harlow	544	0	0	0	0	0	272	272	0
Chelmsford	354	0	0	265	0	0	88	0	0
Colchester	234	0	0	234	0	0	0	0	0
Epping Forest	173	0	0	0	43	0	130	0	0
Basildon	87	0	0	0	0	0	87	0	0
Tendring	70	0	0	70	0	0	0	0	0
Maldon	59	0	0	59	0	0	0	0	0
Brentwood	58	0	0	0	0	0	58	0	0
Castle Point	28	0	0	14	0	0	14	0	0
Rochford	25	0	0	12	0	0	12	0	0
Southend-on-Sea	39	0	0	0	0	0	39	0	0
Thurrock	52	0	0	0	0	0	52	0	0
Hertfordshire	1410								
East Hertfordshire	1135	0	284	0	0	284	0	568	0
Broxbourne	125	0	0	0	0	0	0	125	0
North Hertfordshire	62	0	0	0	0	0	0	62	0
Welwyn Hatfield	25	0	0	0	0	0	0	25	0
St. Albans	16	0	0	0	0	0	0	16	0
Hertsmere	12	0	0	0	0	0	0	12	0
Stevenage	12	0	0	0	0	0	0	12	0
Watford	9	0	0	0	0	0	0	9	0
Dacorum	6	0	0	0	0	0	0	6	0
Three Rivers	6	0	0	0	0	0	0	6	0
SE England - NW	93								
Bedfordshire	62	62	0	0	0	0	0	0	0
Berkshire	14	0	0	0	0	0	14	0	0
Buckinghamshire	16	0	0	0	0	0	16	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	58								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	58	0	0	0	0	0	58	0	0
SE England - SW	42								
Hampshire	11	0	0	0	0	0	11	0	0
Surrey	15	0	0	0	0	0	15	0	0
West Sussex	17	0	0	0	0	0	17	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	638								
Cambridgeshire	308	246	0	0	0	0	0	0	62
Norfolk	51	51	0	0	0	0	0	0	0
Suffolk	279	139	139	0	0	0	0	0	0
East Midlands	44	44	0	0	0	0	0	0	0
South West England and Wales	13	0	0	0	0	0	13	0	0
West Midlands	17	17	0	0	0	0	0	0	0
Rest of UK	20	20	0	0	0	0	0	0	0
Sub-total Rest of Country	20								
Total All Areas	7893								

Total		581	1085	2598	126	284	1548	1114	558

M11 N	581	7%
Church Road	1085	14%
A120 E	2598	33%
Parsonage Road	126	2%
A1250	284	4%
M11 S	1548	20%
A120 W	1114	14%
Bury Lodge Road	558	7%

2028 With Airport (35mppa) Employees

Daily Employee Count	13,200

Employee Mode Split		%
Car Driver	7286	55%
Car Passenger	1246	9%
Total	**8532**	**65%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	778
Total	**778**

Number of Cars	0

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	48	12
Outer London NE	395	54
Outer London SE	27	7
Outer London SW	11	7
Outer London NW	122	22
Outer South East NE	5,834	985
Outer South East NW	82	25
Outer South East SW	33	25
Outer South East SE	54	7
Southwest & Wales	8	12
West Midlands	15	7
East Midlands	41	7
East Anglia	598	73
Rest of UK	18	7
Residence not reported	0	0
Foreign	0	0
Total	7,286	1,246

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	48	7
Outer London NE	395	33
Outer London SE	27	4
Outer London SW	11	4
Outer London NW	122	14
Outer South East NE	5834	615
Outer South East NW	82	15
Outer South East SW	33	15
Outer South East SE	54	4
Southwest & Wales	8	8
West Midlands	15	4
East Midlands	41	4
East Anglia	598	46
Rest of UK	18	4
Residence not reported	0	0
Foreign	0	0
Total	7,286	778

8,065

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	55						100%		
London North East	428						100%		
London North West	31						100%		
London South East	15						100%		
London South West	136						100%		
London Sub-total	666								
SE England - NE	6450								
Essex	4995								
Uttlesford	1690		40%	25%	5%				30%
Braintree	1561			100%					
Harlow	552						50%	50%	
Chelmsford	356			75%			25%		
Colchester	242			100%					
Epping Forest	174				25%		75%		
Basildon	88						100%		
Tendring	70			100%					
Maldon	58			100%					
Brentwood	58						100%		
Castle Point	27			50%			50%		
Rochford	24			50%			50%		
Southend-on-Sea	40						100%		
Thurrock	55						100%		
Hertfordshire	1454								
East Hertfordshire	1185		25%			25%		50%	
Broxbourne	122							100%	
North Hertfordshire	61							100%	
Welwyn Hatfield	24							100%	
St. Albans	15							100%	
Hertsmere	12							100%	
Stevenage	12							100%	
Watford	9							100%	
Dacorum	6							100%	
Three Rivers	6							100%	
SE England - NW	97								
Bedfordshire	64	100%							
Berkshire	15						100%		
Buckinghamshire	18						100%		
Oxfordshire	0						100%		
SE England - SE	58								
East Sussex	0						100%		
Kent	58						100%		
SE England - SW	48								
Hampshire	12						100%		
Surrey	16						100%		
West Sussex	19						100%		
Rest of South East Sub-total	0						100%		
East Anglia	644								
Cambridgeshire	304	80%							20%
Norfolk	53	100%							
Suffolk	286	50%	50%						
East Midlands	45	100%							
South West England and Wales	16						100%		
West Midlands	19	100%							

Rest of UK	22	100%							
Sub-total Rest of Country	22								
Total All Areas	8065								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	55	0	0	0	0	0	55	0	0
London North East	428	0	0	0	0	0	428	0	0
London North West	31	0	0	0	0	0	31	0	0
London South East	15	0	0	0	0	0	15	0	0
London South West	136	0	0	0	0	0	136	0	0
London Sub-total	666								
SE England - NE	6450								
Essex	4995								
Uttlesford	1690	0	676	422	84	0	0	0	507
Braintree	1561	0	0	1561	0	0	0	0	0
Harlow	552	0	0	0	0	0	276	276	0
Chelmsford	356	0	0	267	0	0	89	0	0
Colchester	242	0	0	242	0	0	0	0	0
Epping Forest	174	0	0	0	43	0	130	0	0
Basildon	88	0	0	0	0	0	88	0	0
Tendring	70	0	0	70	0	0	0	0	0
Maldon	58	0	0	58	0	0	0	0	0
Brentwood	58	0	0	0	0	0	58	0	0
Castle Point	27	0	0	14	0	0	14	0	0
Rochford	24	0	0	12	0	0	12	0	0
Southend-on-Sea	40	0	0	0	0	0	40	0	0
Thurrock	55	0	0	0	0	0	55	0	0
Hertfordshire	1454								
East Hertfordshire	1185	0	296	0	0	296	0	593	0
Broxbourne	122	0	0	0	0	0	0	122	0
North Hertfordshire	61	0	0	0	0	0	0	61	0
Welwyn Hatfield	24	0	0	0	0	0	0	24	0
St. Albans	15	0	0	0	0	0	0	15	0
Hertsmere	12	0	0	0	0	0	0	12	0
Stevenage	12	0	0	0	0	0	0	12	0
Watford	9	0	0	0	0	0	0	9	0
Dacorum	6	0	0	0	0	0	0	6	0
Three Rivers	6	0	0	0	0	0	0	6	0
SE England - NW	97								
Bedfordshire	64	64	0	0	0	0	0	0	0
Berkshire	15	0	0	0	0	0	15	0	0
Buckinghamshire	18	0	0	0	0	0	18	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	58								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	58	0	0	0	0	0	58	0	0
SE England - SW	48								
Hampshire	12	0	0	0	0	0	12	0	0
Surrey	16	0	0	0	0	0	16	0	0
West Sussex	19	0	0	0	0	0	19	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	644								
Cambridgeshire	304	243	0	0	0	0	0	0	61
Norfolk	53	53	0	0	0	0	0	0	0
Suffolk	286	143	143	0	0	0	0	0	0
East Midlands	45	45	0	0	0	0	0	0	0
South West England and Wales	16	0	0	0	0	0	16	0	0
West Midlands	19	19	0	0	0	0	0	0	0
Rest of UK	22	22	0	0	0	0	0	0	0
Sub-total Rest of Country	22								
Total All Areas	8065								

Total		589	1115	2646	128	296	1584	1138	568

M11 N	589	7%
Church Road	1115	14%
A120 E	2646	33%
Parsonage Road	128	2%
A1250	296	4%
M11 S	1584	20%
A120 W	1138	14%
Bury Lodge Road	568	7%

2028 With Airport (43mppa) Employees

Daily Employee Count	16,200

Employee Mode Split		%
Car Driver	8942	55%
Car Passenger	1529	9%
Total	**10471**	**65%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	955
Total	**955**

Number of Cars	0

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	59	14
Outer London NE	485	66
Outer London SE	33	8
Outer London SW	14	8
Outer London NW	150	27
Outer South East NE	7,160	1,208
Outer South East NW	101	30
Outer South East SW	40	30
Outer South East SE	66	8
Southwest & Wales	10	15
West Midlands	18	8
East Midlands	50	8
East Anglia	734	90
Rest of UK	21	8
Residence not reported	0	0
Foreign	0	0
Total	8,942	1,529

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	59	9
Outer London NE	485	41
Outer London SE	33	5
Outer London SW	14	5
Outer London NW	150	17
Outer South East NE	7160	755
Outer South East NW	101	19
Outer South East SW	40	19
Outer South East SE	66	5
Southwest & Wales	10	9
West Midlands	18	5
East Midlands	50	5
East Anglia	734	56
Rest of UK	21	5
Residence not reported	0	0
Foreign	0	0
Total	8,942	955

9,897

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	67						100%		
London North East	526						100%		
London North West	38						100%		
London South East	19						100%		
London South West	167						100%		
London Sub-total	817								
SE England - NE	7915								
Essex	6130								
Uttlesford	2074		40%	25%	5%				30%
Braintree	1915			100%					
Harlow	678						50%	50%	
Chelmsford	437			75%			25%		
Colchester	297			100%					
Epping Forest	213				25%		75%		
Basildon	109						100%		
Tendring	86			100%					
Maldon	71			100%					
Brentwood	71						100%		
Castle Point	33			50%			50%		
Rochford	30			50%			50%		
Southend-on-Sea	49						100%		
Thurrock	68						100%		
Hertfordshire	1785								
East Hertfordshire	1455		25%			25%		50%	
Broxbourne	150							100%	
North Hertfordshire	75							100%	
Welwyn Hatfield	30							100%	
St. Albans	19							100%	
Hertsmere	15							100%	
Stevenage	15							100%	
Watford	11							100%	
Dacorum	8							100%	
Three Rivers	8							100%	
SE England - NW	120								
Bedfordshire	79	100%							
Berkshire	19						100%		
Buckinghamshire	22						100%		
Oxfordshire	0						100%		
SE England - SE	71								
East Sussex	0						100%		
Kent	71						100%		
SE England - SW	59								
Hampshire	15						100%		
Surrey	20						100%		
West Sussex	24						100%		
Rest of South East Sub-total	0						100%		
East Anglia	790								
Cambridgeshire	373	80%							20%
Norfolk	65	100%							
Suffolk	352	50%	50%						
East Midlands	55	100%							
South West England and Wales	20						100%		
West Midlands	23	100%							

Rest of UK	26	100%							
Sub-total Rest of Country	26								
Total All Areas	9897								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	67	0	0	0	0	0	67	0	0
London North East	526	0	0	0	0	0	526	0	0
London North West	38	0	0	0	0	0	38	0	0
London South East	19	0	0	0	0	0	19	0	0
London South West	167	0	0	0	0	0	167	0	0
London Sub-total	817								
SE England - NE	7915								
Essex	6130								
Uttlesford	2074	0	830	518	104	0	0	0	622
Braintree	1915	0	0	1915	0	0	0	0	0
Harlow	678	0	0	0	0	0	339	339	0
Chelmsford	437	0	0	328	0	0	109	0	0
Colchester	297	0	0	297	0	0	0	0	0
Epping Forest	213	0	0	0	53	0	160	0	0
Basildon	109	0	0	0	0	0	109	0	0
Tendring	86	0	0	86	0	0	0	0	0
Maldon	71	0	0	71	0	0	0	0	0
Brentwood	71	0	0	0	0	0	71	0	0
Castle Point	33	0	0	17	0	0	17	0	0
Rochford	30	0	0	15	0	0	15	0	0
Southend-on-Sea	49	0	0	0	0	0	49	0	0
Thurrock	68	0	0	0	0	0	68	0	0
Hertfordshire	1785								
East Hertfordshire	1455	0	364	0	0	364	0	727	0
Broxbourne	150	0	0	0	0	0	0	150	0
North Hertfordshire	75	0	0	0	0	0	0	75	0
Welwyn Hatfield	30	0	0	0	0	0	0	30	0
St. Albans	19	0	0	0	0	0	0	19	0
Hertsmere	15	0	0	0	0	0	0	15	0
Stevenage	15	0	0	0	0	0	0	15	0
Watford	11	0	0	0	0	0	0	11	0
Dacorum	8	0	0	0	0	0	0	8	0
Three Rivers	8	0	0	0	0	0	0	8	0
SE England - NW	120								
Bedfordshire	79	79	0	0	0	0	0	0	0
Berkshire	19	0	0	0	0	0	19	0	0
Buckinghamshire	22	0	0	0	0	0	22	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	71								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	71	0	0	0	0	0	71	0	0
SE England - SW	59								
Hampshire	15	0	0	0	0	0	15	0	0
Surrey	20	0	0	0	0	0	20	0	0
West Sussex	24	0	0	0	0	0	24	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	790								
Cambridgeshire	373	299	0	0	0	0	0	0	75
Norfolk	65	65	0	0	0	0	0	0	0
Suffolk	352	176	176	0	0	0	0	0	0
East Midlands	55	55	0	0	0	0	0	0	0
South West England and Wales	20	0	0	0	0	0	20	0	0
West Midlands	23	23	0	0	0	0	0	0	0
Rest of UK	26	26	0	0	0	0	0	0	0
Sub-total Rest of Country	26								
Total All Areas	9897								

Total		723	1369	3247	157	364	1944	1397	697

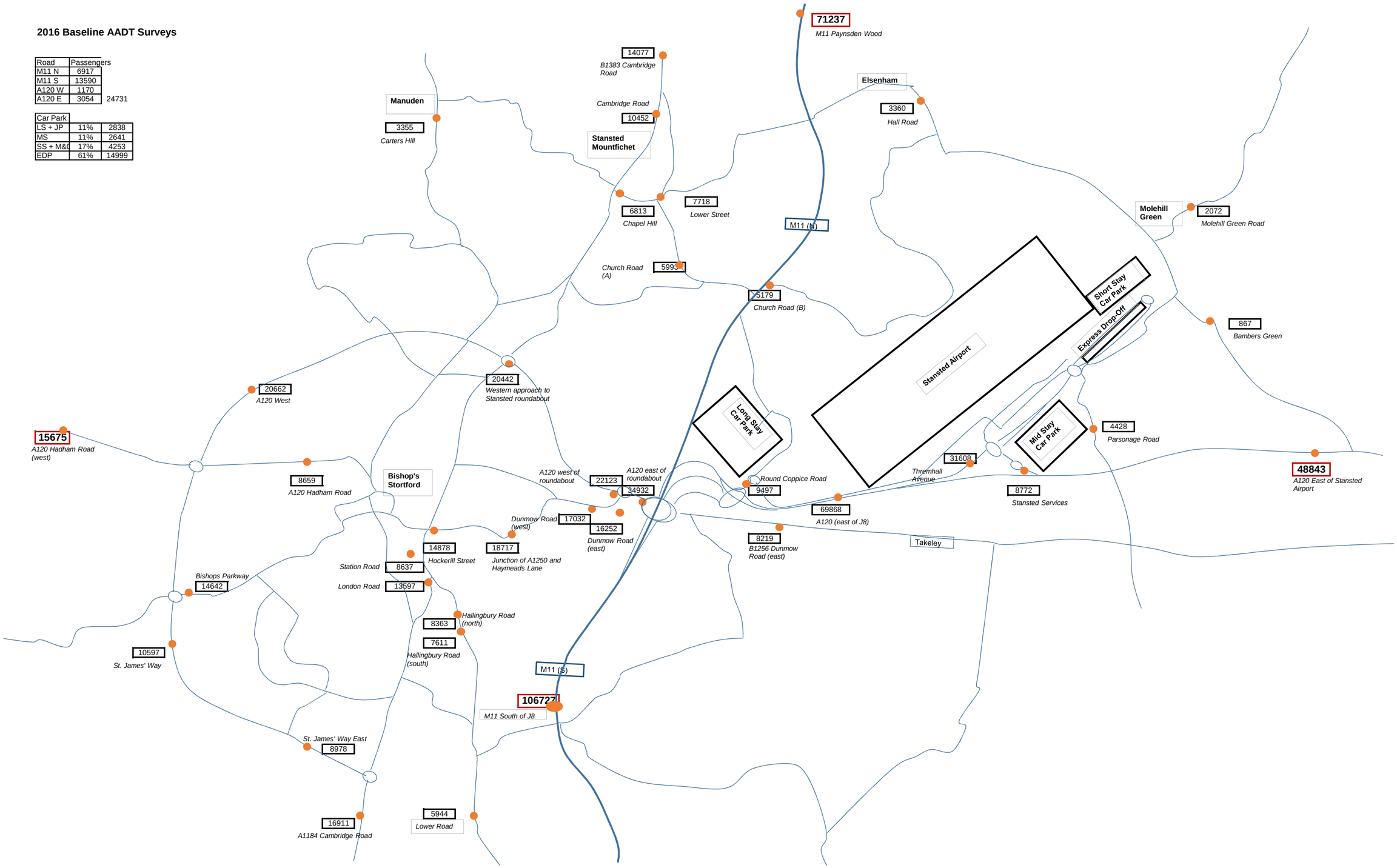
M11 N	723	7%
Church Road	1369	14%
A120 E	3247	33%
Parsonage Road	157	2%
A1250	364	4%
M11 S	1944	20%
A120 W	1397	14%
Bury Lodge Road	697	7%

3) 24 Hour Traffic Flows

2016 Baseline AADT Surveys

Road	Passengers	
M11 N	6917	
M11 S	13590	
A120 W	1170	
A120 E	3054	24731

Car Park		
LS + JP	11%	2838
MS	11%	2641
SS + M&C	17%	4253
EDP	61%	14999

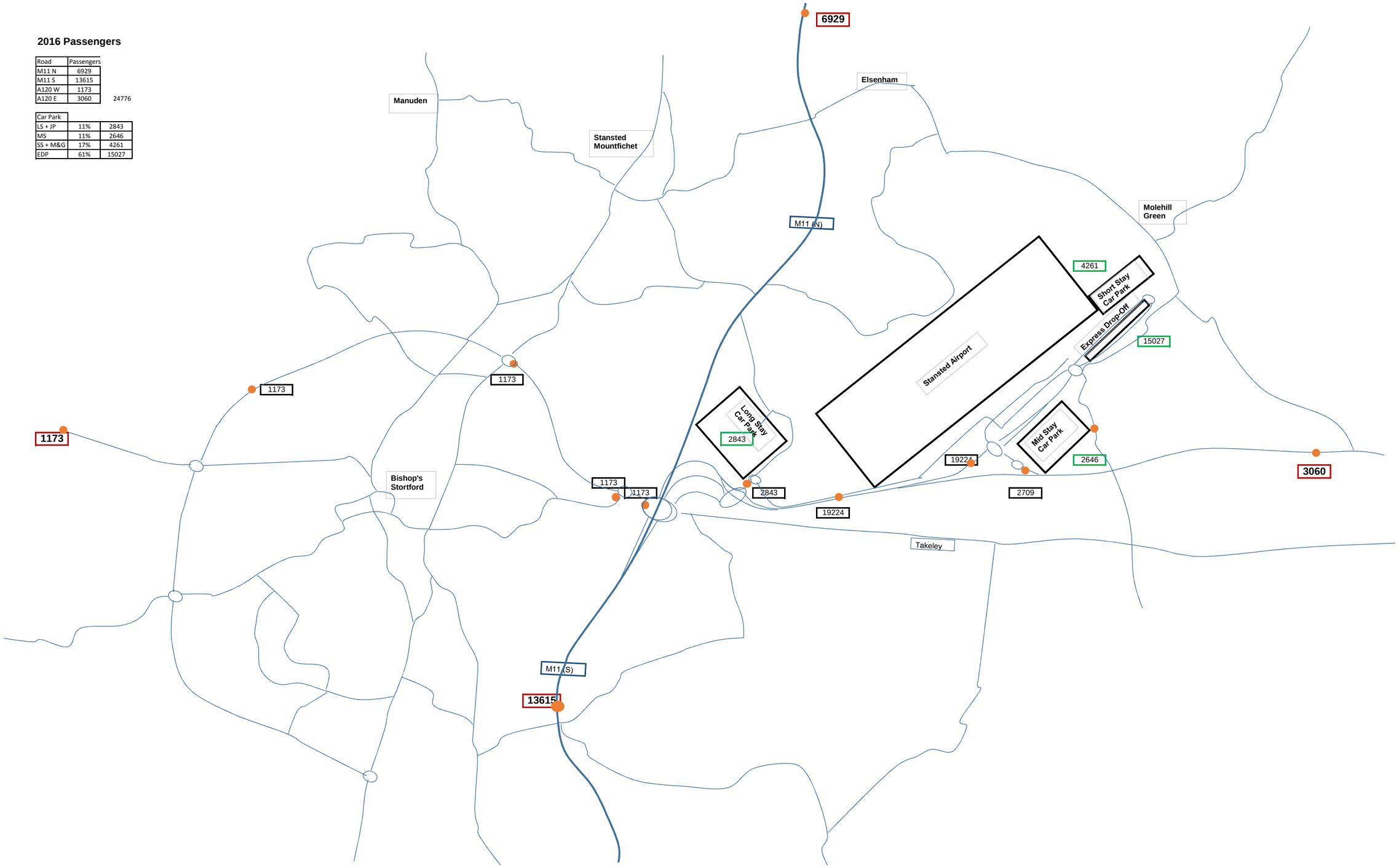


2016 Passengers

Road	Passengers
M11 N	6929
M11 S	13615
A120 W	1173
A120 E	3060

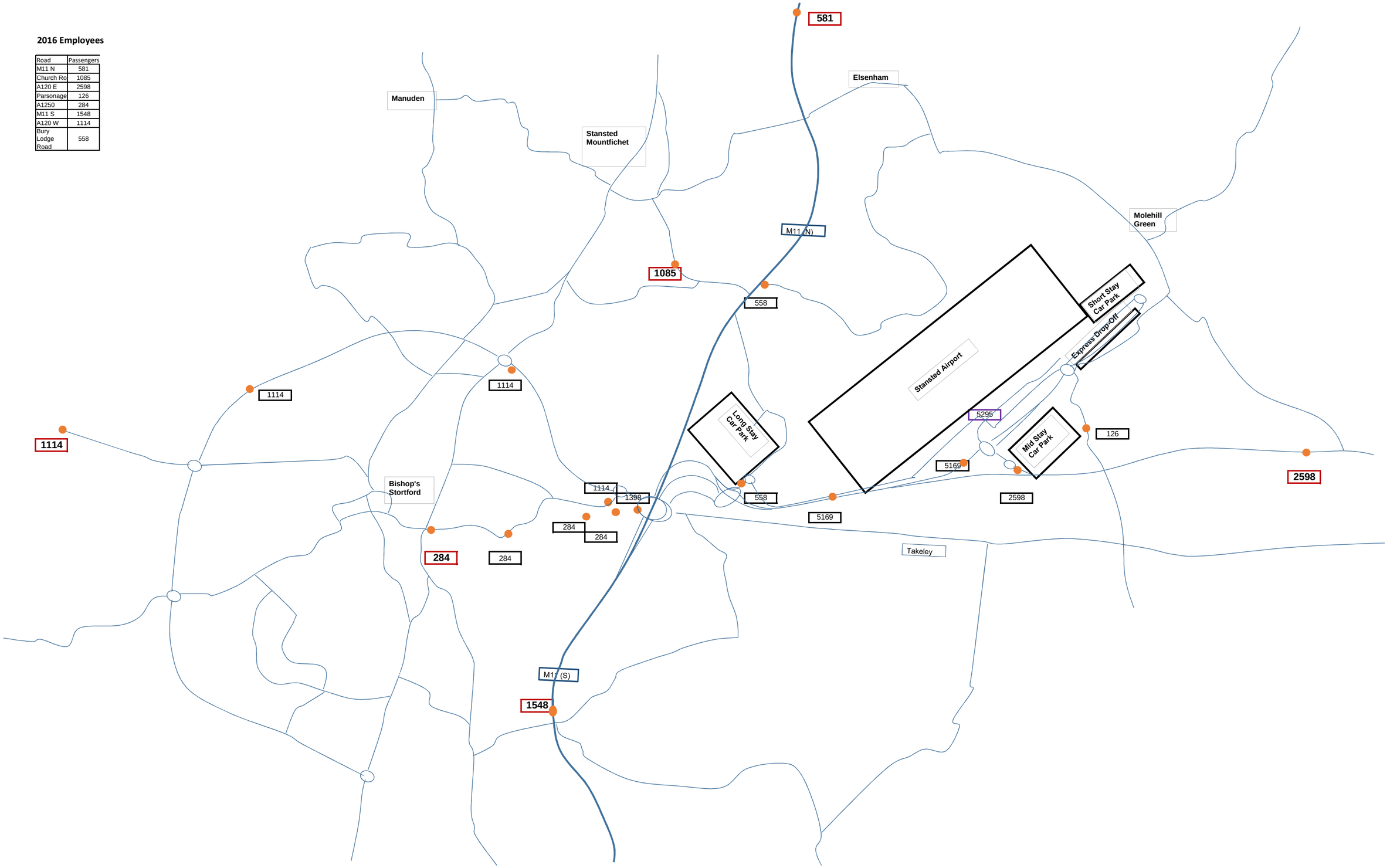
24776

Car Park		
LS + JP	11%	2843
MS	11%	2646
SS + M&G	17%	4261
EDP	61%	15027



2016 Employees

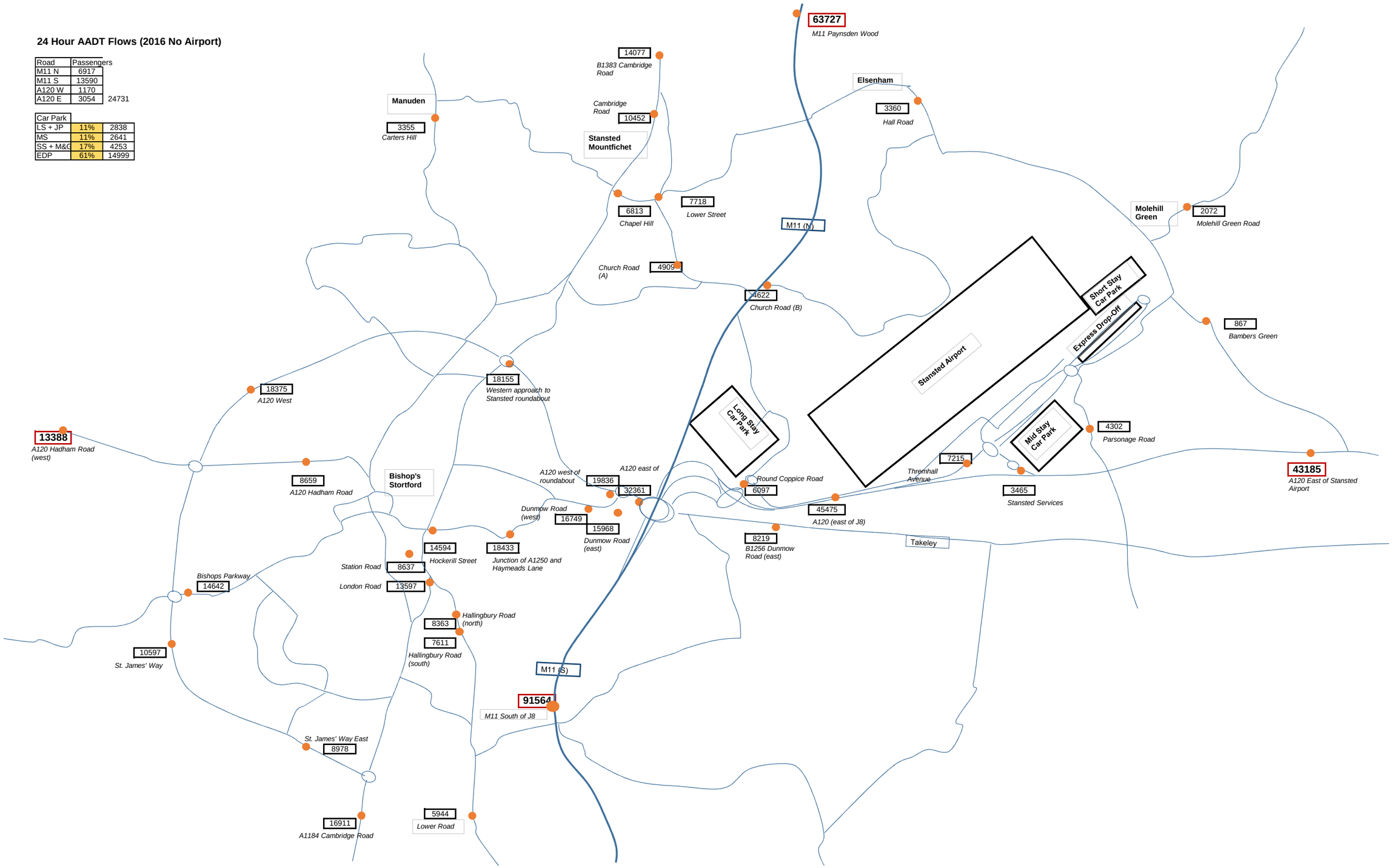
Road	Passengers
M11 N	581
Church Ro	1085
A120 E	2598
Parsonage	126
A1250	284
M11 S	1548
A120 W	1114
Bury Lodge Road	558



24 Hour AADT Flows (2016 No Airport)

Road	Passengers
M11 N	6917
M11 S	13590
A120 W	1170
A120 E	3054
	24731

Car Park		
LS + JP	11%	2838
MS	11%	2641
SS + M&G	17%	4253
EDP	61%	14999



2028 No Airport

Tempro Growth Factor

2016 to 2028

1.1785

75102
M11 Paynsden Wood

16590
B1383 Cambridge Road

Manuden

3954
Carters Hill

Cambridge Road

12317

Stansted Mountfichet

Elsenham

3959
Hall Road

9095
Lower Street

8029
Chapel Hill

M11 (N)

Molehill Green

2442
Molehill Green Road

Church Road (A)

578

5447
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

1021
Bambers Green

21655
A120 West

21396
Western approach to Stansted roundabout

Long Stay Car Park

Mid Stay Car Park

5070
Parsonage Road

15778
A120 Hadham Road (west)

8503
Thremhall Avenue

50894
A120 East of Stansted Airport

10205
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout

23377

A120 east of roundabout

38137

Round Coppice Road

7185

4083
Stansted Services

Dunmow Road (west)

19738

18818
Dunmow Road (east)

53592
A120 (east of J8)

9687
B1256 Dunmow Road (east)

Takeley

17199
Hockerill Street

21723
Junction of A1250 and Haymeads Lane

Station Road

10178

Bishops Parkway

17256

London Road

16024

9856
Hallingbury Road (north)

8969
Hallingbury Road (south)

12489
St. James' Way

M11 (S)

107909
M11 South of J8

St. James' Way East

10580

19929
A1184 Cambridge Road

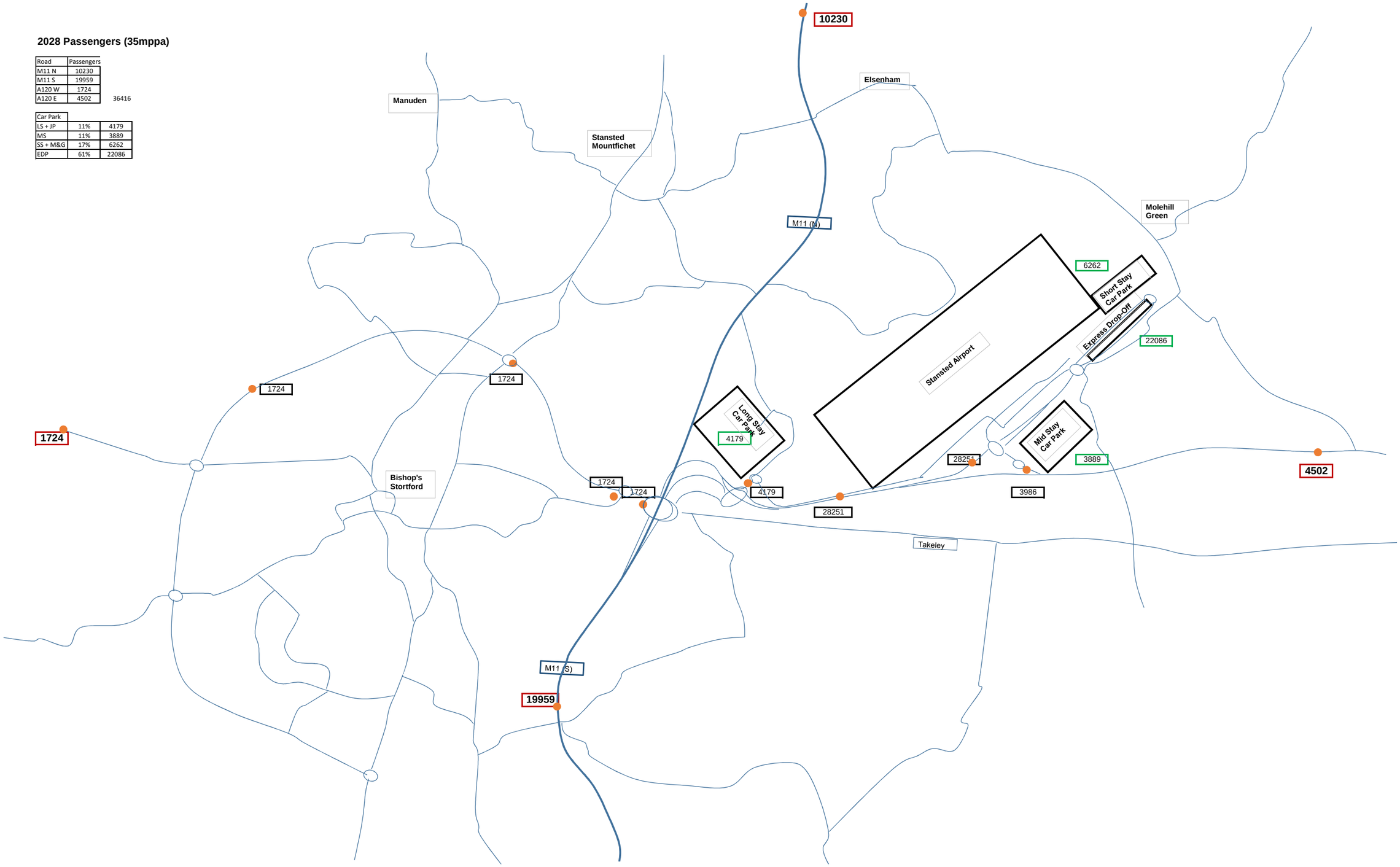
7005
Lower Road

2028 Passengers (35mppa)

Road	Passengers
M11 N	10230
M11 S	19959
A120 W	1724
A120 E	4502

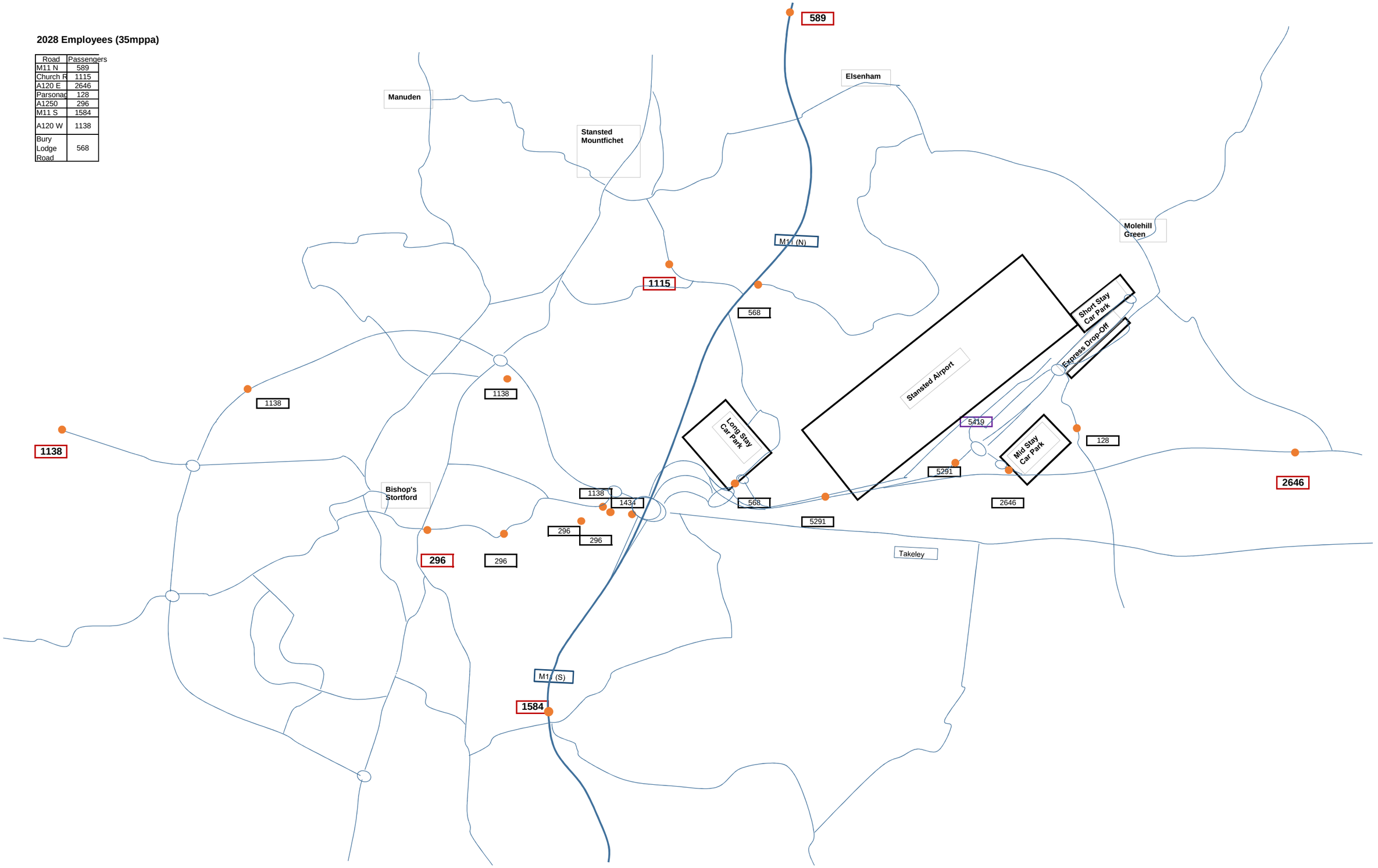
36416

Car Park		
LS + JP	11%	4179
MS	11%	3889
SS + M&G	17%	6262
EDP	61%	22086



2028 Employees (35mppa)

Road	Passengers
M11 N	589
Church R	1115
A120 E	2646
Parsonag	128
A1250	296
M11 S	1584
A120 W	1138
Bury Lodge Road	568



2028 With Airport (35mppa) 'Do Minimum'

Tempro Growth Factor

2016 to 2028
1.1785

85922
M11 Paynsden Wood

16590
B1383 Cambridge Road

Manuden

3954
Carters Hill

Cambridge Road
12317

Stansted Mountfichet

Elsenham

3959
Hall Road

8029
Chapel Hill

9095
Lower Street

M11 (N)

Molehill Green

2442
Molehill Green Road

Church Road (A)
690

6015
Church Road (B)

Short Stay Car Park

Express Drop-Off

1021
Bambers Green

Stansted Airport

24258
Western approach to Stansted roundabout

24517
A120 West

Long Stay Car Park

Mid Stay Car Park

5198
Parsonage Road

18640
A120 Hadham Road (west)

42045
Thremhall Avenue

58042
A120 East of Stansted Airport

10205
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout

A120 east of roundabout
26239
41296

Round Coppice Road
11931

10715
Stansted Services

Dunmow Road (west)
20034

87134
A120 (east of J8)

19115
Dunmow Road (east)

9687
B1256 Dunmow Road (east)

Takeley

17496
Hockerill Street

22020
Junction of A1250 and Haymeads Lane

Station Road
10178

Bishops Parkway
17256

London Road
16024

9856
Hallingbury Road (north)

8969
Hallingbury Road (south)

12489
St. James' Way

M11 (S)

129452
M11 South of J8

St. James' Way East
10580

19929
A1184 Cambridge Road

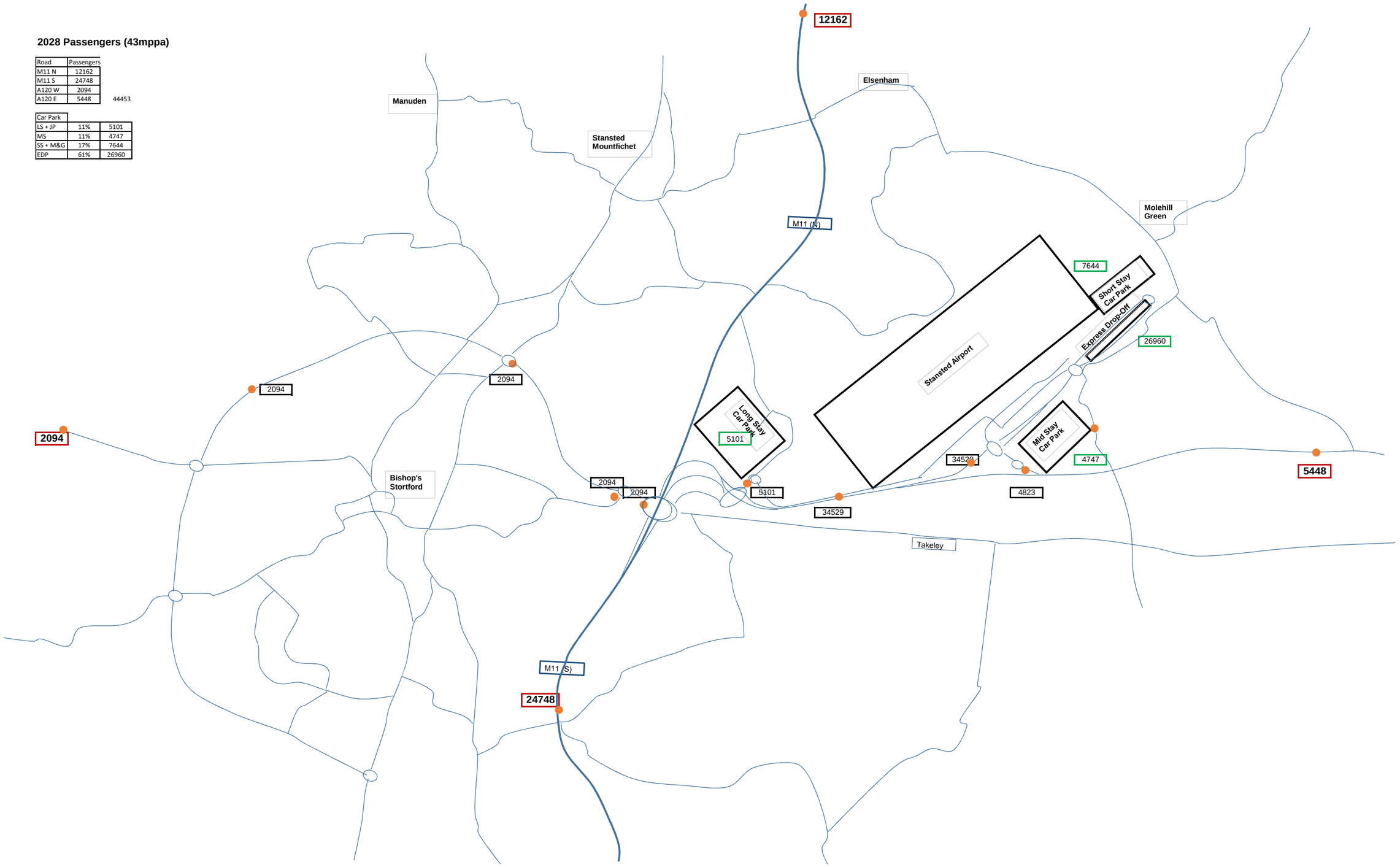
7005
Lower Road

2028 Passengers (43mppa)

Road	Passengers
M11 N	12162
M11 S	24748
A120 W	2094
A120 E	5448

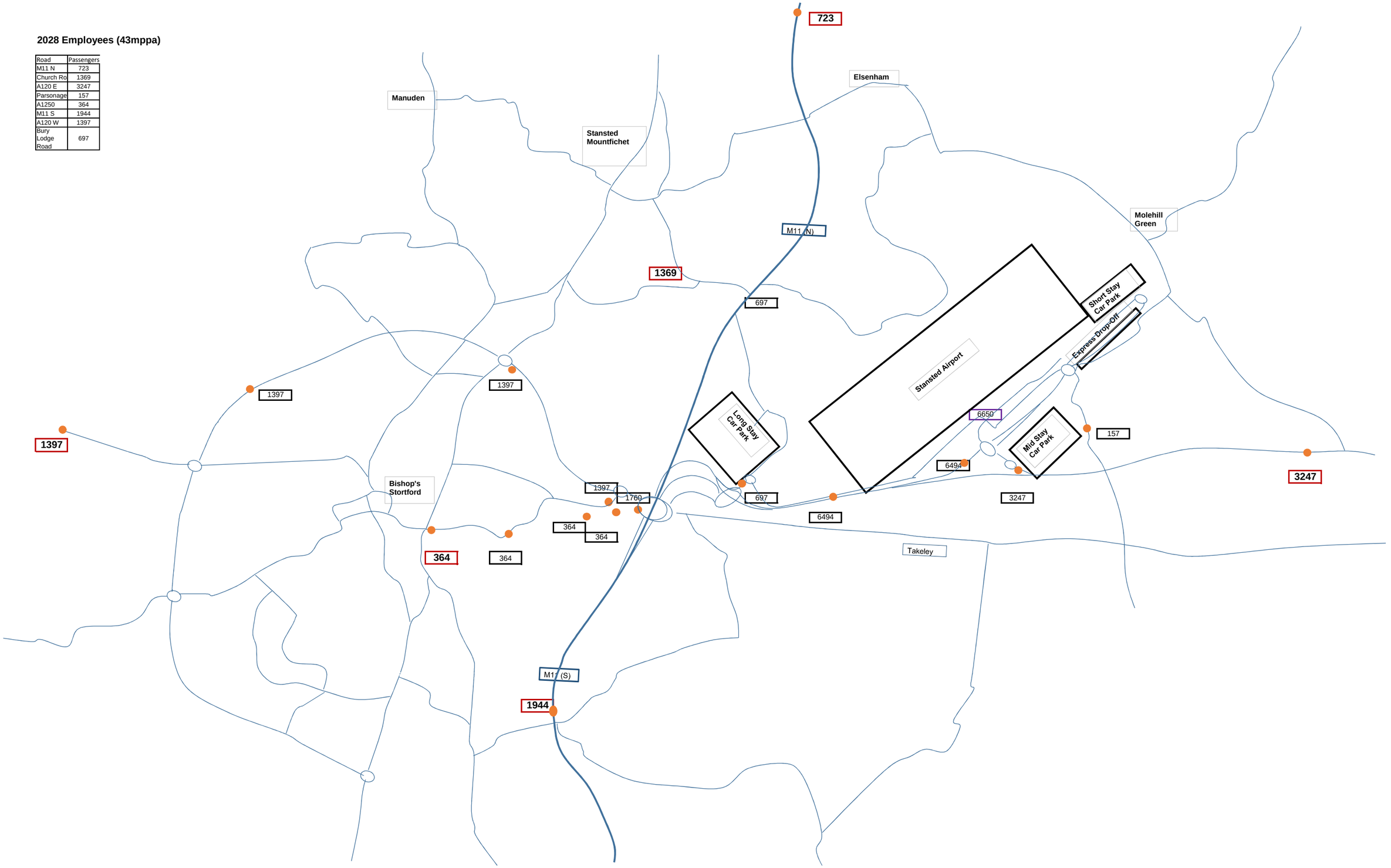
44453

Car Park		
LS + JP	11%	5101
MS	11%	4747
SS + M&G	17%	7644
EDP	61%	26960



2028 Employees (43mppa)

Road	Passengers
M11 N	723
Church Ro	1369
A120 E	3247
Parsonage	157
A1250	364
M11 S	1944
A120 W	1397
Bury Lodge Road	697



2028 With Airport (43mppa) 'Do Something'

Tempro Growth Factor

2016 to 2028
1.1785

87988
M11 Paynsden Wood

16590
B1383 Cambridge Road

Manuden

3954
Carters Hill

Cambridge Road
12317

Stansted Mountfichet

Elsenham

3959
Hall Road

9095
Lower Street

8029
Chapel Hill

M11 (N)

Molehill Green

2442
Molehill Green Road

Church Road (A)
715

6144
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

1021
Bambers Green

24886
Western approach to Stansted roundabout

25146
A120 West

Long Stay Car Park

Mid Stay Car Park

5227
Parsonage Road

19268
A120 Hadham Road (west)

49525
Thremhall Avenue

59589
A120 East of Stansted Airport

10205
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout
26867
41991

A120 east of

Round Coppice Road
12983

12154
Stansted Services

Dunmow Road (west)
20102
19182

94614
A120 (east of J8)

Dunmow Road (east)

9687
B1256 Dunmow Road (east)

Takeley

17563
Hockerill Street

22087
Junction of A1250 and Haymeads Lane

Station Road
10178

London Road
16024

Bishops Parkway
17256

9856
Hallingbury Road (north)

8969
Hallingbury Road (south)

12489
St. James' Way

M11 (S)

134601
M11 South of J8

St. James' Way East
10580

19929
A1184 Cambridge Road

7005
Lower Road

4) Airside / Landside Hourly Passenger Counts

AVERAGE DAY 2016

Service number	Cleared time	Start date	End date	A/D	Days of operation	Aircraft	Seats	Terminal	Week number	Service type	Origin / dest	Last next	Turnround service number	Turnround days
SWN0007W	5	02Aug	02Aug	D	.2.....	ATP	0	FRT	W18	M	NCL	NCL		
QAF0003	10	02Aug	02Aug	D	.2.....	332	0	3I	W18	D	GIG	GIG		
3V0975B	55	02Aug	02Aug	A	.2.....	73P	0	FRT	W18	F	LGG	LGG	3V0976C	
ZT4324W	110	02Aug	02Aug	A	.2.....	W1BST	0	1I	W18	P	ARN	ARN		
3V0976C	140	02Aug	02Aug	D	.2.....	73P	0	FRT	W18	F	LGG	LGG	3V0975B	
EZY3048	210	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	IBZ	IBZ		
FX5202	235	02Aug	02Aug	A	.2.....	ABY	0	FRT	W18	F	CDG	CDG	FX5202	
UPS0236	235	02Aug	02Aug	A	.2.....	76V	0	FRT	W18	F	CGN	CGN	UPS238	
AWC0002D	245	02Aug	02Aug	A	.2.....	733	0	FRT	W18	M	BFS	BFS		
FYR0204	330	02Aug	02Aug	A	.2.....	738	0	3I	W18	D	AUH	AUH		
3V0027R	335	02Aug	02Aug	A	.2.....	75F	0	FRT	W18	F	LGG	LGG	3V0028S	
SWN0023J	345	02Aug	02Aug	D	.2.....	ATP	0	FRT	W18	M	JER	JER		
FX5202	350	02Aug	02Aug	D	.2.....	ABY	0	FRT	W18	F	DUB	DUB	FX5202	
MT0773	420	02Aug	02Aug	A	.2.....	332	320	1I	W18	J	MCO	MCO		
SWN0022G	420	02Aug	02Aug	D	.2.....	ATP	0	FRT	W18	M	GCI	GCI	SWN0006L	1
FR0001	425	02Aug	02Aug	D	.2.....	L45	0	3I	W18	P	MAN	MAN		
FYR0205	455	02Aug	02Aug	D	.2.....	738	0	3I	W18	D	JFK	JFK		
EZY3043	500	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	IBZ	IBZ		
TOM5212	500	02Aug	02Aug	D	.2.....	73H	189	1I	W18	C	PMI	PMI		
EZY3155	505	02Aug	02Aug	D	.2.....	320	180	1I	W18	J	DLM	DLM		
FR8382	505	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ALC	ALC		
MT7352	505	02Aug	02Aug	D	.2.....	32B	220	1I	W18	J	PMI	PMI		
EZY3111	510	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	AGP	AGP		
EZY3249	510	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	NAP	NAP		
FR3556	510	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	RAK	RAK		
FR8182	510	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	FUE	FUE		
FR8166	515	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	TFS	TFS		
MT3214P	515	02Aug	02Aug	A	.2.....	32B	0	1D	W18	P	GLA	GLA		
FR0286	520	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PLQ	PLQ		
FR4976	520	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BDS	BDS		
FR1005	525	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	OTP	OTP		
FR2642	525	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	RIX	RIX		
FR2672	525	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CIA	CIA		
FR5992	525	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	MAD	MAD		
MT0139	525	02Aug	02Aug	A	.2.....	332	330	1I	W18	J	MCO	MCO		
EZY3021	530	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	SPU	SPU		
FR0124	530	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	AOI	AOI		
FR0203	530	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	DUB	DUB		
FR4966	530	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SUF	SUF		
FR8542	530	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SXF	SXF		
FR6541	535	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	MRS	MRS		
FR8584	535	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	RHO	RHO		
GTI0607	540	02Aug	02Aug	A	.2.....	748	0	FRT	W18	F	HSV	HSV	GTI0607	
FR0792	545	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	TSF	TSF		
FR1013	545	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PRG	PRG		
FR2462	545	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BZG	BZG		
ZI0765F	545	02Aug	02Aug	D	.2.....	733	0	1I	W18	P	LYS	LYS		
FR0753	550	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	HHN	HHN		
FR0611	555	02Aug	02Aug	D	.2.....	73H	189	1D	W18	J	LDY	LDY		
EZY3001	600	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	AMS	AMS		
FR8402	600	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	EGC	EGC		
FR9253	600	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	IBZ	IBZ		
EZY3225	605	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	BIO	BIO		
FR2404	605	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	FMM	FMM		
FR3253	605	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	NRN	NRN		
FR2813	610	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CGN	CGN		
FR8132	610	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	LPA	LPA		
FR8321	610	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	VLC	VLC		
FR9524	610	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	LUZ	LUZ		
MT7214	610	02Aug	02Aug	D	.2.....	32B	220	1I	W18	J	TFS	TFS		
4U0354	615	02Aug	02Aug	A	.2.....	319	150	1I	W18	J	CGN	CGN	4U355	
FR1903	615	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	LNZ	LNZ		
FR3631	615	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BRE	BRE		
FR5172	620	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BLL	BLL		
EZY0252	625	02Aug	02Aug	A	.2.....	319	156	1D	W18	J	BFS	BFS		
FR0144	625	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SXF	SXF		

FR8162	625	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	AGP	AGP	
FR0464	630	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	TRN	TRN	
FR0752	630	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	HHN	HHN	
FR3252	630	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	NRN	NRN	
SXN0030P	630	02Aug	02Aug	D	.2.....	EP3	6	3I	W18	N	NWI	NWI	
FR0126	635	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	AOI	AOI	
FR8288	635	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ACE	ACE	
FR0001	640	02Aug	02Aug	A	.2.....	L45	0	3I	W18	P	MAN	MAN	
FR2814	640	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CGN	CGN	
FR4191	640	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BGY	BGY	
FR5993	645	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	MAD	MAD	
4U0355	650	02Aug	02Aug	D	.2.....	319	150	1I	W18	J	CGN	CGN	4U354
EZY0253	650	02Aug	02Aug	D	.2.....	319	156	1D	W18	J	BFS	BFS	
FR0145	650	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SXF	SXF	
FR0202	650	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	DUB	DUB	
FR2315	650	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BTS	BTS	
FR9811	650	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BCN	BCN	
FR0053	655	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	NYO	NYO	
FR0805	655	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	NOC	NOC	
FR0902	655	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	ORK	ORK	
FR1202	655	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PMI	PMI	
FR3632	655	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BRE	BRE	
FR8728	655	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	MXP	MXP	
FR4214	700	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PMF	PMF	
MT7284	700	02Aug	02Aug	D	.2.....	32B	220	1I	W18	J	TFS	TFS	
TOM5250	700	02Aug	02Aug	D	.2.....	73H	189	1I	W18	C	ZTH	ZTH	
FR0195	705	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BLQ	BLQ	
FR0585	705	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PSA	PSA	
FR4192	705	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BGY	BGY	
FR8354	705	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BUD	BUD	
FR1393	710	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	RYG	RYG	
FR8406	710	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	WRO	WRO	
FR9272	710	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	EIN	EIN	
FR0205	715	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	DUB	DUB	
FR1022	715	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	WMI	WMI	
FR3005	715	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CIA	CIA	
FR7491	715	02Aug	02Aug	A	.2.....	73H	189	1D	W18	J	GLA	GLA	
FR9142	715	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	FAO	FAO	
FR9810	715	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BCN	BCN	
EZY0232	720	02Aug	02Aug	A	.2.....	320	180	1D	W18	J	EDI	EDI	
FR0901	720	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ORK	ORK	
FR2433	720	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	KRK	KRK	
FR8729	720	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	MXP	MXP	
FR5994	725	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	MAD	MAD	
FR8882	725	02Aug	02Aug	A	.2.....	73H	189	1D	W18	J	EDI	EDI	
GTI0607	725	02Aug	02Aug	D	.2.....	748	0	FRT	W18	F	LUX	LUX	GTI0607
BE6621	730	02Aug	02Aug	A	.2.....	D38	31	1D	W18	J	DND	DND	BE6622
FR0014	730	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	ATH	ATH	
FR0052	730	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	NYO	NYO	
FR0965	730	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	GOT	GOT	
FR2314	730	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BTS	BTS	
FR8353	730	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BUD	BUD	
UVA0202	730	02Aug	02Aug	A	.2.....	DF7	0	3I	W18	D	MDW	MDW	UVA203
FR0102	735	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	SNN	SNN	
FR1392	735	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	RYG	RYG	
FR8405	735	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	WRO	WRO	
FR9271	735	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	EIN	EIN	
FR7492	740	02Aug	02Aug	D	.2.....	73H	189	1D	W18	J	GLA	GLA	
EZY0206	745	02Aug	02Aug	A	.2.....	319	156	1D	W18	J	GLA	GLA	
EZY0231	745	02Aug	02Aug	D	.2.....	320	180	1D	W18	J	EDI	EDI	
FR0194	745	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BLQ	BLQ	
FR0584	745	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PSA	PSA	
FR2432	745	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	KRK	KRK	
FR0964	755	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	GOT	GOT	
FR1021	755	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	WMI	WMI	
FR3002	755	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CIA	CIA	
FR8881	755	02Aug	02Aug	D	.2.....	73H	189	1D	W18	J	EDI	EDI	
FR0015	800	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ATH	ATH	
FR0103	800	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SNN	SNN	
FR0936	800	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PGF	PGF	

FR4952	800	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PEG	PEG		
FR8344	800	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	OPO	OPO		
FR8572	800	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SKG	SKG		
UVA0203	800	02Aug	02Aug	D	.2.....	DF7	0	3I	W18	D	GOA	GOA	UVA202	
BE6622	810	02Aug	02Aug	D	.2.....	D38	31	1D	W18	J	DND	DND	BE6621	
EZY0207	810	02Aug	02Aug	D	.2.....	319	156	1D	W18	J	GLA	GLA		
TOM0788F	810	02Aug	02Aug	A	.2.....	788	0	CTA	W18	P	DUB	DUB		
FR1885	820	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	LIS	LIS		
FR8343	825	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	OPO	OPO		
EZY3002	835	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	AMS	AMS		
FR0206	840	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	DUB	DUB		
FR1884	850	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	LIS	LIS		
XJT0206	850	02Aug	02Aug	A	.2.....	AGH	0	3I	W18	D	B42	B42		
DUB0001	900	02Aug	02Aug	D	.2.....	744	0	3I	W18	D	DXB	DXB	DUB0001	1
EZY3203	905	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	CAG	CAG		
FR2371	905	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	DUB	DUB		
SXY0142	905	02Aug	02Aug	A	.2.....	74Y	0	FRT	W18	F	JNB	NBO	SXY142	
FR0612	910	02Aug	02Aug	A	.2.....	73H	189	1D	W18	J	LDY	LDY		
MVI0200	915	02Aug	02Aug	A	.2.....	CCX	0	3I	W18	D	IAD	IAD	MVI401	2
FR2375	920	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	GDN	GDN		
FR8978	925	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ALC	ALC		
FR0001B	930	02Aug	02Aug	D	.2.....	L45	0	3I	W18	D	LIG	LIG		
FR2374	945	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	GDN	GDN		
FR9542	945	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	FAO	FAO		
MT0140	950	02Aug	02Aug	D	.2.....	332	330	1I	W18	J	MCO	MCO		
FR2405	955	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	FMM	FMM		
FR5173	955	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BLL	BLL		
FR8401	955	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	EGC	EGC		
FR8543	955	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SXF	SXF		
FYR0203	1000	02Aug	02Aug	D	.2.....	772	0	3I	W18	D	AUH	AUH	FYR0106	1
INS0102	1000	02Aug	02Aug	D	.2.....	GJ6	0	3I	W18	D	BCN	BCN		
FR1014	1005	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PRG	PRG		
TOM0794	1010	02Aug	02Aug	D	.2.....	788	300	1I	W18	C	CUN	CUN		
EZY3226	1020	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	BIO	BIO		
FR0074	1020	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CCF	CCF		
FR0793	1020	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	TSF	TSF		
FR0806	1020	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	NOC	NOC		
FR2136	1020	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	RZE	RZE		
FR2336	1020	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	POZ	POZ		
FR3872	1020	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PUY	PUY		
EZY3044	1030	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	IBZ	IBZ		
FR2463	1030	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BZG	BZG		
FR8388	1030	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ZAD	ZAD		
FR1904	1040	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	LNZ	LNZ		
FR0125	1045	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	AOI	AOI		
FR0287	1045	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PLQ	PLQ		
FR7495	1045	02Aug	02Aug	A	.2.....	73H	189	1D	W18	J	GLA	GLA		
FR8366	1045	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	AGP	AGP		
FR8379	1045	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SCQ	SCQ		
EZY3067	1050	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	PRG	PRG		
FR2468	1055	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	LCJ	LCJ		
EZY3022	1100	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	SPU	SPU		
FR0465	1100	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	TRN	TRN		
TOM5213	1100	02Aug	02Aug	A	.2.....	73H	189	1I	W18	C	PMI	PMI		
CLU0142	1105	02Aug	02Aug	D	.2.....	74Y	0	FRT	W18	F	FRA	FRA	CLU0142	
EZY3250	1105	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	NAP	NAP		
FR2673	1105	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CIA	CIA		
FR5991	1105	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	MAD	MAD		
FR8884	1105	02Aug	02Aug	A	.2.....	73H	189	1D	W18	J	EDI	EDI		
EZY0255	1110	02Aug	02Aug	D	.2.....	319	156	1D	W18	J	BFS	BFS		
FR0972	1110	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	GOA	GOA		
FR7496	1110	02Aug	02Aug	D	.2.....	73H	189	1D	W18	J	GLA	GLA		
FR8026	1110	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	MJV	MJV		
FR8378	1110	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SCQ	SCQ		
FR2643	1115	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	RIX	RIX		
FR8592	1115	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	EGC	EGC		
FR9045	1120	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BCN	BCN		
EZY3112	1125	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	AGP	AGP		
FR3842	1125	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	REU	REU		
FR8363	1125	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SVQ	SVQ		

FR8883	1130	02Aug	02Aug	D	.2.....	73H	189	1D	W18	J	EDI	EDI		
INS0102	1130	02Aug	02Aug	A	.2.....	ERJ	14	3I	W18	N	RAK	RAK		
XJT0207	1130	02Aug	02Aug	D	.2.....	AGH	0	3I	W18	D	B42	B42		
FR4215	1135	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PMF	PMF		
FR8383	1135	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	ALC	ALC		
FR9525	1140	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	LUZ	LUZ		
PC0501	1140	02Aug	02Aug	A	.2.....	738	189	1I	W18	J	SAW	SAW	PC502	
FR9044	1145	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BCN	BCN		
BE1824	1150	02Aug	02Aug	A	.2.....	AT7	66	1D	W18	J	NQY	NQY		
FR0127	1150	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	AOI	AOI		
FR3188	1150	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	RJK	RJK		
FR4199	1150	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BGY	BGY		
FR4977	1150	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BDS	BDS		
FR8322	1150	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	VLC	VLC		
XJT0208	1150	02Aug	02Aug	A	.2.....	CCX	0	3I	W18	D	AGP	AGP		
EZY3083	1155	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	OVD	OVD		
EZY3245	1155	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	LJU	LJU		
FR9254	1155	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	IBZ	IBZ		
FR1788	1200	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	DTM	DTM		
FR3073	1200	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CIA	CIA		
FR9353	1200	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	IBZ	IBZ		
FR4967	1205	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SUF	SUF		
FR7973	1210	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BSL	BSL		
FR2272	1215	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	DUB	DUB		
MVI0251	1215	02Aug	02Aug	D	.2.....	DF2	0	3I	W18	D	GVA	GVA	MVI150	1
EZY3071	1220	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	MUC	MUC		
PC0502	1220	02Aug	02Aug	D	.2.....	738	189	1I	W18	J	SAW	SAW	PC501	
FR0583	1225	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PSA	PSA		
FR2634	1225	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ZAZ	ZAZ		
FR3072	1225	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CIA	CIA		
TOM5232	1225	02Aug	02Aug	D	.2.....	73H	189	1I	W18	C	KGS	KGS		
FR1006	1230	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	OTP	OTP		
FR1203	1230	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PMI	PMI		
FR4194	1230	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BGY	BGY		
BE1825	1235	02Aug	02Aug	D	.2.....	AT7	66	1D	W18	J	NQY	NQY		
FR1802	1235	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CFU	CFU		
FR8386	1235	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PMI	PMI		
FR9773	1235	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	FKB	FKB		
FR0001A	1240	02Aug	02Aug	A	.2.....	L45	0	3I	W18	D	LIG	LIG		
FR0168	1240	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	TRS	TRS		
FR0225	1240	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	DUB	DUB		
FR0937	1240	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PGF	PGF		
FR0967	1245	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	GOT	GOT		
FR0582	1250	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PSA	PSA		
FR8403	1250	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BRQ	BRQ		
FR8163	1255	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	AGP	AGP		
AJK2601	1300	02Aug	02Aug	A	.2.....	M1F	0	FRT	W18	F	NBO	NBO	AJK2601	
FR3557	1300	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	RAK	RAK		
FR9772	1300	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	FKB	FKB		
FR0372	1305	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BIQ	BIQ		
FR8474	1305	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PIS	PIS		
FR0966	1310	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	GOT	GOT		
FR8117	1310	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	NUE	NUE		
EW5832	1315	02Aug	02Aug	A	.2.....	32A	180	1I	W18	J	VIE	VIE	EW5833	
FR2368	1315	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	OSR	OSR		
FR8555	1315	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CDT	CDT		
FR0587	1320	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PSA	PSA		
INS0201	1320	02Aug	02Aug	D	.2.....	ERJ	0	3I	W18	D	LUX	LUX		
FR0003P	1330	02Aug	02Aug	D	.2.....	L45	0	3I	W18	D	ORK	ORK		
FR4953	1330	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PEG	PEG		
FR9143	1330	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	FAO	FAO		
CO0619	1340	02Aug	02Aug	A	.2.....	320	180	1I	W18	J	LCA	LCA	CO0620	
FR9968Z	1340	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SOF	SOF		
FR0072	1345	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CCF	CCF		
FR0586	1345	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PSA	PSA		
FR8868	1345	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	TUF	TUF		
INS0203	1345	02Aug	02Aug	D	.2.....	GJ4	0	3I	W18	D	ABV	ABV	INS706	1
EW5833	1355	02Aug	02Aug	D	.2.....	32A	180	1I	W18	J	VIE	VIE	EW5832	
EZY0254	1400	02Aug	02Aug	A	.2.....	319	156	1D	W18	J	BFS	BFS		
FR5995	1405	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	MAD	MAD		

GR0626	1405	02Aug	02Aug	A	.2.....	AT7	72	CTA	W18	J	GCI	GCI	GR0627	
EZY3156	1410	02Aug	02Aug	A	.2.....	320	180	1I	W18	J	DLM	DLM		
FR0001P	1410	02Aug	02Aug	D	.2.....	L45	0	3I	W18	D	WAW	WAW		
FR8585	1420	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	RHO	RHO		
FR8746	1420	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	LRH	LRH		
CO0620	1425	02Aug	02Aug	D	.2.....	320	180	1I	W18	J	LCA	LCA	CO0619	
XJT0200	1425	02Aug	02Aug	A	.2.....	763	0	3I	W18	D	LPL	LPL		
FR5996	1430	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	MAD	MAD		
FR8183	1430	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	FUE	FUE		
CWY0999A	1435	02Aug	02Aug	A	.2.....	BET	8	3I	W18	U	BFS	BFS	CWY0999B	
FR4195	1435	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BGY	BGY		
FR6542	1435	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	MRS	MRS		
GR0627	1435	02Aug	02Aug	D	.2.....	AT7	72	1I	W18	J	GCI	GCI	GR0626	
EZY0259	1440	02Aug	02Aug	D	.2.....	319	156	1D	W18	J	BFS	BFS		
EZY0238	1445	02Aug	02Aug	A	.2.....	319	156	1D	W18	J	EDI	EDI		
FR0075	1445	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CCF	CCF		
FR3015	1445	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CIA	CIA		
FR8167	1445	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	TFS	TFS		
TOM5251	1450	02Aug	02Aug	A	.2.....	73H	189	1I	W18	C	ZTH	ZTH		
FR2337	1455	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	POZ	POZ		
FR7498	1455	02Aug	02Aug	D	.2.....	73H	189	1D	W18	J	GLA	GLA		
AJK2601	1500	02Aug	02Aug	D	.2.....	M1F	0	FRT	W18	F	LGG	LGG	AJK2601	
EZY3068	1500	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	PRG	PRG		
EZY3204	1500	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	CAG	CAG		
FR2684	1500	02Aug	02Aug	A	.2.....	73H	189	1D	W18	J	EDI	EDI		
FR4196	1500	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BGY	BGY		
ZI0756F	1500	02Aug	02Aug	A	.2.....	733	0	1I	W18	P	TLS	TLS		
EZY3149	1505	02Aug	02Aug	D	.2.....	320	180	1I	W18	J	BJV	BJV		
FR1789	1505	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	DTM	DTM		
QAF0011	1505	02Aug	02Aug	A	.2.....	319	50	3I	W18	U	DOH	DOH	QAF0011	1
EZY0237	1510	02Aug	02Aug	D	.2.....	319	156	1D	W18	J	EDI	EDI		
FR0514	1510	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	DNR	DNR		
FR3014	1510	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CIA	CIA		
FR8593	1510	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	EGC	EGC		
FR3873	1515	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PUY	PUY		
FR8573	1515	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SKG	SKG		
MVI0402	1515	02Aug	02Aug	A	.2.....	752	0	3I	W18	D	MPL	MPL	MVI403	1
FR0909	1525	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	ORK	ORK		
FR2685	1525	02Aug	02Aug	D	.2.....	73H	189	1D	W18	J	EDI	EDI		
FR8977	1525	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	ALC	ALC		
FR9967	1525	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SOF	SOF		
FR1364	1530	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	RBA	RBA		
FR3132	1535	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PFO	PFO		
FR8289	1540	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	ACE	ACE		
FR8582	1540	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SKG	SKG		
FR8853	1540	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	MLA	MLA		
FR2005	1545	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	OTP	OTP		
FR8133	1545	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	LPA	LPA		
FR8389	1545	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	ZAD	ZAD		
EZY3005	1550	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	AMS	AMS		
FR0294	1550	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	DUB	DUB		
FR0908	1550	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ORK	ORK		
FR0973	1550	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	GOA	GOA		
FR7974	1550	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BSL	BSL		
EZY3251	1555	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	NAP	NAP		
FR2137	1555	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	RZE	RZE		
FX0036	1555	02Aug	02Aug	A	.2.....	M1F	0	FRT	W18	F	IND	IND	FX0036	
FR2469	1600	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	LCJ	LCJ		
FR2644	1600	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	RIX	RIX		
FR8028	1600	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	MJV	MJV		
FR9543	1600	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	FAO	FAO		
FR0297	1605	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	DUB	DUB		
EZY3084	1610	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	OVD	OVD		
FR3131	1610	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PFO	PFO		
FR3918	1610	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PMO	PMO		
FR4954	1610	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PEG	PEG		
FR9273	1615	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	EIN	EIN		
QR8781	1615	02Aug	02Aug	A	.2.....	33X	0	FRT	W18	F	DOH	ACC	QR8782	
TOM0432	1615	02Aug	02Aug	D	.2.....	73H	189	1I	W18	C	AYT	AYT		
EZY3072	1625	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	MUC	MUC		

FR3843	1625	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	REU	REU	
FR8164	1625	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	AGP	AGP	
FR8975	1625	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	ALC	ALC	
FR9251	1625	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	IBZ	IBZ	
FR1905	1630	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BRI	BRI	
EZY3215	1635	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	PMI	PMI	
FR8475	1635	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PIS	PIS	
FR1882	1640	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	LIS	LIS	
MT7285	1640	02Aug	02Aug	A	.2.....	32B	220	1I	W18	J	TFS	TFS	
EZY3246	1645	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	LJU	LJU	
FR2244	1645	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	VNO	VNO	
FR0211	1650	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	DUB	DUB	
FR8976	1650	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ALC	ALC	
NJE0117K	1650	02Aug	02Aug	A	.2.....	GJ5	0	3I	W18	D	TIV	TIV	
FR0012	1655	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	ATH	ATH	
FR3189	1655	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	RJK	RJK	
FR8266	1655	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	KTW	KTW	
FR8869	1655	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	TUF	TUF	
EK2694	1700	02Aug	02Aug	D	.2.....	77L	0	1I	W18	P	DXB	DXB	
EZY0241	1700	02Aug	02Aug	D	.2.....	319	156	1D	W18	J	EDI	EDI	
FR0982	1700	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PSR	PSR	
FR2436	1700	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	KRK	KRK	
FR8116	1700	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	NUE	NUE	
FR8025	1705	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	MJV	MJV	
FR8371	1710	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BUD	BUD	
EZY3227	1715	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	BIO	BIO	
FR8365	1715	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	AGP	AGP	
FX0002	1715	02Aug	02Aug	A	.2.....	77X	0	FRT	W18	F	MEM	MEM	FX0001
FR0011	1720	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ATH	ATH	
FR1222	1720	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PMI	PMI	
FR2283	1720	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	WMI	WMI	
FR2635	1720	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	ZAZ	ZAZ	
FR8323	1720	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	VLC	VLC	
FR0003P	1725	02Aug	02Aug	A	.2.....	L45	0	3I	W18	D	ORK	ORK	
FR0058	1725	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	NYO	NYO	
FR0373	1725	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BIQ	BIQ	
FR0969	1725	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	GOT	GOT	
FR9283	1725	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	FAO	FAO	
BE6625	1730	02Aug	02Aug	A	.2.....	D38	31	1D	W18	J	DND	DND	BE6626
CWY0999B	1730	02Aug	02Aug	D	.2.....	BET	8	3I	W18	U	BFS	BFS	VWY0999A
EZY0258	1730	02Aug	02Aug	A	.2.....	319	156	1D	W18	J	BFS	BFS	
FR0169	1730	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	TRS	TRS	
FR0212	1730	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	DUB	DUB	
FR8736	1730	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	MXP	MXP	
FX0036	1730	02Aug	02Aug	D	.2.....	M1F	0	FRT	W18	F	CDG	FRA	FX0036
FR8364	1735	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SVQ	SVQ	
FR8404	1735	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BRQ	BRQ	
FX7016	1735	02Aug	02Aug	A	.2.....	EM2	0	FRT	W18	F	HAJ	AMS	FX8026
MT7512	1740	02Aug	02Aug	D	.2.....	32B	220	1I	W18	J	DLM	DLM	
QR8782	1745	02Aug	02Aug	D	.2.....	33X	0	FRT	W18	F	DOH	OSL	QR8781
FR2372	1750	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	GDN	GDN	
FR8747	1750	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	LRH	LRH	
FR0146	1755	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SXF	SXF	
FR0968	1755	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	GOT	GOT	
FR2466	1755	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SZZ	SZZ	
FR2612	1755	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SDR	SDR	
FR9354	1755	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	IBZ	IBZ	
BE6626	1800	02Aug	02Aug	D	.2.....	D38	31	1D	W18	J	DND	DND	BE6625
EZY3009	1800	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	AMS	AMS	
FR0515	1800	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	DNR	DNR	
FR3634	1800	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BRE	BRE	
FR7494	1800	02Aug	02Aug	D	.2.....	73H	189	1D	W18	J	GLA	GLA	
FR7497	1800	02Aug	02Aug	A	.2.....	73H	189	1D	W18	J	GLA	GLA	
FR8544	1800	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SXF	SXF	
FX8026	1805	02Aug	02Aug	D	.2.....	EM2	0	FRT	W18	F	HAJ	HAJ	FX7016
EZY0240	1810	02Aug	02Aug	A	.2.....	319	156	1D	W18	J	EDI	EDI	
FR0073	1810	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CCF	CCF	
FR2369	1810	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	OSR	OSR	
FR8387	1810	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PMI	PMI	
FR0798	1815	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	TSF	TSF	

FR3003	1815	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CIA	CIA		
FR9282	1815	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	FAO	FAO		
EZY3006	1820	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	AMS	AMS		
FR0147	1820	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SXF	SXF		
FR1598	1820	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	LEJ	LEJ		
MT3882P	1820	02Aug	02Aug	A	.2.....	32B	0	1D	W18	P	GLA	GLA		
MT7353	1820	02Aug	02Aug	A	.2.....	32B	220	1I	W18	J	PMI	PMI		
FR0589	1825	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PSA	PSA		
FR2319	1825	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BTS	BTS		
FR2816	1825	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CGN	CGN		
FR0109	1830	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	SNN	SNN		
FR1395	1830	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	RYG	RYG		
FR5997	1830	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	MAD	MAD		
EZY0239	1835	02Aug	02Aug	D	.2.....	319	156	1D	W18	J	EDI	EDI		
FR0758	1835	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	HHN	HHN		
FR2013	1835	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PRG	PRG		
FR5178	1835	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BLL	BLL		
FR8888	1835	02Aug	02Aug	A	.2.....	73H	189	1D	W18	J	EDI	EDI		
FR3004	1840	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	CIA	CIA		
FX7001	1840	02Aug	02Aug	A	.2.....	AT7	0	FRT	W18	F	MAN	MAN	FX8001	
FX7004	1840	02Aug	02Aug	A	.2.....	EM2	0	FRT	W18	F	GLA	GLA		
4U2378	1845	02Aug	02Aug	A	.2.....	319	150	1I	W18	J	STR	STR	4U2379	
4U3370	1845	02Aug	02Aug	A	.2.....	319	150	1I	W18	J	HAJ	HAJ	4U3371	
EZY0263	1845	02Aug	02Aug	D	.2.....	319	156	1D	W18	J	BFS	BFS		
FR4197	1845	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BGY	BGY		
FR8554	1845	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CDT	CDT		
FX5201	1845	02Aug	02Aug	A	.2.....	ABY	0	FRT	W18	F	DUB	DUB	FX5201	
FR2318	1850	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BTS	BTS		
4U0356	1855	02Aug	02Aug	A	.2.....	319	150	1I	W18	J	CGN	CGN	4U357	
FR1394	1855	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	RYG	RYG		
FR5998	1855	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	MAD	MAD		
FR9274	1855	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	EIN	EIN		
FR8887	1900	02Aug	02Aug	D	.2.....	73H	189	1D	W18	J	EDI	EDI		
FR0588	1905	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	PSA	PSA		
FR0293	1910	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	DUB	DUB		
FR0906	1910	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	ORK	ORK		
FR4198	1910	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BGY	BGY		
FR9815	1910	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BCN	BCN		
MT7882	1910	02Aug	02Aug	D	.2.....	32B	220	1I	W18	J	AYT	AYT		
BID0004C	1915	02Aug	02Aug	A	.2.....	SWM	0	1D	W18	P	MAN	MAN	BID0003A	1
EZY0214	1915	02Aug	02Aug	A	.2.....	319	156	1D	W18	J	GLA	GLA		
FR0288	1915	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	DUB	DUB		
4U2379	1920	02Aug	02Aug	D	.2.....	319	150	1I	W18	J	STR	STR	4U2378	
4U3371	1920	02Aug	02Aug	D	.2.....	319	150	1I	W18	J	HAJ	HAJ	4U3370	
FR1803	1920	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CFU	CFU		
FX8001	1920	02Aug	02Aug	D	.2.....	AT7	0	FRT	W18	F	MAN	MAN	FX7001	
4U0357	1930	02Aug	02Aug	D	.2.....	319	150	1I	W18	J	CGN	CGN	4U356	
FR8348	1930	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	OPO	OPO		
FR0905	1935	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	ORK	ORK		
FR9814	1935	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	BCN	BCN		
MT7892	1935	02Aug	02Aug	D	.2.....	32B	220	1I	W18	J	AYT	AYT		
EZY0215	1940	02Aug	02Aug	D	.2.....	319	156	1D	W18	J	GLA	GLA		
UPS0235	1945	02Aug	02Aug	A	.2.....	76V	0	FRT	W18	F	EWR	EWR	UPS235	
UPS0238	1945	02Aug	02Aug	D	.2.....	76V	0	FRT	W18	F	SDF	SDF	UPS236	
AWC0002A	1950	02Aug	02Aug	D	.2.....	733	0	FRT	W18	M	BFS	BFS		
FX0001	1950	02Aug	02Aug	D	.2.....	77X	0	FRT	W18	F	MEM	MEM	FX0002	
FX9142	1950	02Aug	02Aug	A	.2.....	75F	0	FRT	W18	F	CDG	CDG	FX9143	
EZY0242	1955	02Aug	02Aug	A	.2.....	319	156	1D	W18	J	EDI	EDI		
FR8347	1955	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	OPO	OPO		
SWN0022B	1955	02Aug	02Aug	A	.2.....	ATP	0	FRT	W18	M	GCI	GCI	SWN0007W	1
SWN0023H	1955	02Aug	02Aug	A	.2.....	ATP	0	FRT	W18	M	JER	JER		
AWC0011J	2030	02Aug	02Aug	D	.2.....	733	0	FRT	W18	M	EDI	EDI		
EZY3010	2030	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	AMS	AMS		
EZY3047	2040	02Aug	02Aug	D	.2.....	319	156	1I	W18	J	IBZ	IBZ		
FR0272	2040	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	DUB	DUB		
FX9143	2050	02Aug	02Aug	D	.2.....	75F	0	FRT	W18	F	CDG	CDG	FX9142	
FX5201	2100	02Aug	02Aug	D	.2.....	ABY	0	FRT	W18	F	CDG	CDG	FX5201	
FR0271	2105	02Aug	02Aug	D	.2.....	73H	189	1I	W18	J	DUB	DUB		
EXS0009G	2115	02Aug	02Aug	A	.2.....	733	0	FRT	W18	M	EDI	EDI	EXS0009H	
FR3633	2115	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BRE	BRE		

FR7493	2115	02Aug	02Aug	A	.2.....	73H	189	1D	W18	J	GLA	GLA		
TOM5233	2120	02Aug	02Aug	A	.2.....	73H	189	1I	W18	C	KGS	KGS		
EZY3228	2130	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	BIO	BIO		
EZY0262	2135	02Aug	02Aug	A	.2.....	319	156	1D	W18	J	BFS	BFS		
FR2815	2135	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	CGN	CGN		
FR2645	2140	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	RIX	RIX		
FR4955	2140	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PEG	PEG		
3V0028S	2145	02Aug	02Aug	D	.2.....	75F	0	FRT	W18	F	LGG	LGG	3V0027R	
UPS0235	2145	02Aug	02Aug	D	.2.....	76V	0	FRT	W18	F	CGN	CGN	UPS235	
EZY3252	2150	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	NAP	NAP		
FR0108	2150	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	SNN	SNN		
FR8737	2150	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	MXP	MXP		
EZY3216	2155	02Aug	02Aug	A	.2.....	319	156	1I	W18	J	PMI	PMI		
FR0761	2155	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	HHN	HHN		
FR8027	2155	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	MJV	MJV		
FR8267	2155	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	KTW	KTW		
PC0519	2155	02Aug	02Aug	A	.2.....	738	189	1I	W18	J	SAW	SAW	PC520	
FR1599	2210	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	LEJ	LEJ		
FR2467	2210	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SZZ	SZZ		
FR5179	2210	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BLL	BLL		
FR9968	2210	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SOF	SOF		
FR0298	2215	02Aug	02Aug	A	.2.....	73H	189	CTA	W18	J	DUB	DUB		
FR2613	2215	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SDR	SDR		
FR9252	2220	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	IBZ	IBZ		
FR0059	2225	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	NYO	NYO		
FR2437	2225	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	KRK	KRK		
FR8545	2225	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SXF	SXF		
FR2284	2230	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	WMI	WMI		
FR2245	2235	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	VNO	VNO		
FR8369	2235	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BUD	BUD		
FX8004	2235	02Aug	02Aug	D	.2.....	EM2	0	FRT	W18	F	GLA	GLA		
FR0983	2240	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PSR	PSR		
FR1906	2240	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	BRI	BRI		
FR2373	2240	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	GDN	GDN		
TOM5254	2240	02Aug	02Aug	D	.2.....	73H	189	1I	W18	C	PMI	PMI		
EXS0010J	2245	02Aug	02Aug	A	.2.....	733	0	FRT	W18	M	EDI	EDI	EXS0010K	
FR1365	2245	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	RBA	RBA		
FR1883	2245	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	LIS	LIS		
FR3919	2245	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PMO	PMO		
EXS0009H	2250	02Aug	02Aug	D	.2.....	733	0	FRT	W18	M	EDI	EDI	EXS0009G	
FR0799	2250	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	TSF	TSF		
FR2006	2250	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	OTP	OTP		
FR2014	2255	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PRG	PRG		
FR8852	2255	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	MLA	MLA		
PC0520	2255	02Aug	02Aug	D	.2.....	738	189	1I	W18	J	SAW	SAW	PC519	
FR1223	2300	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	PMI	PMI		
FR8165	2300	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	AGP	AGP		
FR8324	2300	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	VLC	VLC		
FR8583	2300	02Aug	02Aug	A	.2.....	73H	189	1I	W18	J	SKG	SKG		
AWC0002B	2305	02Aug	02Aug	A	.2.....	733	0	FRT	W18	M	BFS	BFS		
AWC0011K	2335	02Aug	02Aug	A	.2.....	733	0	FRT	W18	M	EDI	EDI		
AWC0002C	2345	02Aug	02Aug	D	.2.....	733	0	FRT	W18	M	BFS	BFS		
EZY3150	2345	02Aug	02Aug	A	.2.....	320	180	1I	W18	J	BJV	BJV		
SWN0006L	2350	02Aug	02Aug	A	.2.....	ATP	0	FRT	W18	M	NCL	NCL	SWN0022G	1
EXS0010K	2355	02Aug	02Aug	D	.2.....	733	0	FRT	W18	M	EDI	EDI	EXS0010J	

These are GMT		Airside ATMs				BST Airside ATMs					BST Landside Pass movements				
Daily Total Seats															
		A	D			Hr comme	Arr	Dep	Total		Hr comme	Arr	Dep	Total	
0	100	0	0	0		0	936	0	936		0	0	4347	4347	
100	200	0	0	0		1	0	0	0		1	0	936	936	
200	300	156	0	156		2	0	0	0		2	0	0	0	
300	400	0	0	0		3	156	0	156		3	0	0	0	
400	500	320	0	320		4	0	0	0		4	4993	156	5149	
500	600	519	4993	5512		5	320	0	320		5	4435	0	4435	
600	700	2574	4435	7009		6	519	4993	5512		6	4747	320	5067	
700	800	3013	4747	7760		7	2574	4435	7009		7	1510	519	2029	
800	900	723	1510	2233		8	3013	4747	7760		8	1242	2574	3816	
900	1000	1134	1242	2376		9	723	1510	2233		9	1779	3013	4792	
1000	1100	2013	1779	3792		10	1134	1242	2376		10	2358	723	3081	
1100	1200	3572	2358	5930		11	2013	1779	3792		11	2868	1134	4002	
1200	1300	1890	2868	4758		12	3572	2358	5930		12	2070	2013	4083	
1300	1400	1305	2070	3375		13	1890	2868	4758		13	975	3572	4547	
1400	1500	2462	975	3437		14	1305	2070	3375		14	2538	1890	4428	
1500	1600	3197	2538	5735		15	2462	975	3437		15	2991	1305	4296	
1600	1700	2389	2991	5380		16	3197	2538	5735		16	3186	2462	5648	
1700	1800	2644	3186	5830		17	2389	2991	5380		17	3523	3197	6720	
1800	1900	3628	3523	7151		18	2644	3186	5830		18	2369	2389	4758	
1900	2000	1257	2369	3626		19	3628	3523	7151		19	156	2644	2800	
2000	2100	345	156	501		20	1257	2369	3626		20	189	3628	3817	
2100	2200	2892	189	3081		21	345	156	501		21	378	1257	1635	
2200	2300	4347	378	4725		22	2892	189	3081		22	0	345	345	
2300	2400	936	0	936		23	4347	378	4725		23	0	2892	2892	
		41316	42307	83623	65934		41316	42307	83623			42307	41316	83623	0

2016 Airside / Landside Arrivals and Departure

Mode Share

Mode Share	%
Car	15%
Car Passenger	22%
Taxi / Rental	13%
Bus / Coach	23%
Rail	27%
Other	0%
Total	**100%**

2016 Annual	24,273,000
Daily	66684
summer	83623
Factor	0.7974369

2016 summer average day - PAX

Time Band	Departures	Arrivals	Total
00:00	0	4347	936
01:00	0	936	0
02:00	0	0	0
03:00	0	0	156
04:00	4993	156	0
05:00	4435	0	320
06:00	4747	320	5512
07:00	1510	519	7009
08:00	1242	2574	7760
09:00	1779	3013	2233
10:00	2358	723	2376
11:00	2868	1134	3792
12:00	2070	2013	5930
13:00	975	3572	4758
14:00	2538	1890	3375
15:00	2991	1305	3437
16:00	3186	2462	5735
17:00	3523	3197	5380
18:00	2369	2389	5830
19:00	156	2644	7151
20:00	189	3628	3626
21:00	378	1257	501
22:00	0	345	3081
23:00	0	2892	4725
Daily	**42307**	**41316**	**83623**

2016 Average day - Landside

Time Band	Arrivals	Departures	Total
00:00	0	3508	3508
01:00	0	755	755
02:00	0	0	0
03:00	0	0	0
04:00	3935	126	4061
05:00	3495	0	3495
06:00	3741	258	3999
07:00	1190	419	1609
08:00	979	2077	3056
09:00	1402	2431	3834
10:00	1858	583	2442
11:00	2260	915	3175
12:00	1631	1624	3256
13:00	768	2883	3651
14:00	2000	1525	3525
15:00	2357	1053	3410
16:00	2511	1987	4498
17:00	2776	2580	5356
18:00	1867	1928	3795
19:00	123	2134	2257
20:00	149	2928	3077
21:00	298	1014	1312
22:00	0	278	278
23:00	0	2334	2334
Daily	**33342**	**33342**	**66684**

Surface Access

Arrivals	Departures
0	3508
0	755
0	0
0	0
3935	126
3495	0
3741	258
1190	419
979	2077
1402	2431
1858	583
2260	915
1631	1624
768	2883
2000	1525
2357	1053
2511	1987
2776	2580
1867	1928
123	2134
149	2928
298	1014
0	278
0	2334

Surface Access Arrivals

Car/Taxi	Rail	Bus/coach	Total
0	0	0	**0**
0	0	0	**0**
0	0	0	**0**
0	0	0	**0**
1967	1062	905	**3935**
1748	944	804	**3495**
1871	1010	860	**3741**
595	321	274	**1190**
489	264	225	**979**
701	379	322	**1402**
929	502	427	**1858**
1130	610	520	**2260**
816	440	375	**1631**
384	207	177	**768**
1000	540	460	**2000**
1179	636	542	**2357**
1255	678	578	**2511**
1388	750	639	**2776**
934	504	429	**1867**
61	33	28	**123**
74	40	34	**149**
149	80	69	**298**
0	0	0	**0**
0	0	0	**0**
16671			**33342**

Surface Access Departures

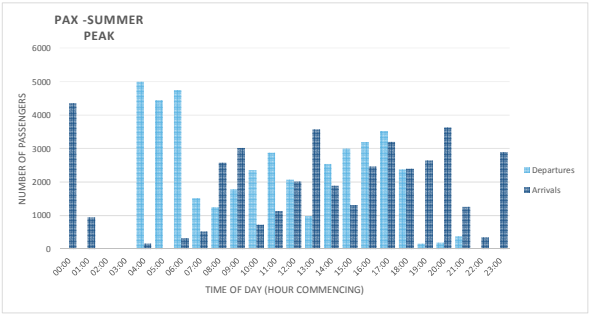
Car/Taxi	Rail	Bus/coach	Total
1754	947	807	**3508**
378	204	174	**755**
0	0	0	**0**
0	0	0	**0**
63	34	29	**126**
0	0	0	**0**
129	70	59	**258**
209	113	96	**419**
1039	561	478	**2077**
1216	657	559	**2431**
292	158	134	**583**
458	247	210	**915**
812	439	374	**1624**
1441	778	663	**2883**
763	412	351	**1525**
527	284	242	**1053**
993	536	457	**1987**
1290	697	593	**2580**
964	521	443	**1928**
1067	576	491	**2134**
1464	791	673	**2928**
507	274	233	**1014**
139	75	64	**278**
1167	630	537	**2334**
			33342

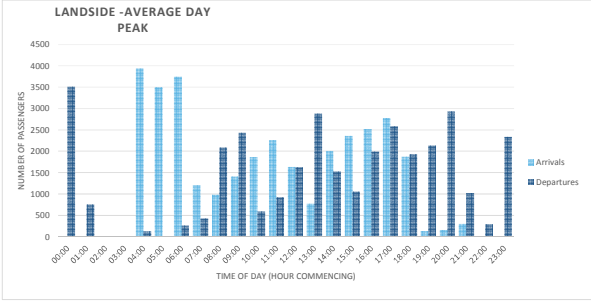
Vehicles

Arrivals	Departures
0	1921
0	414
0	0
0	0
2154	69
1914	0
2048	141
652	229
536	1137
768	1331
1017	319
1237	501
893	889
421	1578
1095	835
1291	577
1375	1088
1520	1413
1022	1056
67	1168
82	1603
163	555
0	152
0	1278
18255	**18255**

2016 - Summary Surface Arrival and Departure by Mode

Time Band	To Airport				From Airport				Total
	Cars / Taxis	Rail	Bus / Coach	Total	Cars / Taxis	Rail	Bus / Coach	Total	
00:00	0	0	0	0	1754	947	807	3508	**3508**
01:00	0	0	0	0	378	204	174	755	**755**
02:00	0	0	0	0	0	0	0	0	**0**
03:00	0	0	0	0	0	0	0	0	**0**
04:00	1967	1062	905	3935	63	34	29	126	**4061**
05:00	1748	944	804	3495	0	0	0	0	**3495**
06:00	1871	1010	860	3741	129	70	59	258	**3999**
07:00	595	321	274	1190	209	113	96	419	**1609**
08:00	489	264	225	979	1039	561	478	2077	**3056**
09:00	701	379	322	1402	1216	657	559	2431	**3834**
10:00	929	502	427	1858	292	158	134	583	**2442**
11:00	1130	610	520	2260	458	247	210	915	**3175**
12:00	816	440	375	1631	812	439	374	1624	**3256**
13:00	384	207	177	768	1441	778	663	2883	**3651**
14:00	1000	540	460	2000	763	412	351	1525	**3525**
15:00	1179	636	542	2357	527	284	242	1053	**3410**
16:00	1255	678	578	2511	993	536	457	1987	**4498**
17:00	1388	750	639	2776	1290	697	593	2580	**5356**
18:00	934	504	429	1867	964	521	443	1928	**3795**
19:00	61	33	28	123	1067	576	491	2134	**2257**
20:00	74	40	34	149	1464	791	673	2928	**3077**
21:00	149	80	69	298	507	274	233	1014	**1312**
22:00	0	0	0	0	139	75	64	278	**278**
23:00	0	0	0	0	1167	630	537	2334	**2334**
Daily	**16671**	**9002**	**7669**	**33342**	**16671**	**9002**	**7669**	**33342**	**66684**





AVERAGE DAY 35mppa

Service number	Cleared time	Start date	End date	Arrival / departure	Days of operation	Aircraft	Seats	Terminal	Week number	Service type	Origin / dest	Last next	Turnround service number	Turnround days
LS 100 T	10	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LPA	LPA	LS 101 T	0
3V 975 B	15	11-Aug-17	11-Aug-17	A	....5..	76V	0	FRT	1	F	LGG	LGG	3V 976 C	0
FX 9041	20	11-Aug-17	11-Aug-17	A	....5..	33X	0	FRT	1	F	CDG	CDG	FX 9041	0
LS 2613S	45	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BJV	BJV	LS 2614S	0
EZY3048	55	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	IBZ	IBZ	EZY3043	0
TOM5421	55	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	C	ACE	ACE	TOM5504	0
3V 976 C	100	11-Aug-17	11-Aug-17	D	....5..	76V	0	FRT	1	F	LGG	LGG	3V 975 B	0
EZY3114	100	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	AGP	AGP	EZY3249	0
FX 9041	100	11-Aug-17	11-Aug-17	D	....5..	33X	0	FRT	1	F	CDG	CDG	FX 9041	0
UVA302	125	11-Aug-17	11-Aug-17	A	....5..	GJ5	10	3I	1	D	BOS	BOS	UVA303	0
UPS244	135	11-Aug-17	11-Aug-17	A	....5..	75F	0	FRT	1	F	CGN	CGN	UPS245	0
MT 1629	150	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	KGS	KGS	MT 1748	0
EZY3216	215	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	PMI	PMI	EZY3103	0
BCS2110	230	11-Aug-17	11-Aug-17	A	....5..	75F	0	FRT	1	H	LEJ	LEJ	BCS2111	0
UPS236	235	11-Aug-17	11-Aug-17	A	....5..	ABF	0	FRT	1	F	CGN	CGN	UPS238	0
FX 5202	235	11-Aug-17	11-Aug-17	A	....5..	ABY	0	FRT	1	F	CDG	CDG	FX 5202	0
INS204	250	11-Aug-17	11-Aug-17	A	....5..	BET	2	3I	1	U	EDI	EDI	INS205	0
3V 804 R	300	11-Aug-17	11-Aug-17	A	....5..	73P	0	FRT	1	F	LGG	LGG	3V 805 S	0
LS 115 U	305	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PFO	PFO	LS 116 U	0
QR 8442	315	11-Aug-17	11-Aug-17	A	....5..	77X	0	FRT	1	F	DOH	DOH	QR 8442	0
INS205	330	11-Aug-17	11-Aug-17	D	....5..	BET	0	3I	1	N	ZZJ	ZZJ	INS204	0
3V 27 R	340	11-Aug-17	11-Aug-17	A	....5..	74F	0	FRT	1	F	LGG	LGG	3V 28 S	0
FX 5202	350	11-Aug-17	11-Aug-17	D	....5..	ABY	0	FRT	1	F	DUB	DUB	FX 5202	0
MT 1748	400	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	MAH	MAH	MT 1629	0
UVA303	455	11-Aug-17	11-Aug-17	D	....5..	GJ5	10	3I	1	D	AMS	AMS	UVA302	0
FYR501	455	11-Aug-17	11-Aug-17	D	....5..	CCX	13	3I	1	D	HPN	HPN		0
UVA501	455	11-Aug-17	11-Aug-17	D	....5..	GS4	8	3I	1	D	GVA	GVA	UVA402	1
ZT 1791	455	11-Aug-17	11-Aug-17	D	....5..	752	202	3I	1	D	OLB	OLB		0
LS 101 T	500	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMI	PMI	LS 100 T	0
LS 200 W	500	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AYT	AYT	LS 203 W	1
EZY3043	500	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	IBZ	IBZ	EZY3048	0
EZY3249	500	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	NAP	NAP	EZY3114	0
QR 8442	500	11-Aug-17	11-Aug-17	D	....5..	77X	0	FRT	1	F	DOH	MXP	QR 8442	0
HYR75 X	510	11-Aug-17	11-Aug-17	D	....5..	CN7	8	3I	1	D	DOL	DOL		0
MVI555	510	11-Aug-17	11-Aug-17	D	....5..	GJ5	10	3I	1	D	SFO	SFO	MVI222	3
FR 3556	510	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RAK	RAK	FR 8165	1
FR 8132	510	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LPA	LPA	FR 8583	1
FR 8166	515	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TFS	TFS	FR 6610	1
LS 313 W	520	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	REU	REU	LS 316 W	1
UVA504	520	11-Aug-17	11-Aug-17	A	....5..	CCX	10	3I	1	D	SID	SID	UVA707	2
FR 792	520	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TSF	TSF	FR 8852	1
FR 124	525	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AOI	AOI	FR 1365	1
INS502	525	11-Aug-17	11-Aug-17	A	....5..	GS4	0	3I	1	N	NQY	NQY		0
FYR507	525	11-Aug-17	11-Aug-17	D	....5..	CCX	1	3I	1	D	ZRH	ZRH		0
INS509	525	11-Aug-17	11-Aug-17	D	....5..	GJ5	6	3I	1	D	GRO	GRO		0
FR 2642	525	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RIX	RIX	FR 1883	1
FR 2672	525	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3919	1
MT 2929	525	11-Aug-17	11-Aug-17	A	....5..	333	372	1I	1	J	MCO	MCO	MT 2928	0
EZY3025	525	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	DBV	DBV	EZY262	1
FR 5992	525	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MAD	MAD	FR 8362	1
FR 203	530	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 1906	1
TOM471	530	11-Aug-17	11-Aug-17	A	....5..	788	300	1I	1	C	MBJ	MBJ	TOM716 F	0
FR 8542	530	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	SXF	SXF	FR 2373	1
FR 6541	535	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MRS	MRS	FR 2437	1
FR 8382	535	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ALC	ALC	FR 799	1
FR 9961	535	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SOF	SOF	FR 8545	1
SXN55 L	540	11-Aug-17	11-Aug-17	A	....5..	GS5	10	3I	1	D	AVN	AVN		0
EK 65 S	540	11-Aug-17	11-Aug-17	A	....5..	388	615	1I	1	J	DXB	DXB	EK 67 U	0
LS 116 U	540	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CFU	CFU	LS 115 U	0
UVA500	540	11-Aug-17	11-Aug-17	A	....5..	GJ6	10	3I	1	D	LIN	LIN	UVA703	2

LS 2517S	540	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ALC	ALC	LS 2516S	1
FR 7608	540	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CHQ	CHQ	FR 8116	1
FR 8396	540	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	XRY	XRY	FR 5179	1
FR 222	545	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	AMS	AMS		0
FR 464	545	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TRN	TRN	FR 298	1
FR 2225	545	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TLL	TLL	FR 2467	1
FR 2462	545	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BZG	BZG	FR 9252	1
FR 4541	545	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	VRN	VRN	FR 8369	1
FR 753	550	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	HHN	HHN	FR 752	0
LS 1411	550	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ALC	ALC	LS 1402	1
FR 8351	550	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LEI	LEI	FR 9968	1
UVA502	555	11-Aug-17	11-Aug-17	A	....5..	763	40	3I	1	D	JFK	JFK	UVA705	2
LS 1405	555	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AGP	AGP	LS 4004	1
FR 7965	555	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	OSI	OSI	FR 2284	1
FR 8120	555	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NUE	NUE	FR 8119	0
CJ 100 X	600	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	TXL	TXL	CJ 101 X	0
LS 204 W	600	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KLX	KLX	LS 207 W	1
MT 1078	600	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	JSI	JSI	MT 1761	1
FR 1396	600	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	OSL	OSL	FR 1223	1
EZY3001	600	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	AMS	AMS	EZY3248	1
EZY3103	600	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	NCE	NCE	EZY3216	0
EZY3225	600	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	BIO	BIO	EZY3228	1
EZY3155	605	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	DLM	DLM	EZY3010	1
FR 8288	605	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ACE	ACE	FR 8267	1
LS 100 X	610	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NCE	NCE	LS 101 X	0
FR 2813	610	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CGN	CGN	FR 2814	0
FR 8321	610	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	VLC	VLC	FR 8027	1
FR 9142	610	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FAO	FAO	FR 1599	1
EZY252	615	11-Aug-17	11-Aug-17	A	....5..	319	156	1D	1	J	BFS	BFS	EZY253	0
LS 301 W	615	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ALC	ALC	LS 304 W	1
4U 354	615	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	CGN	CGN	4U 355	0
FR 1517	615	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	HAM	HAM	FR 1518	0
MT 1944	615	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	ALC	ALC	MT 1955	1
FR 3631	615	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BRE	BRE	FR 3632	0
FR 7973	615	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BSL	BSL	FR 2645	1
FR 8592	615	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	EGC	EGC	FR 8737	1
FR 295	620	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	TLS	TLS	FR 1887	1
FR 1782	620	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BOD	BOD	FR 2613	1
FR 5172	620	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BLL	BLL	FR 2369	1
TOM5516	620	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	C	MAH	MAH	TOM5417	1
FR 144	625	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	SXF	SXF	FR 145	0
FR 8026	625	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MJV	MJV	FR 7493	1
FR 752	630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	HHN	HHN	FR 753	0
FR 1202	630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMI	PMI	FR 1395	1
FR 4952	630	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PEG	PEG	FR 2815	1
FR 8119	630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NUE	NUE	FR 8120	0
FR 8162	630	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	AGP	AGP	FR 2861	1
FR 1014	640	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PRG	PRG	FR 1013	0
EW 2372	640	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	STR	STR	EW 2373	0
FR 2814	640	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CGN	CGN	FR 2813	0
MT 2987	640	11-Aug-17	11-Aug-17	A	....5..	332	322	1I	1	J	LAS	LAS	MT 2922	0
FR 4191	640	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BGY	BGY	FR 4192	0
FR 8402	640	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	EGC	EGC	FR 1803	1
CJ 101 X	645	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	TXL	TXL	CJ 100 X	0
EZY253	645	11-Aug-17	11-Aug-17	D	....5..	319	156	1D	1	J	BFS	BFS	EZY252	0
FR 5993	645	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MAD	MAD	FR 5994	0
FR 145	650	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	SXF	SXF	FR 144	0
FR 202	650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 205	0
4U 355	650	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	CGN	CGN	4U 354	0
FR 1518	650	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	HAM	HAM	FR 1517	0
FR 2315	650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BTS	BTS	FR 2314	0
FR 9811	650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9810	0
FR 53	655	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NYO	NYO	FR 52	0

TOM716 F	655	11-Aug-17	11-Aug-17	D	....5..	788	0	1D	1	P	EMA	EMA	TOM471	0
FR 805	655	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NOC	NOC	FR 9274	1
FR 902	655	11-Aug-17	11-Aug-17	A	....5..	73H	189	CTA	1	J	ORK	ORK	FR 901	0
FR 3632	655	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BRE	BRE	FR 3631	0
FR 967	700	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GOT	GOT	FR 966	0
LS 1529	700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMI	PMI	LS 1452	1
FR 195	705	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BLQ	BLQ	FR 194	0
FR 585	705	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PSA	PSA	FR 584	0
FR 1013	705	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PRG	PRG	FR 1014	0
FR 4192	705	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BGY	BGY	FR 4191	0
FR 8354	705	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BUD	BUD	FR 8353	0
LS 101 X	710	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NCE	NCE	LS 100 X	0
FR 1006	710	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	OTP	OTP	FR 1005	0
FR 4966	710	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	SUF	SUF	FR 288	1
FR 8406	710	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WRO	WRO	FR 8405	0
FR 9272	710	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	EIN	EIN	FR 9271	0
FR 205	715	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 202	0
FR 1218	715	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FRA	FRA		0
LS 1439	715	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FAO	FAO	LS 1664	1
FR 3005	715	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3002	0
FR 9810	715	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9811	0
FR 901	720	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ORK	ORK	FR 902	0
FR 2433	720	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KRK	KRK	FR 2432	0
FR 8728	720	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MXP	MXP	FR 8729	0
FR 966	725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GOT	GOT	FR 967	0
LS 2614S	725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GRO	GRO	LS 2613S	0
FR 5994	725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MAD	MAD	FR 5993	0
FR 14	730	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ATH	ATH	FR 15	0
FR 52	730	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NYO	NYO	FR 53	0
LS 106 X	730	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SOF	SOF	LS 107 X	0
AC 671 W	730	11-Aug-17	11-Aug-17	A	....5..	788	251	1I	1	J	YUL	YUL	AC 672 W	0
LS 1457	730	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GRO	GRO	LS 1450	1
FR 2314	730	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BTS	BTS	FR 2315	0
TOM5504	730	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	C	CFU	CFU	TOM5421	0
FR 8353	730	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BUD	BUD	FR 8354	0
FR 102	735	11-Aug-17	11-Aug-17	A	....5..	73H	189	CTA	1	J	SNN	SNN	FR 103	0
FR 2862	735	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	BFS	BFS		0
FR 8405	735	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WRO	WRO	FR 8406	0
FR 9271	735	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	EIN	EIN	FR 9272	0
FR 1005	740	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	OTP	OTP	FR 1006	0
FR 194	745	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BLQ	BLQ	FR 195	0
FR 584	745	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PSA	PSA	FR 585	0
LS 1441	745	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	REU	REU	LS 1482	1
FR 2432	745	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KRK	KRK	FR 2433	0
FR 3002	745	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3005	0
LS 4001	745	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MJV	MJV	LS 1432	1
FR 8729	745	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MXP	MXP	FR 8728	0
FR 8882	745	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	EDI	EDI	FR 8881	0
FR 562	750	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	NAP	NAP		0
FR 1022	750	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	WMI	WMI	FR 1021	0
FR 7491	750	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	GLA	GLA	FR 7492	0
FR 15	800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ATH	ATH	FR 14	0
FR 103	800	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	SNN	SNN	FR 102	0
FR 106 S	800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BVE	BVE	FR 107 S	0
EW 2373	800	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	STR	STR	EW 2372	0
FR 4976	800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BDS	BDS	FR 7497	1
FR 8344	800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	OPO	OPO	FR 8343	0
FR 7492	815	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	GLA	GLA	FR 7491	0
FR 8881	815	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	EDI	EDI	FR 8882	0
UVA306	820	11-Aug-17	11-Aug-17	A	....5..	LJ3	6	3I	1	U	YYT	YYT	UVA307	0
FR 1885	820	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LIS	LIS	FR 1884	0
FR 107 S	825	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BVE	BVE	FR 106 S	0
FR 8343	825	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OPO	OPO	FR 8344	0

FR 102 T	830	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 103 T	0
LS 107 X	830	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SOF	SOF	LS 106 X	0
PF 230 Y	830	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	MIA	MIA	PF 231 Y	0
FR 304	830	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SZG	SZG	FR 9543	1
CV 713	830	11-Aug-17	11-Aug-17	A	....5..	74Y	0	FRT	1	F	NBO	NBO	CV 713	0
FR 1021	830	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	WMI	WMI	FR 1022	0
FR 206	840	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 2371	0
BE 102 X	845	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1I	1	J	CFR	CFR	BE 103 X	0
B6 127 V	845	11-Aug-17	11-Aug-17	A	....5..	32B	206	1I	1	J	BOS	BOS	B6 128 V	0
FR 128 S	845	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ORY	ORY	FR 129 S	0
FR 1884	845	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LIS	LIS	FR 1885	0
MT 2922	850	11-Aug-17	11-Aug-17	D	....5..	332	322	1I	1	J	MCO	MCO	MT 2987	0
EZY3002	850	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	AMS	AMS	EZY3203	0
FR 103 T	855	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 102 T	0
B6 131 W	855	11-Aug-17	11-Aug-17	A	....5..	32B	206	1I	1	J	JFK	JFK	B6 132 W	0
FR 9400	900	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NYO	NYO	FR 9401	0
FR 2371	905	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 206	0
FR 129 S	910	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ORY	ORY	FR 128 S	0
WX 199 W	910	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	CDG	CDG	WX 200 W	0
PF 234 Y	910	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	YYZ	YYZ	PF 235 Y	0
FR 116 S	915	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RTM	RTM	FR 117 S	0
AC 298 U	920	11-Aug-17	11-Aug-17	A	....5..	788	251	1I	1	J	YYZ	YYZ	AC 299 U	0
EZY3203	920	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	CAG	CAG	EZY3002	0
FR 9401	925	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NYO	NYO	FR 9400	0
BE 103 X	930	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1I	1	J	CFR	CFR	BE 102 X	0
PF 236 Y	930	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	BOS	BOS	PF 237 Y	0
FR 9200	930	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WAW	WAW	FR 9201	0
FR 102 Y	935	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	VIE	VIE	FR 103 Y	0
MVI444	935	11-Aug-17	11-Aug-17	A	....5..	GJ5	15	3I	1	U	ZZF	ZZF	MVI445	0
LS 100 Y	940	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LCA	LCA	LS 101 Y	0
FR 117 S	940	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RTM	RTM	FR 116 S	0
WX 200 W	945	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	CDG	CDG	WX 199 W	0
FR 223	945	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	AMS	AMS		0
MT 1749	945	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	MAH	MAH	MT 1284	0
FR 2375	945	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GDN	GDN	FR 2374	0
MT 2928	950	11-Aug-17	11-Aug-17	D	....5..	333	372	1I	1	J	MCO	MCO	MT 2929	0
NJE14 T	955	11-Aug-17	11-Aug-17	A	....5..	L45	8	3I	1	D	LTN	LTN	NJE23 K	0
FR 793	955	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	TSF	TSF	FR 2468	0
FR 5173	955	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BLL	BLL	FR 8366	0
FR 7974	955	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BSL	BSL	FR 32	0
FR 8543	955	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SXF	SXF	FR 2336	0
FR 9201	955	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WAW	WAW	FR 9200	0
ZT 101	1000	11-Aug-17	11-Aug-17	D	....5..	733	130	1I	1	C	LDE	LDE	ZT 2109	2
FR 103 Y	1000	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	VIE	VIE	FR 102 Y	0
B6 128 V	1000	11-Aug-17	11-Aug-17	D	....5..	32B	206	1I	1	J	BOS	BOS	B6 127 V	0
CV 713	1000	11-Aug-17	11-Aug-17	D	....5..	74Y	0	FRT	1	F	LUX	LUX	CV 713	0
BE 100 X	1005	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1D	1	J	GLA	GLA	BE 101 X	0
PF 223 Y	1005	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	EWR	EWR	PF 224 Y	0
B6 132 W	1010	11-Aug-17	11-Aug-17	D	....5..	32B	206	1I	1	J	JFK	JFK	B6 131 W	0
MVI445	1010	11-Aug-17	11-Aug-17	D	....5..	GJ5	15	3I	1	U	PBI	PBI	MVI444	0
FR 2374	1010	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GDN	GDN	FR 2375	0
FR 8593	1010	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	EGC	EGC	FR 1886	0
FR 465	1015	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TRN	TRN	FR 9542	0
FR 1783	1015	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BOD	BOD	FR 682	0
FR 296	1020	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	TLS	TLS	FR 8445	0
FR 806	1020	11-Aug-17	11-Aug-17	A	....5..	73H	189	CTA	1	J	NOC	NOC	FR 8746	0
FR 2336	1020	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	POZ	POZ	FR 8543	0
EZY3226	1020	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	BIO	BIO	EZY3067	0
FR 8266	1020	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	KTW	KTW	FR 75	1
FR 8366	1020	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AGP	AGP	FR 5173	0
FR 712	1025	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AAR	AAR	FR 8993	1
FR 2463	1030	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BZG	BZG	FR 2281	0
FR 1397	1035	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	OSL	OSL	FR 9802	0

FR 1886	1035	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LIS	LIS	FR 8593	0
EZY3044	1035	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	IBZ	IBZ	EZY255	0
FR 32	1040	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TRF	TRF	FR 7974	0
LS 101 Y	1040	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LCA	LCA	LS 100 Y	0
FR 125	1040	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AOI	AOI	FR 514	0
FR 682	1040	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	VST	VST	FR 1783	0
PC 1181W	1040	11-Aug-17	11-Aug-17	A	....5..	738	189	1I	1	J	AYT	AYT	PC 1182W	0
FR 1372	1040	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BIQ	BIQ	FR 983	1
EZY3104	1040	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	NCE	NCE	EZY3003	0
FR 3842	1040	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	REU	REU	FR 9525	1
FR 4542	1040	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	VRN	VRN	FR 8776	0
FR 124 S	1045	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KEF	KEF	FR 125 S	0
FR 305	1045	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	SZG	SZG	FR 972	0
FR 8379	1045	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SCQ	SCQ	FR 8378	0
FR 8401	1045	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	EGC	EGC	FR 8363	0
FR 8445	1045	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BUD	BUD	FR 296	0
FR 8746	1045	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	LRH	LRH	FR 806	0
FR 9542	1045	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FAO	FAO	FR 465	0
BE 101 X	1050	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1D	1	J	GLA	GLA	BE 100 X	0
CJ 101 Y	1050	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	TXL	TXL	CJ 102 Y	0
BE 100 Y	1055	11-Aug-17	11-Aug-17	A	....5..	DH4	78	CTA	1	J	GCI	GCI	BE 101 Y	0
AC 299 U	1055	11-Aug-17	11-Aug-17	D	....5..	788	251	1I	1	J	YYZ	YYZ	AC 298 U	0
FR 2281	1055	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WMI	WMI	FR 2463	0
FR 2468	1055	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	LCJ	LCJ	FR 793	0
EZY3067	1055	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	PRG	PRG	EZY3226	0
FR 100 S	1100	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGA	AGA	FR 101 S	0
MT 1284	1100	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	TFS	TFS	MT 1749	0
FR 2863	1100	11-Aug-17	11-Aug-17	A	....5..	73H	189	1D	1	J	BFS	BFS		0
EZY3250	1100	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	NAP	NAP	EZY3071	0
FR 9802	1100	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	GRO	GRO	FR 1397	0
PC 1178W	1105	11-Aug-17	11-Aug-17	A	....5..	738	189	1I	1	J	SAW	SAW	PC 1179W	0
FR 2673	1105	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CIA	CIA	FR 794	0
FR 5991	1105	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MAD	MAD	FR 2434	0
FR 8776	1105	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LIG	LIG	FR 4542	0
FR 8884	1105	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	EDI	EDI	FR 8883	0
FR 125 S	1110	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KEF	KEF	FR 124 S	0
FR 972	1110	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	GOA	GOA	FR 305	0
EZY3003	1110	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	AMS	AMS	EZY3104	0
FR 8378	1110	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SCQ	SCQ	FR 8379	0
LS 104 X	1115	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SPU	SPU	LS 105 X	0
WW 120 T	1115	11-Aug-17	11-Aug-17	A	....5..	32B	200	1I	1	J	KEF	KEF	WW 121 T	0
EZY255	1115	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	BFS	BFS	EZY3044	0
EW 910 W	1115	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	MUC	MUC	EW 911 W	0
FR 7966	1120	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	OSI	OSI		0
FR 9045	1120	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9044	0
FR 101 S	1125	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AGA	AGA	FR 100 S	0
FR 8363	1125	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SVQ	SVQ	FR 8401	0
LS 102 Y	1130	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TFS	TFS	LS 103 Y	0
FR 120 S	1130	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KGS	KGS	FR 121 S	0
FR 514	1130	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DNR	DNR	FR 125	0
EZY3026	1130	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	DBV	DBV	EZY3245	0
KK 6003	1130	11-Aug-17	11-Aug-17	A	....5..	321	204	1I	1	J	IST	IST	KK 6004	0
FR 8883	1130	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	EDI	EDI	FR 8884	0
FR 8383	1135	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ALC	ALC	FR 1788	0
EK 67 U	1140	11-Aug-17	11-Aug-17	D	....5..	388	615	1I	1	J	DXB	DXB	EK 65 S	0
LS 105 T	1140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMI	PMI	LS 106 T	0
PC 1181	1140	11-Aug-17	11-Aug-17	A	....5..	738	189	1I	1	J	SAW	SAW	PC 1182	0
PC 1182W	1140	11-Aug-17	11-Aug-17	D	....5..	738	189	1I	1	J	AYT	AYT	PC 1181W	0
FR 9773	1140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FKB	FKB	FR 9772	0
BE 101 Y	1145	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1I	1	J	GCI	GCI	BE 100 Y	0
PC 1179W	1145	11-Aug-17	11-Aug-17	D	....5..	738	189	1I	1	J	SAW	SAW	PC 1178W	0
FR 1219	1145	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FRA	FRA		0
FR 9044	1145	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9045	0

CJ 102 Y	1150	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	DUS	DUS	CJ 101 Y	0
LS 314 W	1150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	REU	REU	LS 315 W	0
LS 1412	1150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ALC	ALC	LS 1495	0
BE 1824	1150	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1D	1	J	NQY	NQY	BE 1825	0
FR 8322	1150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	VLC	VLC	FR 8386	0
FR 121 S	1155	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KGS	KGS	FR 120 S	0
LS 302 W	1155	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ALC	ALC	LS 303 W	0
EW 911 W	1155	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	MUC	MUC	EW 910 W	0
BE 1828W	1155	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1D	1	J	EDI	EDI	BE 1829W	0
FR 2224	1155	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TLL	TLL	FR 522	0
FR 1788	1200	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DTM	DTM	FR 8383	0
FR 2434	1200	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KRK	KRK	FR 5991	0
FR 3073	1200	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3072	0
FR 4199	1200	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BGY	BGY	FR 4194	0
FR 4555	1200	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LIS	LIS	FR 4556	0
FR 4953	1200	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PEG	PEG	FR 72	0
FR 104 U	1205	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GIB	GIB	FR 105 U	0
FR 1203	1205	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMI	PMI	FR 9253	0
EZY3245	1205	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	LJU	LJU	EZY3026	0
FR 9772	1205	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FKB	FKB	FR 9773	0
FR 100 Y	1210	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	ZAD	ZAD	FR 101 Y	0
FR 794	1210	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TSF	TSF	FR 2673	0
FR 8352	1210	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LEI	LEI	FR 8474	0
LS 105 X	1215	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SPU	SPU	LS 104 X	0
WW 121 T	1215	11-Aug-17	11-Aug-17	D	....5..	32B	200	1I	1	J	KEF	KEF	WW 120 T	0
FR 2272	1215	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 701	0
EZY3071	1215	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	MUC	MUC	EZY3250	0
FR 8030	1215	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 225	0
FR 8397	1215	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	XRY	XRY	FR 6543	0
PC 1182	1220	11-Aug-17	11-Aug-17	D	....5..	738	189	1I	1	J	SAW	SAW	PC 1181	0
FR 8025	1220	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MJV	MJV	FR 372	0
FR 9143	1220	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FAO	FAO		0
LS 1406	1225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGP	AGP	LS 1507	0
FR 3072	1225	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3073	0
FR 4556	1225	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LIS	LIS	FR 4555	0
TOM5517	1225	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	C	MAH	MAH	TOM5552	0
FR 9962	1225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SOF	SOF	FR 8403	0
FR 100 T	1230	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FNC	FNC	FR 101 T	0
LS 103 Y	1230	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TFS	TFS	LS 102 Y	0
FR 105 U	1230	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GIB	GIB	FR 104 U	0
FR 9253	1230	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	IBZ	IBZ	FR 1203	0
LS 1458	1235	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GRO	GRO	LS 1451	0
BE 1825	1235	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1D	1	J	NQY	NQY	BE 1824	0
KK 6004	1235	11-Aug-17	11-Aug-17	D	....5..	321	204	1I	1	J	IST	IST	KK 6003	0
FR 8386	1235	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMI	PMI	FR 8322	0
FR 101 Y	1240	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ZAD	ZAD	FR 100 Y	0
FR 225	1240	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 8030	0
LS 1530	1240	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMI	PMI	LS 1663	0
FR 4194	1240	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BGY	BGY	FR 4199	0
FR 130 S	1245	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ORY	ORY	FR 131 S	0
LS 2518S	1245	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ALC	ALC	LS 2519S	0
EZY234	1250	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	EDI	EDI	EZY233	0
LS 315 W	1250	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ZTH	ZTH	LS 314 W	0
LS 1495	1250	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KGS	KGS	LS 1412	0
FR 6543	1250	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MRS	MRS	FR 8397	0
FR 8403	1250	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BRQ	BRQ	FR 9962	0
FR 101 T	1255	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FNC	FNC	FR 100 T	0
LS 303 W	1255	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AYT	AYT	LS 302 W	0
LS 1442	1255	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	REU	REU	LS 1445	0
FR 8163	1255	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGP	AGP	FR 807	0
LS 106 Y	1300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NCE	NCE	LS 107 Y	0
LS 117 U	1300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CFU	CFU	LS 118 U	0
AC 672 W	1300	11-Aug-17	11-Aug-17	D	....5..	788	251	1I	1	J	YUL	YUL	AC 671 W	0

LS 990 S	1300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PXO	PXO	LS 991 S	0
FR 372	1305	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BIQ	BIQ	FR 8025	0
FR 3557	1305	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RAK	RAK	FR 2669	0
FR 8474	1305	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PIS	PIS	FR 8352	0
FR 72	1310	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CCF	CCF	FR 4953	0
LS 106 T	1310	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LCA	LCA	LS 105 T	0
FR 131 S	1310	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ORY	ORY	FR 130 S	0
EZY208	1310	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	GLA	GLA	EZY209	0
FR 522	1310	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LDE	LDE	FR 2224	0
FR 701	1310	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KIR	KIR	FR 2272	0
LS 2615S	1310	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GRO	GRO	LS 2616S	0
NJE23 K	1315	11-Aug-17	11-Aug-17	D	....5..	L45	8	3I	1	D	ZRH	ZRH	NJE14 T	0
BE 1829W	1315	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1D	1	J	EDI	EDI	BE 1828W	0
EW 5832	1315	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	VIE	VIE	EW 5833	0
EZY233	1320	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	EDI	EDI	EZY234	0
FR 587	1320	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PSA	PSA	FR 586	0
ORF2	1325	11-Aug-17	11-Aug-17	A	....5..	74L	1	3I	1	D	MCT	MCT	ORF2	0
UVA104	1325	11-Aug-17	11-Aug-17	A	....5..	CCJ	10	3I	1	U	KWI	KWI	UVA101	0
FR 104 T	1325	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 105 T	0
INS406	1325	11-Aug-17	11-Aug-17	A	....5..	BET	7	3I	1	U	NCL	NCL	INS407	0
GTI909 W	1325	11-Aug-17	11-Aug-17	A	....5..	74F	0	FRT	1	F	DFW	DFW	GTI910 W	0
LS 1507	1325	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ACE	ACE	LS 1406	0
UVA106	1330	11-Aug-17	11-Aug-17	A	....5..	CNJ	6	3I	1	D	DOL	DOL	UVA105	0
LS 110 X	1330	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PSA	PSA	LS 111 X	0
UVA307	1330	11-Aug-17	11-Aug-17	D	....5..	LJ3	6	3I	1	D	GIB	GIB	UVA306	0
LS 2519S	1330	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TFS	TFS	LS 2518S	0
FR 4977	1330	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BDS	BDS	FR 1836	0
FR 563	1335	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	NAP	NAP		0
FR 2669	1335	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WMI	WMI	FR 3557	0
FR 110 S	1340	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FEZ	FEZ	FR 111 S	0
EZY209	1340	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	GLA	GLA	EZY208	0
LS 991 S	1340	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PXO	PXO	LS 990 S	0
LS 1451	1340	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FUE	FUE	LS 1458	0
LS 1663	1340	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TFS	TFS	LS 1530	0
TOM100 Y	1345	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	NCE	NCE	TOM101 Y	0
FR 586	1345	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PSA	PSA	FR 587	0
LS 1440	1345	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FAO	FAO	LS 4003	0
EZY3004	1345	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	AMS	AMS	EZY3083	0
LS 4002	1345	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MJV	MJV	LS 1473	0
FR 4967	1345	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SUF	SUF	FR 8584	0
FR 105 T	1350	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 104 T	0
TOM5552	1350	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	C	TFS	TFS	TOM5517	0
GR 626	1355	11-Aug-17	11-Aug-17	A	....5..	AT7	72	CTA	1	J	GCI	GCI	GR 627	0
EW 5833	1355	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	VIE	VIE	EW 5832	0
FR 102 S	1400	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AHO	AHO	FR 103 S	0
LS 107 Y	1400	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NCE	NCE	LS 106 Y	0
FR 456	1400	11-Aug-17	11-Aug-17	A	....5..	73H	189	1D	1	J	EDI	EDI	FR 457	0
LS 871 U	1400	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SPC	SPC	LS 872 U	0
LS 1445	1400	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FNC	FNC	LS 1442	0
FR 111 S	1405	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FEZ	FEZ	FR 110 S	0
FR 5995	1405	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MAD	MAD	FR 5996	0
LS 205 W	1410	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KLX	KLX	LS 206 W	0
EZY254	1410	11-Aug-17	11-Aug-17	A	....5..	319	156	1D	1	J	BFS	BFS	EZY261	0
FR 713	1410	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AAR	AAR	FR 287	0
FR 1836	1410	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PDV	PDV	FR 4977	0
LS 2616S	1410	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RHO	RHO	LS 2615S	0
FR 8584	1410	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RHO	RHO	FR 4967	0
FR 807	1415	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NOC	NOC	FR 8163	0
FR 8747	1415	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LRH	LRH	FR 3918	0
FR 515	1420	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	DNR	DNR	FR 2466	0
FR 103 S	1425	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AHO	AHO	FR 102 S	0
FR 457	1425	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	EDI	EDI	FR 456	0
GR 627	1425	11-Aug-17	11-Aug-17	D	....5..	AT7	72	1I	1	J	GCI	GCI	GR 626	0

EZY3083	1425	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	OVD	OVD	EZY3004	0
FR 7609	1425	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CHQ	CHQ	FR 3071	0
FR 9202	1425	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	POZ	POZ	FR 9203	0
TK 100 V	1430	11-Aug-17	11-Aug-17	A	....5..	73H	165	1I	1	J	IST	IST	TK 101 V	0
UVA101	1430	11-Aug-17	11-Aug-17	D	....5..	CCJ	10	3I	1	U	NUE	NUE	UVA104	0
LS 111 X	1430	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PSA	PSA	LS 110 X	0
LS 118 U	1430	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CFU	CFU	LS 117 U	0
FR 5996	1430	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MAD	MAD	FR 5995	0
FR 9015	1430	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9014	0
FR 4195	1435	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BGY	BGY	FR 4196	0
FR 6542	1435	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MRS	MRS	FR 7498	0
EZY261	1440	11-Aug-17	11-Aug-17	D	....5..	319	156	1D	1	J	BFS	BFS	EZY254	0
LS 872 U	1440	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SPC	SPC	LS 871 U	0
EW 2372W	1440	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	STR	STR	EW 2373W	0
TOM5505	1440	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	C	CFU	CFU	TOM5510	0
EZY238	1445	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	EDI	EDI	EZY237	0
FR 3015	1445	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3014	0
LS 4003	1445	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CFU	CFU	LS 1440	0
FR 8133	1445	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LPA	LPA	FR 9251	0
FR 8167	1445	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TFS	TFS	FR 9967	0
LS 104 Y	1450	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FNC	FNC	LS 105 Y	0
FR 2466	1450	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SZZ	SZZ	FR 515	0
FR 8777	1450	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LIG	LIG	FR 8771	0
FR 9203	1450	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	POZ	POZ	FR 9202	0
LS 102 X	1455	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LCA	LCA	LS 103 X	0
4U 358	1455	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	CGN	CGN	4U 359	0
GTI910 W	1455	11-Aug-17	11-Aug-17	D	....5..	74F	0	FRT	1	F	DFW	DFW	GTI909 W	0
LS 1473	1455	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	IBZ	IBZ	LS 4002	0
FR 2337	1455	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	POZ	POZ	FR 8582	0
FR 33	1500	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	TRF	TRF	FR 286	1
TOM101 Y	1500	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	MAH	MAH	TOM100 Y	0
LS 201 W	1500	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AYT	AYT	LS 202 W	0
FR 1373	1500	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BIQ	BIQ	FR 8978	0
FR 4196	1500	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BGY	BGY	FR 4195	0
FR 7498	1500	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	GLA	GLA	FR 6542	0
FR 1789	1505	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	DTM	DTM	FR 2612	0
FR 2684	1505	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	EDI	EDI	FR 2685	0
EZY3068	1505	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	PRG	PRG	EZY3005	0
FR 3014	1510	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3015	0
EZY3156	1510	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	DLM	DLM	EZY3251	0
EZY3204	1510	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	CAG	CAG	EZY259	0
FR 8289	1510	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ACE	ACE	FR 8853	0
FR 9014	1510	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9015	0
LS 206 W	1515	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LEI	LEI	LS 205 W	0
EZY237	1515	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	EDI	EDI	EZY238	0
AJK2604	1520	11-Aug-17	11-Aug-17	A	....5..	M1F	0	FRT	1	F	NBO	NBO	AJK2604	0
FR 8267	1520	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KTW	KTW	FR 1394	0
FR 8771	1520	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DOL	DOL	FR 8777	0
PF 235 Y	1525	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	YYZ	YYZ	PF 234 Y	0
FR 909	1525	11-Aug-17	11-Aug-17	A	....5..	73H	189	CTA	1	J	ORK	ORK	FR 908	0
FR 9967	1525	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SOF	SOF	FR 8167	0
TK 101 V	1530	11-Aug-17	11-Aug-17	D	....5..	73H	165	1I	1	J	IST	IST	TK 100 V	0
4U 359	1530	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	CGN	CGN	4U 358	0
FR 2685	1530	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	EDI	EDI	FR 2684	0
FR 3843	1535	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	REU	REU	FR 2644	0
FR 683	1540	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	VST	VST	FR 297	0
FR 8582	1540	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SKG	SKG	FR 2337	0
FR 8853	1540	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MLA	MLA	FR 8289	0
EZY3005	1545	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	AMS	AMS	EZY3068	0
FR 3071	1545	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CIY	CIY	FR 7609	0
FR 9803	1545	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GRO	GRO	FR 1882	0
LS 105 Y	1550	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FNC	FNC	LS 104 Y	0
FR 294	1550	11-Aug-17	11-Aug-17	A	....5..	73H	189	CTA	1	J	DUB	DUB	FR 1905	0

FR 908	1550	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ORK	ORK	FR 909	0
FR 973	1550	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	GOA	GOA	FR 8164	0
FR 8978	1550	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ALC	ALC	FR 1373	0
LS 103 X	1555	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LCA	LCA	LS 102 X	0
EZY212	1555	11-Aug-17	11-Aug-17	A	....5..	319	156	1D	1	J	GLA	GLA	EZY213	0
EZY259	1555	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	BFS	BFS	EZY3204	0
FR 1394	1555	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OSL	OSL	FR 8267	0
FR 2469	1555	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LCJ	LCJ	FR 8028	0
TOM5510	1555	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	C	IBZ	IBZ	TOM5505	0
FR 121 S	1600	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PDL	PDL	FR 122 S	0
LS 202 W	1600	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SPU	SPU	LS 201 W	0
EW 2373W	1600	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	STR	STR	EW 2372W	0
FR 2644	1600	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RIX	RIX	FR 3843	0
FR 8028	1600	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MJV	MJV	FR 2469	0
FR 297	1605	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	DUB	DUB	FR 683	0
FR 2282	1605	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WMI	WMI	FR 2283	0
FR 3918	1610	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMO	PMO	FR 8747	0
FR 8446	1610	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BUD	BUD	FR 8371	0
FR 8992	1610	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FRA	FRA		0
UVA105	1615	11-Aug-17	11-Aug-17	D	....5..	CNJ	0	3I	1	N	FAB	FAB	UVA106	0
PF 231 Y	1615	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	MIA	MIA	PF 230 Y	0
EZY3251	1615	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	NAP	NAP	EZY3156	0
FR 104 Y	1620	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BOD	BOD	FR 105 Y	0
MVI116	1625	11-Aug-17	11-Aug-17	A	....5..	73W	40	3I	1	D	FAB	FAB	MVI117	0
FR 122 S	1625	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PDL	PDL	FR 121 S	0
EZY213	1625	11-Aug-17	11-Aug-17	D	....5..	319	156	1D	1	J	GLA	GLA	EZY212	0
EZY3072	1625	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	MUC	MUC	EZY241	0
FR 3132	1625	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PFO	PFO	FR 3131	0
FR 8164	1625	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	AGP	AGP	FR 973	0
FR 8975	1625	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ALC	ALC	FR 8976	0
FR 9251	1625	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	IBZ	IBZ	FR 8133	0
FR 1905	1630	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BRI	BRI	FR 294	0
FR 702	1635	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	KIR	KIR	FR 2436	0
FR 1008	1635	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	OTP	OTP	FR 1007	0
FR 8475	1635	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PIS	PIS	FR 2136	0
FR 114 S	1640	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TER	TER	FR 115 S	0
FR 1882	1640	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LIS	LIS	FR 9803	0
FR 1887	1640	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	LIS	LIS	FR 1222	0
FR 105 Y	1645	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BOD	BOD	FR 104 Y	0
PF 224 Y	1645	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	EWR	EWR	PF 223 Y	0
FR 795	1645	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	TSF	TSF	FR 58	0
FR 211	1650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 212	0
LS 306 W	1650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FUE	FUE	LS 307 W	0
AJK2604	1650	11-Aug-17	11-Aug-17	D	....5..	M1F	0	FRT	1	F	LGG	LGG	AJK2604	0
FR 3131	1650	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PFO	PFO	FR 3132	0
FR 8365	1650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGP	AGP	FR 8736	0
FR 8976	1650	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ALC	ALC	FR 8975	0
FR 12	1655	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ATH	ATH	FR 11	0
EZY241	1655	11-Aug-17	11-Aug-17	D	....5..	320	180	1D	1	J	EDI	EDI	EZY3072	0
FR 291	1655	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	TSR	TSR	FR 292	0
FR 8994	1655	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	BFS	BFS		0
LS 108 Y	1700	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	REU	REU	LS 109 Y	0
FR 555	1700	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LIS	LIS	FR 556	0
FR 1007	1700	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	OTP	OTP	FR 1008	0
FR 2136	1700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RZE	RZE	FR 8475	0
FR 2283	1700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WMI	WMI	FR 2282	0
FR 2436	1700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KRK	KRK	FR 702	0
FR 2747	1700	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KUN	KUN	FR 2746	0
EZY3246	1700	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	LJU	LJU	EZY3227	0
FR 8371	1700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BUD	BUD	FR 8446	0
FR 9543	1700	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FAO	FAO	FR 9273	0
FR 115 S	1705	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TER	TER	FR 114 S	0
FR 287	1705	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AMS	AMS	FR 713	0

FX 2	1715	11-Aug-17	11-Aug-17	A	....5..	77F	0	FRT	1	F	MEM	MEM	FX 1	0
BE 1824A	1715	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1D	1	J	NQY	NQY	BE 1825A	0
FR 11	1720	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ATH	ATH	FR 12	0
FR 292	1720	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	TSR	TSR	FR 291	0
FR 8736	1720	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MXP	MXP	FR 8365	0
FR 58	1725	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	NYO	NYO	FR 795	0
FR 373	1725	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BIQ	BIQ	FR 2372	0
FR 556	1725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LIS	LIS	FR 555	0
FR 2435	1725	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KRK	KRK	FR 8182	1
FR 2746	1725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KUN	KUN	FR 2747	0
FR 6544	1725	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MRS	MRS	FR 281	0
FR 9273	1725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	EIN	EIN	FR 9543	0
FR 9283	1725	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FAO	FAO	FR 9282	0
FR 212	1730	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 211	0
PF 237 Y	1730	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	BOS	BOS	PF 236 Y	0
EZY260	1730	11-Aug-17	11-Aug-17	A	....5..	319	156	1D	1	J	BFS	BFS	EZY3115	0
EZY3227	1730	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	BIO	BIO	EZY3246	0
FR 73	1735	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	CCF	CCF	FR 7494	0
FR 523	1735	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LDE	LDE	FR 2816	0
FR 1519	1735	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	HAM	HAM	FR 1520	0
FR 8364	1735	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SVQ	SVQ	FR 2860	0
FR 8404	1735	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BRQ	BRQ	FR 8544	0
FR 808	1740	11-Aug-17	11-Aug-17	A	....5..	73H	189	CTA	1	J	NOC	NOC	FR 798	0
FR 1222	1740	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PMI	PMI	FR 1887	0
BE 1825A	1740	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1D	1	J	NQY	NQY	BE 1824A	0
EK 20 U	1745	11-Aug-17	11-Aug-17	A	....5..	77W	354	1I	1	J	DXB	DXB	EK 66 S	0
FR 2612	1745	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	SDR	SDR	FR 1789	0
FR 281	1750	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TLS	TLS	FR 6544	0
LS 307 W	1750	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMI	PMI	LS 306 W	0
FR 2372	1750	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	GDN	GDN	FR 373	0
FR 146	1755	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	SXF	SXF	FR 147	0
FR 106 U	1800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GIB	GIB	FR 107 U	0
LS 109 Y	1800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	REU	REU	LS 108 Y	0
TK 145 W	1800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	IST	IST	TK 146 W	0
FR 1520	1800	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	HAM	HAM	FR 1519	0
FR 2816	1800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CGN	CGN	FR 523	0
FR 7494	1800	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	GLA	GLA	FR 73	0
FR 8544	1800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SXF	SXF	FR 8404	0
FR 9510	1800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 9511	0
FR 798	1805	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	TSF	TSF	FR 808	0
FR 2860	1805	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LUX	LUX	FR 8364	0
FR 7497	1805	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	GLA	GLA	FR 8117	0
FR 8770	1805	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	DOL	DOL	FR 109	0
EZY3115	1810	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	AGP	AGP	EZY260	0
FR 8387	1810	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMI	PMI	FR 5178	0
FR 3003	1815	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3004	0
FR 9282	1815	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FAO	FAO	FR 9283	0
FR 147	1820	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	SXF	SXF	FR 146	0
EZY3006	1820	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	AMS	AMS	EZY263	0
EW 5830	1820	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	VIE	VIE	EW 5831	0
BE 9098X	1820	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1D	1	J	EDI	EDI	BE 9099X	0
FR 107 U	1825	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GIB	GIB	FR 106 U	0
EZY240	1825	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	EDI	EDI	EZY239	0
FR 589	1825	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PSA	PSA	FR 588	0
FR 2319	1825	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BTS	BTS	FR 2318	0
FR 9254	1825	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	IBZ	IBZ	FR 3556	1
FR 9511	1825	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 9510	0
LS 108 X	1830	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SOF	SOF	LS 109 X	0
FR 109	1830	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SNN	SNN	FR 8770	0
FR 5997	1830	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MAD	MAD	FR 5998	0
FR 8117	1830	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NUE	NUE	FR 7497	0
FR 5178	1835	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BLL	BLL	FR 8387	0
NPT2 V	1840	11-Aug-17	11-Aug-17	A	....5..	73Y	0	FRT	1	M	BFS	BFS	NPT2 W	0

FR 3004	1840	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3003	0
FR 4197	1840	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BGY	BGY	FR 4198	0
FR 8888	1840	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	EDI	EDI	FR 8887	0
FR 1195	1845	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BLQ	BLQ	FR 1194	0
4U 2378	1845	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	STR	STR	4U 2379	0
FR 2670	1845	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WMI	WMI	FR 293	0
4U 3370	1845	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	HAJ	HAJ	4U 3371	0
EZY258	1850	11-Aug-17	11-Aug-17	A	....5..	319	156	1D	1	J	BFS	BFS	EZY3047	0
FR 965	1850	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GOT	GOT	FR 964	0
FR 2318	1850	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BTS	BTS	FR 2319	0
EZY3084	1850	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	OVD	OVD	EZY3009	0
EZY239	1855	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	EDI	EDI	EZY240	0
EZY263	1855	11-Aug-17	11-Aug-17	D	....5..	320	180	1D	1	J	BFS	BFS	EZY3006	0
4U 356	1855	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	CGN	CGN	4U 357	0
FR 5998	1855	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MAD	MAD	FR 5997	0
FR 118 S	1900	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RTM	RTM	FR 119 S	0
TK 146 W	1900	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	IST	IST	TK 145 W	0
EW 1752	1900	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	MUC	MUC	EW 1753	0
EW 5831	1900	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	VIE	VIE	EW 5830	0
FR 588	1905	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PSA	PSA	FR 589	0
FR 2014	1905	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PRG	PRG	FR 2013	0
FR 4198	1905	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BGY	BGY	FR 4197	0
FR 8887	1905	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	EDI	EDI	FR 8888	0
BE 9099X	1905	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1D	1	J	EDI	EDI	BE 9098X	0
FR 106 Y	1910	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MXP	MXP	FR 107 Y	0
FR 293	1910	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 2670	0
FR 906	1910	11-Aug-17	11-Aug-17	A	....5..	73H	189	CTA	1	J	ORK	ORK	FR 905	0
FR 1194	1910	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BLQ	BLQ	FR 1195	0
FR 9815	1910	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9814	0
FR 288	1915	11-Aug-17	11-Aug-17	A	....5..	73H	189	CTA	1	J	DUB	DUB	FR 8166	1
FR 964	1915	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GOT	GOT	FR 965	0
FR 8408	1915	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WRO	WRO	FR 8407	0
4U 2379	1920	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	STR	STR	4U 2378	0
EZY3009	1920	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	AMS	AMS	EZY3084	0
EZY3047	1920	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	IBZ	IBZ	EZY258	0
4U 3371	1920	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	HAJ	HAJ	4U 3370	0
FR 119 S	1925	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RTM	RTM	FR 118 S	0
EZY214	1925	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	GLA	GLA	EZY215	0
LS 109 X	1930	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SOF	SOF	LS 108 X	0
4U 357	1930	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	J	CGN	CGN	4U 356	0
FR 2013	1930	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PRG	PRG	FR 2014	0
FR 8348	1930	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	OPO	OPO	FR 8347	0
FR 107 Y	1935	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	MXP	MXP	FR 106 Y	0
FR 905	1935	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ORK	ORK	FR 906	0
FR 9814	1935	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9815	0
NPT2 W	1940	11-Aug-17	11-Aug-17	D	....5..	73Y	0	FRT	1	M	BFS	BFS	NPT2 V	0
EW 1753	1940	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	MUC	MUC	EW 1752	0
FR 8407	1940	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WRO	WRO	FR 8408	0
FR 106 T	1945	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 107 T	0
UPS235	1945	11-Aug-17	11-Aug-17	A	....5..	ABF	0	FRT	1	F	EWR	EWR	UPS235	0
FX 1	1950	11-Aug-17	11-Aug-17	D	....5..	77F	0	FRT	1	F	MEM	MEM	FX 2	0
EZY215	1955	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	GLA	GLA	EZY214	0
EZY242	1955	11-Aug-17	11-Aug-17	A	....5..	319	156	1D	1	J	EDI	EDI	EZY3215	0
FR 8347	1955	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OPO	OPO	FR 8348	0
MJE28	2000	11-Aug-17	11-Aug-17	A	....5..	CJL	8	3I	1	D	KAN	KAN	MJE28	0
MVI117	2000	11-Aug-17	11-Aug-17	D	....5..	73W	40	3I	1	D	RUH	RUH	MVI116	0
FYR300	2000	11-Aug-17	11-Aug-17	A	....5..	73W	6	3I	1	D	AZI	AZI	FYR301	0
INS407	2000	11-Aug-17	11-Aug-17	D	....5..	BET	7	3I	1	U	BFS	BFS	INS406	0
FR 8824	2000	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	EDI	EDI	FR 8823	0
FR 107 T	2010	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 106 T	0
FR 126 S	2010	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KEF	KEF	FR 127 S	0
FR 132 S	2010	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ORY	ORY	FR 133 S	0
LS 316 W	2010	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ZTH	ZTH	LS 313 W	1

FYR503	2015	11-Aug-17	11-Aug-17	D	....5..	744	140	3I	1	D	RBA	RBA	FYR400	1
FR 9274	2015	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	EIN	EIN	FR 4976	1
FR 289	2020	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	AMS	AMS	FR 3872	1
FR 8995	2020	11-Aug-17	11-Aug-17	A	....5..	73H	189	1D	1	J	BFS	BFS		0
FR 8823	2025	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	EDI	EDI	FR 8824	0
FR 8993	2025	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FRA	FRA		0
ORF2	2030	11-Aug-17	11-Aug-17	D	....5..	74L	1	3I	1	D	ORY	ORY	ORF2	0
NPT11 L	2030	11-Aug-17	11-Aug-17	D	....5..	73Y	0	FRT	1	M	EDI	EDI	NPT11 M	1
MVI500	2030	11-Aug-17	11-Aug-17	A	....5..	320	150	3I	1	D	ATH	ATH	MVI601	1
INS504	2030	11-Aug-17	11-Aug-17	A	....5..	GS5	0	3I	1	N	LTN	LTN		0
FR 1395	2030	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	OSL	OSL	FR 792	1
FR 127 S	2035	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KEF	KEF	FR 126 S	0
FR 133 S	2035	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ORY	ORY	FR 132 S	0
MJE28	2040	11-Aug-17	11-Aug-17	D	....5..	CJL	0	3I	1	N	FAB	FAB	MJE28	0
EK 66 S	2040	11-Aug-17	11-Aug-17	D	....5..	77W	354	1I	1	J	DXB	DXB	EK 20 U	0
FR 272	2040	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 271	0
EZY3215	2040	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	PMI	PMI	EZY242	0
FR 1	2045	11-Aug-17	11-Aug-17	A	....5..	L45	0	3I	1	P	PSA	PSA		0
FR 108 Y	2045	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	LEI	LEI	FR 109 Y	0
UPS245	2045	11-Aug-17	11-Aug-17	D	....5..	75F	0	FRT	1	F	CGN	CGN	UPS244	0
UVA503	2045	11-Aug-17	11-Aug-17	D	....5..	CCJ	10	3I	1	D	LBG	LBG	UVA400	1
FYR504	2045	11-Aug-17	11-Aug-17	A	....5..	GJ5	13	3I	1	D	VKO	VKO		0
UVA505	2045	11-Aug-17	11-Aug-17	D	....5..	CCJ	10	3I	1	D	BGR	BGR	UVA406	1
FYR508	2045	11-Aug-17	11-Aug-17	A	....5..	CCX	3	3I	1	D	BRN	BRN		0
MVI510	2045	11-Aug-17	11-Aug-17	A	....5..	GJ6	15	3I	1	D	DUB	DUB		0
MVI511	2045	11-Aug-17	11-Aug-17	D	....5..	GJ6	15	3I	1	D	DUB	DUB		0
LS 1498	2055	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	IBZ	IBZ	LS 4001	1
TAY45 J	2100	11-Aug-17	11-Aug-17	A	....5..	L45	0	3I	1	N	LGG	LEJ	TAY45 J	0
BCS2111	2100	11-Aug-17	11-Aug-17	D	....5..	75F	0	FRT	1	H	LEJ	LEJ	BCS2110	0
FR 271	2105	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 272	0
FR 109 Y	2110	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	LEI	LEI	FR 108 Y	0
FYR301	2110	11-Aug-17	11-Aug-17	D	....5..	73W	6	3I	1	D	BOS	BOS	FYR300	0
FR 2815	2110	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CGN	CGN	FR 8382	1
NPT9 G	2115	11-Aug-17	11-Aug-17	A	....5..	73Y	0	FRT	1	M	EDI	EDI	NPT9 H	0
FR 2861	2115	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	LUX	LUX	FR 5992	1
FR 7493	2115	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	GLA	GLA	FR 3928	1
INS402	2120	11-Aug-17	11-Aug-17	A	....5..	73W	20	3I	1	D	JFK	JFK		0
FR 1837	2125	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PDV	PDV	FR 2642	1
FR 8977	2125	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ALC	ALC	FR 4966	1
CJ 2298	2130	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	TXL	TXL	CJ 2331	1
LS 207 W	2140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LEI	LEI	LS 204 W	1
CJ 2342	2140	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	GVA	GVA	CJ 2291	1
FR 2645	2140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RIX	RIX	FR 124	1
FR 8737	2140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MXP	MXP	FR 2672	1
3V 28 S	2145	11-Aug-17	11-Aug-17	D	....5..	74F	0	FRT	1	F	LGG	LGG	3V 27 R	0
UPS235	2145	11-Aug-17	11-Aug-17	D	....5..	ABF	0	FRT	1	F	CGN	CGN	UPS235	0
FR 108	2150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	SNN	SNN	FR 8584	1
LS 119 U	2150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CFU	CFU	LS 120 U	1
LS 203 W	2150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SPU	SPU	LS 200 W	1
EZY262	2150	11-Aug-17	11-Aug-17	A	....5..	319	156	1D	1	J	BFS	BFS	EZY3021	1
FR 282	2150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TLS	TLS	FR 203	1
EZY3228	2150	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	BIO	BIO	EZY3025	1
PC 1163	2155	11-Aug-17	11-Aug-17	A	....5..	738	189	1I	1	J	SAW	SAW	PC 1164	0
LS 1402	2155	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ACE	ACE	LS 1411	1
TOM5511	2155	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	C	IBZ	IBZ	TOM5610	1
FR 8027	2155	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MJV	MJV	FR 9961	1
EZY3010	2200	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	J	AMS	AMS	EZY3053	1
FR 2613	2205	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SDR	SDR	FR 936	1
TAY45 J	2210	11-Aug-17	11-Aug-17	D	....5..	L45	0	3I	1	N	LGG	LGG	TAY45 J	0
FR 2284	2210	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	WMI	WMI	FR 6541	1
FR 5179	2210	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BLL	BLL	FR 2404	1
FR 9968	2210	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SOF	SOF	FR 464	1
UPS238	2215	11-Aug-17	11-Aug-17	D	....5..	ABF	0	FRT	1	F	SDF	SDF	UPS236	0

FR 298	2215	11-Aug-17	11-Aug-17	A	....5..	73H	189	CTA	1	J	DUB	DUB	FR 7963	1
EZY3252	2220	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	NAP	NAP	EZY3001	1
FR 9252	2220	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	IBZ	IBZ	FR 1396	1
FR 59	2225	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	NYO	NYO	FR 5172	1
NJE833 T	2225	11-Aug-17	11-Aug-17	A	....5..	CNJ	7	3I	1	D	FAB	FAB	NJE840 M	1
FR 2437	2225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KRK	KRK	FR 8778	1
FR 2467	2225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SZZ	SZZ	FR 8288	1
FR 8116	2225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NUE	NUE	FR 2462	1
FR 8369	2225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BUD	BUD	FR 9524	1
FR 8545	2225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SXF	SXF	FR 8132	1
LS 304 W	2230	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AYT	AYT	LS 301 W	1
QR 8444	2230	11-Aug-17	11-Aug-17	A	....5..	77X	0	FRT	1	F	DOH	DOH	QR 8444	1
LS 1482	2235	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KGS	KGS	LS 1405	1
FR 2137	2235	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	RZE	RZE	FR 1202	1
FR 799	2240	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	TSF	TSF	FR 8321	1
FR 1906	2240	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BRI	BRI	FR 805	1
FR 2373	2240	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GDN	GDN	FR 9142	1
NPT10 J	2245	11-Aug-17	11-Aug-17	A	....5..	73P	0	FRT	1	M	EDI	EDI	NPT10 K	0
3V 805 S	2245	11-Aug-17	11-Aug-17	D	....5..	73P	0	FRT	1	F	LGG	LGG	3V 804 R	0
PC 1164	2245	11-Aug-17	11-Aug-17	D	....5..	738	189	1I	1	J	SAW	SAW	PC 1163	0
FR 1883	2245	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	LIS	LIS	FR 9253	1
FR 3074	2245	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	CIY	CIY	FR 8162	1
FR 3919	2245	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMO	PMO	FR 1903	1
NPT9 H	2250	11-Aug-17	11-Aug-17	D	....5..	73Y	0	FRT	1	M	EDI	EDI	NPT9 G	0
LS 320 W	2255	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMI	PMI	LS 317 W	1
LS 1452	2300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FUE	FUE	LS 1513	1
FR 8165	2300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGP	AGP	FR 295	1
FR 8583	2300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SKG	SKG	FR 9542	1
FR 8585	2300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RHO	RHO	FR 8542	1
FR 8852	2300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MLA	MLA	FR 304	1
NPT2 X	2305	11-Aug-17	11-Aug-17	A	....5..	73Y	0	FRT	1	M	BFS	BFS	NPT2 Y	0
FR 1223	2315	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PMI	PMI	FR 8345	1
LS 1446	2315	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FNC	FNC	LS 1439	1
LS 1664	2320	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TFS	TFS	LS 1529	1
TOM5553	2335	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	C	TFS	TFS	TOM5622	1
LS 2520S	2345	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TFS	TFS	LS 2521S	1
LS 4004	2350	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CFU	CFU	LS 1473	1
NPT2 Y	2355	11-Aug-17	11-Aug-17	D	....5..	73Y	0	FRT	1	M	BFS	BFS	NPT2 X	0
NPT10 K	2355	11-Aug-17	11-Aug-17	D	....5..	73P	0	FRT	1	M	EDI	EDI	NPT10 J	0
NPT11 M	2355	11-Aug-17	11-Aug-17	A	....5..	73Y	0	FRT	1	M	EDI	EDI		0

Daily Total Seats					BST Airside ATMs					BST Landside Pass movements				
GMT	GMT				Hr comme	Arr	Dep	Total		Hr comme	Arr	Dep	Total	
		A	D											
0	100	769	0	769	0	2178	0	2178		0	0	4685	4685	
100	200	376	0	376	1	769	0	769		1	0	2178	2178	
200	300	188	0	188	2	376	0	376		2	0	769	769	
300	400	200	0	200	3	188	0	188		3	413	376	789	
400	500	0	413	413	4	200	0	200		4	6333	188	6521	
500	600	1757	6333	8090	5	0	413	413		5	6348	200	6548	
600	700	3550	6348	9898	6	1757	6333	8090		6	5890	0	5890	
700	800	3396	5890	9286	7	3550	6348	9898		7	2880	1757	4637	
800	900	2096	2880	4976	8	3396	5890	9286		8	1810	3550	5360	
900	1000	3241	1810	5051	9	2096	2880	4976		9	4395	3396	7791	
1000	1100	3824	4395	8219	10	3241	1810	5051		10	4137	2096	6233	
1100	1200	5251	4137	9388	11	3824	4395	8219		11	5026	3241	8267	
1200	1300	4753	5026	9779	12	5251	4137	9388		12	4073	3824	7897	
1300	1400	3609	4073	7682	13	4753	5026	9779		13	3807	5251	9058	
1400	1500	5045	3807	8852	14	3609	4073	7682		14	4673	4753	9426	
1500	1600	3431	4673	8104	15	5045	3807	8852		15	4065	3609	7674	
1600	1700	3554	4065	7619	16	3431	4673	8104		16	4418	5045	9463	
1700	1800	3719	4418	8137	17	3554	4065	7619		17	3878	3431	7309	
1800	1900	4884	3878	8762	18	3719	4418	8137		18	4451	3554	8005	
1900	2000	2278	4451	6729	19	4884	3878	8762		19	1533	3719	5252	
2000	2100	2540	1533	4073	20	2278	4451	6729		20	395	4884	5279	
2100	2200	3824	395	4219	21	2540	1533	4073		21	189	2278	2467	
2200	2300	4685	189	4874	22	3824	395	4219		22	0	2540	2540	
2300	2400	2178	0	2178	23	4685	189	4874		23	0	3824	3824	
2400	2500	0	0	0										
		69148	**68714**	**137862**	65934		69148	68714	137862		68714	69148	137862	0

2028 (35mppa) Airside / Landside Arrivals and Departure

Mode Share

Mode Share	%
Car	15%
Car Passenger	22%
Taxi / Rental	13%
Bus / Coach	23%
Rail	27%
Other	0%
Total	**100%**

2029 Annual	35,000,000
Daily	96154
summer	137862
Factor	0.6974645

2028 (35mppa) Summer average day - PAX

Time Band	Departures	Arrivals	Total
00:00	0	4685	4685
01:00	0	2178	2178
02:00	0	769	769
03:00	413	376	789
04:00	6333	188	6521
05:00	6348	200	6548
06:00	5890	0	5890
07:00	2880	1757	4637
08:00	1810	3550	5360
09:00	4395	3396	7791
10:00	4137	2096	6233
11:00	5026	3241	8267
12:00	4073	3824	7897
13:00	3807	5251	9058
14:00	4673	4753	9426
15:00	4065	3609	7674
16:00	4418	5045	9463
17:00	3878	3431	7309
18:00	4451	3554	8005
19:00	1533	3719	5252
20:00	395	4884	5279
21:00	189	2278	2467
22:00	0	2540	2540
23:00	0	3824	3824
Daily	**68714**	**69148**	**137862**

2028 (35mppa) Average day - Landside

Time Band	Arrivals	Departures	Total
00:00	0	3257	3257
01:00	0	1514	1514
02:00	0	535	535
03:00	289	261	550
04:00	4431	131	4562
05:00	4441	139	4581
06:00	4121	0	4121
07:00	2015	1222	3237
08:00	1266	2468	3735
09:00	3075	2361	5436
10:00	2895	1457	4352
11:00	3517	2253	5770
12:00	2850	2659	5508
13:00	2664	3651	6315
14:00	3270	3305	6574
15:00	2844	2509	5353
16:00	3091	3508	6599
17:00	2713	2385	5099
18:00	3114	2471	5585
19:00	1073	2586	3658
20:00	276	3396	3672
21:00	132	1584	1716
22:00	0	1766	1766
23:00	0	2659	2659
Daily	**48077**	**48077**	**96154**

Surface Access

Arrivals	Departures
0	3257
0	1514
0	535
289	261
4431	131
4441	139
4121	0
2015	1222
1266	2468
3075	2361
2895	1457
3517	2253
2850	2659
2664	3651
3270	3305
2844	2509
3091	3508
2713	2385
3114	2471
1073	2586
276	3396
132	1584
0	1766
0	2659

Surface Access Arrivals by Mode

Car/Taxi	Rail	Bus/coach	Total
0	0	0	**0**
0	0	0	**0**
0	0	0	**0**
146	77	66	**288**
2238	1179	1006	**4422**
2244	1181	1008	**4433**
2082	1096	935	**4113**
1018	536	457	**2011**
640	337	287	**1264**
1553	818	698	**3069**
1462	770	657	**2889**
1776	935	798	**3510**
1439	758	647	**2844**
1345	708	604	**2658**
1652	870	742	**3263**
1437	757	645	**2839**
1561	822	701	**3085**
1371	722	616	**2708**
1573	828	707	**3108**
542	285	243	**1071**
140	74	63	**276**
67	35	30	**132**
0	0	0	**0**
0	0	0	**0**
24285			**47983**

Surface Access Departures by Mode

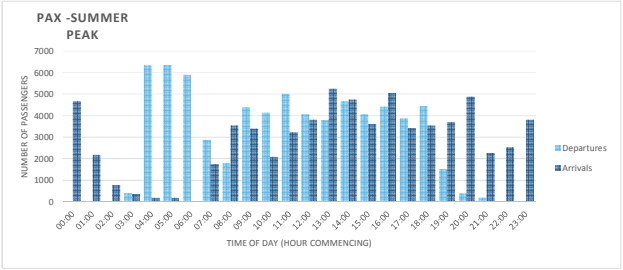
Car/Taxi	Rail	Bus/coach	Total
1645	866	739	**3251**
765	403	344	**1511**
270	142	121	**534**
132	70	59	**261**
66	35	30	**130**
70	37	32	**139**
0	0	0	**0**
617	325	277	**1219**
1247	657	560	**2463**
1193	628	536	**2357**
736	388	331	**1454**
1138	599	511	**2249**
1343	707	603	**2654**
1844	971	829	**3644**
1669	879	750	**3298**
1268	667	569	**2504**
1772	933	796	**3501**
1205	635	541	**2381**
1248	657	561	**2466**
1306	688	587	**2581**
1715	903	771	**3389**
800	421	359	**1581**
892	470	401	**1763**
1343	707	603	**2654**
			47983

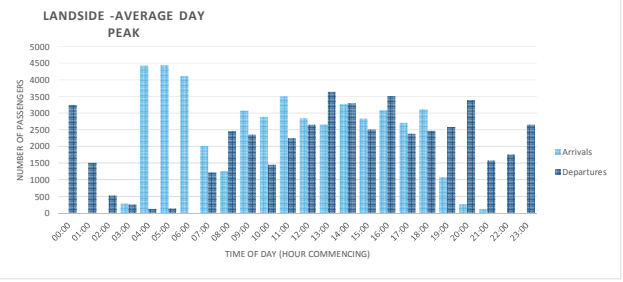
Vehicles

Arrivals	Departures
0	1797
0	835
0	295
159	144
2444	72
2450	77
2273	0
1112	674
699	1362
1696	1302
1597	804
1940	1243
1572	1467
1469	2014
1804	1823
1569	1384
1705	1935
1497	1316
1718	1363
592	1426
152	1873
73	874
0	974
0	1467
26521	**26521**

2028 (35mppa) - Summary Surface Arrival and Departure by Mode

Time Band	To Airport				From Airport				Total
	Cars / Taxis	Rail	Bus / Coach	Total	Cars / Taxis	Rail	Bus / Coach	Total	
00:00	0	0	0	0	1645	866	739	3251	**3251**
01:00	0	0	0	0	765	403	344	1511	**1511**
02:00	0	0	0	0	270	142	121	534	**534**
03:00	146	77	66	288	132	70	59	261	**549**
04:00	2238	1179	1006	4422	66	35	30	130	**4553**
05:00	2244	1181	1008	4433	70	37	32	139	**4572**
06:00	2082	1096	935	4113	0	0	0	0	**4113**
07:00	1018	536	457	2011	617	325	277	1219	**3230**
08:00	640	337	287	1264	1247	657	560	2463	**3727**
09:00	1553	818	698	3069	1193	628	536	2357	**5426**
10:00	1462	770	657	2889	736	388	331	1454	**4343**
11:00	1776	935	798	3510	1138	599	511	2249	**5759**
12:00	1439	758	647	2844	1343	707	603	2654	**5498**
13:00	1345	708	604	2658	1844	971	829	3644	**6302**
14:00	1652	870	742	3263	1669	879	750	3298	**6561**
15:00	1437	757	645	2839	1268	667	569	2504	**5343**
16:00	1561	822	701	3085	1772	933	796	3501	**6586**
17:00	1371	722	616	2708	1205	635	541	2381	**5089**
18:00	1573	828	707	3108	1248	657	561	2466	**5574**
19:00	542	285	243	1071	1306	688	587	2581	**3651**
20:00	140	74	63	276	1715	903	771	3389	**3665**
21:00	67	35	30	132	800	421	359	1581	**1713**
22:00	0	0	0	0	892	470	401	1763	**1763**
23:00	0	0	0	0	1343	707	603	2654	**2654**
Daily	**24285**	**12788**	**10910**	**47983**	**24285**	**12788**	**10910**	**47983**	**95967**





AVERAGE DAY 43mppa

Service number	Cleared time	Start date	End date	A/D	Days of operation	Aircraft	Seats	Terminal	Week number	Service type	Origin / dest	Last next	Turnround service number	Turnround days
LS 100 T	10	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	LPA	LPA	LS 101 T	0
3V 975 B	15	11-Aug-17	11-Aug-17	A	....5..	73P	0	FRT	1	F	LGG	LGG	3V 976 C	0
FX 9041	20	11-Aug-17	11-Aug-17	A	....5..	33X	0	FRT	1	F	CDG	CDG		0
LS 2613S	45	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BJV	BJV	LS 2614S	0
EZY3048	55	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	IBZ	IBZ	EZY3043	0
TOM5421	55	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	C	ACE	ACE	TOM5504	0
EZY3114	100	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	AGP	AGP	EZY3249	0
3V 976 C	100	11-Aug-17	11-Aug-17	D	....5..	73P	0	FRT	1	F	LGG	LGG	3V 975 B	0
FX 9041	100	11-Aug-17	11-Aug-17	D	....5..	33X	0	FRT	1	F	CDG	CDG		0
BCS2112W	130	11-Aug-17	11-Aug-17	A	....5..	ABF	0	FRT	1	H	LEJ	LEJ		0
UPS244	135	11-Aug-17	11-Aug-17	A	....5..	74F	0	FRT	1	F	CGN	CGN	UPS245	0
MT 1629	150	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	KGS	KGS	MT 1748	0
EZY3216	215	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	PMI	PMI	EZY3103	0
BCS2110	230	11-Aug-17	11-Aug-17	A	....5..	ABF	0	FRT	1	H	LEJ	LEJ		0
UPS236	235	11-Aug-17	11-Aug-17	A	....5..	74F	0	FRT	1	F	CGN	CGN	UPS238	0
FX 5202	235	11-Aug-17	11-Aug-17	A	....5..	ABY	0	FRT	1	F	CDG	CDG	FX 5202	0
LS 115 U	305	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PFO	PFO	LS 116 U	0
QR 8442	315	11-Aug-17	11-Aug-17	A	....5..	77X	0	FRT	1	F	DOH	DOH	QR 8442	0
3V 27 R	340	11-Aug-17	11-Aug-17	A	....5..	76X	0	FRT	1	F	LGG	LGG	3V 28 S	0
FX 5202	350	11-Aug-17	11-Aug-17	D	....5..	ABY	0	FRT	1	F	DUB	DUB	FX 5202	0
MT 1748	400	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	MAH	MAH	MT 1629	0
LS 101 T	500	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PMI	PMI	LS 100 T	0
LS 200 W	500	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AYT	AYT	LS 203 W	1
EZY3043	500	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	IBZ	IBZ	EZY3048	0
EZY3249	500	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	NAP	NAP	EZY3114	0
QR 8442	500	11-Aug-17	11-Aug-17	D	....5..	77X	0	FRT	1	F	DOH	MXP	QR 8442	0
FR 3556	510	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RAK	RAK	FR 8165	1
FR 8132	510	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LPA	LPA	FR 8583	1
FR 8166	515	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TFS	TFS	FR 6610	1
LS 313 W	520	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	REU	REU	LS 316 W	1
FR 792	520	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TSF	TSF	FR 8852	1
FR 124	525	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AOI	AOI	FR 1365	1
FR 2642	525	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RIX	RIX	FR 1883	1
FR 2672	525	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3919	1
EZY3025	525	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	DBV	DBV	EZY262	1
FR 5992	525	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	MAD	MAD	FR 8362	1
FR 203	530	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 1906	1
TOM471	530	11-Aug-17	11-Aug-17	A	....5..	788	300	1I	1	C	MBJ	MBJ	TOM716 F	0
FR 8542	530	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SXF	SXF	FR 2373	1
FR 6541	535	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MRS	MRS	FR 2437	1
FR 8382	535	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ALC	ALC	FR 799	1
FR 9961	535	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SOF	SOF	FR 8545	1
EK 65 S	540	11-Aug-17	11-Aug-17	A	....5..	77W	354	1I	1	J	DXB	DXB	EK 67 U	0
LS 116 U	540	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	CFU	CFU	LS 115 U	0
LS 2517S	540	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ALC	ALC	LS 2516S	1
FR 7608	540	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	CHQ	CHQ	FR 8116	1
FR 8396	540	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	XRY	XRY	FR 5179	1
FR 222	545	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	AMS	AMS		0
FR 464	545	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TRN	TRN	FR 298	1
FR 2225	545	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TLL	TLL	FR 2467	1
FR 2462	545	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BZG	BZG	FR 9252	1
FR 4541	545	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	VRN	VRN	FR 8369	1
FR 753	550	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	HHN	HHN	FR 752	0
LS 1411	550	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ALC	ALC	LS 1402	1
FR 8351	550	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	LEI	LEI	FR 9968	1
CJ 100 X	555	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	TXL	TXL	CJ 101 X	0
LS 1405	555	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	AGP	AGP	LS 4004	1
FR 7965	555	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OSI	OSI	FR 2284	1
FR 8120	555	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NUE	NUE	FR 8119	0
LS 204 W	600	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KLX	KLX	LS 207 W	1
MT 1078	600	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	JSI	JSI	MT 1761	1
FR 1396	600	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OSL	OSL	FR 1223	1
EZY3001	600	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	AMS	AMS	EZY3248	1
EZY3103	600	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	NCE	NCE	EZY3216	0
EZY3225	600	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	BIO	BIO	EZY3228	1
EZY3155	605	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	DLM	DLM	EZY3010	1

FR 8288	605	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ACE	ACE	FR 8267	1
LS 100 X	610	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NCE	NCE	LS 101 X	0
FR 2813	610	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CGN	CGN	FR 2814	0
FR 8321	610	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	VLC	VLC	FR 8027	1
FR 9142	610	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FAO	FAO	FR 1599	1
EZY252	615	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	BFS	BFS	EZY253	0
LS 301 W	615	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ALC	ALC	LS 304 W	1
4U 354	615	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	CGN	CGN	4U 355	0
FR 1517	615	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	HAM	HAM	FR 1518	0
MT 1944	615	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	ALC	ALC	MT 1955	1
FR 3631	615	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BRE	BRE	FR 3632	0
FR 7973	615	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BSL	BSL	FR 2645	1
FR 8592	615	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	EGC	EGC	FR 8737	1
FR 295	620	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TLS	TLS	FR 1887	1
FR 1782	620	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BOD	BOD	FR 2613	1
FR 5172	620	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BLL	BLL	FR 2369	1
TOM5516	620	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	C	MAH	MAH	TOM5417	1
FR 144	625	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SXF	SXF	FR 145	0
FR 8026	625	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MJV	MJV	FR 7493	1
LS 212 W	630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MLA	MLA	LS 215 W	1
FR 752	630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	HHN	HHN	FR 753	0
FR 1202	630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMI	PMI	FR 1395	1
FR 4952	630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PEG	PEG	FR 2815	1
FR 8119	630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NUE	NUE	FR 8120	0
FR 8162	630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AGP	AGP	FR 2861	1
CJ 101 X	640	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	TXL	TXL	CJ 100 X	0
LS 309 W	640	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	MLA	MLA	LS 312 W	1
FR 1014	640	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PRG	PRG	FR 1013	0
EW 2372	640	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	STR	STR	EW 2373	0
FR 2814	640	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CGN	CGN	FR 2813	0
FR 4191	640	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BGY	BGY	FR 4192	0
FR 8402	640	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	EGC	EGC	FR 1803	1
EZY253	645	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	BFS	BFS	EZY252	0
FR 5993	645	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MAD	MAD	FR 5994	0
FR 145	650	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SXF	SXF	FR 144	0
LS 317 W	650	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BJV	BJV	LS 320 W	1
4U 355	650	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	CGN	CGN	4U 354	0
FR 1518	650	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	HAM	HAM	FR 1517	0
FR 2315	650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BTS	BTS	FR 2314	0
FR 9811	650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9810	0
FR 202	650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 205	0
TOM716 F	655	11-Aug-17	11-Aug-17	D	....5..	788	0	1D	1	P	EMA	EMA	TOM471	0
FR 53	655	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NYO	NYO	FR 52	0
FR 805	655	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	NOC	NOC	FR 9274	1
FR 3632	655	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BRE	BRE	FR 3631	0
FR 902	655	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	ORK	ORK	FR 901	0
FR 967	700	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GOT	GOT	FR 966	0
LS 1529	700	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PMI	PMI	LS 1452	1
FR 195	705	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BLQ	BLQ	FR 194	0
FR 585	705	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PSA	PSA	FR 584	0
FR 1013	705	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PRG	PRG	FR 1014	0
FR 4192	705	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BGY	BGY	FR 4191	0
FR 8354	705	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BUD	BUD	FR 8353	0
LS 101 X	710	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NCE	NCE	LS 100 X	0
FR 1006	710	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	OTP	OTP	FR 1005	0
FR 4966	710	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SUF	SUF	FR 288	1
FR 8406	710	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WRO	WRO	FR 8405	0
FR 9272	710	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	EIN	EIN	FR 9271	0
FR 205	715	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 202	0
FR 1218	715	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FRA	FRA		0
LS 1439	715	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FAO	FAO	LS 1664	1
FR 3005	715	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	CIA	CIA	FR 3002	0
FR 9810	715	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9811	0
FR 901	720	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ORK	ORK	FR 902	0
FR 2433	720	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KRK	KRK	FR 2432	0
FR 8728	720	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MXP	MXP	FR 8729	0
FR 101 W	725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ALC	ALC	FR 105 W	1
LS 208 W	725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GRO	GRO	LS 211 W	1
FR 966	725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GOT	GOT	FR 967	0
LS 2614S	725	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	GRO	GRO	LS 2613S	0

FR 5994	725	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	MAD	MAD	FR 5993	0
GR 100 X	725	11-Aug-17	11-Aug-17	A	....5..	AT7	72	CTA	1	J	GCI	GCI	GR 101 X	0
FR 14	730	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ATH	ATH	FR 15	0
FR 52	730	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NYO	NYO	FR 53	0
FR 138 W	730	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MXP	MXP	FR 139 W	0
AC 671 W	730	11-Aug-17	11-Aug-17	A	....5..	788	251	1I	1	J	YUL	YUL	AC 672 W	0
LS 1457	730	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	GRO	GRO	LS 1450	1
FR 2314	730	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BTS	BTS	FR 2315	0
TOM5504	730	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	C	CFU	CFU	TOM5421	0
FR 8353	730	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BUD	BUD	FR 8354	0
FR 2862	735	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	BFS	BFS		0
FR 8405	735	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WRO	WRO	FR 8406	0
FR 9271	735	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	EIN	EIN	FR 9272	0
FR 102	735	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	SNN	SNN	FR 103	0
LS 305 W	740	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FUE	FUE	LS 308 W	1
FR 1005	740	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OTP	OTP	FR 1006	0
FR 8882	745	11-Aug-17	11-Aug-17	A	....5..	73H	189	1D	1	J	EDI	EDI	FR 8881	0
FR 194	745	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BLQ	BLQ	FR 195	0
FR 584	745	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PSA	PSA	FR 585	0
LS 1441	745	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	REU	REU	LS 1482	1
FR 2432	745	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KRK	KRK	FR 2433	0
FR 3002	745	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	CIA	CIA	FR 3005	0
LS 4001	745	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	MJV	MJV	LS 1432	1
FR 8729	745	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MXP	MXP	FR 8728	0
FR 7491	750	11-Aug-17	11-Aug-17	A	....5..	73H	189	1D	1	J	GLA	GLA	FR 7492	0
FR 100 V	750	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GVA	GVA	FR 101 V	0
FR 562	750	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	NAP	NAP		0
FR 1022	750	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WMI	WMI	FR 1021	0
LS 106 Y	755	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MUC	MUC	LS 107 Y	0
FR 139 W	755	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TLL	TLL	FR 138 W	0
FR 15	800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ATH	ATH	FR 14	0
EW 100 X	800	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	TXL	TXL	EW 101 X	0
GR 101 X	800	11-Aug-17	11-Aug-17	D	....5..	AT7	72	1I	1	J	GCI	GCI	GR 100 X	0
FR 103	800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SNN	SNN	FR 102	0
FR 106 S	800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BVE	BVE	FR 107 S	0
LS 106 X	800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SOF	SOF	LS 107 X	0
FR 118 W	800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BCN	BCN	FR 119 W	0
FR 132 W	800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BRE	BRE	FR 133 W	0
FR 201 X	800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PSA	PSA	FR 202 X	0
EZY905 W	800	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	JER	JER		0
EW 2373	800	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	STR	STR	EW 2372	0
FR 4976	800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BDS	BDS	FR 7497	1
FR 8344	800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	OPO	OPO	FR 8343	0
EZY8967W	800	11-Aug-17	11-Aug-17	A	....5..	32A	186	CTA	1	J	IOM	IOM	EZY8968W	0
FR 7492	815	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	GLA	GLA	FR 7491	0
FR 8881	815	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	EDI	EDI	FR 8882	0
FR 101 V	815	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GVA	GVA	FR 100 V	0
FR 1885	820	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LIS	LIS	FR 1884	0
FR 107 S	825	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BVE	BVE	FR 106 S	0
FR 119 W	825	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TLS	TLS	FR 118 W	0
FR 133 W	825	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LPA	LPA	FR 132 W	0
FR 8343	825	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OPO	OPO	FR 8344	0
FR 102 T	830	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 103 T	0
LS 132 X	830	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AGP	AGP	LS 131 X	1
FR 202 X	830	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LIS	LIS	FR 201 X	0
PF 230 Y	830	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	BOS	BOS	PF 231 Y	0
FR 304	830	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SZG	SZG	FR 9543	1
FR 1021	830	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WMI	WMI	FR 1022	0
CV 713	830	11-Aug-17	11-Aug-17	A	....5..	74Y	0	FRT	1	F	NBO	NBO	CV 713	0
FR 106 W	835	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NUE	NUE	FR 107 W	0
EZY8968W	835	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	IOM	IOM	EZY8967W	0
EW 101 X	840	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	TXL	TXL	EW 100 X	0
FR 123 W	840	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SXF	SXF	FR 124 W	0
FR 206	840	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 2371	0
BE 102 X	845	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1I	1	J	CFR	CFR	BE 103 X	0
B6 127 V	845	11-Aug-17	11-Aug-17	A	....5..	32B	206	1I	1	J	BOS	BOS	B6 128 V	0
FR 128 S	845	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ORY	ORY	FR 129 S	0
FR 1884	845	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LIS	LIS	FR 1885	0
EZY3002	850	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	AMS	AMS	EZY3203	0
FR 103 T	855	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 102 T	0

LS 107 Y	855	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MUC	MUC	LS 106 Y	0
B6 131 W	855	11-Aug-17	11-Aug-17	A	....5..	32B	206	1I	1	J	JFK	JFK	B6 132 W	0
FR 100 U	900	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MUC	MUC	FR 101 U	0
FR 107 W	900	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RJK	RJK	FR 106 W	0
LS 107 X	900	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SOF	SOF	LS 106 X	0
FR 110 V	900	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TLV	TLV	FR 111 V	0
FR 210 X	900	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MAD	MAD	FR 211 X	0
FR 9400	900	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NYO	NYO	FR 9401	0
FR 124 W	905	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KIR	KIR	FR 123 W	0
FR 2371	905	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 206	0
FR 112 W	910	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ZAD	ZAD	FR 113 W	0
BE 119 X	910	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1I	1	J	AMS	AMS	BE 120 X	0
FR 129 S	910	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ORY	ORY	FR 128 S	0
WX 199 W	910	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	CDG	CDG	WX 200 W	0
PF 234 Y	910	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	YYZ	YYZ	PF 235 Y	0
EZY8970W	910	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	MAD	MAD	EZY8971W	0
FR 116 S	915	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RTM	RTM	FR 117 S	0
AC 298 U	920	11-Aug-17	11-Aug-17	A	....5..	788	251	1I	1	J	YYZ	YYZ	AC 299 U	0
EZY3203	920	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	CAG	CAG	EZY3002	0
FR 101 U	925	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MUC	MUC	FR 100 U	0
FR 111 V	925	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TLV	TLV	FR 110 V	0
FR 9401	925	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NYO	NYO	FR 9400	0
BE 103 X	930	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1I	1	J	CFR	CFR	BE 102 X	0
FR 128 W	930	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	OPO	OPO	FR 129 W	0
FR 211 X	930	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ACE	ACE	FR 210 X	0
PF 236 Y	930	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	BOS	BOS	PF 237 Y	0
FR 9200	930	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	WAW	WAW	FR 9201	0
FR 113 W	935	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RBA	RBA	FR 112 W	0
EW 908 W	935	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	HAJ	HAJ	EW 909 W	0
BE 100 X	940	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1D	1	J	GLA	GLA	BE 101 X	0
FR 117 S	940	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RTM	RTM	FR 116 S	0
WX 200 W	945	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	CDG	CDG	WX 199 W	0
FR 223	945	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AMS	AMS		0
MT 1749	945	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	MAH	MAH	MT 1284	0
FR 2375	945	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GDN	GDN	FR 2374	0
EZY8971W	945	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	MAD	MAD	EZY8970W	0
BE 120 X	955	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1I	1	J	DUS	DUS	BE 119 X	0
FR 129 W	955	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BRQ	BRQ	FR 128 W	0
FR 793	955	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TSF	TSF	FR 2468	0
FR 5173	955	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BLL	BLL	FR 8366	0
FR 7974	955	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BSL	BSL	FR 32	0
FR 8543	955	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SXF	SXF	FR 2336	0
FR 9201	955	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	WAW	WAW	FR 9200	0
ZT 101	1000	11-Aug-17	11-Aug-17	D	....5..	733	130	1I	1	C	LDE	LDE	ZT 2109	2
FR 106 V	1000	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CLY	CLY	FR 107 V	0
B6 128 V	1000	11-Aug-17	11-Aug-17	D	....5..	32B	206	1I	1	J	BOS	BOS	B6 127 V	0
PF 238 Y	1000	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	YYZ	YYZ	PF 239 Y	0
EZY906 W	1000	11-Aug-17	11-Aug-17	A	....5..	32A	186	CTA	1	J	JER	JER	EZY907 W	0
CV 713	1000	11-Aug-17	11-Aug-17	D	....5..	74Y	0	FRT	1	F	LUX	LUX	CV 713	0
PF 223 Y	1005	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	EWR	EWR	PF 224 Y	0
B6 132 W	1010	11-Aug-17	11-Aug-17	D	....5..	32B	206	1I	1	J	JFK	JFK	B6 131 W	0
EW 909 W	1010	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	HAJ	HAJ	EW 908 W	0
FR 2374	1010	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GDN	GDN	FR 2375	0
FR 8593	1010	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	EGC	EGC	FR 1886	0
FR 465	1015	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TRN	TRN	FR 9542	0
FR 1783	1015	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BOD	BOD	FR 682	0
FR 296	1020	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TLS	TLS	FR 8445	0
FR 2336	1020	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	POZ	POZ	FR 8543	0
EZY3226	1020	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	BIO	BIO	EZY3067	0
FR 8266	1020	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KTW	KTW	FR 75	1
FR 8366	1020	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	AGP	AGP	FR 5173	0
FR 806	1020	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	NOC	NOC	FR 8746	0
BE 101 X	1025	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1D	1	J	GLA	GLA	BE 100 X	0
FR 107 V	1025	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CLY	CLY	FR 106 V	0
FR 712	1025	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AAR	AAR	FR 8993	1
PC 1181W	1025	11-Aug-17	11-Aug-17	A	....5..	738	189	1I	1	J	AYT	AYT	PC 1182W	0
FR 144 W	1030	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GOT	GOT	FR 145 W	0
EZY907 W	1030	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	CDG	CDG	EZY906 W	0
FR 2463	1030	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BZG	BZG	FR 2281	0
FR 1397	1035	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	OSL	OSL	FR 9802	0

FR 1886	1035	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LIS	LIS	FR 8593	0
EZY3044	1035	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	IBZ	IBZ	EZY255	0
FR 32	1040	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	TRF	TRF	FR 7974	0
TK 100 X	1040	11-Aug-17	11-Aug-17	A	....5..	73H	165	1I	1	J	ANK	ANK	TK 101 X	0
FR 125	1040	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AOI	AOI	FR 514	0
FR 682	1040	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	VST	VST	FR 1783	0
FR 1372	1040	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BIQ	BIQ	FR 983	1
EZY3104	1040	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	NCE	NCE	EZY3003	0
FR 3842	1040	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	REU	REU	FR 9525	1
FR 4542	1040	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	VRN	VRN	FR 8776	0
FR 124 S	1045	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KEF	KEF	FR 125 S	0
FR 305	1045	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SZG	SZG	FR 972	0
FR 8379	1045	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SCQ	SCQ	FR 8378	0
FR 8401	1045	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	EGC	EGC	FR 8363	0
FR 8445	1045	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BUD	BUD	FR 296	0
FR 8746	1045	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LRH	LRH	FR 806	0
FR 9542	1045	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FAO	FAO	FR 465	0
CJ 101 Y	1050	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	TXL	TXL	CJ 102 Y	0
FR 145 W	1055	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	HAM	HAM	FR 144 W	0
AC 299 U	1055	11-Aug-17	11-Aug-17	D	....5..	788	251	1I	1	J	YYZ	YYZ	AC 298 U	0
FR 798 X	1055	11-Aug-17	11-Aug-17	A	....5..	7M9	200	1I	1	J	LCJ	LCJ	FR 799 X	0
FR 2281	1055	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WMI	WMI	FR 2463	0
FR 2468	1055	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LCJ	LCJ	FR 793	0
EZY3067	1055	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	PRG	PRG	EZY3226	0
FR 2863	1100	11-Aug-17	11-Aug-17	A	....5..	73H	189	1D	1	J	BFS	BFS		0
FR 100 S	1100	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGA	AGA	FR 101 S	0
MT 1284	1100	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	TFS	TFS	MT 1749	0
EZY3250	1100	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	NAP	NAP	EZY3071	0
FR 9802	1100	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GRO	GRO	FR 1397	0
FR 8884	1105	11-Aug-17	11-Aug-17	A	....5..	73H	189	1D	1	J	EDI	EDI	FR 8883	0
PC 1178W	1105	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SAW	SAW	PC 1179W	0
FR 2673	1105	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CIA	CIA	FR 794	0
FR 5991	1105	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MAD	MAD	FR 2434	0
FR 8776	1105	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	LIG	LIG	FR 4542	0
FR 125 S	1110	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KEF	KEF	FR 124 S	0
FR 972	1110	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GOA	GOA	FR 305	0
EZY3003	1110	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	AMS	AMS	EZY3104	0
FR 8378	1110	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SCQ	SCQ	FR 8379	0
EZY255	1115	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	BFS	BFS	EZY3044	0
WW 120 T	1115	11-Aug-17	11-Aug-17	A	....5..	32B	200	1I	1	J	KEF	KEF	WW 121 T	0
EW 910 W	1115	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	MUC	MUC	EW 911 W	0
WX 100 X	1120	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	NTE	NTE	WX 101 X	0
FR 7966	1120	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	OSI	OSI		0
FR 9045	1120	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9044	0
FR 101 S	1125	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AGA	AGA	FR 100 S	0
FR 799 X	1125	11-Aug-17	11-Aug-17	D	....5..	7M9	200	1I	1	J	LCJ	LCJ	FR 798 X	0
PC 1182W	1125	11-Aug-17	11-Aug-17	D	....5..	738	189	1I	1	J	AYT	AYT	PC 1181W	0
FR 8363	1125	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SVQ	SVQ	FR 8401	0
FR 8883	1130	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	EDI	EDI	FR 8884	0
FR 120 S	1130	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KGS	KGS	FR 121 S	0
FR 514	1130	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DNR	DNR	FR 125	0
EZY3026	1130	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	DBV	DBV	EZY3245	0
KK 6003	1130	11-Aug-17	11-Aug-17	A	....5..	321	204	1I	1	J	IST	IST	KK 6004	0
FR 8383	1135	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ALC	ALC	FR 1788	0
EK 55 W	1140	11-Aug-17	11-Aug-17	A	....5..	388	615	1I	1	J	DXB	DXB	EK 56 W	0
EK 67 U	1140	11-Aug-17	11-Aug-17	D	....5..	77W	354	1I	1	J	DXB	DXB	EK 65 S	0
TK 101 X	1140	11-Aug-17	11-Aug-17	D	....5..	73H	165	1I	1	J	ANK	ANK	TK 100 X	0
LS 104 X	1140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SPU	SPU	LS 105 X	0
LS 105 T	1140	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PMI	PMI	LS 106 T	0
PC 1181	1140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SAW	SAW	PC 1182	0
FR 9773	1140	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FKB	FKB	FR 9772	0
BE 1828W	1145	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1D	1	J	EDI	EDI	BE 1829W	0
FR 796 X	1145	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGP	AGP	FR 797 X	0
PC 1179W	1145	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SAW	SAW	PC 1178W	0
FR 1219	1145	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FRA	FRA		0
FR 9044	1145	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9045	0
BE 1824	1150	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1D	1	J	NQY	NQY	BE 1825	0
CJ 102 Y	1150	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	DUS	DUS	CJ 101 Y	0
LS 314 W	1150	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	REU	REU	LS 315 W	0
LS 1412	1150	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	ALC	ALC	LS 1495	0

FR 8322	1150	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	VLC	VLC	FR 8386	0
WX 101 X	1155	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	NTE	NTE	WX 100 X	0
FR 121 S	1155	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KGS	KGS	FR 120 S	0
EW 911 W	1155	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	MUC	MUC	EW 910 W	0
FR 2224	1155	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TLL	TLL	FR 522	0
FR 1788	1200	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DTM	DTM	FR 8383	0
FR 2434	1200	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	KRK	KRK	FR 5991	0
FR 3073	1200	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3072	0
FR 4199	1200	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BGY	BGY	FR 4194	0
FR 4555	1200	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	LIS	LIS	FR 4556	0
FR 4953	1200	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PEG	PEG	FR 72	0
FR 104 U	1205	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GIB	GIB	FR 105 U	0
FR 1203	1205	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMI	PMI	FR 9253	0
EZY3245	1205	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	LJU	LJU	EZY3026	0
FR 9772	1205	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FKB	FKB	FR 9773	0
LS 108 Y	1210	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	IBZ	IBZ	LS 109 Y	0
LS 302 W	1210	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ALC	ALC	LS 303 W	0
FR 794	1210	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TSF	TSF	FR 2673	0
FR 8352	1210	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	LEI	LEI	FR 8474	0
WW 121 T	1215	11-Aug-17	11-Aug-17	D	....5..	32B	200	1I	1	J	KEF	KEF	WW 120 T	0
EZY3071	1215	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	MUC	MUC	EZY3250	0
FR 8397	1215	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	XRY	XRY	FR 6543	0
FR 2272	1215	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 701	0
FR 8030	1215	11-Aug-17	11-Aug-17	A	....5..	73H	189	CTA	1	J	DUB	DUB	FR 225	0
FR 119 W	1220	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TLS	TLS	FR 120 W	0
PC 1182	1220	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SAW	SAW	PC 1181	0
FR 8025	1220	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MJV	MJV	FR 372	0
FR 9143	1220	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FAO	FAO		0
LS 1406	1225	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	AGP	AGP	LS 1507	0
FR 3072	1225	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3073	0
FR 4556	1225	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	LIS	LIS	FR 4555	0
TOM5517	1225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	C	MAH	MAH	TOM5552	0
FR 9962	1225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SOF	SOF	FR 8403	0
BE 1829W	1230	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1D	1	J	EDI	EDI	BE 1828W	0
FR 100 T	1230	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FNC	FNC	FR 101 T	0
FR 105 U	1230	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GIB	GIB	FR 104 U	0
FR 9253	1230	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	IBZ	IBZ	FR 1203	0
FR 124 W	1230	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	KIR	KIR	FR 125 W	0
BE 1825	1235	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1D	1	J	NQY	NQY	BE 1824	0
LS 1458	1235	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	GRO	GRO	LS 1451	0
KK 6004	1235	11-Aug-17	11-Aug-17	D	....5..	321	204	1I	1	J	IST	IST	KK 6003	0
FR 8386	1235	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PMI	PMI	FR 8322	0
LS 209 W	1240	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	GRO	GRO	LS 210 W	0
FR 225	1240	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	DUB	DUB	FR 8030	0
LS 1530	1240	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PMI	PMI	LS 1663	0
FR 4194	1240	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BGY	BGY	FR 4199	0
FR 120 W	1245	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ARN	ARN	FR 119 W	0
FR 130 S	1245	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ORY	ORY	FR 131 S	0
FR 797 X	1245	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AGP	AGP	FR 796 X	0
LS 2518S	1245	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	ALC	ALC	LS 2519S	0
EZY234	1250	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	EDI	EDI	EZY233	0
LS 315 W	1250	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ZTH	ZTH	LS 314 W	0
9U 833 Y	1250	11-Aug-17	11-Aug-17	A	....5..	320	170	1I	1	J	KIV	KIV	9U 834 Y	0
LS 1495	1250	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	KGS	KGS	LS 1412	0
FR 6543	1250	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MRS	MRS	FR 8397	0
FR 8403	1250	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BRQ	BRQ	FR 9962	0
FR 101 T	1255	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FNC	FNC	FR 100 T	0
FR 125 W	1255	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GDN	GDN	FR 124 W	0
LS 1442	1255	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	REU	REU	LS 1445	0
FR 8163	1255	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGP	AGP	FR 807	0
LS 117 U	1300	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	CFU	CFU	LS 118 U	0
AC 672 W	1300	11-Aug-17	11-Aug-17	D	....5..	788	251	1I	1	J	YUL	YUL	AC 671 W	0
LS 990 S	1300	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PXO	PXO	LS 991 S	0
FR 372	1305	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BIQ	BIQ	FR 8025	0
FR 3557	1305	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RAK	RAK	FR 2669	0
FR 8474	1305	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PIS	PIS	FR 8352	0
EZY208	1310	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	GLA	GLA	EZY209	0
FR 72	1310	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	CCF	CCF	FR 4953	0
LS 106 T	1310	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	LCA	LCA	LS 105 T	0
LS 109 Y	1310	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	IBZ	IBZ	LS 108 Y	0

FR 131 S	1310	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ORY	ORY	FR 130 S	0
FR 522	1310	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LDE	LDE	FR 2224	0
FR 701	1310	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KIR	KIR	FR 2272	0
LS 2615S	1310	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	GRO	GRO	LS 2616S	0
FR 101 W	1315	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ALC	ALC	FR 102 W	0
FR 102 V	1315	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GVA	GVA	FR 103 V	0
LS 105 X	1315	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SPU	SPU	LS 104 X	0
LS 303 W	1315	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AYT	AYT	LS 302 W	0
MT 1945	1315	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	ALC	ALC	MT 778	0
EW 5832	1315	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	VIE	VIE	EW 5833	0
EZY233	1320	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	EDI	EDI	EZY234	0
FR 587	1320	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PSA	PSA	FR 586	0
FR 104 T	1325	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 105 T	0
EZY908 W	1325	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	CDG	CDG	EZY909 W	0
LS 1507	1325	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ACE	ACE	LS 1406	0
FR 108 W	1330	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RJK	RJK	FR 109 W	0
LS 110 X	1330	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PSA	PSA	LS 111 X	0
LS 2519S	1330	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	TFS	TFS	LS 2518S	0
FR 4977	1330	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BDS	BDS	FR 1836	0
EK 56 W	1335	11-Aug-17	11-Aug-17	D	....5..	388	615	1I	1	J	DXB	DXB	EK 55 W	0
FR 563	1335	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	NAP	NAP		0
FR 2669	1335	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WMI	WMI	FR 3557	0
EZY209	1340	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	GLA	GLA	EZY208	0
FR 103 V	1340	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GVA	GVA	FR 102 V	0
FR 110 S	1340	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FEZ	FEZ	FR 111 S	0
9U 834 Y	1340	11-Aug-17	11-Aug-17	D	....5..	320	170	1I	1	J	KIV	KIV	9U 833 Y	0
LS 991 S	1340	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PXO	PXO	LS 990 S	0
LS 1451	1340	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FUE	FUE	LS 1458	0
LS 1663	1340	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	TFS	TFS	LS 1530	0
FR 102 W	1345	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	INV	INV	FR 101 W	0
LS 210 W	1345	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BOJ	BOJ	LS 209 W	0
FR 586	1345	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PSA	PSA	FR 587	0
LS 1440	1345	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FAO	FAO	LS 4003	0
EZY3004	1345	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	AMS	AMS	EZY3083	0
LS 4002	1345	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MJV	MJV	LS 1473	0
FR 4967	1345	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	SUF	SUF	FR 8584	0
FR 105 T	1350	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 104 T	0
TOM5552	1350	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	C	TFS	TFS	TOM5517	0
FR 109 W	1355	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OSR	OSR	FR 108 W	0
EZY909 W	1355	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	JER	JER	EZY908 W	0
EW 5833	1355	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	VIE	VIE	EW 5832	0
GR 626	1355	11-Aug-17	11-Aug-17	A	....5..	AT7	72	CTA	1	J	GCI	GCI	GR 627	0
FR 456	1400	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	EDI	EDI	FR 457	0
FR 102 S	1400	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AHO	AHO	FR 103 S	0
BE 122 X	1400	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1I	1	J	DUS	DUS	BE 123 X	0
LS 871 U	1400	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	SPC	SPC	LS 872 U	0
LS 1445	1400	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FNC	FNC	LS 1442	0
FR 111 S	1405	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	FEZ	FEZ	FR 110 S	0
FR 5995	1405	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MAD	MAD	FR 5996	0
EZY254	1410	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	BFS	BFS	EZY261	0
LS 205 W	1410	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	KLX	KLX	LS 206 W	0
FR 713	1410	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AAR	AAR	FR 287	0
MT 1079	1410	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	JSI	JSI	MT 504	0
FR 1836	1410	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PDV	PDV	FR 4977	0
LS 2616S	1410	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	RHO	RHO	LS 2615S	0
FR 8584	1410	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	RHO	RHO	FR 4967	0
FR 146 W	1415	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	HAM	HAM	FR 147 W	0
LS 213 W	1415	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MLA	MLA	LS 214 W	0
LS 310 W	1415	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MLA	MLA	LS 311 W	0
FR 807	1415	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NOC	NOC	FR 8163	0
FR 8747	1415	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LRH	LRH	FR 3918	0
FR 139 W	1420	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TLL	TLL	FR 140 W	0
FR 515	1420	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	DNR	DNR	FR 2466	0
FR 457	1425	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	EDI	EDI	FR 456	0
FR 103 S	1425	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AHO	AHO	FR 102 S	0
GR 627	1425	11-Aug-17	11-Aug-17	D	....5..	AT7	72	1I	1	J	GCI	GCI	GR 626	0
EZY3083	1425	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	OVD	OVD	EZY3004	0
FR 7609	1425	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	CHQ	CHQ	FR 3071	0
FR 9202	1425	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	POZ	POZ	FR 9203	0
FR 102 U	1430	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MUC	MUC	FR 103 U	0

LS 111 X	1430	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PSA	PSA	LS 110 X	0
LS 118 U	1430	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	CFU	CFU	LS 117 U	0
FR 5996	1430	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	MAD	MAD	FR 5995	0
FR 9015	1430	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9014	0
FR 4195	1435	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BGY	BGY	FR 4196	0
FR 6542	1435	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MRS	MRS	FR 7498	0
EZY261	1440	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	BFS	BFS	EZY254	0
LS 110 Y	1440	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ALC	ALC	LS 111 Y	0
FR 129 W	1440	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BRQ	BRQ	FR 130 W	0
FR 147 W	1440	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SCQ	SCQ	FR 146 W	0
LS 872 U	1440	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	SPC	SPC	LS 871 U	0
EW 2372W	1440	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	STR	STR	EW 2373W	0
TOM5505	1440	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	C	CFU	CFU	TOM5510	0
EZY238	1445	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	EDI	EDI	EZY237	0
BE 123 X	1445	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1I	1	J	MXP	MXP	BE 122 X	0
FR 140 W	1445	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DNR	DNR	FR 139 W	0
FR 3015	1445	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3014	0
LS 4003	1445	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	CFU	CFU	LS 1440	0
FR 8133	1445	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LPA	LPA	FR 9251	0
FR 8167	1445	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TFS	TFS	FR 9967	0
FR 2466	1450	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SZZ	SZZ	FR 515	0
FR 8777	1450	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LIG	LIG	FR 8771	0
FR 9203	1450	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	POZ	POZ	FR 9202	0
FR 103 U	1455	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MUC	MUC	FR 102 U	0
4U 358	1455	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	CGN	CGN	4U 359	0
LS 1473	1455	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	IBZ	IBZ	LS 4002	0
FR 2337	1455	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	POZ	POZ	FR 8582	0
FR 7498	1500	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	GLA	GLA	FR 6542	0
FR 33	1500	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TRF	TRF	FR 286	1
LS 201 W	1500	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	AYT	AYT	LS 202 W	0
FR 1373	1500	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BIQ	BIQ	FR 8978	0
FR 4196	1500	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BGY	BGY	FR 4195	0
FR 2684	1505	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	EDI	EDI	FR 2685	0
FR 1789	1505	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	DTM	DTM	FR 2612	0
EZY3068	1505	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	PRG	PRG	EZY3005	0
MT 778	1510	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	DLM	DLM	MT 1945	0
FR 3014	1510	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CIA	CIA	FR 3015	0
EZY3156	1510	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	DLM	DLM	EZY3251	0
EZY3204	1510	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	CAG	CAG	EZY259	0
FR 8289	1510	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	ACE	ACE	FR 8853	0
FR 9014	1510	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9015	0
FR 114 V	1515	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	MAN	MAN	FR 115 V	0
EZY237	1515	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	EDI	EDI	EZY238	0
FR 130 W	1515	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMI	PMI	FR 129 W	0
LS 141 X	1515	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGP	AGP	LS 142 X	0
LS 206 W	1515	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	LEI	LEI	LS 205 W	0
LS 214 W	1515	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ADB	ADB	LS 213 W	0
LS 311 W	1515	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	AGP	AGP	LS 310 W	0
ZT 102	1520	11-Aug-17	11-Aug-17	A	....5..	733	130	1I	1	C	LDE	LDE	ZT 171	2
FR 8267	1520	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KTW	KTW	FR 1394	0
FR 8771	1520	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DOL	DOL	FR 8777	0
AJK2604	1520	11-Aug-17	11-Aug-17	A	....5..	M1F	0	FRT	1	F	NBO	NBO	AJK2604	0
PF 235 Y	1525	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	YYZ	YYZ	PF 234 Y	0
FR 9967	1525	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SOF	SOF	FR 8167	0
FR 909	1525	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	ORK	ORK	FR 908	0
FR 2685	1530	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	EDI	EDI	FR 2684	0
LS 102 X	1530	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LCA	LCA	LS 103 X	0
4U 359	1530	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	CGN	CGN	4U 358	0
GTI909 W	1530	11-Aug-17	11-Aug-17	A	....5..	74F	0	FRT	1	F	DFW	DFW	GTI910 W	0
FR 3843	1535	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	REU	REU	FR 2644	0
FR 115 V	1540	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	MAN	MAN	FR 114 V	0
LS 111 Y	1540	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ALC	ALC	LS 110 Y	0
FR 683	1540	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	VST	VST	FR 297	0
FR 8582	1540	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SKG	SKG	FR 2337	0
FR 8853	1540	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	MLA	MLA	FR 8289	0
EZY3005	1545	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	AMS	AMS	EZY3068	0
FR 3071	1545	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	CIY	CIY	FR 7609	0
FR 9803	1545	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	GRO	GRO	FR 1882	0
BE 100 Y	1550	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1D	1	J	GLA	GLA	BE 101 Y	0
FR 908	1550	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ORK	ORK	FR 909	0

FR 973	1550	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GOA	GOA	FR 8164	0
FR 8978	1550	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ALC	ALC	FR 1373	0
FR 294	1550	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 1905	0
EZY212	1555	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	GLA	GLA	EZY213	0
EZY259	1555	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	BFS	BFS	EZY3204	0
FR 1394	1555	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OSL	OSL	FR 8267	0
FR 2469	1555	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LCJ	LCJ	FR 8028	0
TOM5510	1555	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	C	IBZ	IBZ	TOM5505	0
FR 121 S	1600	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PDL	PDL	FR 122 S	0
LS 202 W	1600	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	SPU	SPU	LS 201 W	0
EW 2373W	1600	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	STR	STR	EW 2372W	0
FR 2644	1600	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RIX	RIX	FR 3843	0
FR 8028	1600	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MJV	MJV	FR 2469	0
FR 297	1605	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 683	0
FR 2282	1605	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WMI	WMI	FR 2283	0
LS 318 W	1610	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BJV	BJV	LS 319 W	0
FR 3918	1610	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMO	PMO	FR 8747	0
FR 8446	1610	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BUD	BUD	FR 8371	0
FR 8992	1610	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FRA	FRA		0
LS 142 X	1615	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LPA	LPA	LS 141 X	0
PF 231 Y	1615	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	BOS	BOS	PF 230 Y	0
EZY3251	1615	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	NAP	NAP	EZY3156	0
BE 101 Y	1625	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1D	1	J	GLA	GLA	BE 100 Y	0
EZY213	1625	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	GLA	GLA	EZY212	0
FR 122 S	1625	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PDL	PDL	FR 121 S	0
PC 1185W	1625	11-Aug-17	11-Aug-17	A	....5..	738	189	1I	1	J	ADB	ADB	PC 1186W	0
EZY3072	1625	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	MUC	MUC	EZY241	0
FR 3132	1625	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PFO	PFO	FR 3131	0
FR 8164	1625	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AGP	AGP	FR 973	0
FR 8975	1625	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	ALC	ALC	FR 8976	0
FR 9251	1625	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	IBZ	IBZ	FR 8133	0
EZY910 W	1625	11-Aug-17	11-Aug-17	A	....5..	32A	186	CTA	1	J	JER	JER	EZY911 W	0
LS 103 X	1630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LCA	LCA	LS 102 X	0
FR 114 W	1630	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RBA	RBA	FR 115 W	0
FR 775 X	1630	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AMS	AMS	FR 776 X	0
FR 1905	1630	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BRI	BRI	FR 294	0
FR 1008	1635	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	OTP	OTP	FR 1007	0
FR 8475	1635	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PIS	PIS	FR 2136	0
FR 702	1635	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	KIR	KIR	FR 2436	0
FR 114 S	1640	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TER	TER	FR 115 S	0
PF 224 Y	1640	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	EWR	EWR	PF 223 Y	0
PF 239 Y	1640	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	YYZ	YYZ	PF 238 Y	0
FR 1882	1640	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	LIS	LIS	FR 9803	0
FR 1887	1640	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LIS	LIS	FR 1222	0
MT 504	1645	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	DLM	DLM	MT 1079	0
FR 795	1645	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TSF	TSF	FR 58	0
LS 306 W	1650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FUE	FUE	LS 307 W	0
FR 3131	1650	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PFO	PFO	FR 3132	0
FR 8365	1650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGP	AGP	FR 8736	0
FR 8976	1650	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	ALC	ALC	FR 8975	0
FR 211	1650	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 212	0
AJK2604	1650	11-Aug-17	11-Aug-17	D	....5..	M1F	0	FRT	1	F	LGG	LGG	AJK2604	0
EZY241	1655	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	EDI	EDI	EZY3072	0
FR 8994	1655	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	BFS	BFS		0
FR 12	1655	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ATH	ATH	FR 11	0
FR 115 W	1655	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	JER	JER	FR 114 W	0
FR 291	1655	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TSR	TSR	FR 292	0
EZY911 W	1655	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	RTM	RTM	EZY910 W	0
FR 555	1700	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LIS	LIS	FR 556	0
FR 776 X	1700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NTE	NTE	FR 775 X	0
FR 1007	1700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OTP	OTP	FR 1008	0
FR 2136	1700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RZE	RZE	FR 8475	0
FR 2283	1700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WMI	WMI	FR 2282	0
FR 2436	1700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KRK	KRK	FR 702	0
FR 2747	1700	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KUN	KUN	FR 2746	0
EZY3246	1700	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	LJU	LJU	EZY3227	0
FR 8371	1700	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BUD	BUD	FR 8446	0
FR 9543	1700	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	FAO	FAO	FR 9273	0
GTI910 W	1700	11-Aug-17	11-Aug-17	D	....5..	74F	0	FRT	1	F	DFW	DFW	GTI909 W	0
FR 115 S	1705	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TER	TER	FR 114 S	0

FR 287	1705	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AMS	AMS	FR 713	0
LS 319 W	1710	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	PMI	PMI	LS 318 W	0
BE 1824A	1715	11-Aug-17	11-Aug-17	A	....5..	DH4	78	1D	1	J	NQY	NQY	BE 1825A	0
FX 2	1715	11-Aug-17	11-Aug-17	A	....5..	77F	0	FRT	1	F	MEM	MEM	FX 1	0
FR 11	1720	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ATH	ATH	FR 12	0
FR 292	1720	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TSR	TSR	FR 291	0
FR 8736	1720	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MXP	MXP	FR 8365	0
FR 58	1725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NYO	NYO	FR 795	0
FR 373	1725	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BIQ	BIQ	FR 2372	0
FR 556	1725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	LIS	LIS	FR 555	0
PC 1186W	1725	11-Aug-17	11-Aug-17	D	....5..	738	189	1I	1	J	ADB	ADB	PC 1185W	0
FR 2435	1725	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KRK	KRK	FR 8182	1
FR 2746	1725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KUN	KUN	FR 2747	0
FR 6544	1725	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MRS	MRS	FR 281	0
FR 9273	1725	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	EIN	EIN	FR 9543	0
FR 9283	1725	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FAO	FAO	FR 9282	0
EZY260	1730	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	BFS	BFS	EZY3115	0
FR 212	1730	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 211	0
PF 237 Y	1730	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	BOS	BOS	PF 236 Y	0
EZY3227	1730	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	BIO	BIO	EZY3246	0
FR 73	1735	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CCF	CCF	FR 7494	0
FR 523	1735	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LDE	LDE	FR 2816	0
FR 1519	1735	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	HAM	HAM	FR 1520	0
FR 8364	1735	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	SVQ	SVQ	FR 2860	0
FR 8404	1735	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BRQ	BRQ	FR 8544	0
BE 1825A	1740	11-Aug-17	11-Aug-17	D	....5..	DH4	78	1D	1	J	NQY	NQY	BE 1824A	0
FR 140 W	1740	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	DNR	DNR	FR 141 W	0
PF 230 Y	1740	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	EWR	EWR		0
FR 1222	1740	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMI	PMI	FR 1887	0
FR 808	1740	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	NOC	NOC	FR 798	0
FR 103 W	1745	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	INV	INV	FR 104 W	0
EK 20 U	1745	11-Aug-17	11-Aug-17	A	....5..	388	615	1I	1	J	DXB	DXB	EK 66 S	0
FR 2612	1745	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SDR	SDR	FR 1789	0
FR 125 W	1750	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GDN	GDN	FR 126 W	0
FR 134 W	1750	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LPA	LPA	FR 135 W	0
FR 281	1750	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	TLS	TLS	FR 6544	0
LS 307 W	1750	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PMI	PMI	LS 306 W	0
FR 2372	1750	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GDN	GDN	FR 373	0
FR 104 V	1755	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GVA	GVA	FR 105 V	0
FR 121 W	1755	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ARN	ARN	FR 122 W	0
FR 146	1755	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SXF	SXF	FR 147	0
FR 7494	1800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	GLA	GLA	FR 73	0
FR 106 U	1800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GIB	GIB	FR 107 U	0
FR 1520	1800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	HAM	HAM	FR 1519	0
FR 2816	1800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CGN	CGN	FR 523	0
FR 8544	1800	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SXF	SXF	FR 8404	0
FR 9510	1800	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 9511	0
FR 7497	1805	11-Aug-17	11-Aug-17	A	....5..	73H	189	1D	1	J	GLA	GLA	FR 8117	0
FR 141 W	1805	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ORK	ORK	FR 140 W	0
FR 798	1805	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TSF	TSF	FR 808	0
FR 2860	1805	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	LUX	LUX	FR 8364	0
FR 8770	1805	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	DOL	DOL	FR 109	0
FR 104 W	1810	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	LBA	LBA	FR 103 W	0
EZY3115	1810	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	AGP	AGP	EZY260	0
FR 8387	1810	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMI	PMI	FR 5178	0
FR 126 W	1815	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	EIN	EIN	FR 125 W	0
FR 135 W	1815	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	AMS	AMS	FR 134 W	0
FR 3003	1815	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	CIA	CIA	FR 3004	0
FR 9282	1815	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	FAO	FAO	FR 9283	0
FR 105 V	1820	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GVA	GVA	FR 104 V	0
FR 147	1820	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SXF	SXF	FR 146	0
EZY3006	1820	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	AMS	AMS	EZY263	0
EW 5830	1820	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	VIE	VIE	EW 5831	0
EZY240	1825	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	EDI	EDI	EZY239	0
FR 107 U	1825	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GIB	GIB	FR 106 U	0
FR 589	1825	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PSA	PSA	FR 588	0
FR 2319	1825	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BTS	BTS	FR 2318	0
FR 9254	1825	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	IBZ	IBZ	FR 3556	1
FR 9511	1825	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 9510	0
LS 108 X	1830	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SOF	SOF	LS 109 X	0

FR 109	1830	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SNN	SNN	FR 8770	0
FR 122 W	1830	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BCN	BCN	FR 121 W	0
FR 5997	1830	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MAD	MAD	FR 5998	0
FR 8117	1830	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	NUE	NUE	FR 7497	0
FR 5178	1835	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BLL	BLL	FR 8387	0
FR 8888	1840	11-Aug-17	11-Aug-17	A	....5..	73H	189	1D	1	J	EDI	EDI	FR 8887	0
FR 212 X	1840	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ACE	ACE	FR 213 X	0
FR 3004	1840	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	CIA	CIA	FR 3003	0
FR 4197	1840	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	BGY	BGY	FR 4198	0
NPT2 V	1840	11-Aug-17	11-Aug-17	A	....5..	73Y	0	FRT	1	M	BFS	BFS	NPT2 W	0
TK 100 V	1845	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	IST	IST	TK 101 V	0
TK 145 W	1845	11-Aug-17	11-Aug-17	A	....5..	73H	165	1I	1	J	IST	IST	TK 146 W	0
FR 1195	1845	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BLQ	BLQ	FR 1194	0
4U 2378	1845	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	STR	STR	4U 2379	0
FR 2670	1845	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WMI	WMI	FR 293	0
4U 3370	1845	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	HAJ	HAJ	4U 3371	0
EZY258	1850	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	BFS	BFS	EZY3047	0
FR 965	1850	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GOT	GOT	FR 964	0
FR 2318	1850	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BTS	BTS	FR 2319	0
EZY3084	1850	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	OVD	OVD	EZY3009	0
EZY239	1855	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	EDI	EDI	EZY240	0
EZY263	1855	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	BFS	BFS	EZY3006	0
4U 356	1855	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	CGN	CGN	4U 357	0
FR 5998	1855	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	MAD	MAD	FR 5997	0
FR 108 V	1900	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CLY	CLY	FR 109 V	0
FR 110 W	1900	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	OSR	OSR	FR 111 W	0
FR 118 S	1900	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RTM	RTM	FR 119 S	0
EW 1752	1900	11-Aug-17	11-Aug-17	A	....5..	32A	180	1I	1	J	MUC	MUC	EW 1753	0
EW 5831	1900	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	VIE	VIE	EW 5830	0
FR 116 W	1900	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	JER	JER	FR 117 W	0
FR 8887	1905	11-Aug-17	11-Aug-17	D	....5..	73H	189	1D	1	J	EDI	EDI	FR 8888	0
FR 588	1905	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PSA	PSA	FR 589	0
FR 2014	1905	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PRG	PRG	FR 2013	0
FR 4198	1905	11-Aug-17	11-Aug-17	D	....5..	73H	189	1I	1	J	BGY	BGY	FR 4197	0
FR 293	1910	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 2670	0
FR 1194	1910	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BLQ	BLQ	FR 1195	0
FR 9815	1910	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9814	0
FR 906	1910	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	ORK	ORK	FR 905	0
FR 213 X	1915	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MAD	MAD	FR 212 X	0
FR 964	1915	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GOT	GOT	FR 965	0
FR 8408	1915	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WRO	WRO	FR 8407	0
FR 288	1915	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 8166	1
4U 2379	1920	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	STR	STR	4U 2378	0
EZY3009	1920	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	AMS	AMS	EZY3084	0
EZY3047	1920	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	IBZ	IBZ	EZY258	0
4U 3371	1920	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	HAJ	HAJ	4U 3370	0
EZY214	1925	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	GLA	GLA	EZY215	0
FR 109 V	1925	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	CLY	CLY	FR 108 V	0
FR 111 W	1925	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	NUE	NUE	FR 110 W	0
FR 117 W	1925	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ZAD	ZAD	FR 116 W	0
FR 119 S	1925	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	RTM	RTM	FR 118 S	0
EZY912 W	1925	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	RTM	RTM		0
LS 109 X	1930	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SOF	SOF	LS 108 X	0
4U 357	1930	11-Aug-17	11-Aug-17	D	....5..	319	156	1I	1	J	CGN	CGN	4U 356	0
FR 2013	1930	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	PRG	PRG	FR 2014	0
FR 8348	1930	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	OPO	OPO	FR 8347	0
EZY8975W	1930	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	MAD	MAD	EZY8976W	0
FR 905	1935	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ORK	ORK	FR 906	0
FR 9814	1935	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BCN	BCN	FR 9815	0
FR 148 W	1940	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SCQ	SCQ	FR 149 W	0
EW 1753	1940	11-Aug-17	11-Aug-17	D	....5..	32A	180	1I	1	J	MUC	MUC	EW 1752	0
FR 8407	1940	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	WRO	WRO	FR 8408	0
NPT2 W	1940	11-Aug-17	11-Aug-17	D	....5..	73Y	0	FRT	1	M	BFS	BFS	NPT2 V	0
TK 101 V	1945	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	IST	IST	TK 100 V	0
FR 106 T	1945	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 107 T	0
TK 146 W	1945	11-Aug-17	11-Aug-17	D	....5..	73H	165	1I	1	J	IST	IST	TK 145 W	0
UPS235	1945	11-Aug-17	11-Aug-17	A	....5..	76V	0	FRT	1	F	EWR	EWR	UPS235	0
FX 1	1950	11-Aug-17	11-Aug-17	D	....5..	77F	0	FRT	1	F	MEM	MEM	FX 2	0
EZY215	1955	11-Aug-17	11-Aug-17	D	....5..	32A	186	1D	1	J	GLA	GLA	EZY214	0
EZY242	1955	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	EDI	EDI	EZY3215	0

FR 8347	1955	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OPO	OPO	FR 8348	0
FR 8824	2000	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	EDI	EDI	FR 8823	0
FR 112 V	2000	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TLV	TLV	FR 113 V	0
FR 778 X	2000	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NTE	NTE	FR 779 X	0
BCS2113W	2000	11-Aug-17	11-Aug-17	D	....5..	33X	0	FRT	1	H	LEJ	LEJ		0
FR 149 W	2005	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	GOT	GOT	FR 148 W	0
EZY8976W	2005	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	MAD	MAD	EZY8975W	0
FR 107 T	2010	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ZRH	ZRH	FR 106 T	0
FR 126 S	2010	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KEF	KEF	FR 127 S	0
FR 132 S	2010	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ORY	ORY	FR 133 S	0
LS 316 W	2010	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	ZTH	ZTH	LS 313 W	1
ENT100 X	2015	11-Aug-17	11-Aug-17	A	....5..	738	189	1I	1	C	WAW	WAW	ENT101 X	0
P7 2901X	2015	11-Aug-17	11-Aug-17	A	....5..	320	180	1I	1	C	AGP	AGP	P7 2902X	0
FR 9274	2015	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	EIN	EIN	FR 4976	1
FR 105 W	2020	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	LBA	LBA	FR 101 W	1
FR 8995	2020	11-Aug-17	11-Aug-17	A	....5..	73H	189	1D	1	J	BFS	BFS		0
FR 289	2020	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AMS	AMS	FR 3872	1
FR 8823	2025	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1D	1	J	EDI	EDI	FR 8824	0
FR 113 V	2025	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	TLV	TLV	FR 112 V	0
FR 8993	2025	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FRA	FRA		0
FR 779 X	2030	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	HAM	HAM	FR 778 X	0
FR 1395	2030	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	OSL	OSL	FR 792	1
NPT11 L	2030	11-Aug-17	11-Aug-17	D	....5..	73Y	0	FRT	1	M	EDI	EDI	NPT11 M	1
FR 127 S	2035	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	KEF	KEF	FR 126 S	0
FR 130 W	2035	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMI	PMI	FR 131 W	0
FR 133 S	2035	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	ORY	ORY	FR 132 S	0
EK 66 S	2040	11-Aug-17	11-Aug-17	D	....5..	388	615	1I	1	J	DXB	DXB	EK 20 U	0
EZY3215	2040	11-Aug-17	11-Aug-17	D	....5..	32A	186	1I	1	J	PMI	PMI	EZY242	0
FR 272	2040	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 271	0
UPS245	2045	11-Aug-17	11-Aug-17	D	....5..	74F	0	FRT	1	F	CGN	CGN	UPS244	0
FR 126 W	2050	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	EIN	EIN	FR 127 W	0
MT 1285	2050	11-Aug-17	11-Aug-17	A	....5..	32B	220	1I	1	J	TFS	TFS	MT 7334	0
LS 1498	2055	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	IBZ	IBZ	LS 4001	1
ENT101 X	2100	11-Aug-17	11-Aug-17	D	....5..	738	189	1I	1	C	WAW	WAW	ENT100 X	0
FR 131 W	2100	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	OPO	OPO	FR 130 W	0
FR 136 W	2100	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AMS	AMS	FR 137 W	0
P7 2902X	2100	11-Aug-17	11-Aug-17	D	....5..	320	180	1I	1	C	FUE	FUE	P7 2901X	0
BCS2111	2100	11-Aug-17	11-Aug-17	D	....5..	ABF	0	FRT	1	H	LEJ	LEJ		0
FR 271	2105	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	DUB	DUB	FR 272	0
FR 2815	2110	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CGN	CGN	FR 8382	1
FR 7493	2115	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1D	1	J	GLA	GLA	FR 3928	1
FR 127 W	2115	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SXF	SXF	FR 126 W	0
FR 2861	2115	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LUX	LUX	FR 5992	1
NPT9 G	2115	11-Aug-17	11-Aug-17	A	....5..	73Y	0	FRT	1	M	EDI	EDI	NPT9 H	0
FR 142 W	2120	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	ORK	ORK	FR 143 W	0
FR 137 W	2125	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	BRE	BRE	FR 136 W	0
FR 1837	2125	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PDV	PDV	FR 2642	1
FR 8977	2125	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	ALC	ALC	FR 4966	1
CJ 2298	2130	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	TXL	TXL	CJ 2331	1
LS 207 W	2140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LEI	LEI	LS 204 W	1
LS 211 W	2140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BOJ	BOJ	LS 208 W	1
CJ 2342	2140	11-Aug-17	11-Aug-17	A	....5..	319	156	1I	1	J	GVA	GVA	CJ 2291	1
FR 2645	2140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RIX	RIX	FR 124	1
FR 8737	2140	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	MXP	MXP	FR 2672	1
FR 143 W	2145	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	MXP	MXP	FR 142 W	0
3V 28 S	2145	11-Aug-17	11-Aug-17	D	....5..	76X	0	FRT	1	F	LGG	LGG	3V 27 R	0
UPS235	2145	11-Aug-17	11-Aug-17	D	....5..	76V	0	FRT	1	F	CGN	CGN	UPS235	0
EZY262	2150	11-Aug-17	11-Aug-17	A	....5..	32A	186	1D	1	J	BFS	BFS	EZY3021	1
LS 119 U	2150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CFU	CFU	LS 120 U	1
LS 203 W	2150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SPU	SPU	LS 200 W	1
FR 282	2150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TLS	TLS	FR 203	1
EZY3228	2150	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	BIO	BIO	EZY3025	1
FR 108	2150	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	SNN	SNN	FR 8584	1
PC 1163	2155	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SAW	SAW	PC 1164	0
LS 1402	2155	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	ACE	ACE	LS 1411	1
TOM5511	2155	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	C	IBZ	IBZ	TOM5610	1
MT 7334	2155	11-Aug-17	11-Aug-17	D	....5..	32B	220	1I	1	J	PMI	PMI	MT 1285	0
FR 8027	2155	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MJV	MJV	FR 9961	1
EZY3010	2200	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	AMS	AMS	EZY3053	1
FR 2613	2205	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SDR	SDR	FR 936	1

FR 2284	2210	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	WMI	WMI	FR 6541	1
FR 5179	2210	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BLL	BLL	FR 2404	1
FR 9968	2210	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SOF	SOF	FR 464	1
FR 298	2215	11-Aug-17	11-Aug-17	A	....5..	7M8	200	CTA	1	J	DUB	DUB	FR 7963	1
UPS238	2215	11-Aug-17	11-Aug-17	D	....5..	74F	0	FRT	1	F	SDF	SDF	UPS236	0
EZY3252	2220	11-Aug-17	11-Aug-17	A	....5..	32A	186	1I	1	J	NAP	NAP	EZY3001	1
FR 9252	2220	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	IBZ	IBZ	FR 1396	1
FR 59	2225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	NYO	NYO	FR 5172	1
FR 2437	2225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	KRK	KRK	FR 8778	1
FR 2467	2225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SZZ	SZZ	FR 8288	1
FR 8116	2225	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	NUE	NUE	FR 2462	1
FR 8369	2225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BUD	BUD	FR 9524	1
FR 8545	2225	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SXF	SXF	FR 8132	1
LS 304 W	2230	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AYT	AYT	LS 301 W	1
QR 8444	2230	11-Aug-17	11-Aug-17	A	....5..	77X	0	FRT	1	F	DOH	DOH	QR 8444	1
LS 1482	2235	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	KGS	KGS	LS 1405	1
FR 2137	2235	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RZE	RZE	FR 1202	1
FR 799	2240	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	TSF	TSF	FR 8321	1
FR 1906	2240	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	BRI	BRI	FR 805	1
FR 2373	2240	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	GDN	GDN	FR 9142	1
PC 1164	2245	11-Aug-17	11-Aug-17	D	....5..	7M8	200	1I	1	J	SAW	SAW	PC 1163	0
FR 1883	2245	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	LIS	LIS	FR 9253	1
FR 3074	2245	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	CIY	CIY	FR 8162	1
FR 3919	2245	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMO	PMO	FR 1903	1
NPT10 J	2245	11-Aug-17	11-Aug-17	A	....5..	73P	0	FRT	1	M	EDI	EDI	NPT10 K	0
NPT9 H	2250	11-Aug-17	11-Aug-17	D	....5..	73Y	0	FRT	1	M	EDI	EDI	NPT9 G	0
LS 320 W	2255	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PMI	PMI	LS 317 W	1
LS 215 W	2300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	ADB	ADB	LS 212 W	1
LS 1452	2300	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FUE	FUE	LS 1513	1
FR 8165	2300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	AGP	AGP	FR 295	1
FR 8583	2300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	SKG	SKG	FR 9542	1
FR 8585	2300	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	RHO	RHO	FR 8542	1
FR 8852	2300	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	MLA	MLA	FR 304	1
LS 312 W	2305	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	AGP	AGP	LS 309 W	1
NPT2 X	2305	11-Aug-17	11-Aug-17	A	....5..	73Y	0	FRT	1	M	BFS	BFS	NPT2 Y	0
LS 308 W	2310	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	PMI	PMI	LS 305 W	1
FR 1223	2315	11-Aug-17	11-Aug-17	A	....5..	7M8	200	1I	1	J	PMI	PMI	FR 8345	1
LS 1446	2315	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	FNC	FNC	LS 1439	1
LS 1664	2320	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	TFS	TFS	LS 1529	1
TOM5553	2335	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	C	TFS	TFS	TOM5622	1
LS 2520S	2345	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	TFS	TFS	LS 2521S	1
LS 4004	2350	11-Aug-17	11-Aug-17	A	....5..	73H	189	1I	1	J	CFU	CFU	LS 1473	1
NPT2 Y	2355	11-Aug-17	11-Aug-17	D	....5..	73Y	0	FRT	1	M	BFS	BFS	NPT2 X	0
NPT10 K	2355	11-Aug-17	11-Aug-17	D	....5..	73P	0	FRT	1	M	EDI	EDI	NPT10 J	0
NPT11 M	2355	11-Aug-17	11-Aug-17	A	....5..	73Y	0	FRT	1	M	EDI	EDI		0

Daily Total Seats

GMT	GMT	A	D	
0	100	764	0	764
100	200	406	0	406
200	300	186	0	186
300	400	189	0	189
400	500	0	220	220
500	600	1210	6237	7447
600	700	3100	7016	10116
700	800	3868	6635	10503
800	900	3662	4182	7844
900	1000	4356	3273	7629
1000	1100	4883	4790	9673
1100	1200	5773	4370	10143
1200	1300	5613	4844	10457
1300	1400	4142	6264	10406
1400	1500	6118	4212	10330
1500	1600	4319	5088	9407
1600	1700	4339	5227	9566
1700	1800	5032	5271	10303
1800	1900	5102	4903	10005
1900	2000	3324	5129	8453
2000	2100	3745	2387	6132
2100	2200	4440	1589	6029
2200	2300	4728	200	4928
2300	2400	2701	0	2701
2400	2500	0	0	0
		82000	**81837**	**163837**

BST Airside ATMs

Hr commencing	Arr	Dep	Total
0	2701	0	2701
1	764	0	764
2	406	0	406
3	186	0	186
4	189	0	189
5	0	220	220
6	1210	6237	7447
7	3100	7016	10116
8	3868	6635	10503
9	3662	4182	7844
10	4356	3273	7629
11	4883	4790	9673
12	5773	4370	10143
13	5613	4844	10457
14	4142	6264	10406
15	6118	4212	10330
16	4319	5088	9407
17	4339	5227	9566
18	5032	5271	10303
19	5102	4903	10005
20	3324	5129	8453
21	3745	2387	6132
22	4440	1589	6029
23	4728	200	4928
	82000	81837	163837

65934 #DIV/0!

BST Landside Pass movements

Hr commencing	Arr	Dep	Total
0	0	4728	4728
1	0	2701	2701
2	0	764	764
3	220	406	626
4	6237	186	6423
5	7016	189	7205
6	6635	0	6635
7	4182	1210	5392
8	3273	3100	6373
9	4790	3868	8658
10	4370	3662	8032
11	4844	4356	9200
12	6264	4883	11147
13	4212	5773	9985
14	5088	5613	10701
15	5227	4142	9369
16	5271	6118	11389
17	4903	4319	9222
18	5129	4339	9468
19	2387	5032	7419
20	1589	5102	6691
21	200	3324	3524
22	0	3745	3745
23	0	4440	4440
	81837	82000	163837

0

2028 (43mppa) Airside / Landside Arrivals and Departure

Mode Share

Mode Share	%
Car	15%
Car Passenger	22%
Taxi / Rental	13%
Bus / Coach	23%
Rail	27%
Other	0%
Total	**100%**

2016 Annual	43,000,000
Daily	118132
summer	163837
Factor	0.7210329

2028 (43mppa) Summer average day - PAX

	Departures	Arrivals	Total
00:00	0	4728	4728
01:00	0	2701	2701
02:00	0	764	764
03:00	220	406	626
04:00	6237	186	6423
05:00	7016	189	7205
06:00	6635	0	6635
07:00	4182	1210	5392
08:00	3273	3100	6373
09:00	4790	3868	8658
10:00	4370	3662	8032
11:00	4844	4356	9200
12:00	6264	4883	11147
13:00	4212	5773	9985
14:00	5088	5613	10701
15:00	5227	4142	9369
16:00	5271	6118	11389
17:00	4903	4319	9222
18:00	5129	4339	9468
19:00	2387	5032	7419
20:00	1589	5102	6691
21:00	200	3324	3524
22:00	0	3745	3745
23:00	0	4440	4440
Daily	**81837**	**82000**	**163837**

2028 (43mppa) Average day - Landside

	Arrivals	Departures	Total
00:00	0	3406	3406
01:00	0	1946	1946
02:00	0	550	550
03:00	159	292	451
04:00	4502	134	4636
05:00	5064	136	5200
06:00	4789	0	4789
07:00	3018	872	3890
08:00	2362	2233	4595
09:00	3457	2786	6243
10:00	3154	2638	5792
11:00	3496	3138	6634
12:00	4521	3517	8038
13:00	3040	4158	7198
14:00	3672	4043	7715
15:00	3773	2984	6756
16:00	3804	4407	8211
17:00	3539	3111	6650
18:00	3702	3125	6827
19:00	1723	3625	5347
20:00	1147	3675	4822
21:00	144	2394	2539
22:00	0	2698	2698
23:00	0	3198	3198
Daily	**59066**	**59066**	**118132**

Surface Access

Arrivals	Departures
0	3406
0	1946
0	550
159	292
4502	134
5064	136
4789	0
3018	872
2362	2233
3457	2786
3154	2638
3496	3138
4521	3517
3040	4158
3672	4043
3773	2984
3804	4407
3539	3111
3702	3125
1723	3625
1147	3675
144	2394
0	2698
0	3198

Surface Access Arrivals by Mode

Car/Taxi	Rail	Bus/coach	Total
0	0	0	**0**
0	0	0	**0**
0	0	0	**0**
80	42	36	**158**
2274	1197	1022	**4493**
2558	1347	1149	**5054**
2419	1274	1087	**4780**
1525	803	685	**3012**
1193	628	536	**2358**
1746	920	785	**3450**
1593	839	716	**3148**
1766	930	793	**3489**
2284	1203	1026	**4512**
1536	809	690	**3034**
1855	977	833	**3665**
1906	1003	856	**3765**
1922	1012	863	**3797**
1788	941	803	**3532**
1870	985	840	**3695**
870	458	391	**1719**
579	305	260	**1145**
73	38	33	**144**
0	0	0	**0**
0	0	0	**0**
		29836	**58951**

Surface Access Departures by Mode

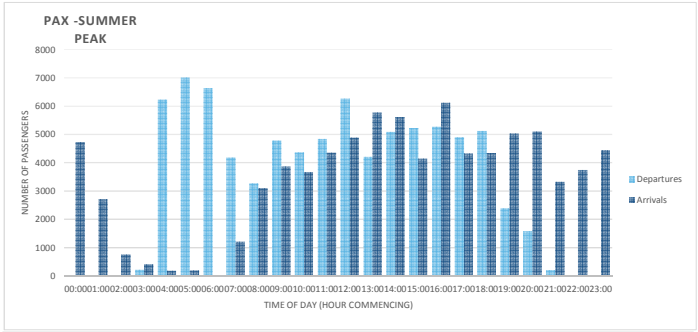
Car/Taxi	Rail	Bus/coach	Total
1720	906	773	**3399**
983	518	442	**1942**
278	146	125	**549**
148	78	66	**292**
68	36	30	**134**
69	36	31	**136**
0	0	0	**0**
440	232	198	**870**
1128	594	507	**2229**
1407	741	632	**2781**
1332	702	599	**2633**
1585	835	712	**3132**
1777	936	798	**3510**
2101	1106	944	**4150**
2042	1075	918	**4035**
1507	794	677	**2978**
2226	1172	1000	**4398**
1571	828	706	**3105**
1579	831	709	**3119**
1831	964	823	**3618**
1856	978	834	**3668**
1209	637	543	**2390**
1363	718	612	**2692**
1616	851	726	**3192**
			58951

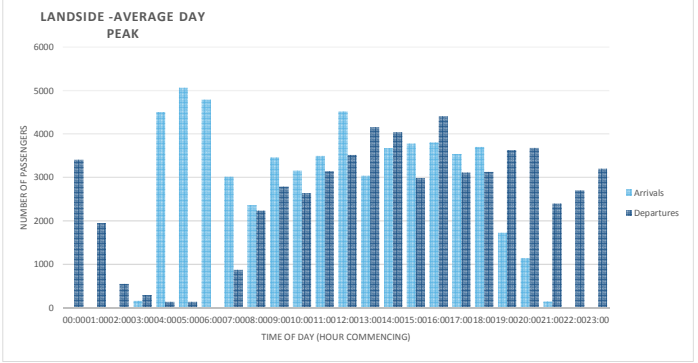
Vehicles

Arrivals	Departures
0	1879
0	1073
0	304
88	161
2483	74
2793	75
2642	0
1665	481
1303	1232
1907	1537
1740	1455
1929	1731
2494	1940
1677	2294
2026	2230
2081	1646
2099	2431
1952	1716
2042	1724
950	1999
633	2027
80	1321
0	1488
0	1764
32583	**32583**

2028 (43mppa) - Summary Surface Arrival and Departure by Mode

Time Band	To Airport				From Airport				Total
	Cars / Taxis	Rail	Bus / Coach	Total	Cars / Taxis	Rail	Bus / Coach	Total	
00:00	0	0	0	0	1720	906	773	3399	**3399**
01:00	0	0	0	0	983	518	442	1942	**1942**
02:00	0	0	0	0	278	146	125	549	**549**
03:00	80	42	36	158	148	78	66	292	**450**
04:00	2274	1197	1022	4493	68	36	30	134	**4627**
05:00	2558	1347	1149	5054	69	36	31	136	**5190**
06:00	2419	1274	1087	4780	0	0	0	0	**4780**
07:00	1525	803	685	3012	440	232	198	870	**3882**
08:00	1193	628	536	2358	1128	594	507	2229	**4586**
09:00	1746	920	785	3450	1407	741	632	2781	**6231**
10:00	1593	839	716	3148	1332	702	599	2633	**5781**
11:00	1766	930	793	3489	1585	835	712	3132	**6621**
12:00	2284	1203	1026	4512	1777	936	798	3510	**8023**
13:00	1536	809	690	3034	2101	1106	944	4150	**7184**
14:00	1855	977	833	3665	2042	1075	918	4035	**7700**
15:00	1906	1003	856	3765	1507	794	677	2978	**6743**
16:00	1922	1012	863	3797	2226	1172	1000	4398	**8195**
17:00	1788	941	803	3532	1571	828	706	3105	**6637**
18:00	1870	985	840	3695	1579	831	709	3119	**6814**
19:00	870	458	391	1719	1831	964	823	3618	**5337**
20:00	579	305	260	1145	1856	978	834	3668	**4813**
21:00	73	38	33	144	1209	637	543	2390	**2534**
22:00	0	0	0	0	1363	718	612	2692	**2692**
23:00	0	0	0	0	1616	851	726	3192	**3192**
Daily	**29836**	**15711**	**13404**	**58951**	**29836**	**15711**	**13404**	**58951**	**#####**





5) Passenger Daily Profile – Vehicle Movements

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Passenger Car Park Times

Passenger Flight Time

Time Band	2016			2028 35mppa			2028 43mppa		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
00:00	0	3508	3508	0	3257	3257	0	3406	3406
01:00	0	755	755	0	1514	1514	0	1946	1946
02:00	0	0	0	0	535	535	0	550	550
03:00	0	0	0	289	261	550	159	292	451
04:00	3935	126	4061	4431	131	4562	4502	134	4636
05:00	3495	0	3495	4441	139	4581	5064	136	5200
06:00	3741	258	3999	4121	0	4121	4789	0	4789
07:00	1190	419	1609	2015	1222	3237	3018	872	3890
08:00	979	2077	3056	1266	2468	3735	2362	2233	4595
09:00	1402	2431	3834	3075	2361	5436	3457	2786	6243
10:00	1858	583	2442	2895	1457	4352	3154	2638	5792
11:00	2260	915	3175	3517	2253	5770	3496	3138	6634
12:00	1631	1624	3256	2850	2659	5508	4521	3517	8038
13:00	768	2883	3651	2664	3651	6315	3040	4158	7198
14:00	2000	1525	3525	3270	3305	6574	3672	4043	7715
15:00	2357	1053	3410	2844	2509	5353	3773	2984	6756
16:00	2511	1987	4498	3091	3508	6599	3804	4407	8211
17:00	2776	2580	5356	2713	2385	5099	3539	3111	6650
18:00	1867	1928	3795	3114	2471	5585	3702	3125	6827
19:00	123	2134	2257	1073	2586	3658	1723	3625	5347
20:00	149	2928	3077	276	3396	3672	1147	3675	4822
21:00	298	1014	1312	132	1584	1716	144	2394	2539
22:00	0	278	278	0	1766	1766	0	2698	2698
23:00	0	2334	2334	0	2659	2659	0	3198	3198
Total	**33342**	**33342**	**66684**	**48077**	**48077**	**96154**	**59066**	**59066**	**118132**

Passenger Airport Entry and Exit Movement Times

Assumptions:
Exit = Arrivals +1 Hr
Entry = Departures -2 Hrs

Time Band	2016			2028 35mppa			2028 43mppa		
	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
00:00	0	3508	3508	0	3257	3257	0	3406	3406
01:00	0	755	755	0	1514	1514	0	1946	1946
02:00	0	0	0	0	535	535	0	550	550
03:00	0	0	0	289	261	550	159	292	451
04:00	3935	126	4060.86	4431	131	4562	4502	134	4636
05:00	3495	0	3495	4441	139	4581	5064	136	5200
06:00	3741	258	3999	4121	0	4121	4789	0	4789
07:00	1190	419	1609	2015	1222	3237	3018	872	3890
08:00	979	2077	3056	1266	2468	3735	2362	2233	4595
09:00	1402	2431	3834	3075	2361	5436	3457	2786	6243
10:00	1858	583	2442	2895	1457	4352	3154	2638	5792
11:00	2260	915	3175	3517	2253	5770	3496	3138	6634
12:00	1631	1624	3256	2850	2659	5508	4521	3517	8038
13:00	768	2883	3651	2664	3651	6315	3040	4158	7198
14:00	2000	1525	3525	3270	3305	6574	3672	4043	7715
15:00	2357	1053	3410	2844	2509	5353	3773	2984	6756
16:00	2511	1987	4498	3091	3508	6599	3804	4407	8211
17:00	2776	2580	5356	2713	2385	5099	3539	3111	6650
18:00	1867	1928	3795	3114	2471	5585	3702	3125	6827
19:00	123	2134	2257	1073	2586	3658	1723	3625	5347

20:00	149	2928	3077	276	3396	3672	1147	3675	4822
21:00	298	1014	1312	132	1584	1716	144	2394	2539
22:00	0	278	278	0	1766	1766	0	2698	2698
23:00	0	2334	2334	0	2659	2659	0	3198	3198
Total	**33342**	**33342**	**66684.1**	**48077**	**48077**	**96154**	**59066**	**59066**	**118132**

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Air Passengers by Car and Taxi

Car Proportion of Total Mode Share	49%		
Car Hire	2.2%		
Hotel + Offsite	0.7%		
Car Proportion (excl. Hire)	46%	46%	46%

Time Band	2016			2028 35mppa			2028 43mppa		
	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
00:00	0	1617	1617	0	1502	1502	0	1570	1570
01:00	0	348	348	0	698	698	0	897	897
02:00	0	0	0	0	246	246	0	254	254
03:00	0	0	0	133	121	254	73	135	208
04:00	1814	58	1872	2043	60	2103	2075	62	2137
05:00	1611	0	1611	2048	64	2112	2334	63	2397
06:00	1725	119	1844	1900	0	1900	2208	0	2208
07:00	549	193	742	929	563	1492	1391	402	1793
08:00	451	958	1409	584	1138	1722	1089	1029	2118
09:00	646	1121	1767	1418	1088	2506	1594	1284	2878
10:00	857	269	1126	1334	672	2006	1454	1216	2670
11:00	1042	422	1464	1621	1039	2660	1612	1446	3058
12:00	752	749	1501	1314	1226	2539	2084	1621	3706
13:00	354	1329	1683	1228	1683	2911	1401	1917	3318
14:00	922	703	1625	1507	1523	3031	1693	1864	3557
15:00	1087	485	1572	1311	1157	2468	1739	1375	3115
16:00	1158	916	2073	1425	1617	3042	1754	2032	3785
17:00	1280	1189	2469	1251	1100	2351	1631	1434	3066
18:00	861	889	1749	1436	1139	2575	1707	1441	3147
19:00	57	984	1040	494	1192	1686	794	1671	2465
20:00	69	1350	1418	127	1565	1693	529	1694	2223
21:00	137	468	605	61	730	791	67	1104	1170
22:00	0	128	128	0	814	814	0	1244	1244
23:00	0	1076	1076	0	1226	1226	0	1474	1474
Total	**15371**	**15371**	**30741**	**22163**	**22163**	**44327**	**27229**	**27229**	**54459**

Number of Vehicles from Passenger Movements (no two-way allowance)

Car Occupancy 1.6

Time Band	2016			2028 35mppa			2028 43mppa		
	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
00:00	0	1011	1011	0	939	939	0	981	981
01:00	0	218	218	0	436	436	0	561	561
02:00	0	0	0	0	154	154	0	159	159
03:00	0	0	0	83	75	159	46	84	130
04:00	1134	36	1170	1277	38	1314	1297	39	1336
05:00	1007	0	1007	1280	40	1320	1459	39	1498
06:00	1078	74	1152	1187	0	1187	1380	0	1380
07:00	343	121	464	581	352	933	870	251	1121
08:00	282	598	881	365	711	1076	681	643	1324
09:00	404	701	1105	886	680	1566	996	803	1799
10:00	535	168	704	834	420	1254	909	760	1669
11:00	651	264	915	1013	649	1662	1007	904	1911
12:00	470	468	938	821	766	1587	1303	1013	2316
13:00	221	831	1052	767	1052	1819	876	1198	2074
14:00	576	439	1016	942	952	1894	1058	1165	2223
15:00	679	303	983	819	723	1542	1087	860	1947
16:00	723	572	1296	891	1011	1901	1096	1270	2366
17:00	800	743	1543	782	687	1469	1020	896	1916
18:00	538	555	1093	897	712	1609	1067	901	1967
19:00	35	615	650	309	745	1054	496	1044	1541
20:00	43	844	886	80	978	1058	330	1059	1389

21:00	86	292	378	38	456	494	42	690	731
22:00	0	80	80	0	509	509	0	777	777
23:00	0	672	672	0	766	766	0	921	921
Total	**9607**	**9607**	**19213**	**13852**	**13852**	**27704**	**17018**	**17018**	**34037**

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Barrier and Parking Calibration

2016 Reported
18.00%

Parking Location	Entry	Exit	Total	Entry	Exit	Total
JetParks Total	416	374	790	485	864	1349
Long Stay Total	684	839	1523	1450	1927	3377
Mid Stay Total	873	982	1855	1381	1596	2977
Short Stay Total	3934	3757	7691	3643	3796	7439
Meet & Greet Total	724	694	1418	754	765	1519
Express Set Down Total (50%	4300	4297.5	8597	5937	5901	11838
Valet Total	94	123	217	145	147	292
Total Parked	**6725**	**6769**	**13494**	**7858**	**9095**	**16953**
Total	**11025**	**11067**	**22091**	**13795**	**14996**	**28791**

Mode Share Correction (increased use of Parking/lower set-down&pick-up)

Corrected To Average Busy Day 16.50%

Parking Location	Entry	Exit
JetParks Total	338	553
Long Stay Total	1010	1234
Mid Stay Total	962	1022
Short Stay Total	2537	2432
Meet & Greet Total	525	490
Express Set Down Total (50%	4134	3780
Valet Total	101	94
Total	**9607**	**9607**
Total Parked	**5472**	**5826**
Express Set Down Total (50	**4134**	**3780**
% drop off (Two Way)	**43%**	**39%**

35mppa					
18.00%			21.62%		
Entry	Exit	Total	Entry	Exit	Total
13852	13852	27704	13852	13852	27704
7891	8401	16292	9477	10091	19568
5962	5451	11412	4375	3761	8136
43%	39%	41%	32%	27%	29%
43mppa					
18.00%			23.45%		
Entry	Exit	Total	Entry	Exit	Total
17018	17018	34037	17018	17018	34037
9694	10322	20016	12629	13447	26076
7324	6697	14021	4389	3572	7961
43%	39%	41%	26%	21%	23%

Number of Vehicles from Passenger Movements (2-way allowance)

Proportion using Car Parks 57%
Proportion using Drop off 43%

Time Band	2016			2028 35mppa			2028 43mppa		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
00:00	435	1011	1446	404	939	1342	422	981	1404
01:00	94	218	311	188	436	624	241	561	802
02:00	0	0	0	66	154	220	68	159	227
03:00	0	0	0	116	111	227	82	104	186
04:00	1149	524	1674	1293	587	1880	1314	597	1910
05:00	1007	433	1440	1297	591	1888	1476	667	2143
06:00	1110	538	1648	1187	511	1698	1380	594	1974
07:00	395	268	663	732	602	1334	978	625	1603
08:00	540	720	1259	671	868	1539	958	936	1894
09:00	705	874	1580	1179	1062	2240	1342	1231	2573
10:00	608	399	1006	1015	779	1793	1236	1151	2387
11:00	765	544	1309	1293	1085	2378	1396	1338	2734
12:00	671	670	1342	1151	1119	2270	1739	1574	3313
13:00	579	926	1505	1220	1382	2602	1392	1575	2967
14:00	765	687	1453	1352	1358	2709	1559	1620	3180
15:00	810	596	1405	1131	1076	2206	1457	1327	2784
16:00	970	884	1854	1326	1394	2720	1643	1741	3384
17:00	1120	1088	2208	1078	1024	2101	1405	1335	2741
18:00	777	787	1564	1204	1098	2302	1454	1360	2814
19:00	300	630	930	630	878	1508	946	1258	2204
20:00	406	862	1268	501	1013	1513	786	1201	1987
21:00	212	329	541	234	473	707	338	708	1046
22:00	35	80	115	219	509	728	335	777	1112
23:00	289	672	962	330	766	1096	397	921	1318

Total	**13741**	**13741**	**27482**	**19814**	**19814**	**39628**	**24343**	**24343**	**48685**

Number of Vehicles from Passenger Movements (inc. Mode Share and 2-way allowance)

Proportion using Car Parks	57%	68%	74%
Proportion using Drop off	43%	32%	26%

Time Band	2016			2028 35mppa			2028 43mppa		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
00:00	435	1011	1446	296	939	1235	253	981	1234
01:00	94	218	311	138	436	574	145	561	705
02:00	0	0	0	49	154	203	41	159	199
03:00	0	0	0	107	102	209	67	96	164
04:00	1149	524	1674	1289	441	1729	1307	373	1680
05:00	1007	433	1440	1292	444	1737	1469	416	1885
06:00	1110	538	1648	1187	375	1562	1380	356	1736
07:00	395	268	663	692	535	1227	934	475	1410
08:00	540	720	1259	589	826	1416	847	819	1665
09:00	705	874	1580	1101	960	2061	1203	1060	2263
10:00	608	399	1006	967	683	1650	1105	994	2099
11:00	765	544	1309	1218	969	2187	1240	1164	2404
12:00	671	670	1342	1063	1025	2088	1564	1349	2913
13:00	579	926	1505	1100	1294	2394	1185	1424	2609
14:00	765	687	1453	1243	1250	2492	1359	1438	2796
15:00	810	596	1405	1048	982	2030	1309	1140	2449
16:00	970	884	1854	1210	1292	2502	1424	1552	2976
17:00	1120	1088	2208	999	934	1933	1251	1159	2410
18:00	777	787	1564	1122	995	2117	1299	1176	2474
19:00	300	630	930	544	843	1387	766	1172	1938
20:00	406	862	1268	389	1004	1392	604	1144	1748
21:00	212	329	541	182	468	651	220	701	920
22:00	35	80	115	161	509	670	200	777	978
23:00	289	672	962	242	766	1008	238	921	1159
Total	**13741**	**13741**	**27482**	**18227**	**18227**	**36454**	**21407**	**21407**	**42815**

Number of Vehicles from Passenger Movements (inc. Mode Share and 2-way allowance)

Proportion using Car Parks	57%	100%	100%
Proportion using Drop off	43%	0%	0%

Time Band	2016			2028 35mppa			2028 43mppa		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
00:00	3%	7%	5%	2%	5%	3%	1%	5%	3%
01:00	1%	2%	1%	1%	2%	2%	1%	3%	2%
02:00	0%	0%	0%	0%	1%	1%	0%	1%	0%
03:00	0%	0%	0%	1%	1%	1%	0%	0%	0%
04:00	8%	4%	6%	7%	2%	5%	6%	2%	4%
05:00	7%	3%	5%	7%	2%	5%	7%	2%	4%
06:00	8%	4%	6%	7%	2%	4%	6%	2%	4%
07:00	3%	2%	2%	4%	3%	3%	4%	2%	3%
08:00	4%	5%	5%	3%	5%	4%	4%	4%	4%
09:00	5%	6%	6%	6%	5%	6%	6%	5%	5%
10:00	4%	3%	4%	5%	4%	5%	5%	5%	5%
11:00	6%	4%	5%	7%	5%	6%	6%	5%	6%
12:00	5%	5%	5%	6%	6%	6%	7%	6%	7%
13:00	4%	7%	5%	6%	7%	7%	6%	7%	6%
14:00	6%	5%	5%	7%	7%	7%	6%	7%	7%
15:00	6%	4%	5%	6%	5%	6%	6%	5%	6%
16:00	7%	6%	7%	7%	7%	7%	7%	7%	7%
17:00	8%	8%	8%	5%	5%	5%	6%	5%	6%
18:00	6%	6%	6%	6%	5%	6%	6%	5%	6%
19:00	2%	5%	3%	3%	5%	4%	4%	5%	5%
20:00	3%	6%	5%	2%	6%	4%	3%	5%	4%
21:00	2%	2%	2%	1%	3%	2%	1%	3%	2%

22:00	0%	1%	0%	1%	3%	2%	1%	4%	2%
23:00	2%	5%	3%	1%	4%	3%	1%	4%	3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

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Uncorrected

Time Band	2016		2028 (35 mppa)		2028 (43 mppa)	
	Entry	Exit	Entry	Exit	Entry	Exit
00:00	0	1011	0	939	0	981
01:00	0	218	0	436	0	561
02:00	0	0	0	154	0	159
03:00	0	0	83	75	46	84
04:00	1134	36	1277	38	1297	39
05:00	1007	0	1280	40	1459	39
06:00	1078	74	1187	0	1380	0
07:00	343	121	581	352	870	251
08:00	282	598	365	711	681	643
09:00	404	701	886	680	996	803
10:00	535	168	834	420	909	760
11:00	651	264	1013	649	1007	904
12:00	470	468	821	766	1303	1013
13:00	221	831	767	1052	876	1198
14:00	576	439	942	952	1058	1165
15:00	679	303	819	723	1087	860
16:00	723	572	891	1011	1096	1270
17:00	800	743	782	687	1020	896
18:00	538	555	897	712	1067	901
19:00	35	615	309	745	496	1044
20:00	43	844	80	978	330	1059
21:00	86	292	38	456	42	690
22:00	0	80	0	509	0	777
23:00	0	672	0	766	0	921
					40477	**40477**

Two-way allowance

2016		2028 (35 mppa)		2028 (43 mppa)	
Entry	Exit	Entry	Exit	Entry	Exit
435	1011	404	939	422	981
94	218	188	436	241	561
0	0	66	154	68	159
0	0	116	111	82	104
1149	524	1293	587	1314	597
1007	433	1297	591	1476	667
1110	538	1187	511	1380	594
395	268	732	602	978	625
540	720	671	868	958	936
705	874	1179	1062	1342	1231
608	399	1015	779	1236	1151
765	544	1293	1085	1396	1338
671	670	1151	1119	1739	1574
579	926	1220	1382	1392	1575
765	687	1352	1358	1559	1620
810	596	1131	1076	1457	1327
970	884	1326	1394	1643	1741
1120	1088	1078	1024	1405	1335
777	787	1204	1098	1454	1360
300	630	630	878	946	1258
406	862	501	1013	786	1201
212	329	234	473	338	708
35	80	219	509	335	777
289	672	330	766	397	921
				57898	**57898**

inc. Mode Share shift and two-way allowance

2016		2028 (35 mppa)		2028 (43 mppa)	
Entry	Exit	Entry	Exit	Entry	Exit
435	1011	296	939	253	981
94	218	138	436	145	561
0	0	49	154	41	159
0	0	107	102	67	96
1149	524	1289	441	1307	373
1007	433	1292	444	1469	416
1110	538	1187	375	1380	356
395	268	692	535	934	475
540	720	589	826	847	819
705	874	1101	960	1203	1060
608	399	967	683	1105	994
765	544	1218	969	1240	1164
671	670	1063	1025	1564	1349
579	926	1100	1294	1185	1424
765	687	1243	1250	1359	1438
810	596	1048	982	1309	1140
970	884	1210	1292	1424	1552
1120	1088	999	934	1251	1159
777	787	1122	995	1299	1176
300	630	544	843	766	1172
406	862	389	1004	604	1144
212	329	182	468	220	701
35	80	161	509	200	777
289	672	242	766	238	921
				53375	**53375**

2016		2028 (35 mppa)		2028 (43 mppa)	
Entry	Exit	Entry	Exit	Entry	Exit
30%	70%	24%	76%	21%	79%
30%	70%	24%	76%	21%	79%
#DIV/0!	#DIV/0!	24%	76%	21%	79%
#DIV/0!	#DIV/0!	51%	49%	41%	59%
69%	31%	75%	25%	78%	22%
70%	30%	74%	26%	78%	22%
67%	33%	76%	24%	79%	21%
60%	40%	56%	44%	66%	34%
43%	57%	42%	58%	51%	49%
45%	55%	53%	47%	53%	47%
60%	40%	59%	41%	53%	47%
58%	42%	56%	44%	52%	48%
50%	50%	51%	49%	54%	46%
38%	62%	46%	54%	45%	55%
53%	47%	50%	50%	49%	51%
58%	42%	52%	48%	53%	47%
52%	48%	48%	52%	48%	52%
51%	49%	52%	48%	52%	48%
50%	50%	53%	47%	52%	48%
32%	68%	39%	61%	40%	60%
32%	68%	28%	72%	35%	65%
39%	61%	28%	72%	24%	76%
30%	70%	24%	76%	21%	79%
30%	70%	24%	76%	21%	79%

6) Peak Hour Traffic Flows (07:00-08:00)

2016 Baseline Scenario (0700-0800) Passenger Departures

Hourly Passenger Count 1,788

Passenger Mode Split		%
Car Driver	268	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**268**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 268

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	20	0	0	0
Outer London NE	26	0	0	0
Outer London SE	4	0	0	0
Outer London SW	3	0	0	0
Outer London NW	21	0	0	0
Outer South East NE	86	0	0	0
Outer South East NW	10	0	0	0
Outer South East SW	5	0	0	0
Outer South East SE	14	0	0	0
Southwest & Wales	6	0	0	0
West Midlands	3	0	0	0
East Midlands	16	0	0	0
East Anglia	47	0	0	0
Rest of UK	7	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	268	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	20	0	0	0
Outer London NE	26	0	0	0
Outer London SE	4	0	0	0
Outer London SW	3	0	0	0
Outer London NW	21	0	0	0
Outer South East NE	86	0	0	0
Outer South East NW	10	0	0	0
Outer South East SW	5	0	0	0
Outer South East SE	14	0	0	0
Southwest & Wales	6	0	0	0
West Midlands	3	0	0	0
East Midlands	16	0	0	0
East Anglia	47	0	0	0
Rest of UK	7	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	268	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	20	0	0	0
Outer London NE	26	0	0	0
Outer London SE	4	0	0	0
Outer London SW	3	0	0	0
Outer London NW	21	0	0	0
Outer South East NE	86	0	0	0
Outer South East NW	10	0	0	0
Outer South East SW	5	0	0	0
Outer South East SE	14	0	0	0
Southwest & Wales	6	0	0	0
West Midlands	3	0	0	0
East Midlands	16	0	0	0
East Anglia	47	0	0	0
Rest of UK	7	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	268	0	0	0

268

Distribution of Vehicles on the Road Network *Source:* ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South						West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	20										100%												
London North East	26										100%												
London North West	21										100%												
London South East	4										100%												
London South West	3										100%												
London Sub-total	75																						
SE England - NE	86																						
Essex	63		50%								50%												
Hertfordshire	22										25%							75%					
SE England - NW	10																						
Bedfordshire	1	100%																					
Berkshire	3										100%												
Buckinghamshire	4										100%												
Oxfordshire	3										100%												
SE England - SE	14																						
East Sussex	2										100%												
Kent	12										100%												
SE England - SW	5																						
Hampshire	3										100%												
Surrey	1										100%												
West Sussex	1										100%												
Rest of South East Sub-total	0										100%												
East Anglia	47																						
Cambridgeshire	24	100%																					
Norfolk	5	100%																					
Suffolk	17	50%	50%																				
East Midlands	16	100%																					
South West England and Wales	6										100%												
West Midlands	3	100%																					
Rest of UK	7	100%																					
Sub-total Rest of Country	7																						
Total All Areas	268																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	20	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0
London North East	26	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0
London North West	21	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0
London South East	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
London South West	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	75																						
SE England - NE	86																						
Essex	63	0	32	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	22	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	17	0	0	0	0	0
SE England - NW	10																						
Bedfordshire	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	14																						
East Sussex	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Kent	12	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	5																						
Hampshire	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	47																						
Cambridgeshire	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	17	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	7																						
Total All Areas	268																						
Residence not reported	0																						
Total		66	40	0	0	0	0	0	0	0	145	0	0	0	0	0	0	17	0	0	0	0	0

Road Link		
M11 N	66	24%
M11 S	145	54%
A120 E	40	15%
A120 W	17	6%
Total	**268**	

2016 Baseline Scenario (0700-0800) Passenger Arrivals

Hourly Passenger Count 2,632

Passenger Mode Split		%
Car Driver	395	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**395**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 395

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	30	0	0	0
Outer London NE	38	0	0	0
Outer London SE	6	0	0	0
Outer London SW	4	0	0	0
Outer London NW	32	0	0	0
Outer South East NE	126	0	0	0
Outer South East NW	15	0	0	0
Outer South East SW	7	0	0	0
Outer South East SE	20	0	0	0
Southwest & Wales	9	0	0	0
West Midlands	5	0	0	0
East Midlands	24	0	0	0
East Anglia	69	0	0	0
Rest of UK	10	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	395	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	30	0	0	0
Outer London NE	38	0	0	0
Outer London SE	6	0	0	0
Outer London SW	4	0	0	0
Outer London NW	32	0	0	0
Outer South East NE	126	0	0	0
Outer South East NW	15	0	0	0
Outer South East SW	7	0	0	0
Outer South East SE	20	0	0	0
Southwest & Wales	9	0	0	0
West Midlands	5	0	0	0
East Midlands	24	0	0	0
East Anglia	69	0	0	0
Rest of UK	10	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	395	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	30	0	0	0
Outer London NE	38	0	0	0
Outer London SE	6	0	0	0
Outer London SW	4	0	0	0
Outer London NW	32	0	0	0
Outer South East NE	126	0	0	0
Outer South East NW	15	0	0	0
Outer South East SW	7	0	0	0
Outer South East SE	20	0	0	0
Southwest & Wales	9	0	0	0
West Midlands	5	0	0	0
East Midlands	24	0	0	0
East Anglia	69	0	0	0
Rest of UK	10	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	395	0	0	0

395

Distribution of Vehicles on the Road Network *Source:* ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South						West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	30										100%												
London North East	38										100%												
London North West	32										100%												
London South East	6										100%												
London South West	4										100%												
London Sub-total	110																						
SE England - NE	126																						
Essex	93		50%								50%												
Hertfordshire	33										25%							75%					
SE England - NW	15																						
Bedfordshire	1	100%																					
Berkshire	4										100%												
Buckinghamshire	6										100%												
Oxfordshire	4										100%												
SE England - SE	20																						
East Sussex	2										100%												
Kent	18										100%												
SE England - SW	7																						
Hampshire	4										100%												
Surrey	2										100%												
West Sussex	1										100%												
Rest of South East Sub-total	0										100%												
East Anglia	69																						
Cambridgeshire	35	100%																					
Norfolk	8	100%																					
Suffolk	26	50%	50%																				
East Midlands	24	100%																					
South West England and Wales	9										100%												
West Midlands	5	100%																					
Rest of UK	10	100%																					
Sub-total Rest of Country	10																						
Total All Areas	395																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	30	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0
London North East	38	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0
London North West	32	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0
London South East	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
London South West	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	110																						
SE England - NE	126																						
Essex	93	0	47	0	0	0	0	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	33	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	25	0	0	0	0	0
SE England - NW	15																						
Bedfordshire	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	20																						
East Sussex	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Kent	18	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	7																						
Hampshire	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	69																						
Cambridgeshire	35	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	26	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	9	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	10																						
Total All Areas	395																						
Residence not reported	0																						
Total		97	59	0	0	0	0	0	0	0	214	0	0	0	0	0	0	25	0	0	0	0	0

Road Link		
M11 N	97	24%
M11 S	214	54%
A120 E	59	15%
A120 W	25	6%
Total	**395**	

2016 Baseline Scenario (07:00-08:00) Employee Departures

Daily Employee Count 30

Employee Mode Split		%
Car Driver	28	94%
Car Passenger	2	6%
Total	**30**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1.6 Occupancy

Car Passenger	1
Total	**1**

0.5

Number of Cars 29

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	27	2
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	0	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	28	2

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	27	1
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	0	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	28	1

29

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0						100%		
London North East	2						100%		
London North West	0						100%		
London South East	0						100%		
London South West	0						100%		
London Sub-total	2								
SE England - NE	28								
Essex	22								
Uttlesford	7		40%	25%	5%				30%
Braintree	7			100%					
Harlow	2						50%	50%	
Chelmsford	2			75%			25%		
Colchester	1			100%					
Epping Forest	1				25%		75%		
Basildon	0						100%		
Tendring	0			100%					
Maldon	0			100%					
Brentwood	0						100%		
Castle Point	0			50%			50%		
Rochford	0			50%			50%		
Southend-on-Sea	0						100%		
Thurrock	0						100%		
Hertfordshire	6								
East Hertfordshire	5		25%			25%			50%
Broxbourne	1								100%
North Hertfordshire	0								100%
Welwyn Hatfield	0								100%
St. Albans	0								100%
Hertsmere	0								100%
Stevenage	0								100%
Watford	0								100%
Dacorum	0								100%
Three Rivers	0								100%
SE England - NW	0								
Bedfordshire	0	100%							
Berkshire	0						100%		
Buckinghamshire	0						100%		
Oxfordshire	0						100%		
SE England - SE	0								
East Sussex	0						100%		
Kent	0						100%		
SE England - SW	0								
Hampshire	0						100%		
Surrey	0						100%		
West Sussex	0						100%		
Rest of South East Sub-total	0						100%		
East Anglia	0								
Cambridgeshire	0	100%							
Norfolk	0	100%							
Suffolk	0	50%	50%						
East Midlands	0	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	29								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0	0	0	0	0	0	0	0	0
London North East	2	0	0	0	0	0	2	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	0	0	0	0	0	0	0	0	0
London South West	0	0	0	0	0	0	0	0	0
London Sub-total	2								
SE England - NE	28								
Essex	22								
Uttlesford	7	0	3	2	0	0	0	0	2
Braintree	7	0	0	7	0	0	0	0	0
Harlow	2	0	0	0	0	0	1	1	0
Chelmsford	2	0	0	1	0	0	0	0	0
Colchester	1	0	0	1	0	0	0	0	0
Epping Forest	1	0	0	0	0	0	1	0	0
Basildon	0	0	0	0	0	0	0	0	0
Tendring	0	0	0	0	0	0	0	0	0
Maldon	0	0	0	0	0	0	0	0	0
Brentwood	0	0	0	0	0	0	0	0	0
Castle Point	0	0	0	0	0	0	0	0	0
Rochford	0	0	0	0	0	0	0	0	0
Southend-on-Sea	0	0	0	0	0	0	0	0	0
Thurrock	0	0	0	0	0	0	0	0	0
Hertfordshire	6								
East Hertfordshire	5	0	1	0	0	1	0	0	2
Broxbourne	1	0	0	0	0	0	0	0	1
North Hertfordshire	0	0	0	0	0	0	0	0	0
Welwyn Hatfield	0	0	0	0	0	0	0	0	0
St. Albans	0	0	0	0	0	0	0	0	0
Hertsmere	0	0	0	0	0	0	0	0	0
Stevenage	0	0	0	0	0	0	0	0	0
Watford	0	0	0	0	0	0	0	0	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	0								
Bedfordshire	0	0	0	0	0	0	0	0	0
Berkshire	0	0	0	0	0	0	0	0	0
Buckinghamshire	0	0	0	0	0	0	0	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	0								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	0	0	0	0	0	0	0	0	0
SE England - SW	0								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	0	0	0	0	0	0	0	0	0
West Sussex	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	0								
Cambridgeshire	0	0	0	0	0	0	0	0	0
Norfolk	0	0	0	0	0	0	0	0	0
Suffolk	0	0	0	0	0	0	0	0	0
East Midlands	0	0	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	29								

Total		0	4	11	1	1	5	1	6

M11 N	0	0%
Church Road	4	14%
A120 E	11	39%
Parsonage Road	1	2%
A1250	1	4%
M11 S	5	17%
A120 W	1	4%
Bury Lodge Road	6	20%

2016 Baseline Scenario (07:00-08:00) Employee Arrivals

Daily Employee Count		517

Employee Mode Split		%
Car Driver	495	96%
Car Passenger	22	4%
Total	**517**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	13
Total	**13**

0.5

Number of Cars	509

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	3	0
Outer London NE	43	2
Outer London SE	0	0
Outer London SW	2	0
Outer London NW	9	0
Outer South East NE	347	17
Outer South East NW	13	1
Outer South East SW	2	0
Outer South East SE	6	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	8	0
East Anglia	58	1
Rest of UK	3	0
Residence not reported	0	0
Foreign	0	0
Total	495	22

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	3	0
Outer London NE	43	1
Outer London SE	0	0
Outer London SW	2	0
Outer London NW	9	0
Outer South East NE	347	11
Outer South East NW	13	1
Outer South East SW	2	0
Outer South East SE	6	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	8	0
East Anglia	58	1
Rest of UK	3	0
Residence not reported	0	0
Foreign	0	0
Total	495	13

509

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	3						100%		
London North East	44						100%		
London North West	0						100%		
London South East	2						100%		
London South West	9						100%		
London Sub-total	58								
SE England - NE	358								
Essex	278								
Uttlesford	93		40%	25%	5%				30%
Braintree	87			100%					
Harlow	31						50%	50%	
Chelmsford	20			75%			25%		
Colchester	13			100%					
Epping Forest	10				25%		75%		
Basildon	5						100%		
Tendring	4			100%					
Maldon	3			100%					
Brentwood	3						100%		
Castle Point	2			50%			50%		
Rochford	1			50%			50%		
Southend-on-Sea	2						100%		
Thurrock	3						100%		
Hertfordshire	80								
East Hertfordshire	64		25%			25%			50%
Broxbourne	7								100%
North Hertfordshire	4								100%
Welwyn Hatfield	1								100%
St. Albans	1								100%
Hertsmere	1								100%
Stevenage	1								100%
Watford	1								100%
Dacorum	0								100%
Three Rivers	0								100%
SE England - NW	13								
Bedfordshire	9	100%							
Berkshire	2						100%		
Buckinghamshire	2						100%		
Oxfordshire	0						100%		
SE England - SE	6								
East Sussex	0						100%		
Kent	6						100%		
SE England - SW	2								
Hampshire	0						100%		
Surrey	1						100%		
West Sussex	1						100%		
Rest of South East Sub-total	0						100%		
East Anglia	59								
Cambridgeshire	28	100%							
Norfolk	5	100%							
Suffolk	26	50%	50%						
East Midlands	8	100%							
South West England and Wales	0						100%		
West Midlands	2	100%							

Rest of UK	3	100%							
Sub-total Rest of Country	3								
Total All Areas	509								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	3	0	0	0	0	0	3	0	0
London North East	44	0	0	0	0	0	44	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	2	0	0	0	0	0	2	0	0
London South West	9	0	0	0	0	0	9	0	0
London Sub-total	58								
SE England - NE	358								
Essex	278								
Uttlesford	93	0	37	23	5	0	0	0	28
Braintree	87	0	0	87	0	0	0	0	0
Harlow	31	0	0	0	0	0	15	15	0
Chelmsford	20	0	0	15	0	0	5	0	0
Colchester	13	0	0	13	0	0	0	0	0
Epping Forest	10	0	0	0	2	0	7	0	0
Basildon	5	0	0	0	0	0	5	0	0
Tendring	4	0	0	4	0	0	0	0	0
Maldon	3	0	0	3	0	0	0	0	0
Brentwood	3	0	0	0	0	0	3	0	0
Castle Point	2	0	0	1	0	0	1	0	0
Rochford	1	0	0	1	0	0	1	0	0
Southend-on-Sea	2	0	0	0	0	0	2	0	0
Thurrock	3	0	0	0	0	0	3	0	0
Hertfordshire	80								
East Hertfordshire	64	0	16	0	0	16	0	0	32
Broxbourne	7	0	0	0	0	0	0	0	7
North Hertfordshire	4	0	0	0	0	0	0	0	4
Welwyn Hatfield	1	0	0	0	0	0	0	0	1
St. Albans	1	0	0	0	0	0	0	0	1
Hertsmere	1	0	0	0	0	0	0	0	1
Stevenage	1	0	0	0	0	0	0	0	1
Watford	1	0	0	0	0	0	0	0	1
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	13								
Bedfordshire	9	9	0	0	0	0	0	0	0
Berkshire	2	0	0	0	0	0	2	0	0
Buckinghamshire	2	0	0	0	0	0	2	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	6								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	6	0	0	0	0	0	6	0	0
SE England - SW	2								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	1	0	0	0	0	0	1	0	0
West Sussex	1	0	0	0	0	0	1	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	59								
Cambridgeshire	28	28	0	0	0	0	0	0	0
Norfolk	5	5	0	0	0	0	0	0	0
Suffolk	26	13	13	0	0	0	0	0	0
East Midlands	8	8	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	2	2	0	0	0	0	0	0	0
Rest of UK	3	3	0	0	0	0	0	0	0
Sub-total Rest of Country	3								
Total All Areas	509								
Total		68	66	147	7	16	113	15	76

M11 N	68	13%
Church Road	66	13%
A120 E	147	29%
Parsonage Road	7	1%
A1250	16	3%
M11 S	113	22%
A120 W	15	3%
Bury Lodge Road	76	15%

2016 07:00-08:00 Traffic Flows (With Airport)

Road	Passengers
M11 N	4253
M11 S	6372
A120 W	936
A120 E	2916

14477

Car Park		
LS + JP	11%	1661
MS	11%	1546
SS + M&	17%	2490
EDP	61%	8780

4253
M11 Paynsden Wood

779
B1383 Cambridge Road

Manuden

222
Carters Hill

Cambridge Road

917

Stansted Mountfichet

Elsenham

202
Hall Road

331
Chapel Hill

517
Lower Street

M11 (N)

Molehill Green

139
Molehill Green Road

Church Road (A)

407

332
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

47
Bambers Green

1220
Western approach to Stansted roundabout

1234
A120 West

Long Stay Car Park

936
A120 Hadham Road (west)

Mid Stay Car Park

233
Parsonage Road

517
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout

1321

A120 east of roundabout

2085

Round Coppice Road

533

Thremhall Avenue

1273

458
Stansted Services

2916
A120 East of Stansted Airport

Dunmow Road (west)

1017

970
Dunmow Road (east)

4171
A120 (east of J8)

523
B1256 Dunmow Road (east)

Takeley

888
Hockerill Street

1117
Junction of A1250 and Haymeads Lane

Station Road

516

Bishops Parkway

874

London Road

812

Hallingbury Road (north)

499

454
Hallingbury Road (south)

633
St. James' Way

M11 (S)

6372
M11 South of J8

St. James' Way East

536

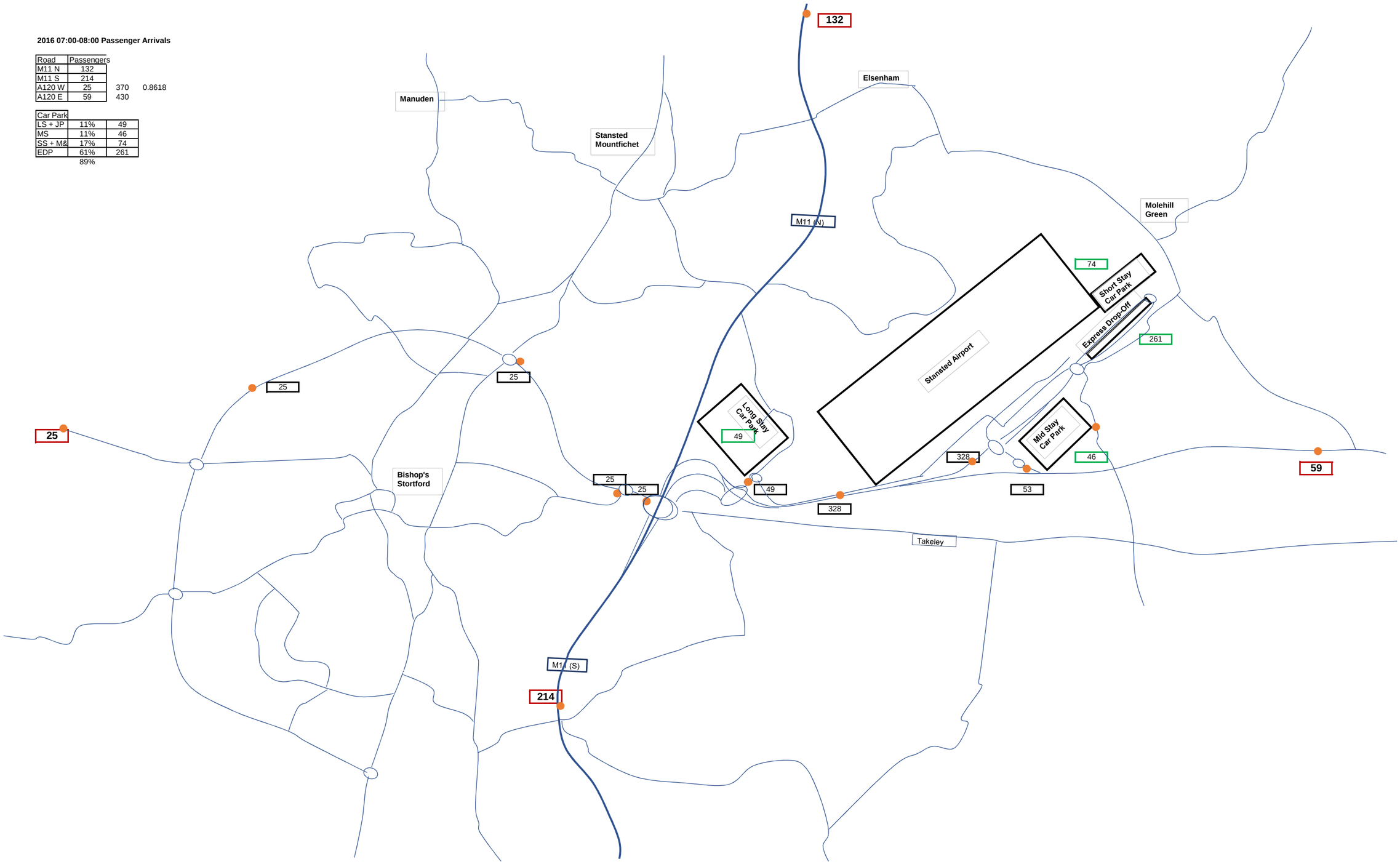
982
A1184 Cambridge Road

355
Lower Road

2016 07:00-08:00 Passenger Arrivals

Road	Passengers		
M11 N	132		
M11 S	214		
A120 W	25	370	0.8618
A120 E	59	430	

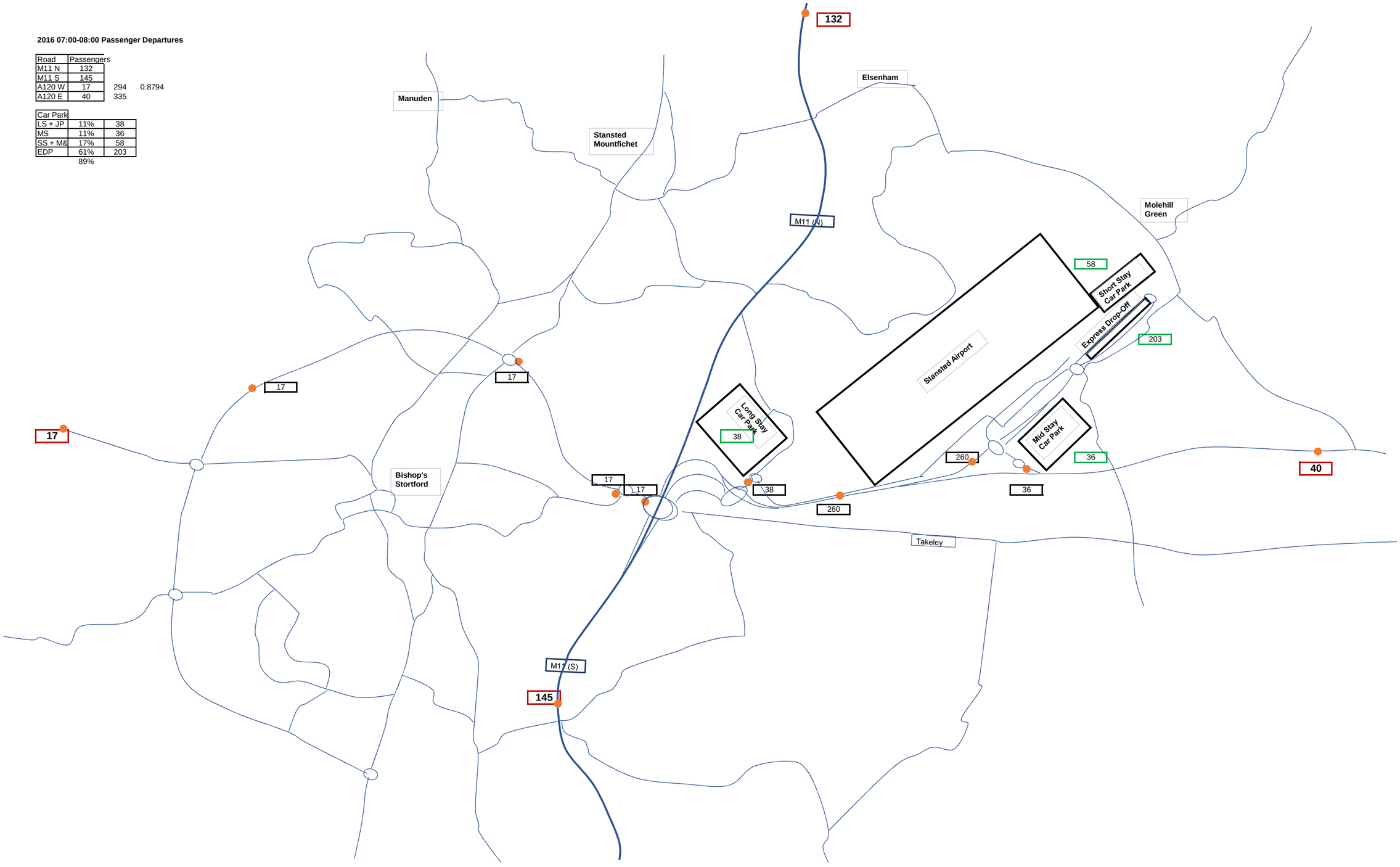
Car Park		
LS + JP	11%	49
MS	11%	46
SS + M&	17%	74
EDP	61%	261
	89%	



2016 07:00-08:00 Passenger Departures

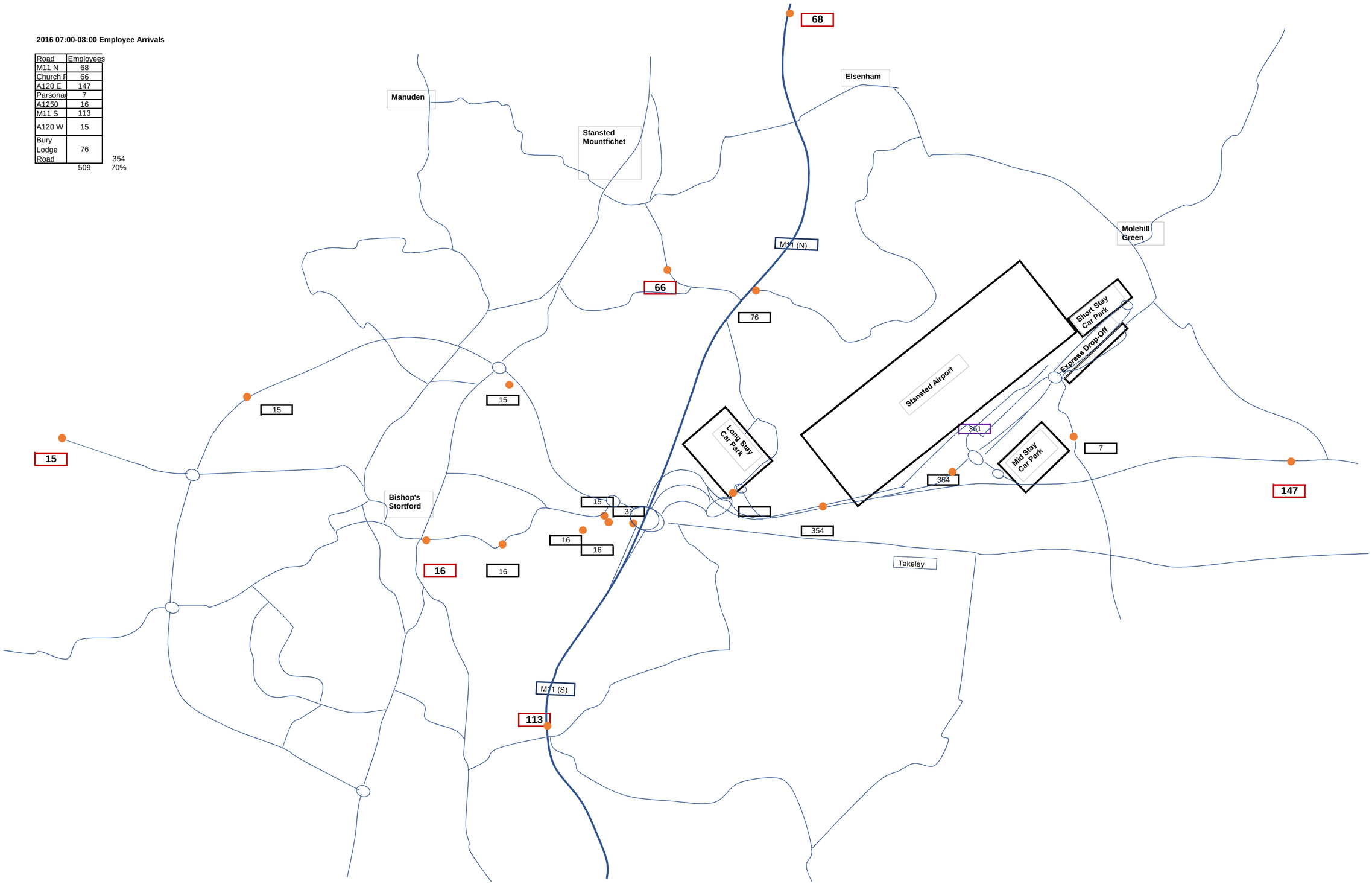
Road	Passengers		
M11 N	132		
M11 S	145		
A120 W	17	294	0.8794
A120 E	40	335	

Car Park		
LS + JP	11%	38
MS	11%	36
SS + M&	17%	58
EDP	61%	203
	89%	



2016 07:00-08:00 Employee Arrivals

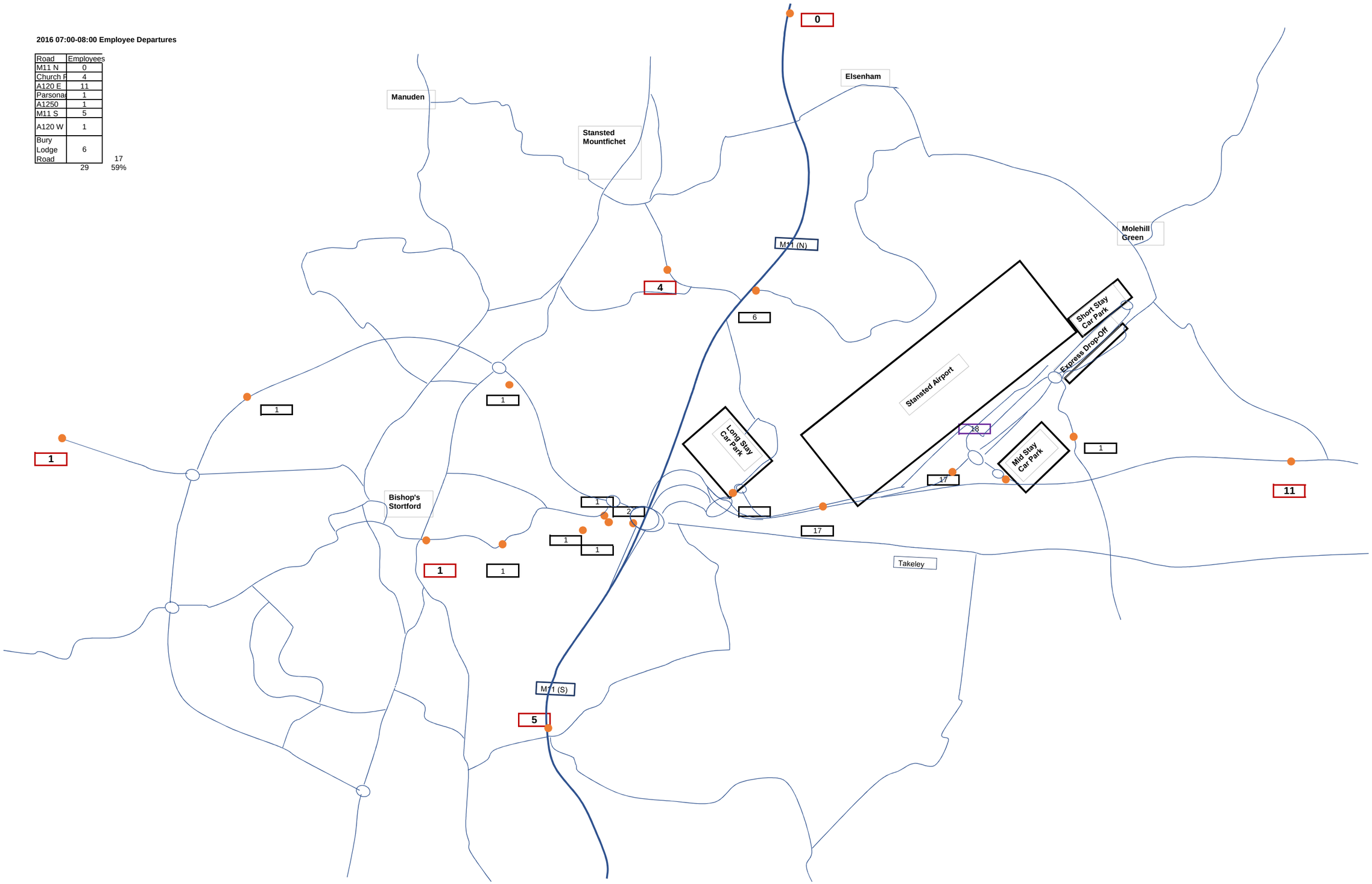
Road	Employees	
M11 N	68	
Church F	66	
A120 E	147	
Parsonag	7	
A1250	16	
M11 S	113	
A120 W	15	
Bury Lodge Road	76	
		354
	509	70%



2016 07:00-08:00 Employee Departures

Road	Employees
M11 N	0
Church F	4
A120 E	11
Parsonag	1
A1250	1
M11 S	5
A120 W	1
Bury Lodge Road	6
	29

17
59%

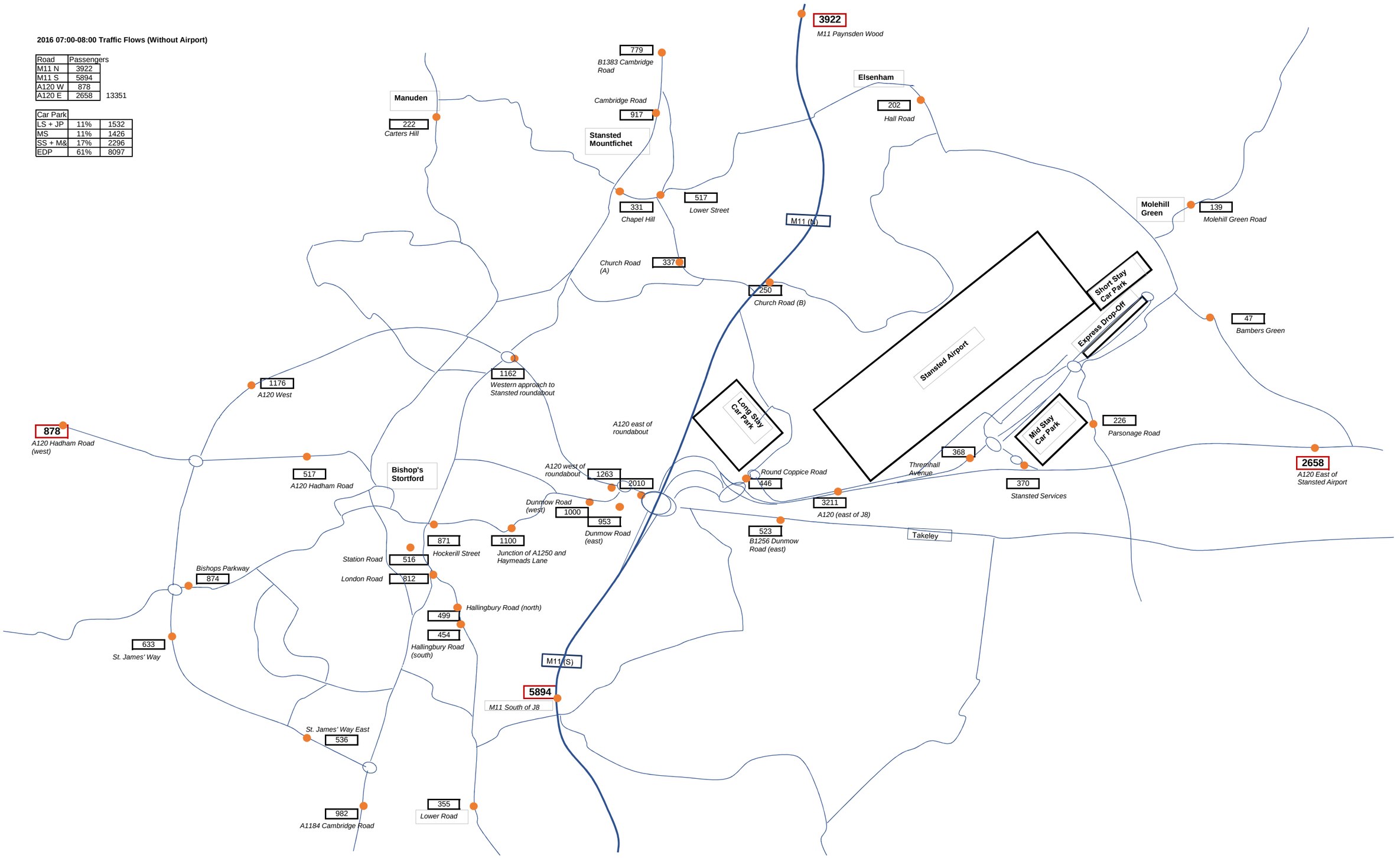


2016 07:00-08:00 Traffic Flows (Without Airport)

Road	Passengers
M11 N	3922
M11 S	5894
A120 W	878
A120 E	2658

13351

Car Park		
LS + JP	11%	1532
MS	11%	1426
SS + M&	17%	2296
EDP	61%	8097



2028 With Airport (35mppa) 0700-0800 Passenger Arrivals

Hourly Passenger Count 4,612

Passenger Mode Split		%
Car Driver	692	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**692**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 692

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	52	0	0	0
Outer London NE	67	0	0	0
Outer London SE	11	0	0	0
Outer London SW	8	0	0	0
Outer London NW	55	0	0	0
Outer South East NE	221	0	0	0
Outer South East NW	26	0	0	0
Outer South East SW	12	0	0	0
Outer South East SE	35	0	0	0
Southwest & Wales	15	0	0	0
West Midlands	9	0	0	0
East Midlands	42	0	0	0
East Anglia	120	0	0	0
Rest of UK	18	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	692	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	52	0	0	0
Outer London NE	67	0	0	0
Outer London SE	11	0	0	0
Outer London SW	8	0	0	0
Outer London NW	55	0	0	0
Outer South East NE	221	0	0	0
Outer South East NW	26	0	0	0
Outer South East SW	12	0	0	0
Outer South East SE	35	0	0	0
Southwest & Wales	15	0	0	0
West Midlands	9	0	0	0
East Midlands	42	0	0	0
East Anglia	120	0	0	0
Rest of UK	18	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	692	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	52	0	0	0
Outer London NE	67	0	0	0
Outer London SE	11	0	0	0
Outer London SW	8	0	0	0
Outer London NW	55	0	0	0
Outer South East NE	221	0	0	0
Outer South East NW	26	0	0	0
Outer South East SW	12	0	0	0
Outer South East SE	35	0	0	0
Southwest & Wales	15	0	0	0
West Midlands	9	0	0	0
East Midlands	42	0	0	0
East Anglia	120	0	0	0
Rest of UK	18	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	692	0	0	0

692

Distribution of Vehicles on the Road Network *Source:* ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South						West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	52										100%												
London North East	67										100%												
London North West	55										100%												
London South East	11										100%												
London South West	8										100%												
London Sub-total	193																						
SE England - NE	221																						
Essex	163		50%								50%												
Hertfordshire	58										25%							75%					
SE England - NW	26																						
Bedfordshire	2	100%																					
Berkshire	7										100%												
Buckinghamshire	10										100%												
Oxfordshire	7										100%												
SE England - SE	35																						
East Sussex	4										100%												
Kent	31										100%												
SE England - SW	12																						
Hampshire	7										100%												
Surrey	3										100%												
West Sussex	2										100%												
Rest of South East Sub-total	0										100%												
East Anglia	120																						
Cambridgeshire	61	100%																					
Norfolk	14	100%																					
Suffolk	45	50%	50%																				
East Midlands	42	100%																					
South West England and Wales	15										100%												
West Midlands	9	100%																					
Rest of UK	18	100%																					
Sub-total Rest of Country	18																						
Total All Areas	692																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	52	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0
London North East	67	0	0	0	0	0	0	0	0	0	67	0	0	0	0	0	0	0	0	0	0	0	0
London North West	55	0	0	0	0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0
London South East	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
London South West	8	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	193																						
SE England - NE	221																						
Essex	163	0	82	0	0	0	0	0	0	0	82	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	58	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	43	0	0	0	0	0
SE England - NW	26																						
Bedfordshire	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	35																						
East Sussex	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Kent	31	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	12																						
Hampshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	120																						
Cambridgeshire	61	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	45	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	42	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	15	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	18																						
Total All Areas	692																						
Residence not reported	0																						
Total		169	104	0	0	0	0	0	0	0	375	0	0	0	0	0	0	43	0	0	0	0	0

Road Link		
M11 N	169	24%
M11 S	375	54%
A120 E	104	15%
A120 W	43	6%
Total	**692**	

2028 With Airport (35mppa) 0700-0800 Passenger Departures

Hourly Passenger Count 3,569

Passenger Mode Split		%
Car Driver	535	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**535**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 535

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	40	0	0	0
Outer London NE	52	0	0	0
Outer London SE	8	0	0	0
Outer London SW	6	0	0	0
Outer London NW	43	0	0	0
Outer South East NE	171	0	0	0
Outer South East NW	20	0	0	0
Outer South East SW	10	0	0	0
Outer South East SE	27	0	0	0
Southwest & Wales	12	0	0	0
West Midlands	7	0	0	0
East Midlands	33	0	0	0
East Anglia	93	0	0	0
Rest of UK	14	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	535	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	40	0	0	0
Outer London NE	52	0	0	0
Outer London SE	8	0	0	0
Outer London SW	6	0	0	0
Outer London NW	43	0	0	0
Outer South East NE	171	0	0	0
Outer South East NW	20	0	0	0
Outer South East SW	10	0	0	0
Outer South East SE	27	0	0	0
Southwest & Wales	12	0	0	0
West Midlands	7	0	0	0
East Midlands	33	0	0	0
East Anglia	93	0	0	0
Rest of UK	14	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	535	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	40	0	0	0
Outer London NE	52	0	0	0
Outer London SE	8	0	0	0
Outer London SW	6	0	0	0
Outer London NW	43	0	0	0
Outer South East NE	171	0	0	0
Outer South East NW	20	0	0	0
Outer South East SW	10	0	0	0
Outer South East SE	27	0	0	0
Southwest & Wales	12	0	0	0
West Midlands	7	0	0	0
East Midlands	33	0	0	0
East Anglia	93	0	0	0
Rest of UK	14	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	535	0	0	0

535

Distribution of Vehicles on the Road Network

Source: ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	40										100%												
London North East	52										100%												
London North West	43										100%												
London South East	8										100%												
London South West	6										100%												
London Sub-total	149																						
SE England - NE	171																						
Essex	126		50%								50%												
Hertfordshire	45										25%							75%					
SE England - NW	20																						
Bedfordshire	2	100%																					
Berkshire	7										100%												
Buckinghamshire	9										100%												
Oxfordshire	6										100%												
SE England - SE	27																						
East Sussex	4										100%												
Kent	28										100%												
SE England - SW	10																						
Hampshire	7										100%												
Surrey	3										100%												
West Sussex	2										100%												
Rest of South East Sub-total	0										100%												
East Anglia	93																						
Cambridgeshire	48	100%																					
Norfolk	11	100%																					
Suffolk	35	50%	50%																				
East Midlands	33	100%																					
South West England and Wales	12										100%												
West Midlands	7	100%																					
Rest of UK	14	100%																					
Sub-total Rest of Country	14																						
Total All Areas	535																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	40	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0
London North East	52	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0
London North West	43	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	0
London South East	8	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
London South West	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	149																						
SE England - NE	171																						
Essex	126	0	63	0	0	0	0	0	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	45	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	33	0	0	0	0	0
SE England - NW	20																						
Bedfordshire	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	9	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	27																						
East Sussex	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Kent	28	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	10																						
Hampshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	93																						
Cambridgeshire	48	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	35	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	33	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	12	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	14																						
Total All Areas	535																						
Residence not reported	0																						
Total		131	81	0	0	0	0	0	0	0	300	0	0	0	0	0	0	33	0	0	0	0	0

Road Link		
M11 N	131	24%
M11 S	300	55%
A120 E	81	15%
A120 W	33	6%
Total	**545**	

2028 With Airport (35mppa) 07:00-08:00 Employee Arrivals

Daily Employee Count	549

Employee Mode Split		%
Car Driver	491	89%
Car Passenger	58	11%
Total	**549**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	36
Total	**36**

0.5

Number of Cars	527

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	3	0
Outer London NE	42	6
Outer London SE	0	0
Outer London SW	2	0
Outer London NW	9	0
Outer South East NE	344	47
Outer South East NW	13	3
Outer South East SW	2	0
Outer South East SE	6	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	8	0
East Anglia	58	3
Rest of UK	3	0
Residence not reported	0	0
Foreign	0	0
Total	491	58

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	3	0
Outer London NE	42	4
Outer London SE	0	0
Outer London SW	2	0
Outer London NW	9	0
Outer South East NE	344	29
Outer South East NW	13	2
Outer South East SW	2	0
Outer South East SE	6	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	8	0
East Anglia	58	2
Rest of UK	3	0
Residence not reported	0	0
Foreign	0	0
Total	491	36

527

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	3						100%		
London North East	46						100%		
London North West	0						100%		
London South East	2						100%		
London South West	9						100%		
London Sub-total	60								
SE England - NE	373								
Essex	290								
Uttlesford	98		40%	25%	5%				30%
Braintree	90			100%					
Harlow	32						50%	50%	
Chelmsford	21			75%			25%		
Colchester	14			100%					
Epping Forest	10				25%		75%		
Basildon	5						100%		
Tendring	4			100%					
Maldon	3			100%					
Brentwood	3						100%		
Castle Point	2			50%			50%		
Rochford	1			50%			50%		
Southend-on-Sea	2						100%		
Thurrock	3						100%		
Hertfordshire	83								
East Hertfordshire	67		25%			25%		50%	
Broxbourne	7							100%	
North Hertfordshire	4							100%	
Welwyn Hatfield	1							100%	
St. Albans	1							100%	
Hertsmere	1							100%	
Stevenage	1							100%	
Watford	1							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	14								
Bedfordshire	10	100%							
Berkshire	2						100%		
Buckinghamshire	3						100%		
Oxfordshire	0						100%		
SE England - SE	6								
East Sussex	0						100%		
Kent	6						100%		
SE England - SW	2								
Hampshire	0						100%		
Surrey	1						100%		
West Sussex	1						100%		
Rest of South East Sub-total	0						100%		
East Anglia	60								
Cambridgeshire	29	80%							20%
Norfolk	5	100%							
Suffolk	26	50%	50%						
East Midlands	8	100%							
South West England and Wales	0						100%		
West Midlands	2	100%							

Rest of UK	3	100%							
Sub-total Rest of Country	3								
Total All Areas	527								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	3	0	0	0	0	0	3	0	0
London North East	46	0	0	0	0	0	46	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	2	0	0	0	0	0	2	0	0
London South West	9	0	0	0	0	0	9	0	0
London Sub-total	60								
SE England - NE	373								
Essex	290								
Uttlesford	98	0	39	24	5	0	0	0	29
Braintree	90	0	0	90	0	0	0	0	0
Harlow	32	0	0	0	0	0	16	16	0
Chelmsford	21	0	0	16	0	0	5	0	0
Colchester	14	0	0	14	0	0	0	0	0
Epping Forest	10	0	0	0	3	0	8	0	0
Basildon	5	0	0	0	0	0	5	0	0
Tendring	4	0	0	4	0	0	0	0	0
Maldon	3	0	0	3	0	0	0	0	0
Brentwood	3	0	0	0	0	0	3	0	0
Castle Point	2	0	0	1	0	0	1	0	0
Rochford	1	0	0	1	0	0	1	0	0
Southend-on-Sea	2	0	0	0	0	0	2	0	0
Thurrock	3	0	0	0	0	0	3	0	0
Hertfordshire	83								
East Hertfordshire	67	0	17	0	0	17	0	34	0
Broxbourne	7	0	0	0	0	0	0	7	0
North Hertfordshire	4	0	0	0	0	0	0	4	0
Welwyn Hatfield	1	0	0	0	0	0	0	1	0
St. Albans	1	0	0	0	0	0	0	1	0
Hertsmere	1	0	0	0	0	0	0	1	0
Stevenage	1	0	0	0	0	0	0	1	0
Watford	1	0	0	0	0	0	0	1	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	14								
Bedfordshire	10	10	0	0	0	0	0	0	0
Berkshire	2	0	0	0	0	0	2	0	0
Buckinghamshire	3	0	0	0	0	0	3	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	6								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	6	0	0	0	0	0	6	0	0
SE England - SW	2								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	1	0	0	0	0	0	1	0	0
West Sussex	1	0	0	0	0	0	1	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	60								
Cambridgeshire	29	23	0	0	0	0	0	0	6
Norfolk	5	5	0	0	0	0	0	0	0
Suffolk	26	13	13	0	0	0	0	0	0
East Midlands	8	8	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	2	2	0	0	0	0	0	0	0
Rest of UK	3	3	0	0	0	0	0	0	0
Sub-total Rest of Country	3								
Total All Areas	527								
Total		63	69	153	7	17	117	66	35

M11 N	63	12%
Church Road	69	13%
A120 E	153	29%
Parsonage Road	7	1%
A1250	17	3%
M11 S	117	22%
A120 W	66	12%
Bury Lodge Road	35	7%

2028 With Airport (35mppa) 07:00-08:00 Employee Departures

Daily Employee Count 31

Employee Mode Split		%
Car Driver	28	91%
Car Passenger	3	9%
Total	**31**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1.6 Occupancy

Car Passenger	2
Total	**2**

0.5

Number of Cars 30

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	27	3
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	0	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	28	3

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	27	2
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	0	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	28	2

30

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0						100%		
London North East	2						100%		
London North West	0						100%		
London South East	0						100%		
London South West	0						100%		
London Sub-total	2								
SE England - NE	28								
Essex	22								
Uttlesford	7		40%	25%	5%				30%
Braintree	7			100%					
Harlow	2						50%	50%	
Chelmsford	2			75%			25%		
Colchester	1			100%					
Epping Forest	1				25%		75%		
Basildon	0						100%		
Tendring	0			100%					
Maldon	0			100%					
Brentwood	0						100%		
Castle Point	0			50%			50%		
Rochford	0			50%			50%		
Southend-on-Sea	0						100%		
Thurrock	0						100%		
Hertfordshire	6								
East Hertfordshire	5		25%			25%		50%	
Broxbourne	1							100%	
North Hertfordshire	0							100%	
Welwyn Hatfield	0							100%	
St. Albans	0							100%	
Hertsmere	0							100%	
Stevenage	0							100%	
Watford	0							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	0								
Bedfordshire	0	100%							
Berkshire	0						100%		
Buckinghamshire	0						100%		
Oxfordshire	0						100%		
SE England - SE	0								
East Sussex	0						100%		
Kent	0						100%		
SE England - SW	0								
Hampshire	0						100%		
Surrey	0						100%		
West Sussex	0						100%		
Rest of South East Sub-total	0						100%		
East Anglia	0								
Cambridgeshire	0	80%							20%
Norfolk	0	100%							
Suffolk	0	50%	50%						
East Midlands	0	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	30								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0	0	0	0	0	0	0	0	0
London North East	2	0	0	0	0	0	2	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	0	0	0	0	0	0	0	0	0
London South West	0	0	0	0	0	0	0	0	0
London Sub-total	2								
SE England - NE	28								
Essex	22								
Uttlesford	7	0	3	2	0	0	0	0	2
Braintree	7	0	0	7	0	0	0	0	0
Harlow	2	0	0	0	0	0	1	1	0
Chelmsford	2	0	0	1	0	0	0	0	0
Colchester	1	0	0	1	0	0	0	0	0
Epping Forest	1	0	0	0	0	0	1	0	0
Basildon	0	0	0	0	0	0	0	0	0
Tendring	0	0	0	0	0	0	0	0	0
Maldon	0	0	0	0	0	0	0	0	0
Brentwood	0	0	0	0	0	0	0	0	0
Castle Point	0	0	0	0	0	0	0	0	0
Rochford	0	0	0	0	0	0	0	0	0
Southend-on-Sea	0	0	0	0	0	0	0	0	0
Thurrock	0	0	0	0	0	0	0	0	0
Hertfordshire	6								
East Hertfordshire	5	0	1	0	0	1	0	3	0
Broxbourne	1	0	0	0	0	0	0	1	0
North Hertfordshire	0	0	0	0	0	0	0	0	0
Welwyn Hatfield	0	0	0	0	0	0	0	0	0
St. Albans	0	0	0	0	0	0	0	0	0
Hertsmere	0	0	0	0	0	0	0	0	0
Stevenage	0	0	0	0	0	0	0	0	0
Watford	0	0	0	0	0	0	0	0	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	0								
Bedfordshire	0	0	0	0	0	0	0	0	0
Berkshire	0	0	0	0	0	0	0	0	0
Buckinghamshire	0	0	0	0	0	0	0	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	0								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	0	0	0	0	0	0	0	0	0
SE England - SW	0								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	0	0	0	0	0	0	0	0	0
West Sussex	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	0								
Cambridgeshire	0	0	0	0	0	0	0	0	0
Norfolk	0	0	0	0	0	0	0	0	0
Suffolk	0	0	0	0	0	0	0	0	0
East Midlands	0	0	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	30								

Total		0	4	12	1	1	5	5	2

M11 N	0	0%
Church Road	4	14%
A120 E	12	39%
Parsonage Road	1	2%
A1250	1	4%
M11 S	5	16%
A120 W	5	17%
Bury Lodge Road	2	7%

2028 07:00-08:00 Traffic Flows (Without Airport)

Road	Passengers
M11 N	4660
M11 S	7044
A120 W	1124
A120 E	3260

16087

Car Park		
LS + JP	11%	1846
MS	11%	1718
SS + M&	17%	2766
EDP	61%	9757

TEMPro:
1.1785

4660
M11 Paynsden Wood

918
B1383 Cambridge Road

Manuden

261
Carters Hill

Cambridge Road

1081

Stansted Mountfichet

Elsenham

238
Hall Road

609
Lower Street

390
Chapel Hill

M11 (N)

Molehill Green

163
Molehill Green Road

Church Road (A)

462

324
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

55
Bambers Green

1459
Western approach to Stansted roundabout

1475
A120 West

Long Stay Car Park

A120 east of roundabout

1124
A120 Hadham Road (west)

Mid Stay Car Park

273
Parsonage Road

434
Thremhall Avenue

3260
A120 East of Stansted Airport

609
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout

1577

2488

Round Coppice Road

908

436
Stansted Services

Dunmow Road (west)

1208

1153
Dunmow Road (east)

3913
A120 (east of J8)

616
B1256 Dunmow Road (east)

Takeley

1056
Hockerill Street

1326
Junction of A1250 and Haymeads Lane

Station Road

608

Bishops Parkway

1030

London Road

957

Hallingbury Road (north)

588

535
Hallingbury Road (south)

746
St. James' Way

M11 (S)

7044
M11 South of J8

St. James' Way East

632

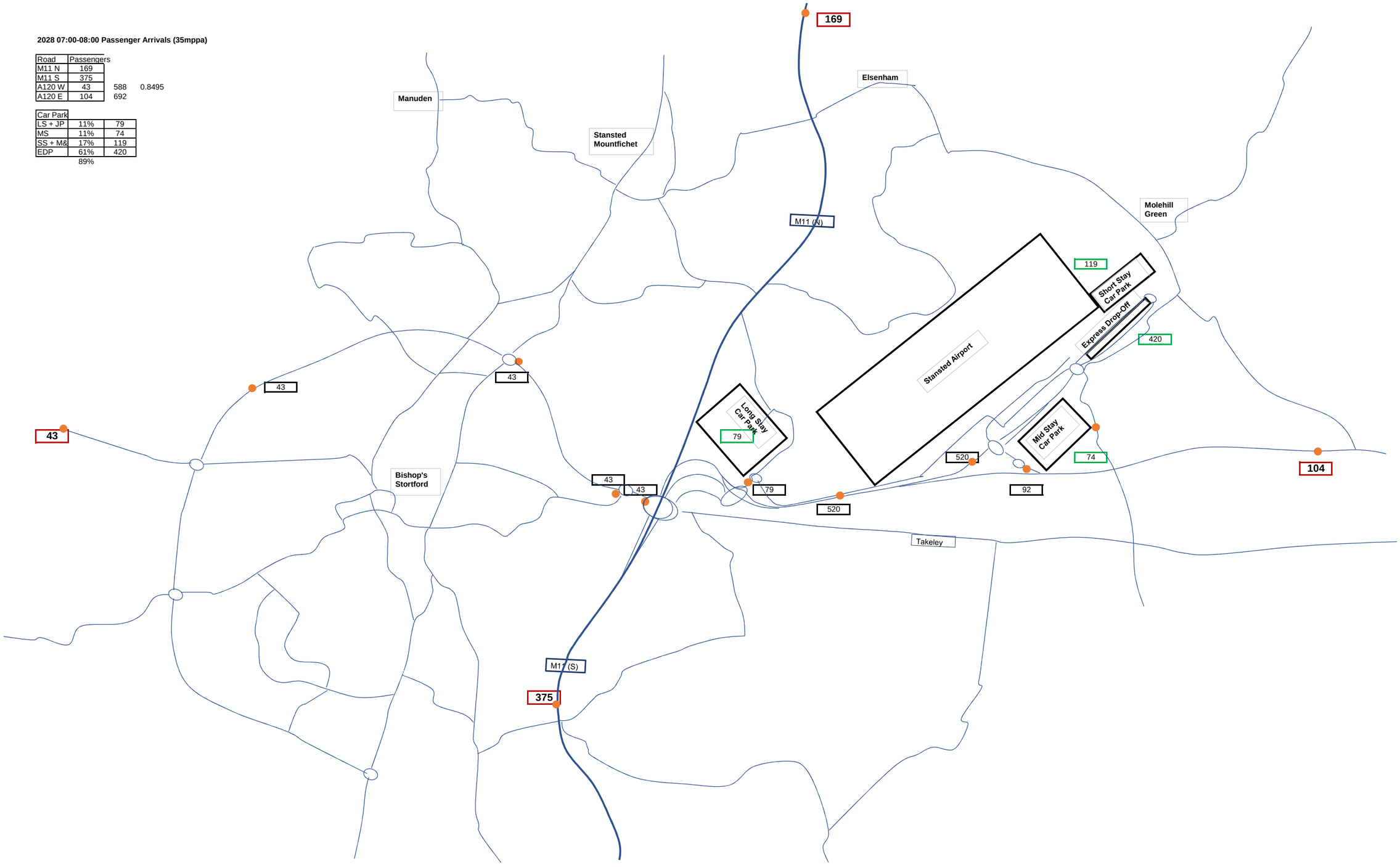
1157
A1184 Cambridge Road

418
Lower Road

2028 07:00-08:00 Passenger Arrivals (35mppa)

Road	Passengers		
M11 N	169		
M11 S	375		
A120 W	43	588	0.8495
A120 E	104	692	

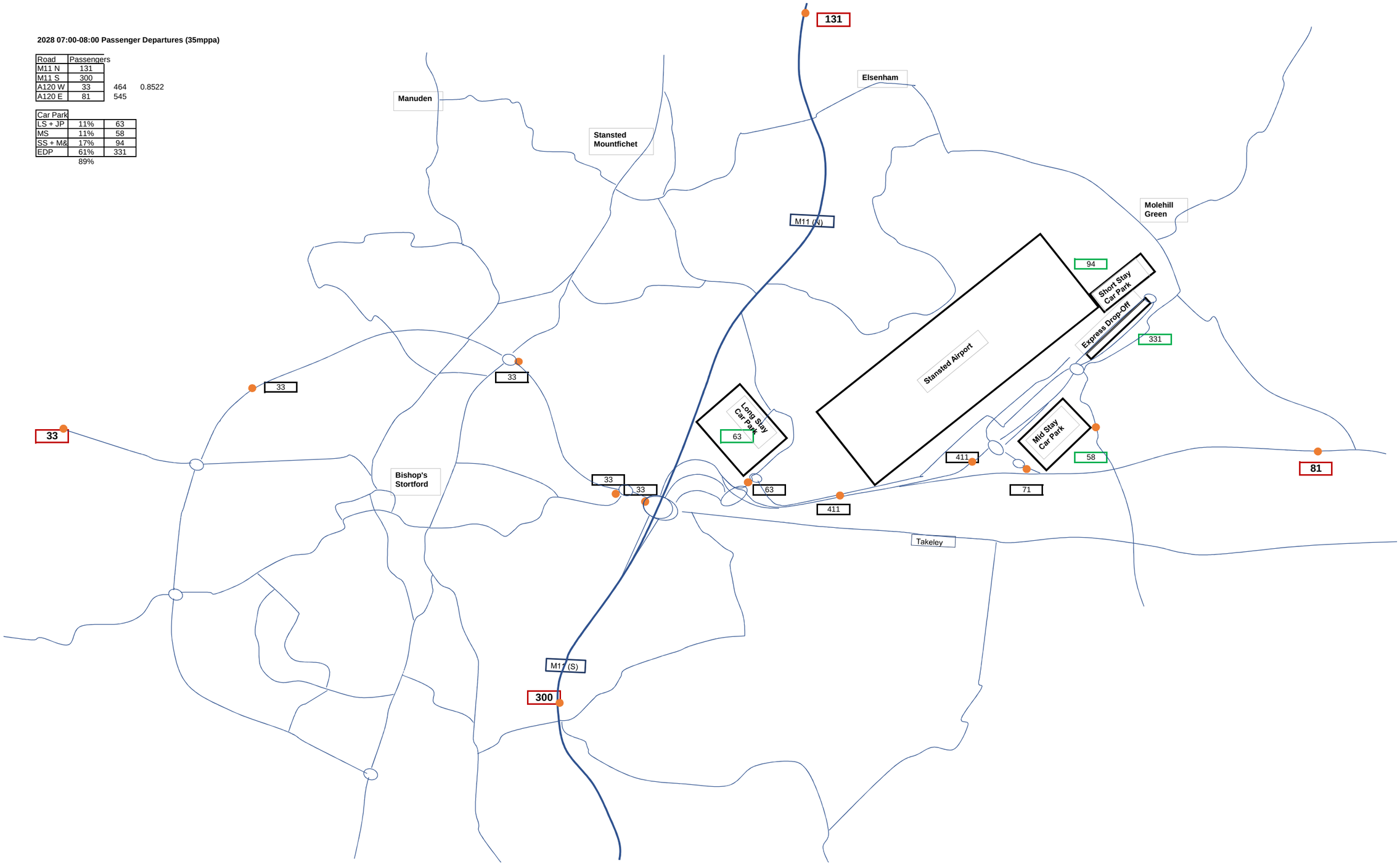
Car Park		
LS + JP	11%	79
MS	11%	74
SS + M&	17%	119
EDP	61%	420
	89%	



2028 07:00-08:00 Passenger Departures (35mppa)

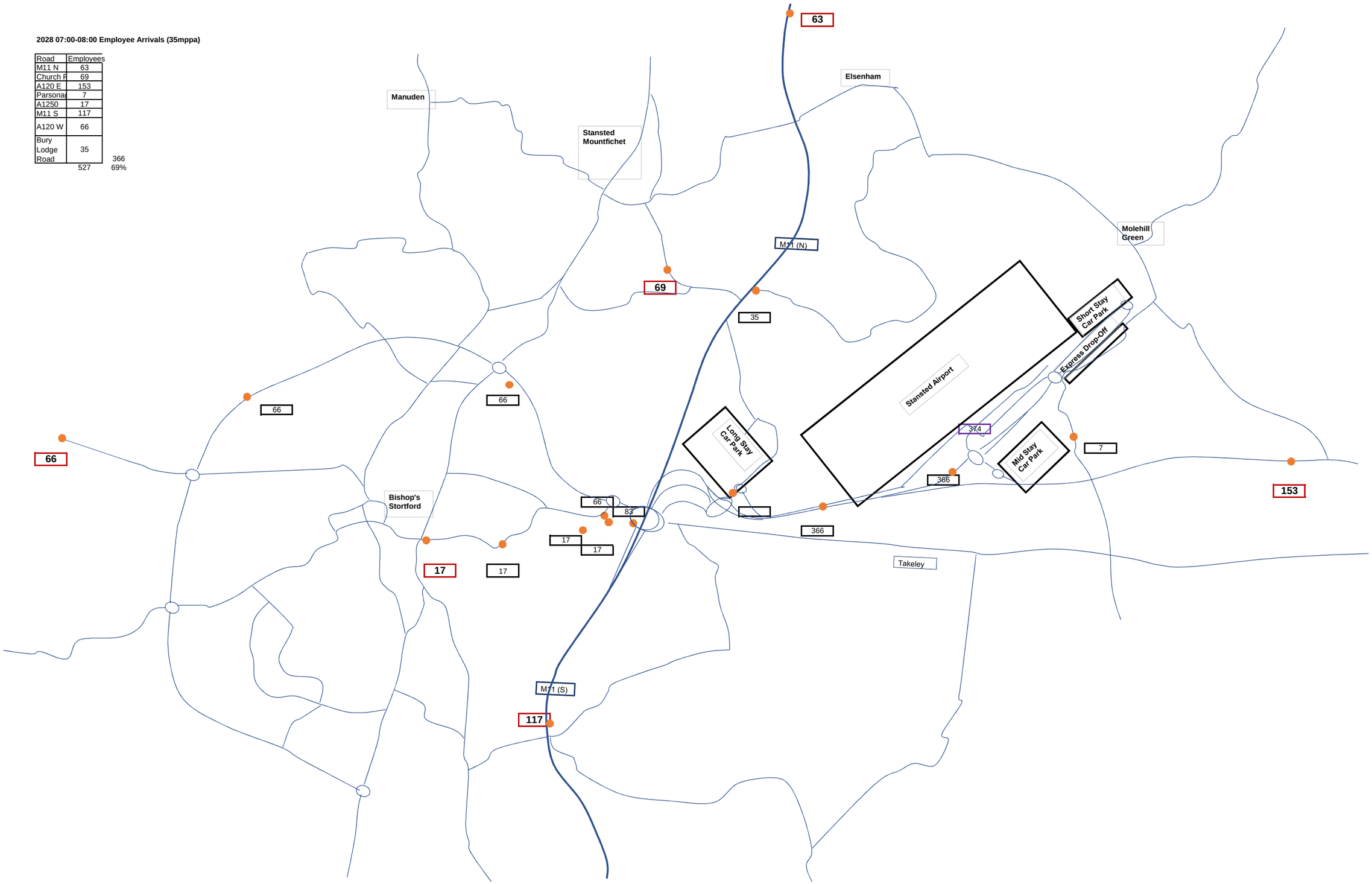
Road	Passengers		
M11 N	131		
M11 S	300		
A120 W	33	464	0.8522
A120 E	81	545	

Car Park		
LS + JP	11%	63
MS	11%	58
SS + M&	17%	94
EDP	61%	331
	89%	



2028 07:00-08:00 Employee Arrivals (35mppa)

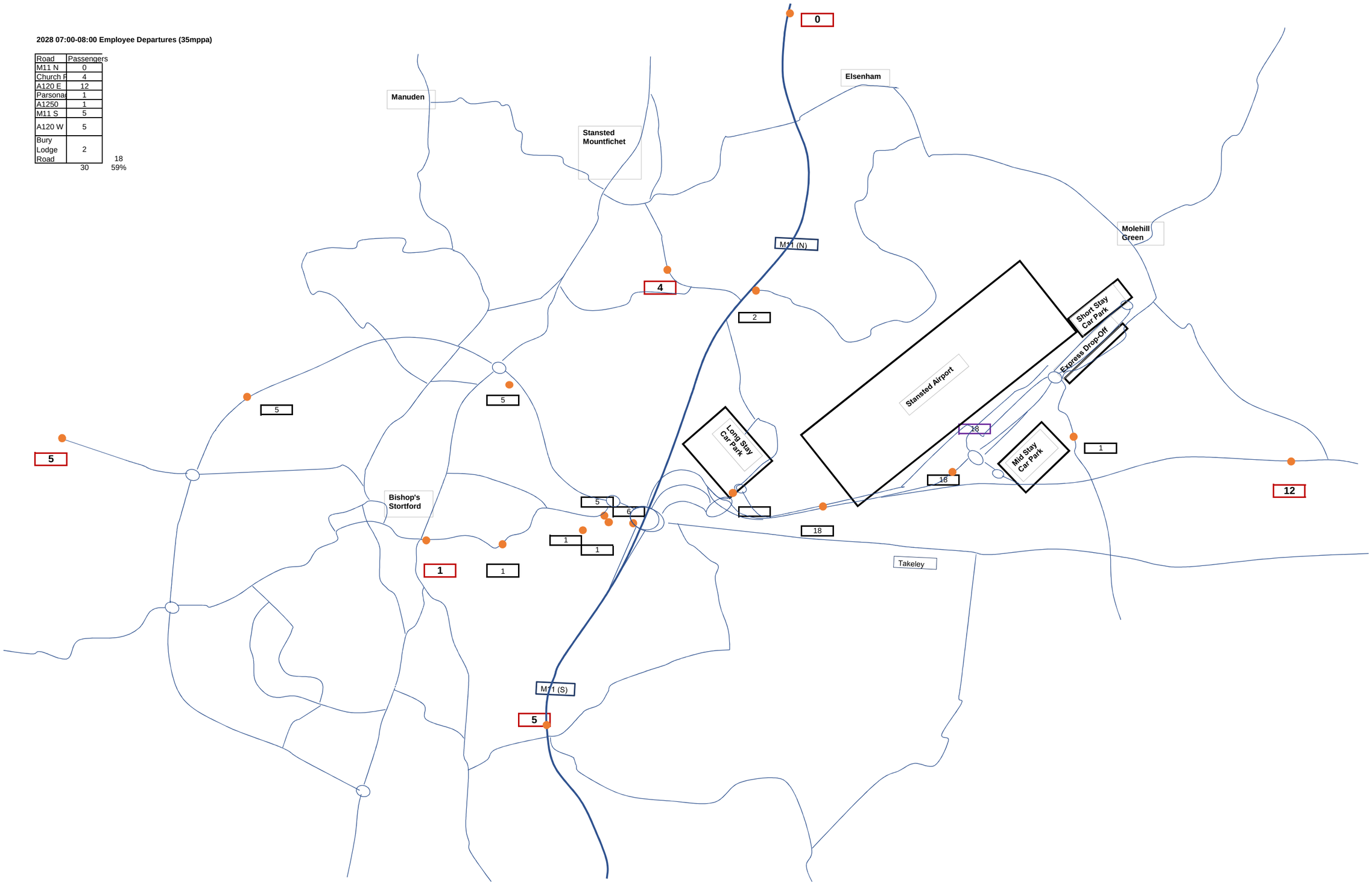
Road	Employees	
M11 N	63	
Church F	69	
A120 E	153	
Parsonag	7	
A1250	17	
M11 S	117	
A120 W	66	
Bury Lodge Road	35	
		366
	527	69%



2028 07:00-08:00 Employee Departures (35mppa)

Road	Passengers
M11 N	0
Church F	4
A120 E	12
Parsonag	1
A1250	1
M11 S	5
A120 W	5
Bury Lodge Road	2
	30

18
59%



2028 07:00-08:00 Traffic Flows (With Airport 35mppa)

Road	Passengers
M11 N	5023
M11 S	7840
A120 W	1271
A120 E	3610

17745

Car Park		
LS + JP	11%	2036
MS	11%	1895
SS + M&	17%	3051
EDP	61%	10762

TEMPro:
1.1872

5023
M11 Paynsden Wood

918
B1383 Cambridge Road

Manuden

261
Carters Hill

Cambridge Road

1081

Stansted Mountfichet

Elsenham

238
Hall Road

609
Lower Street

390
Chapel Hill

M11 (N)

Molehill Green

163
Molehill Green Road

Church Road (A)

535

361
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

55
Bambers Green

1607
Western approach to Stansted roundabout

1622
A120 West

Long Stay Car Park

1271
A120 Hadham Road (west)

A120 east of roundabout

A120 west of roundabout

1725

2653

Round Coppice Road

1050

Mid Stay Car Park

281
Parsonage Road

1749
Thremhall Avenue

3610
A120 East of Stansted Airport

609
A120 Hadham Road

Bishop's Stortford

Dunmow Road (west)

1226

1171
Dunmow Road (east)

5228
A120 (east of J8)

600
Stansted Services

1074
Hockerill Street

1344
Junction of A1250 and Haymeads Lane

616
B1256 Dunmow Road (east)

Takeley

Station Road

608

Bishops Parkway

1030

London Road

957

Hallingbury Road (north)

588

535
Hallingbury Road (south)

746
St. James' Way

M11 (S)

7840
M11 South of J8

St. James' Way East

632

1157
A1184 Cambridge Road

418
Lower Road

2028 With Airport (43mppa) 0700-0800 Passenger Arrivals

Hourly Passenger Count 6,230

Passenger Mode Split		%
Car Driver	934	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**934**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 934

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	70	0	0	0
Outer London NE	90	0	0	0
Outer London SE	15	0	0	0
Outer London SW	11	0	0	0
Outer London NW	75	0	0	0
Outer South East NE	298	0	0	0
Outer South East NW	35	0	0	0
Outer South East SW	17	0	0	0
Outer South East SE	47	0	0	0
Southwest & Wales	21	0	0	0
West Midlands	12	0	0	0
East Midlands	57	0	0	0
East Anglia	163	0	0	0
Rest of UK	24	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	934	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	70	0	0	0
Outer London NE	90	0	0	0
Outer London SE	15	0	0	0
Outer London SW	11	0	0	0
Outer London NW	75	0	0	0
Outer South East NE	298	0	0	0
Outer South East NW	35	0	0	0
Outer South East SW	17	0	0	0
Outer South East SE	47	0	0	0
Southwest & Wales	21	0	0	0
West Midlands	12	0	0	0
East Midlands	57	0	0	0
East Anglia	163	0	0	0
Rest of UK	24	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	934	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	70	0	0	0
Outer London NE	90	0	0	0
Outer London SE	15	0	0	0
Outer London SW	11	0	0	0
Outer London NW	75	0	0	0
Outer South East NE	298	0	0	0
Outer South East NW	35	0	0	0
Outer South East SW	17	0	0	0
Outer South East SE	47	0	0	0
Southwest & Wales	21	0	0	0
West Midlands	12	0	0	0
East Midlands	57	0	0	0
East Anglia	163	0	0	0
Rest of UK	24	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	934	0	0	0

934

Distribution of Vehicles on the Road Network *Source:* *..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx*

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	70										100%												
London North East	90										100%												
London North West	75										100%												
London South East	15										100%												
London South West	11										100%												
London Sub-total	260																						
SE England - NE	298																						
Essex	221		50%								50%												
Hertfordshire	78										25%							75%					
SE England - NW	35																						
Bedfordshire	3	100%																					
Berkshire	10										100%												
Buckinghamshire	13										100%												
Oxfordshire	9										100%												
SE England - SE	47																						
East Sussex	6										100%												
Kent	42										100%												
SE England - SW	17																						
Hampshire	10										100%												
Surrey	4										100%												
West Sussex	2										100%												
Rest of South East Sub-total	0										100%												
East Anglia	163																						
Cambridgeshire	83	100%																					
Norfolk	19	100%																					
Suffolk	61	50%	50%																				
East Midlands	57	100%																					
South West England and Wales	21										100%												
West Midlands	12	100%																					
Rest of UK	24	100%																					
Sub-total Rest of Country	24																						
Total All Areas	934																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	70	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	0	0	0	0	0
London North East	90	0	0	0	0	0	0	0	0	0	90	0	0	0	0	0	0	0	0	0	0	0	0
London North West	75	0	0	0	0	0	0	0	0	0	75	0	0	0	0	0	0	0	0	0	0	0	0
London South East	15	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
London South West	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	260																						
SE England - NE	298																						
Essex	221	0	110	0	0	0	0	0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	78	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	58	0	0	0	0	0
SE England - NW	35																						
Bedfordshire	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	13	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	9	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	47																						
East Sussex	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
Kent	42	0	0	0	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	17																						
Hampshire	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	163																						
Cambridgeshire	83	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	61	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	57	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	21	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	24																						
Total All Areas	934																						
Residence not reported	0																						
Total		229	141	0	0	0	0	0	0	0	507	0	0	0	0	0	0	58	0	0	0	0	0

Road Link		
M11 N	229	24%
M11 S	507	54%
A120 E	141	15%
A120 W	58	6%
Total	**934**	

2028 With Airport (43mppa) 0700-0800 Passenger Departures

Hourly Passenger Count 3,169

Passenger Mode Split		%
Car Driver	475	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**475**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 475

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	36	0	0	0
Outer London NE	46	0	0	0
Outer London SE	7	0	0	0
Outer London SW	5	0	0	0
Outer London NW	38	0	0	0
Outer South East NE	152	0	0	0
Outer South East NW	18	0	0	0
Outer South East SW	8	0	0	0
Outer South East SE	24	0	0	0
Southwest & Wales	10	0	0	0
West Midlands	6	0	0	0
East Midlands	29	0	0	0
East Anglia	83	0	0	0
Rest of UK	12	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	475	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	36	0	0	0
Outer London NE	46	0	0	0
Outer London SE	7	0	0	0
Outer London SW	5	0	0	0
Outer London NW	38	0	0	0
Outer South East NE	152	0	0	0
Outer South East NW	18	0	0	0
Outer South East SW	8	0	0	0
Outer South East SE	24	0	0	0
Southwest & Wales	10	0	0	0
West Midlands	6	0	0	0
East Midlands	29	0	0	0
East Anglia	83	0	0	0
Rest of UK	12	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	475	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	36	0	0	0
Outer London NE	46	0	0	0
Outer London SE	7	0	0	0
Outer London SW	5	0	0	0
Outer London NW	38	0	0	0
Outer South East NE	152	0	0	0
Outer South East NW	18	0	0	0
Outer South East SW	8	0	0	0
Outer South East SE	24	0	0	0
Southwest & Wales	10	0	0	0
West Midlands	6	0	0	0
East Midlands	29	0	0	0
East Anglia	83	0	0	0
Rest of UK	12	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	475	0	0	0

475

Distribution of Vehicles on the Road Network *Source:* ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	36										100%												
London North East	46										100%												
London North West	38										100%												
London South East	7										100%												
London South West	5										100%												
London Sub-total	132																						
SE England - NE	152																						
Essex	112		50%								50%												
Hertfordshire	40										25%							75%					
SE England - NW	18																						
Bedfordshire	2	100%																					
Berkshire	5										100%												
Buckinghamshire	7										100%												
Oxfordshire	5										100%												
SE England - SE	24																						
East Sussex	3										100%												
Kent	21										100%												
SE England - SW	8																						
Hampshire	5										100%												
Surrey	2										100%												
West Sussex	1										100%												
Rest of South East Sub-total	0										100%												
East Anglia	83																						
Cambridgeshire	42	100%																					
Norfolk	10	100%																					
Suffolk	31	50%	50%																				
East Midlands	29	100%																					
South West England and Wales	10										100%												
West Midlands	6	100%																					
Rest of UK	12	100%																					
Sub-total Rest of Country	12																						
Total All Areas	475																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	36	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0
London North East	46	0	0	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
London North West	38	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0
London South East	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
London South West	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	132																						
SE England - NE	152																						
Essex	112	0	56	0	0	0	0	0	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	40	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	30	0	0	0	0	0
SE England - NW	18																						
Bedfordshire	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	24																						
East Sussex	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Kent	21	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	8																						
Hampshire	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	83																						
Cambridgeshire	42	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	31	15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	29	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	12																						
Total All Areas	475																						
Residence not reported	0																						
Total		116	72	0	0	0	0	0	0	0	258	0	0	0	0	0	0	30	0	0	0	0	0

Road Link		
M11 N	116	24%
M11 S	258	54%
A120 E	72	15%
A120 W	30	6%
Total	**475**	

2028 With Airport (43mppa) 07:00-08:00 Employee Arrivals

Daily Employee Count		647

Employee Mode Split		%
Car Driver	602	93%
Car Passenger	45	7%
Total	**647**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	28
Total	**28**

0.5

Number of Cars	630

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	4	0
Outer London NE	52	4
Outer London SE	0	0
Outer London SW	2	0
Outer London NW	12	0
Outer South East NE	422	36
Outer South East NW	15	2
Outer South East SW	2	0
Outer South East SE	8	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	10	0
East Anglia	71	2
Rest of UK	4	0
Residence not reported	0	0
Foreign	0	0
Total	602	45

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	4	0
Outer London NE	52	3
Outer London SE	0	0
Outer London SW	2	0
Outer London NW	12	0
Outer South East NE	422	22
Outer South East NW	15	1
Outer South East SW	2	0
Outer South East SE	8	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	10	0
East Anglia	71	1
Rest of UK	4	0
Residence not reported	0	0
Foreign	0	0
Total	602	28

630

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	4						100%		
London North East	55						100%		
London North West	0						100%		
London South East	2						100%		
London South West	12						100%		
London Sub-total	72								
SE England - NE	444								
Essex	345								
Uttlesford	116		40%	25%	5%				30%
Braintree	108			100%					
Harlow	38						50%	50%	
Chelmsford	25			75%			25%		
Colchester	16			100%					
Epping Forest	12				25%		75%		
Basildon	6						100%		
Tendring	5			100%					
Maldon	4			100%					
Brentwood	4						100%		
Castle Point	2			50%			50%		
Rochford	2			50%			50%		
Southend-on-Sea	3						100%		
Thurrock	4						100%		
Hertfordshire	99								
East Hertfordshire	79		25%			25%		50%	
Broxbourne	9							100%	
North Hertfordshire	4							100%	
Welwyn Hatfield	2							100%	
St. Albans	1							100%	
Hertsmere	1							100%	
Stevenage	1							100%	
Watford	1							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	17								
Bedfordshire	11	100%							
Berkshire	3						100%		
Buckinghamshire	3						100%		
Oxfordshire	0						100%		
SE England - SE	8								
East Sussex	0						100%		
Kent	8						100%		
SE England - SW	2								
Hampshire	0						100%		
Surrey	1						100%		
West Sussex	1						100%		
Rest of South East Sub-total	0						100%		
East Anglia	72								
Cambridgeshire	35	80%							20%
Norfolk	6	100%							
Suffolk	32	50%	50%						
East Midlands	10	100%							
South West England and Wales	0						100%		
West Midlands	2	100%							

Rest of UK	4	100%							
Sub-total Rest of Country	4								
Total All Areas	630								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	4	0	0	0	0	0	4	0	0
London North East	55	0	0	0	0	0	55	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	2	0	0	0	0	0	2	0	0
London South West	12	0	0	0	0	0	12	0	0
London Sub-total	72								
SE England - NE	444								
Essex	345								
Uttlesford	116	0	47	29	6	0	0	0	35
Braintree	108	0	0	108	0	0	0	0	0
Harlow	38	0	0	0	0	0	19	19	0
Chelmsford	25	0	0	19	0	0	6	0	0
Colchester	16	0	0	16	0	0	0	0	0
Epping Forest	12	0	0	0	3	0	9	0	0
Basildon	6	0	0	0	0	0	6	0	0
Tendring	5	0	0	5	0	0	0	0	0
Maldon	4	0	0	4	0	0	0	0	0
Brentwood	4	0	0	0	0	0	4	0	0
Castle Point	2	0	0	1	0	0	1	0	0
Rochford	2	0	0	1	0	0	1	0	0
Southend-on-Sea	3	0	0	0	0	0	3	0	0
Thurrock	4	0	0	0	0	0	4	0	0
Hertfordshire	99								
East Hertfordshire	79	0	20	0	0	20	0	40	0
Broxbourne	9	0	0	0	0	0	0	9	0
North Hertfordshire	4	0	0	0	0	0	0	4	0
Welwyn Hatfield	2	0	0	0	0	0	0	2	0
St. Albans	1	0	0	0	0	0	0	1	0
Hertsmere	1	0	0	0	0	0	0	1	0
Stevenage	1	0	0	0	0	0	0	1	0
Watford	1	0	0	0	0	0	0	1	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	17								
Bedfordshire	11	11	0	0	0	0	0	0	0
Berkshire	3	0	0	0	0	0	3	0	0
Buckinghamshire	3	0	0	0	0	0	3	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	8								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	8	0	0	0	0	0	8	0	0
SE England - SW	2								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	1	0	0	0	0	0	1	0	0
West Sussex	1	0	0	0	0	0	1	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	72								
Cambridgeshire	35	28	0	0	0	0	0	0	7
Norfolk	6	6	0	0	0	0	0	0	0
Suffolk	32	16	16	0	0	0	0	0	0
East Midlands	10	10	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	2	2	0	0	0	0	0	0	0
Rest of UK	4	4	0	0	0	0	0	0	0
Sub-total Rest of Country	4								
Total All Areas	630								

Total		76	82	183	9	20	140	79	42

M11 N	76	12%
Church Road	82	13%
A120 E	183	29%
Parsonage Road	9	1%
A1250	20	3%
M11 S	140	22%
A120 W	79	12%
Bury Lodge Road	42	7%

2028 With Airport (43mppa) 07:00-08:00 Employee Departures

Daily Employee Count 37

Employee Mode Split		%
Car Driver	35	94%
Car Passenger	2	6%
Total	**37**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1.6 Occupancy → 0.5

Car Passenger	1
Total	**1**

Number of Cars 36

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	33	2
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	0	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	35	2

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	33	1
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	0	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	35	1

36

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0						100%		
London North East	2						100%		
London North West	0						100%		
London South East	0						100%		
London South West	0						100%		
London Sub-total	2								
SE England - NE	34								
Essex	26								
Uttlesford	9		40%	25%	5%				30%
Braintree	8			100%					
Harlow	3						50%	50%	
Chelmsford	2			75%			25%		
Colchester	1			100%					
Epping Forest	1				25%		75%		
Basildon	0						100%		
Tendring	0			100%					
Maldon	0			100%					
Brentwood	0						100%		
Castle Point	0			50%			50%		
Rochford	0			50%			50%		
Southend-on-Sea	0						100%		
Thurrock	0						100%		
Hertfordshire	8								
East Hertfordshire	6		25%			25%		50%	
Broxbourne	1							100%	
North Hertfordshire	0							100%	
Welwyn Hatfield	0							100%	
St. Albans	0							100%	
Hertsmere	0							100%	
Stevenage	0							100%	
Watford	0							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	0								
Bedfordshire	0	100%							
Berkshire	0						100%		
Buckinghamshire	0						100%		
Oxfordshire	0						100%		
SE England - SE	0								
East Sussex	0						100%		
Kent	0						100%		
SE England - SW	0								
Hampshire	0						100%		
Surrey	0						100%		
West Sussex	0						100%		
Rest of South East Sub-total	0						100%		
East Anglia	0								
Cambridgeshire	0	80%							20%
Norfolk	0	100%							
Suffolk	0	50%	50%						
East Midlands	0	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	36								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0	0	0	0	0	0	0	0	0
London North East	2	0	0	0	0	0	2	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	0	0	0	0	0	0	0	0	0
London South West	0	0	0	0	0	0	0	0	0
London Sub-total	2								
SE England - NE	34								
Essex	26								
Uttlesford	9	0	4	2	0	0	0	0	3
Braintree	8	0	0	8	0	0	0	0	0
Harlow	3	0	0	0	0	0	1	1	0
Chelmsford	2	0	0	1	0	0	0	0	0
Colchester	1	0	0	1	0	0	0	0	0
Epping Forest	1	0	0	0	0	0	1	0	0
Basildon	0	0	0	0	0	0	0	0	0
Tendring	0	0	0	0	0	0	0	0	0
Maldon	0	0	0	0	0	0	0	0	0
Brentwood	0	0	0	0	0	0	0	0	0
Castle Point	0	0	0	0	0	0	0	0	0
Rochford	0	0	0	0	0	0	0	0	0
Southend-on-Sea	0	0	0	0	0	0	0	0	0
Thurrock	0	0	0	0	0	0	0	0	0
Hertfordshire	8								
East Hertfordshire	6	0	2	0	0	2	0	3	0
Broxbourne	1	0	0	0	0	0	0	1	0
North Hertfordshire	0	0	0	0	0	0	0	0	0
Welwyn Hatfield	0	0	0	0	0	0	0	0	0
St. Albans	0	0	0	0	0	0	0	0	0
Hertsmere	0	0	0	0	0	0	0	0	0
Stevenage	0	0	0	0	0	0	0	0	0
Watford	0	0	0	0	0	0	0	0	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	0								
Bedfordshire	0	0	0	0	0	0	0	0	0
Berkshire	0	0	0	0	0	0	0	0	0
Buckinghamshire	0	0	0	0	0	0	0	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	0								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	0	0	0	0	0	0	0	0	0
SE England - SW	0								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	0	0	0	0	0	0	0	0	0
West Sussex	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	0								
Cambridgeshire	0	0	0	0	0	0	0	0	0
Norfolk	0	0	0	0	0	0	0	0	0
Suffolk	0	0	0	0	0	0	0	0	0
East Midlands	0	0	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	36								

Total		0	5	14	1	2	6	6	3

M11 N	0	0%
Church Road	5	14%
A120 E	14	39%
Parsonage Road	1	2%
A1250	2	4%
M11 S	6	17%
A120 W	6	17%
Bury Lodge Road	3	7%

2028 07:00-08:00 Traffic Flows (Without Airport)

Road	Passengers
M11 N	4660
M11 S	7044
A120 W	1124
A120 E	3260

16087

Car Park		
LS + JP	11%	1846
MS	11%	1718
SS + M&	17%	2766
EDP	61%	9757

TEMPro:
1.1785

4660
M11 Paynsden Wood

918
B1383 Cambridge Road

Manuden

261
Carters Hill

Cambridge Road

1081

Stansted Mountfichet

Elsenham

238
Hall Road

609
Lower Street

390
Chapel Hill

M11 (N)

Molehill Green

163
Molehill Green Road

Church Road (A)

462

324
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

55
Bambers Green

1459
Western approach to Stansted roundabout

1475
A120 West

Long Stay Car Park

A120 east of roundabout

1124
A120 Hadham Road (west)

Mid Stay Car Park

273
Parsonage Road

434
Thremhall Avenue

3260
A120 East of Stansted Airport

609
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout

1577

2488

Round Coppice Road

908

436
Stansted Services

Dunmow Road (west)

1208

1153
Dunmow Road (east)

3913
A120 (east of J8)

616
B1256 Dunmow Road (east)

Takeley

1056
Hockerill Street

1326
Junction of A1250 and Haymeads Lane

Station Road

608

Bishops Parkway

1030

London Road

957

Hallingbury Road (north)

588

535
Hallingbury Road (south)

746
St. James' Way

M11 (S)

7044
M11 South of J8

St. James' Way East

632

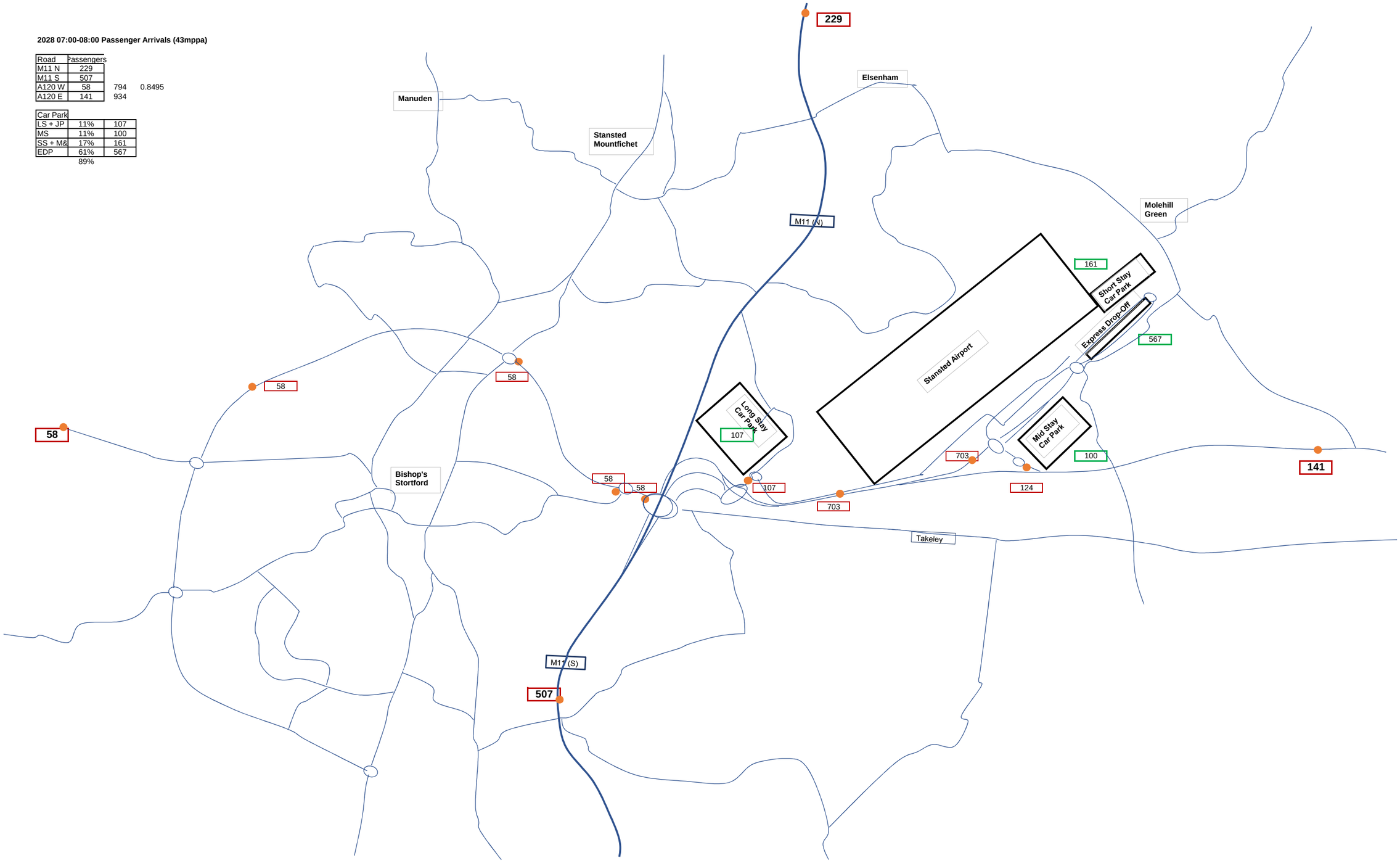
1157
A1184 Cambridge Road

418
Lower Road

2028 07:00-08:00 Passenger Arrivals (43mppa)

Road	Passengers		
M11 N	229		
M11 S	507		
A120 W	58	794	0.8495
A120 E	141	934	

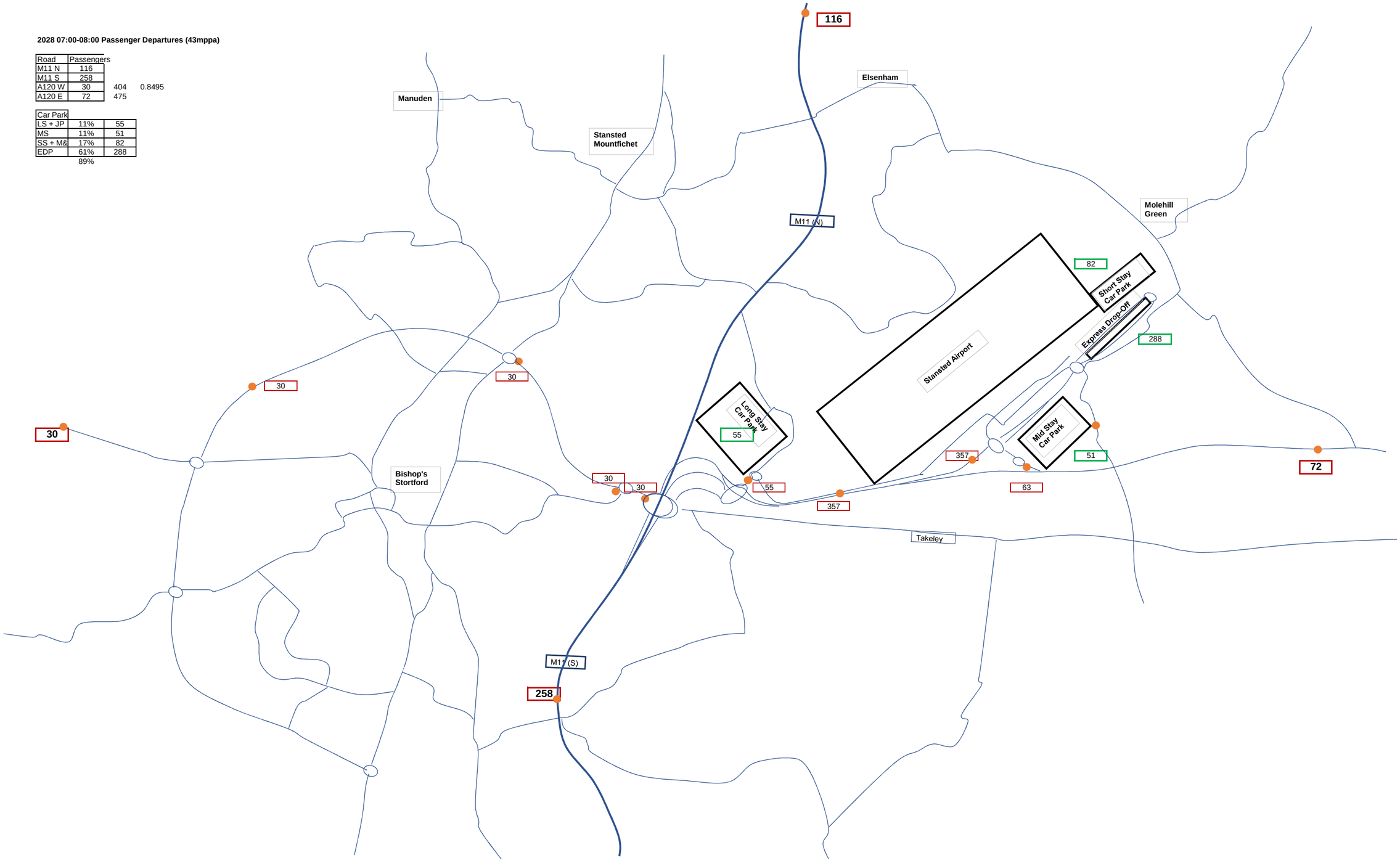
Car Park		
LS + JP	11%	107
MS	11%	100
SS + M&	17%	161
EDP	61%	567
	89%	



2028 07:00-08:00 Passenger Departures (43mppa)

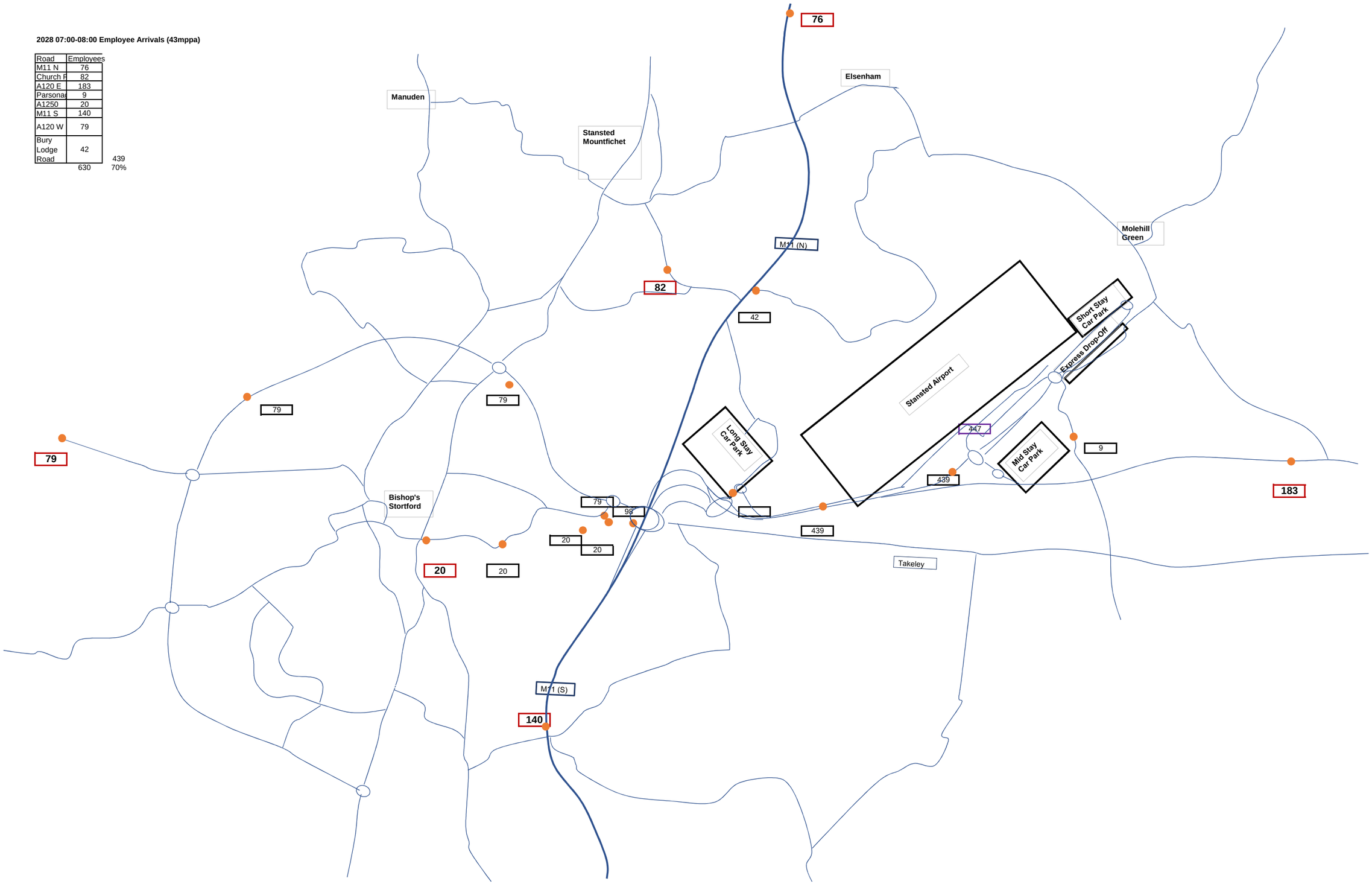
Road	Passengers		
M11 N	116		
M11 S	258		
A120 W	30	404	0.8495
A120 E	72	475	

Car Park		
LS + JP	11%	55
MS	11%	51
SS + M&	17%	82
EDP	61%	288
	89%	



2028 07:00-08:00 Employee Arrivals (43mppa)

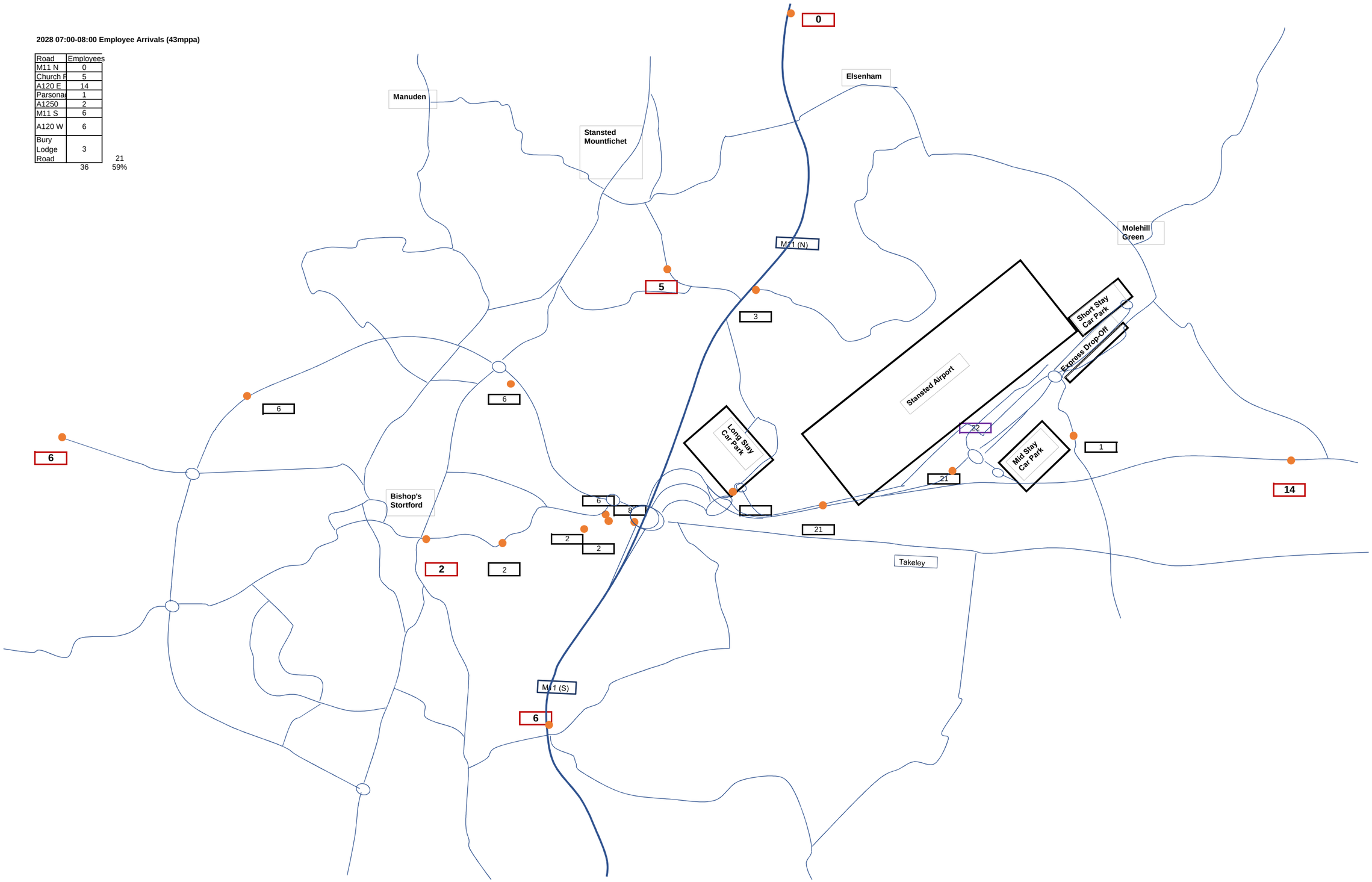
Road	Employees	
M11 N	76	
Church F	82	
A120 E	183	
Parsonag	9	
A1250	20	
M11 S	140	
A120 W	79	
Bury Lodge Road	42	
	630	439 70%



2028 07:00-08:00 Employee Arrivals (43mppa)

Road	Employees
M11 N	0
Church F	5
A120 E	14
Parsonag	1
A1250	2
M11 S	6
A120 W	6
Bury Lodge Road	3
	36

21
59%



2028 07:00-08:00 Traffic Flows (With Airport 43mppa)

Road	Passengers
M11 N	5081
M11 S	7954
A120 W	1296
A120 E	3669

18001

Car Park		
LS + JP	11%	2066
MS	11%	1922
SS + M&	17%	3096
EDP	61%	10917

TEMPro:
1.1872

5081
M11 Paynsden Wood

918
B1383 Cambridge Road

Cambridge Road
1081

Manuden
261
Carters Hill

Stansted Mountfichet

Elsenham
238
Hall Road

609
Lower Street

390
Chapel Hill

M11 (N)

Molehill Green
163
Molehill Green Road

Church Road (A)
550

368
Church Road (B)

Short Stay Car Park
Express Drop-Off
Stansted Airport

55
Bambers Green

1632
Western approach to Stansted roundabout

1647
A120 West

Long Stay Car Park

A120 east of roundabout

Mid Stay Car Park

282
Parsonage Road

1296
A120 Hadham Road (west)

609
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout
1750
2682

Round Coppice Road
1069

1954
Thremhall Avenue

624
Stansted Services

3669
A120 East of Stansted Airport

Dunmow Road (west)
1229
1174
Dunmow Road (east)

5433
A120 (east of J8)

616
B1256 Dunmow Road (east)

Takeley

1078
Hockerill Street

1348
Junction of A1250 and Haymeads Lane

Station Road
608

London Road
957

Bishops Parkway
1030

588
Hallingbury Road (north)

535
Hallingbury Road (south)

746
St. James' Way

M11 (S)

7954
M11 South of J8

St. James' Way East
632

1157
A1184 Cambridge Road

418
Lower Road

7) Peak Hour Traffic Flows (16:00-17:00)

2016 Baseline Scenario (16:00-17:00) Passenger Arrivals

Hourly Passenger Count 6,465

Passenger Mode Split		%
Car Driver	970	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**970**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 970

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	73	0	0	0
Outer London NE	94	0	0	0
Outer London SE	15	0	0	0
Outer London SW	11	0	0	0
Outer London NW	78	0	0	0
Outer South East NE	310	0	0	0
Outer South East NW	37	0	0	0
Outer South East SW	17	0	0	0
Outer South East SE	49	0	0	0
Southwest & Wales	21	0	0	0
West Midlands	13	0	0	0
East Midlands	59	0	0	0
East Anglia	169	0	0	0
Rest of UK	25	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	970	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	73	0	0	0
Outer London NE	94	0	0	0
Outer London SE	15	0	0	0
Outer London SW	11	0	0	0
Outer London NW	78	0	0	0
Outer South East NE	310	0	0	0
Outer South East NW	37	0	0	0
Outer South East SW	17	0	0	0
Outer South East SE	49	0	0	0
Southwest & Wales	21	0	0	0
West Midlands	13	0	0	0
East Midlands	59	0	0	0
East Anglia	169	0	0	0
Rest of UK	25	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	970	0	0	0

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	73	0	0	0
Outer London NE	94	0	0	0
Outer London SE	15	0	0	0
Outer London SW	11	0	0	0
Outer London NW	78	0	0	0
Outer South East NE	310	0	0	0
Outer South East NW	37	0	0	0
Outer South East SW	17	0	0	0
Outer South East SE	49	0	0	0
Southwest & Wales	21	0	0	0
West Midlands	13	0	0	0
East Midlands	59	0	0	0
East Anglia	169	0	0	0
Rest of UK	25	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	970	0	0	0

970
Check

Distribution of Vehicles on the Road Network *Source:* ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	73										100%												
London North East	94										100%												
London North West	78										100%												
London South East	15										100%												
London South West	11										100%												
London Sub-total	270																						
SE England - NE	310																						
Essex	229		50%								50%												
Hertfordshire	81										25%							75%					
SE England - NW	37																						
Bedfordshire	3	100%																					
Berkshire	10										100%												
Buckinghamshire	14										100%												
Oxfordshire	10										100%												
SE England - SE	49																						
East Sussex	6										100%												
Kent	43										100%												
SE England - SW	17																						
Hampshire	10										100%												
Surrey	5										100%												
West Sussex	3										100%												
Rest of South East Sub-total	0										100%												
East Anglia	169																						
Cambridgeshire	86	100%																					
Norfolk	19	100%																					
Suffolk	63	50%	50%																				
East Midlands	59	100%																					
South West England and Wales	21										100%												
West Midlands	13	100%																					
Rest of UK	25	100%																					
Sub-total Rest of Country	25																						
Total All Areas	970																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	73	0	0	0	0	0	0	0	0	0	73	0	0	0	0	0	0	0	0	0	0	0	0
London North East	94	0	0	0	0	0	0	0	0	0	94	0	0	0	0	0	0	0	0	0	0	0	0
London North West	78	0	0	0	0	0	0	0	0	0	78	0	0	0	0	0	0	0	0	0	0	0	0
London South East	15	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
London South West	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	270																						
SE England - NE	310																						
Essex	229	0	114	0	0	0	0	0	0	0	114	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	81	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	61	0	0	0	0	0
SE England - NW	37																						
Bedfordshire	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	14	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	49																						
East Sussex	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
Kent	43	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	17																						
Hampshire	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	169																						
Cambridgeshire	86	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	63	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	59	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	21	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	25																						
Total All Areas	970																						
Residence not reported	0																						
Total		237	146	0	0	0	0	0	0	0	526	0	0	0	0	0	0	61	0	0	0	0	0

Road Link		
M11 N	237	24%
M11 S	526	54%
A120 E	146	15%
A120 W	61	6%
Total	**970**	

2016 Baseline Scenario (16:00-17:00) Passenger Departures

Hourly Passenger Count 5,892

Passenger Mode Split		%
Car Driver	884	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**884**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 884

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	66	0	0	0
Outer London NE	85	0	0	0
Outer London SE	14	0	0	0
Outer London SW	10	0	0	0
Outer London NW	71	0	0	0
Outer South East NE	282	0	0	0
Outer South East NW	33	0	0	0
Outer South East SW	16	0	0	0
Outer South East SE	45	0	0	0
Southwest & Wales	19	0	0	0
West Midlands	11	0	0	0
East Midlands	54	0	0	0
East Anglia	154	0	0	0
Rest of UK	23	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	884	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	66	0	0	0
Outer London NE	85	0	0	0
Outer London SE	14	0	0	0
Outer London SW	10	0	0	0
Outer London NW	71	0	0	0
Outer South East NE	282	0	0	0
Outer South East NW	33	0	0	0
Outer South East SW	16	0	0	0
Outer South East SE	45	0	0	0
Southwest & Wales	19	0	0	0
West Midlands	11	0	0	0
East Midlands	54	0	0	0
East Anglia	154	0	0	0
Rest of UK	23	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	884	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	66	0	0	0
Outer London NE	85	0	0	0
Outer London SE	14	0	0	0
Outer London SW	10	0	0	0
Outer London NW	71	0	0	0
Outer South East NE	282	0	0	0
Outer South East NW	33	0	0	0
Outer South East SW	16	0	0	0
Outer South East SE	45	0	0	0
Southwest & Wales	19	0	0	0
West Midlands	11	0	0	0
East Midlands	54	0	0	0
East Anglia	154	0	0	0
Rest of UK	23	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	884	0	0	0

884

Distribution of Vehicles on the Road Network *Source:* ...\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South						West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	66										100%												
London North East	85										100%												
London North West	71										100%												
London South East	14										100%												
London South West	10										100%												
London Sub-total	246																						
SE England - NE	282																						
Essex	209		50%								50%												
Hertfordshire	74										25%							75%					
SE England - NW	33																						
Bedfordshire	3	100%																					
Berkshire	10										100%												
Buckinghamshire	12										100%												
Oxfordshire	9										100%												
SE England - SE	45																						
East Sussex	5										100%												
Kent	39										100%												
SE England - SW	16																						
Hampshire	9										100%												
Surrey	4										100%												
West Sussex	2										100%												
Rest of South East Sub-total	0										100%												
East Anglia	154																						
Cambridgeshire	79	100%																					
Norfolk	18	100%																					
Suffolk	57	50%	50%																				
East Midlands	54	100%																					
South West England and Wales	19										100%												
West Midlands	11	100%																					
Rest of UK	23	100%																					
Sub-total Rest of Country	23																						
Total All Areas	884																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	66	0	0	0	0	0	0	0	0	0	66	0	0	0	0	0	0	0	0	0	0	0	0
London North East	85	0	0	0	0	0	0	0	0	0	85	0	0	0	0	0	0	0	0	0	0	0	0
London North West	71	0	0	0	0	0	0	0	0	0	71	0	0	0	0	0	0	0	0	0	0	0	0
London South East	14	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0
London South West	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	246																						
SE England - NE	282																						
Essex	209	0	104	0	0	0	0	0	0	0	104	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	74	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	55	0	0	0	0	0
SE England - NW	33																						
Bedfordshire	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	12	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	9	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	45																						
East Sussex	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Kent	39	0	0	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	16																						
Hampshire	9	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	154																						
Cambridgeshire	79	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	57	29	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	54	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	19	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	23	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	23																						
Total All Areas	884																						
Residence not reported	0																						
Total		216	133	0	0	0	0	0	0	0	479	0	0	0	0	0	0	55	0	0	0	0	0

Road Link		
M11 N	216	24%
M11 S	479	54%
A120 E	133	15%
A120 W	55	6%
Total	**884**	

2016 Baseline Scenario (16:00-17:00) Employee Arrivals

Daily Employee Count	71

Employee Mode Split		%
Car Driver	68	95%
Car Passenger	3	5%
Total	**71**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	2
Total	**2**

0.5

Number of Cars	70

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	3	0
Outer South East NE	52	3
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	2	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	9	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	68	3

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	3	0
Outer South East NE	52	2
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	2	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	9	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	68	2

Check

70

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0						100%		
London North East	2						100%		
London North West	0						100%		
London South East	0						100%		
London South West	3						100%		
London Sub-total	5								
SE England - NE	54								
Essex	42								
Uttlesford	14		40%	25%	5%				30%
Braintree	13			100%					
Harlow	5						50%	50%	
Chelmsford	3			75%			25%		
Colchester	2			100%					
Epping Forest	1				25%		75%		
Basildon	1						100%		
Tendring	1			100%					
Maldon	1			100%					
Brentwood	0						100%		
Castle Point	0			50%			50%		
Rochford	0			50%			50%		
Southend-on-Sea	0						100%		
Thurrock	0						100%		
Hertfordshire	12								
East Hertfordshire	10		25%			25%		50%	
Broxbourne	1							100%	
North Hertfordshire	1							100%	
Welwyn Hatfield	0							100%	
St. Albans	0							100%	
Hertsmere	0							100%	
Stevenage	0							100%	
Watford	0							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	0								
Bedfordshire	0	100%							
Berkshire	0						100%		
Buckinghamshire	0						100%		
Oxfordshire	0						100%		
SE England - SE	2								
East Sussex	0						100%		
Kent	2						100%		
SE England - SW	0								
Hampshire	0						100%		
Surrey	0						100%		
West Sussex	0						100%		
Rest of South East Sub-total	0						100%		
East Anglia	9								
Cambridgeshire	5	80%							20%
Norfolk	1	100%							
Suffolk	4	50%	50%						
East Midlands	0	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							
Rest of UK	0	100%							

Sub-total Rest of Country	0								
Total All Areas	70								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0	0	0	0	0	0	0	0	0
London North East	2	0	0	0	0	0	2	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	0	0	0	0	0	0	0	0	0
London South West	3	0	0	0	0	0	3	0	0
London Sub-total	5								
SE England - NE	54								
Essex	42								
Uttlesford	14	0	6	4	1	0	0	0	4
Braintree	13	0	0	13	0	0	0	0	0
Harlow	5	0	0	0	0	0	2	2	0
Chelmsford	3	0	0	2	0	0	1	0	0
Colchester	2	0	0	2	0	0	0	0	0
Epping Forest	1	0	0	0	0	0	1	0	0
Basildon	1	0	0	0	0	0	1	0	0
Tendring	1	0	0	1	0	0	0	0	0
Maldon	1	0	0	1	0	0	0	0	0
Brentwood	0	0	0	0	0	0	0	0	0
Castle Point	0	0	0	0	0	0	0	0	0
Rochford	0	0	0	0	0	0	0	0	0
Southend-on-Sea	0	0	0	0	0	0	0	0	0
Thurrock	0	0	0	0	0	0	0	0	0
Hertfordshire	12								
East Hertfordshire	10	0	2	0	0	2	0	5	0
Broxbourne	1	0	0	0	0	0	0	1	0
North Hertfordshire	1	0	0	0	0	0	0	1	0
Welwyn Hatfield	0	0	0	0	0	0	0	0	0
St. Albans	0	0	0	0	0	0	0	0	0
Hertsmere	0	0	0	0	0	0	0	0	0
Stevenage	0	0	0	0	0	0	0	0	0
Watford	0	0	0	0	0	0	0	0	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	0								
Bedfordshire	0	0	0	0	0	0	0	0	0
Berkshire	0	0	0	0	0	0	0	0	0
Buckinghamshire	0	0	0	0	0	0	0	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	2								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	2	0	0	0	0	0	2	0	0
SE England - SW	0								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	0	0	0	0	0	0	0	0	0
West Sussex	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	9								
Cambridgeshire	5	4	0	0	0	0	0	0	1
Norfolk	1	1	0	0	0	0	0	0	0
Suffolk	4	2	2	0	0	0	0	0	0
East Midlands	0	0	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	70								
Total		6	10	22	1	2	13	10	5

M11 N	6	9%
Church Road	10	15%
A120 E	22	32%
Parsonage Road	1	2%
A1250	2	3%
M11 S	13	18%
A120 W	10	14%
Bury Lodge Road	5	7%

2016 Baseline Scenario (16:00-17:00) Employee Departures

Daily Employee Count		522

Employee Mode Split		%
Car Driver	487	93%
Car Passenger	35	7%
Total	**522**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	22
Total	**22**

0.5

Number of Cars	509

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	5	0
Outer London NE	16	0
Outer London SE	6	0
Outer London SW	2	0
Outer London NW	3	0
Outer South East NE	399	26
Outer South East NW	8	2
Outer South East SW	2	0
Outer South East SE	3	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	6	0
East Anglia	38	7
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	487	35

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	5	0
Outer London NE	16	0
Outer London SE	6	0
Outer London SW	2	0
Outer London NW	3	0
Outer South East NE	399	16
Outer South East NW	8	1
Outer South East SW	2	0
Outer South East SE	3	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	6	0
East Anglia	38	4
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	487	22

509

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	5						100%		
London North East	16						100%		
London North West	6						100%		
London South East	2						100%		
London South West	3						100%		
London Sub-total	32								
SE England - NE	415								
Essex	322								
Uttlesford	109		40%	25%	5%				30%
Braintree	101			100%					
Harlow	36						50%	50%	
Chelmsford	23			75%			25%		
Colchester	15			100%					
Epping Forest	11				25%		75%		
Basildon	6						100%		
Tendring	5			100%					
Maldon	4			100%					
Brentwood	4						100%		
Castle Point	2			50%			50%		
Rochford	2			50%			50%		
Southend-on-Sea	3						100%		
Thurrock	3						100%		
Hertfordshire	93								
East Hertfordshire	74		25%			25%		50%	
Broxbourne	8							100%	
North Hertfordshire	4							100%	
Welwyn Hatfield	2							100%	
St. Albans	1							100%	
Hertsmere	1							100%	
Stevenage	1							100%	
Watford	1							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	9								
Bedfordshire	6	100%							
Berkshire	1						100%		
Buckinghamshire	2						100%		
Oxfordshire	0						100%		
SE England - SE	3								
East Sussex	0						100%		
Kent	3						100%		
SE England - SW	2								
Hampshire	0						100%		
Surrey	1						100%		
West Sussex	1						100%		
Rest of South East Sub-total	0						100%		
East Anglia	42								
Cambridgeshire	20	80%							20%
Norfolk	3	100%							
Suffolk	18	50%	50%						
East Midlands	6	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	509								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	5	0	0	0	0	0	5	0	0
London North East	16	0	0	0	0	0	16	0	0
London North West	6	0	0	0	0	0	6	0	0
London South East	2	0	0	0	0	0	2	0	0
London South West	3	0	0	0	0	0	3	0	0
London Sub-total	32								
SE England - NE	415								
Essex	322								
Uttlesford	109	0	43	27	5	0	0	0	33
Braintree	101	0	0	101	0	0	0	0	0
Harlow	36	0	0	0	0	0	18	18	0
Chelmsford	23	0	0	18	0	0	6	0	0
Colchester	15	0	0	15	0	0	0	0	0
Epping Forest	11	0	0	0	3	0	9	0	0
Basildon	6	0	0	0	0	0	6	0	0
Tendring	5	0	0	5	0	0	0	0	0
Maldon	4	0	0	4	0	0	0	0	0
Brentwood	4	0	0	0	0	0	4	0	0
Castle Point	2	0	0	1	0	0	1	0	0
Rochford	2	0	0	1	0	0	1	0	0
Southend-on-Sea	3	0	0	0	0	0	3	0	0
Thurrock	3	0	0	0	0	0	3	0	0
Hertfordshire	93								
East Hertfordshire	74	0	19	0	0	19	0	37	0
Broxbourne	8	0	0	0	0	0	0	8	0
North Hertfordshire	4	0	0	0	0	0	0	4	0
Welwyn Hatfield	2	0	0	0	0	0	0	2	0
St. Albans	1	0	0	0	0	0	0	1	0
Hertsmere	1	0	0	0	0	0	0	1	0
Stevenage	1	0	0	0	0	0	0	1	0
Watford	1	0	0	0	0	0	0	1	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	9								
Bedfordshire	6	6	0	0	0	0	0	0	0
Berkshire	1	0	0	0	0	0	1	0	0
Buckinghamshire	2	0	0	0	0	0	2	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	3								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	3	0	0	0	0	0	3	0	0
SE England - SW	2								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	1	0	0	0	0	0	1	0	0
West Sussex	1	0	0	0	0	0	1	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	42								
Cambridgeshire	20	16	0	0	0	0	0	0	4
Norfolk	3	3	0	0	0	0	0	0	0
Suffolk	18	9	9	0	0	0	0	0	0
East Midlands	6	6	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	509								

Total		41	71	171	8	19	89	74	37

M11 N	41	8%
Church Road	71	14%
A120 E	171	34%
Parsonage Road	8	2%
A1250	19	4%
M11 S	89	17%
A120 W	74	14%
Bury Lodge Road	37	7%

2016 16:00-17:00 Traffic Flows (With Airport)

Road	Passengers
M11 N	5504
M11 S	8246
A120 W	1211
A120 E	3774

18735

Car Park		
LS + JP	11%	2150
MS	11%	2001
SS + M&	17%	3222
EDP	61%	11363

5504
M11 Paynsden Wood

837
B1383 Cambridge Road

Manuden

251
Carters Hill

Cambridge Road

816

Stansted Mountfichet

Elsenham

254
Hall Road

565
Lower Street

509
Chapel Hill

M11 (N)

Molehill Green

159
Molehill Green Road

Church Road (A)

454

368
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

73
Bambers Green

1579
Western approach to Stansted roundabout

1596
A120 West

Long Stay Car Park

1211
A120 Hadham Road (west)

Mid Stay Car Park

310
Parsonage Road

3774
A120 East of Stansted Airport

669
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout

1709

A120 east of roundabout

2699

Round Coppice Road

591

1707
Threnhall Avenue

556
Stansted Services

Dunmow Road (west)

1316

1256
Dunmow Road (east)

5398
A120 (east of J8)

590
B1256 Dunmow Road (east)

Takeley

1150
Hockerill Street

1446
Junction of A1250 and Haymeads Lane

Station Road

667

London Road

1051

Bishops Parkway

1131

Hallingbury Road (north)

646

588
Hallingbury Road (south)

819
St. James' Way

M11 (S)

8246
M11 South of J8

St. James' Way East

694

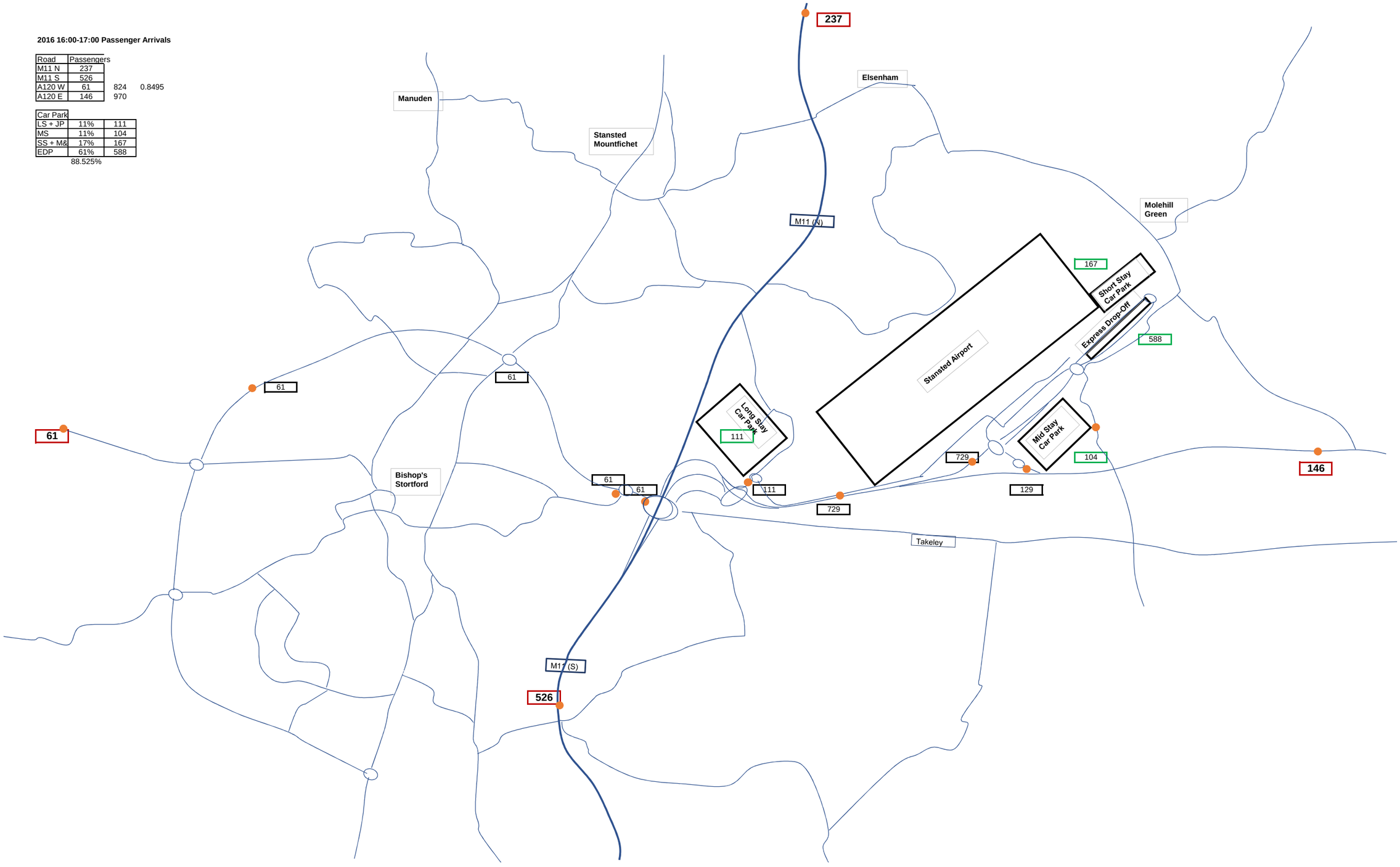
1226
A1184 Cambridge Road

459
Lower Road

2016 16:00-17:00 Passenger Arrivals

Road	Passengers		
M11 N	237		
M11 S	526		
A120 W	61	824	0.8495
A120 E	146	970	

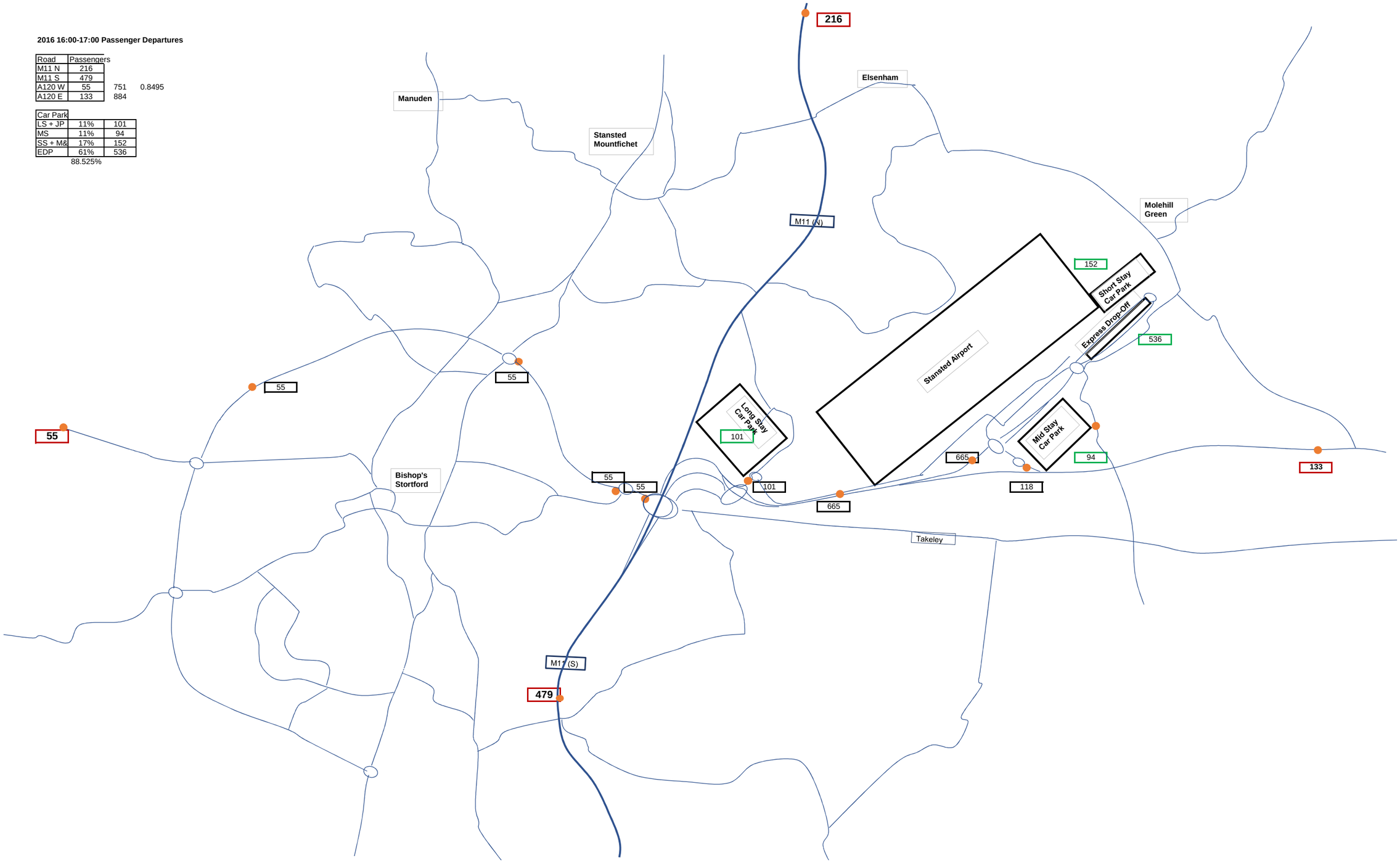
Car Park		
LS + JP	11%	111
MS	11%	104
SS + M&	17%	167
EDP	61%	588
	88.525%	



2016 16:00-17:00 Passenger Departures

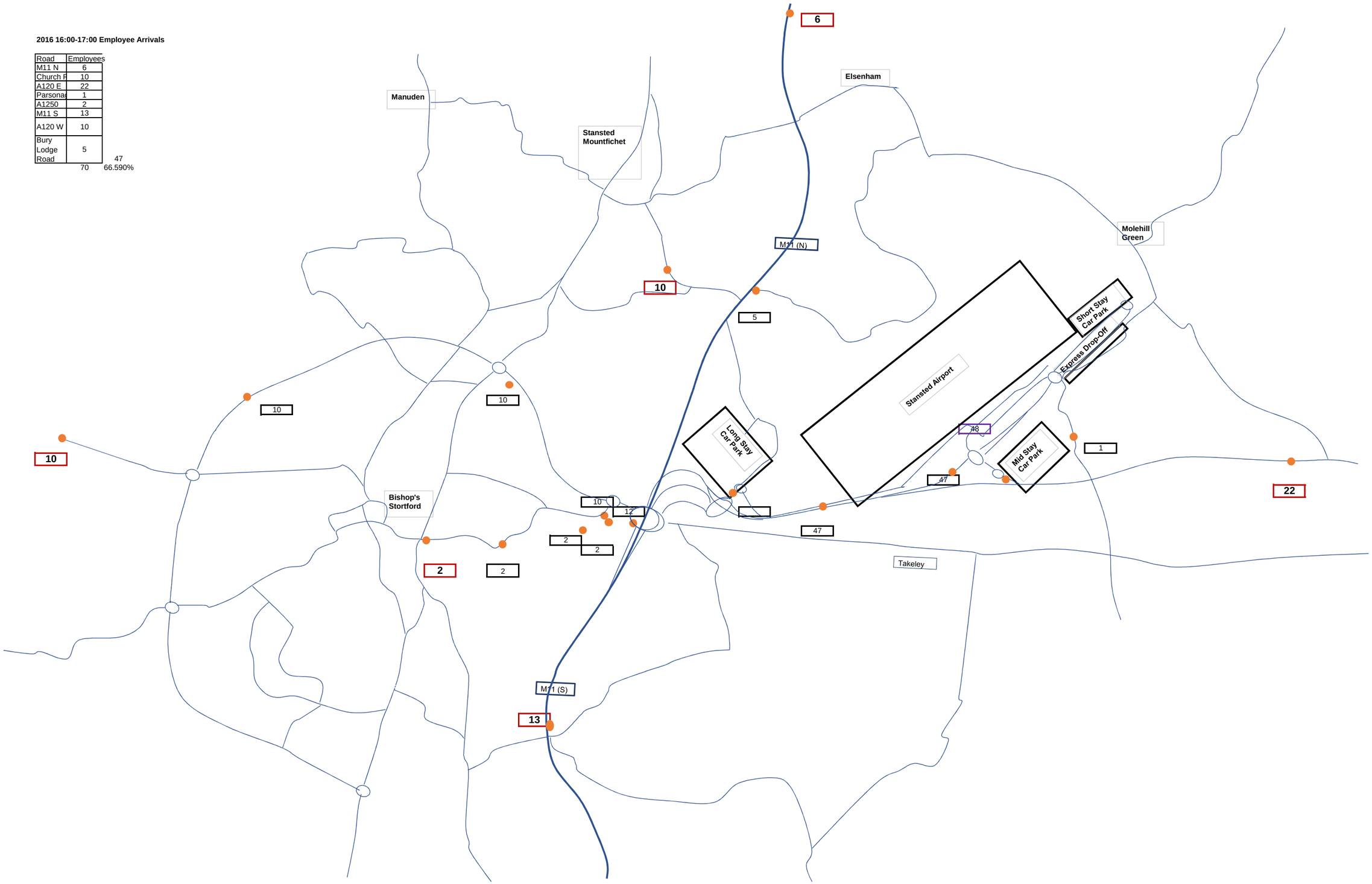
Road	Passengers		
M11 N	216		
M11 S	479		
A120 W	55	751	0.8495
A120 E	133	884	

Car Park		
LS + JP	11%	101
MS	11%	94
SS + M&	17%	152
EDP	61%	536
	88.525%	



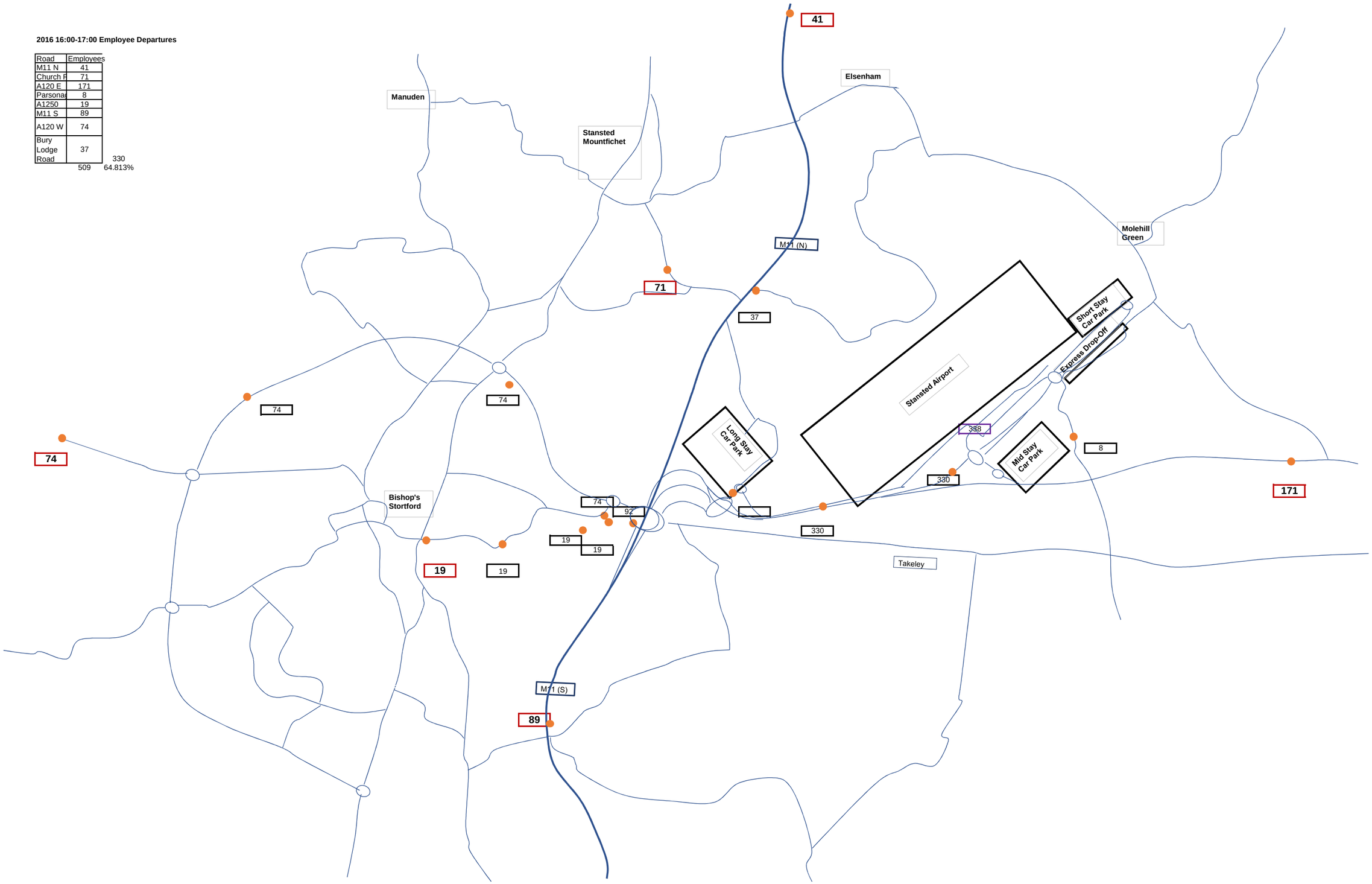
2016 16:00-17:00 Employee Arrivals

Road	Employees
M11 N	6
Church F	10
A120 E	22
Parsonag	1
A1250	2
M11 S	13
A120 W	10
Bury Lodge Road	5
	47
	70 66.590%



2016 16:00-17:00 Employee Departures

Road	Employees	
M11 N	41	
Church F	71	
A120 E	171	
Parsonag	8	
A1250	19	
M11 S	89	
A120 W	74	
Bury Lodge Road	37	
		330
	509	64.813%



2016 16:00-17:00 Traffic Flows (Without Airport)

Road	Passengers
M11 N	5003
M11 S	7140
A120 W	1012
A120 E	3302

16456

Car Park		
LS + JP	11%	1888
MS	11%	1757
SS + M&	17%	2830
EDP	61%	9981

5003
M11 Paynsden Wood

837
B1383 Cambridge Road

Cambridge Road
816

Manuden
251
Carters Hill

Stansted Mountfichet

Elsenham
254
Hall Road

565
Lower Street

509
Chapel Hill

M11 (N)

Molehill Green
159
Molehill Green Road

Church Road (A)
373

327
Church Road (B)

Short Stay Car Park
Express Drop-Off
Stansted Airport

73
Bambers Green

1380
Western approach to Stansted roundabout

1397
A120 West

Long Stay Car Park

A120 east of roundabout

1012
A120 Hadham Road (west)

669
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout
1510
2479

Round Coppice Road
378

Dunmow Road (west)
1295
1235

Thremhall Avenue
-63

Mid Stay Car Park
309
Stansted Services

300
Parsonage Road

3302
A120 East of Stansted Airport

3628
A120 (east of J8)

Dunmow Road (east)

590
B1256 Dunmow Road (east)

Takeley

1129
Hockerill Street

1425
Junction of A1250 and Haymeads Lane

Station Road
667

London Road
1051

Bishops Parkway
1131

Hallingbury Road (north)
646
588
Hallingbury Road (south)

819
St. James' Way

M11 (S)

7140
M11 South of J8

St. James' Way East
694

1226
A1184 Cambridge Road

459
Lower Road

2028 With Airport (35mppa) 0700-0800 Passenger Arrivals

Hourly Passenger Count 4,612

Passenger Mode Split		%
Car Driver	692	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**692**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 692

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	52	0	0	0
Outer London NE	67	0	0	0
Outer London SE	11	0	0	0
Outer London SW	8	0	0	0
Outer London NW	55	0	0	0
Outer South East NE	221	0	0	0
Outer South East NW	26	0	0	0
Outer South East SW	12	0	0	0
Outer South East SE	35	0	0	0
Southwest & Wales	15	0	0	0
West Midlands	9	0	0	0
East Midlands	42	0	0	0
East Anglia	120	0	0	0
Rest of UK	18	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	692	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	52	0	0	0
Outer London NE	67	0	0	0
Outer London SE	11	0	0	0
Outer London SW	8	0	0	0
Outer London NW	55	0	0	0
Outer South East NE	221	0	0	0
Outer South East NW	26	0	0	0
Outer South East SW	12	0	0	0
Outer South East SE	35	0	0	0
Southwest & Wales	15	0	0	0
West Midlands	9	0	0	0
East Midlands	42	0	0	0
East Anglia	120	0	0	0
Rest of UK	18	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	692	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	52	0	0	0
Outer London NE	67	0	0	0
Outer London SE	11	0	0	0
Outer London SW	8	0	0	0
Outer London NW	55	0	0	0
Outer South East NE	221	0	0	0
Outer South East NW	26	0	0	0
Outer South East SW	12	0	0	0
Outer South East SE	35	0	0	0
Southwest & Wales	15	0	0	0
West Midlands	9	0	0	0
East Midlands	42	0	0	0
East Anglia	120	0	0	0
Rest of UK	18	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	692	0	0	0

692

Distribution of Vehicles on the Road Network *Source:* ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South						West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	52										100%												
London North East	67										100%												
London North West	55										100%												
London South East	11										100%												
London South West	8										100%												
London Sub-total	193																						
SE England - NE	221																						
Essex	163		50%								50%												
Hertfordshire	58										25%							75%					
SE England - NW	26																						
Bedfordshire	2	100%																					
Berkshire	7										100%												
Buckinghamshire	10										100%												
Oxfordshire	7										100%												
SE England - SE	35																						
East Sussex	4										100%												
Kent	31										100%												
SE England - SW	12																						
Hampshire	7										100%												
Surrey	3										100%												
West Sussex	2										100%												
Rest of South East Sub-total	0										100%												
East Anglia	120																						
Cambridgeshire	61	100%																					
Norfolk	14	100%																					
Suffolk	45	50%	50%																				
East Midlands	42	100%																					
South West England and Wales	15										100%												
West Midlands	9	100%																					
Rest of UK	18	100%																					
Sub-total Rest of Country	18																						
Total All Areas	692																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	52	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0
London North East	67	0	0	0	0	0	0	0	0	0	67	0	0	0	0	0	0	0	0	0	0	0	0
London North West	55	0	0	0	0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0
London South East	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
London South West	8	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	193																						
SE England - NE	221																						
Essex	163	0	82	0	0	0	0	0	0	0	82	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	58	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	43	0	0	0	0	0
SE England - NW	26																						
Bedfordshire	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	35																						
East Sussex	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Kent	31	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	12																						
Hampshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	120																						
Cambridgeshire	61	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	45	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	42	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	15	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	18																						
Total All Areas	692																						
Residence not reported	0																						
Total		169	104	0	0	0	0	0	0	0	375	0	0	0	0	0	0	43	0	0	0	0	0

Road Link		
M11 N	169	24%
M11 S	375	54%
A120 E	104	15%
A120 W	43	6%
Total	**692**	

2028 With Airport (35mppa) 0700-0800 Passenger Departures

Hourly Passenger Count 3,569

Passenger Mode Split		%
Car Driver	535	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**535**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 535

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	40	0	0	0
Outer London NE	52	0	0	0
Outer London SE	8	0	0	0
Outer London SW	6	0	0	0
Outer London NW	43	0	0	0
Outer South East NE	171	0	0	0
Outer South East NW	20	0	0	0
Outer South East SW	10	0	0	0
Outer South East SE	27	0	0	0
Southwest & Wales	12	0	0	0
West Midlands	7	0	0	0
East Midlands	33	0	0	0
East Anglia	93	0	0	0
Rest of UK	14	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	535	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	40	0	0	0
Outer London NE	52	0	0	0
Outer London SE	8	0	0	0
Outer London SW	6	0	0	0
Outer London NW	43	0	0	0
Outer South East NE	171	0	0	0
Outer South East NW	20	0	0	0
Outer South East SW	10	0	0	0
Outer South East SE	27	0	0	0
Southwest & Wales	12	0	0	0
West Midlands	7	0	0	0
East Midlands	33	0	0	0
East Anglia	93	0	0	0
Rest of UK	14	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	535	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	40	0	0	0
Outer London NE	52	0	0	0
Outer London SE	8	0	0	0
Outer London SW	6	0	0	0
Outer London NW	43	0	0	0
Outer South East NE	171	0	0	0
Outer South East NW	20	0	0	0
Outer South East SW	10	0	0	0
Outer South East SE	27	0	0	0
Southwest & Wales	12	0	0	0
West Midlands	7	0	0	0
East Midlands	33	0	0	0
East Anglia	93	0	0	0
Rest of UK	14	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	535	0	0	0

535

Distribution of Vehicles on the Road Network

Source: ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	40										100%												
London North East	52										100%												
London North West	43										100%												
London South East	8										100%												
London South West	6										100%												
London Sub-total	149																						
SE England - NE	171																						
Essex	126		50%								50%												
Hertfordshire	45										25%							75%					
SE England - NW	20																						
Bedfordshire	2	100%																					
Berkshire	7										100%												
Buckinghamshire	9										100%												
Oxfordshire	6										100%												
SE England - SE	27																						
East Sussex	4										100%												
Kent	28										100%												
SE England - SW	10																						
Hampshire	7										100%												
Surrey	3										100%												
West Sussex	2										100%												
Rest of South East Sub-total	0										100%												
East Anglia	93																						
Cambridgeshire	48	100%																					
Norfolk	11	100%																					
Suffolk	35	50%	50%																				
East Midlands	33	100%																					
South West England and Wales	12										100%												
West Midlands	7	100%																					
Rest of UK	14	100%																					
Sub-total Rest of Country	14																						
Total All Areas	535																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	40	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0
London North East	52	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0
London North West	43	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	0
London South East	8	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
London South West	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	149																						
SE England - NE	171																						
Essex	126	0	63	0	0	0	0	0	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	45	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	33	0	0	0	0	0
SE England - NW	20																						
Bedfordshire	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	9	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	27																						
East Sussex	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Kent	28	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	10																						
Hampshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	93																						
Cambridgeshire	48	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	35	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	33	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	12	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	14																						
Total All Areas	535																						
Residence not reported	0																						
Total		131	81	0	0	0	0	0	0	0	300	0	0	0	0	0	0	33	0	0	0	0	0

Road Link		
M11 N	131	24%
M11 S	300	55%
A120 E	81	15%
A120 W	33	6%
Total	**545**	

2028 With Airport (35mppa) 07:00-08:00 Employee Arrivals

Daily Employee Count	549

Employee Mode Split		%
Car Driver	491	89%
Car Passenger	58	11%
Total	**549**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	36
Total	**36**

0.5

Number of Cars	527

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	3	0
Outer London NE	42	6
Outer London SE	0	0
Outer London SW	2	0
Outer London NW	9	0
Outer South East NE	344	47
Outer South East NW	13	3
Outer South East SW	2	0
Outer South East SE	6	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	8	0
East Anglia	58	3
Rest of UK	3	0
Residence not reported	0	0
Foreign	0	0
Total	491	58

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	3	0
Outer London NE	42	4
Outer London SE	0	0
Outer London SW	2	0
Outer London NW	9	0
Outer South East NE	344	29
Outer South East NW	13	2
Outer South East SW	2	0
Outer South East SE	6	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	8	0
East Anglia	58	2
Rest of UK	3	0
Residence not reported	0	0
Foreign	0	0
Total	491	36

527

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	3						100%		
London North East	46						100%		
London North West	0						100%		
London South East	2						100%		
London South West	9						100%		
London Sub-total	60								
SE England - NE	373								
Essex	290								
Uttlesford	98		40%	25%	5%				30%
Braintree	90			100%					
Harlow	32						50%	50%	
Chelmsford	21			75%			25%		
Colchester	14			100%					
Epping Forest	10				25%		75%		
Basildon	5						100%		
Tendring	4			100%					
Maldon	3			100%					
Brentwood	3						100%		
Castle Point	2			50%			50%		
Rochford	1			50%			50%		
Southend-on-Sea	2						100%		
Thurrock	3						100%		
Hertfordshire	83								
East Hertfordshire	67		25%			25%		50%	
Broxbourne	7							100%	
North Hertfordshire	4							100%	
Welwyn Hatfield	1							100%	
St. Albans	1							100%	
Hertsmere	1							100%	
Stevenage	1							100%	
Watford	1							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	14								
Bedfordshire	10	100%							
Berkshire	2						100%		
Buckinghamshire	3						100%		
Oxfordshire	0						100%		
SE England - SE	6								
East Sussex	0						100%		
Kent	6						100%		
SE England - SW	2								
Hampshire	0						100%		
Surrey	1						100%		
West Sussex	1						100%		
Rest of South East Sub-total	0						100%		
East Anglia	60								
Cambridgeshire	29	80%							20%
Norfolk	5	100%							
Suffolk	26	50%	50%						
East Midlands	8	100%							
South West England and Wales	0						100%		
West Midlands	2	100%							

Rest of UK	3	100%							
Sub-total Rest of Country	3								
Total All Areas	527								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	3	0	0	0	0	0	3	0	0
London North East	46	0	0	0	0	0	46	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	2	0	0	0	0	0	2	0	0
London South West	9	0	0	0	0	0	9	0	0
London Sub-total	60								
SE England - NE	373								
Essex	290								
Uttlesford	98	0	39	24	5	0	0	0	29
Braintree	90	0	0	90	0	0	0	0	0
Harlow	32	0	0	0	0	0	16	16	0
Chelmsford	21	0	0	16	0	0	5	0	0
Colchester	14	0	0	14	0	0	0	0	0
Epping Forest	10	0	0	0	3	0	8	0	0
Basildon	5	0	0	0	0	0	5	0	0
Tendring	4	0	0	4	0	0	0	0	0
Maldon	3	0	0	3	0	0	0	0	0
Brentwood	3	0	0	0	0	0	3	0	0
Castle Point	2	0	0	1	0	0	1	0	0
Rochford	1	0	0	1	0	0	1	0	0
Southend-on-Sea	2	0	0	0	0	0	2	0	0
Thurrock	3	0	0	0	0	0	3	0	0
Hertfordshire	83								
East Hertfordshire	67	0	17	0	0	17	0	34	0
Broxbourne	7	0	0	0	0	0	0	7	0
North Hertfordshire	4	0	0	0	0	0	0	4	0
Welwyn Hatfield	1	0	0	0	0	0	0	1	0
St. Albans	1	0	0	0	0	0	0	1	0
Hertsmere	1	0	0	0	0	0	0	1	0
Stevenage	1	0	0	0	0	0	0	1	0
Watford	1	0	0	0	0	0	0	1	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	14								
Bedfordshire	10	10	0	0	0	0	0	0	0
Berkshire	2	0	0	0	0	0	2	0	0
Buckinghamshire	3	0	0	0	0	0	3	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	6								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	6	0	0	0	0	0	6	0	0
SE England - SW	2								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	1	0	0	0	0	0	1	0	0
West Sussex	1	0	0	0	0	0	1	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	60								
Cambridgeshire	29	23	0	0	0	0	0	0	6
Norfolk	5	5	0	0	0	0	0	0	0
Suffolk	26	13	13	0	0	0	0	0	0
East Midlands	8	8	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	2	2	0	0	0	0	0	0	0
Rest of UK	3	3	0	0	0	0	0	0	0
Sub-total Rest of Country	3								
Total All Areas	527								
Total		63	69	153	7	17	117	66	35

M11 N	63	12%
Church Road	69	13%
A120 E	153	29%
Parsonage Road	7	1%
A1250	17	3%
M11 S	117	22%
A120 W	66	12%
Bury Lodge Road	35	7%

2028 With Airport (35mppa) 07:00-08:00 Employee Departures

Daily Employee Count 31

Employee Mode Split		%
Car Driver	28	91%
Car Passenger	3	9%
Total	**31**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1.6 Occupancy

Car Passenger	2
Total	**2**

0.5

Number of Cars 30

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	27	3
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	0	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	28	3

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	27	2
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	0	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	28	2

30

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0						100%		
London North East	2						100%		
London North West	0						100%		
London South East	0						100%		
London South West	0						100%		
London Sub-total	2								
SE England - NE	28								
Essex	22								
Uttlesford	7		40%	25%	5%				30%
Braintree	7			100%					
Harlow	2						50%	50%	
Chelmsford	2			75%			25%		
Colchester	1			100%					
Epping Forest	1				25%		75%		
Basildon	0						100%		
Tendring	0			100%					
Maldon	0			100%					
Brentwood	0						100%		
Castle Point	0			50%			50%		
Rochford	0			50%			50%		
Southend-on-Sea	0						100%		
Thurrock	0						100%		
Hertfordshire	6								
East Hertfordshire	5		25%			25%		50%	
Broxbourne	1							100%	
North Hertfordshire	0							100%	
Welwyn Hatfield	0							100%	
St. Albans	0							100%	
Hertsmere	0							100%	
Stevenage	0							100%	
Watford	0							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	0								
Bedfordshire	0	100%							
Berkshire	0						100%		
Buckinghamshire	0						100%		
Oxfordshire	0						100%		
SE England - SE	0								
East Sussex	0						100%		
Kent	0						100%		
SE England - SW	0								
Hampshire	0						100%		
Surrey	0						100%		
West Sussex	0						100%		
Rest of South East Sub-total	0						100%		
East Anglia	0								
Cambridgeshire	0	80%							20%
Norfolk	0	100%							
Suffolk	0	50%	50%						
East Midlands	0	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	30								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0	0	0	0	0	0	0	0	0
London North East	2	0	0	0	0	0	2	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	0	0	0	0	0	0	0	0	0
London South West	0	0	0	0	0	0	0	0	0
London Sub-total	2								
SE England - NE	28								
Essex	22								
Uttlesford	7	0	3	2	0	0	0	0	2
Braintree	7	0	0	7	0	0	0	0	0
Harlow	2	0	0	0	0	0	1	1	0
Chelmsford	2	0	0	1	0	0	0	0	0
Colchester	1	0	0	1	0	0	0	0	0
Epping Forest	1	0	0	0	0	0	1	0	0
Basildon	0	0	0	0	0	0	0	0	0
Tendring	0	0	0	0	0	0	0	0	0
Maldon	0	0	0	0	0	0	0	0	0
Brentwood	0	0	0	0	0	0	0	0	0
Castle Point	0	0	0	0	0	0	0	0	0
Rochford	0	0	0	0	0	0	0	0	0
Southend-on-Sea	0	0	0	0	0	0	0	0	0
Thurrock	0	0	0	0	0	0	0	0	0
Hertfordshire	6								
East Hertfordshire	5	0	1	0	0	1	0	3	0
Broxbourne	1	0	0	0	0	0	0	1	0
North Hertfordshire	0	0	0	0	0	0	0	0	0
Welwyn Hatfield	0	0	0	0	0	0	0	0	0
St. Albans	0	0	0	0	0	0	0	0	0
Hertsmere	0	0	0	0	0	0	0	0	0
Stevenage	0	0	0	0	0	0	0	0	0
Watford	0	0	0	0	0	0	0	0	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	0								
Bedfordshire	0	0	0	0	0	0	0	0	0
Berkshire	0	0	0	0	0	0	0	0	0
Buckinghamshire	0	0	0	0	0	0	0	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	0								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	0	0	0	0	0	0	0	0	0
SE England - SW	0								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	0	0	0	0	0	0	0	0	0
West Sussex	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	0								
Cambridgeshire	0	0	0	0	0	0	0	0	0
Norfolk	0	0	0	0	0	0	0	0	0
Suffolk	0	0	0	0	0	0	0	0	0
East Midlands	0	0	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	30								

Total		0	4	12	1	1	5	5	2

M11 N	0	0%
Church Road	4	14%
A120 E	12	39%
Parsonage Road	1	2%
A1250	1	4%
M11 S	5	16%
A120 W	5	17%
Bury Lodge Road	2	7%

2028 07:00-08:00 Traffic Flows (Without Airport)

Road	Passengers
M11 N	4660
M11 S	7044
A120 W	1124
A120 E	3260

16087

Car Park		
LS + JP	11%	1846
MS	11%	1718
SS + M&	17%	2766
EDP	61%	9757

TEMPro:
1.1785

4660
M11 Paynsden Wood

918
B1383 Cambridge Road

Manuden

261
Carters Hill

Cambridge Road

1081

Stansted Mountfichet

Elsenham

238
Hall Road

609
Lower Street

390
Chapel Hill

M11 (N)

Molehill Green

163
Molehill Green Road

Church Road (A)

462

324
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

55
Bambers Green

1459
Western approach to Stansted roundabout

1475
A120 West

Long Stay Car Park

A120 east of roundabout

1124
A120 Hadham Road (west)

Mid Stay Car Park

273
Parsonage Road

434
Thremhall Avenue

3260
A120 East of Stansted Airport

609
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout

1577

2488

Round Coppice Road

908

436
Stansted Services

Dunmow Road (west)

1208

1153
Dunmow Road (east)

3913
A120 (east of J8)

616
B1256 Dunmow Road (east)

Takeley

1056
Hockerill Street

1326
Junction of A1250 and Haymeads Lane

Station Road

608

Bishops Parkway

1030

London Road

957

Hallingbury Road (north)

588

535
Hallingbury Road (south)

746
St. James' Way

M11 (S)

7044
M11 South of J8

St. James' Way East

632

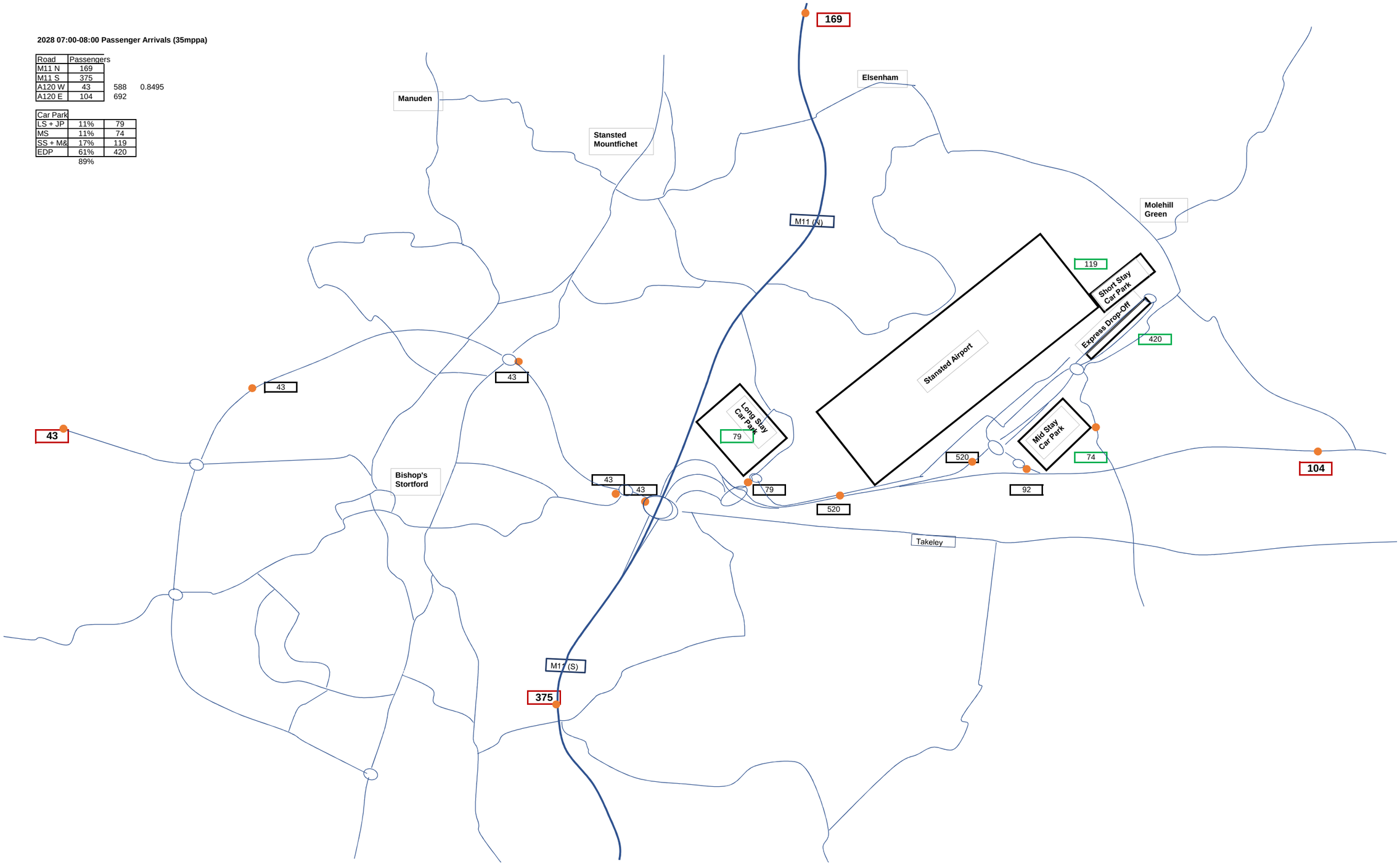
1157
A1184 Cambridge Road

418
Lower Road

2028 07:00-08:00 Passenger Arrivals (35mppa)

Road	Passengers		
M11 N	169		
M11 S	375		
A120 W	43	588	0.8495
A120 E	104	692	

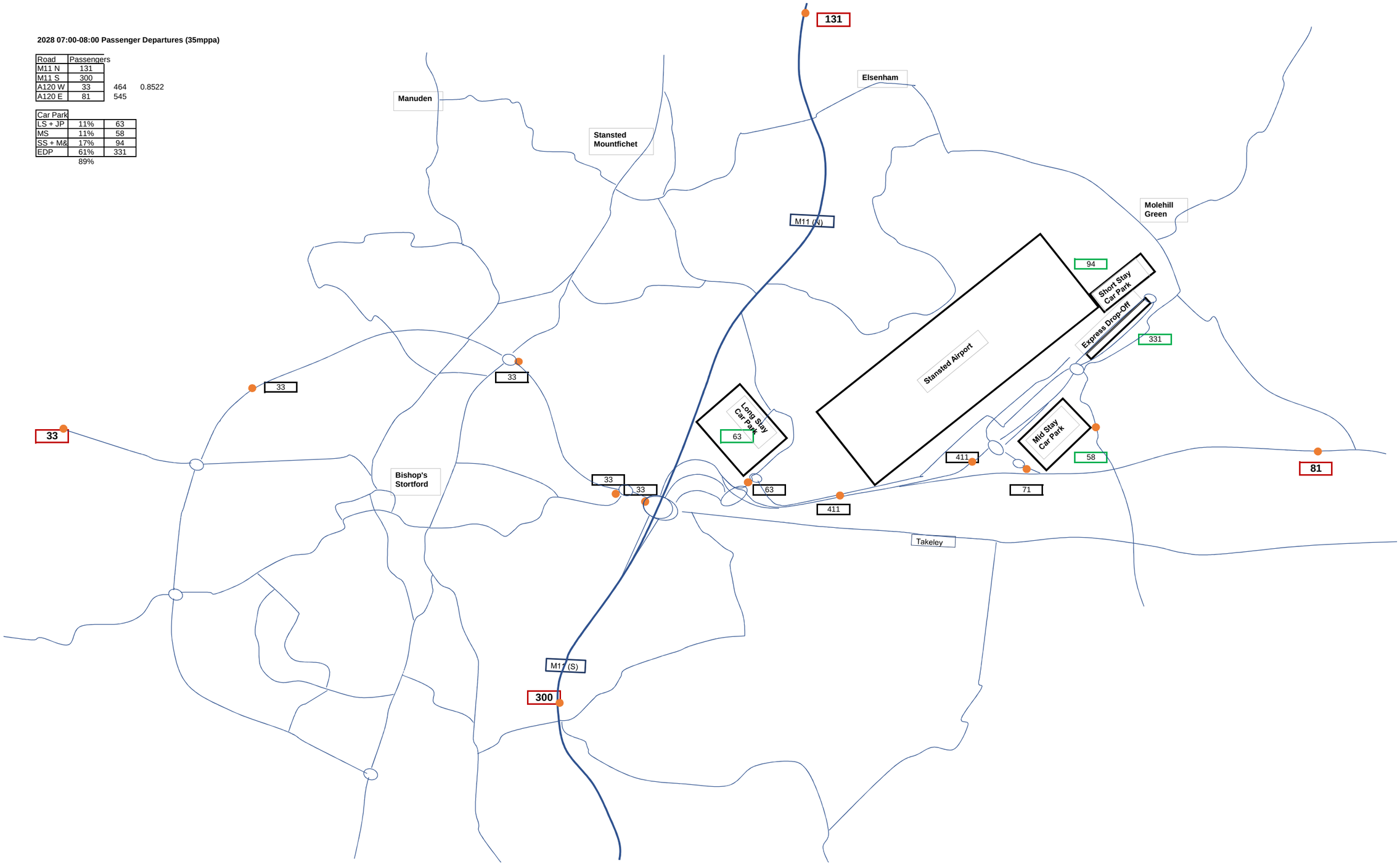
Car Park		
LS + JP	11%	79
MS	11%	74
SS + M&	17%	119
EDP	61%	420
	89%	



2028 07:00-08:00 Passenger Departures (35mppa)

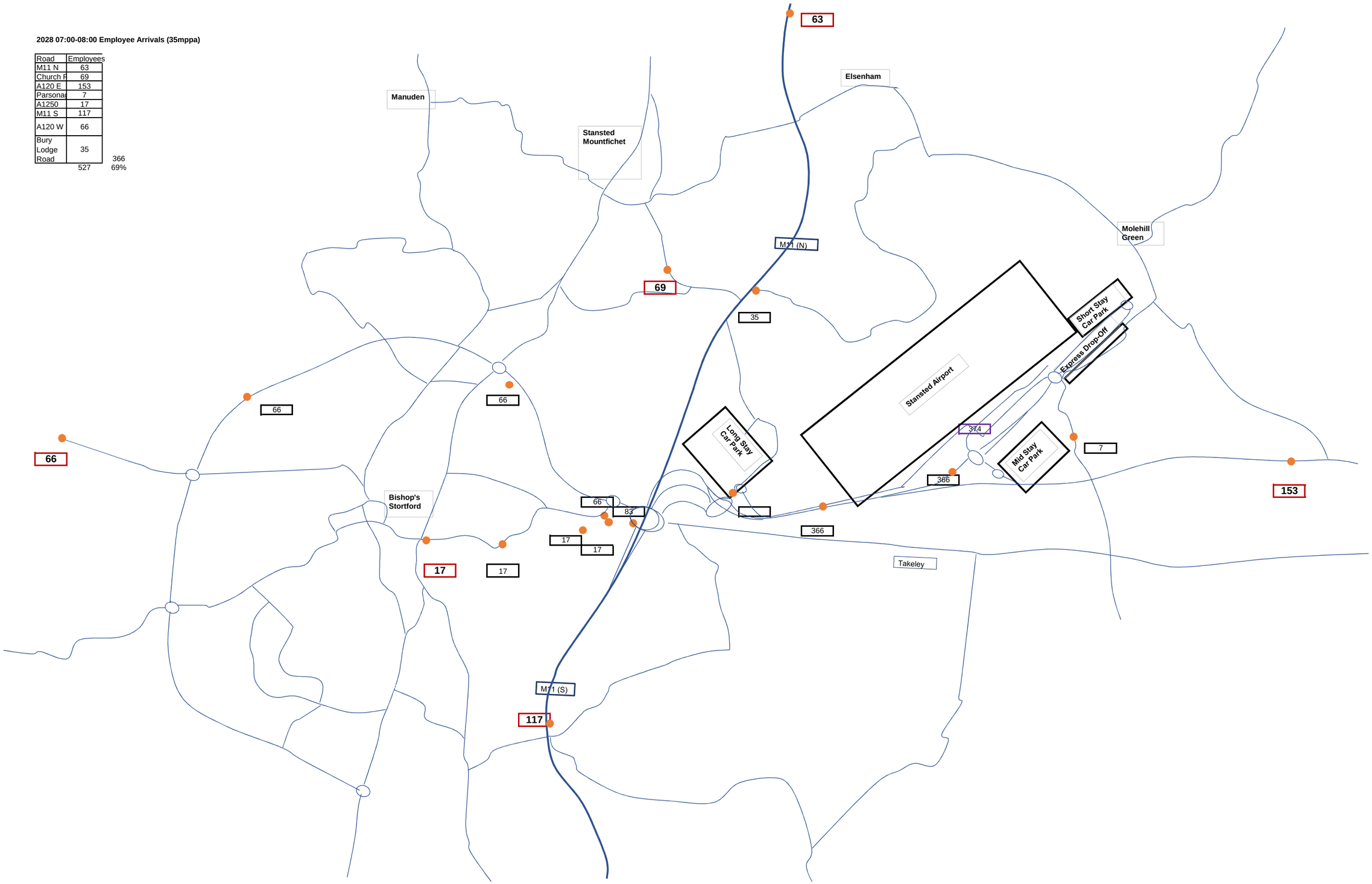
Road	Passengers		
M11 N	131		
M11 S	300		
A120 W	33	464	0.8522
A120 E	81	545	

Car Park		
LS + JP	11%	63
MS	11%	58
SS + M&	17%	94
EDP	61%	331
	89%	



2028 07:00-08:00 Employee Arrivals (35mppa)

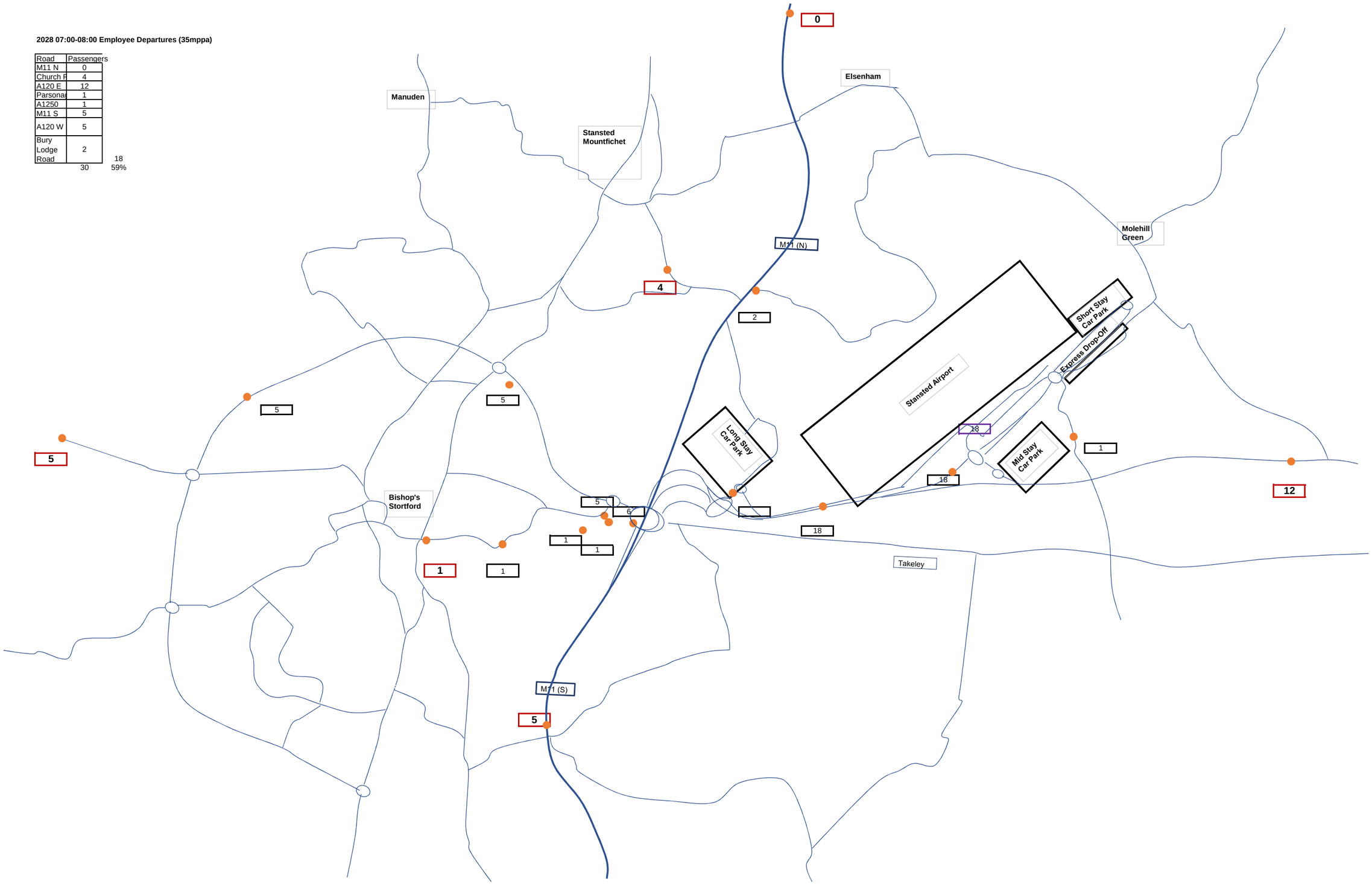
Road	Employees	
M11 N	63	
Church F	69	
A120 E	153	
Parsonag	7	
A1250	17	
M11 S	117	
A120 W	66	
Bury Lodge Road	35	
		366
	527	69%



2028 07:00-08:00 Employee Departures (35mppa)

Road	Passengers
M11 N	0
Church F	4
A120 E	12
Parsonag	1
A1250	1
M11 S	5
A120 W	5
Bury Lodge Road	2
	30

18
59%



2028 07:00-08:00 Traffic Flows (With Airport 35mppa)

Road	Passengers
M11 N	5023
M11 S	7840
A120 W	1271
A120 E	3610

17745

Car Park		
LS + JP	11%	2036
MS	11%	1895
SS + M&	17%	3051
EDP	61%	10762

TEMPro:
1.1872

5023
M11 Paynsden Wood

918
B1383 Cambridge Road

Manuden

261
Carters Hill

Cambridge Road

1081

Stansted Mountfichet

Elsenham

238
Hall Road

609
Lower Street

390
Chapel Hill

M11 (N)

Molehill Green

163
Molehill Green Road

Church Road (A)

535

361
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

55
Bambers Green

1607
Western approach to Stansted roundabout

1622
A120 West

Long Stay Car Park

1271
A120 Hadham Road (west)

A120 east of roundabout

A120 west of roundabout

1725

2653

Round Coppice Road

1050

Mid Stay Car Park

281
Parsonage Road

1749
Thremhall Avenue

3610
A120 East of Stansted Airport

609
A120 Hadham Road

Bishop's Stortford

Dunmow Road (west)

1226

1171
Dunmow Road (east)

5228
A120 (east of J8)

600
Stansted Services

1074
Hockerill Street

1344
Junction of A1250 and Haymeads Lane

616
B1256 Dunmow Road (east)

Takeley

Station Road

608

Bishops Parkway

1030

London Road

957

Hallingbury Road (north)

588

535
Hallingbury Road (south)

746
St. James' Way

M11 (S)

7840
M11 South of J8

St. James' Way East

632

1157
A1184 Cambridge Road

418
Lower Road

2028 With Airport (43mppa) 0700-0800 Passenger Arrivals

Hourly Passenger Count 6,230

Passenger Mode Split		%
Car Driver	934	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**934**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 934

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	70	0	0	0
Outer London NE	90	0	0	0
Outer London SE	15	0	0	0
Outer London SW	11	0	0	0
Outer London NW	75	0	0	0
Outer South East NE	298	0	0	0
Outer South East NW	35	0	0	0
Outer South East SW	17	0	0	0
Outer South East SE	47	0	0	0
Southwest & Wales	21	0	0	0
West Midlands	12	0	0	0
East Midlands	57	0	0	0
East Anglia	163	0	0	0
Rest of UK	24	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	934	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	70	0	0	0
Outer London NE	90	0	0	0
Outer London SE	15	0	0	0
Outer London SW	11	0	0	0
Outer London NW	75	0	0	0
Outer South East NE	298	0	0	0
Outer South East NW	35	0	0	0
Outer South East SW	17	0	0	0
Outer South East SE	47	0	0	0
Southwest & Wales	21	0	0	0
West Midlands	12	0	0	0
East Midlands	57	0	0	0
East Anglia	163	0	0	0
Rest of UK	24	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	934	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	70	0	0	0
Outer London NE	90	0	0	0
Outer London SE	15	0	0	0
Outer London SW	11	0	0	0
Outer London NW	75	0	0	0
Outer South East NE	298	0	0	0
Outer South East NW	35	0	0	0
Outer South East SW	17	0	0	0
Outer South East SE	47	0	0	0
Southwest & Wales	21	0	0	0
West Midlands	12	0	0	0
East Midlands	57	0	0	0
East Anglia	163	0	0	0
Rest of UK	24	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	934	0	0	0

934

Distribution of Vehicles on the Road Network *Source:* *..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx*

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	70										100%												
London North East	90										100%												
London North West	75										100%												
London South East	15										100%												
London South West	11										100%												
London Sub-total	260																						
SE England - NE	298																						
Essex	221		50%								50%												
Hertfordshire	78										25%							75%					
SE England - NW	35																						
Bedfordshire	3	100%																					
Berkshire	10										100%												
Buckinghamshire	13										100%												
Oxfordshire	9										100%												
SE England - SE	47																						
East Sussex	6										100%												
Kent	42										100%												
SE England - SW	17																						
Hampshire	10										100%												
Surrey	4										100%												
West Sussex	2										100%												
Rest of South East Sub-total	0										100%												
East Anglia	163																						
Cambridgeshire	83	100%																					
Norfolk	19	100%																					
Suffolk	61	50%	50%																				
East Midlands	57	100%																					
South West England and Wales	21										100%												
West Midlands	12	100%																					
Rest of UK	24	100%																					
Sub-total Rest of Country	24																						
Total All Areas	934																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	70	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	0	0	0	0	0
London North East	90	0	0	0	0	0	0	0	0	0	90	0	0	0	0	0	0	0	0	0	0	0	0
London North West	75	0	0	0	0	0	0	0	0	0	75	0	0	0	0	0	0	0	0	0	0	0	0
London South East	15	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
London South West	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	260																						
SE England - NE	298																						
Essex	221	0	110	0	0	0	0	0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	78	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	58	0	0	0	0	0
SE England - NW	35																						
Bedfordshire	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	13	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	9	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	47																						
East Sussex	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
Kent	42	0	0	0	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	17																						
Hampshire	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	163																						
Cambridgeshire	83	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	61	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	57	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	21	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	24																						
Total All Areas	934																						
Residence not reported	0																						
Total		229	141	0	0	0	0	0	0	0	507	0	0	0	0	0	0	58	0	0	0	0	0

Road Link		
M11 N	229	24%
M11 S	507	54%
A120 E	141	15%
A120 W	58	6%
Total	**934**	

2028 With Airport (43mppa) 0700-0800 Passenger Departures

Hourly Passenger Count 3,169

Passenger Mode Split		%
Car Driver	475	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**475**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 475

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	36	0	0	0
Outer London NE	46	0	0	0
Outer London SE	7	0	0	0
Outer London SW	5	0	0	0
Outer London NW	38	0	0	0
Outer South East NE	152	0	0	0
Outer South East NW	18	0	0	0
Outer South East SW	8	0	0	0
Outer South East SE	24	0	0	0
Southwest & Wales	10	0	0	0
West Midlands	6	0	0	0
East Midlands	29	0	0	0
East Anglia	83	0	0	0
Rest of UK	12	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	475	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	36	0	0	0
Outer London NE	46	0	0	0
Outer London SE	7	0	0	0
Outer London SW	5	0	0	0
Outer London NW	38	0	0	0
Outer South East NE	152	0	0	0
Outer South East NW	18	0	0	0
Outer South East SW	8	0	0	0
Outer South East SE	24	0	0	0
Southwest & Wales	10	0	0	0
West Midlands	6	0	0	0
East Midlands	29	0	0	0
East Anglia	83	0	0	0
Rest of UK	12	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	475	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	36	0	0	0
Outer London NE	46	0	0	0
Outer London SE	7	0	0	0
Outer London SW	5	0	0	0
Outer London NW	38	0	0	0
Outer South East NE	152	0	0	0
Outer South East NW	18	0	0	0
Outer South East SW	8	0	0	0
Outer South East SE	24	0	0	0
Southwest & Wales	10	0	0	0
West Midlands	6	0	0	0
East Midlands	29	0	0	0
East Anglia	83	0	0	0
Rest of UK	12	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	475	0	0	0

475

Distribution of Vehicles on the Road Network *Source:* ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	36										100%												
London North East	46										100%												
London North West	38										100%												
London South East	7										100%												
London South West	5										100%												
London Sub-total	132																						
SE England - NE	152																						
Essex	112		50%								50%												
Hertfordshire	40										25%							75%					
SE England - NW	18																						
Bedfordshire	2	100%																					
Berkshire	5										100%												
Buckinghamshire	7										100%												
Oxfordshire	5										100%												
SE England - SE	24																						
East Sussex	3										100%												
Kent	21										100%												
SE England - SW	8																						
Hampshire	5										100%												
Surrey	2										100%												
West Sussex	1										100%												
Rest of South East Sub-total	0										100%												
East Anglia	83																						
Cambridgeshire	42	100%																					
Norfolk	10	100%																					
Suffolk	31	50%	50%																				
East Midlands	29	100%																					
South West England and Wales	10										100%												
West Midlands	6	100%																					
Rest of UK	12	100%																					
Sub-total Rest of Country	12																						
Total All Areas	475																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	36	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0
London North East	46	0	0	0	0	0	0	0	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
London North West	38	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0
London South East	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
London South West	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	132																						
SE England - NE	152																						
Essex	112	0	56	0	0	0	0	0	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	40	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	30	0	0	0	0	0
SE England - NW	18																						
Bedfordshire	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	24																						
East Sussex	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Kent	21	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	8																						
Hampshire	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	83																						
Cambridgeshire	42	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	31	15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	29	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	10	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	12																						
Total All Areas	475																						
Residence not reported	0																						
Total		116	72	0	0	0	0	0	0	0	258	0	0	0	0	0	0	30	0	0	0	0	0

Road Link		
M11 N	116	24%
M11 S	258	54%
A120 E	72	15%
A120 W	30	6%
Total	**475**	

2028 With Airport (43mppa) 07:00-08:00 Employee Arrivals

Daily Employee Count		647

Employee Mode Split		%
Car Driver	602	93%
Car Passenger	45	7%
Total	**647**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	28
Total	**28**

0.5

Number of Cars	630

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	4	0
Outer London NE	52	4
Outer London SE	0	0
Outer London SW	2	0
Outer London NW	12	0
Outer South East NE	422	36
Outer South East NW	15	2
Outer South East SW	2	0
Outer South East SE	8	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	10	0
East Anglia	71	2
Rest of UK	4	0
Residence not reported	0	0
Foreign	0	0
Total	602	45

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	4	0
Outer London NE	52	3
Outer London SE	0	0
Outer London SW	2	0
Outer London NW	12	0
Outer South East NE	422	22
Outer South East NW	15	1
Outer South East SW	2	0
Outer South East SE	8	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	10	0
East Anglia	71	1
Rest of UK	4	0
Residence not reported	0	0
Foreign	0	0
Total	602	28

630

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	4						100%		
London North East	55						100%		
London North West	0						100%		
London South East	2						100%		
London South West	12						100%		
London Sub-total	72								
SE England - NE	444								
Essex	345								
Uttlesford	116		40%	25%	5%				30%
Braintree	108			100%					
Harlow	38						50%	50%	
Chelmsford	25			75%			25%		
Colchester	16			100%					
Epping Forest	12				25%		75%		
Basildon	6						100%		
Tendring	5			100%					
Maldon	4			100%					
Brentwood	4						100%		
Castle Point	2			50%			50%		
Rochford	2			50%			50%		
Southend-on-Sea	3						100%		
Thurrock	4						100%		
Hertfordshire	99								
East Hertfordshire	79		25%			25%		50%	
Broxbourne	9							100%	
North Hertfordshire	4							100%	
Welwyn Hatfield	2							100%	
St. Albans	1							100%	
Hertsmere	1							100%	
Stevenage	1							100%	
Watford	1							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	17								
Bedfordshire	11	100%							
Berkshire	3						100%		
Buckinghamshire	3						100%		
Oxfordshire	0						100%		
SE England - SE	8								
East Sussex	0						100%		
Kent	8						100%		
SE England - SW	2								
Hampshire	0						100%		
Surrey	1						100%		
West Sussex	1						100%		
Rest of South East Sub-total	0						100%		
East Anglia	72								
Cambridgeshire	35	80%							20%
Norfolk	6	100%							
Suffolk	32	50%	50%						
East Midlands	10	100%							
South West England and Wales	0						100%		
West Midlands	2	100%							

Rest of UK	4	100%							
Sub-total Rest of Country	4								
Total All Areas	630								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	4	0	0	0	0	0	4	0	0
London North East	55	0	0	0	0	0	55	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	2	0	0	0	0	0	2	0	0
London South West	12	0	0	0	0	0	12	0	0
London Sub-total	72								
SE England - NE	444								
Essex	345								
Uttlesford	116	0	47	29	6	0	0	0	35
Braintree	108	0	0	108	0	0	0	0	0
Harlow	38	0	0	0	0	0	19	19	0
Chelmsford	25	0	0	19	0	0	6	0	0
Colchester	16	0	0	16	0	0	0	0	0
Epping Forest	12	0	0	0	3	0	9	0	0
Basildon	6	0	0	0	0	0	6	0	0
Tendring	5	0	0	5	0	0	0	0	0
Maldon	4	0	0	4	0	0	0	0	0
Brentwood	4	0	0	0	0	0	4	0	0
Castle Point	2	0	0	1	0	0	1	0	0
Rochford	2	0	0	1	0	0	1	0	0
Southend-on-Sea	3	0	0	0	0	0	3	0	0
Thurrock	4	0	0	0	0	0	4	0	0
Hertfordshire	99								
East Hertfordshire	79	0	20	0	0	20	0	40	0
Broxbourne	9	0	0	0	0	0	0	9	0
North Hertfordshire	4	0	0	0	0	0	0	4	0
Welwyn Hatfield	2	0	0	0	0	0	0	2	0
St. Albans	1	0	0	0	0	0	0	1	0
Hertsmere	1	0	0	0	0	0	0	1	0
Stevenage	1	0	0	0	0	0	0	1	0
Watford	1	0	0	0	0	0	0	1	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	17								
Bedfordshire	11	11	0	0	0	0	0	0	0
Berkshire	3	0	0	0	0	0	3	0	0
Buckinghamshire	3	0	0	0	0	0	3	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	8								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	8	0	0	0	0	0	8	0	0
SE England - SW	2								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	1	0	0	0	0	0	1	0	0
West Sussex	1	0	0	0	0	0	1	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	72								
Cambridgeshire	35	28	0	0	0	0	0	0	7
Norfolk	6	6	0	0	0	0	0	0	0
Suffolk	32	16	16	0	0	0	0	0	0
East Midlands	10	10	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	2	2	0	0	0	0	0	0	0
Rest of UK	4	4	0	0	0	0	0	0	0
Sub-total Rest of Country	4								
Total All Areas	630								

Total		76	82	183	9	20	140	79	42

M11 N	76	12%
Church Road	82	13%
A120 E	183	29%
Parsonage Road	9	1%
A1250	20	3%
M11 S	140	22%
A120 W	79	12%
Bury Lodge Road	42	7%

2028 With Airport (43mppa) 07:00-08:00 Employee Departures

Daily Employee Count 37

Employee Mode Split		%
Car Driver	35	94%
Car Passenger	2	6%
Total	**37**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1.6 Occupancy → 0.5

Car Passenger	1
Total	**1**

Number of Cars 36

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	33	2
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	0	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	35	2

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	33	1
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	0	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	35	1

36

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0						100%		
London North East	2						100%		
London North West	0						100%		
London South East	0						100%		
London South West	0						100%		
London Sub-total	2								
SE England - NE	34								
Essex	26								
Uttlesford	9		40%	25%	5%				30%
Braintree	8			100%					
Harlow	3						50%	50%	
Chelmsford	2			75%			25%		
Colchester	1			100%					
Epping Forest	1				25%		75%		
Basildon	0						100%		
Tendring	0			100%					
Maldon	0			100%					
Brentwood	0						100%		
Castle Point	0			50%			50%		
Rochford	0			50%			50%		
Southend-on-Sea	0						100%		
Thurrock	0						100%		
Hertfordshire	8								
East Hertfordshire	6		25%			25%		50%	
Broxbourne	1							100%	
North Hertfordshire	0							100%	
Welwyn Hatfield	0							100%	
St. Albans	0							100%	
Hertsmere	0							100%	
Stevenage	0							100%	
Watford	0							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	0								
Bedfordshire	0	100%							
Berkshire	0						100%		
Buckinghamshire	0						100%		
Oxfordshire	0						100%		
SE England - SE	0								
East Sussex	0						100%		
Kent	0						100%		
SE England - SW	0								
Hampshire	0						100%		
Surrey	0						100%		
West Sussex	0						100%		
Rest of South East Sub-total	0						100%		
East Anglia	0								
Cambridgeshire	0	80%							20%
Norfolk	0	100%							
Suffolk	0	50%	50%						
East Midlands	0	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	36								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0	0	0	0	0	0	0	0	0
London North East	2	0	0	0	0	0	2	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	0	0	0	0	0	0	0	0	0
London South West	0	0	0	0	0	0	0	0	0
London Sub-total	2								
SE England - NE	34								
Essex	26								
Uttlesford	9	0	4	2	0	0	0	0	3
Braintree	8	0	0	8	0	0	0	0	0
Harlow	3	0	0	0	0	0	1	1	0
Chelmsford	2	0	0	1	0	0	0	0	0
Colchester	1	0	0	1	0	0	0	0	0
Epping Forest	1	0	0	0	0	0	1	0	0
Basildon	0	0	0	0	0	0	0	0	0
Tendring	0	0	0	0	0	0	0	0	0
Maldon	0	0	0	0	0	0	0	0	0
Brentwood	0	0	0	0	0	0	0	0	0
Castle Point	0	0	0	0	0	0	0	0	0
Rochford	0	0	0	0	0	0	0	0	0
Southend-on-Sea	0	0	0	0	0	0	0	0	0
Thurrock	0	0	0	0	0	0	0	0	0
Hertfordshire	8								
East Hertfordshire	6	0	2	0	0	2	0	3	0
Broxbourne	1	0	0	0	0	0	0	1	0
North Hertfordshire	0	0	0	0	0	0	0	0	0
Welwyn Hatfield	0	0	0	0	0	0	0	0	0
St. Albans	0	0	0	0	0	0	0	0	0
Hertsmere	0	0	0	0	0	0	0	0	0
Stevenage	0	0	0	0	0	0	0	0	0
Watford	0	0	0	0	0	0	0	0	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	0								
Bedfordshire	0	0	0	0	0	0	0	0	0
Berkshire	0	0	0	0	0	0	0	0	0
Buckinghamshire	0	0	0	0	0	0	0	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	0								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	0	0	0	0	0	0	0	0	0
SE England - SW	0								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	0	0	0	0	0	0	0	0	0
West Sussex	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	0								
Cambridgeshire	0	0	0	0	0	0	0	0	0
Norfolk	0	0	0	0	0	0	0	0	0
Suffolk	0	0	0	0	0	0	0	0	0
East Midlands	0	0	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	36								

Total		0	5	14	1	2	6	6	3

M11 N	0	0%
Church Road	5	14%
A120 E	14	39%
Parsonage Road	1	2%
A1250	2	4%
M11 S	6	17%
A120 W	6	17%
Bury Lodge Road	3	7%

2028 07:00-08:00 Traffic Flows (Without Airport)

Road	Passengers
M11 N	4660
M11 S	7044
A120 W	1124
A120 E	3260

16087

Car Park		
LS + JP	11%	1846
MS	11%	1718
SS + M&	17%	2766
EDP	61%	9757

TEMPro:
1.1785

4660
M11 Paynsden Wood

918
B1383 Cambridge Road

Manuden

261
Carters Hill

Cambridge Road

1081

Stansted Mountfichet

Elsenham

238
Hall Road

609
Lower Street

390
Chapel Hill

M11 (N)

Molehill Green

163
Molehill Green Road

Church Road (A)

462

324
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

55
Bambers Green

1459
Western approach to Stansted roundabout

1475
A120 West

Long Stay Car Park

A120 east of roundabout

1124
A120 Hadham Road (west)

Mid Stay Car Park

273
Parsonage Road

434
Thremhall Avenue

3260
A120 East of Stansted Airport

609
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout

1577

2488

Round Coppice Road

908

436
Stansted Services

Dunmow Road (west)

1208

1153
Dunmow Road (east)

3913
A120 (east of J8)

616
B1256 Dunmow Road (east)

Takeley

1056
Hockerill Street

1326
Junction of A1250 and Haymeads Lane

Station Road

608

Bishops Parkway

1030

London Road

957

Hallingbury Road (north)

588

535
Hallingbury Road (south)

746
St. James' Way

M11 (S)

7044
M11 South of J8

St. James' Way East

632

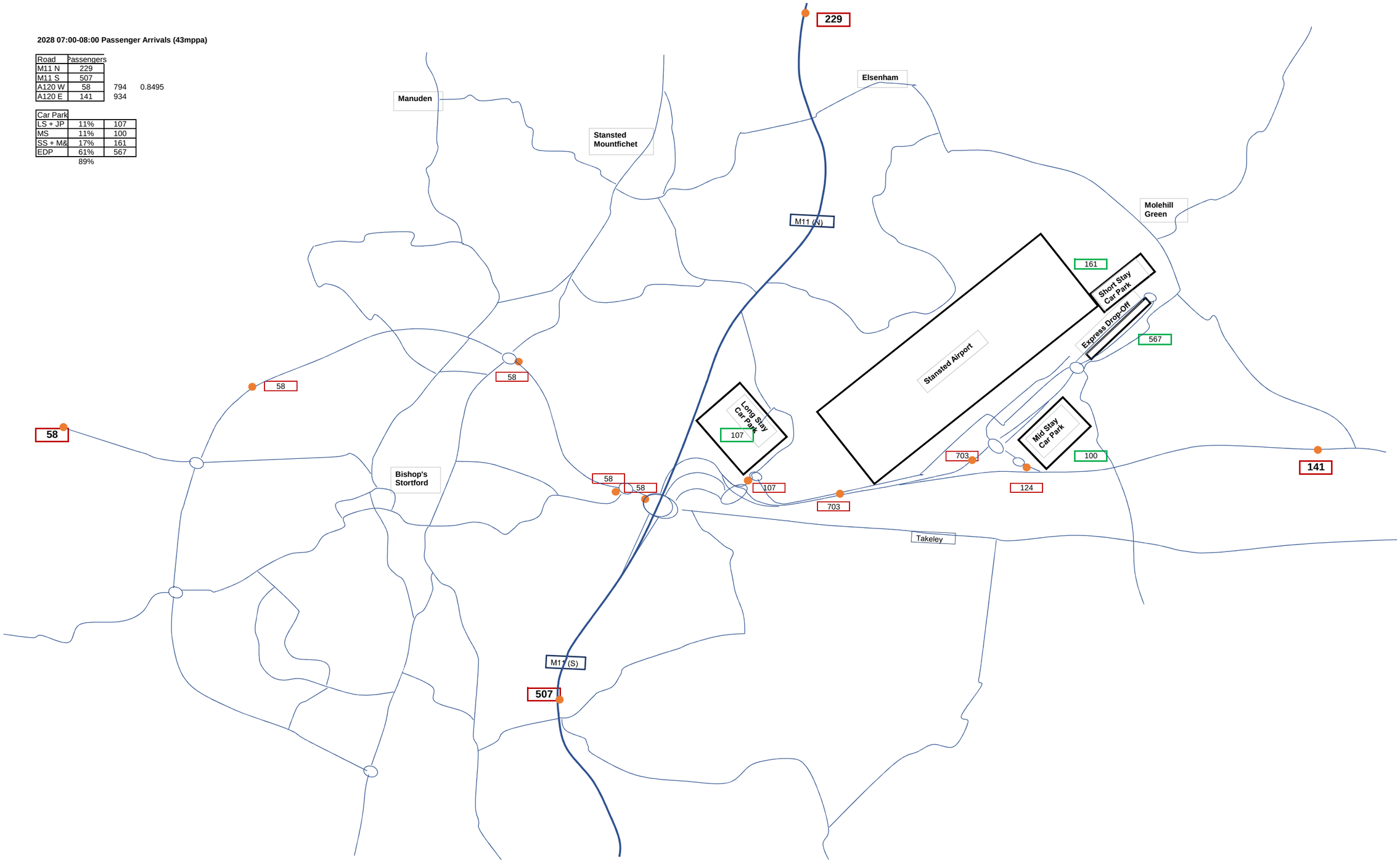
1157
A1184 Cambridge Road

418
Lower Road

2028 07:00-08:00 Passenger Arrivals (43mppa)

Road	Passengers		
M11 N	229		
M11 S	507		
A120 W	58	794	0.8495
A120 E	141	934	

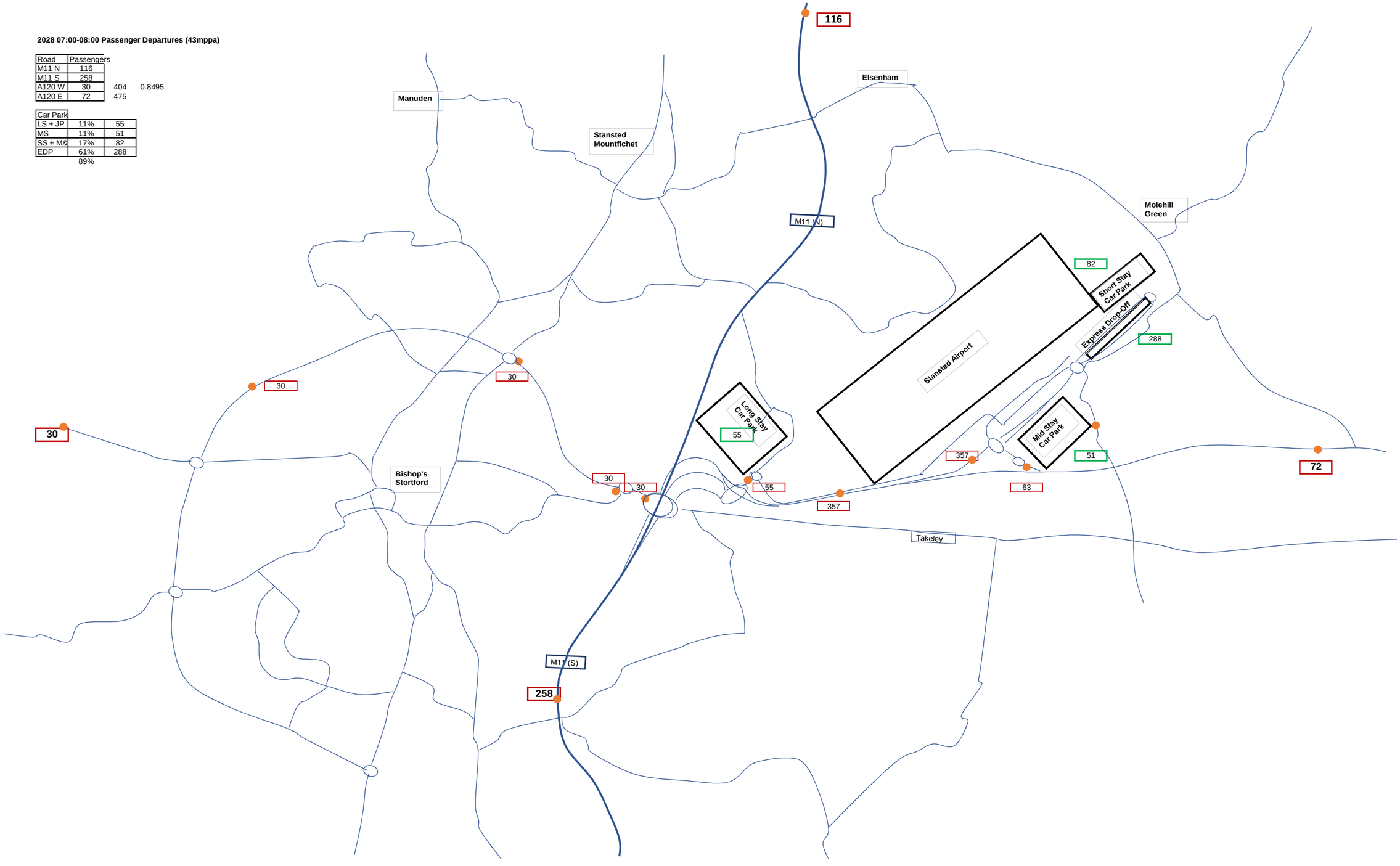
Car Park		
LS + JP	11%	107
MS	11%	100
SS + M&	17%	161
EDP	61%	567
	89%	



2028 07:00-08:00 Passenger Departures (43mppa)

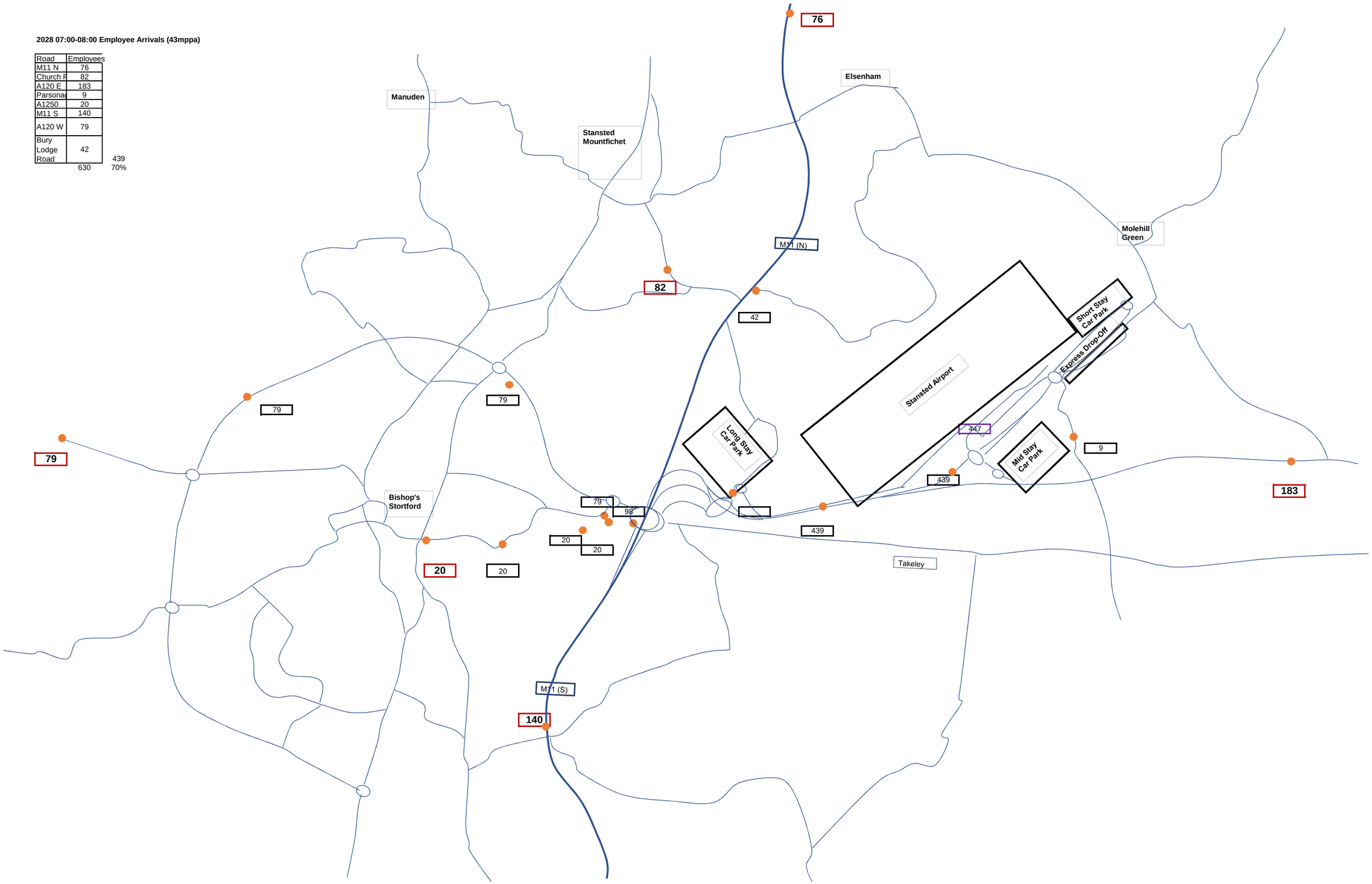
Road	Passengers		
M11 N	116		
M11 S	258		
A120 W	30	404	0.8495
A120 E	72	475	

Car Park		
LS + JP	11%	55
MS	11%	51
SS + M&	17%	82
EDP	61%	288
	89%	



2028 07:00-08:00 Employee Arrivals (43mppa)

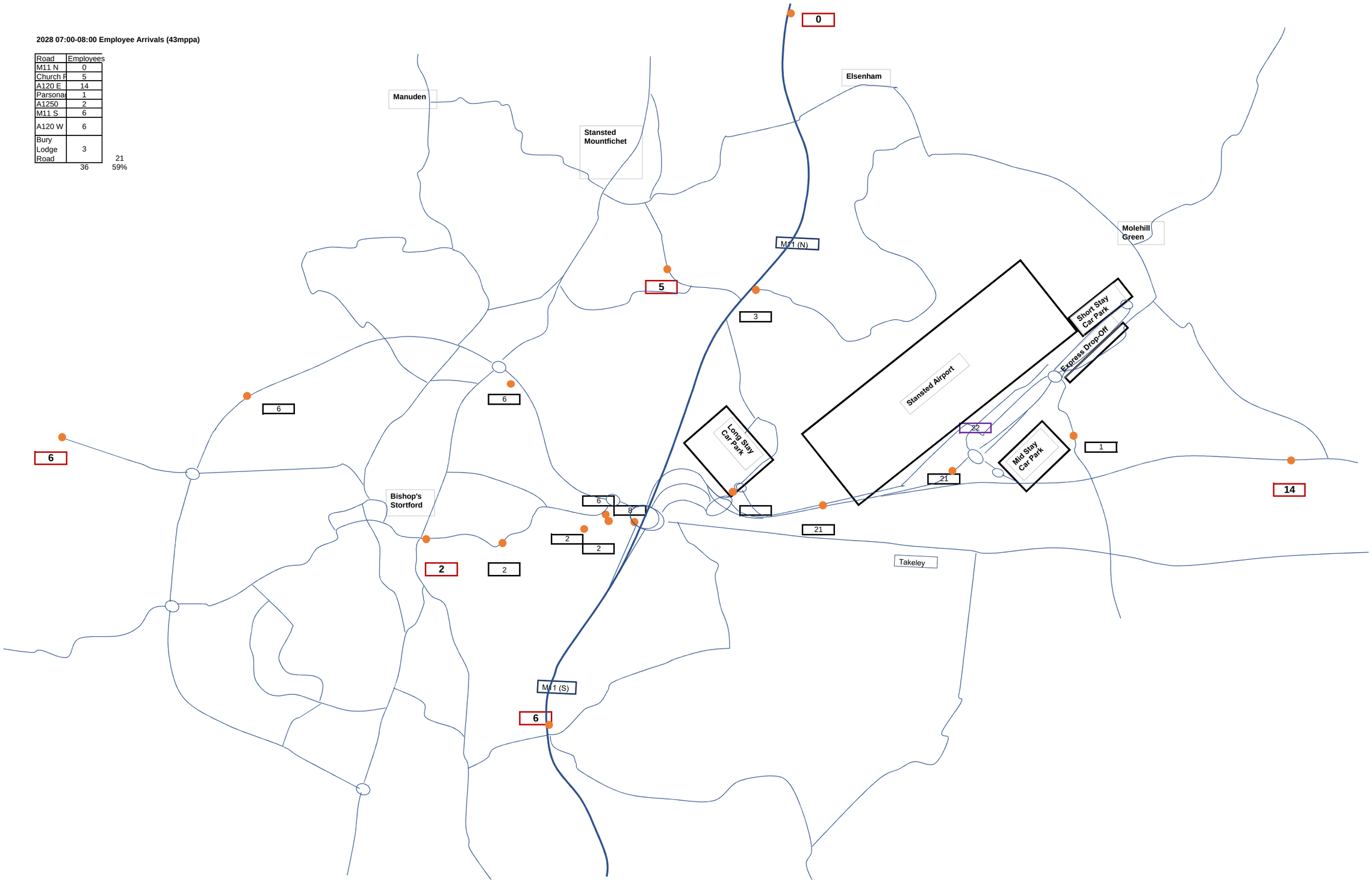
Road	Employees	
M11 N	76	
Church F	82	
A120 E	183	
Parsonag	9	
A1250	20	
M11 S	140	
A120 W	79	
Bury Lodge Road	42	
	630	439 70%



2028 07:00-08:00 Employee Arrivals (43mppa)

Road	Employees
M11 N	0
Church F	5
A120 E	14
Parsonag	1
A1250	2
M11 S	6
A120 W	6
Bury Lodge Road	3
	36

21
59%



2028 07:00-08:00 Traffic Flows (With Airport 43mppa)

Road	Passengers
M11 N	5081
M11 S	7954
A120 W	1296
A120 E	3669

18001

Car Park		
LS + JP	11%	2066
MS	11%	1922
SS + M&	17%	3096
EDP	61%	10917

TEMPro:
1.1872

5081
M11 Paynsden Wood

918
B1383 Cambridge Road

Cambridge Road
1081

Manuden
261
Carters Hill

Stansted Mountfichet

Elsenham
238
Hall Road

609
Lower Street

390
Chapel Hill

M11 (N)

Molehill Green
163
Molehill Green Road

Church Road (A)
550

368
Church Road (B)

Short Stay Car Park
Express Drop-Off
Stansted Airport

55
Bambers Green

1632
Western approach to Stansted roundabout

1647
A120 West

Long Stay Car Park

A120 east of roundabout

Mid Stay Car Park

282
Parsonage Road

1296
A120 Hadham Road (west)

609
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout
1750
2682

Round Coppice Road
1069

1954
Thremhall Avenue

624
Stansted Services

3669
A120 East of Stansted Airport

Dunmow Road (west)
1229
1174
Dunmow Road (east)

5433
A120 (east of J8)

616
B1256 Dunmow Road (east)

Takeley

1078
Hockerill Street

1348
Junction of A1250 and Haymeads Lane

Station Road
608

London Road
957

Bishops Parkway
1030

588
Hallingbury Road (north)

535
Hallingbury Road (south)

746
St. James' Way

M11 (S)

7954
M11 South of J8

St. James' Way East
632

1157
A1184 Cambridge Road

418
Lower Road

8) Peak Hour Traffic Flows (17:00-18:00)

2016 Baseline Scenario (17:00-18:00) Passenger Arrivals

Hourly Passenger Count 7,466

Passenger Mode Split		%
Car Driver	1120	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**1120**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 1120

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	84	0	0	0
Outer London NE	108	0	0	0
Outer London SE	17	0	0	0
Outer London SW	13	0	0	0
Outer London NW	90	0	0	0
Outer South East NE	358	0	0	0
Outer South East NW	42	0	0	0
Outer South East SW	20	0	0	0
Outer South East SE	56	0	0	0
Southwest & Wales	25	0	0	0
West Midlands	14	0	0	0
East Midlands	68	0	0	0
East Anglia	195	0	0	0
Rest of UK	29	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,120	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	84	0	0	0
Outer London NE	108	0	0	0
Outer London SE	17	0	0	0
Outer London SW	13	0	0	0
Outer London NW	90	0	0	0
Outer South East NE	358	0	0	0
Outer South East NW	42	0	0	0
Outer South East SW	20	0	0	0
Outer South East SE	56	0	0	0
Southwest & Wales	25	0	0	0
West Midlands	14	0	0	0
East Midlands	68	0	0	0
East Anglia	195	0	0	0
Rest of UK	29	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,120	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	84	0	0	0
Outer London NE	108	0	0	0
Outer London SE	17	0	0	0
Outer London SW	13	0	0	0
Outer London NW	90	0	0	0
Outer South East NE	358	0	0	0
Outer South East NW	42	0	0	0
Outer South East SW	20	0	0	0
Outer South East SE	56	0	0	0
Southwest & Wales	25	0	0	0
West Midlands	14	0	0	0
East Midlands	68	0	0	0
East Anglia	195	0	0	0
Rest of UK	29	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,120	0	0	0

1,120

Distribution of Vehicles on the Road Network *Source:* ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	84										100%												
London North East	108										100%												
London North West	90										100%												
London South East	17										100%												
London South West	13										100%												
London Sub-total	312																						
SE England - NE	358																						
Essex	264		50%								50%												
Hertfordshire	93										25%							75%					
SE England - NW	42																						
Bedfordshire	4	100%																					
Berkshire	12										100%												
Buckinghamshire	16										100%												
Oxfordshire	11										100%												
SE England - SE	56																						
East Sussex	7										100%												
Kent	50										100%												
SE England - SW	20																						
Hampshire	12										100%												
Surrey	5										100%												
West Sussex	3										100%												
Rest of South East Sub-total	0										100%												
East Anglia	195																						
Cambridgeshire	100	100%																					
Norfolk	22	100%																					
Suffolk	73	50%	50%																				
East Midlands	68	100%																					
South West England and Wales	25										100%												
West Midlands	14	100%																					
Rest of UK	29	100%																					
Sub-total Rest of Country	29																						
Total All Areas	1120																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	84	0	0	0	0	0	0	0	0	0	84	0	0	0	0	0	0	0	0	0	0	0	0
London North East	108	0	0	0	0	0	0	0	0	0	108	0	0	0	0	0	0	0	0	0	0	0	0
London North West	90	0	0	0	0	0	0	0	0	0	90	0	0	0	0	0	0	0	0	0	0	0	0
London South East	17	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0
London South West	13	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	312																						
SE England - NE	358																						
Essex	264	0	132	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	93	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	70	0	0	0	0	0
SE England - NW	42																						
Bedfordshire	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	12	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	16	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	56																						
East Sussex	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Kent	50	0	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	20																						
Hampshire	12	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	195																						
Cambridgeshire	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	73	36	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	68	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	25	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	29	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	29																						
Total All Areas	1120																						
Residence not reported	0																						
Total		274	169	0	0	0	0	0	0	0	607	0	0	0	0	0	0	70	0	0	0	0	0

Road Link		
M11 N	274	24%
M11 S	607	54%
A120 E	169	15%
A120 W	70	6%
Total	**1120**	

2016 Baseline Scenario (17:00-18:00) Passenger Departures

Hourly Passenger Count 7,251

Passenger Mode Split		%
Car Driver	1088	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**1088**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 1088

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	82	0	0	0
Outer London NE	105	0	0	0
Outer London SE	17	0	0	0
Outer London SW	12	0	0	0
Outer London NW	87	0	0	0
Outer South East NE	347	0	0	0
Outer South East NW	41	0	0	0
Outer South East SW	19	0	0	0
Outer South East SE	55	0	0	0
Southwest & Wales	24	0	0	0
West Midlands	14	0	0	0
East Midlands	66	0	0	0
East Anglia	189	0	0	0
Rest of UK	28	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,088	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	82	0	0	0
Outer London NE	105	0	0	0
Outer London SE	17	0	0	0
Outer London SW	12	0	0	0
Outer London NW	87	0	0	0
Outer South East NE	347	0	0	0
Outer South East NW	41	0	0	0
Outer South East SW	19	0	0	0
Outer South East SE	55	0	0	0
Southwest & Wales	24	0	0	0
West Midlands	14	0	0	0
East Midlands	66	0	0	0
East Anglia	189	0	0	0
Rest of UK	28	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,088	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	82	0	0	0
Outer London NE	105	0	0	0
Outer London SE	17	0	0	0
Outer London SW	12	0	0	0
Outer London NW	87	0	0	0
Outer South East NE	347	0	0	0
Outer South East NW	41	0	0	0
Outer South East SW	19	0	0	0
Outer South East SE	55	0	0	0
Southwest & Wales	24	0	0	0
West Midlands	14	0	0	0
East Midlands	66	0	0	0
East Anglia	189	0	0	0
Rest of UK	28	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,088	0	0	0

1,088

Distribution of Vehicles on the Road Network *Source:* ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	82										100%												
London North East	105										100%												
London North West	87										100%												
London South East	17										100%												
London South West	12										100%												
London Sub-total	303																						
SE England - NE	347																						
Essex	257		50%								50%												
Hertfordshire	91										25%							75%					
SE England - NW	41																						
Bedfordshire	4	100%																					
Berkshire	12										100%												
Buckinghamshire	15										100%												
Oxfordshire	11										100%												
SE England - SE	55																						
East Sussex	6										100%												
Kent	48										100%												
SE England - SW	19																						
Hampshire	11										100%												
Surrey	5										100%												
West Sussex	3										100%												
Rest of South East Sub-total	0										100%												
East Anglia	189																						
Cambridgeshire	97	100%																					
Norfolk	22	100%																					
Suffolk	71	50%	50%																				
East Midlands	66	100%																					
South West England and Wales	24										100%												
West Midlands	14	100%																					
Rest of UK	28	100%																					
Sub-total Rest of Country	28																						
Total All Areas	1088																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	82	0	0	0	0	0	0	0	0	0	82	0	0	0	0	0	0	0	0	0	0	0	0
London North East	105	0	0	0	0	0	0	0	0	0	105	0	0	0	0	0	0	0	0	0	0	0	0
London North West	87	0	0	0	0	0	0	0	0	0	87	0	0	0	0	0	0	0	0	0	0	0	0
London South East	17	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0
London South West	12	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	303																						
SE England - NE	347																						
Essex	257	0	128	0	0	0	0	0	0	0	128	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	91	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	68	0	0	0	0	0
SE England - NW	41																						
Bedfordshire	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	12	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	15	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	55																						
East Sussex	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
Kent	48	0	0	0	0	0	0	0	0	0	48	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	19																						
Hampshire	11	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	189																						
Cambridgeshire	97	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	71	35	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	66	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	24	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	28	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	28																						
Total All Areas	1088																						
Residence not reported	0																						
Total		266	164	0	0	0	0	0	0	0	590	0	0	0	0	0	0	68	0	0	0	0	0

Road Link		
M11 N	266	24%
M11 S	590	54%
A120 E	164	15%
A120 W	68	6%
Total	**1088**	

2016 Baseline Scenario (17:00-18:00) Employee Arrivals

Daily Employee Count		42

Employee Mode Split		%
Car Driver	33	79%
Car Passenger	9	21%
Total	**42**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	5
Total	**5**

0.5

Number of Cars	39

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	28	9
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	3	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	33	9

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	0	0
Outer South East NE	28	5
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	0	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	3	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	33	5

39

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0						100%		
London North East	2						100%		
London North West	0						100%		
London South East	0						100%		
London South West	0						100%		
London Sub-total	2								
SE England - NE	34								
Essex	26								
Uttlesford	9		40%	25%	5%				30%
Braintree	8			100%					
Harlow	3						50%	50%	
Chelmsford	2			75%			25%		
Colchester	1			100%					
Epping Forest	1				25%		75%		
Basildon	0						100%		
Tendring	0			100%					
Maldon	0			100%					
Brentwood	0						100%		
Castle Point	0			50%			50%		
Rochford	0			50%			50%		
Southend-on-Sea	0						100%		
Thurrock	0						100%		
Hertfordshire	8								
East Hertfordshire	6		25%			25%		50%	
Broxbourne	1							100%	
North Hertfordshire	0							100%	
Welwyn Hatfield	0							100%	
St. Albans	0							100%	
Hertsmere	0							100%	
Stevenage	0							100%	
Watford	0							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	0								
Bedfordshire	0	100%							
Berkshire	0						100%		
Buckinghamshire	0						100%		
Oxfordshire	0						100%		
SE England - SE	0								
East Sussex	0						100%		
Kent	0						100%		
SE England - SW	0								
Hampshire	0						100%		
Surrey	0						100%		
West Sussex	0						100%		
Rest of South East Sub-total	0						100%		
East Anglia	3								
Cambridgeshire	2	80%							20%
Norfolk	0	100%							
Suffolk	1	50%	50%						
East Midlands	0	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	39								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0	0	0	0	0	0	0	0	0
London North East	2	0	0	0	0	0	2	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	0	0	0	0	0	0	0	0	0
London South West	0	0	0	0	0	0	0	0	0
London Sub-total	2								
SE England - NE	34								
Essex	26								
Uttlesford	9	0	4	2	0	0	0	0	3
Braintree	8	0	0	8	0	0	0	0	0
Harlow	3	0	0	0	0	0	1	1	0
Chelmsford	2	0	0	1	0	0	0	0	0
Colchester	1	0	0	1	0	0	0	0	0
Epping Forest	1	0	0	0	0	0	1	0	0
Basildon	0	0	0	0	0	0	0	0	0
Tendring	0	0	0	0	0	0	0	0	0
Maldon	0	0	0	0	0	0	0	0	0
Brentwood	0	0	0	0	0	0	0	0	0
Castle Point	0	0	0	0	0	0	0	0	0
Rochford	0	0	0	0	0	0	0	0	0
Southend-on-Sea	0	0	0	0	0	0	0	0	0
Thurrock	0	0	0	0	0	0	0	0	0
Hertfordshire	8								
East Hertfordshire	6	0	2	0	0	2	0	3	0
Broxbourne	1	0	0	0	0	0	0	1	0
North Hertfordshire	0	0	0	0	0	0	0	0	0
Welwyn Hatfield	0	0	0	0	0	0	0	0	0
St. Albans	0	0	0	0	0	0	0	0	0
Hertsmere	0	0	0	0	0	0	0	0	0
Stevenage	0	0	0	0	0	0	0	0	0
Watford	0	0	0	0	0	0	0	0	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	0								
Bedfordshire	0	0	0	0	0	0	0	0	0
Berkshire	0	0	0	0	0	0	0	0	0
Buckinghamshire	0	0	0	0	0	0	0	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	0								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	0	0	0	0	0	0	0	0	0
SE England - SW	0								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	0	0	0	0	0	0	0	0	0
West Sussex	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	3								
Cambridgeshire	2	1	0	0	0	0	0	0	0
Norfolk	0	0	0	0	0	0	0	0	0
Suffolk	1	1	1	0	0	0	0	0	0
East Midlands	0	0	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	39								

Total		2	6	14	1	2	6	6	3

M11 N	2	6%
Church Road	6	15%
A120 E	14	36%
Parsonage Road	1	2%
A1250	2	4%
M11 S	6	14%
A120 W	6	15%
Bury Lodge Road	3	8%

2016 Baseline Scenario (17:00-18:00) Employee Departures

Daily Employee Count		617

Employee Mode Split		%
Car Driver	575	93%
Car Passenger	42	7%
Total	**617**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	26
Total	**26**

0.5

Number of Cars	602

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	25	3
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	8	0
Outer South East NE	463	37
Outer South East NW	8	0
Outer South East SW	5	2
Outer South East SE	3	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	5	0
East Anglia	57	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	575	42

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	25	2
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	8	0
Outer South East NE	463	23
Outer South East NW	8	0
Outer South East SW	5	1
Outer South East SE	3	0
Southwest & Wales	0	0
West Midlands	2	0
East Midlands	5	0
East Anglia	57	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	575	26

602

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0						100%		
London North East	27						100%		
London North West	0						100%		
London South East	0						100%		
London South West	8						100%		
London Sub-total	35								
SE England - NE	486								
Essex	378								
Uttlesford	127		40%	25%	5%				30%
Braintree	118			100%					
Harlow	42						50%	50%	
Chelmsford	27			75%			25%		
Colchester	18			100%					
Epping Forest	13				25%		75%		
Basildon	7						100%		
Tendring	5			100%					
Maldon	5			100%					
Brentwood	4						100%		
Castle Point	2			50%			50%		
Rochford	2			50%			50%		
Southend-on-Sea	3						100%		
Thurrock	4						100%		
Hertfordshire	109								
East Hertfordshire	87		25%			25%		50%	
Broxbourne	10							100%	
North Hertfordshire	5							100%	
Welwyn Hatfield	2							100%	
St. Albans	1							100%	
Hertsmere	1							100%	
Stevenage	1							100%	
Watford	1							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	8								
Bedfordshire	5	100%							
Berkshire	1						100%		
Buckinghamshire	1						100%		
Oxfordshire	0						100%		
SE England - SE	3								
East Sussex	0						100%		
Kent	3						100%		
SE England - SW	6								
Hampshire	1						100%		
Surrey	2						100%		
West Sussex	2						100%		
Rest of South East Sub-total	0						100%		
East Anglia	57								
Cambridgeshire	27	80%							20%
Norfolk	5	100%							
Suffolk	25	50%	50%						
East Midlands	5	100%							
South West England and Wales	0						100%		
West Midlands	2	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	602								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0	0	0	0	0	0	0	0	0
London North East	27	0	0	0	0	0	27	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	0	0	0	0	0	0	0	0	0
London South West	8	0	0	0	0	0	8	0	0
London Sub-total	35								
SE England - NE	486								
Essex	378								
Uttlesford	127	0	51	32	6	0	0	0	38
Braintree	118	0	0	118	0	0	0	0	0
Harlow	42	0	0	0	0	0	21	21	0
Chelmsford	27	0	0	20	0	0	7	0	0
Colchester	18	0	0	18	0	0	0	0	0
Epping Forest	13	0	0	0	3	0	10	0	0
Basildon	7	0	0	0	0	0	7	0	0
Tendring	5	0	0	5	0	0	0	0	0
Maldon	5	0	0	5	0	0	0	0	0
Brentwood	4	0	0	0	0	0	4	0	0
Castle Point	2	0	0	1	0	0	1	0	0
Rochford	2	0	0	1	0	0	1	0	0
Southend-on-Sea	3	0	0	0	0	0	3	0	0
Thurrock	4	0	0	0	0	0	4	0	0
Hertfordshire	109								
East Hertfordshire	87	0	22	0	0	22	0	43	0
Broxbourne	10	0	0	0	0	0	0	10	0
North Hertfordshire	5	0	0	0	0	0	0	5	0
Welwyn Hatfield	2	0	0	0	0	0	0	2	0
St. Albans	1	0	0	0	0	0	0	1	0
Hertsmere	1	0	0	0	0	0	0	1	0
Stevenage	1	0	0	0	0	0	0	1	0
Watford	1	0	0	0	0	0	0	1	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	8								
Bedfordshire	5	5	0	0	0	0	0	0	0
Berkshire	1	0	0	0	0	0	1	0	0
Buckinghamshire	1	0	0	0	0	0	1	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	3								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	3	0	0	0	0	0	3	0	0
SE England - SW	6								
Hampshire	1	0	0	0	0	0	1	0	0
Surrey	2	0	0	0	0	0	2	0	0
West Sussex	2	0	0	0	0	0	2	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	57								
Cambridgeshire	27	22	0	0	0	0	0	0	5
Norfolk	5	5	0	0	0	0	0	0	0
Suffolk	25	12	12	0	0	0	0	0	0
East Midlands	5	5	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	2	2	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	602								

Total		50	85	200	10	22	105	86	44

M11 N	50	8%
Church Road	85	14%
A120 E	200	33%
Parsonage Road	10	2%
A1250	22	4%
M11 S	105	17%
A120 W	86	14%
Bury Lodge Road	44	7%

2016 17:00-18:00 Traffic Flows (With Airport)

Road	Passengers
M11 N	5433
M11 S	8140
A120 W	1196
A120 E	3725

18494

Car Park		
LS + JP	11%	2122
MS	11%	1975
SS + M&	17%	3180
EDP	61%	11217

5433
M11 Paynsden Wood

895
B1383 Cambridge Road

Manuden

278
Carters Hill

Cambridge Road

965

Stansted Mountfichet

Elsenham

291
Hall Road

633
Lower Street

535
Chapel Hill

M11 (N)

Molehill Green

180
Molehill Green Road

Church Road (A)

504

479
Church Road (B)

Short Stay Car Park

Express Drop-Off

Stansted Airport

79
Bambers Green

1559
Western approach to Stansted roundabout

1576
A120 West

Long Stay Car Park

1196
A120 Hadham Road (west)

Mid Stay Car Park

368
Parsonage Road

3725
A120 East of Stansted Airport

660
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout

1687

A120 east of roundabout

2664

Round Coppice Road

686

1786
Thremhall Avenue

604
Stansted Services

Dunmow Road (west)

1299

1240
Dunmow Road (east)

5329
A120 (east of J8)

678
B1256 Dunmow Road (east)

Takeley

1135
Hockerill Street

1428
Junction of A1250 and Haymeads Lane

Station Road

659

London Road

1037

Bishops Parkway

1117

Hallingbury Road (north)

638

580
Hallingbury Road (south)

808
St. James' Way

M11 (S)

8140
M11 South of J8

St. James' Way East

685

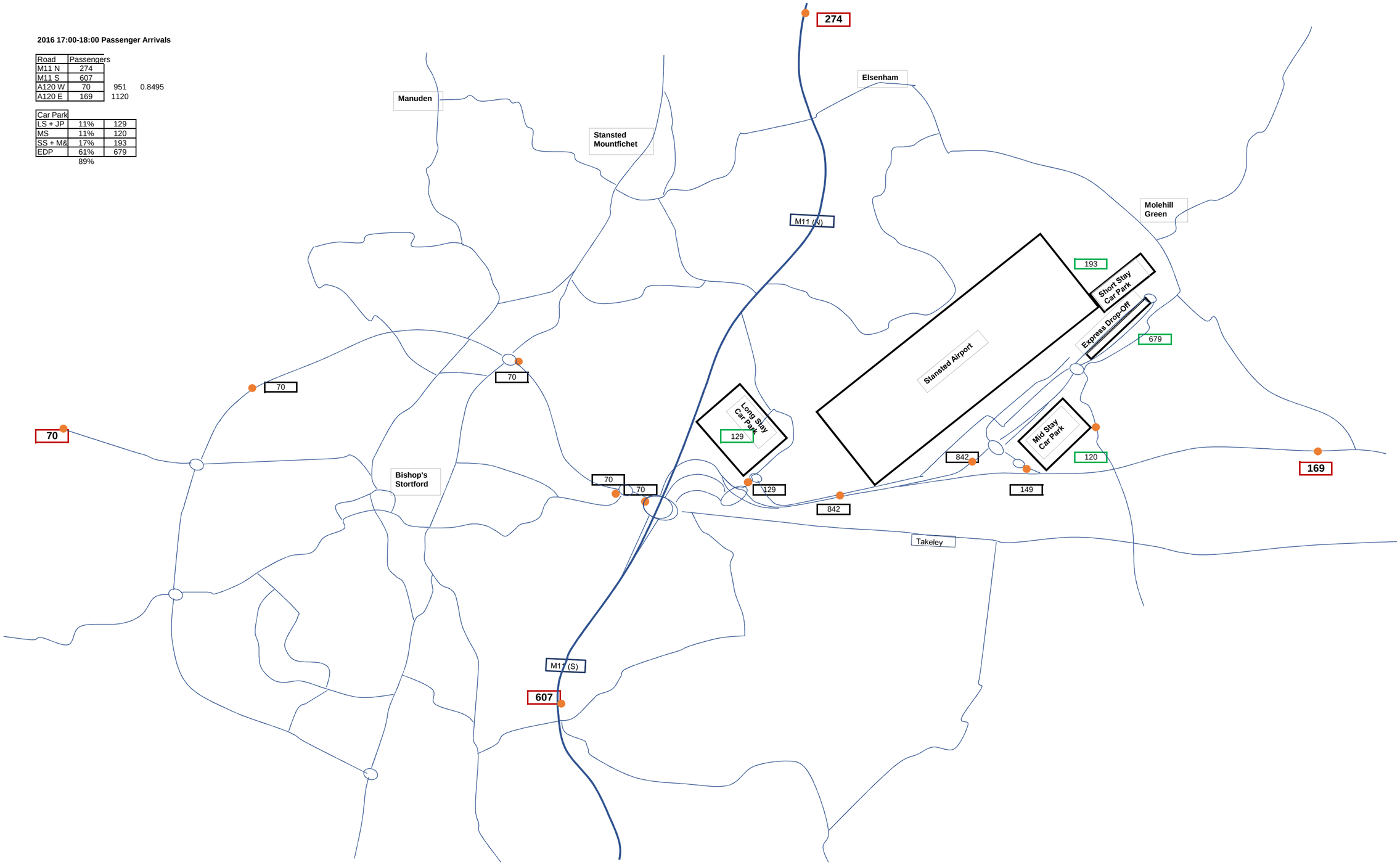
1287
A1184 Cambridge Road

453
Lower Road

2016 17:00-18:00 Passenger Arrivals

Road	Passengers		
M11 N	274		
M11 S	607		
A120 W	70	951	0.8495
A120 E	169	1120	

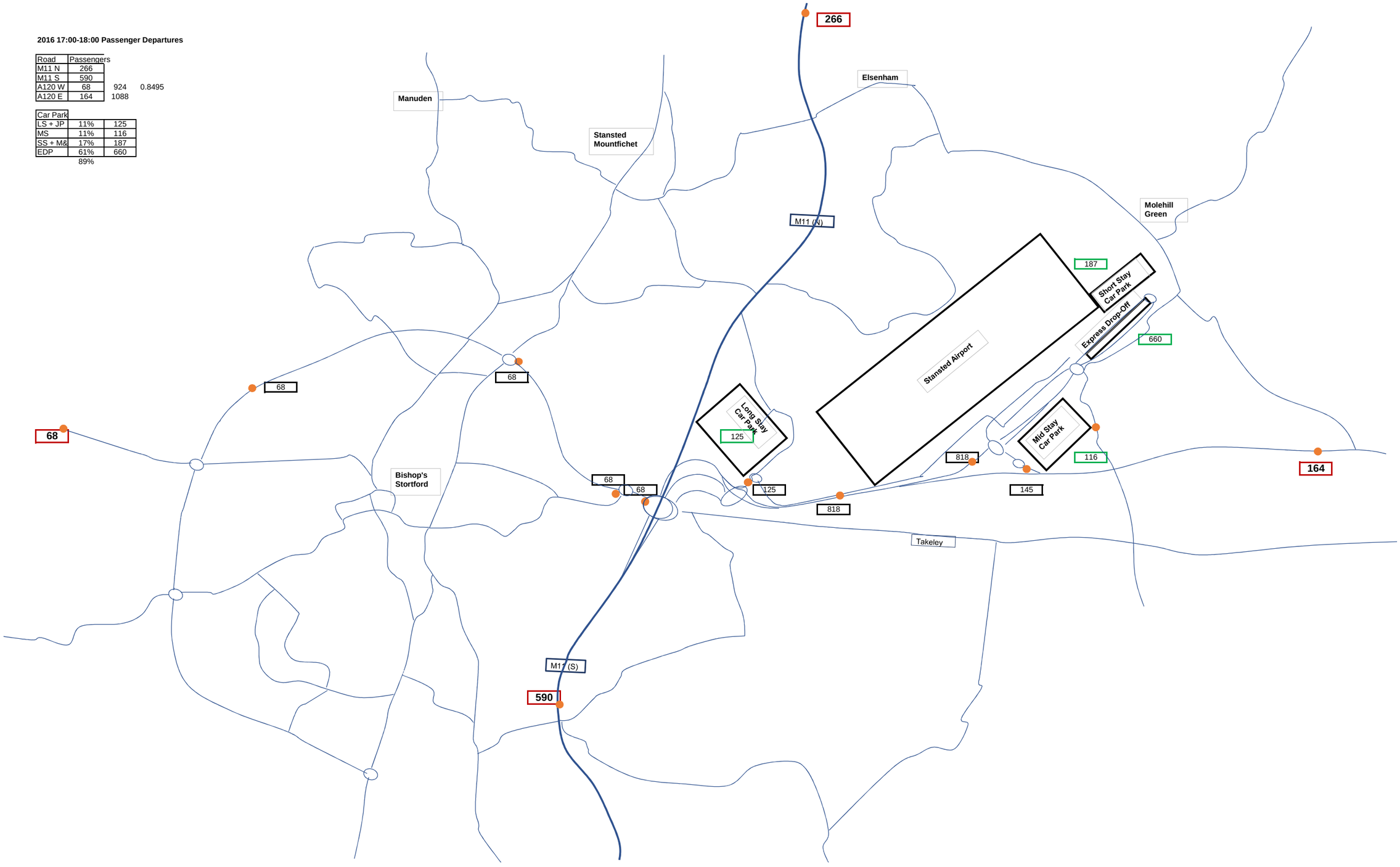
Car Park		
LS + JP	11%	129
MS	11%	120
SS + M&	17%	193
EDP	61%	679
	89%	



2016 17:00-18:00 Passenger Departures

Road	Passengers		
M11 N	266		
M11 S	590		
A120 W	68	924	0.8495
A120 E	164	1088	

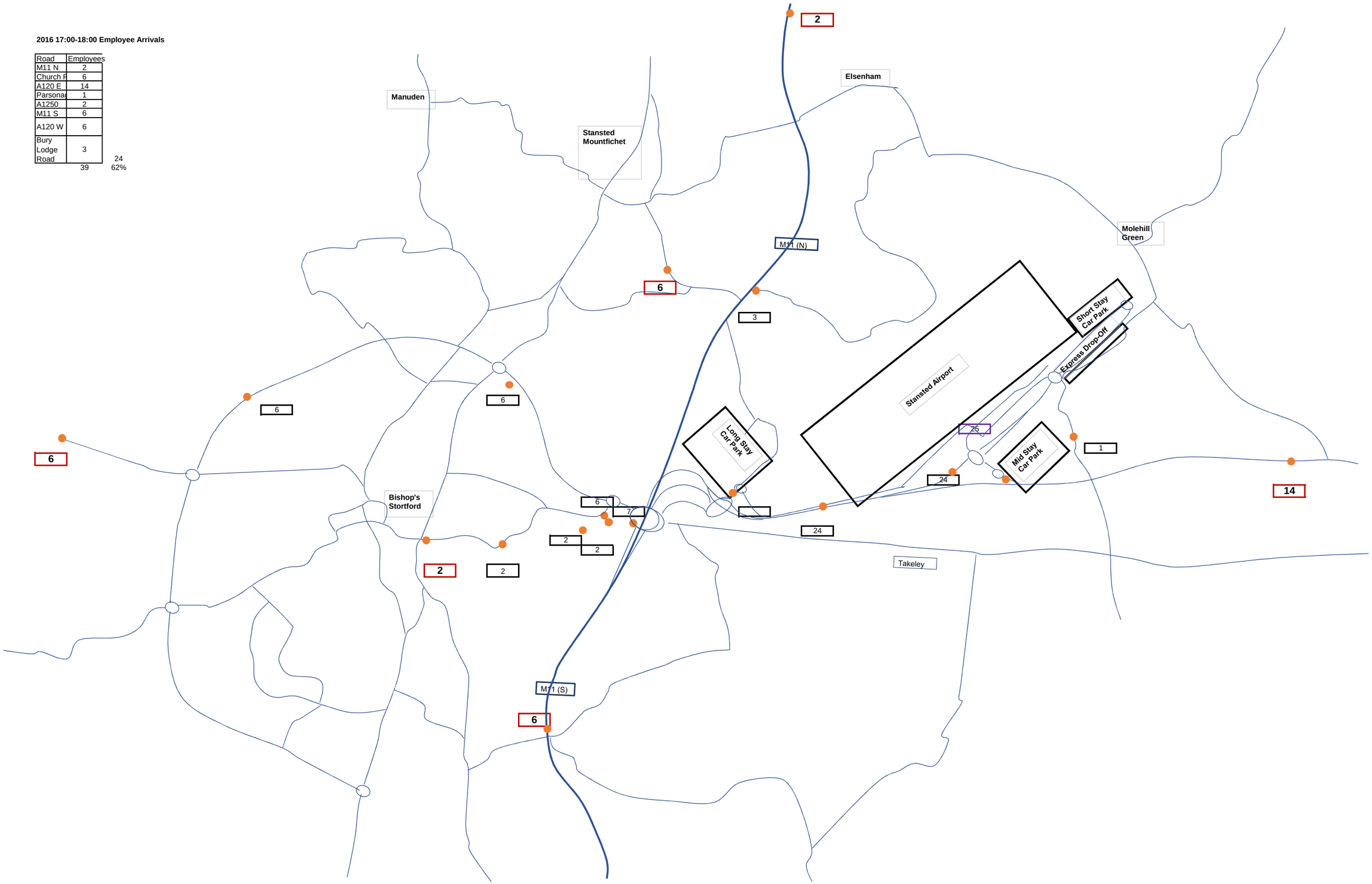
Car Park		
LS + JP	11%	125
MS	11%	116
SS + M&	17%	187
EDP	61%	660
	89%	



2016 17:00-18:00 Employee Arrivals

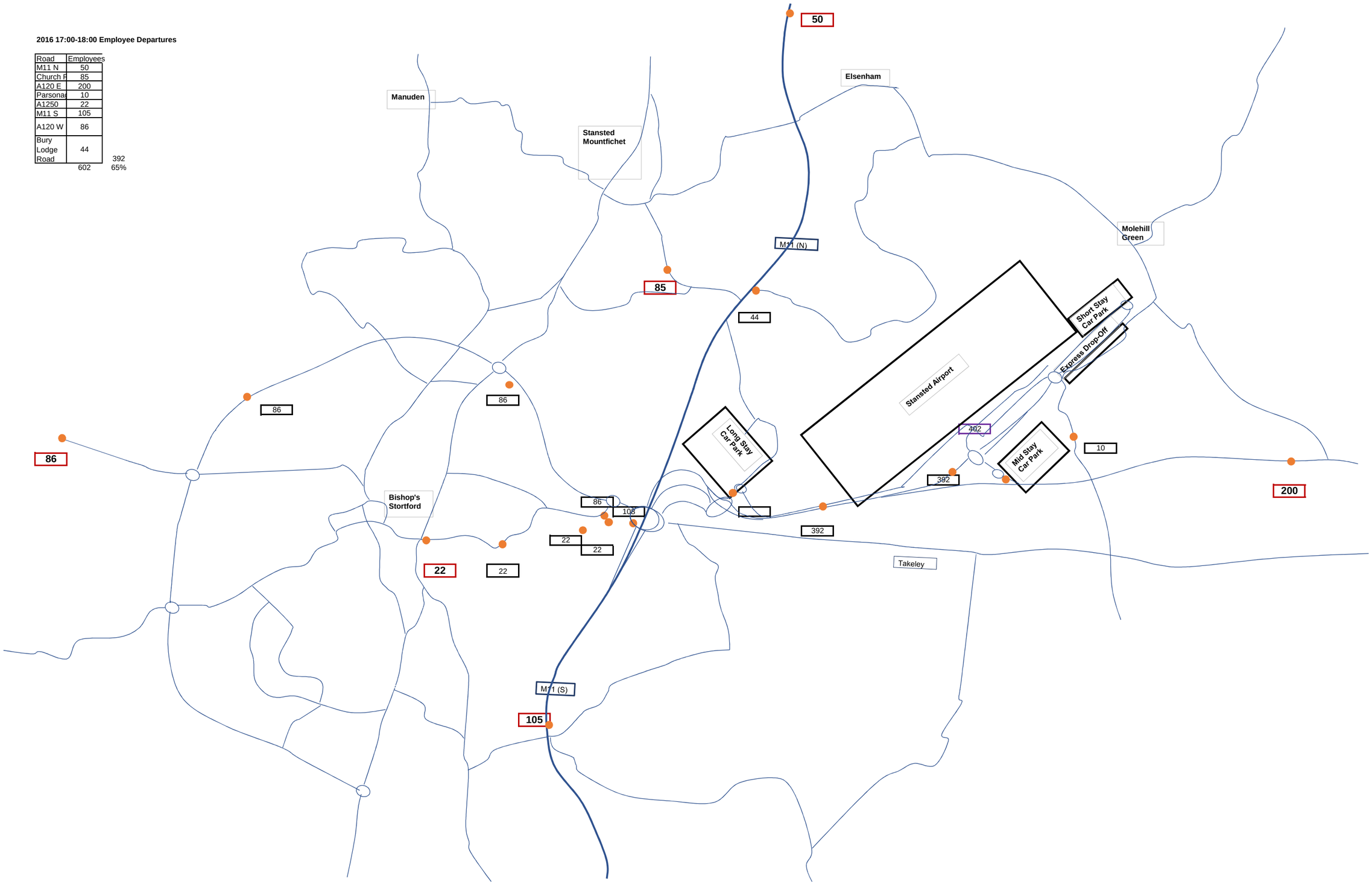
Road	Employees
M11 N	2
Church F	6
A120 E	14
Parsonag	1
A1250	2
M11 S	6
A120 W	6
Bury Lodge Road	3
	39

24
62%



2016 17:00-18:00 Employee Departures

Road	Employees	
M11 N	50	
Church F	85	
A120 E	200	
Parsonag	10	
A1250	22	
M11 S	105	
A120 W	86	
Bury Lodge Road	44	
		392
	602	65%



2016 17:00-18:00 Traffic Flows (Without Airport)

Road	Passengers
M11 N	4841
M11 S	6833
A120 W	966
A120 E	3179

15818

Car Park		
LS + JP	11%	1815
MS	11%	1689
SS + M&	17%	2720
EDP	61%	9593

4841
M11 Paynsden Wood

895
B1383 Cambridge Road

Cambridge Road
965

Manuden
278
Carters Hill

Stansted Mountfichet

Elsenham
291
Hall Road

633
Lower Street

535
Chapel Hill

M11 (N)

Molehill Green
180
Molehill Green Road

Church Road (A)
413

432
Church Road (B)

Short Stay Car Park
Express Drop-Off
Stansted Airport

79
Bambers Green

1329
Western approach to Stansted roundabout

1346
A120 West

966
A120 Hadham Road (west)

A120 east of roundabout

Long Stay Car Park

358
Parsonage Road

542
Thremhall Avenue

Mid Stay Car Park

310
Stansted Services

3179
A120 East of Stansted Airport

660
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout
1457
2411

Round Coppice Road
433

Dunmow Road (west)
1276
1216

Dunmow Road (east)

3253
A120 (east of J8)

678
B1256 Dunmow Road (east)

Takeley

1111
Hockerill Street

1404
Junction of A1250 and Haymeads Lane

Station Road
659

London Road
1037

Bishops Parkway
1117

Hallingbury Road (north)
638
580
Hallingbury Road (south)

808
St. James' Way

M11 (S)

6833
M11 South of J8

St. James' Way East
685

1287
A1184 Cambridge Road

453
Lower Road

2028 With Airport (35mppa) 16:00-17:00 Passenger Arrivals

Hourly Passenger Count 8,065

Passenger Mode Split		%
Car Driver	1210	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**1210**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 1210

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	91	0	0	0
Outer London NE	117	0	0	0
Outer London SE	19	0	0	0
Outer London SW	14	0	0	0
Outer London NW	97	0	0	0
Outer South East NE	386	0	0	0
Outer South East NW	46	0	0	0
Outer South East SW	22	0	0	0
Outer South East SE	61	0	0	0
Southwest & Wales	27	0	0	0
West Midlands	16	0	0	0
East Midlands	74	0	0	0
East Anglia	210	0	0	0
Rest of UK	31	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,210	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	91	0	0	0
Outer London NE	117	0	0	0
Outer London SE	19	0	0	0
Outer London SW	14	0	0	0
Outer London NW	97	0	0	0
Outer South East NE	386	0	0	0
Outer South East NW	46	0	0	0
Outer South East SW	22	0	0	0
Outer South East SE	61	0	0	0
Southwest & Wales	27	0	0	0
West Midlands	16	0	0	0
East Midlands	74	0	0	0
East Anglia	210	0	0	0
Rest of UK	31	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,210	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	91	0	0	0
Outer London NE	117	0	0	0
Outer London SE	19	0	0	0
Outer London SW	14	0	0	0
Outer London NW	97	0	0	0
Outer South East NE	386	0	0	0
Outer South East NW	46	0	0	0
Outer South East SW	22	0	0	0
Outer South East SE	61	0	0	0
Southwest & Wales	27	0	0	0
West Midlands	16	0	0	0
East Midlands	74	0	0	0
East Anglia	210	0	0	0
Rest of UK	31	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,210	0	0	0

1,210

Distribution of Vehicles on the Road Network

Source: ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	91										100%												
London North East	117										100%												
London North West	97										100%												
London South East	19										100%												
London South West	14										100%												
London Sub-total	337																						
SE England - NE	386																						
Essex	285		50%								50%												
Hertfordshire	101										25%							75%					
SE England - NW	46																						
Bedfordshire	4	100%																					
Berkshire	13										100%												
Buckinghamshire	17										100%												
Oxfordshire	12										100%												
SE England - SE	61																						
East Sussex	7										100%												
Kent	54										100%												
SE England - SW	22																						
Hampshire	13										100%												
Surrey	6										100%												
West Sussex	3										100%												
Rest of South East Sub-total	0										100%												
East Anglia	210																						
Cambridgeshire	108	100%																					
Norfolk	24	100%																					
Suffolk	79	50%	50%																				
East Midlands	74	100%																					
South West England and Wales	27										100%												
West Midlands	16	100%																					
Rest of UK	31	100%																					
Sub-total Rest of Country	31																						
Total All Areas	1210																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	91	0	0	0	0	0	0	0	0	0	91	0	0	0	0	0	0	0	0	0	0	0	0
London North East	117	0	0	0	0	0	0	0	0	0	117	0	0	0	0	0	0	0	0	0	0	0	0
London North West	97	0	0	0	0	0	0	0	0	0	97	0	0	0	0	0	0	0	0	0	0	0	0
London South East	19	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0
London South West	14	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	337																						
SE England - NE	386																						
Essex	285	0	143	0	0	0	0	0	0	0	143	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	101	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	76	0	0	0	0	0
SE England - NW	46																						
Bedfordshire	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	13	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	17	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	12	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	61																						
East Sussex	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Kent	54	0	0	0	0	0	0	0	0	0	54	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	22																						
Hampshire	13	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	210																						
Cambridgeshire	108	108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	79	39	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	74	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	27	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	31	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	31																						
Total All Areas	1210																						
Residence not reported	0																						
Total		296	182	0	0	0	0	0	0	0	656	0	0	0	0	0	0	76	0	0	0	0	0

Road Link		
M11 N	296	24%
M11 S	656	54%
A120 E	182	15%
A120 W	76	6%
Total	**1210**	

2028 With Airport (35mppa) 16:00-17:00 Passenger Departures

Hourly Passenger Count 8,613

Passenger Mode Split		%
Car Driver	1292	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**1292**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 1292

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	97	0	0	0
Outer London NE	125	0	0	0
Outer London SE	20	0	0	0
Outer London SW	15	0	0	0
Outer London NW	103	0	0	0
Outer South East NE	412	0	0	0
Outer South East NW	49	0	0	0
Outer South East SW	23	0	0	0
Outer South East SE	65	0	0	0
Southwest & Wales	28	0	0	0
West Midlands	17	0	0	0
East Midlands	79	0	0	0
East Anglia	225	0	0	0
Rest of UK	34	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,292	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	97	0	0	0
Outer London NE	125	0	0	0
Outer London SE	20	0	0	0
Outer London SW	15	0	0	0
Outer London NW	103	0	0	0
Outer South East NE	412	0	0	0
Outer South East NW	49	0	0	0
Outer South East SW	23	0	0	0
Outer South East SE	65	0	0	0
Southwest & Wales	28	0	0	0
West Midlands	17	0	0	0
East Midlands	79	0	0	0
East Anglia	225	0	0	0
Rest of UK	34	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,292	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	97	0	0	0
Outer London NE	125	0	0	0
Outer London SE	20	0	0	0
Outer London SW	15	0	0	0
Outer London NW	103	0	0	0
Outer South East NE	412	0	0	0
Outer South East NW	49	0	0	0
Outer South East SW	23	0	0	0
Outer South East SE	65	0	0	0
Southwest & Wales	28	0	0	0
West Midlands	17	0	0	0
East Midlands	79	0	0	0
East Anglia	225	0	0	0
Rest of UK	34	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,292	0	0	0

1,292

Distribution of Vehicles on the Road Network

Source: ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	97										100%												
London North East	125										100%												
London North West	103										100%												
London South East	20										100%												
London South West	15										100%												
London Sub-total	360																						
SE England - NE	412																						
Essex	305		50%								50%												
Hertfordshire	108										25%							75%					
SE England - NW	49																						
Bedfordshire	4	100%																					
Berkshire	14										100%												
Buckinghamshire	18										100%												
Oxfordshire	13										100%												
SE England - SE	65																						
East Sussex	8										100%												
Kent	57										100%												
SE England - SW	23																						
Hampshire	13										100%												
Surrey	6										100%												
West Sussex	3										100%												
Rest of South East Sub-total	0										100%												
East Anglia	225																						
Cambridgeshire	115	100%																					
Norfolk	26	100%																					
Suffolk	84	50%	50%																				
East Midlands	79	100%																					
South West England and Wales	28										100%												
West Midlands	17	100%																					
Rest of UK	34	100%																					
Sub-total Rest of Country	34																						
Total All Areas	1292																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	97	0	0	0	0	0	0	0	0	0	97	0	0	0	0	0	0	0	0	0	0	0	0
London North East	125	0	0	0	0	0	0	0	0	0	125	0	0	0	0	0	0	0	0	0	0	0	0
London North West	103	0	0	0	0	0	0	0	0	0	103	0	0	0	0	0	0	0	0	0	0	0	0
London South East	20	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0
London South West	15	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	360																						
SE England - NE	412																						
Essex	305	0	152	0	0	0	0	0	0	0	152	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	108	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	81	0	0	0	0	0
SE England - NW	49																						
Bedfordshire	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	14	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	18	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	13	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	65																						
East Sussex	8	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
Kent	57	0	0	0	0	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	23																						
Hampshire	13	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	225																						
Cambridgeshire	115	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	26	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	84	42	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	79	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	28	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	34	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	34																						
Total All Areas	1292																						
Residence not reported	0																						
Total		316	194	0	0	0	0	0	0	0	701	0	0	0	0	0	0	81	0	0	0	0	0

Road Link		
M11 N	316	24%
M11 S	701	54%
A120 E	194	15%
A120 W	81	6%
Total	**1292**	

2028 With Airport (35mppa) 16:00-17:00 Employee Arrivals

Daily Employee Count 73

Employee Mode Split		%
Car Driver	67	92%
Car Passenger	6	8%
Total	**73**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1.6 Occupancy

Car Passenger	4
Total	**4**

0.5

Number of Cars 71

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	3	0
Outer South East NE	52	6
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	2	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	9	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	67	6

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	3	0
Outer South East NE	52	4
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	2	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	9	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	67	4

71

Check

Distribution of Vehicles on the Road Network *Source:* Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0						100%		
London North East	2						100%		
London North West	0						100%		
London South East	0						100%		
London South West	3						100%		
London Sub-total	5								
SE England - NE	55								
Essex	43								
Uttlesford	14		40%	25%	5%				30%
Braintree	13			100%					
Harlow	5						50%	50%	
Chelmsford	3			75%			25%		
Colchester	2			100%					
Epping Forest	2				25%		75%		
Basildon	1						100%		
Tendring	1			100%					
Maldon	1			100%					
Brentwood	1						100%		
Castle Point	0			50%			50%		
Rochford	0			50%			50%		
Southend-on-Sea	0						100%		
Thurrock	0						100%		
Hertfordshire	12								
East Hertfordshire	10		25%			25%		50%	
Broxbourne	1							100%	
North Hertfordshire	1							100%	
Welwyn Hatfield	0							100%	
St. Albans	0							100%	
Hertsmere	0							100%	
Stevenage	0							100%	
Watford	0							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	0								
Bedfordshire	0	100%							
Berkshire	0						100%		
Buckinghamshire	0						100%		
Oxfordshire	0						100%		
SE England - SE	2								
East Sussex	0						100%		
Kent	2						100%		
SE England - SW	0								
Hampshire	0						100%		
Surrey	0						100%		
West Sussex	0						100%		
Rest of South East Sub-total	0						100%		
East Anglia	9								
Cambridgeshire	5	80%							20%
Norfolk	1	100%							
Suffolk	4	50%	50%						
East Midlands	0	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							
Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	71								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0	0	0	0	0	0	0	0	0
London North East	2	0	0	0	0	0	2	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	0	0	0	0	0	0	0	0	0
London South West	3	0	0	0	0	0	3	0	0
London Sub-total	5								
SE England - NE	55								
Essex	43								
Uttlesford	14	0	6	4	1	0	0	0	4
Braintree	13	0	0	13	0	0	0	0	0
Harlow	5	0	0	0	0	0	2	2	0
Chelmsford	3	0	0	2	0	0	1	0	0
Colchester	2	0	0	2	0	0	0	0	0
Epping Forest	2	0	0	0	0	0	1	0	0
Basildon	1	0	0	0	0	0	1	0	0
Tendring	1	0	0	1	0	0	0	0	0
Maldon	1	0	0	1	0	0	0	0	0
Brentwood	1	0	0	0	0	0	1	0	0
Castle Point	0	0	0	0	0	0	0	0	0
Rochford	0	0	0	0	0	0	0	0	0
Southend-on-Sea	0	0	0	0	0	0	0	0	0
Thurrock	0	0	0	0	0	0	0	0	0
Hertfordshire	12								
East Hertfordshire	10	0	2	0	0	2	0	5	0
Broxbourne	1	0	0	0	0	0	0	1	0
North Hertfordshire	1	0	0	0	0	0	0	1	0
Welwyn Hatfield	0	0	0	0	0	0	0	0	0
St. Albans	0	0	0	0	0	0	0	0	0
Hertsmere	0	0	0	0	0	0	0	0	0
Stevenage	0	0	0	0	0	0	0	0	0
Watford	0	0	0	0	0	0	0	0	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	0								
Bedfordshire	0	0	0	0	0	0	0	0	0
Berkshire	0	0	0	0	0	0	0	0	0
Buckinghamshire	0	0	0	0	0	0	0	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	2								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	2	0	0	0	0	0	2	0	0
SE England - SW	0								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	0	0	0	0	0	0	0	0	0
West Sussex	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	9								
Cambridgeshire	5	4	0	0	0	0	0	0	1
Norfolk	1	1	0	0	0	0	0	0	0
Suffolk	4	2	2	0	0	0	0	0	0
East Midlands	0	0	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	71								
Total		6	10	23	1	2	13	10	5

M11 N	6	9%
Church Road	10	15%
A120 E	23	32%
Parsonage Road	1	2%
A1250	2	3%
M11 S	13	18%
A120 W	10	14%
Bury Lodge Road	5	7%

2028 With Airport (35mppa) 16:00-17:00 Employee Departures

Daily Employee Count 542

Employee Mode Split		%
Car Driver	483	89%
Car Passenger	59	11%
Total	**542**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1.6 Occupancy

Car Passenger	37
Total	**37**

0.5

Number of Cars 520

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	5	0
Outer London NE	16	0
Outer London SE	6	0
Outer London SW	2	0
Outer London NW	3	0
Outer South East NE	395	44
Outer South East NW	8	3
Outer South East SW	2	0
Outer South East SE	3	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	6	0
East Anglia	37	12
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	483	59

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	5	0
Outer London NE	16	0
Outer London SE	6	0
Outer London SW	2	0
Outer London NW	3	0
Outer South East NE	395	28
Outer South East NW	8	2
Outer South East SW	2	0
Outer South East SE	3	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	6	0
East Anglia	37	7
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	483	37

520

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	5						100%		
London North East	16						100%		
London North West	6						100%		
London South East	2						100%		
London South West	3						100%		
London Sub-total	31								
SE England - NE	423								
Essex	329								
Uttlesford	111		40%	25%	5%				30%
Braintree	103			100%					
Harlow	36						50%	50%	
Chelmsford	24			75%			25%		
Colchester	16			100%					
Epping Forest	12				25%		75%		
Basildon	6						100%		
Tendring	5			100%					
Maldon	4			100%					
Brentwood	4						100%		
Castle Point	2			50%			50%		
Rochford	2			50%			50%		
Southend-on-Sea	3						100%		
Thurrock	4						100%		
Hertfordshire	94								
East Hertfordshire	76		25%			25%		50%	
Broxbourne	8							100%	
North Hertfordshire	4							100%	
Welwyn Hatfield	2							100%	
St. Albans	1							100%	
Hertsmere	1							100%	
Stevenage	1							100%	
Watford	1							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	10								
Bedfordshire	6	100%							
Berkshire	1						100%		
Buckinghamshire	2						100%		
Oxfordshire	0						100%		
SE England - SE	3								
East Sussex	0						100%		
Kent	3						100%		
SE England - SW	2								
Hampshire	0						100%		
Surrey	1						100%		
West Sussex	1						100%		
Rest of South East Sub-total	0						100%		
East Anglia	45								
Cambridgeshire	22	80%							20%
Norfolk	4	100%							
Suffolk	20	50%	50%						
East Midlands	6	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	520								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Road	A1250	M11 S	A120 W	Bury Lodge Road
Central London	5	0	0	0	0	0	5	0	0
London North East	16	0	0	0	0	0	16	0	0
London North West	6	0	0	0	0	0	6	0	0
London South East	2	0	0	0	0	0	2	0	0
London South West	3	0	0	0	0	0	3	0	0
London Sub-total	31								
SE England - NE	423								
Essex	329								
Uttlesford	111	0	44	28	6	0	0	0	33
Braintree	103	0	0	103	0	0	0	0	0
Harlow	36	0	0	0	0	0	18	18	0
Chelmsford	24	0	0	18	0	0	6	0	0
Colchester	16	0	0	16	0	0	0	0	0
Epping Forest	12	0	0	0	3	0	9	0	0
Basildon	6	0	0	0	0	0	6	0	0
Tendring	5	0	0	5	0	0	0	0	0
Maldon	4	0	0	4	0	0	0	0	0
Brentwood	4	0	0	0	0	0	4	0	0
Castle Point	2	0	0	1	0	0	1	0	0
Rochford	2	0	0	1	0	0	1	0	0
Southend-on-Sea	3	0	0	0	0	0	3	0	0
Thurrock	4	0	0	0	0	0	4	0	0
Hertfordshire	94								
East Hertfordshire	76	0	19	0	0	19	0	38	0
Broxbourne	8	0	0	0	0	0	0	8	0
North Hertfordshire	4	0	0	0	0	0	0	4	0
Welwyn Hatfield	2	0	0	0	0	0	0	2	0
St. Albans	1	0	0	0	0	0	0	1	0
Hertsmere	1	0	0	0	0	0	0	1	0
Stevenage	1	0	0	0	0	0	0	1	0
Watford	1	0	0	0	0	0	0	1	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	10								
Bedfordshire	6	6	0	0	0	0	0	0	0
Berkshire	1	0	0	0	0	0	1	0	0
Buckinghamshire	2	0	0	0	0	0	2	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	3								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	3	0	0	0	0	0	3	0	0
SE England - SW	2								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	1	0	0	0	0	0	1	0	0
West Sussex	1	0	0	0	0	0	1	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	45								
Cambridgeshire	22	17	0	0	0	0	0	0	4
Norfolk	4	4	0	0	0	0	0	0	0
Suffolk	20	10	10	0	0	0	0	0	0
East Midlands	6	6	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	520								

Total		43	73	174	8	19	89	75	38

M11 N	43	8%
Church Road	73	14%
A120 E	174	33%
Parsonage Road	8	2%
A1250	19	4%
M11 S	89	17%
A120 W	75	14%
Bury Lodge Road	38	7%

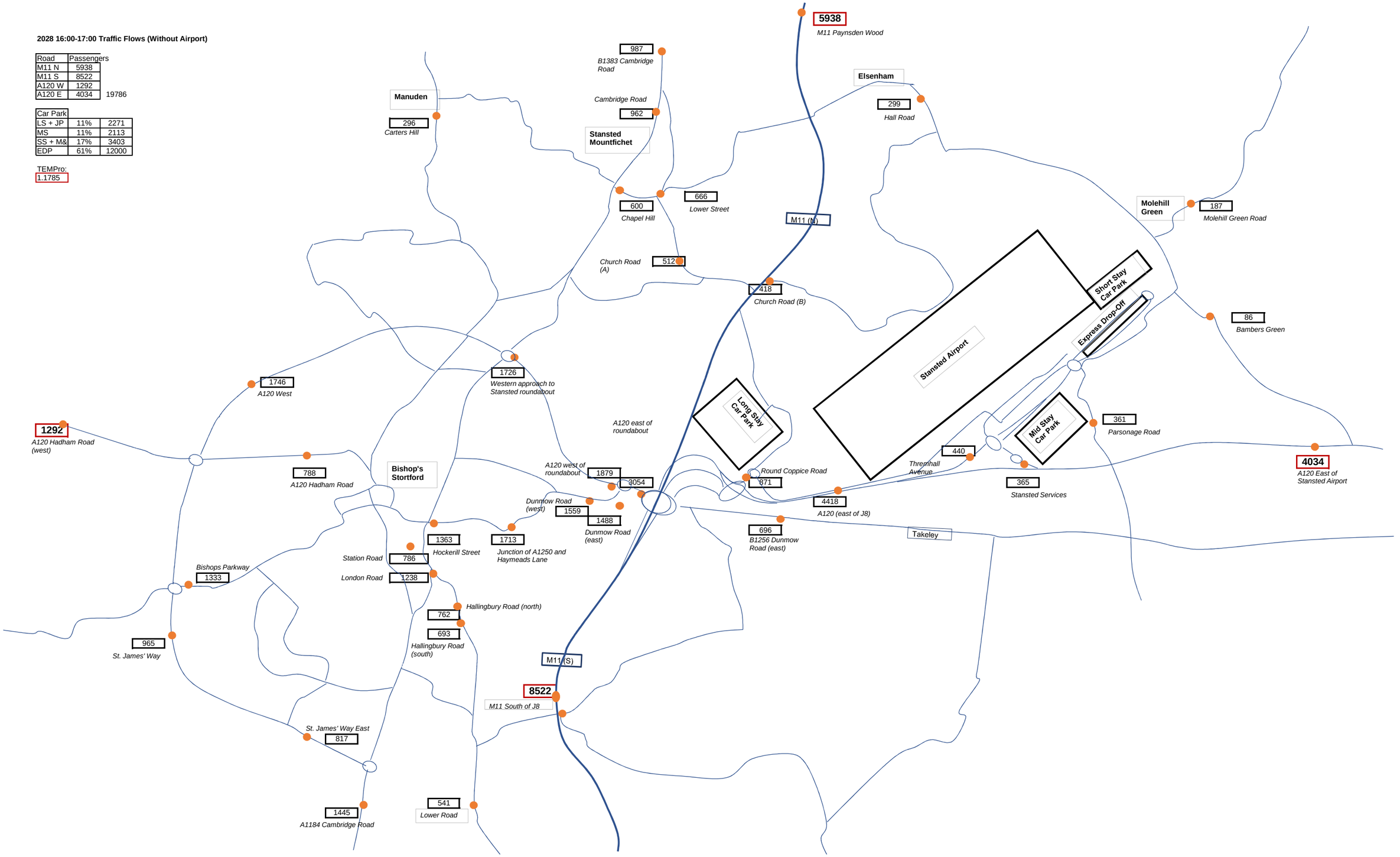
2028 16:00-17:00 Traffic Flows (Without Airport)

Road	Passengers
M11 N	5938
M11 S	8522
A120 W	1292
A120 E	4034

19786

Car Park		
LS + JP	11%	2271
MS	11%	2113
SS + M&	17%	3403
EDP	61%	12000

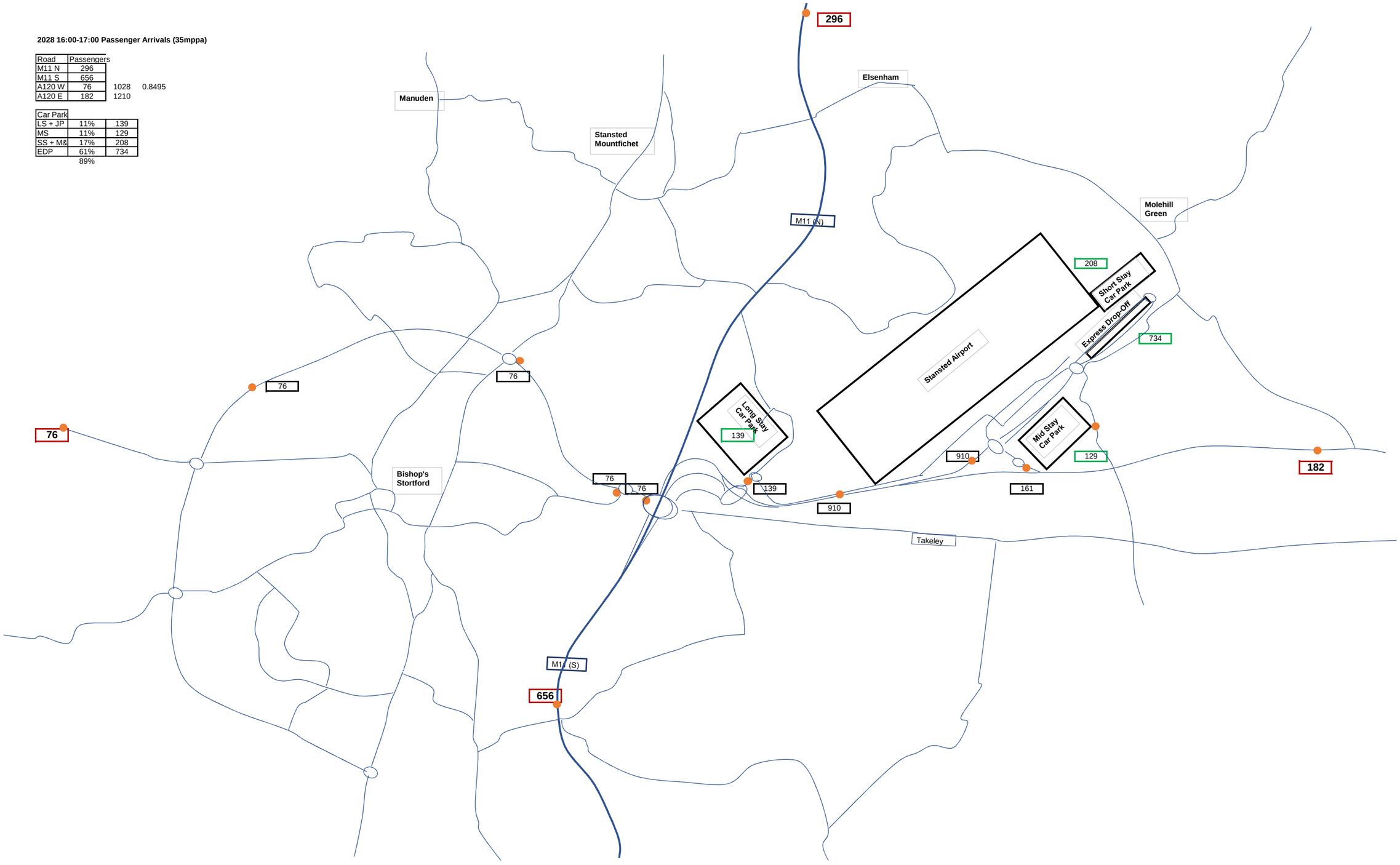
TEMPro:
1.1785



2028 16:00-17:00 Passenger Arrivals (35mppa)

Road	Passengers		
M11 N	296		
M11 S	656		
A120 W	76	1028	0.8495
A120 E	182	1210	

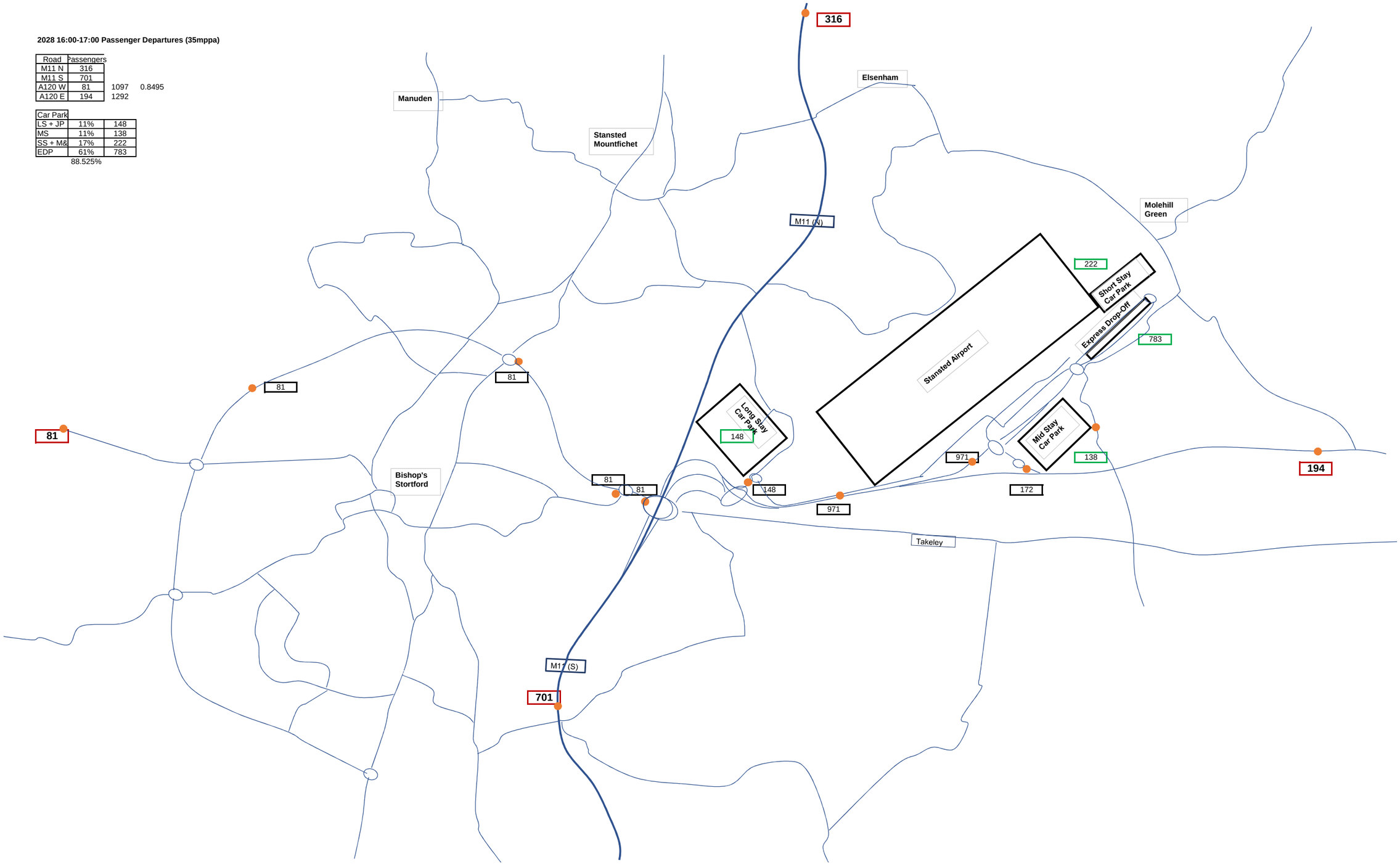
Car Park		
LS + JP	11%	139
MS	11%	129
SS + M&	17%	208
EDP	61%	734
	89%	



2028 16:00-17:00 Passenger Departures (35mppa)

Road	Passengers		
M11 N	316		
M11 S	701		
A120 W	81	1097	0.8495
A120 E	194	1292	

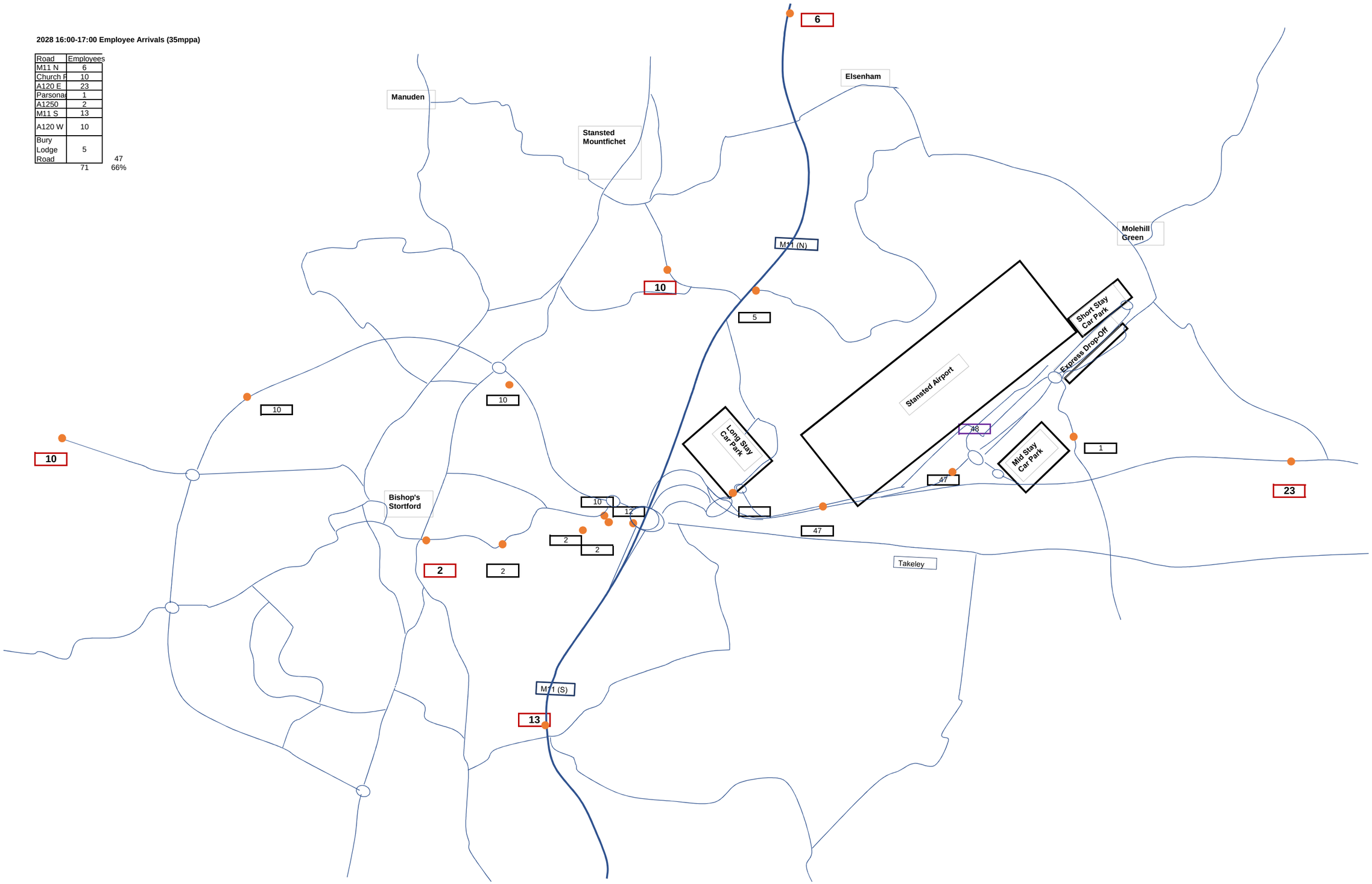
Car Park		
LS + JP	11%	148
MS	11%	138
SS + M&	17%	222
EDP	61%	783
	88.525%	



2028 16:00-17:00 Employee Arrivals (35mppa)

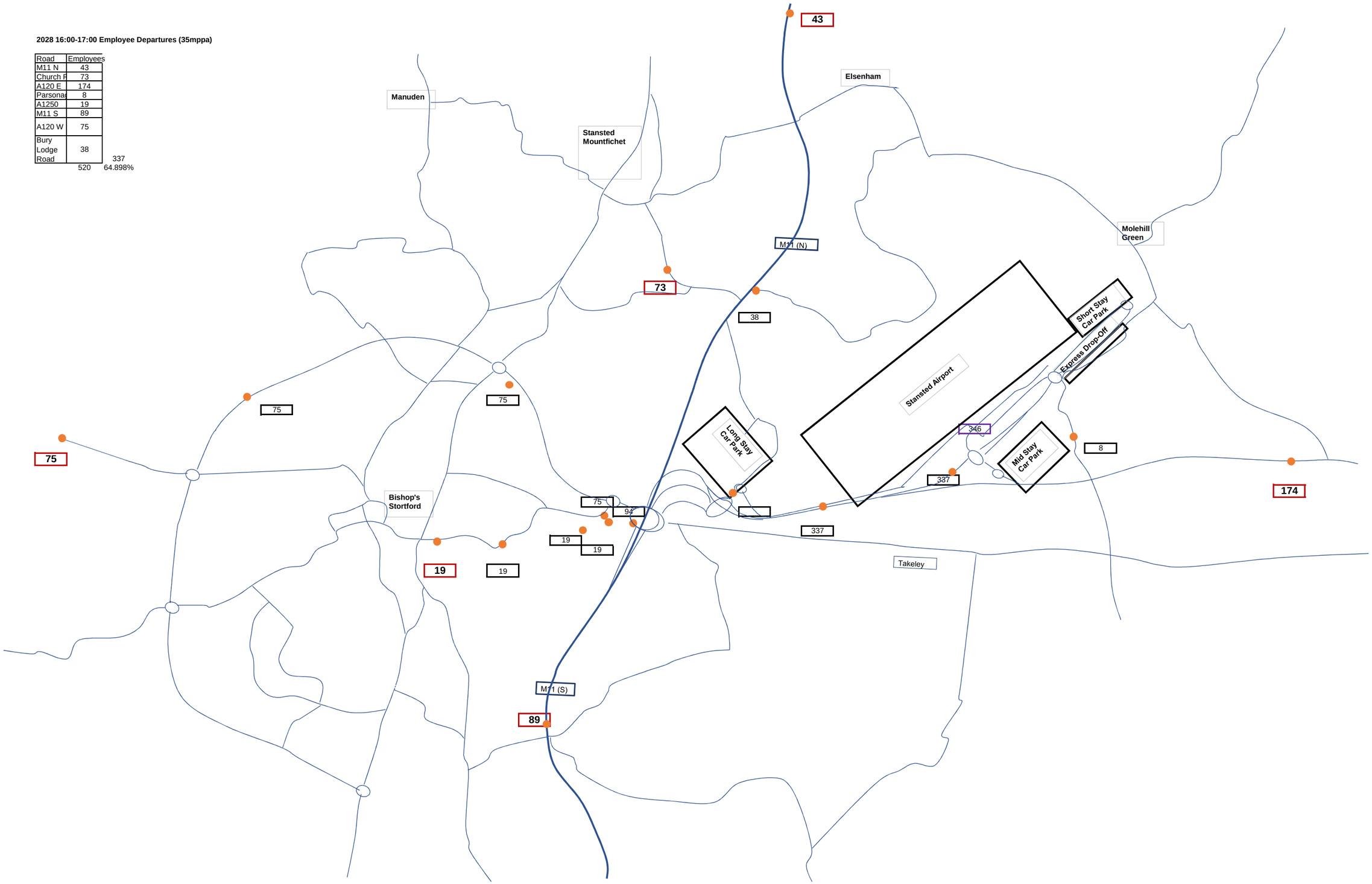
Road	Employees
M11 N	6
Church F	10
A120 E	23
Parsonag	1
A1250	2
M11 S	13
A120 W	10
Bury Lodge Road	5
	71

47
66%



2028 16:00-17:00 Employee Departures (35mppa)

Road	Employees	
M11 N	43	
Church F	73	
A120 E	174	
Parsonag	8	
A1250	19	
M11 S	89	
A120 W	75	
Bury Lodge Road	38	
		337
	520	64.898%



2028 With Airport (43mppa) 16:00-17:00 Passenger Arrivals

Hourly Passenger Count 9,491

Passenger Mode Split		%
Car Driver	1424	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**1424**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 1424

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	107	0	0	0
Outer London NE	137	0	0	0
Outer London SE	22	0	0	0
Outer London SW	16	0	0	0
Outer London NW	114	0	0	0
Outer South East NE	455	0	0	0
Outer South East NW	54	0	0	0
Outer South East SW	25	0	0	0
Outer South East SE	72	0	0	0
Southwest & Wales	31	0	0	0
West Midlands	18	0	0	0
East Midlands	87	0	0	0
East Anglia	248	0	0	0
Rest of UK	37	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,424	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	107	0	0	0
Outer London NE	137	0	0	0
Outer London SE	22	0	0	0
Outer London SW	16	0	0	0
Outer London NW	114	0	0	0
Outer South East NE	455	0	0	0
Outer South East NW	54	0	0	0
Outer South East SW	25	0	0	0
Outer South East SE	72	0	0	0
Southwest & Wales	31	0	0	0
West Midlands	18	0	0	0
East Midlands	87	0	0	0
East Anglia	248	0	0	0
Rest of UK	37	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,424	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	107	0	0	0
Outer London NE	137	0	0	0
Outer London SE	22	0	0	0
Outer London SW	16	0	0	0
Outer London NW	114	0	0	0
Outer South East NE	455	0	0	0
Outer South East NW	54	0	0	0
Outer South East SW	25	0	0	0
Outer South East SE	72	0	0	0
Southwest & Wales	31	0	0	0
West Midlands	18	0	0	0
East Midlands	87	0	0	0
East Anglia	248	0	0	0
Rest of UK	37	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,424	0	0	0

1,424

Distribution of Vehicles on the Road Network

Source: ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	107										100%												
London North East	137										100%												
London North West	114										100%												
London South East	22										100%												
London South West	16										100%												
London Sub-total	397																						
SE England - NE	455																						
Essex	336		50%								50%												
Hertfordshire	119										25%							75%					
SE England - NW	54																						
Bedfordshire	5	100%																					
Berkshire	15										100%												
Buckinghamshire	20										100%												
Oxfordshire	14										100%												
SE England - SE	72																						
East Sussex	8										100%												
Kent	63										100%												
SE England - SW	25																						
Hampshire	15										100%												
Surrey	7										100%												
West Sussex	4										100%												
Rest of South East Sub-total	0										100%												
East Anglia	248																						
Cambridgeshire	127	100%																					
Norfolk	29	100%																					
Suffolk	93	50%	50%																				
East Midlands	87	100%																					
South West England and Wales	31										100%												
West Midlands	18	100%																					
Rest of UK	37	100%																					
Sub-total Rest of Country	37																						
Total All Areas	1424																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	107	0	0	0	0	0	0	0	0	0	107	0	0	0	0	0	0	0	0	0	0	0	0
London North East	137	0	0	0	0	0	0	0	0	0	137	0	0	0	0	0	0	0	0	0	0	0	0
London North West	114	0	0	0	0	0	0	0	0	0	114	0	0	0	0	0	0	0	0	0	0	0	0
London South East	22	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0
London South West	16	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	397																						
SE England - NE	455																						
Essex	336	0	168	0	0	0	0	0	0	0	168	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	119	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	89	0	0	0	0	0
SE England - NW	54																						
Bedfordshire	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	15	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	20	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	14	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	72																						
East Sussex	8	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0
Kent	63	0	0	0	0	0	0	0	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	25																						
Hampshire	15	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	248																						
Cambridgeshire	127	127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	29	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	93	46	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	87	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	31	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	37	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	37																						
Total All Areas	1424																						
Residence not reported	0																						
Total		348	214	0	0	0	0	0	0	0	772	0	0	0	0	0	0	89	0	0	0	0	0

Road Link		
M11 N	348	24%
M11 S	772	54%
A120 E	214	15%
A120 W	89	6%
Total	**1424**	

2028 With Airport (43mppa) 16:00-17:00 Passenger Departures

Hourly Passenger Count 10,350

Passenger Mode Split		%
Car Driver	1552	15%
Car Passenger		22%
Taxi		13%
Rental Car		
Bus/coach		23%
Rail		27%
Tube		0%
Total	**1552**	**100%**

Source:
P:\Projects\230\0\34\01\External Inputs\Client\STN OD 12 Months to 201512.xls
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Number of Car Drivers 1 (One Driver)
Number of Car Passengers 1 Occupancy →

Car Passenger	0
Taxi	0
Rental Car	0
Total	**0**

Number of Cars 1552

Distribution of Passengers
Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	117	0	0	0
Outer London NE	150	0	0	0
Outer London SE	24	0	0	0
Outer London SW	18	0	0	0
Outer London NW	124	0	0	0
Outer South East NE	496	0	0	0
Outer South East NW	59	0	0	0
Outer South East SW	28	0	0	0
Outer South East SE	78	0	0	0
Southwest & Wales	34	0	0	0
West Midlands	20	0	0	0
East Midlands	95	0	0	0
East Anglia	270	0	0	0
Rest of UK	40	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,552	0	0	0

Distribution of Vehicles (Daily)
Apply Occupany Factors

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	117	0	0	0
Outer London NE	150	0	0	0
Outer London SE	24	0	0	0
Outer London SW	18	0	0	0
Outer London NW	124	0	0	0
Outer South East NE	496	0	0	0
Outer South East NW	59	0	0	0
Outer South East SW	28	0	0	0
Outer South East SE	78	0	0	0
Southwest & Wales	34	0	0	0
West Midlands	20	0	0	0
East Midlands	95	0	0	0
East Anglia	270	0	0	0
Rest of UK	40	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,552	0	0	0

Check

Distribution of Vehicles (Annual Daily Average)
Apply Occupany Factors 1

Residence	Private Car	Private car (APT CP)	Taxi/Minicab	Rental Car
Inner London	117	0	0	0
Outer London NE	150	0	0	0
Outer London SE	24	0	0	0
Outer London SW	18	0	0	0
Outer London NW	124	0	0	0
Outer South East NE	496	0	0	0
Outer South East NW	59	0	0	0
Outer South East SW	28	0	0	0
Outer South East SE	78	0	0	0
Southwest & Wales	34	0	0	0
West Midlands	20	0	0	0
East Midlands	95	0	0	0
East Anglia	270	0	0	0
Rest of UK	40	0	0	0
Residence not reported	0	0	0	0
Foreign	0	0	0	0
Total	1,552	0	0	0

1,552

Distribution of Vehicles on the Road Network *Source:* ..\..\..\..\2\02\01\External Inputs\Other Consultants\Historic data- CH2M\Stansted- Davies Commision\09 Design & Calculations\(2013-06-17) Employee and Air Passengers Forecasting LK.xlsx

		North	East				South/East				South						West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	117										100%												
London North East	150										100%												
London North West	124										100%												
London South East	24										100%												
London South West	18										100%												
London Sub-total	433																						
SE England - NE	496																						
Essex	366		50%								50%												
Hertfordshire	129										25%							75%					
SE England - NW	59																						
Bedfordshire	5	100%																					
Berkshire	17										100%												
Buckinghamshire	22										100%												
Oxfordshire	15										100%												
SE England - SE	78																						
East Sussex	9										100%												
Kent	69										100%												
SE England - SW	28																						
Hampshire	16										100%												
Surrey	7										100%												
West Sussex	4										100%												
Rest of South East Sub-total	0										100%												
East Anglia	270																						
Cambridgeshire	138	100%																					
Norfolk	31	100%																					
Suffolk	101	50%	50%																				
East Midlands	95	100%																					
South West England and Wales	34										100%												
West Midlands	20	100%																					
Rest of UK	40	100%																					
Sub-total Rest of Country	40																						
Total All Areas	1552																						

		North	East				South/East				South							West					
Area	Vehicles	M11 N	A120 E	B1008	A1060	A12	A131	A414	A130	M11 S (south of Harlow)	M11 S (between Stansted and Harlow)	M25 E	M25 W	M11 S (within London)	A12 W	A406 W	A406 E	A120 W (east of M11)	A120 W (BS Bypass)	A120 West of Bishops S	A10 W	A602	A414
Central London	117	0	0	0	0	0	0	0	0	0	117	0	0	0	0	0	0	0	0	0	0	0	0
London North East	150	0	0	0	0	0	0	0	0	0	150	0	0	0	0	0	0	0	0	0	0	0	0
London North West	124	0	0	0	0	0	0	0	0	0	124	0	0	0	0	0	0	0	0	0	0	0	0
London South East	24	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0
London South West	18	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0
London Sub-total	433																						
SE England - NE	496																						
Essex	366	0	183	0	0	0	0	0	0	0	183	0	0	0	0	0	0	0	0	0	0	0	0
Hertfordshire	129	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	97	0	0	0	0	0
SE England - NW	59																						
Bedfordshire	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berkshire	17	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0
Buckinghamshire	22	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0
Oxfordshire	15	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SE	78																						
East Sussex	9	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
Kent	69	0	0	0	0	0	0	0	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0
SE England - SW	28																						
Hampshire	16	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0
Surrey	7	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0
West Sussex	4	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Anglia	270																						
Cambridgeshire	138	138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norfolk	31	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suffolk	101	50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Midlands	95	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South West England and Wales	34	0	0	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0
West Midlands	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of UK	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	40																						
Total All Areas	1552																						
Residence not reported	0																						
Total		380	234	0	0	0	0	0	0	0	842	0	0	0	0	0	0	97	0	0	0	0	0

Road Link		
M11 N	380	24%
M11 S	842	54%
A120 E	234	15%
A120 W	97	6%
Total	**1552**	

2028 With Airport (43mppa) 16:00-17:00 Employee Arrivals

Daily Employee Count		87

Employee Mode Split		%
Car Driver	82	95%
Car Passenger	4	5%
Total	**87**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	3
Total	**3**

0.5

Number of Cars	85

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	4	0
Outer South East NE	63	4
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	2	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	12	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	82	4

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	0	0
Outer London NE	2	0
Outer London SE	0	0
Outer London SW	0	0
Outer London NW	4	0
Outer South East NE	63	3
Outer South East NW	0	0
Outer South East SW	0	0
Outer South East SE	2	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	0	0
East Anglia	12	0
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	82	3

85

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0						100%		
London North East	2						100%		
London North West	0						100%		
London South East	0						100%		
London South West	4						100%		
London Sub-total	6								
SE England - NE	66								
Essex	51								
Uttlesford	17		40%	25%	5%				30%
Braintree	16			100%					
Harlow	6						50%	50%	
Chelmsford	4			75%			25%		
Colchester	2			100%					
Epping Forest	2				25%		75%		
Basildon	1						100%		
Tendring	1			100%					
Maldon	1			100%					
Brentwood	1						100%		
Castle Point	0			50%			50%		
Rochford	0			50%			50%		
Southend-on-Sea	0						100%		
Thurrock	1						100%		
Hertfordshire	15								
East Hertfordshire	12		25%			25%		50%	
Broxbourne	1							100%	
North Hertfordshire	1							100%	
Welwyn Hatfield	0							100%	
St. Albans	0							100%	
Hertsmere	0							100%	
Stevenage	0							100%	
Watford	0							100%	
Dacorum	0							100%	
Three Rivers	0							100%	
SE England - NW	0								
Bedfordshire	0	100%							
Berkshire	0						100%		
Buckinghamshire	0						100%		
Oxfordshire	0						100%		
SE England - SE	2								
East Sussex	0						100%		
Kent	2						100%		
SE England - SW	0								
Hampshire	0						100%		
Surrey	0						100%		
West Sussex	0						100%		
Rest of South East Sub-total	0						100%		
East Anglia	12								
Cambridgeshire	6	80%							20%
Norfolk	1	100%							
Suffolk	5	50%	50%						
East Midlands	0	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	85								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	0	0	0	0	0	0	0	0	0
London North East	2	0	0	0	0	0	2	0	0
London North West	0	0	0	0	0	0	0	0	0
London South East	0	0	0	0	0	0	0	0	0
London South West	4	0	0	0	0	0	4	0	0
London Sub-total	6								
SE England - NE	66								
Essex	51								
Uttlesford	17	0	7	4	1	0	0	0	5
Braintree	16	0	0	16	0	0	0	0	0
Harlow	6	0	0	0	0	0	3	3	0
Chelmsford	4	0	0	3	0	0	1	0	0
Colchester	2	0	0	2	0	0	0	0	0
Epping Forest	2	0	0	0	0	0	1	0	0
Basildon	1	0	0	0	0	0	1	0	0
Tendring	1	0	0	1	0	0	0	0	0
Maldon	1	0	0	1	0	0	0	0	0
Brentwood	1	0	0	0	0	0	1	0	0
Castle Point	0	0	0	0	0	0	0	0	0
Rochford	0	0	0	0	0	0	0	0	0
Southend-on-Sea	0	0	0	0	0	0	0	0	0
Thurrock	1	0	0	0	0	0	1	0	0
Hertfordshire	15								
East Hertfordshire	12	0	3	0	0	3	0	6	0
Broxbourne	1	0	0	0	0	0	0	1	0
North Hertfordshire	1	0	0	0	0	0	0	1	0
Welwyn Hatfield	0	0	0	0	0	0	0	0	0
St. Albans	0	0	0	0	0	0	0	0	0
Hertsmere	0	0	0	0	0	0	0	0	0
Stevenage	0	0	0	0	0	0	0	0	0
Watford	0	0	0	0	0	0	0	0	0
Dacorum	0	0	0	0	0	0	0	0	0
Three Rivers	0	0	0	0	0	0	0	0	0
SE England - NW	0								
Bedfordshire	0	0	0	0	0	0	0	0	0
Berkshire	0	0	0	0	0	0	0	0	0
Buckinghamshire	0	0	0	0	0	0	0	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	2								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	2	0	0	0	0	0	2	0	0
SE England - SW	0								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	0	0	0	0	0	0	0	0	0
West Sussex	0	0	0	0	0	0	0	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	12								
Cambridgeshire	6	4	0	0	0	0	0	0	1
Norfolk	1	1	0	0	0	0	0	0	0
Suffolk	5	3	3	0	0	0	0	0	0
East Midlands	0	0	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	85								

Total		8	12	27	1	3	16	12	6

M11 N	8	9%
Church Road	12	15%
A120 E	27	32%
Parsonage Road	1	2%
A1250	3	3%
M11 S	16	18%
A120 W	12	14%
Bury Lodge Road	6	7%

2028 With Airport (43mppa) 16:00-17:00 Employee Departures

Daily Employee Count	638

Employee Mode Split		%
Car Driver	593	93%
Car Passenger	45	7%
Total	**638**	**100%**

Source:
Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

Number of Car Drivers	1	(One Driver)
Number of Car Passengers	1.6	Occupancy

Car Passenger	28
Total	**28**

0.5

Number of Cars	621

Distribution of Employees

Source:
P:\Projects\230\0\34\01\Work\STN OD 12 Months to 201512 SLW workings 2.xls

Residence	Car Driver	Car Passenger
Inner London	6	0
Outer London NE	19	0
Outer London SE	8	0
Outer London SW	2	0
Outer London NW	4	0
Outer South East NE	485	34
Outer South East NW	10	2
Outer South East SW	2	0
Outer South East SE	4	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	8	0
East Anglia	46	9
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	593	45

Distribution of Vehicles (Daily)

Apply Occupany Factors

Residence	Car Driver	Car Passenger
Inner London	6	0
Outer London NE	19	0
Outer London SE	8	0
Outer London SW	2	0
Outer London NW	4	0
Outer South East NE	485	21
Outer South East NW	10	1
Outer South East SW	2	0
Outer South East SE	4	0
Southwest & Wales	0	0
West Midlands	0	0
East Midlands	8	0
East Anglia	46	6
Rest of UK	0	0
Residence not reported	0	0
Foreign	0	0
Total	593	28

621

Check

Distribution of Vehicles on the Road Network

Source: Employee Forecasts - Travel Planning\2015 Staff Travel Survey Data SLW Analysis 20032017.xlsx

		North	East						
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	6						100%		
London North East	19						100%		
London North West	8						100%		
London South East	2						100%		
London South West	4						100%		
London Sub-total	38								
SE England - NE	506								
Essex	393								
Uttlesford	132		40%	25%	5%				30%
Braintree	123			100%					
Harlow	44						50%	50%	
Chelmsford	28			75%			25%		
Colchester	19			100%					
Epping Forest	14				25%		75%		
Basildon	7						100%		
Tendring	6			100%					
Maldon	5			100%					
Brentwood	5						100%		
Castle Point	2			50%			50%		
Rochford	2			50%			50%		
Southend-on-Sea	3						100%		
Thurrock	4						100%		
Hertfordshire	113								
East Hertfordshire	90		25%			25%		50%	
Broxbourne	10							100%	
North Hertfordshire	5							100%	
Welwyn Hatfield	2							100%	
St. Albans	1							100%	
Hertsmere	1							100%	
Stevenage	1							100%	
Watford	1							100%	
Dacorum	1							100%	
Three Rivers	1							100%	
SE England - NW	11								
Bedfordshire	7	100%							
Berkshire	2						100%		
Buckinghamshire	2						100%		
Oxfordshire	0						100%		
SE England - SE	4								
East Sussex	0						100%		
Kent	4						100%		
SE England - SW	2								
Hampshire	0						100%		
Surrey	1						100%		
West Sussex	1						100%		
Rest of South East Sub-total	0						100%		
East Anglia	52								
Cambridgeshire	25	80%							20%
Norfolk	4	100%							
Suffolk	23	50%	50%						
East Midlands	8	100%							
South West England and Wales	0						100%		
West Midlands	0	100%							

Rest of UK	0	100%							
Sub-total Rest of Country	0								
Total All Areas	621								

		North	East				South/East		
Area	Vehicles	M11 N	Church Road	A120 E	Parsonage Roa	A1250	M11 S	A120 W	Bury Lodge Road
Central London	6	0	0	0	0	0	6	0	0
London North East	19	0	0	0	0	0	19	0	0
London North West	8	0	0	0	0	0	8	0	0
London South East	2	0	0	0	0	0	2	0	0
London South West	4	0	0	0	0	0	4	0	0
London Sub-total	38								
SE England - NE	506								
Essex	393								
Uttlesford	132	0	53	33	7	0	0	0	40
Braintree	123	0	0	123	0	0	0	0	0
Harlow	44	0	0	0	0	0	22	22	0
Chelmsford	28	0	0	21	0	0	7	0	0
Colchester	19	0	0	19	0	0	0	0	0
Epping Forest	14	0	0	0	3	0	10	0	0
Basildon	7	0	0	0	0	0	7	0	0
Tendring	6	0	0	6	0	0	0	0	0
Maldon	5	0	0	5	0	0	0	0	0
Brentwood	5	0	0	0	0	0	5	0	0
Castle Point	2	0	0	1	0	0	1	0	0
Rochford	2	0	0	1	0	0	1	0	0
Southend-on-Sea	3	0	0	0	0	0	3	0	0
Thurrock	4	0	0	0	0	0	4	0	0
Hertfordshire	113								
East Hertfordshire	90	0	23	0	0	23	0	45	0
Broxbourne	10	0	0	0	0	0	0	10	0
North Hertfordshire	5	0	0	0	0	0	0	5	0
Welwyn Hatfield	2	0	0	0	0	0	0	2	0
St. Albans	1	0	0	0	0	0	0	1	0
Hertsmere	1	0	0	0	0	0	0	1	0
Stevenage	1	0	0	0	0	0	0	1	0
Watford	1	0	0	0	0	0	0	1	0
Dacorum	1	0	0	0	0	0	0	1	0
Three Rivers	1	0	0	0	0	0	0	1	0
SE England - NW	11								
Bedfordshire	7	7	0	0	0	0	0	0	0
Berkshire	2	0	0	0	0	0	2	0	0
Buckinghamshire	2	0	0	0	0	0	2	0	0
Oxfordshire	0	0	0	0	0	0	0	0	0
SE England - SE	4								
East Sussex	0	0	0	0	0	0	0	0	0
Kent	4	0	0	0	0	0	4	0	0
SE England - SW	2								
Hampshire	0	0	0	0	0	0	0	0	0
Surrey	1	0	0	0	0	0	1	0	0
West Sussex	1	0	0	0	0	0	1	0	0
Rest of South East Sub-total	0	0	0	0	0	0	0	0	0
East Anglia	52								
Cambridgeshire	25	20	0	0	0	0	0	0	5
Norfolk	4	4	0	0	0	0	0	0	0
Suffolk	23	11	11	0	0	0	0	0	0
East Midlands	8	8	0	0	0	0	0	0	0
South West England and Wales	0	0	0	0	0	0	0	0	0
West Midlands	0	0	0	0	0	0	0	0	0
Rest of UK	0	0	0	0	0	0	0	0	0
Sub-total Rest of Country	0								
Total All Areas	621								

Total		50	87	208	10	23	108	90	45

M11 N	50	8%
Church Road	87	14%
A120 E	208	34%
Parsonage Road	10	2%
A1250	23	4%
M11 S	108	17%
A120 W	90	14%
Bury Lodge Road	45	7%

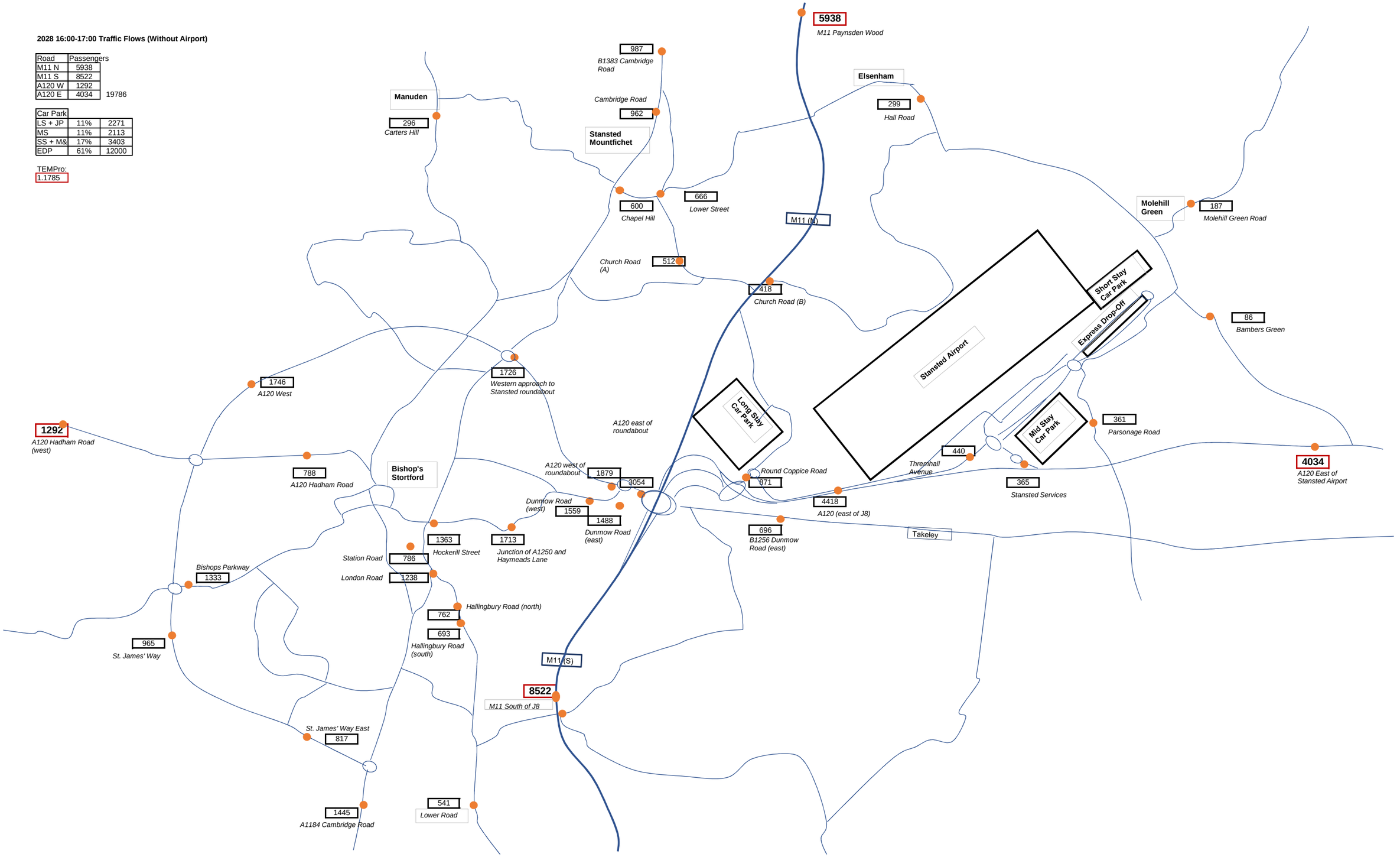
2028 16:00-17:00 Traffic Flows (Without Airport)

Road	Passengers
M11 N	5938
M11 S	8522
A120 W	1292
A120 E	4034

19786

Car Park		
LS + JP	11%	2271
MS	11%	2113
SS + M&	17%	3403
EDP	61%	12000

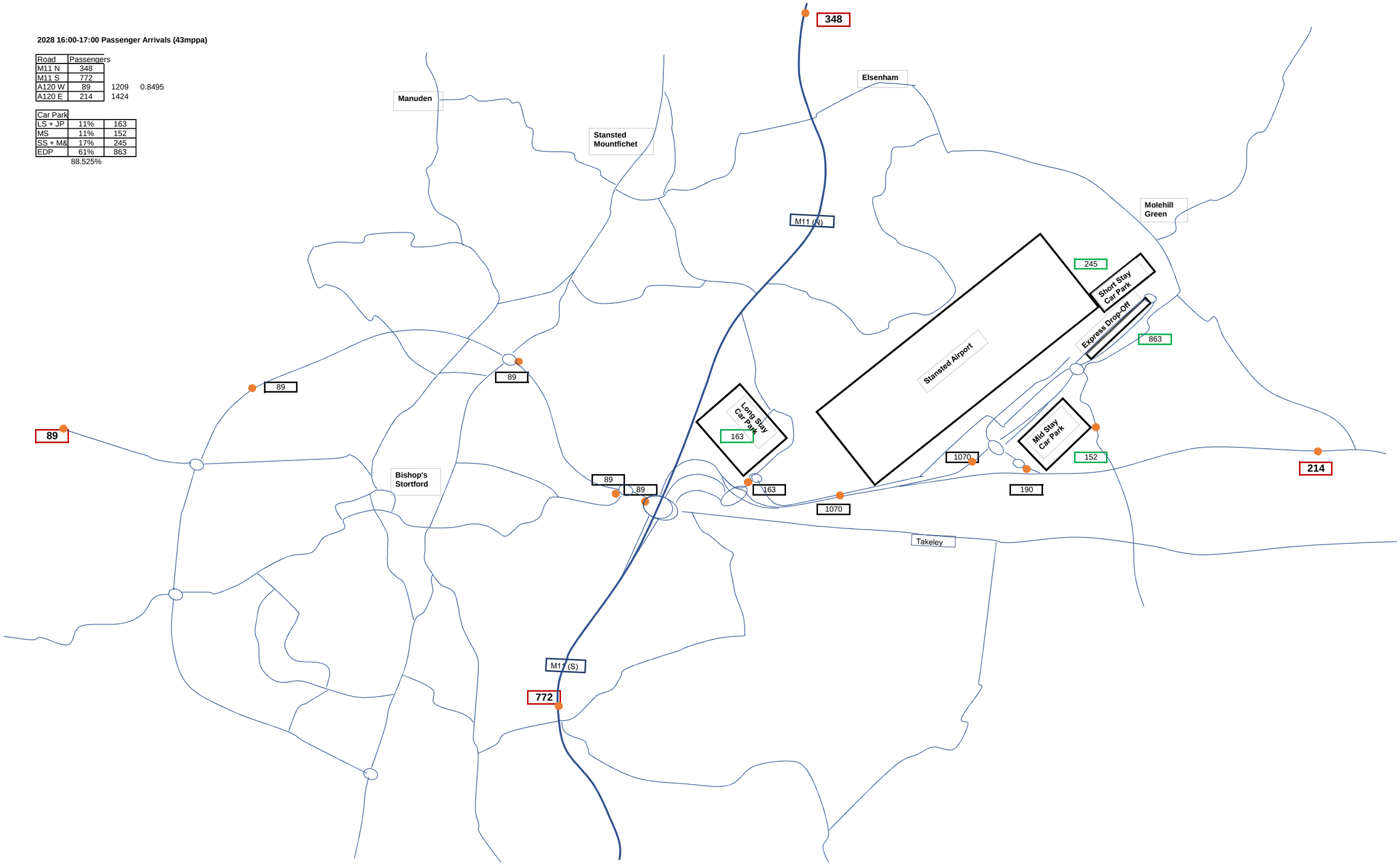
TEMPro:
1.1785



2028 16:00-17:00 Passenger Arrivals (43mppa)

Road	Passengers		
M11 N	348		
M11 S	772		
A120 W	89	1209	0.8495
A120 E	214	1424	

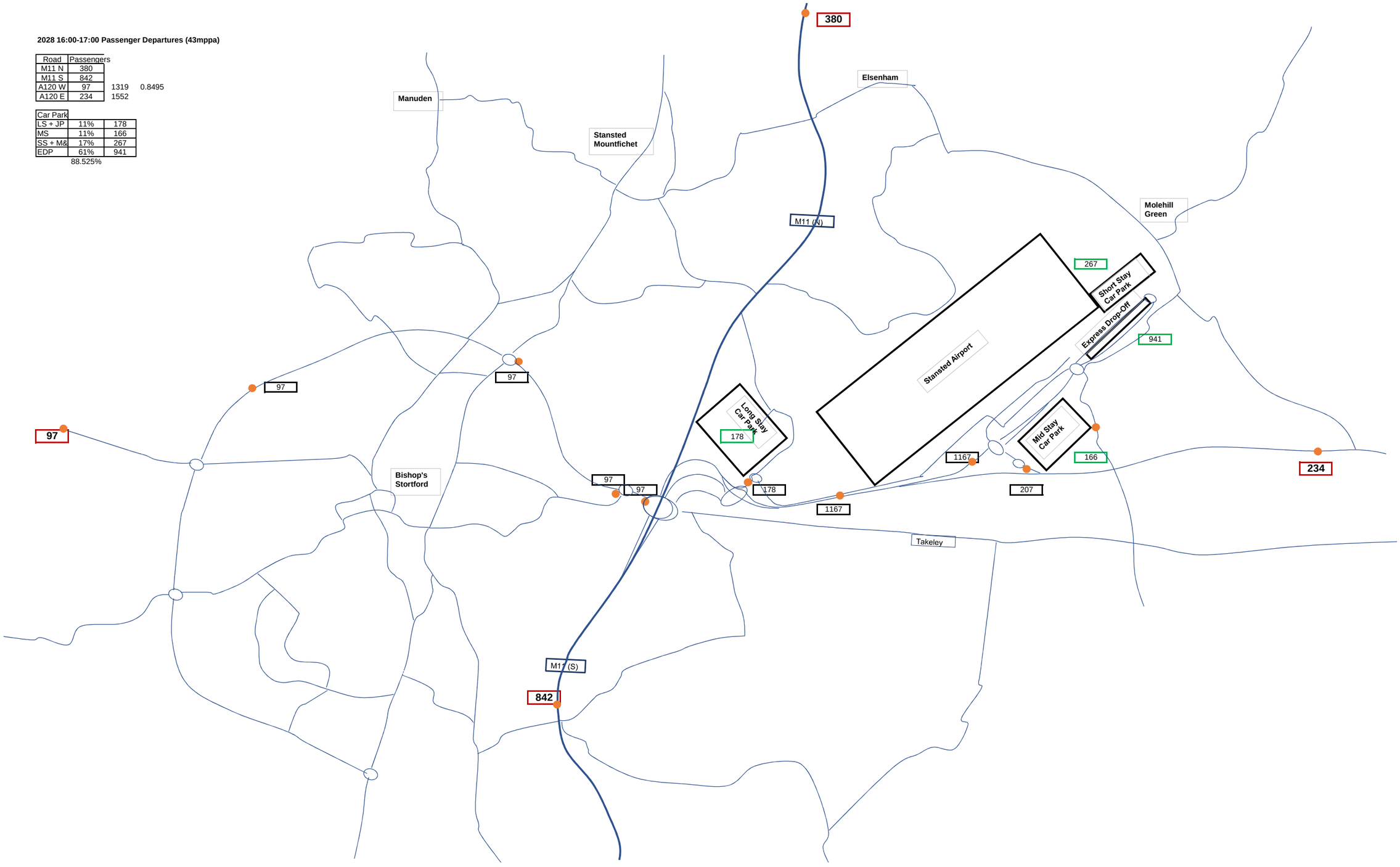
Car Park		
LS + JP	11%	163
MS	11%	152
SS + M&	17%	245
EDP	61%	863
	88.525%	



2028 16:00-17:00 Passenger Departures (43mppa)

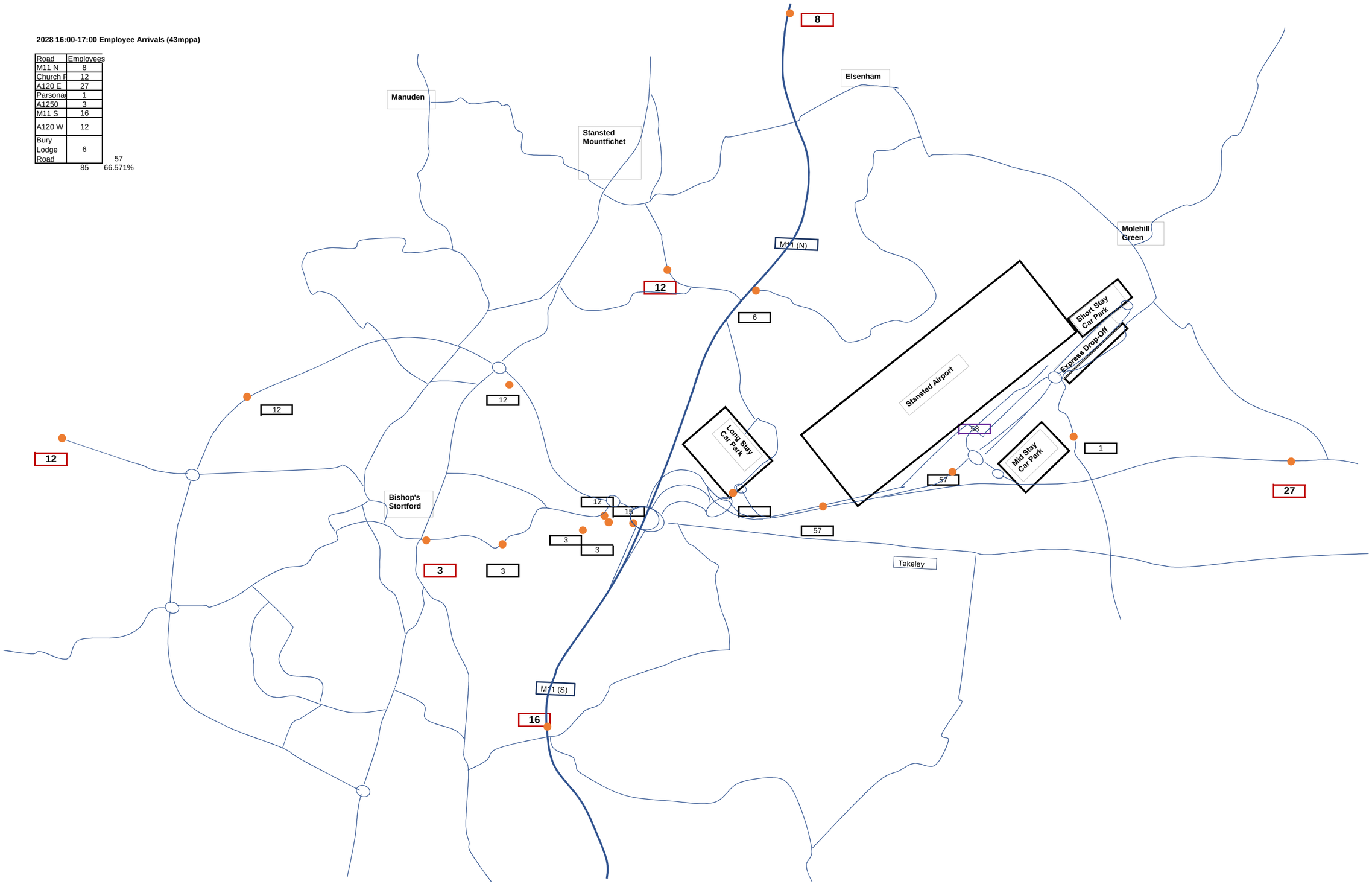
Road	Passengers		
M11 N	380		
M11 S	842		
A120 W	97	1319	0.8495
A120 E	234	1552	

Car Park		
LS + JP	11%	178
MS	11%	166
SS + M&	17%	267
EDP	61%	941
	88.525%	



2028 16:00-17:00 Employee Arrivals (43mppa)

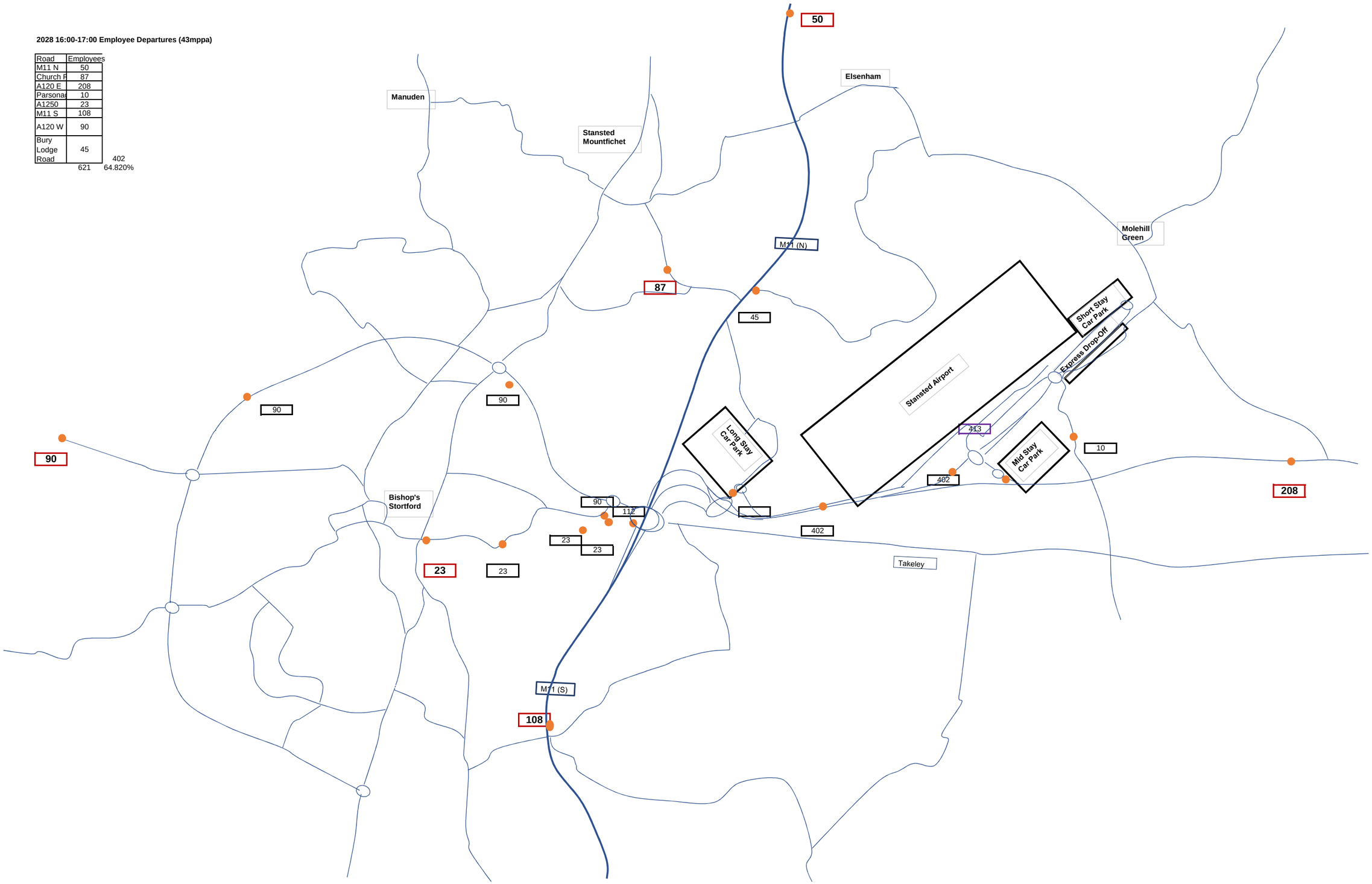
Road	Employees	
M11 N	8	
Church F	12	
A120 E	27	
Parsonag	1	
A1250	3	
M11 S	16	
A120 W	12	
Bury Lodge Road	6	57
	85	66.571%



2028 16:00-17:00 Employee Departures (43mppa)

Road	Employees
M11 N	50
Church F	87
A120 E	208
Parsonag	10
A1250	23
M11 S	108
A120 W	90
Bury Lodge Road	45

402
621 64.820%



2028 16:00-17:00 Traffic Flows (With Airport 43mppa)

Road	Passengers
M11 N	6725
M11 S	10260
A120 W	1579
A120 E	4717

23281

Car Park		
LS + JP	11%	2672
MS	11%	2486
SS + M&	17%	4004
EDP	61%	14120

TEMPro:
1.1872

6725
M11 Paynsden Wood

987
B1383 Cambridge Road

Cambridge Road
962

Manuden
296
Carters Hill

Stansted Mountfichet

Elsenham
299
Hall Road

666
Lower Street

600
Chapel Hill

M11 (N)

Molehill Green
187
Molehill Green Road

Church Road (A)
611

469
Church Road (B)

Short Stay Car Park
Express Drop-Off
Stansted Airport

86
Bambers Green

2013
Western approach to Stansted roundabout

2033
A120 West

1579
A120 Hadham Road (west)

A120 east of roundabout

Long Stay Car Park

Mid Stay Car Park

373
Parsonage Road

3137
Thremhall Avenue

4717
A120 East of Stansted Airport

788
A120 Hadham Road

Bishop's Stortford

A120 west of roundabout
2166
3367

Round Coppice Road
1212

761
Stansted Services

Dunmow Road (west)
1585
1514
Dunmow Road (east)

7115
A120 (east of J8)

696
B1256 Dunmow Road (east)

Takeley

1389
Hockerill Street

1738
Junction of A1250 and Haymeads Lane

Station Road
786

London Road
1238

Bishops Parkway
1333

Hallingbury Road (north)
762
693
Hallingbury Road (south)

965
St. James' Way

M11 (S)

10260
M11 South of J8

St. James' Way East
817

541
Lower Road

1445
A1184 Cambridge Road

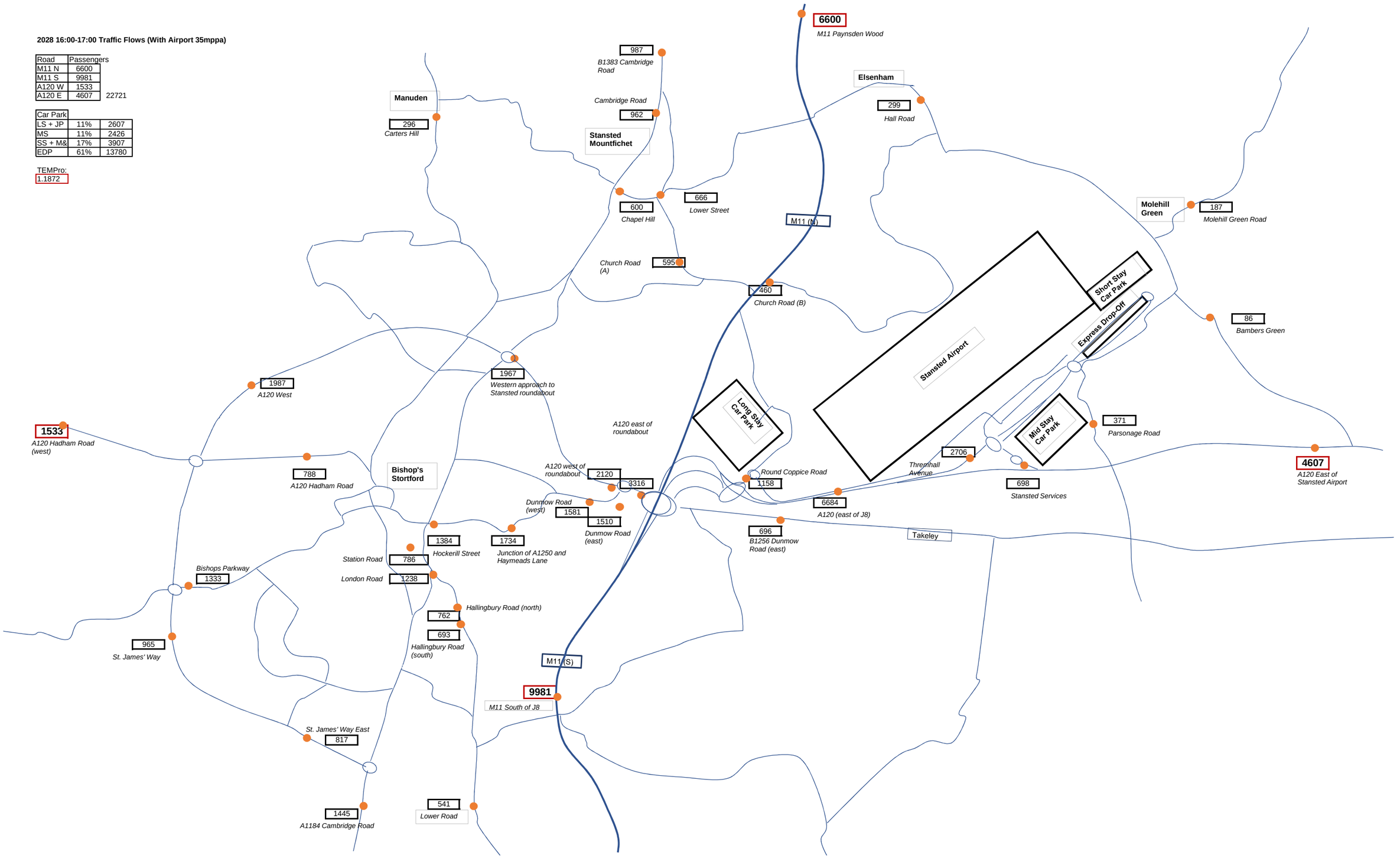
2028 16:00-17:00 Traffic Flows (With Airport 35mppa)

Road	Passengers
M11 N	6600
M11 S	9981
A120 W	1533
A120 E	4607

22721

Car Park		
LS + JP	11%	2607
MS	11%	2426
SS + M&	17%	3907
EDP	61%	13780

TEMPro:
1.1872



9) Essex County Council 2014 M11 J8 Turning Counts

PROJECT TITLE	14430 STANSTED
LOCATION	M11 J7 & J8
SURVEY DATE	Tue 15 Jul 2014
START TIME	05:00
END TIME	21:00
FORMAT	Furnessed 60min ANPR matrices

A	Hastingwood Rd
B	A414 Canes Lane
C	M11 south
D	B1393 London Rd
E	A414 Harlow
F	J8 Services
G	A120 B. Stortford
H	M11 north
L	B1256 Dunmow Road
I	Round Coppice Road
J	Bassingbourn R'bout
K	A120 Takeley

2014

0700 - 0800

J8

0700 - 0800	F	G	H	IJK	L	ABCDE	TOTAL
F	0	14	45	17	1	228	**304**
G	16	3	335	429	107	612	**1503**
H	138	208	0	676	62	1268	**2352**
IJK	22	657	616	0	64	0	**1359**
L	2	65	74	16	1	326	**484**
ABCDE	136	424	1557	0	114	0	**2231**
TOTAL	**314**	**1371**	**2628**	**1138**	**349**	**2434**	**8233**

1600 - 1700

J8

1600 - 1700	F	G	H	IJK	L	ABCDE	TOTAL
F	0	53	163	77	9	122	**424**
G	29	11	163	641	239	306	**1389**
H	121	174	3	599	47	1495	**2439**
IJK	37	508	524	0	54	0	**1124**
L	18	155	180	47	3	96	**499**
ABCDE	243	463	1664	0	93	0	**2464**
TOTAL	**448**	**1364**	**2697**	**1364**	**446**	**2019**	**8339**

1700 - 1800

J8

1700 - 1800	F	G	H	IJK	L	ABCDE	TOTAL
F	0	50	150	79	11	95	**386**
G	26	7	208	756	296	371	**1663**
H	107	251	1	649	70	1517	**2594**
IJK	56	606	518	0	65	0	**1244**
L	19	198	191	62	2	109	**581**
ABCDE	189	611	1456	0	116	0	**2373**
TOTAL	**396**	**1723**	**2524**	**1546**	**561**	**2091**	**8841**

10) Assessment Scenarios M11 J8 Turning Counts

AM Peak 07:00-08:00 Turning Counts - M11 Junction 8

2014

0700 - 0800	MSA	A120 W	M11 N	A120 E	B1256	M11 S	TOTAL
MSA	0	14	45	17	1	228	**304**
A120 W	16	3	335	429	107	612	**1503**
M11 N	138	208	0	676	62	1268	**2352**
A120 E	22	657	616	0	64	0	**1359**
B1256	2	65	74	16	1	326	**484**
M11 S	136	424	1557	0	114	0	**2231**
TOTAL	**314**	**1371**	**2628**	**1138**	**349**	**2434**	**8233**

TEMPro
2014 - 2016 1.0409

The 2014 data was factored up using TEMPro to derive 2016 baseline data, as below.

2016

0700 - 0800	MSA	A120 W	M11 N	A120 E	B1256	M11 S	TOTAL
MSA	0	14	47	17	1	237	**316**
A120 W	16	3	349	447	112	637	**1564**
M11 N	144	216	0	704	65	1320	**2449**
A120 E	23	684	641	0	67	0	**1414**
B1256	3	67	77	16	1	339	**504**
M11 S	141	442	1621	0	119	0	**2323**
TOTAL	**327**	**1427**	**2735**	**1184**	**364**	**2533**	**8570**

These figures form the 2016 With Airport scenario, and were inputted into the table below as a representation of to/from each link.

Scenarios

07:00-08:00

2016 - Without Airport

	To	From	Total
MSA	292	282	575
A120 W	1407	1508	2916
M11 N	2603	2249	4852
A120 E	780	1248	2028
B1256	364	504	868
M11 S	2383	1995	4378

2016 - With Airport

	To	From	Total
MSA	327	316	643
A120 W	1427	1564	2991
M11 N	2735	2449	5184
A120 E	1184	1414	2599
B1256	364	504	868
M11 S	2533	2323	4856

2028 - Without Airport

TEMPro 2016-2028 1.1785

	To	From	Total
MSA	345	333	677
A120 W	1659	1778	3436
M11 N	3068	2651	5718
A120 E	919	1471	2390
B1256	429	594	1022
M11 S	2808	2352	5160

2028 - With Airport (35 mppa)

The With Airport trips include passenger and employee movements as shown in the Peak Hour Diagrams in this appendix.

	To	From	Total
MSA	392	379	772
A120 W	1698	1903	3602
M11 N	3199	2883	6082
A120 E	1393	1658	3051
B1256	429	594	1022
M11 S	3113	2844	5956

2028 - With Airport (43 mppa)

	To	From	Total
MSA	406	392	799
A120 W	1696	1934	3630
M11 N	3184	2956	6140
A120 E	1521	1641	3162
B1256	429	594	1022
M11 S	3072	2998	6070

With Northside

2028 - Without Airport

	To	From	Total
MSA	345	333	677
A120 W	1659	1778	3436
M11 N	3068	2651	5718
A120 E	919	1471	2390
B1256	429	594	1022
M11 S	2808	2352	5160

2028 - With Airport (35 mppa)

	To	From	Total
MSA	392	379	772
A120 W	1734	1986	3721
M11 N	3211	2909	6120
A120 E	1502	1706	3208
B1256	429	594	1022
M11 S	3142	2911	6054

2028 - With Airport (43 mppa)

	To	From	Total
MSA	406	392	799
A120 W	1732	2017	3749
M11 N	3196	2982	6178
A120 E	1630	1688	3318
B1256	429	594	1022
M11 S	3101	3066	6167

2033 - Without Airport

TEMPro 2016-2033 1.2222

	To	From	Total
MSA	357	345	703
A120 W	1720	1843	3564
M11 N	3181	2749	5930
A120 E	953	1526	2479
B1256	445	616	1060
M11 S	2912	2439	5351

2033 - With Airport (35 mppa)

	To	From	Total
MSA	413	399	811
A120 W	1796	2052	3848
M11 N	3324	3008	6332
A120 E	1536	1760	3296
B1256	445	616	1060
M11 S	3246	2999	6245

2033 - With Airport (43 mppa)

	To	From	Total
MSA	460	445	905
A120 W	1793	2083	3877
M11 N	3309	3080	6390
A120 E	1664	1743	3407
B1256	445	616	1060
M11 S	3205	3713	6918

07:00-08:00 Turning Counts

0700-0800	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0%	5%	15%	5%	0%	75%	**100%**
A120 W	1%	0%	22%	29%	7%	41%	**100%**
M11 N	6%	9%	0%	29%	3%	54%	**100%**
A120 E	2%	48%	45%	0%	5%	0%	**100%**
B1256	1%	13%	15%	3%	0%	67%	**100%**
M11 S	6%	19%	70%	0%	5%	0%	**100%**

The 2014 proportions for flows on each link were used to inform 2016 proportions of link flows, as shown above.

2016 With Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	14	47	17	1	237	**316**
A120 W	16	3	349	447	112	637	**1564**
M11 N	144	216	0	704	65	1320	**2449**
A120 E	23	684	641	0	67	0	**1414**
B1256	3	67	77	16	1	339	**504**
M11 S	141	442	1621	0	119	0	**2323**
TOTAL	**327**	**1427**	**2735**	**1184**	**364**	**2533**	**8570**

2016 Without Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	13	42	16	1	212	**282**
A120 W	16	3	337	431	108	614	**1508**
M11 N	132	199	0	646	60	1212	**2249**
A120 E	20	604	566	0	59	0	**1248**
B1256	3	67	77	16	1	339	**504**
M11 S	121	380	1393	0	102	0	**1995**
TOTAL	**292**	**1265**	**2414**	**1109**	**330**	**2378**	**7788**

2028 Without Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	15	49	18	1	250	**333**
A120 W	19	4	397	508	127	724	**1778**
M11 N	156	234	0	762	70	1428	**2651**
A120 E	24	711	667	0	69	0	**1471**
B1256	3	79	91	19	1	400	**594**
M11 S	143	447	1641	0	120	0	**2352**
TOTAL	**345**	**1491**	**2845**	**1307**	**389**	**2802**	**9178**

2028 With Airport 35 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	17	56	21	1	284	**379**
A120 W	21	4	443	567	142	809	**1986**
M11 N	171	257	0	836	77	1568	**2909**
A120 E	28	825	773	0	80	0	**1706**
B1256	3	79	91	19	1	400	**594**
M11 S	177	554	2032	0	149	0	**2911**
TOTAL	**400**	**1736**	**3395**	**1443**	**450**	**3061**	**10485**

2028 With Airport 43 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	18	58	22	1	294	**392**
A120 W	21	4	450	576	144	822	**2017**
M11 N	176	264	0	857	79	1607	**2982**
A120 E	27	816	765	0	80	0	**1688**
B1256	3	79	91	19	1	400	**594**
M11 S	186	583	2140	0	157	0	**3066**
TOTAL	**413**	**1764**	**3504**	**1474**	**461**	**3123**	**10740**

2033 Without Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	16	51	19	1	259	**345**
A120 W	19	4	411	526	132	751	**1843**
M11 N	162	243	0	790	73	1481	**2749**
A120 E	25	738	691	0	72	0	**1526**
B1256	3	82	94	20	1	415	**616**
M11 S	148	464	1702	0	125	0	**2439**
TOTAL	**357**	**1546**	**2950**	**1355**	**403**	**2906**	**9518**

2033 With Airport 35 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	18	59	22	1	299	**399**
A120 W	22	4	458	586	147	836	**2052**
M11 N	177	266	0	864	80	1621	**3008**
A120 E	29	851	798	0	83	0	**1760**
B1256	3	82	94	20	1	415	**616**
M11 S	182	570	2093	0	153	0	**2999**
TOTAL	**413**	**1791**	**3502**	**1492**	**465**	**3170**	**10833**

2033 With Airport 43 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	20	66	24	1	333	**445**
A120 W	22	4	465	595	149	848	**2083**
M11 N	181	272	0	885	82	1660	**3080**
A120 E	28	843	790	0	82	0	**1743**
B1256	3	82	94	20	1	415	**616**
M11 S	225	706	2591	0	190	0	**3713**
TOTAL	**460**	**1928**	**4006**	**1525**	**505**	**3257**	**11680**

PM Peak 16:00-17:00 Turning Counts - M11 Junction 8

2014

1600 - 1700	MSA	A120 W	M11 N	A120 E	B1256	M11 S	TOTAL
MSA	0	53	163	77	9	122	**424**
A120 W	29	11	163	641	239	306	**1389**
M11 N	121	174	3	599	47	1495	**2439**
A120 E	37	508	524	0	54	0	**1124**
B1256	18	155	180	47	3	96	**499**
M11 S	243	463	1664	0	93	0	**2464**
TOTAL	**448**	**1364**	**2697**	**1364**	**446**	**2019**	**8339**

TEMPro
2014 - 2016 1.0409

The 2014 data was factored up using TEMPro to derive 2016 baseline data, as below.

2016

1600 - 1700	MSA	A120 W	M11 N	A120 E	B1256	M11 S	TOTAL
MSA	0	55	170	81	9	127	**442**
A120 W	30	11	169	667	249	319	**1446**
M11 N	126	181	3	624	49	1556	**2539**
A120 E	39	529	545	0	56	0	**1169**
B1256	18	162	188	49	3	99	**519**
M11 S	253	482	1732	0	97	0	**2565**
TOTAL	**467**	**1420**	**2807**	**1420**	**464**	**2102**	**8680**

These figures form the 2016 With Airport scenario, and were inputted into the table below as a representation of to/from each link.

Scenarios

16:00 - 17:00

2016 - Without Airport

	To	From	Total
MSA	382	362	744
A120 W	1273	1373	2646
M11 N	2550	2295	4845
A120 E	1072	642	1713
B1256	464	519	983
M11 S	1534	2026	3560

2016 - With Airport

	To	From	Total
MSA	467	442	908
A120 W	1420	1446	2866
M11 N	2807	2539	5346
A120 E	1420	1169	2590
B1256	464	519	983
M11 S	2102	2565	4667

2028 - Without Airport

TEMPro 2016-2028 1.1785

	To	From	Total
MSA	450	426	877
A120 W	1500	1618	3118
M11 N	3005	2705	5709
A120 E	1263	756	2019
B1256	547	612	1158
M11 S	1807	2388	4195

2028 - With Airport (35 mppa)

The With Airport trips include passenger and employee movements as shown in the Peak Hour Diagrams in this appendix.

	To	From	Total
MSA	556	526	1082
A120 W	1674	1706	3380
M11 N	3364	3007	6371
A120 E	1690	1423	3113
B1256	547	612	1158
M11 S	2597	3057	5654

2028 - With Airport (43 mppa)

	To	From	Total
MSA	575	544	1119
A120 W	1709	1722	3431
M11 N	3435	3061	6496
A120 E	1766	1554	3320
B1256	547	612	1158
M11 S	2757	3175	5933

With Northside

2028 - Without Airport

	To	From	Total
MSA	450	426	877
A120 W	1500	1618	3118
M11 N	3005	2705	5709
A120 E	1263	756	2019
B1256	547	612	1158
M11 S	1807	2388	4195

2028 - With Airport (35 mppa)

	To	From	Total
MSA	556	526	1082
A120 W	1756	1757	3513
M11 N	3390	3023	6414
A120 E	1757	1531	3287
B1256	547	612	1158
M11 S	2664	3098	5762

2028 - With Airport (43 mppa)

	To	From	Total
MSA	575	544	1119
A120 W	1791	1772	3563
M11 N	3461	3077	6538
A120 E	1833	1662	3495
B1256	547	612	1158
M11 S	2824	3217	6041

2033 - Without Airport

TEMPro 2016-2033 1.2222

	To	From	Total
MSA	467	442	909
A120 W	1556	1678	3234
M11 N	3116	2805	5921
A120 E	1310	784	2094
B1256	567	634	1201
M11 S	1874	2477	4351

2033 - With Airport (35 mppa)

	To	From	Total
MSA	582	551	1133
A120 W	1812	1817	3628
M11 N	3502	3124	6625
A120 E	1803	1559	3362
B1256	567	634	1201
M11 S	2731	3187	5918

2033 - With Airport (43 mppa)

	To	From	Total
MSA	600	568	1168
A120 W	1846	1782	3628
M11 N	3573	3177	6750
A120 E	1880	1690	3569
B1256	567	634	1201
M11 S	2891	3306	6197

16:00-17:00 Turning Counts

1600-1700	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0%	12%	38%	18%	2%	29%	**100%**
A120 W	2%	1%	12%	46%	17%	22%	**100%**
M11 N	5%	7%	0%	25%	2%	61%	**100%**
A120 E	3%	45%	47%	0%	5%	0%	**100%**
B1256	4%	31%	36%	9%	1%	19%	**100%**
M11 S	10%	19%	68%	0%	4%	0%	**100%**

The 2014 proportions for flows on each link were used to inform 2016 proportions of link flows, as shown above.

2016 With Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	55	170	81	9	127	**442**
A120 W	30	11	169	667	249	319	**1446**
M11 N	126	181	3	624	49	1556	**2539**
A120 E	39	529	545	0	56	0	**1169**
B1256	18	162	188	49	3	99	**519**
M11 S	253	482	1732	0	97	0	**2565**
TOTAL	**467**	**1420**	**2807**	**1420**	**464**	**2102**	**8680**

2016 Without Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	45	139	66	8	104	**362**
A120 W	29	11	161	634	236	303	**1373**
M11 N	114	163	3	564	44	1407	**2295**
A120 E	21	290	299	0	31	0	**642**
B1256	18	162	188	49	3	99	**519**
M11 S	200	381	1368	0	77	0	**2026**
TOTAL	**382**	**1052**	**2158**	**1312**	**399**	**1913**	**7217**

2028 Without Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	53	164	78	9	123	**426**
A120 W	34	13	190	747	279	357	**1618**
M11 N	134	192	3	665	52	1658	**2705**
A120 E	25	342	353	0	36	0	**756**
B1256	22	191	221	57	4	117	**612**
M11 S	236	449	1613	0	90	0	**2388**
TOTAL	**450**	**1240**	**2543**	**1546**	**470**	**2255**	**8505**

2028 With Airport 35 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	65	202	96	11	151	**526**
A120 W	37	14	206	811	302	387	**1757**
M11 N	150	215	4	743	59	1853	**3023**
A120 E	51	692	714	0	74	0	**1531**
B1256	22	191	221	57	4	117	**612**
M11 S	306	583	2092	0	117	0	**3098**
TOTAL	**565**	**1760**	**3439**	**1707**	**567**	**2509**	**10546**

2028 With Airport 43 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	68	209	99	12	157	**544**
A120 W	37	14	208	818	305	391	**1772**
M11 N	152	219	4	756	60	1886	**3077**
A120 E	55	751	775	0	80	0	**1662**
B1256	22	191	221	57	4	117	**612**
M11 S	318	605	2172	0	122	0	**3217**
TOTAL	**584**	**1848**	**3589**	**1731**	**582**	**2551**	**10884**

2033 Without Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	55	170	81	9	127	**442**
A120 W	35	13	197	775	289	370	**1678**
M11 N	139	200	3	689	54	1720	**2805**
A120 E	26	355	366	0	38	0	**784**
B1256	23	198	229	59	4	122	**634**
M11 S	245	466	1672	0	94	0	**2477**
TOTAL	**467**	**1286**	**2637**	**1604**	**488**	**2338**	**8820**

2033 With Airport 35 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	69	212	101	12	159	**551**
A120 W	38	14	213	838	313	400	**1817**
M11 N	155	222	4	767	60	1915	**3124**
A120 E	52	705	727	0	75	0	**1559**
B1256	23	198	229	59	4	122	**634**
M11 S	315	599	2152	0	121	0	**3187**
TOTAL	**582**	**1807**	**3536**	**1766**	**584**	**2595**	**10871**

2033 With Airport 43 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	71	218	104	12	163	**568**
A120 W	37	14	209	822	307	393	**1782**
M11 N	157	226	4	781	61	1948	**3177**
A120 E	56	764	788	0	81	0	**1690**
B1256	23	198	229	59	4	122	**634**
M11 S	327	622	2232	0	125	0	**3306**
TOTAL	**600**	**1894**	**3680**	**1766**	**591**	**2626**	**11157**

PM Peak 17:00-18:00 Turning Counts - M11 Junction 8

2014

1700 - 1800	MSA	A120 W	M11 N	A120 E	B1256	M11 S	TOTAL
MSA	0	50	150	79	11	95	**386**
A120 W	26	7	208	756	296	371	**1663**
M11 N	107	251	1	649	70	1517	**2594**
A120 E	56	606	518	0	65	0	**1244**
B1256	19	198	191	62	2	109	**581**
M11 S	189	611	1456	0	116	0	**2373**
TOTAL	**396**	**1723**	**2524**	**1546**	**561**	**2091**	**8841**

TEMPro
2014 - 2016 1.0409

The 2014 data was factored up using TEMPro to derive 2016 baseline data, as below.

2016

1700 - 1800	MSA	A120 W	M11 N	A120 E	B1256	M11 S	TOTAL
MSA	0	52	156	82	12	99	**402**
A120 W	27	7	217	787	308	386	**1732**
M11 N	111	261	1	675	73	1579	**2701**
A120 E	58	631	539	0	67	0	**1295**
B1256	20	206	199	64	2	113	**605**
M11 S	196	636	1516	0	121	0	**2470**
TOTAL	**413**	**1794**	**2627**	**1609**	**584**	**2177**	**9203**

These figures form the 2016 With Airport scenario, and were inputted into the table below as a representation of to/from each link.

Scenarios

17:00-18:00

2016 - Without Airport

	To	From	Total
MSA	296	288	584
A120 W	1598	1629	3227
M11 N	2231	2326	4558
A120 E	1097	550	1647
B1256	584	605	1189
M11 S	1306	1640	2946

2016 - With Airport

	To	From	Total
MSA	413	402	814
A120 W	1794	1732	3525
M11 N	2627	2701	5328
A120 E	1609	1295	2904
B1256	584	605	1189
M11 S	2177	2470	4646

2028 - Without Airport

TEMPro 2016-2028 1.1785

	To	From	Total
MSA	349	340	689
A120 W	1883	1920	3803
M11 N	2629	2742	5371
A120 E	1293	648	1941
B1256	688	713	1401
M11 S	1539	1932	3472

2028 - With Airport (35 mppa)

The With Airport trips include passenger and employee movements as shown in the Peak Hour Diagrams in this appendix.

	To	From	Total
MSA	464	451	915
A120 W	2074	2023	4096
M11 N	3005	3114	6119
A120 E	1804	1366	3170
B1256	688	713	1401
M11 S	2365	2758	5124

2028 - With Airport (43 mppa)

	To	From	Total
MSA	504	490	994
A120 W	2128	2058	4186
M11 N	3135	3249	6384
A120 E	1985	1586	3572
B1256	688	713	1401
M11 S	2651	3059	5710

With Northside

2028 - Without Airport

	To	From	Total
MSA	349	340	689
A120 W	1961	1944	3905
M11 N	2654	2749	5404
A120 E	1324	751	2075
B1256	688	713	1401
M11 S	1539	1932	3472

2028 - With Airport (35 mppa)

	To	From	Total
MSA	464	451	915
A120 W	2185	2061	4246
M11 N	3030	3122	6152
A120 E	1850	1502	3352
B1256	688	713	1401
M11 S	2398	2773	5172

2028 - With Airport (43 mppa)

	To	From	Total
MSA	504	490	994
A120 W	2239	2097	4336
M11 N	3160	3257	6417
A120 E	2032	1723	3755
B1256	688	713	1401
M11 S	2685	3074	5758

2033 - Without Airport

TEMPro 2016-2033 1.2222

	To	From	Total
MSA	362	352	714
A120 W	1953	1991	3944
M11 N	2727	2843	5570
A120 E	1341	672	2013
B1256	713	739	1453
M11 S	1596	2004	3600

2033 - With Airport (35 mppa)

	To	From	Total
MSA	485	472	957
A120 W	2255	2132	4387
M11 N	3128	3223	6351
A120 E	1898	1527	3424
B1256	713	739	1453
M11 S	2456	2845	5300

2033 - With Airport (43 mppa)

	To	From	Total
MSA	525	511	1036
A120 W	2309	2168	4477
M11 N	3257	3359	6616
A120 E	2080	1747	3826
B1256	713	739	1453
M11 S	2742	3145	5887

17:00-18:00 Turning Counts

1700-1800	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0%	13%	39%	20%	3%	25%	**100%**
A120 W	2%	0%	13%	45%	18%	22%	**100%**
M11 N	4%	10%	0%	25%	3%	58%	**100%**
A120 E	5%	49%	42%	0%	5%	0%	**100%**
B1256	3%	34%	33%	11%	0%	19%	**100%**
M11 S	8%	26%	61%	0%	5%	0%	**100%**

The 2014 proportions for flows on each link were used to inform 2016 proportions of link flows, as shown above.

2016 With Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	52	156	82	12	99	**402**
A120 W	27	7	217	787	308	386	**1732**
M11 N	111	261	1	675	73	1579	**2701**
A120 E	58	631	539	0	67	0	**1295**
B1256	20	206	199	64	2	113	**605**
M11 S	196	636	1516	0	121	0	**2470**
TOTAL	**413**	**1794**	**2627**	**1609**	**584**	**2177**	**9203**

2016 Without Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	38	112	59	8	71	**288**
A120 W	25	7	204	741	290	363	**1629**
M11 N	96	225	1	582	63	1360	**2326**
A120 E	25	268	229	0	29	0	**550**
B1256	20	206	199	64	2	113	**605**
M11 S	130	422	1006	0	80	0	**1640**
TOTAL	**296**	**1166**	**1751**	**1445**	**473**	**1907**	**7038**

2028 Without Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	44	132	69	10	84	**340**
A120 W	30	8	243	884	346	433	**1944**
M11 N	113	266	1	687	75	1607	**2749**
A120 E	34	366	312	0	39	0	**751**
B1256	24	243	234	76	2	134	**713**
M11 S	154	498	1186	0	95	0	**1932**
TOTAL	**354**	**1425**	**2109**	**1716**	**567**	**2258**	**8429**

2028 With Airport 35 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	59	176	92	13	111	**451**
A120 W	32	9	258	937	367	459	**2061**
M11 N	129	302	1	780	85	1825	**3122**
A120 E	68	732	625	0	78	0	**1502**
B1256	24	243	234	76	2	134	**713**
M11 S	220	715	1702	0	136	0	**2773**
TOTAL	**472**	**2059**	**2996**	**1886**	**681**	**2529**	**10623**

2028 With Airport 43 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	64	191	100	14	121	**490**
A120 W	32	9	262	953	373	467	**2097**
M11 N	134	315	1	814	88	1904	**3257**
A120 E	78	839	717	0	89	0	**1723**
B1256	24	243	234	76	2	134	**713**
M11 S	244	792	1887	0	151	0	**3074**
TOTAL	**512**	**2262**	**3292**	**1943**	**719**	**2626**	**11353**

2033 Without Airport

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	46	137	72	10	87	**352**
A120 W	31	8	249	905	354	444	**1991**
M11 N	117	275	1	711	77	1662	**2843**
A120 E	30	327	279	0	35	0	**672**
B1256	25	252	243	79	3	139	**739**
M11 S	159	516	1230	0	98	0	**2004**
TOTAL	**362**	**1425**	**2140**	**1767**	**578**	**2331**	**8602**

2033 With Airport 35 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	62	184	96	14	117	**472**
A120 W	33	9	267	969	380	475	**2132**
M11 N	133	312	1	806	88	1884	**3223**
A120 E	69	743	635	0	79	0	**1527**
B1256	25	252	243	79	3	139	**739**
M11 S	226	733	1746	0	140	0	**2845**
TOTAL	**485**	**2110**	**3076**	**1950**	**702**	**2614**	**10938**

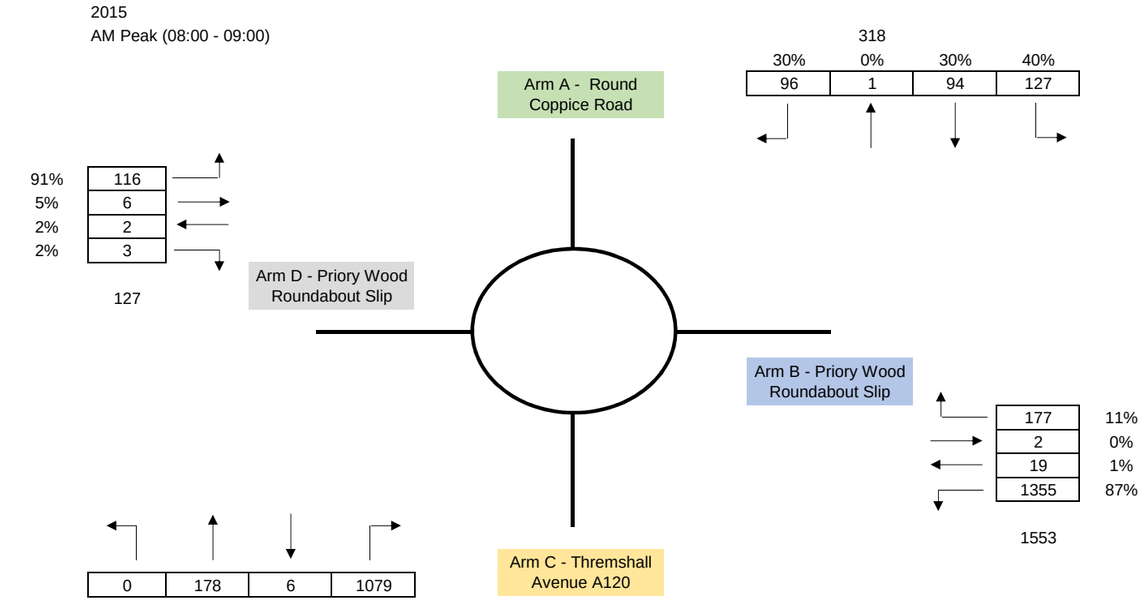
2033 With Airport 43 mppa

	MSA	A120 W	M11 N	A120 E	B1256	M11 S	**TOTAL**
MSA	0	67	199	104	15	126	**511**
A120 W	33	9	271	986	386	483	**2168**
M11 N	138	325	1	840	91	1963	**3359**
A120 E	79	851	727	0	91	0	**1747**
B1256	25	252	243	79	3	139	**739**
M11 S	250	810	1931	0	154	0	**3145**
TOTAL	**525**	**2314**	**3372**	**2008**	**740**	**2711**	**11669**

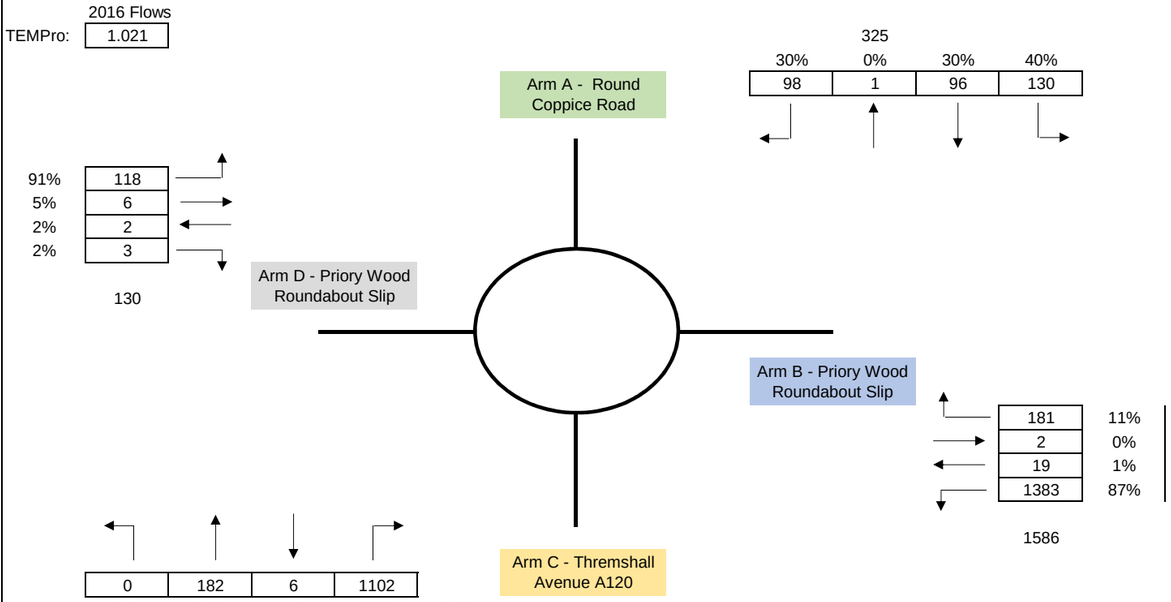
11) Priory Wood and Round Coppice Road Baseline Turning Counts

Priory Wood Baseline Turning Counts

2015
AM Peak (08:00 - 09:00)

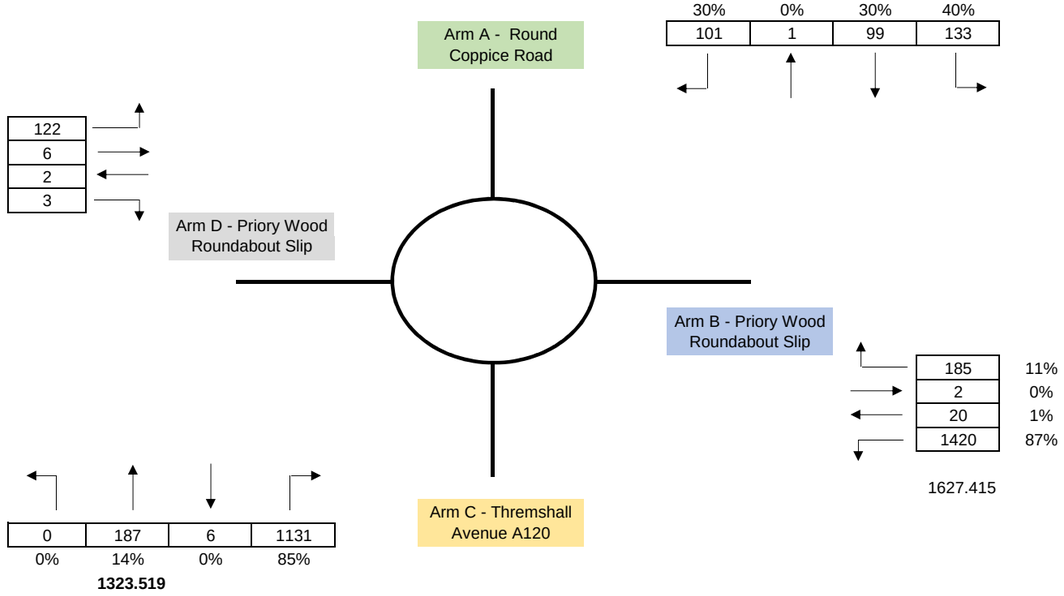


2016 Flows
TEMPro: 1.021

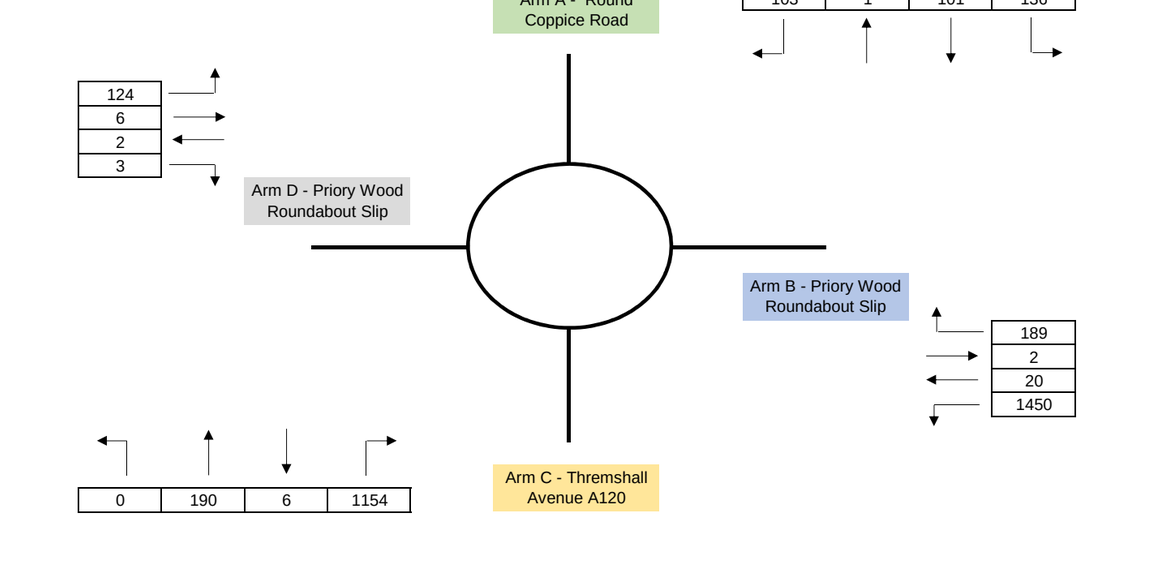


2015
PM Peak (17:00 - 18:00)

1.047917

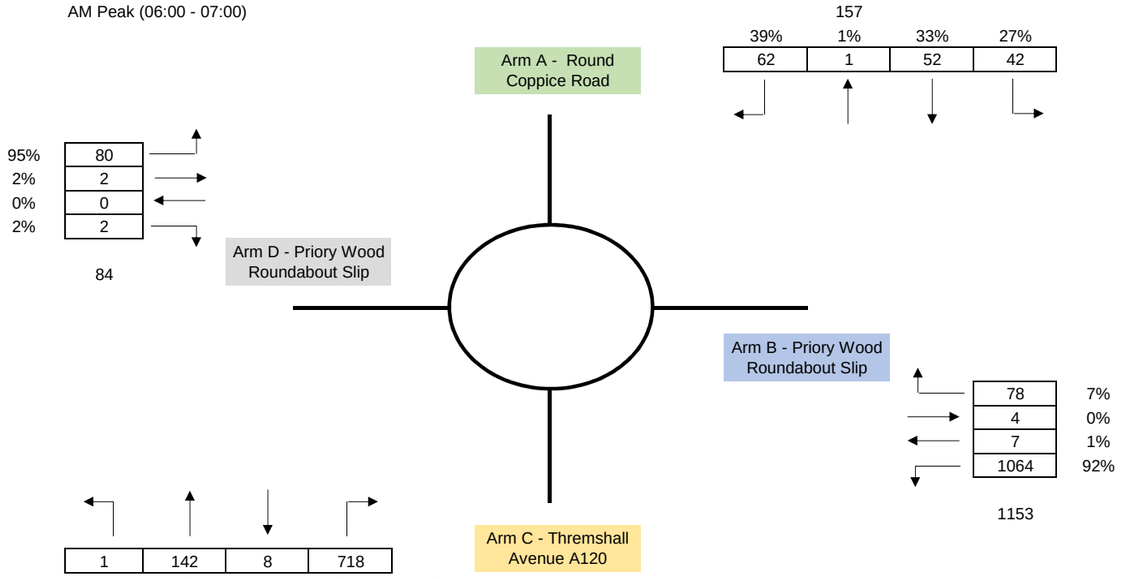


2016 Flows
TEMPro: 1.021

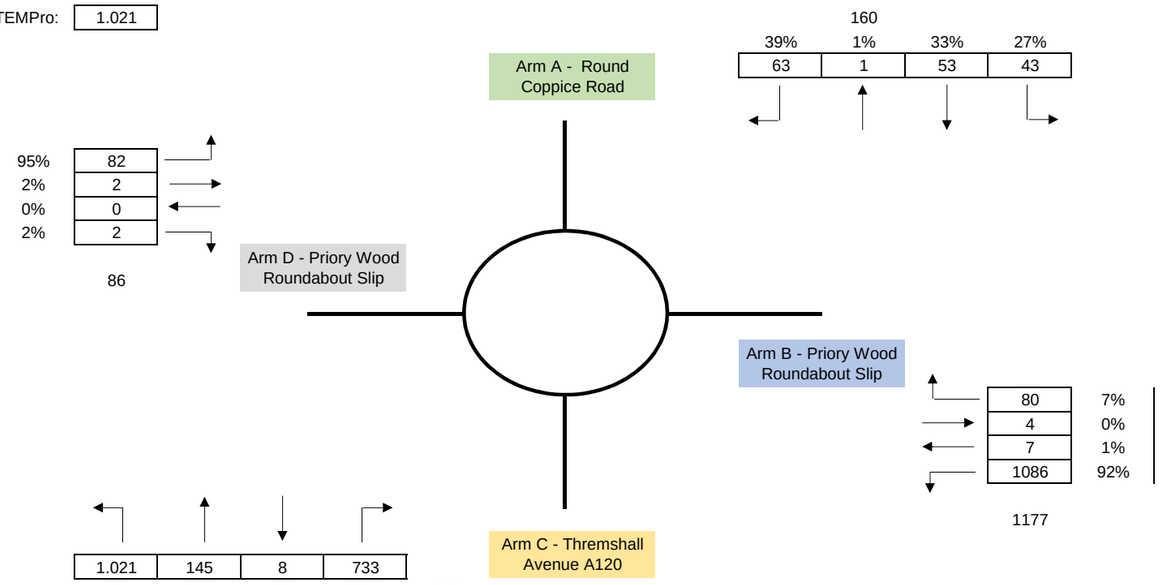


Priory Wood Baseline 2016 Turning Counts (16:00-17:00)

2015
AM Peak (06:00 - 07:00)

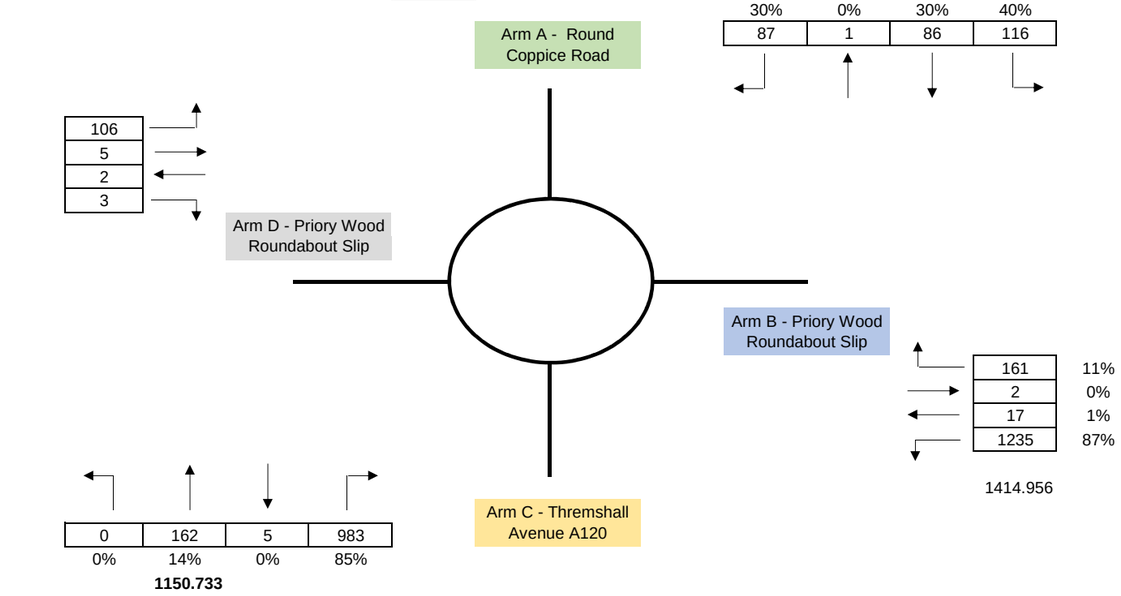


2016 Flows
TEMPro: 1.021

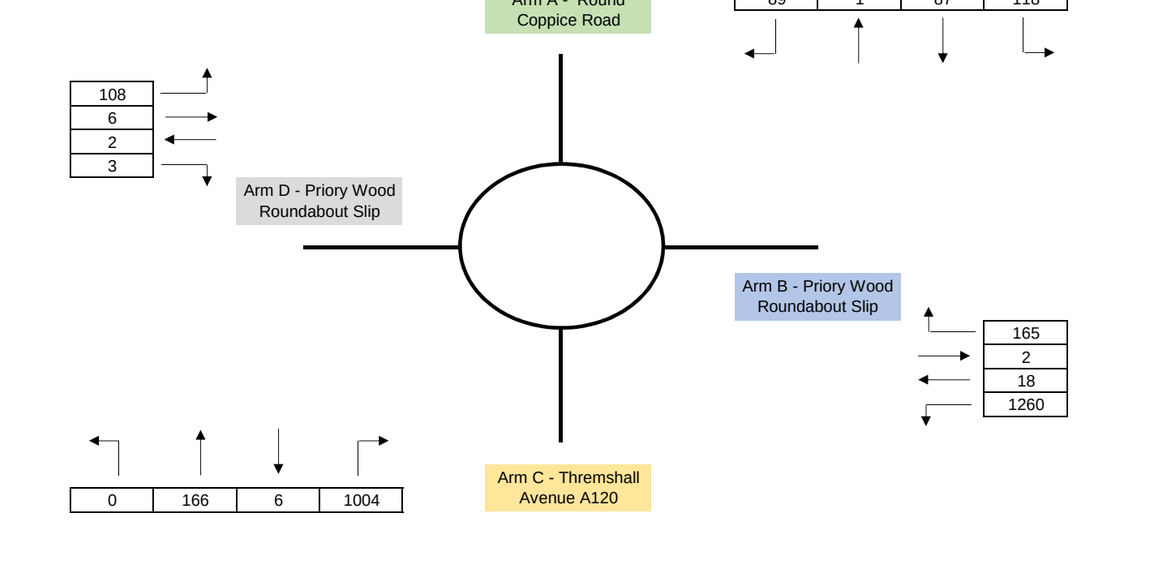


2015
PM Peak (16:00 - 17:00)

0.911

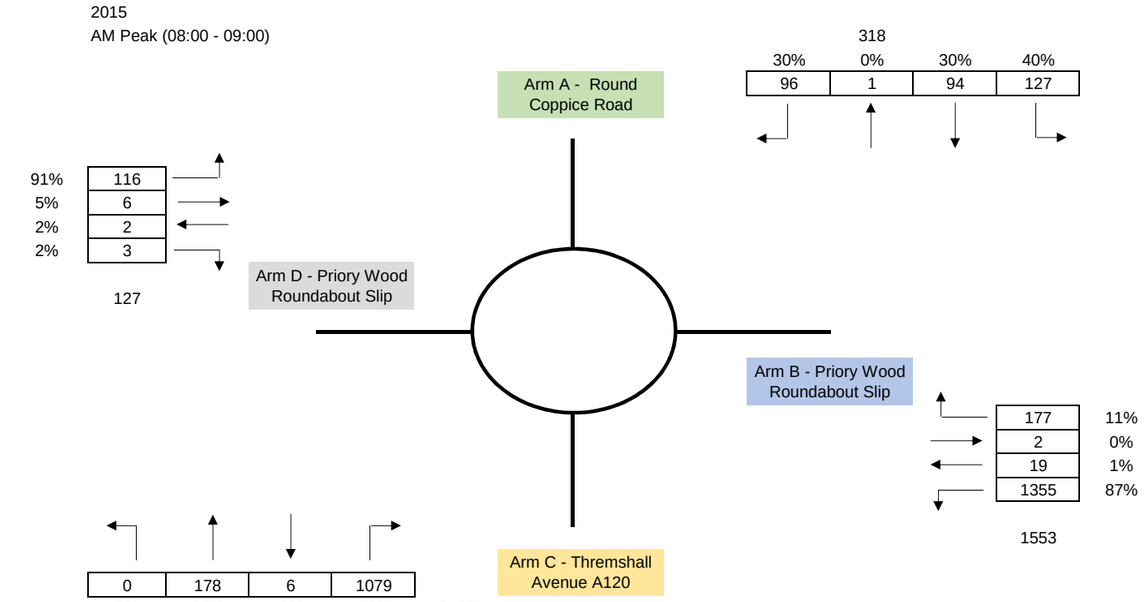


2016 Flows
TEMPro: 1.021

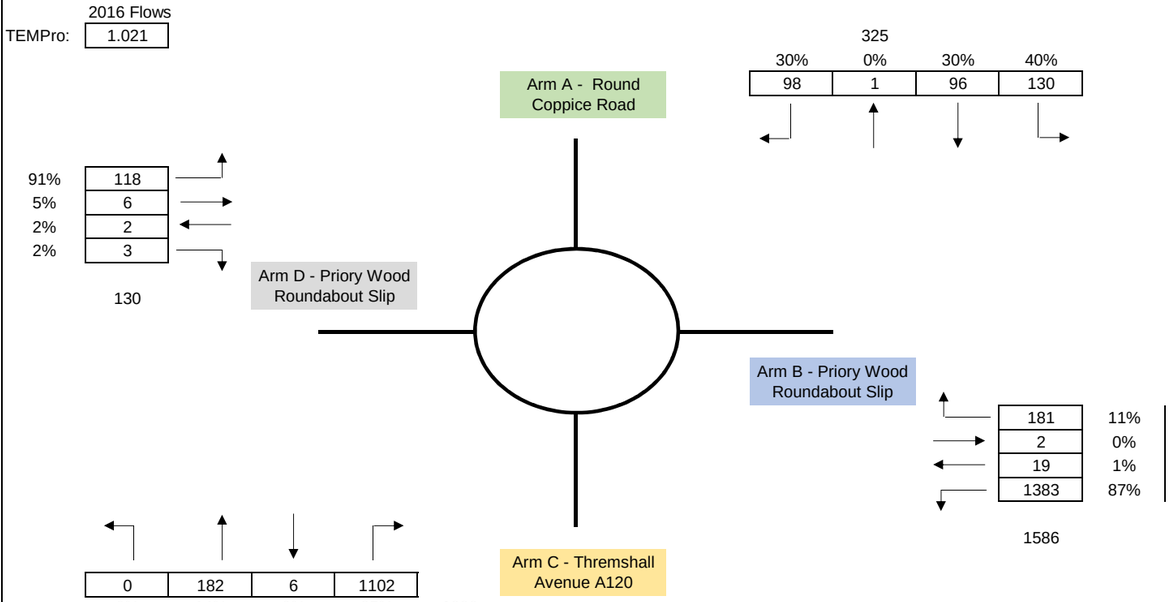


Priory Wood Baseline 2016 Turning Counts (17:00-18:00)

2015
AM Peak (08:00 - 09:00)

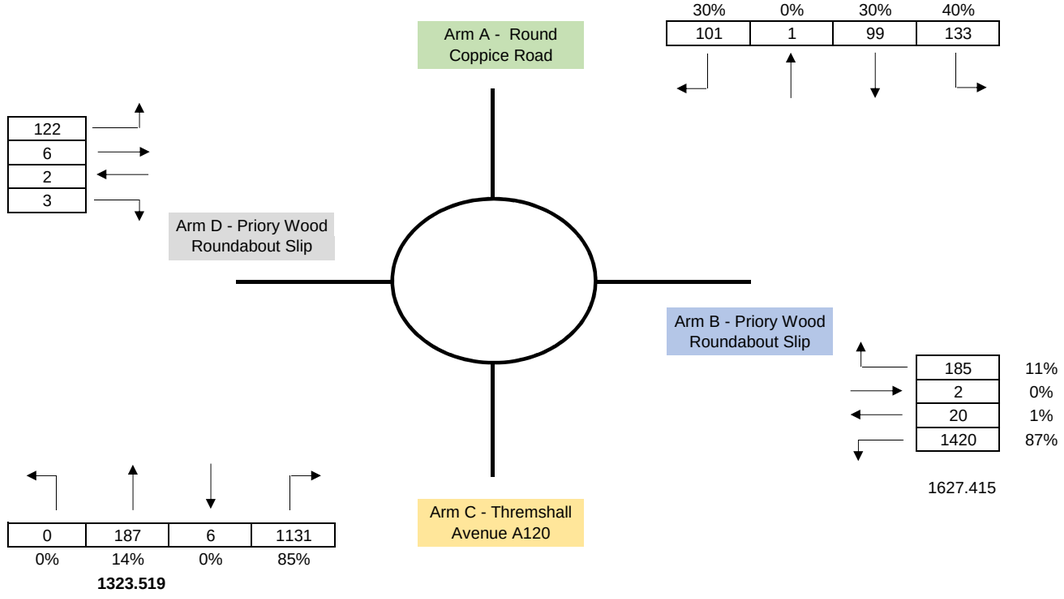


2016 Flows
TEMPro: 1.021

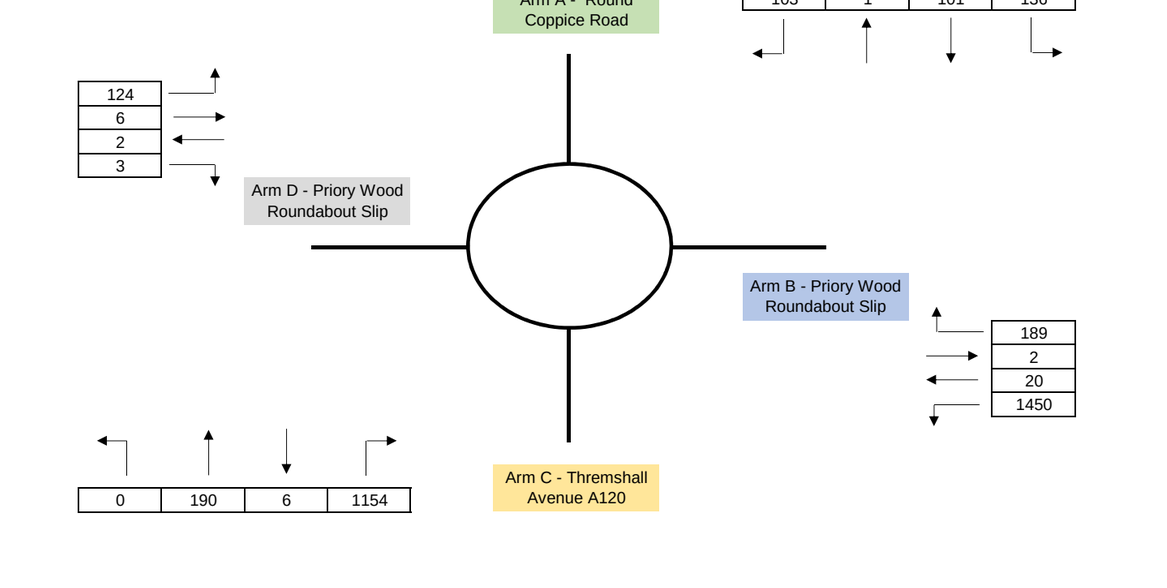


2015
PM Peak (17:00 - 18:00)

1.047917

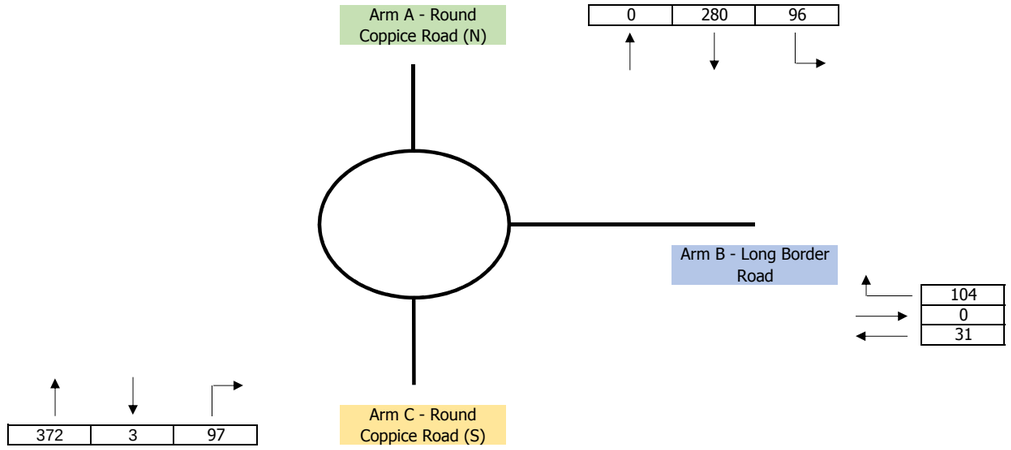


2016 Flows
TEMPro: 1.021

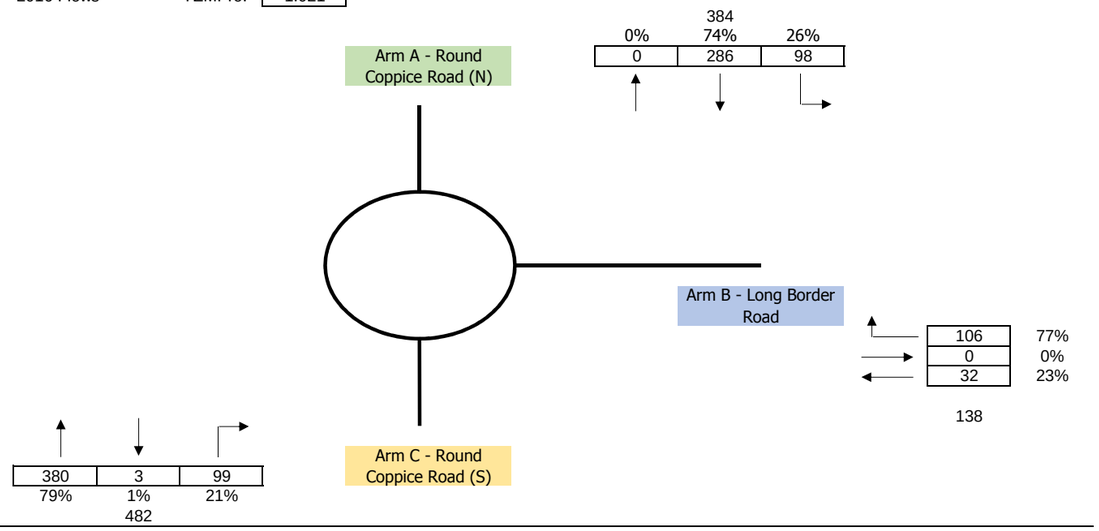


Round Coppice Road Turning Counts (Baseline)

2015
AM Peak - 08:00 - 09:00



2016 Flows TEMPro: 1.021

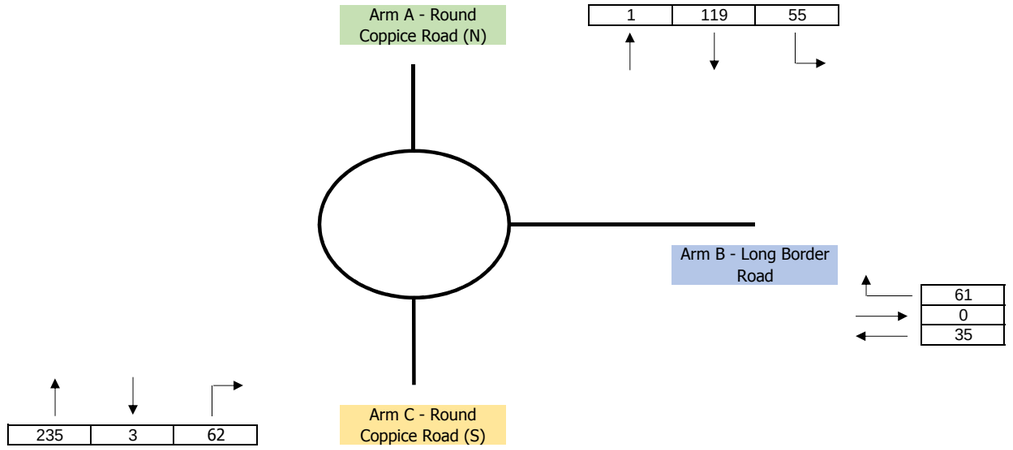


2015
PM Peak (17:00 - 18:00) 1.047917

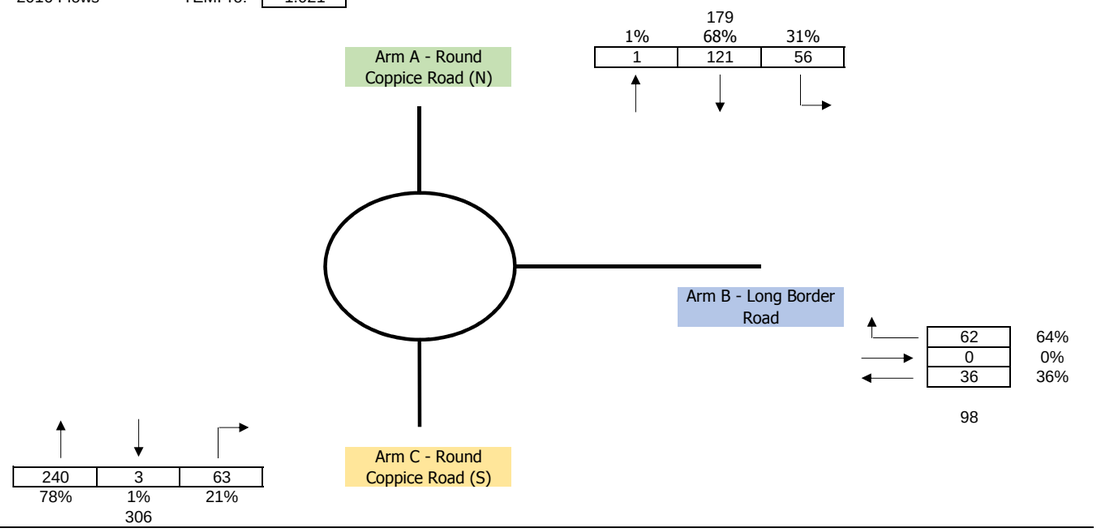
2016 Flows TEMPro: 1.021

Round Coppice Road Baseline 2016 Turning Counts (16:00-17:00)

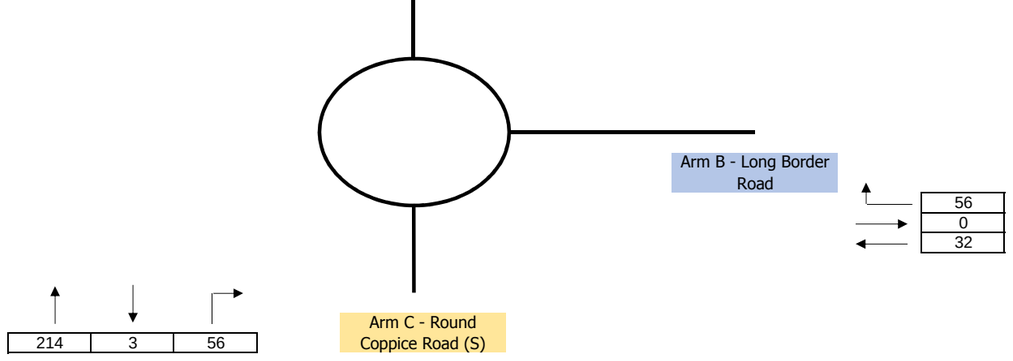
2015
AM Peak - 06:00 - 07:00



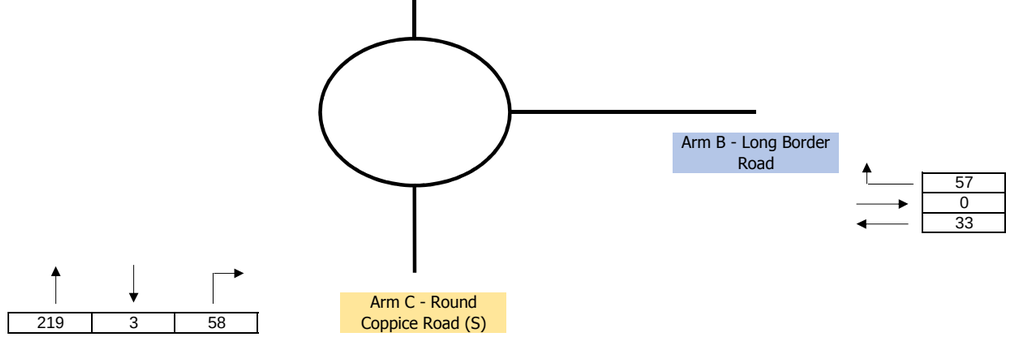
2016 Flows TEMPro: 1.021



2015
PM Peak (16:00 - 17:00) 0.911111

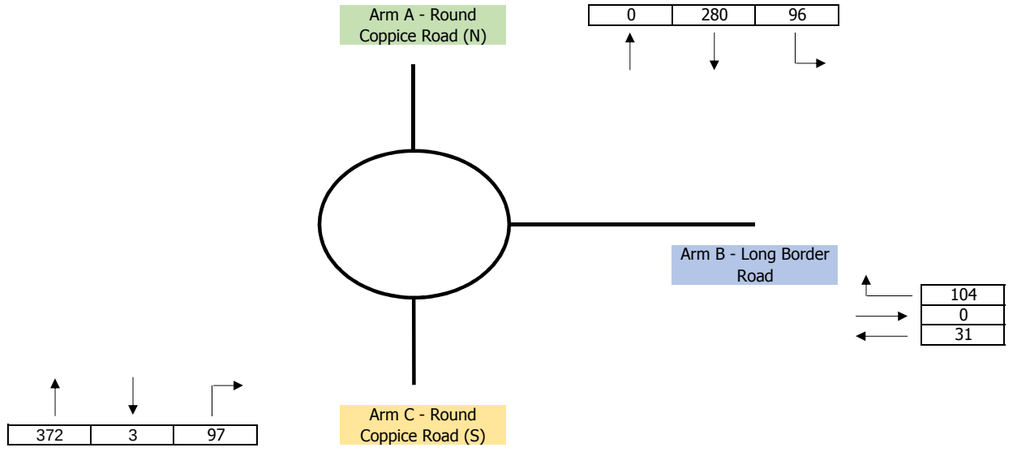


2016 Flows TEMPro: 1.021

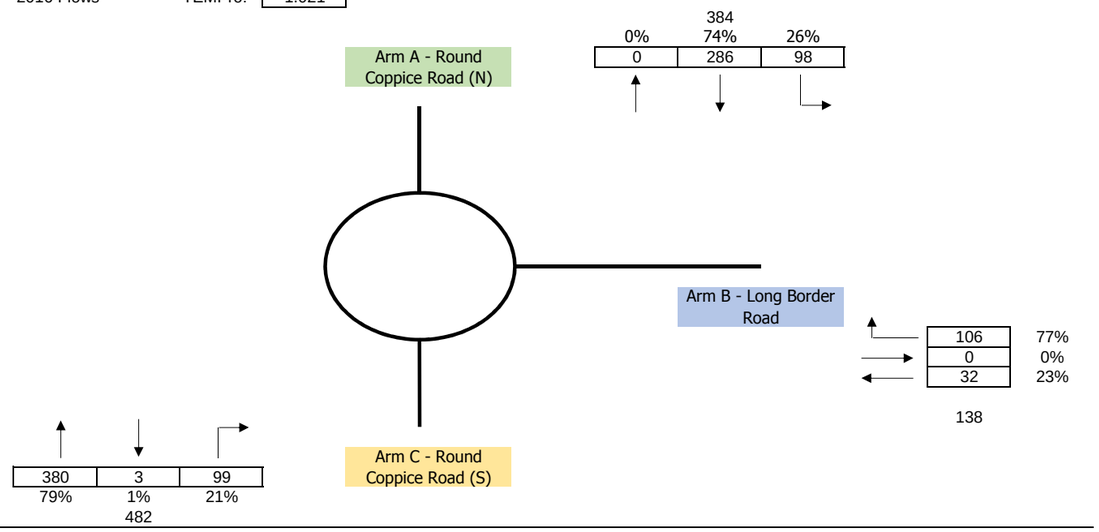


Round Coppice Road Baseline 2016 Turning Counts (17:00-18:00)

2015
AM Peak - 08:00 - 09:00



2016 Flows TEMPro: 1.021

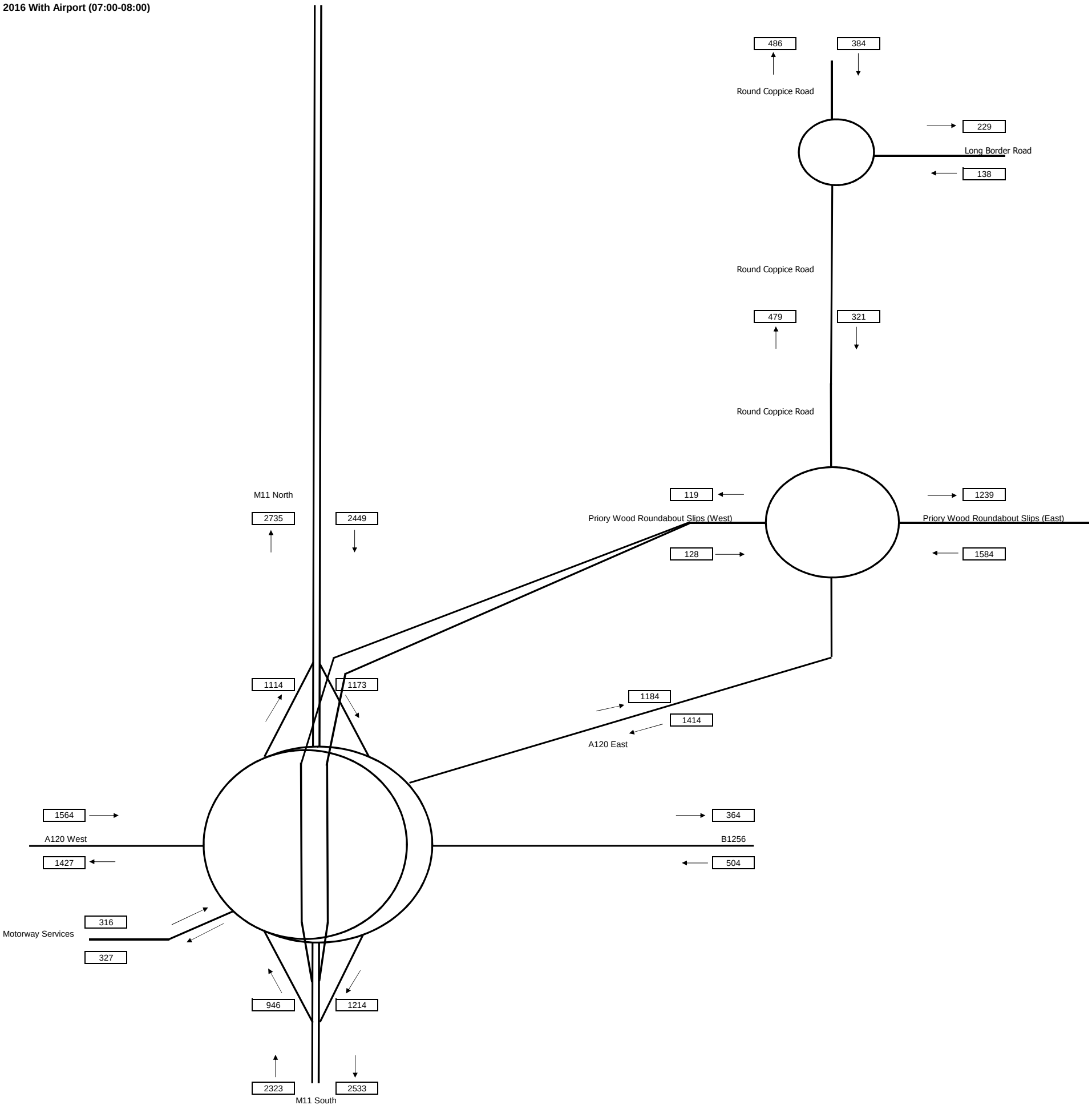


2015
PM Peak (17:00 - 18:00) 1.047917

2016 Flows TEMPro: 1.021

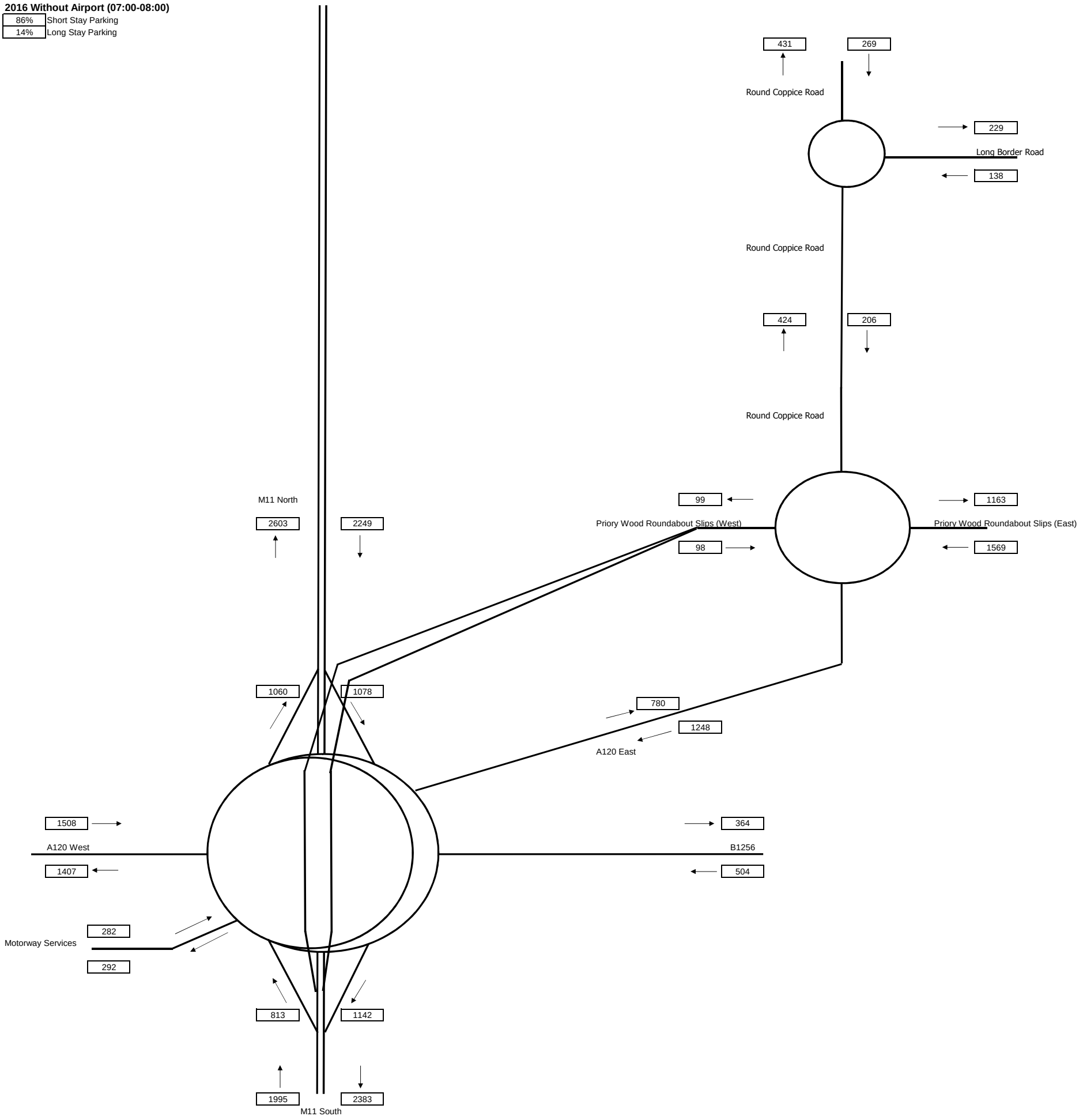
12) M11 J8, Priory Wood and Round Coppice Road Junction Analysis and Results (07:00-08:00)

2016 With Airport (07:00-08:00)



2016 Without Airport (07:00-08:00)

86%	Short Stay Parking
14%	Long Stay Parking



2028 Without Airport (07:00-08:00)

TEMPRO:

1.1785

2016 to 2028

Long Stay 15%

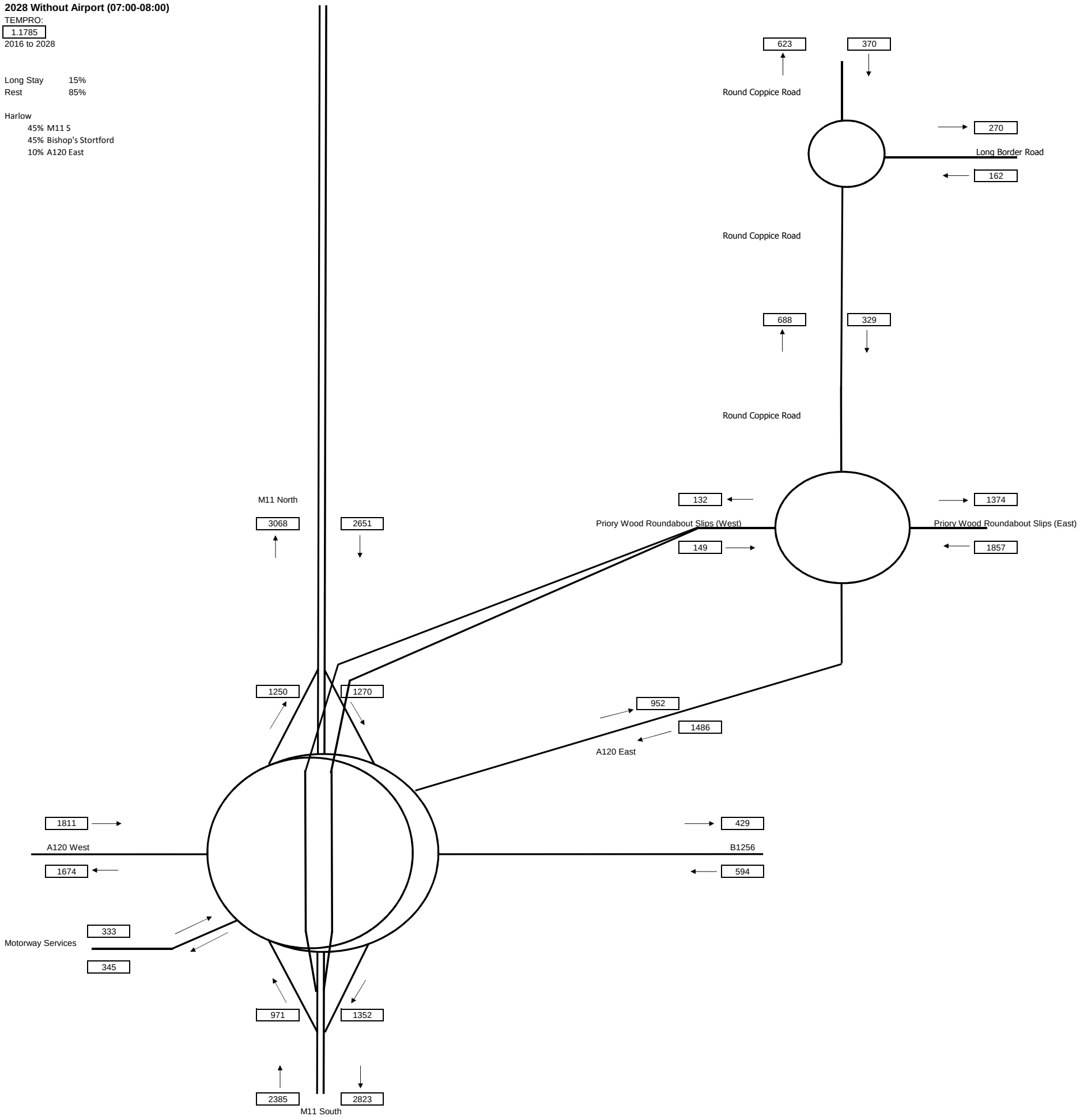
Rest 85%

Harlow

45% M11 S

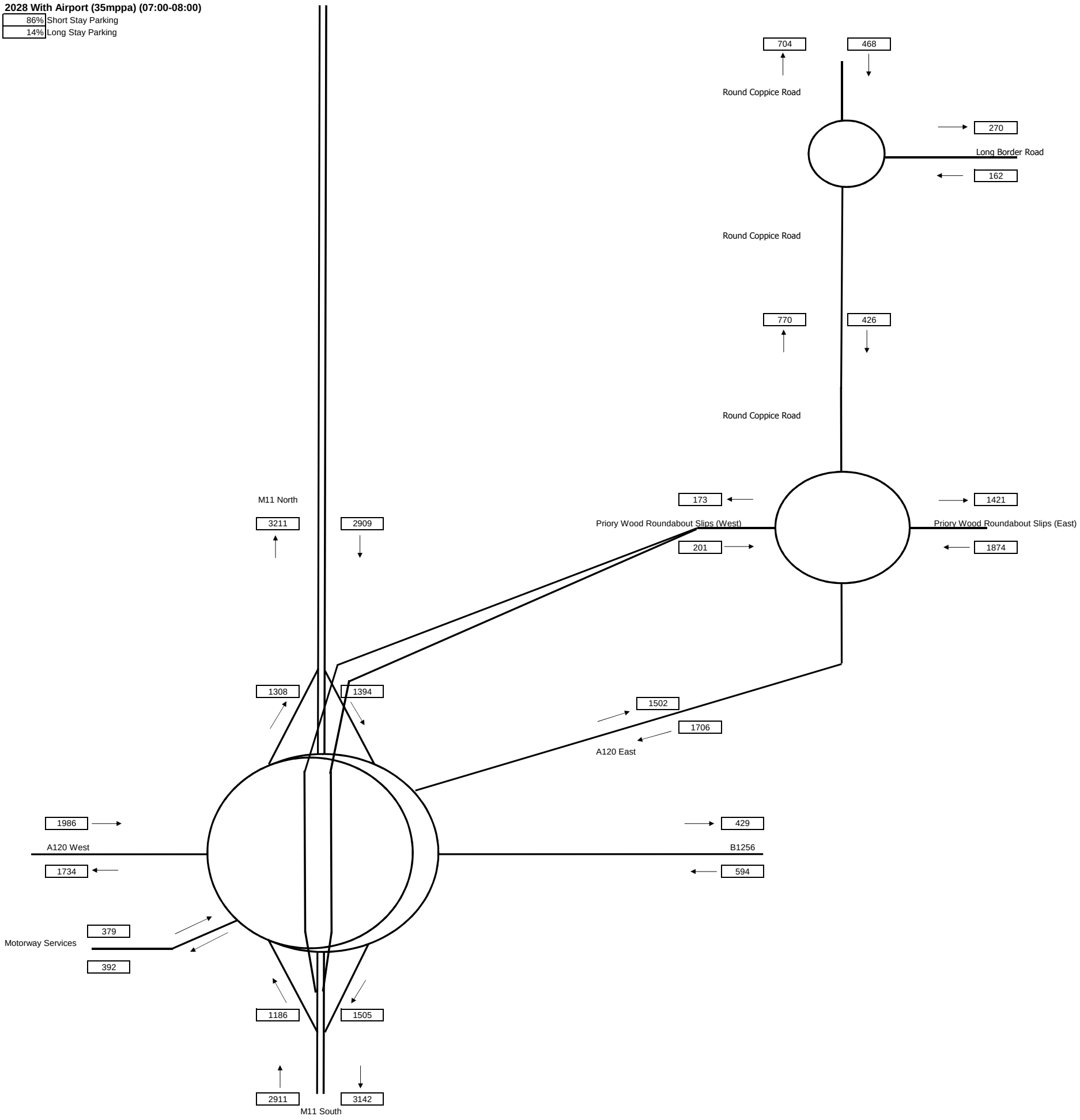
45% Bishop's Stortford

10% A120 East



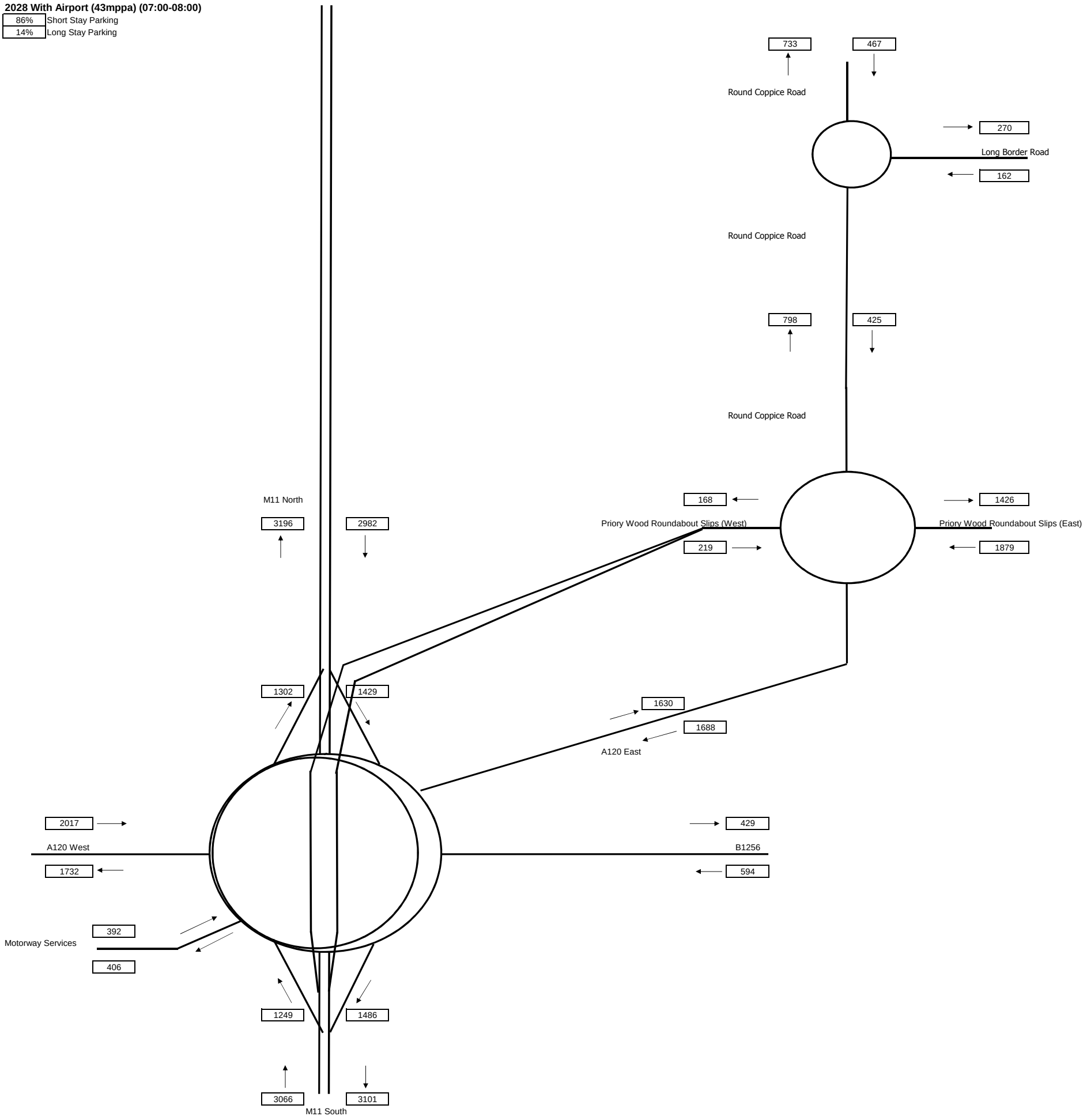
2028 With Airport (35mppa) (07:00-08:00)

86%	Short Stay Parking
14%	Long Stay Parking



2028 With Airport (43mppa) (07:00-08:00)

86%	Short Stay Parking
14%	Long Stay Parking



07:00 - 08:00

Flows To/From each Link at Junction 8 of the M11, Priory Wood roundabout and Round Coppice Road roundabout

Road Link	Baseline 2016				2028 35mppa 'Do Minimum'				2028 43mppa 'Development Case'			
	Without Airport		With Airport		Without Airport		With Airport		Without Airport		With Airport	
	To	From	To	From	To	From	To	From	To	From	To	From
Motorway Services (MSA)	292	282	327	316	345	333	392	379	345	333	406	392
A120 West of M11 Junction 8	1407	1508	1427	1564	1674	1811	1734	1986	1674	1811	1732	2017
M11 North of Junction 8	2603	2249	2735	2449	3068	2651	3211	2909	3068	2651	3196	2982
A120 East of M11 Junction 8	780	1248	1184	1414	952	1486	1502	1706	952	1486	1630	1688
B1256	364	504	364	504	429	594	429	594	429	594	429	594
M11 South of Junction 8	2383	1995	2533	2323	2823	2385	3142	2911	2823	2385	3101	3066
Priory Wood (West)	99	98	119	128	132	149	173	201	132	149	168	219
Priory Wood (East)	1163	1569	1239	1584	1374	1857	1421	1874	1374	1857	1426	1879
Round Coppice Road (South)	424	206	479	321	688	329	770	426	688	329	798	425
Long Border Road	229	138	229	138	270	162	270	162	270	162	270	162
Round Coppice Road (North)	431	269	486	384	623	370	704	468	623	370	733	467

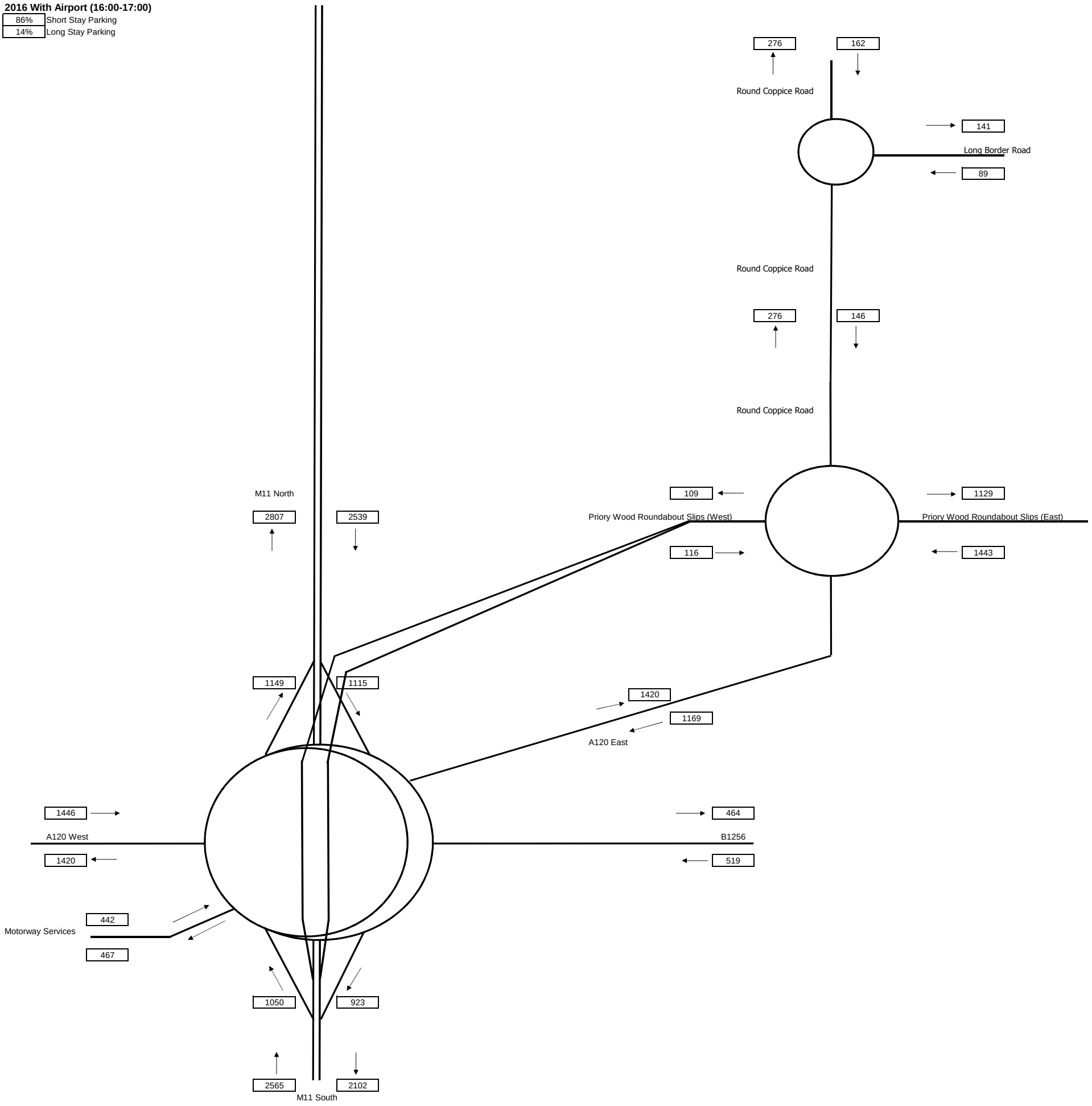
Percentage Traffic Growth on Road Links at Key Junctions

Road Link	Percentage Impact (With Airport)	
	2016 - 2028 (35mppa)	2028 (35) - 2028 (43)
Motorway Services (MSA)	20%	3%
A120 West of M11 Junction 8	24%	1%
M11 North of Junction 8	18%	1%
A120 East of M11 Junction 8	23%	3%
B1256	18%	0%
M11 South of Junction 8	25%	2%
Priory Wood (West)	51%	3%
Priory Wood (East)	17%	0%
Round Coppice Road (South)	50%	2%
Long Border Road	18%	0%
Round Coppice Road (North)	35%	2%

13) M11 J8, Priory Wood and Round Coppice Road Junction Analysis and Results (16:00-17:00)

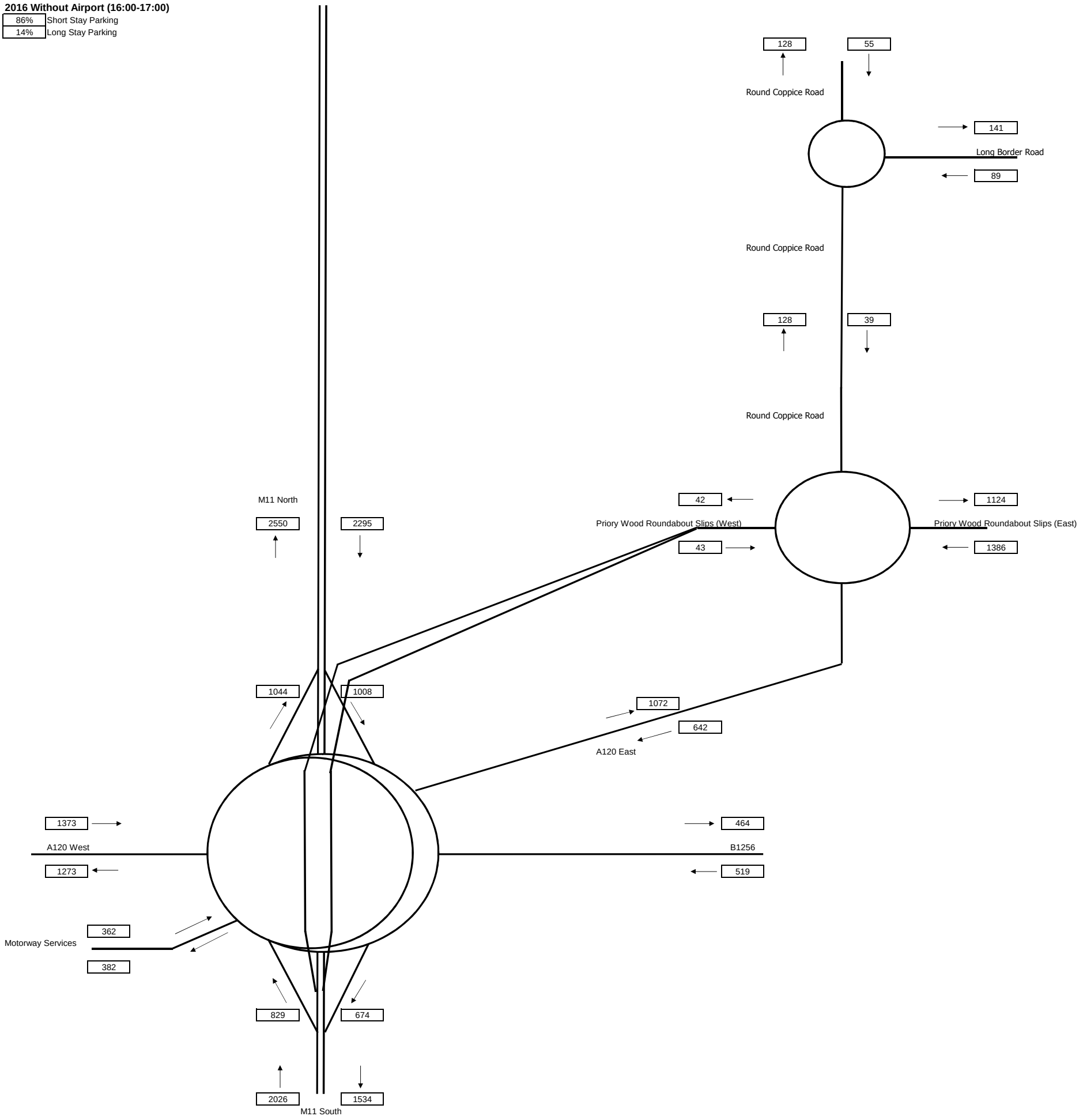
2016 With Airport (16:00-17:00)

86%	Short Stay Parking
14%	Long Stay Parking



2016 Without Airport (16:00-17:00)

86%	Short Stay Parking
14%	Long Stay Parking



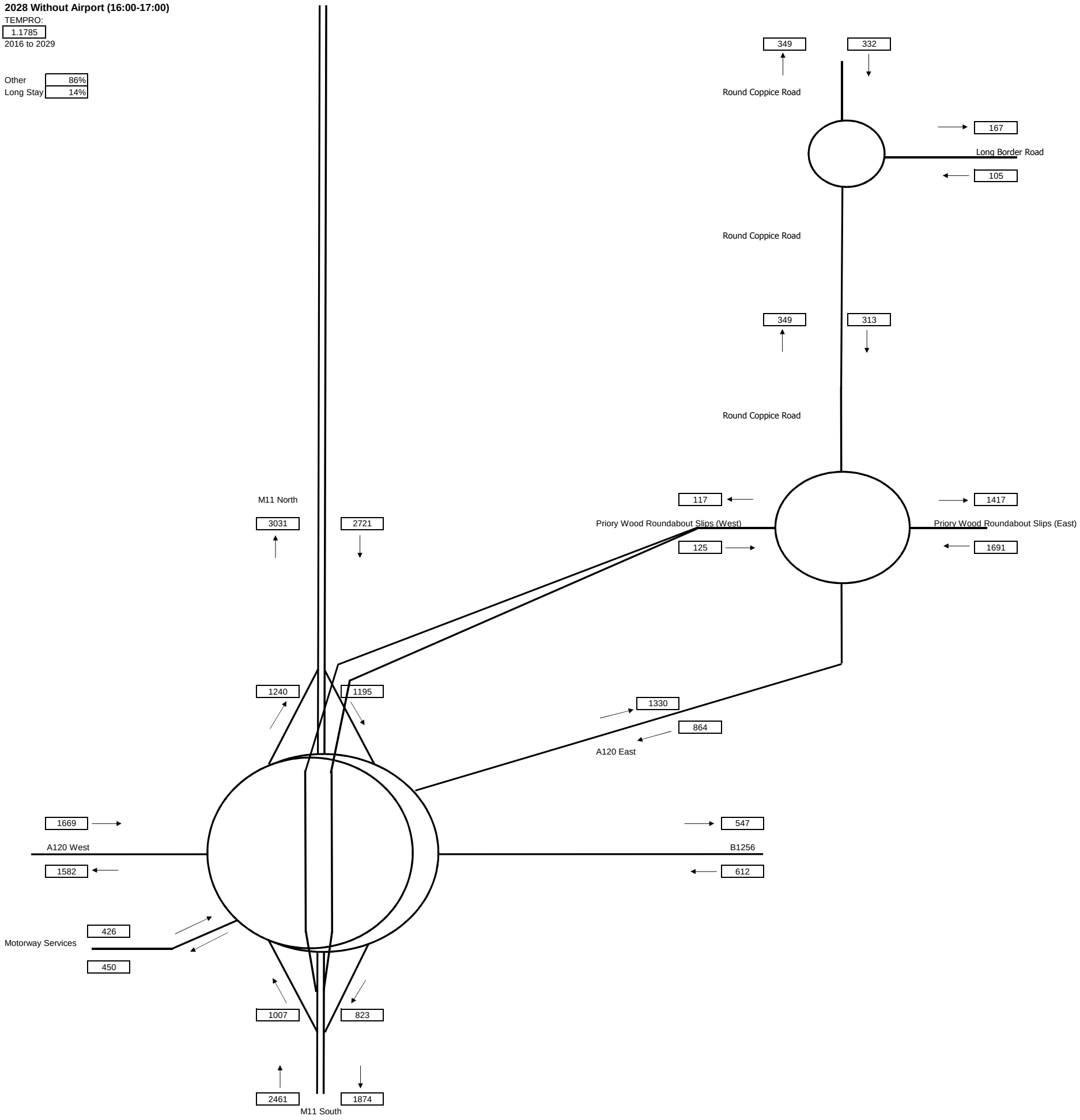
2028 Without Airport (16:00-17:00)

TEMPRO:

1.1785

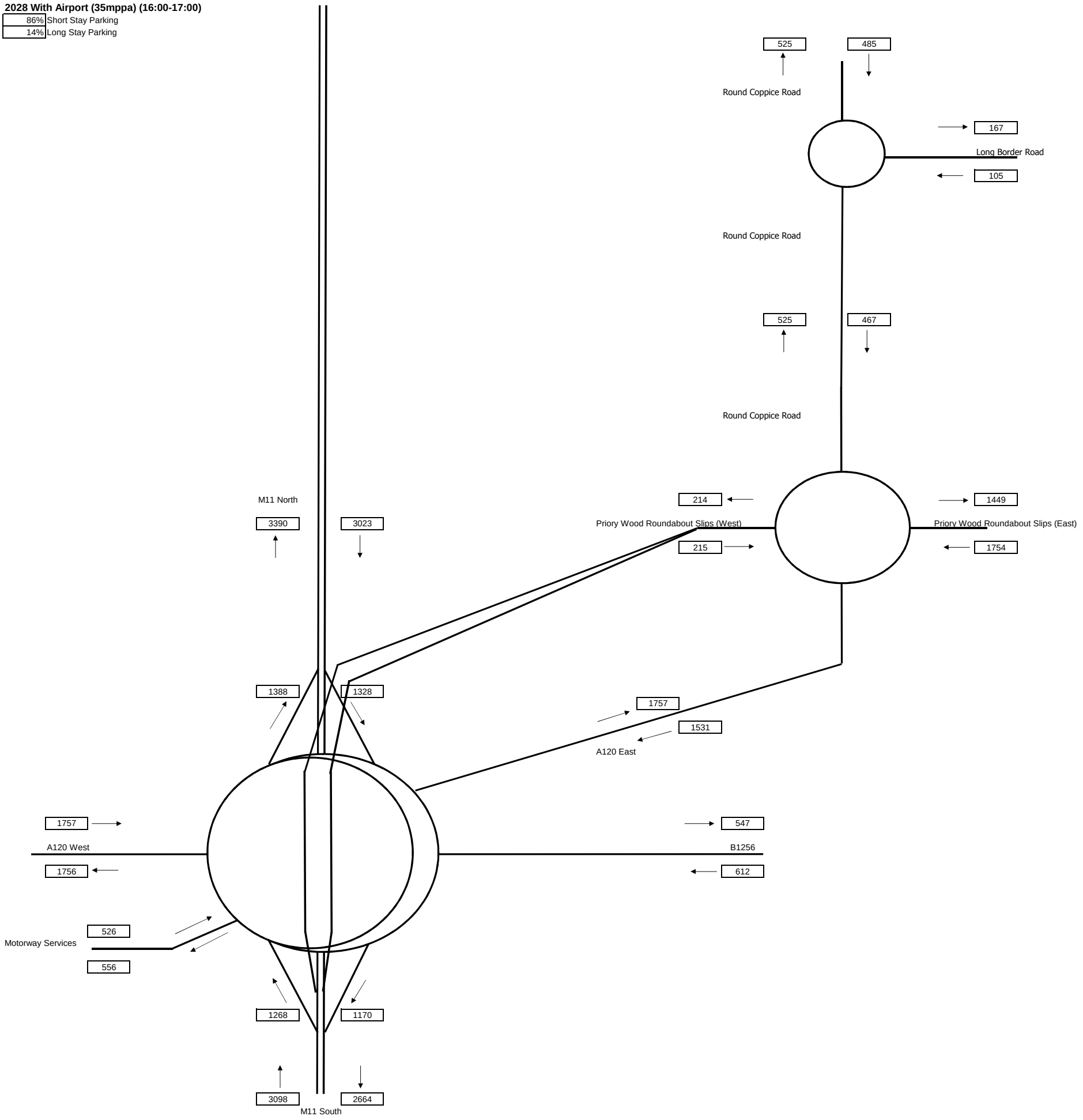
2016 to 2029

Other	86%
Long Stay	14%



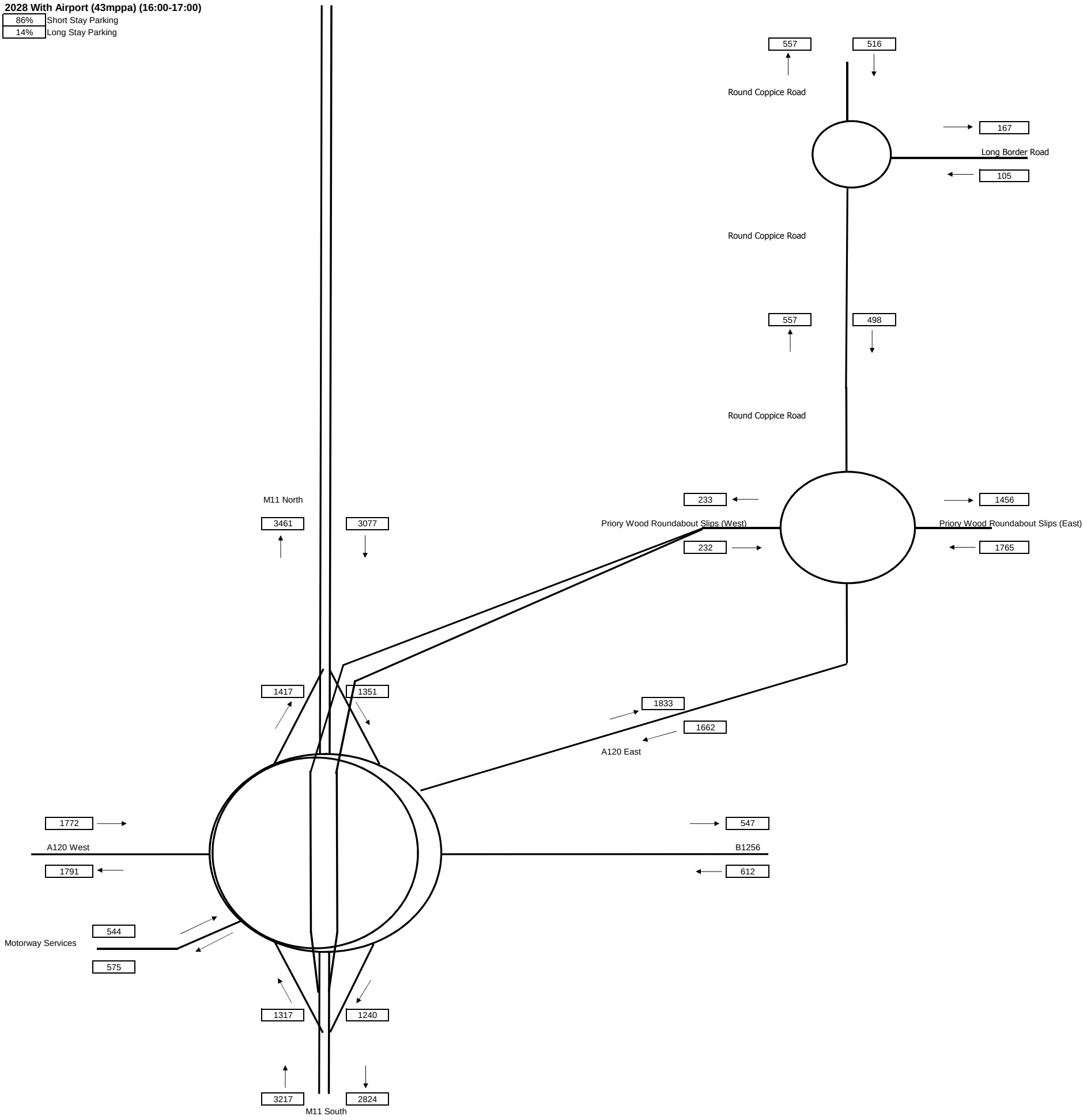
2028 With Airport (35mppa) (16:00-17:00)

86%	Short Stay Parking
14%	Long Stay Parking



2028 With Airport (43mppa) (16:00-17:00)

86%	Short Stay Parking
14%	Long Stay Parking



16:00 - 17:00

Flows To/From each Link at Junction 8 of the M11, Priory Wood roundabout and Round Coppice Road roundabout

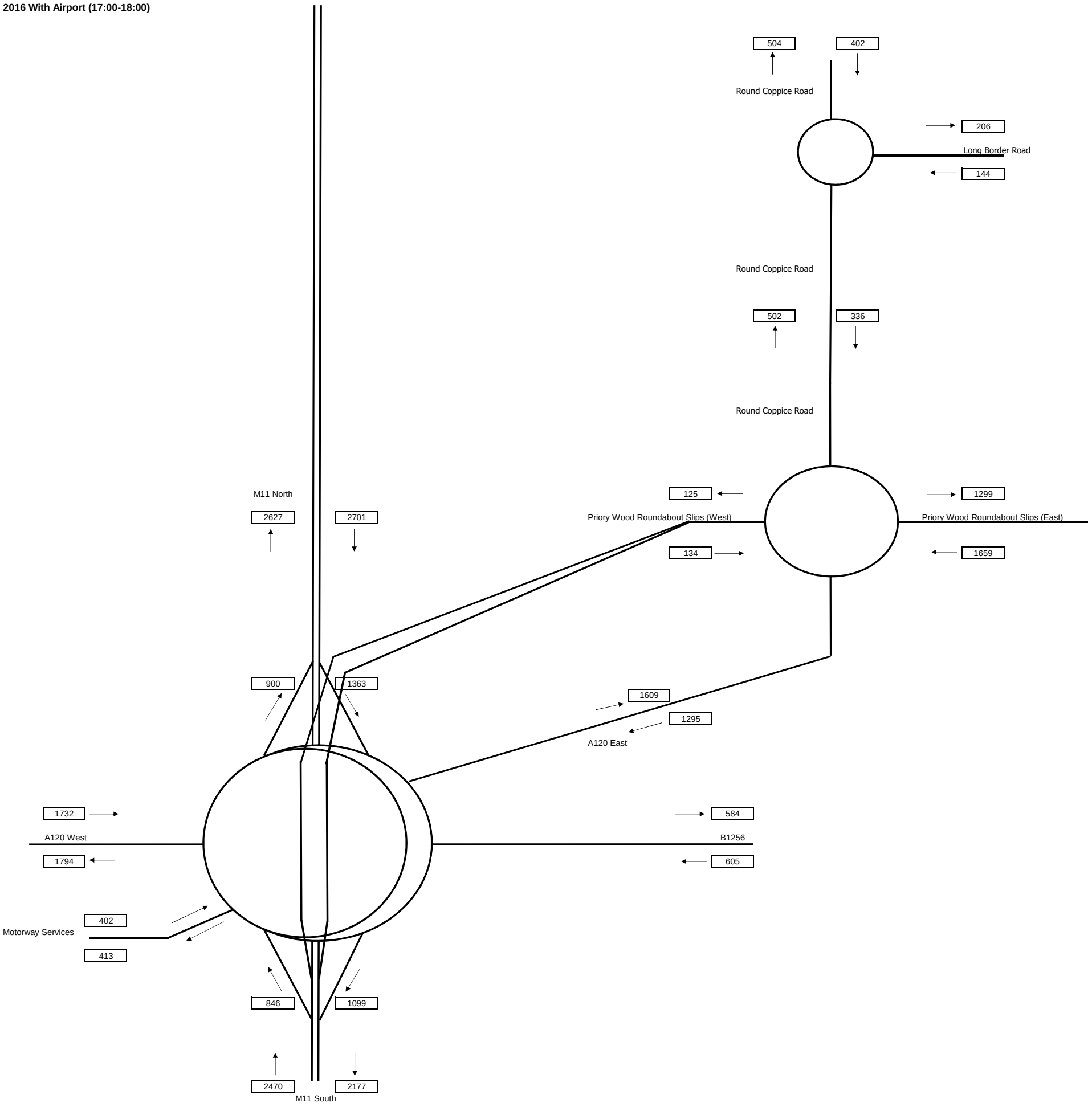
Road Link	Baseline 2016				2028 35mppa 'Do Minimum'				2028 43mppa 'Development Case'			
	Without Airport		With Airport		Without Airport		With Airport		Without Airport		With Airport	
	To	From	To	From	To	From	To	From	To	From	To	From
Motorway Services (MSA)	382	362	467	442	450	426	556	526	450	426	575	544
A120 West of M11 Junction 8	1273	1373	1420	1446	1582	1669	1756	1757	1582	1669	1791	1772
M11 North of Junction 8	2550	2295	2807	2539	3031	2721	3390	3023	3031	2721	3461	3077
A120 East of M11 Junction 8	1072	642	1420	1169	1330	864	1757	1531	1330	864	1833	1662
B1256	464	519	464	519	547	612	547	612	547	612	547	612
M11 South of Junction 8	1534	2026	2102	2565	1874	2461	2664	3098	1874	2461	2824	3217
Priory Wood (West)	42	43	109	116	117	125	214	215	117	125	233	232
Priory Wood (East)	1124	1386	1129	1443	1417	1691	1449	1754	1417	1691	1456	1765
Round Coppice Road (South)	128	39	276	146	349	313	525	467	349	313	557	498
Long Border Road	141	89	141	89	167	105	167	105	167	105	167	105
Round Coppice Road (North)	128	55	276	162	349	332	525	485	349	332	557	516

Percentage Traffic Growth on Road Links at Key Junctions

Road Link	Percentage Impact (With Airport)	
	2016 - 2028 (35mppa)	2028 (35) - 2028 (43)
Motorway Services (MSA)	19%	3%
A120 West of M11 Junction 8	23%	1%
M11 North of Junction 8	20%	2%
A120 East of M11 Junction 8	27%	6%
B1256	18%	0%
M11 South of Junction 8	23%	5%
Priory Wood (West)	91%	8%
Priory Wood (East)	25%	1%
Round Coppice Road (South)	135%	6%
Long Border Road	18%	0%
Round Coppice Road (North)	131%	6%

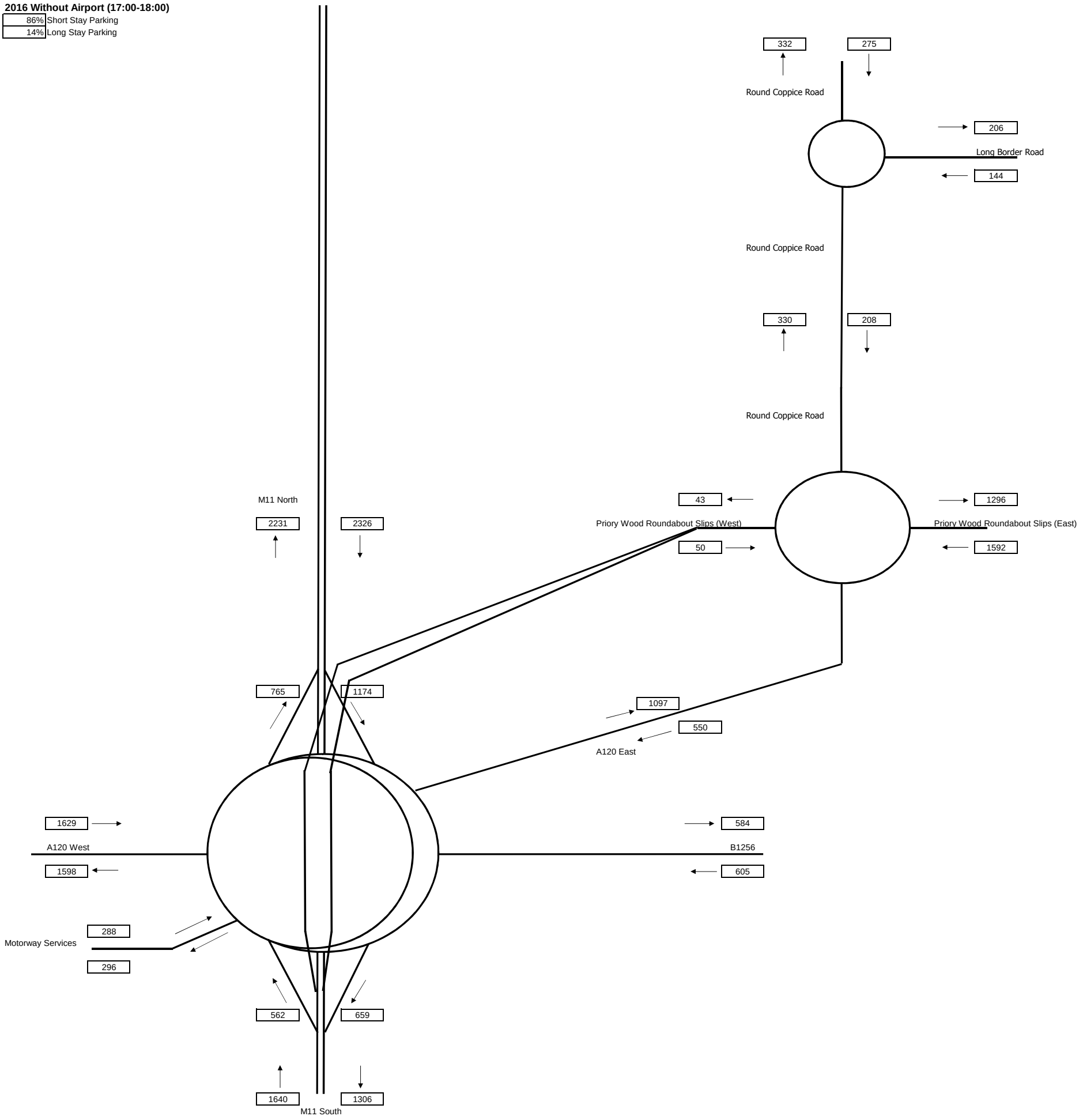
14) M11 J8, Priory Wood and Round Coppice Road Junction Analysis and Results (17:00-18:00)

2016 With Airport (17:00-18:00)



2016 Without Airport (17:00-18:00)

86%	Short Stay Parking
14%	Long Stay Parking



2028 Without Airport (17:00-18:00)

TEMPRO:

1.1785

2016 to 2023

Long Stay 15%

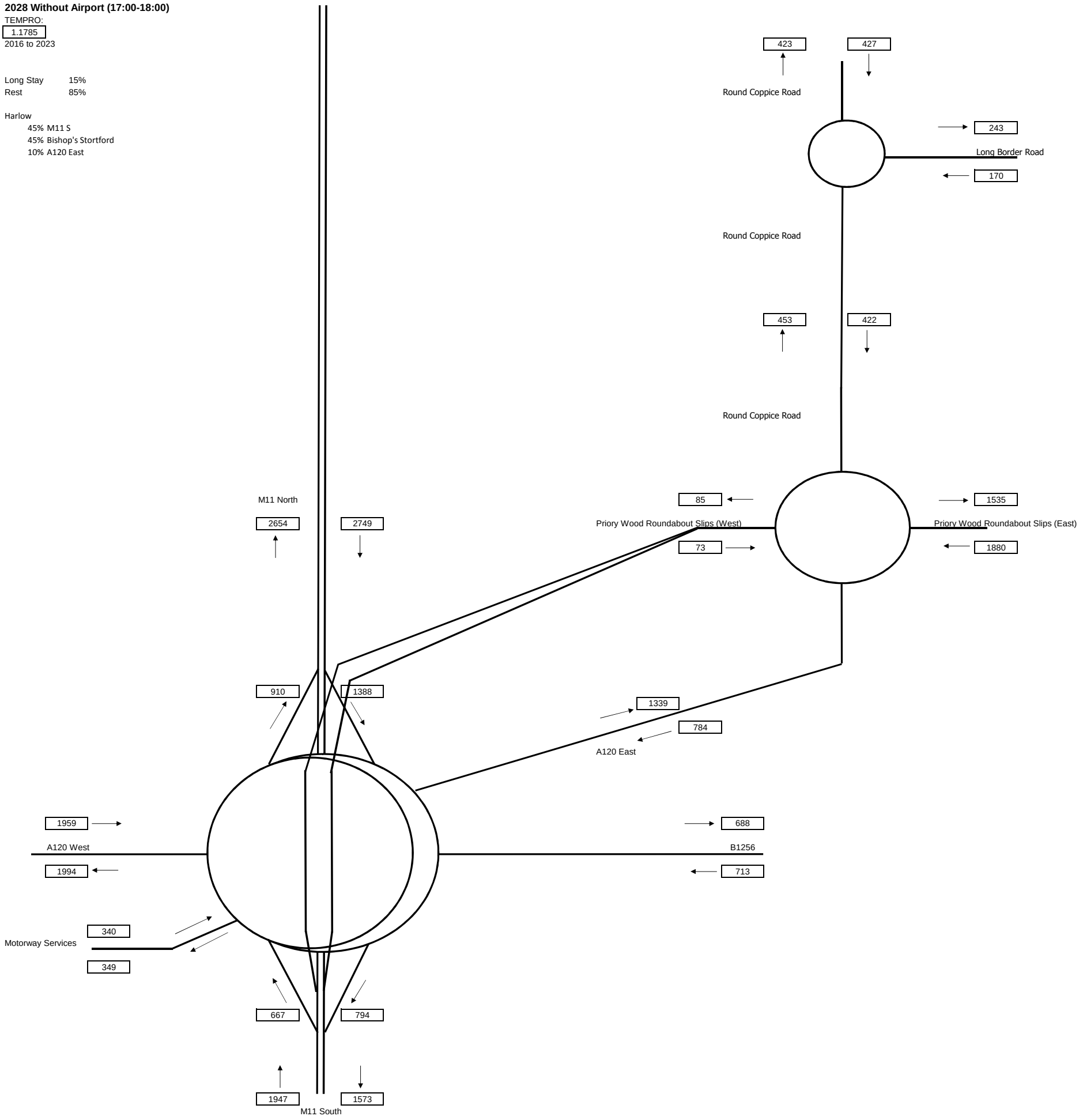
Rest 85%

Harlow

45% M11 S

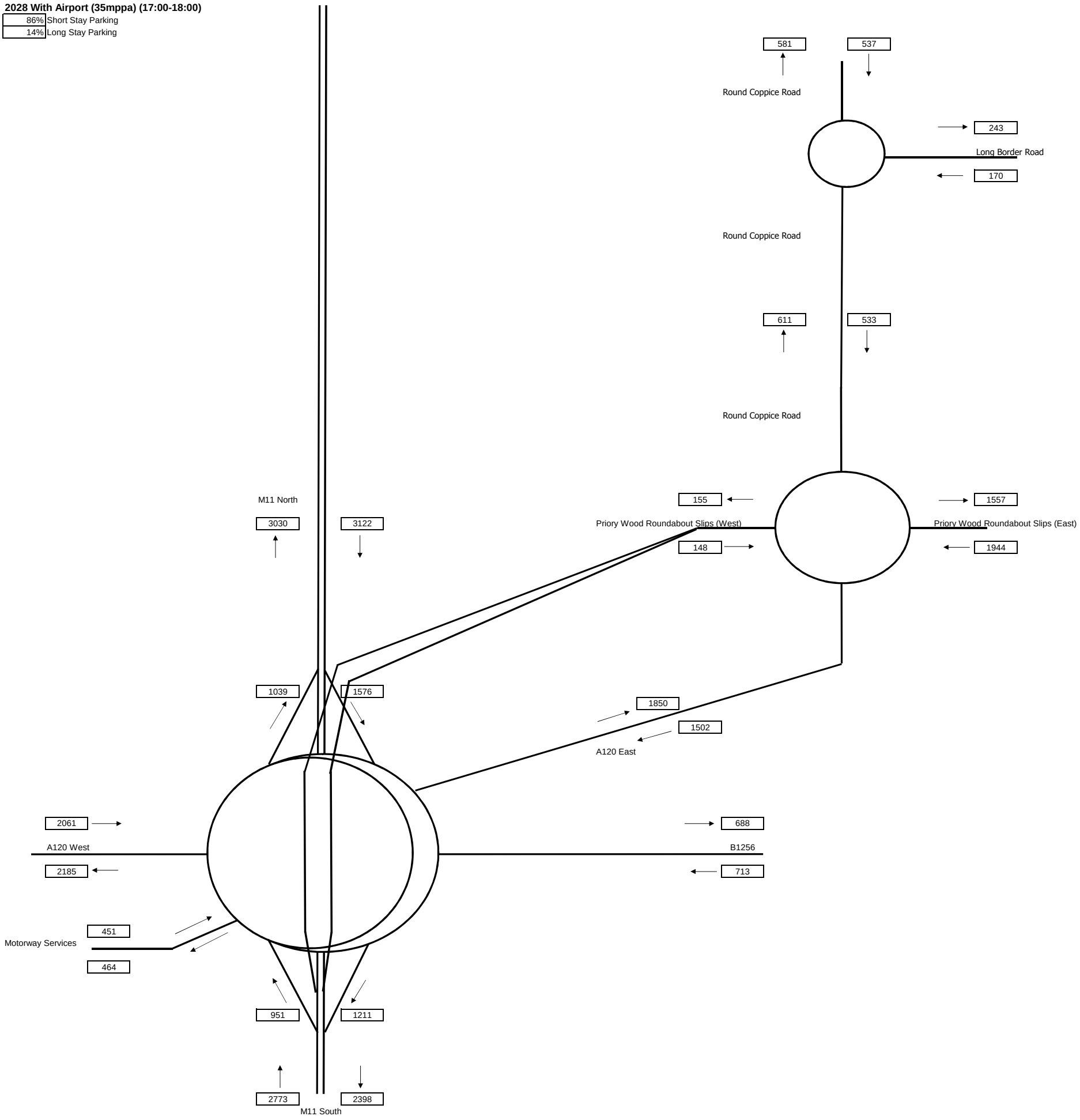
45% Bishop's Stortford

10% A120 East



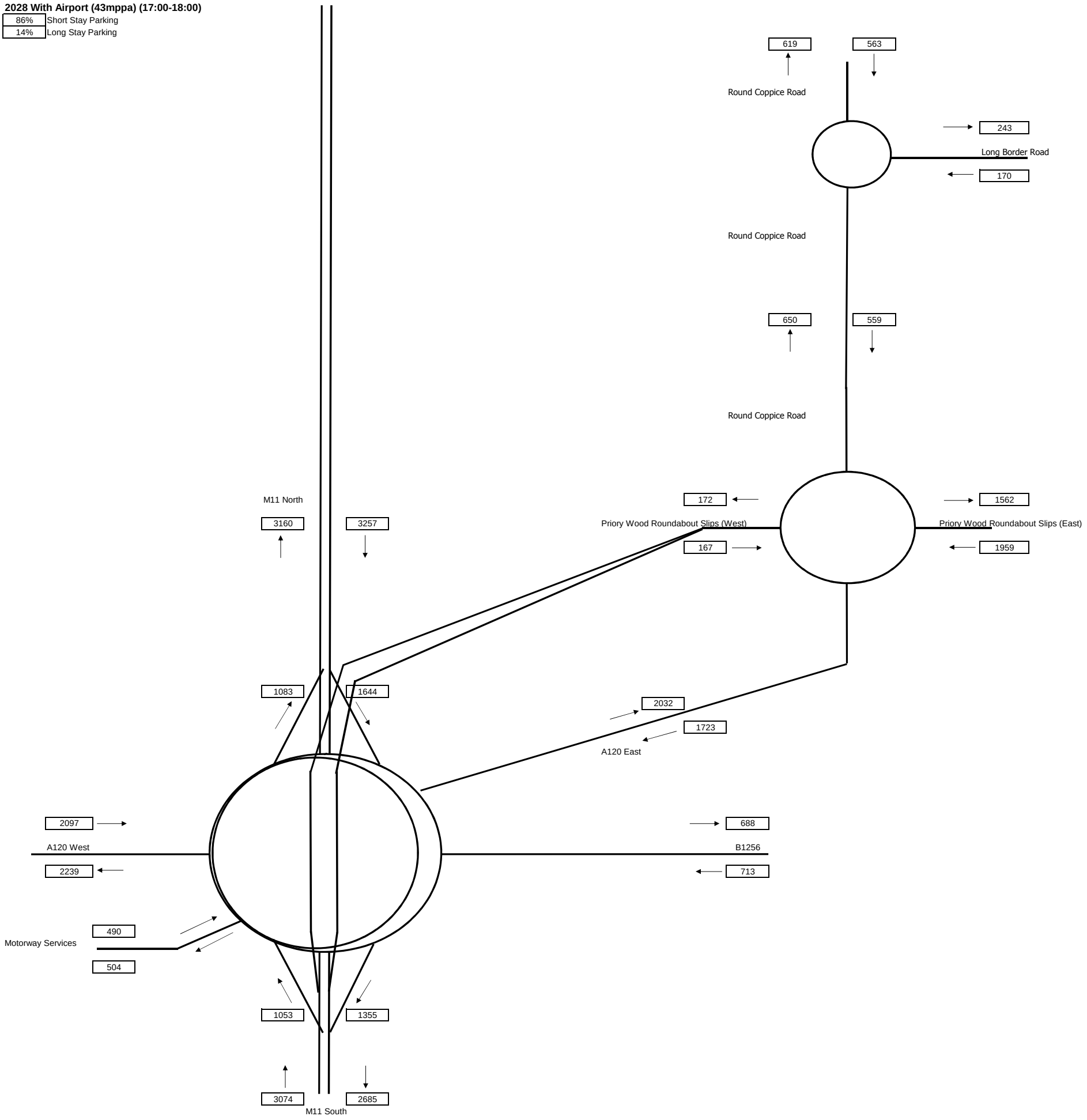
2028 With Airport (35mppa) (17:00-18:00)

86%	Short Stay Parking
14%	Long Stay Parking



2028 With Airport (43mppa) (17:00-18:00)

86%	Short Stay Parking
14%	Long Stay Parking



17:00 - 18:00

Flows To/From each Link at Junction 8 of the M11, Priory Wood roundabout and Round Coppice Road roundabout

Road Link	Baseline 2016				2028 35mppa 'Do Minimum'				2028 43mppa 'Development Case'			
	Without Airport		With Airport		Without Airport		With Airport		Without Airport		With Airport	
	To	From	To	From	To	From	To	From	To	From	To	From
Motorway Services (MSA)	296	288	413	402	349	340	464	451	349	340	504	490
A120 West of M11 Junction 8	1598	1629	1794	1732	1994	1959	2185	2061	1994	1959	2239	2097
M11 North of Junction 8	2231	2326	2627	2701	2654	2749	3030	3122	2654	2749	3160	3257
A120 East of M11 Junction 8	1097	550	1609	1295	1339	784	1850	1502	1339	784	2032	1723
B1256	584	605	584	605	688	713	688	713	688	713	688	713
M11 South of Junction 8	1306	1640	2177	2470	1573	1947	2398	2773	1573	1947	2685	3074
Priory Wood (West)	43	50	125	134	85	73	155	148	85	73	172	167
Priory Wood (East)	1296	1592	1299	1659	1535	1880	1557	1944	1535	1880	1562	1959
Round Coppice Road (South)	330	208	502	336	453	422	611	533	453	422	650	559
Long Border Road	206	144	206	144	243	170	243	170	243	170	243	170
Round Coppice Road (North)	332	275	504	402	423	427	581	537	423	427	619	563

Percentage Traffic Growth on Road Links at Key Junctions

Road Link	Percentage Impact (With Airport)	
	2016 - 2028 (35mppa)	2028 (35) - 2028 (43)
Motorway Services (MSA)	12%	9%
A120 West of M11 Junction 8	20%	2%
M11 North of Junction 8	15%	4%
A120 East of M11 Junction 8	15%	12%
B1256	18%	0%
M11 South of Junction 8	11%	11%
Priory Wood (West)	17%	12%
Priory Wood (East)	18%	1%
Round Coppice Road (South)	37%	6%
Long Border Road	18%	0%
Round Coppice Road (North)	23%	6%

15) M11 J8, Priory Wood and Round Coppice Road Junction Analysis and Results (2033 Sensitivity Test)

2033 Without Airport (07:00-08:00)

TEMPRO:

1.2222

2016 to 2033

Long Stay 15%

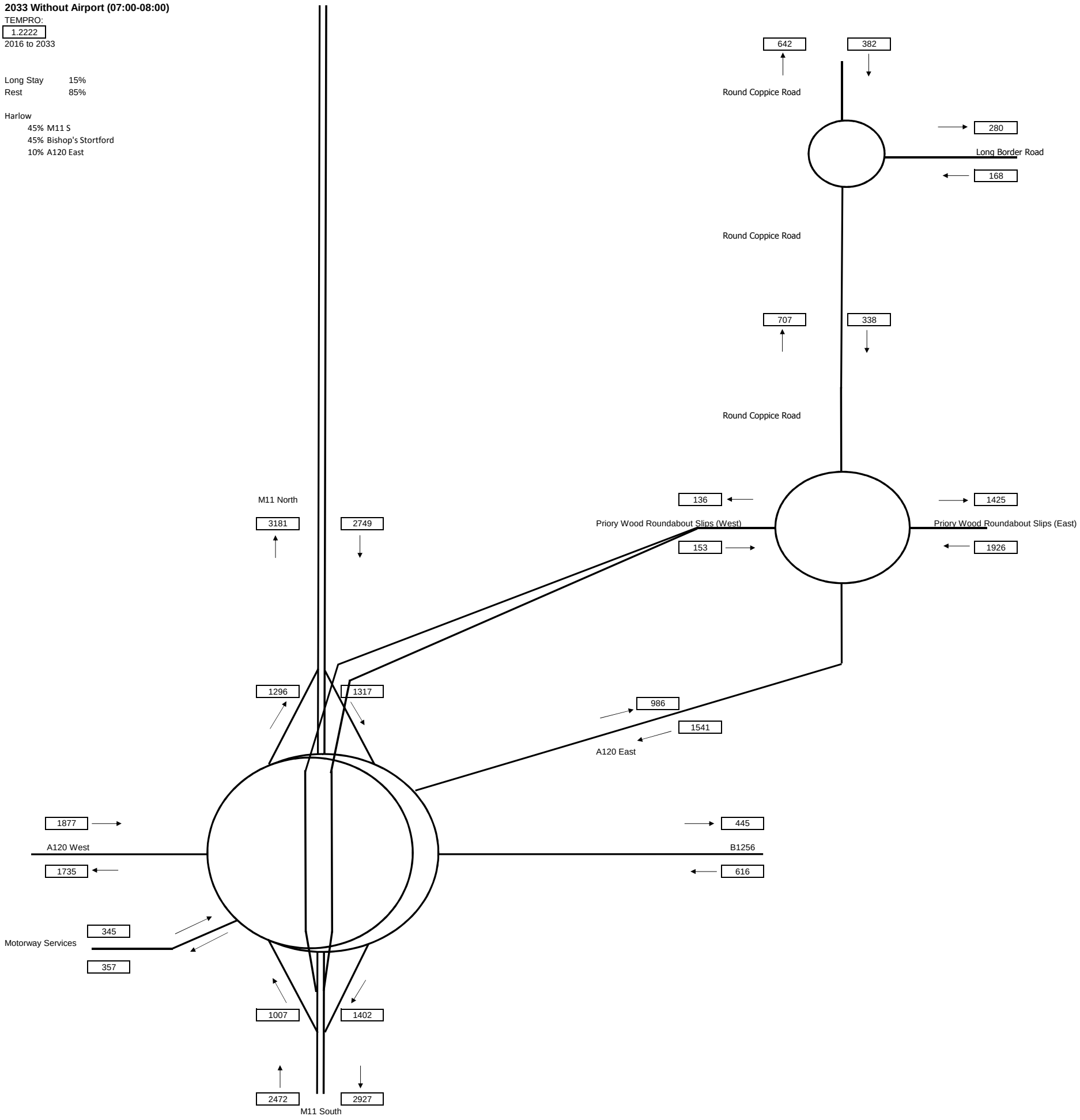
Rest 85%

Harlow

45% M11 S

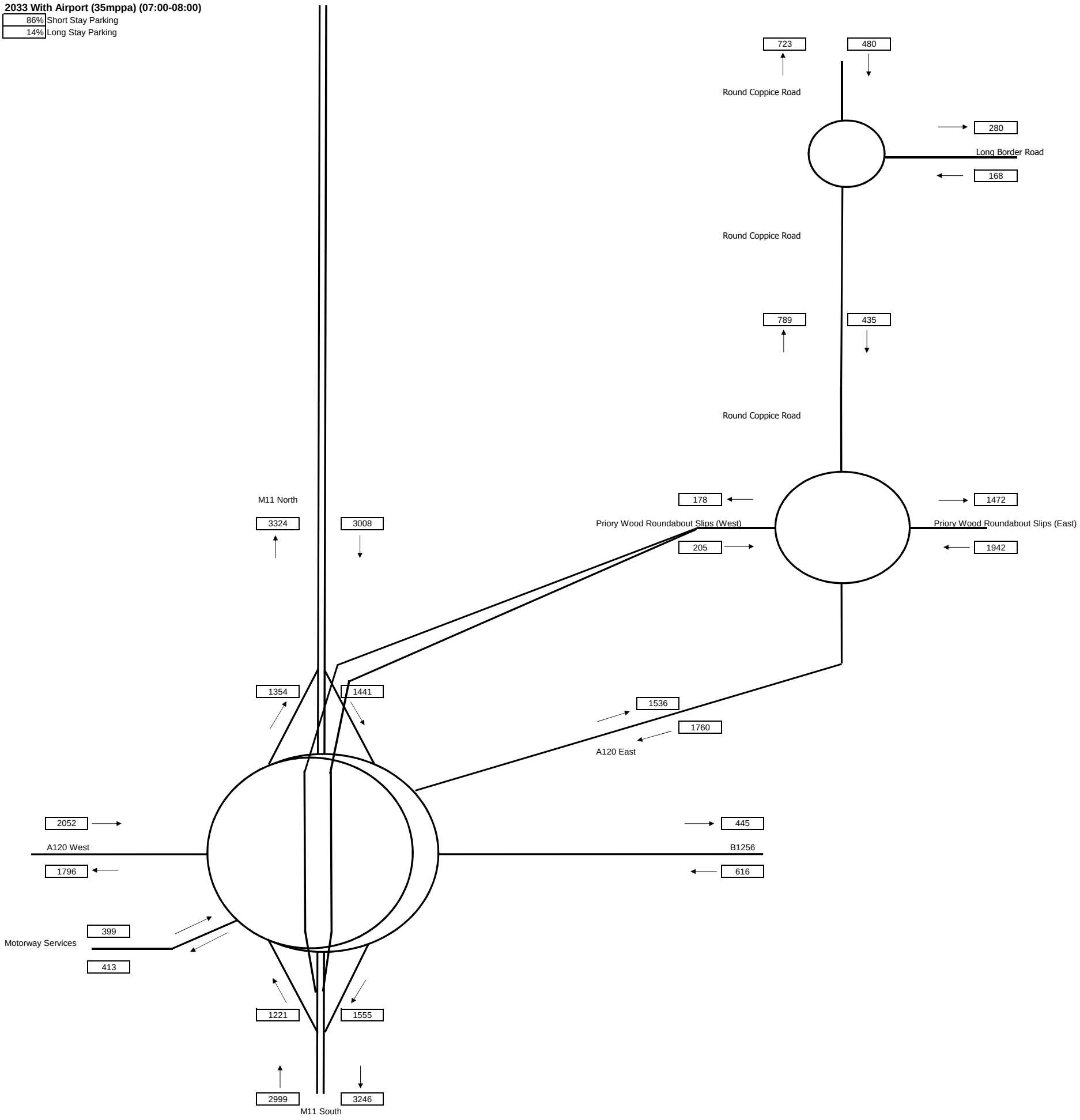
45% Bishop's Stortford

10% A120 East



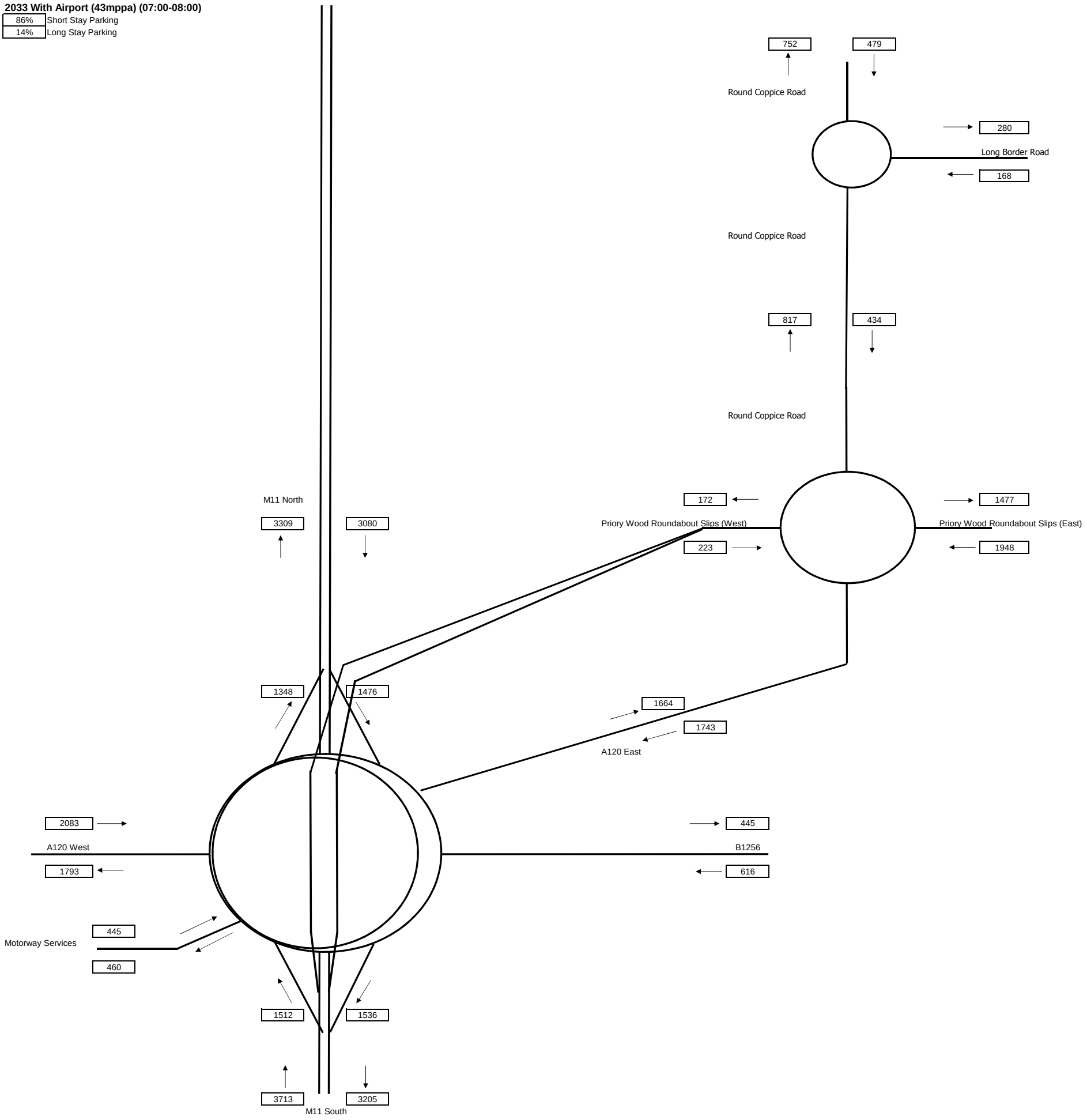
2033 With Airport (35mppa) (07:00-08:00)

86%	Short Stay Parking
14%	Long Stay Parking



2033 With Airport (43mppa) (07:00-08:00)

86%	Short Stay Parking
14%	Long Stay Parking



07:00 - 08:00

Flows To/From each Link at Junction 8 of the M11, Priory Wood roundabout and Round Coppice Road roundabout

Road Link	2033					
	Without Airport		With Airport (35)		With Airport (43)	
	To	From	To	From	To	From
Motorway Services (MSA)	357	345	413	399	460	445
A120 West of M11 Junction 8	1735	1877	1796	2052	1793	2083
M11 North of Junction 8	3181	2749	3324	3008	3309	3080
A120 East of M11 Junction 8	986	1541	1536	1760	1664	1743
B1256	445	616	445	616	445	616
M11 South of Junction 8	2927	2472	3246	2999	3205	3713
Priory Wood (West)	136	153	178	205	172	223
Priory Wood (East)	1425	1926	1472	1942	1477	1948
Round Coppice Road (South)	707	338	789	435	817	434
Long Border Road	280	168	280	168	280	168
Round Coppice Road (North)	642	382	723	480	752	479

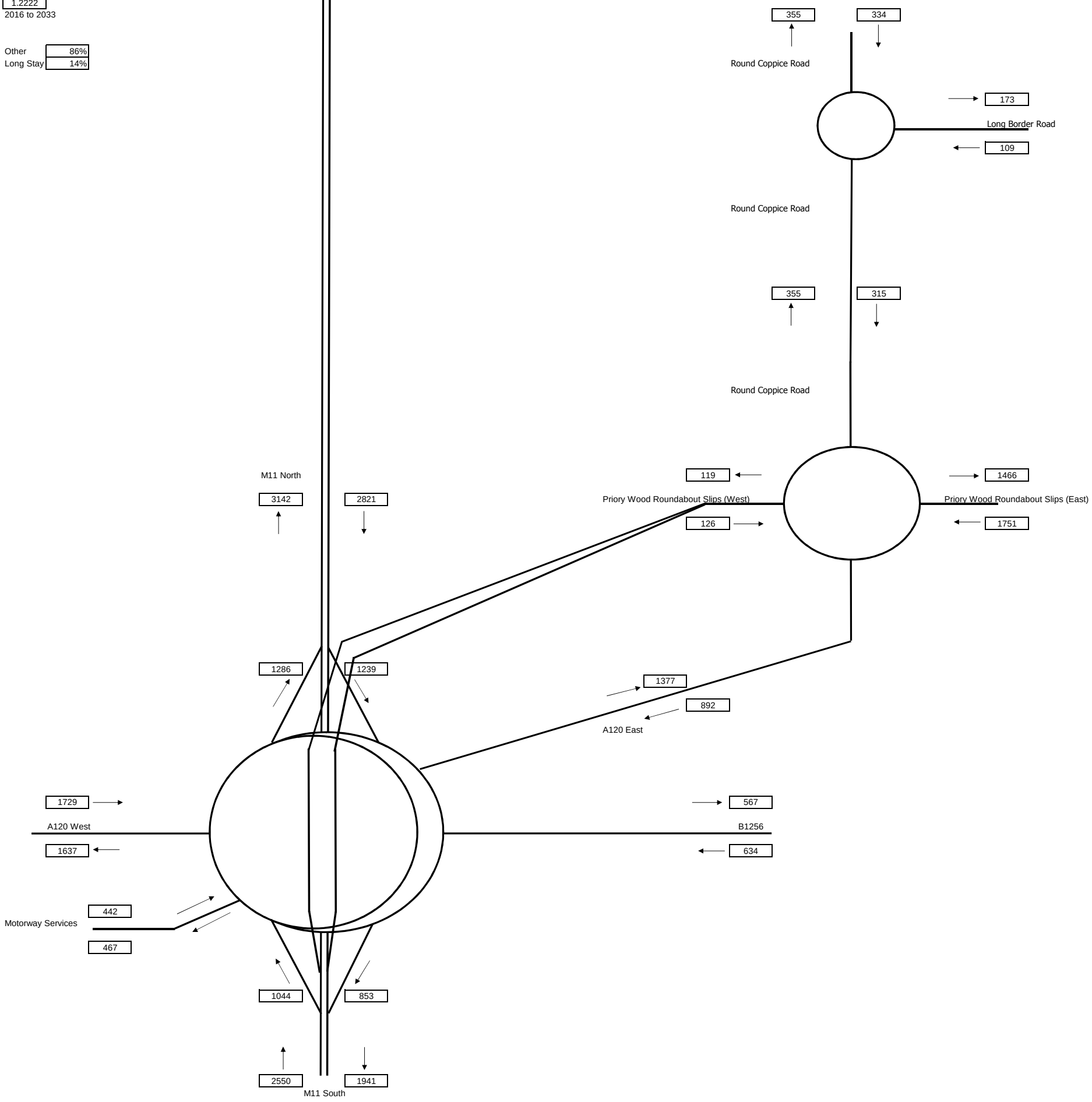
2033 Without Airport (16:00-17:00)

TEMPRO:

1.2222

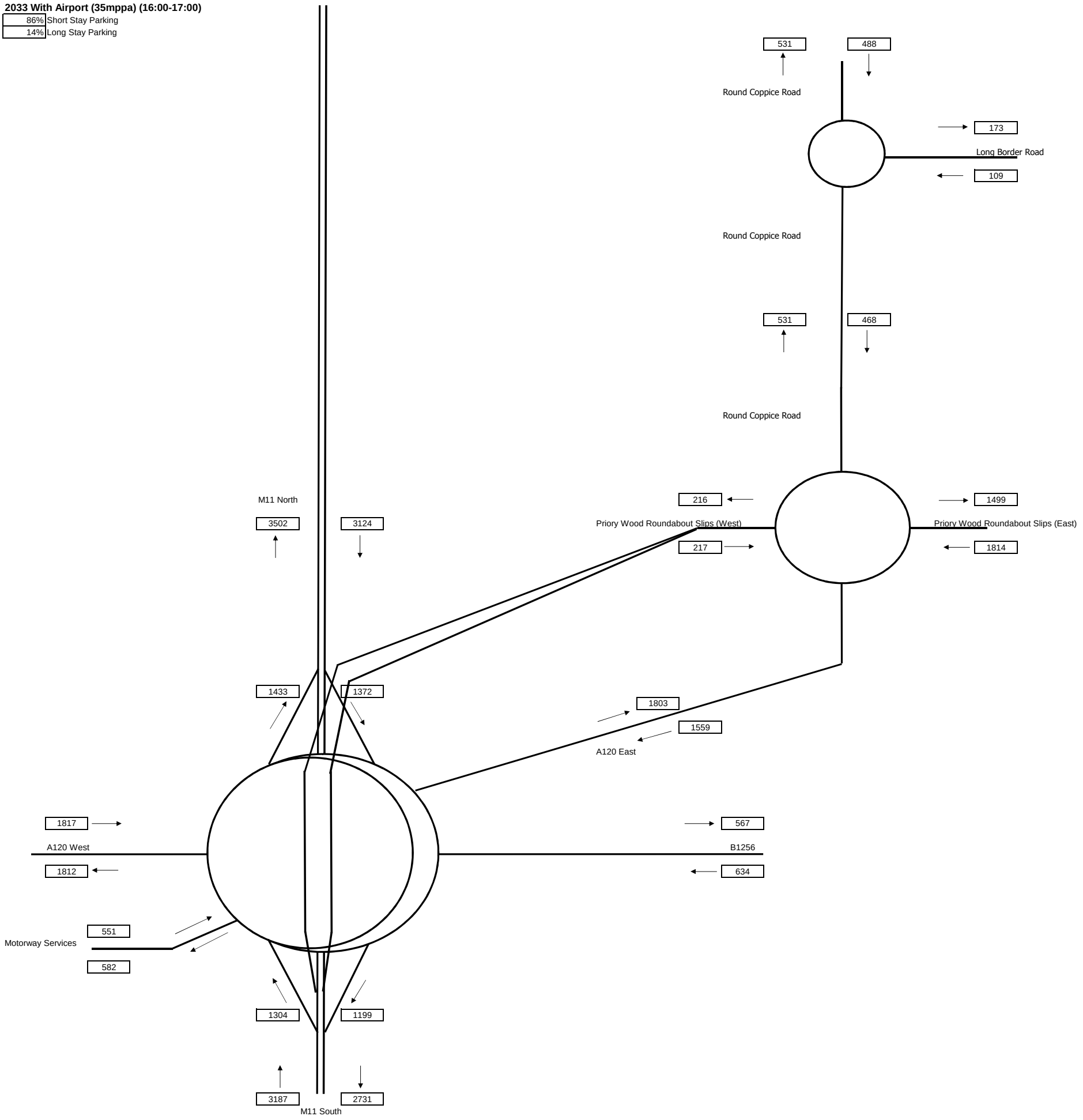
2016 to 2033

Other	86%
Long Stay	14%



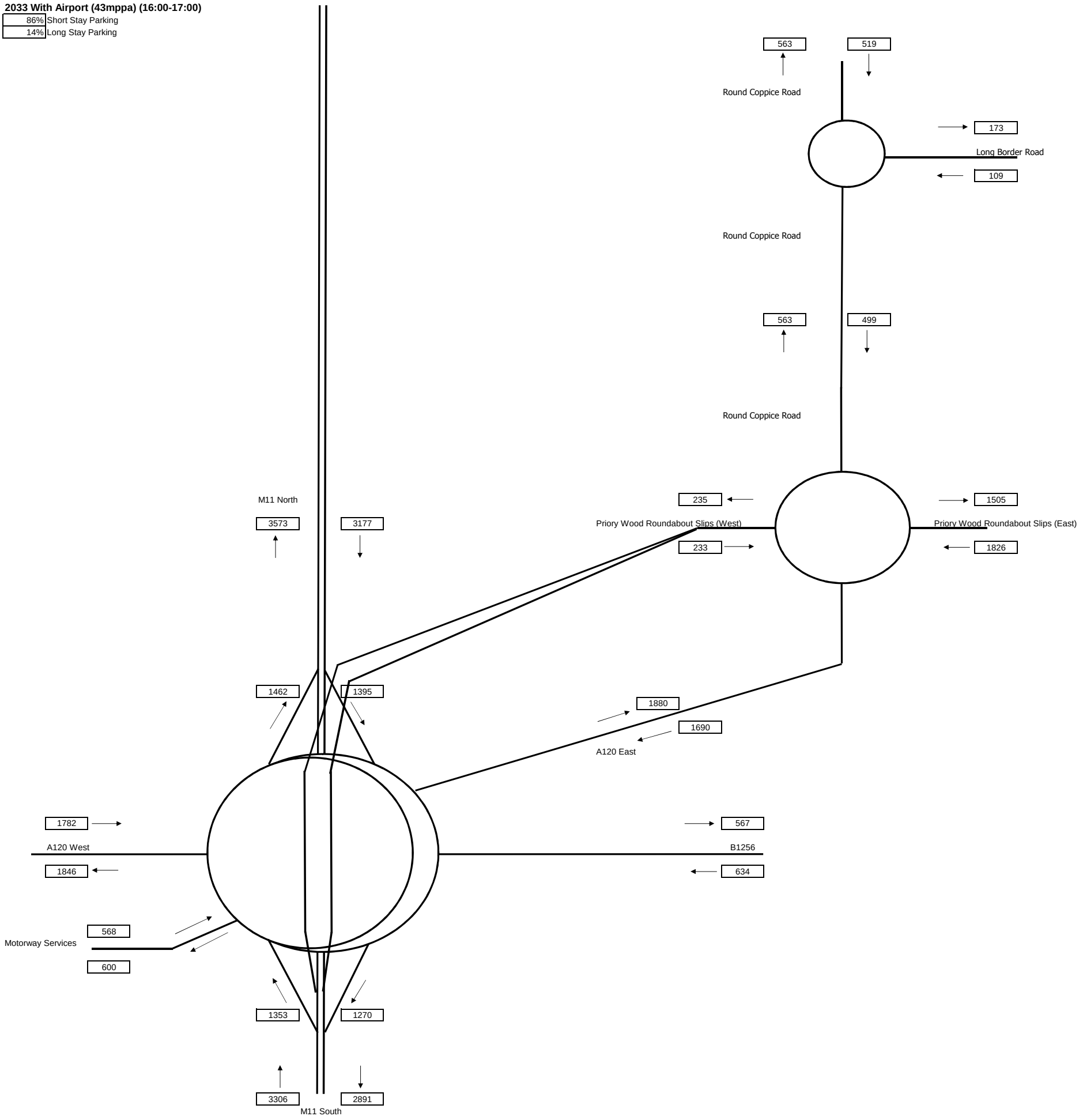
2033 With Airport (35mppa) (16:00-17:00)

86%	Short Stay Parking
14%	Long Stay Parking



2033 With Airport (43mppa) (16:00-17:00)

86%	Short Stay Parking
14%	Long Stay Parking



16:00 - 17:00

Flows To/From each Link at Junction 8 of the M11, Priory Wood roundabout and Round Coppice Road roundabout

Road Link	2033					
	Without Airport		With Airport (35)		With Airport (43)	
	To	From	To	From	To	From
Motorway Services (MSA)	467	0	582	551	600	568
A120 West of M11 Junction 8	1637	1729	1812	1817	1846	1782
M11 North of Junction 8	3142	2821	3502	3124	3573	3177
A120 East of M11 Junction 8	1377	892	1803	1559	1880	1690
B1256	567	634	567	634	567	634
M11 South of Junction 8	1941	2550	2731	3187	2891	3306
Priory Wood (West)	119	126	216	217	235	233
Priory Wood (East)	1466	1751	1499	1814	1505	1826
Round Coppice Road (South)	355	315	531	468	563	499
Long Border Road	173	109	173	109	173	109
Round Coppice Road (North)	355	334	531	488	563	519

2033 Without Airport (17:00-18:00)

TEMPRO:

1.2222

2016 to 2033

Long Stay 15%

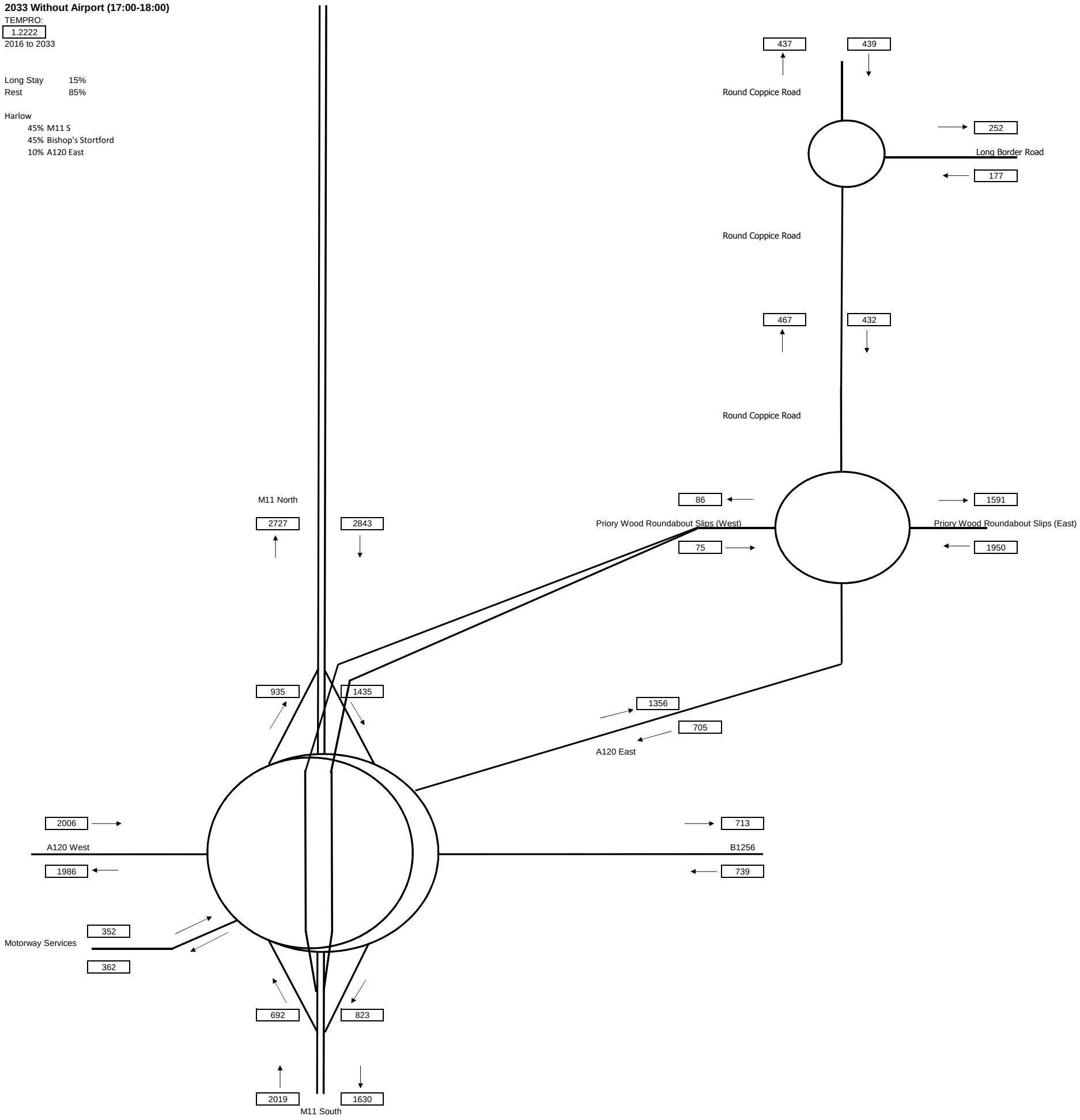
Rest 85%

Harlow

45% M11 S

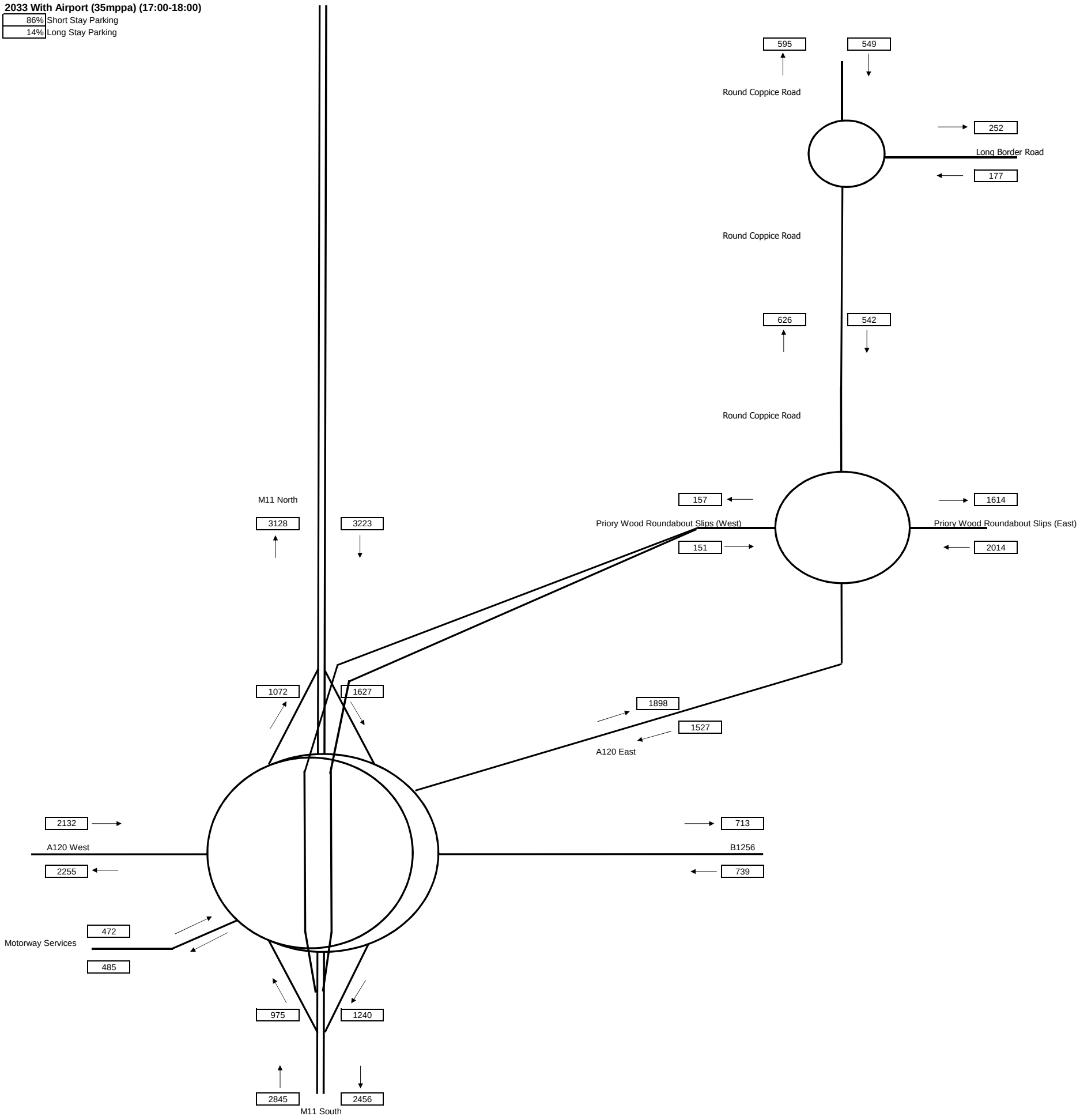
45% Bishop's Stortford

10% A120 East



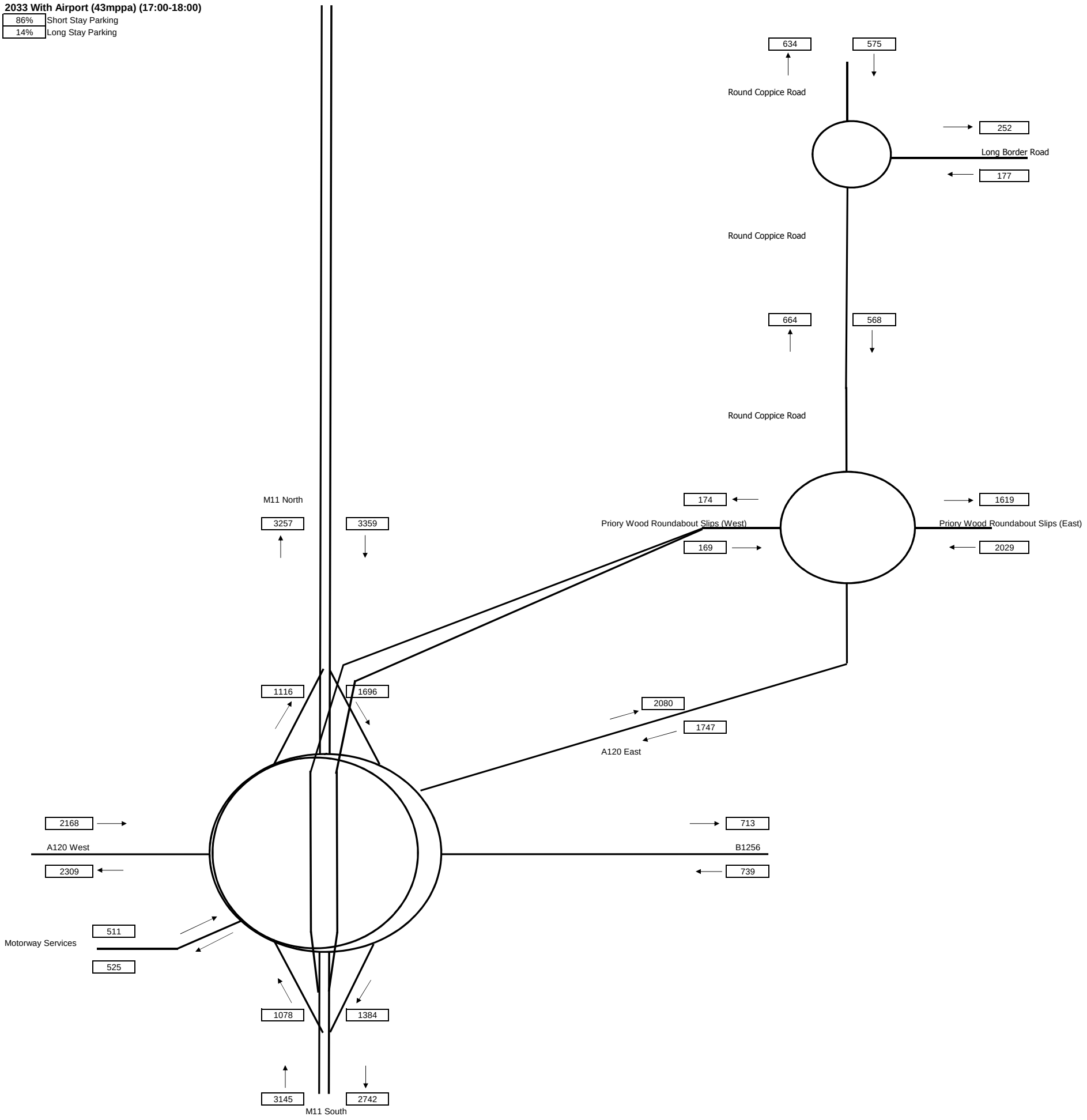
2033 With Airport (35mppa) (17:00-18:00)

86%	Short Stay Parking
14%	Long Stay Parking



2033 With Airport (43mppa) (17:00-18:00)

86%	Short Stay Parking
14%	Long Stay Parking



17:00 - 18:00

Flows To/From each Link at Junction 8 of the M11, Priory Wood roundabout and Round Coppice Road roundabout

Road Link	2033					
	Without Airport		With Airport (35)		With Airport (43)	
	To	From	To	From	To	From
Motorway Services (MSA)	362	352	485	472	525	511
A120 West of M11 Junction 8	1986	2006	2255	2132	2309	2168
M11 North of Junction 8	2727	2843	3128	3223	3257	3359
A120 East of M11 Junction 8	1356	705	1898	1527	2080	1747
B1256	713	739	713	739	713	739
M11 South of Junction 8	1630	2019	2456	2845	2742	3145
Priory Wood (West)	86	75	157	151	174	169
Priory Wood (East)	1591	1950	1614	2014	1619	2029
Round Coppice Road (South)	467	432	626	542	664	568
Long Border Road	252	177	252	177	252	177
Round Coppice Road (North)	437	439	595	549	634	575

H Epping Forest SSSI Sensitivity Test Technical Note

steer davies gleave

Technical Note

To	Natural England
Cc	Stansted Airport Limited, RPS
From	Steer Davies Gleave
Date	15 December 2017
Project	Stansted 35+ Project

Project No. 23003401

Epping Forest SSSI – Impact of Stansted 35+ Project

Introduction

1. Steer Davies Gleave (SDG) was commissioned by Stansted Airport Limited (STAL) to provide surface access transport consultancy advice in support of the planning application to increase the allowable passenger throughput at Stansted Airport from 35 million passengers per annum (mppa) to 43mppa (hereby referred to as the 'Stansted Airport 35+ Project').

2. An Environmental Statement (ES) scoping report was produced for the proposed planning application and issued to a number of stakeholders in July 2017. Natural England (NE) was amongst the stakeholders approached for comment. NE is the UK government's statutory advisor for the natural environment, who "*help to protect England's nature and landscapes for people to enjoy and for the services they provide*".

3. In response to the ES scoping report, NE set out the following response regarding the Epping Forest SSSI:

   "we advise that your ES submission needs to include a traffic assessment with predictions for traffic levels including key roads near Epping Forest SAC, SSSI. It should be noted that the current baseline levels of road traffic movements are for aircraft passenger levels (and staffing/operational traffic associated with current operations) are below the permitted passenger levels of 35mppa, so predictions need to be provided for road traffic movements that would meet the 35mppa level within indicated growth timetables and to meet 43mppa within the timetables indicated."

4. Epping Forest SSSI comprises 1,728 hectares of land and expands across Epping Forest District, London Borough of Waltham Forest and the London Borough of Redbridge.

5. It was designated as an SSSI in 1953 (Under 1949 Act) and 1980 (Under 1981 Act). It is one of few remaining large-scale examples of ancient wood-pasture in lowland Britain. The environment has retained "*habitats of high nature conservation value including ancient semi-natural woodland, old grassland plains and scattered wetland*". The semi-natural woodland is particularly extensive, forming one of the largest coherent blocks in the country. Another major feature is the forest plains, which contain a variety of unimproved acid grasslands, uncommon elsewhere in Essex and London. Epping Forest SSSI also supports "*a nationally outstanding assemblage of invertebrates, major amphibian interest and an exceptional breeding bird community*".

6. It is considered that the key consideration is the impact associated with an increase in vehicular traffic on the M25, Junction 26-27 link associated with a proportion of the additional 8 million passengers.

7. This note sets out the forecast traffic flows expected on this link of the M25 as a result of the passenger cap increase at Stansted Airport, compared to consented conditions, i.e. the vehicle movements associated with 8 million additional passenger movements and associated increased employee vehicle trips, both taking into account predicted modes of travel and average car occupancies.

8. It sets out a comparison of the additional traffic flows to and from Stansted Airport for the Stansted Airport 35+ Project compared to the volume of traffic that would utilise this link of the M25 should the 8 million passengers use alternative airports once Stansted Airport reaches its current 35mppa cap.

Methodology

Passenger and Employee Forecasts

9. To inform the surface access travel patterns at Stansted Airport for the existing and future baselines, the following data sources have been used to derive up-to-date and robust information:

- Civil Aviation Authority (CAA) 2016 Passenger Survey data;
- ICF Passenger Outputs (2016); and
- Employee Travel Survey (2015).

10. These sources were used to derive existing and future baseline passenger and employee modes of travel and places of residence; to inform the distribution of employees and passengers travelling to/from Stansted Airport, and to further delineate the proportion that would travel via the M25 (J26-27).

Mode Share

11. The mode share from the 2016 CAA passenger survey was used to derive the number of vehicle trips for passengers in 2028.

12. The baseline modal split for employees was forecast from the Employee Travel Survey (2015). The future mode share for employees was derived from the existing modal share and the targets outlined in Stansted Airport's 2015 Sustainable Development Plan to reduce the number of single car occupancy trips for employees at Stansted Airport.

13. The proportion of the mode share which comprises vehicle trips for passengers and employees in 2028, is therefore shown in Table 1.

Table 1: Future Vehicular Mode Share – Passengers and Employees

	Proportion of Vehicle Trips (%)*
Passengers	50%
Employees	55%

*This includes all trips made by car, car passenger and taxis. An average occupancy of 1.6 persons was applied to car passenger and taxi trips to derive the number of vehicles. More information is provided in Technical Note 01 and the Transport Assessment.

14. To forecast the quantum of vehicle trips generated by passengers and employees in the 2028 35mppa and 2028 43mppa future year scenarios, the average daily passenger and employee forecasts were applied to the vehicle mode splits presented in Table 1. These results are shown in Table 2.

Table 2: Average Total Daily Vehicle Trips

Scenario	Daily Passenger Vehicle Trips	Daily Employee Vehicle Trips	Total
2028 (35mppa) 'Do Minimum'	36,454	8,163	**44,617**
2028 (43mppa) 'Do Something'	42,815	10,018	**52,833**

Place of Residence

15. In order to determine the proportion of persons (passengers and employees) using the M25 (J26-27) link, a trip origin/destination was assigned to predicted trips. The surface origin of air passengers was derived

from the CAA 2016 passenger survey. The 2015 Employee Survey informed the distribution of employees. The baseline trip distribution was also used to inform the 2028 scenarios, as the catchment for passengers and employees is not anticipated to alter significantly. Table 3 shows the aggregated distributions for passengers and employees.

Table 3: Place of Residence – Passengers and Employees

	Passengers	Employees
East Midlands	6%	1%
West Midlands	2%	0%
Southwest and Wales	3%	0%
East Anglia	13%	7%
Outer South East NW	3%	2%
Outer South East NE	14%	77%
Outer South East SE	3%	1%
Outer South East SW	2%	1%
Inner London	31%	1%
Outer London NE	7%	6%
Outer London NW	9%	3%
Outer London SE	2%	1%
Outer London SW	2%	0%
Rest of UK	2%	0%
Total	**100%**	**100%**

Routing of Passengers and Employees

16. Future additional traffic flows on the M25 (J26-27) link were forecast using the system application 'Network Analyst' in ArcGIS to assign the trip distribution to the highway network based on lowest journey times.

17. The network used was 'Pitney Bowes 2016 Speed profiles – Night (22:00 – 04:00)', which provides a reliable proxy for free flow conditions and suitable for the 24 hour operation at the airport. This was then edited by SDG to account for the A14 improvements and Huntingdon Bypass which will be complete and operational by 2028.The national speed limit was adopted as the link speed for this new route.

18. The network was used to calculate the quickest timed routes from weighted population centres from each residential district to the Airport. The districts were weighted according to population density, which was calculated by deriving the median coordinates for each district, weighted by population at Lower Super Output Area (LSOA) level (2011). A number of employee/passenger vehicles were assigned to each district, based on the relative size (area) of each district, compared with the overall aggregate zone where:

$$\left(\frac{\text{District Population}}{\text{Total zone population}}\right) \times \text{No. of passengers and employees in the overall zone}$$

19. It was then assumed that all passengers and employees within each district took the fastest route to Stansted Airport. Passenger only trips were calculated for the alternative airports tested, as the number of employees affected is not directly comparable. Employee travel characteristics are usually determined by locality.

Results

Travel to Stansted Airport

20. In order to quantify the increase in traffic posed by the passenger cap application for 43mppa, results were produced for:

- 2028 (35mppa) 'Do Minimum' Scenario; and
- 2028 (43mppa) 'Do Something' Scenario.

21. The distribution of passengers and employees to/from Stansted Airport as derived from the existing passenger and employee surveys, is presented in Figure 1.

Figure 1: Passenger and Employee Routing to Stansted Airport

22. Based on the passenger and employee routings shown in Figure 1, the proportion of vehicle trips via the M25 (J26-27) link was derived. Table 4 illustrates the number of vehicles per scenario which are predicted to travel via the M25 (J26-27) link, according to place of residence.

Table 4: Vehicle movements on M25 (J26-27) – Stansted Airport

Aggregate zone	Travel to Stansted Airport on M25 (J26-27)						
	Projected Employees (2028 35mppa)	Projected Employees (2028 43mppa)	Difference in Employees (2028 35mppa vs 43mppa)	Projected Passengers (2028 35mppa)	Projected Passengers (2028 43mppa)	Difference in Passengers (2028 35mppa vs 43mppa)	Total Difference (Employees + Passengers)
East Midlands	1	1	**0**	57	70	**13**	**13**
West Midlands	0	0	**0**	0	0	**0**	**0**
Southwest and Wales	10	12	**2**	768	944	**176**	**178**
East Anglia	0	0	**0**	0	0	**0**	**0**
Outer South East NW	84	103	**19**	1,316	1,618	**302**	**321**
Outer South East NE	1,016	1,246	**231**	1,392	1,711	**319**	**550**
Outer South East SE	0	0	**0**	0	0	**0**	**0**
Outer South East SW	31	38	**7**	606	745	**139**	**146**
Inner London	0	0	**0**	0	0	**0**	**0**
Outer London NE	0	0	**0**	0	0	**0**	**0**
Outer London NW	54	66	**12**	1,188	1,460	**272**	**284**
Outer London SE	0	0	**0**	0	0	**0**	**0**
Outer London SW	0	0	**0**	0	0	**0**	**0**
Rest of UK	0	0	**0**	0	0	**0**	**0**
Total	**1,195**	**1,466**	**271**	**5,327**	**6,549**	**1,222**	**1,493**

23. As Table 4 shows, a combined total of 1,493 daily trips are predicted for the M25 (J26-27) link in the 2028 (43mppa) 'Do Something' scenario compared to the consented 2028 (35mppa) 'Do Minimum' results to Stansted Airport.

24. The largest proportion of passengers using the M25 (J26-27) are located in the 'Outer South East NE' and 'Outer South East NW' zones., with a similar distribution of employees.

25. Figure 2 and Figure 3 visually present the proportion of trips made by passengers and employees respectively to Stansted Airport, between the two scenarios tested.

Figure 2: Proportion of Passengers using the M25 (J26-27) link – Stansted Airport

Figure 3: Proportion of Employees using the M25 (J26-27) link– Stansted Airport

Potential Future Travel – Other Airports

26. The Department for Transport predicts a steady increase in air travel demand and their modelling suggests that demand distributes between airports based on ability to handle demand. Hence, whilst the increased cap application will attract vehicular trips on the M25 (J26-27) link for travel to and from Stansted Airport; without the cap application, the same 8mppa passengers will still be expected to travel, but via other UK Airports where there is suitable capacity.

27. The potential for associated vehicle trips to otherwise use the M25 (J26-27) link for travel to other UK Airports has therefore been analysed to consider the impact of the Stansted 35+ Project, compared to alternative of increased passenger travel to other airports.

28. In the current absence of alternative permitted expansion of other south-east England airports, the airports selected for analysis are as follows:

- Birmingham Airport;
- East Midlands Airport; and
- Bristol Airport.

29. All of the options above have been considered as they display 'spare' operating capacity at 2028, sufficient to accommodate, between them, the displaced 8mppa. In order to provide a simple direct comparison, three scenarios have been tested:

- **Option 1** – All Passengers displaced to Birmingham Airport;
- **Option 2** – All Passengers displaced to East Midlands Airport; and
- **Option 3** – All Passengers displaced to Bristol Airport.

30. In practice, any displacement would be expected to be a mix of the three options. No London-based Airports were tested as all are projected to be operating at capacity by 2028[1].

Option 1 – All Passengers displaced to Birmingham Airport

31. Birmingham Airport is the seventh largest airport in the UK, located in the Metropolitan Borough of Solihull, eight miles south east of Birmingham city centre.

32. In 2016, a total of 11.6 million passengers were recorded to travel through Birmingham Airport (CAA passenger survey, 2016). The maximum throughput of passengers is estimated presently at 27mppa (Towards 2030 (Airport Masterplan to 2030), Birmingham Airport 2007). It is noted that a new masterplan is being prepared by the airport to support further growth to 55mpaa by 2050.

33. The routing of passengers to/from Birmingham Airport, based on the origins presented in Table 3 and the same assignment technique as adopted above, is presented in Figure 4.

[1] It is acknowledged that London Heathrow Airport will not have a third runway by 2028, and forecasts show that 2030 is a realistic timescale for opening.

Figure 4: Passenger Routing to Birmingham Airport

34. The assignment of vehicle trips via the M25 (J26-27) link was derived based on the passenger routings shown in Figure 4. Table 5 illustrates the number of vehicles per scenario which are predicted to travel across the M25 (J26-27) link, according to place of residence.

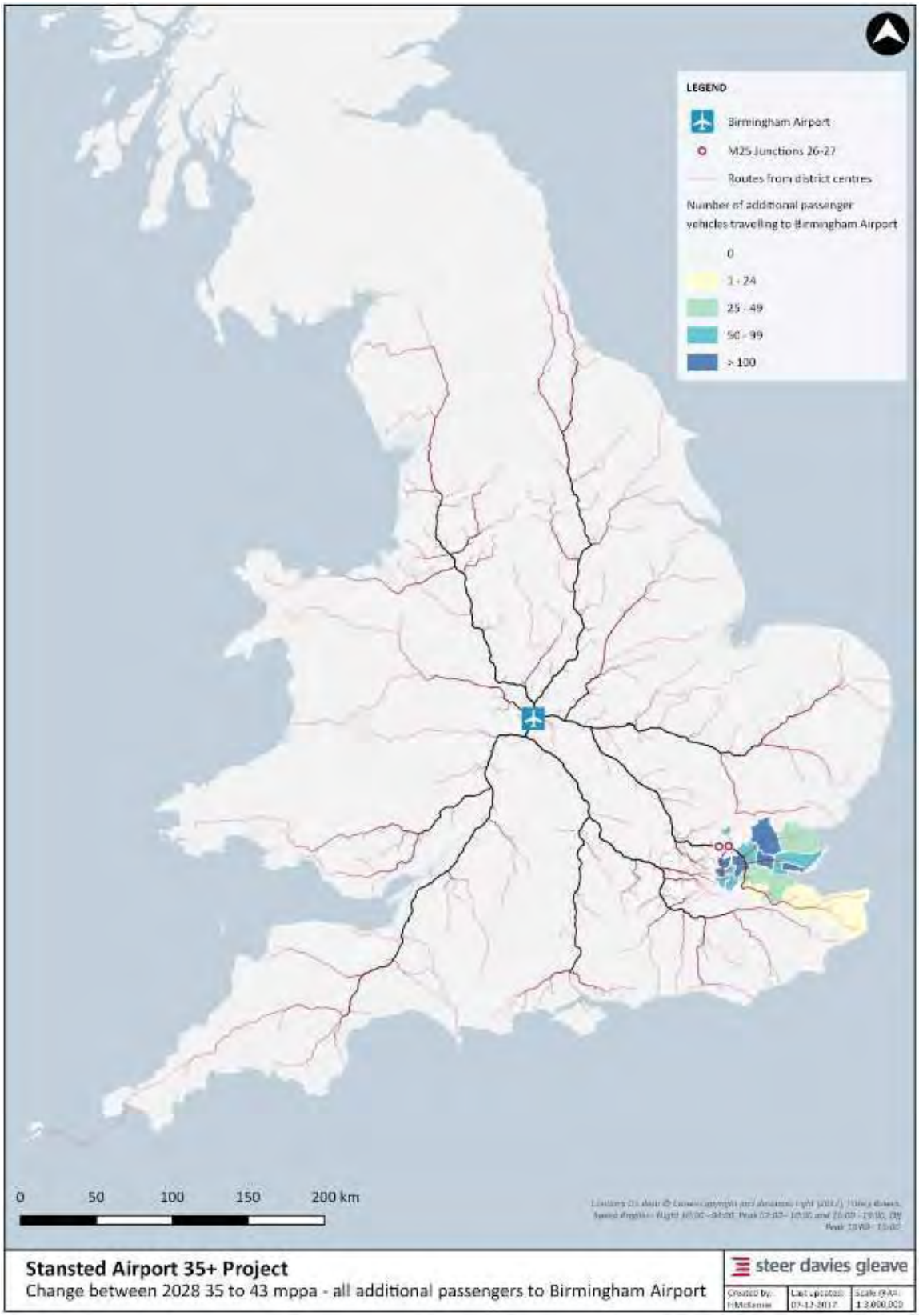
Table 5: Vehicle movements on M25 (J26-27) – Birmingham Airport

Aggregate Zone	Total additional Employee and Passenger trips to Stansted Airport 2028 43 (8mppa)	Displacement of additional Passenger trips to Birmingham Airport 2028-43 (8mppa)	Difference in M25 (J26-27) trips (+/-)
Rest of UK	0	0	0
East Midlands	13	0	-13
West Midlands	0	0	0
Southwest and Wales	179	0	-179
East Anglia	0	0	0
Outer South East NW	321	0	-321
Outer South East NE	550	684	+134
Outer South East SE	0	184	+184
Outer South East SW	146	0	-146
Inner London	0	74	+74
Outer London NE	0	516	+516
Outer London NW	285	0	-285
Outer London SE	0	52	+52
Outer London SW	0	0	0
Total	**1,493**	**1,508**	**+15**

35. As Table 5 shows, a total of 1,508 passenger related vehicle trips would use the M25 (J26-27) link to travel to Birmingham Airport in the absence of the 35+ Project at Stansted Airport. This is 15 more vehicle trips than the traffic increase forecast for this link associated with travel to and from Stansted Airport with the 35+ Project including Passengers and employees.

36. Figure 5 visually present the origin/destinations of the displaced passengers respectively to Birmingham Airport.

Figure 5: Proportion of Passengers using the M25 (J26-27) – Birmingham Airport



Option 2 – All Passengers displaced to East Midlands Airport

37. Option 2 sets out the proportion of vehicle trips travelling on the M25 (J26-27) link in the instance that the 8mppa is displaced to East Midlands Airport.

38. East Midlands Airport is located in Leicestershire, within 14 miles of Loughborough, Derby and Nottingham. In 2016, a total of 4.65 million passengers were recorded to travel through East Midlands Airport (CAA passenger survey, 2016). The maximum throughput of passengers is estimated at 10mppa (EMA Sustainable Development Plan, 2015), however, all 8 million trips have been assigned to the airport for this comparison exercise.

39. The routing of passengers to/from East Midlands Airport is presented in Figure 6.

40. Based on the passenger routings shown in Figure 6 and the assignment method previously adopted, the predicted number of passenger related vehicle trips attracted to the M25 (J26-27) link was derived. Table 6 illustrates the number of vehicles per scenario which are predicted to travel on the M25 (J26-27) link, according to place of residence.

Table 6: Vehicle movements on M25 (J26-27) – East Midlands Airport

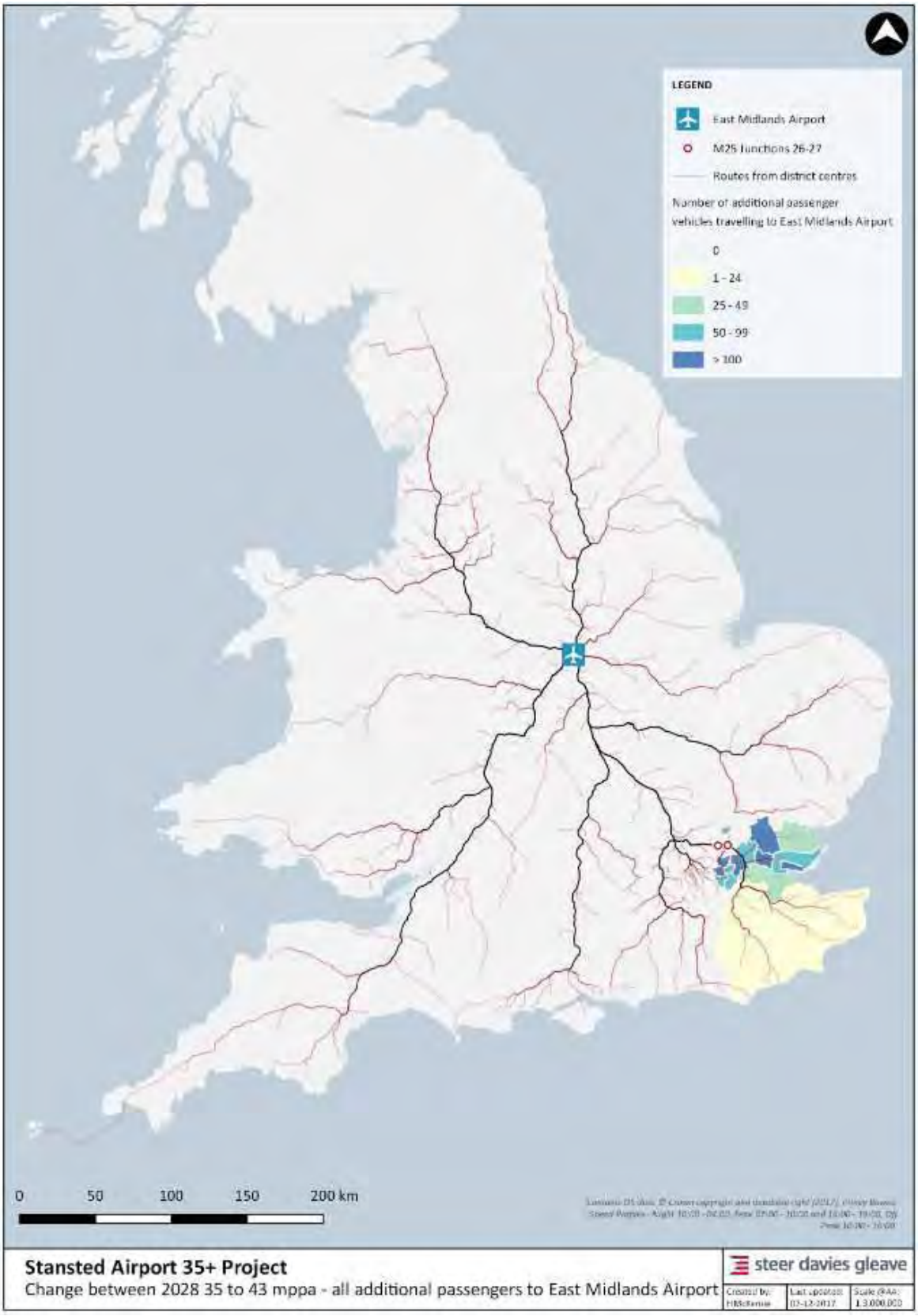
Aggregate Zone	Total additional Employee and Passenger trips to Stansted Airport 2028 43 (8mppa)	Displacement of additional Passenger trips to East Midlands Airport 2028-43 (8mppa)	Difference in M25 (J26-27) trips (+/-)
Rest of UK	0	0	0
East Midlands	13	0	-13
West Midlands	0	0	0
Southwest and Wales	179	0	-179
East Anglia	0	0	0
Outer South East NW	321	0	-321
Outer South East NE	550	684	+134
Outer South East SE	0	352	+352
Outer South East SW	146	0	-146
Inner London	0	74	+74
Outer London NE	0	516	+516
Outer London NW	285	0	-285
Outer London SE	0	52	+52
Outer London SW	0	0	0
Total	**1,493**	**1,677**	**+184**

41. As Table 6 shows, a total of 1,677 passenger related vehicle trips would use the M25 (J26-27) link to travel to and from East Midlands Airport in the absence of the 35+ Project at Stansted Airport. This is 184 vehicle trips compared to the traffic forecast for passengers and employees combined, towards Stansted Airport for the 35+ project.

42. Passengers using the M25 (J26-27) are located in the 'Outer South East NE', 'Outer London NE' and 'Outer South East SE' zones. Figure 7 visually presents the origin/destinations of the displaced passengers to East Midlands Airport.

Figure 6: Passenger Routing to East Midlands Airport

Figure 7: Proportion of Passengers using the M25 (J26-27) – East Midlands Airport



Option 3 – All Passengers displaced to Bristol Airport

43. Bristol Airport is the UK's ninth largest airport, located in Lulsgate Bottom in North Somerset. In 2016, a total of 7.6 million passengers were recorded to travel through Bristol Airport (CAA passenger survey, 2016). The maximum throughput of passengers is estimated at 15mppa by 2030 (Bristol Airport 'Preparing for the Future', 2017).

44. The predicted trip assignment of vehicles for passengers to/from Bristol Airport is presented in Figure 8.

45. Based on the passenger routings shown in Figure 8 and the assignment method previously adopted, the predicted number of vehicle trips attracted to the M25 (J26-27) link was derived. Table 7 illustrates the number of vehicles per scenario which are predicted to travel on the M25 (J26-27) link, according to place of residence.

Table 7: Vehicle movements on M25 (J26-27) – Bristol Airport

Aggregate Zone	Total additional Employee and Passenger trips to Stansted Airport 2028 43 (8mppa)	Displacement of additional Passenger trips to Bristol Airport 2028-43 (8mppa)	Difference in M25 (J26-27) trips (+/-)
Rest of UK	0	0	0
East Midlands	13	0	-13
West Midlands	0	0	0
Southwest and Wales	179	0	-179
East Anglia	0	305	+305
Outer South East NW	321	0	-321
Outer South East NE	550	1,090	+540
Outer South East SE	0	0	0
Outer South East SW	146	0	-146
Inner London	0	0	0
Outer London NE	0	121	+121
Outer London NW	285	0	-285
Outer London SE	0	0	0
Outer London SW	0	0	0
Total	**1,493**	**1,516**	**+23**

46. As Table 7 shows, a total of 1,516 vehicle passenger related trips would use the M25 (J26-27) link to travel to Bristol Airport in the absence of the 35+ Project at Stansted Airport. This is 23 additional vehicle trips compared to the traffic forecast for passengers and employees combined, towards Stansted Airport for the 35+ Project.

47. Passengers using the M25 (J26-27) are located in 'East Anglia', the 'Outer South East NE' and 'Outer London NE' zones. Figure 9 visually presents the origin/destinations of the displaced passengers to Bristol Airport.

Figure 8: Passenger Routing to Bristol Airport

48.

Figure 9: Proportion of Passengers using the M25 (J26-27) – Bristol Airport

Summary and Conclusions

49. Stansted Airport 35+ Project is predicted to attract an additional 1,493 vehicular movements per day on the M25 (J26-27) link as a result of passenger and employee related travel.

50. In the absence of expansion of operations at Stansted, 8 million additional passenger trips will be diverted from Stansted to other UK airports.

51. The London market demand will be constrained from 2022/3 when the available airport capacities become limited in their operating capacities, and would therefore not be able to accommodate the 8mppa passenger demand. However, in accordance with DfT predictions, it is reasonable to anticipate that demand for air travel will remain and that alternative airports will attract these trips.

52. Results from the redistribution analysis for Birmingham Airport, East Midlands Airport and Bristol Airport all indicate between 1% and 12% more vehicular trips will use the M25 (J26-27) link if the Stansted 35+ Project does not go ahead, associated with a proportion of the passenger travel (8mppa). In practice, the alternative passenger trips could be anticipated to be shared amongst these and other smaller airports. This uplift in passengers is in comparison to the combined passenger and employee vehicle trips associated with the Stansted Airport 35+ application. It is considered that any future displaced employee travel to other airports would further increase the traffic growth on the M25 (J26-27) link.

Background Traffic Comparison

53. In all scenarios tested, there is an increase in vehicular traffic across the M25 (J26-27), however to understand the impact of growth compared to background traffic, 2016 existing traffic flow data was derived from the DfT at this point on the M25 as a baseline. 2016 data was used as this is the latest fully dataset provided. TEMPro was used to growth the background traffic for the assessment year: 2028. The background traffic growth is shown in Table 8, for the 1026 and 2028 scenarios, with and without traffic to Stansted Airport. The 2028 (35mppa) 'Do Minimum' scenario has been included as this has received planning consent.

Table 8: Consented and Forecast Background Traffic Growth

Assessment Scenario	Volume of Traffic on M25 (J26-27)
2016 Baseline Traffic	135,453
2016 Background Traffic (No Airport)	131,033
2028 Background Traffic (No Airport)	154,422
2028 35mppa at Stansted Airport (consented)	160,943

54. To understand the impact of the Stansted 35+ Project compared to the background flows presented in Table 8, the forecast additional 8mmpa trips to Stansted Airport and alternative airports: Birmingham, East Midlands and Bristol, were added and compared to the background flows, and a percentage change was calculated per airport to consider the proportional impact. The results are presented in Table 9.

Table 9: Traffic Growth on M25 (J26-67) With/Without Stansted 35+ Project

Assessment Scenario	Volume of Traffic on M25 (J26-27)	% Growth
2028 43mppa at Stansted Airport	162,436	+0.93%
2028 43mppa (8mppa to Birmingham Airport)	162,451	+0.94%
2028 43mppa (8mppa to East Midlands Airport)	162,620	+1.04%
2028 43mppa (8mppa to Bristol Airport)	162,459	+0.94%

55. The results of the analysis indicate that the 35+ Project at Stansted Airport will have the least impact on the total traffic flows for the M25 (J26-27) link of +0.93% growth in vehicular traffic compared to the displacement of passengers to alternative UK Airports which varies between +0.94 and +1.04% growth, if the consented 35mppa cap at Stansted Airport is retained. This additional growth represents passengers only compared to the combined passenger and employee demand at Stansted Airport. Potential future employee travel could further exacerbate the traffic flows on the M25 (J26-27) for other UK airports.

I Peak Hour Junction Turning Movements

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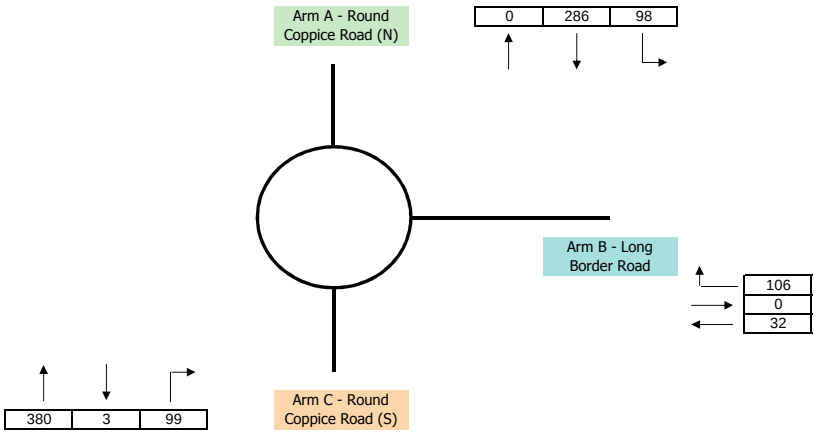
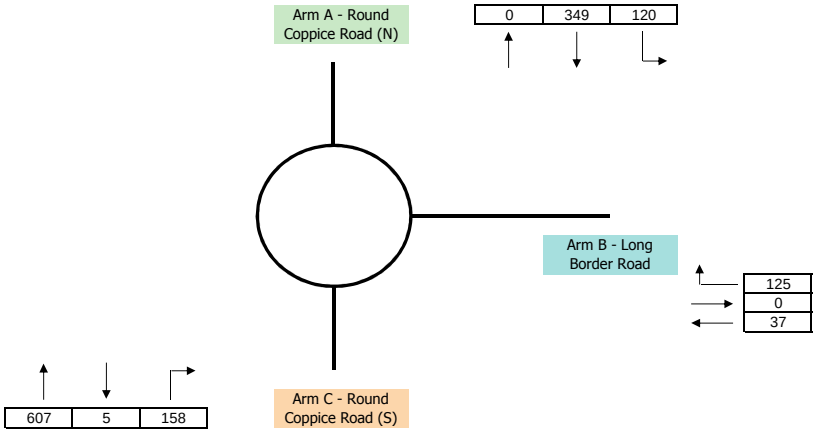
Stansted Airport Limited
Stansted Airport 35+ Project
Peak Hour Turning Movements

AM Peak: 07:00 - 08:00 - Round Coppice Road Roundabout

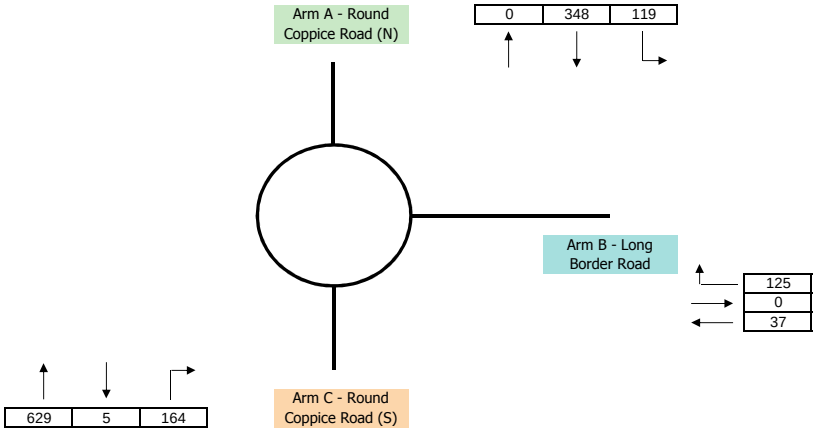
2016 With Airport



2028 With Airport 35 mppa



2028 With Airport 43 mppa



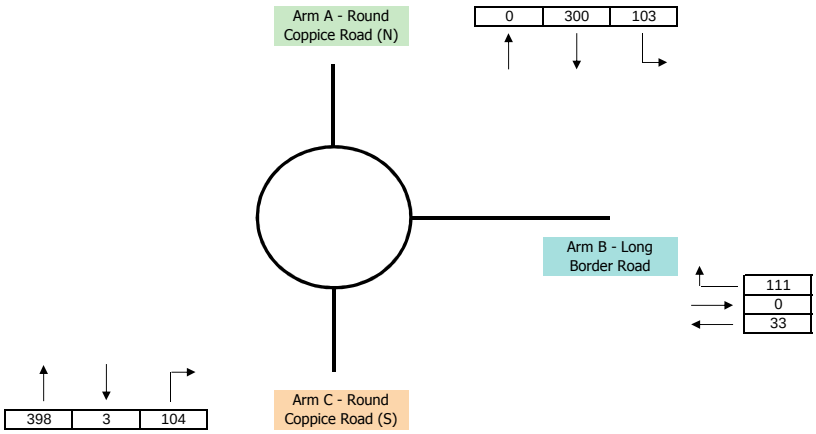
END

steer davies gleave

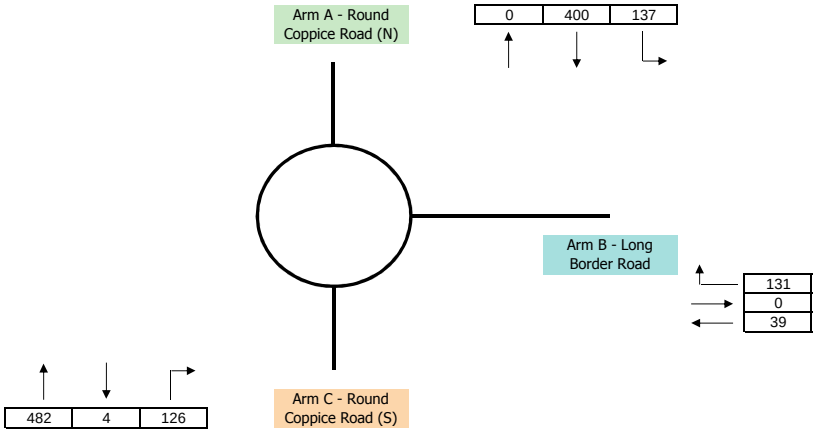
Stansted Airport Limited
Stansted Airport 35+ Project
Peak Hour Turning Movements

PM Peak: 17:00 - 18:00 - Round Coppice Road Roundabout

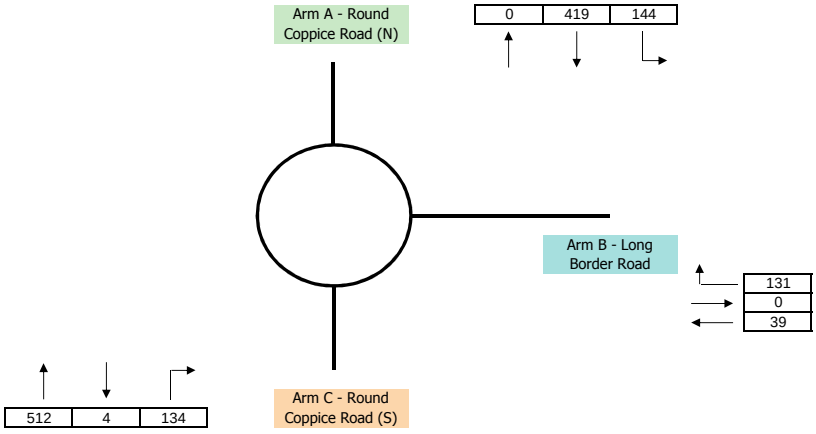
2016 With Airport



2028 With Airport 35 mppa



2028 With Airport 43 mppa

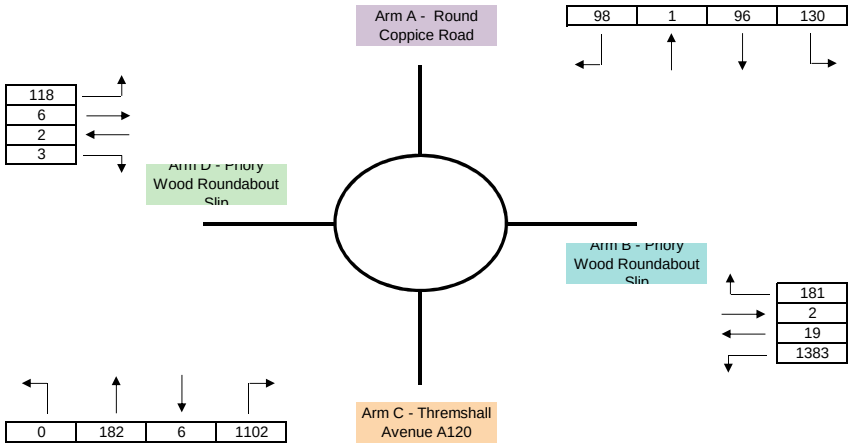


END

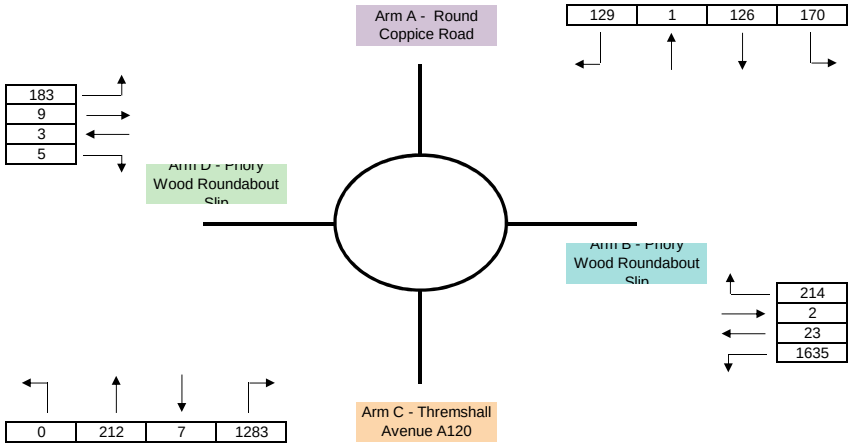
Stansted Airport Limited
Stansted Airport 35+ Project
Peak Hour Turning Movements

AM Peak: 07:00 - 08:00 - Priory Wood Roundabout

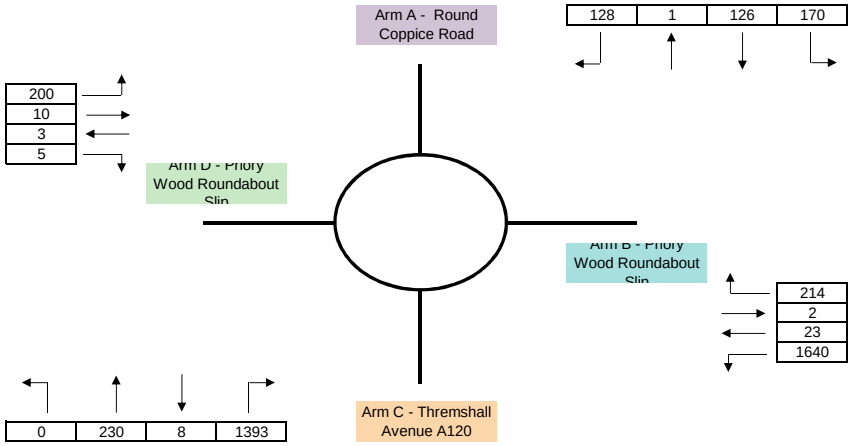
2016 With Airport



2028 With Airport 35 mppa



2028 With Airport 43 mppa

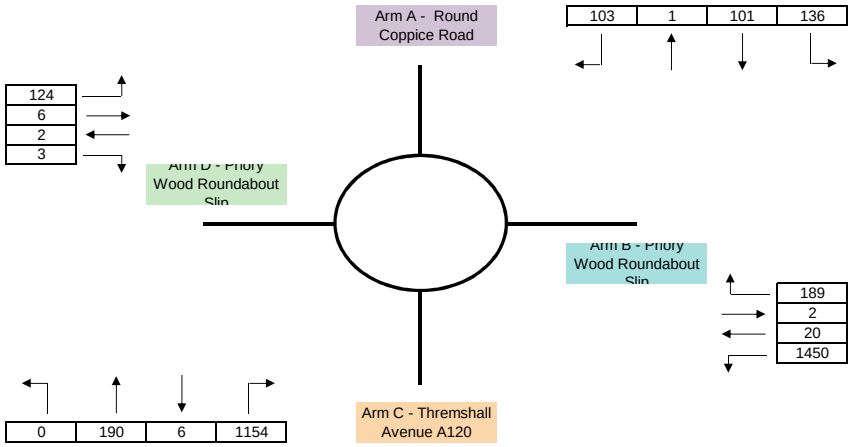


END

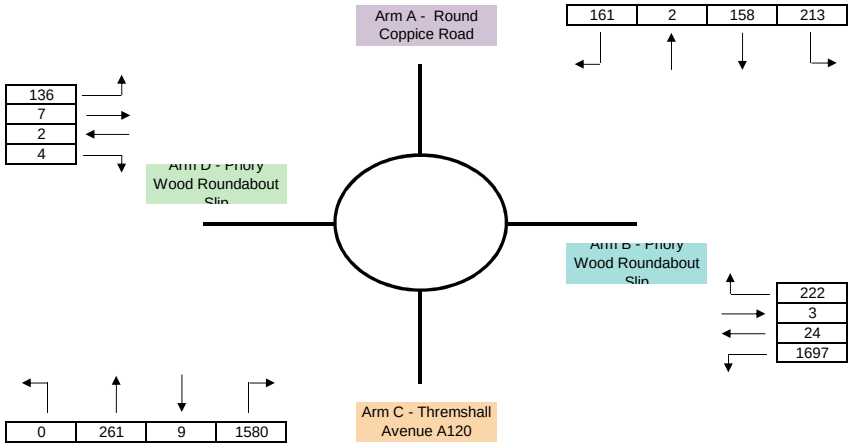
Stansted Airport Limited
Stansted Airport 35+ Project
Peak Hour Turning Movements

PM Peak: 17:00 - 18:00 - Priory Wood Roundabout

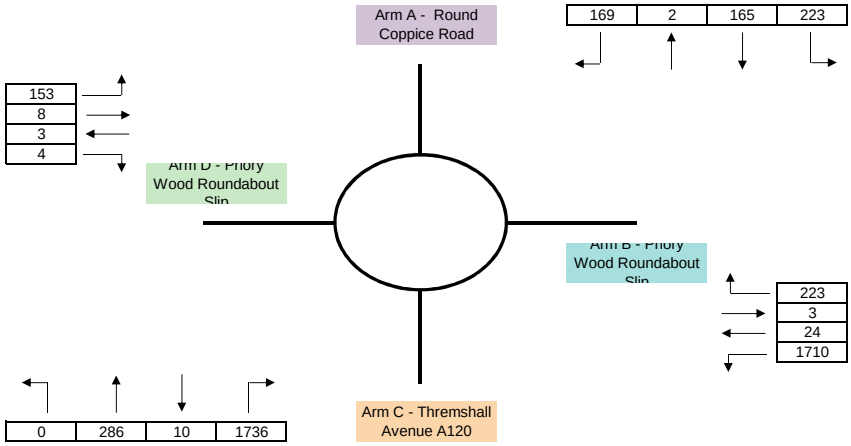
2016 With Airport



2028 With Airport 35 mppa



2028 With Airport 43 mppa



END

J M11 J8 Junction LinSig Modelling Results

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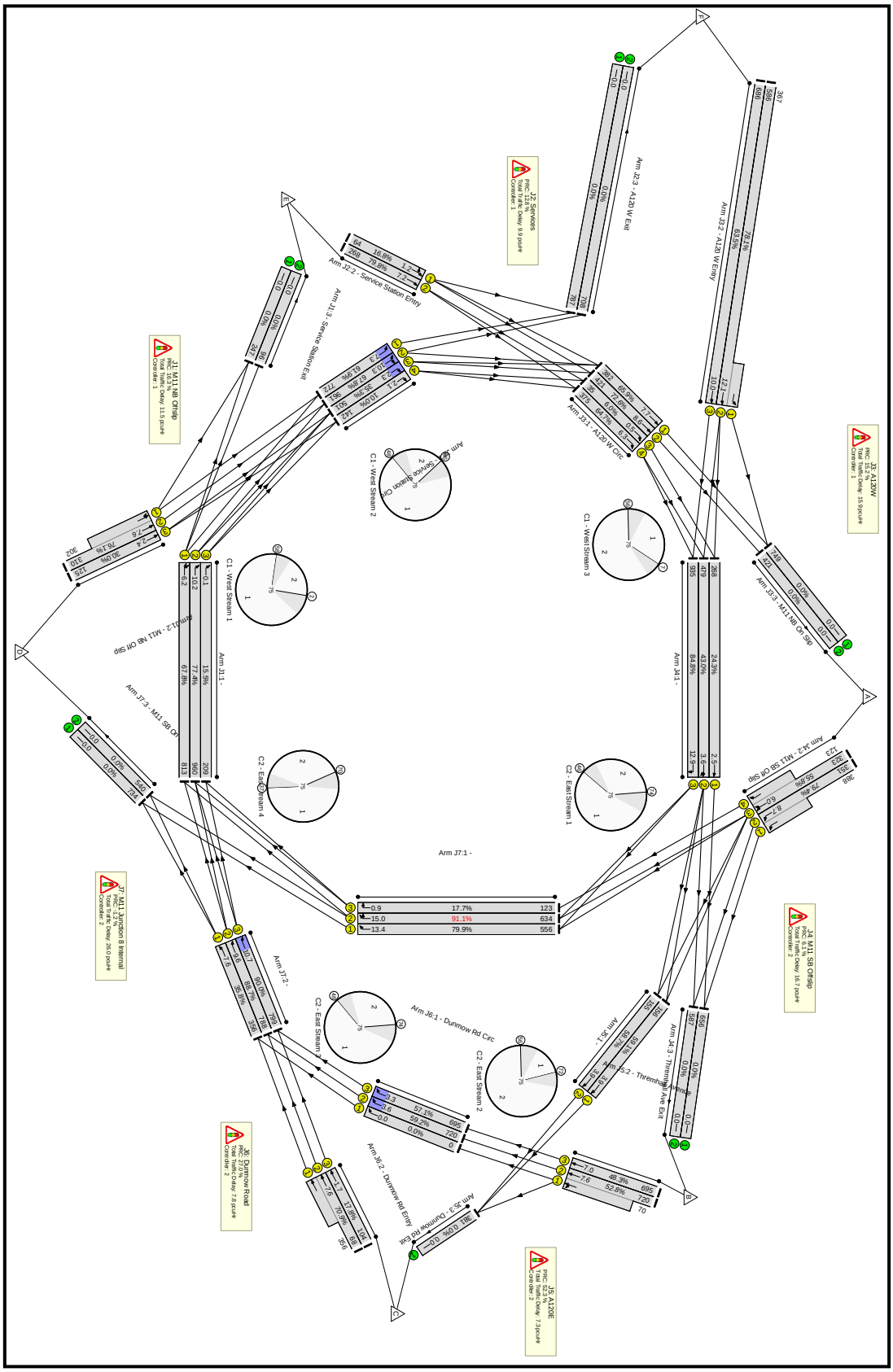
M11 Junction 8 LinSig Modelling Results

2016, 2028 and 2033 Sensitivity Test

This appendix summarises the inputs and results for the current interim layout. Full details of the LinSig model are available on request.

Existing 2016 Network Layout Diagram



Lane Input Data

Junction: J1: M11 NB Offslip

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical [illegible]	Sat Flow Type	Def User Saturation Flow	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius
J1:1/1	U	A	2	3	20.7	User	1800	-	-	-	-	-
J1:1/2	U	A	6	3	20.7	Geom	-	3.07	0.00	N	Arm J2:1 Right	75.00
J1:1/3	U	A	2	3	16.5	Geom	-	3.07	0.00	N	Arm J2:1 Right	75.00
J1:2/1 (M11 NB Off Slip)	U	B	2	3	9.2	Geom	-	3.64	0.00	Y	Arm J1:3 Ahead	79.00
											Arm J2:1 Ahead	79.00
J1:2/2 (M11 NB Off Slip)	U	B	2	3	60.0	Geom	-	3.64	0.00	N	Arm J2:1 Ahead	79.00
J1:2/3 (M11 NB Off Slip)	U	B	2	3	60.0	Geom	-	3.64	0.00	N	Arm J2:1 Ahead	79.00
J1:3/1 (Service Station Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:3/2 (Service Station Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J2: Services

Lane	Lane Type	Phases	Start	End	Physical Length	Sat Flow Type	Def User Saturation Flow	Lane	Gradient	Nearside Lane	Turns	Turning Radius
J2:1/1 (Service Station Circ)	U	C	2	3	4.5	User	1800	-	-	-	-	-
J2:1/2 (Service Station Circ)	U	C	2	3	5.2	Geom	-	3.30	0.00	N	Arm J2:3 Left Arm J3:1 Right	77.00 77.00
J2:1/3 (Service Station Circ)	U	C	2	3	6.1	Geom	-	3.30	0.00	N	Arm J3:1 Right	77.00
J2:1/4 (Service Station Circ)	U	C	2	3	7.0	Geom	-	3.30	0.00	N	Arm J3:1 Right	77.00
J2:2/1 (Service Station Entry)	U	D	2	3	60.0	Geom	-	4.87	0.00	Y	Arm J2:3 Left Arm J3:1 Ahead	37.00 50.00
J2:2/2 (Service Station Entry)	U	D	2	3	60.0	User	1800	-	-	-	-	-
J2:3/1 (A120 W Exit)	U		2	3	21.7	Inf	-	-	-	-	-	-
J2:3/2 (A120 W Exit)	U		2	3	21.7	Inf	-	-	-	-	-	-

Junction: J3: A120W												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width	Gradient	Nearside Lane	Turns	Turning Radius
J3:1/1 (A120 W Circ)	U	E	2	3	6.3	Geom	-	3.54	0.00	N	Arm J3:3 Ahead	79.00
J3:1/2 (A120 W Circ)	U	E	2	3	7.0	Geom	-	3.54	0.00	N	Arm J3:3 Ahead	79.00
J3:1/3 (A120 W Circ)	U	E	2	3	7.7	Geom	-	3.54	0.00	N	Arm J4:1 Right	79.00
J3:1/4 (A120 W Circ)	U	E	2	3	8.5	Geom	-	3.54	0.00	N	Arm J4:1 Right	79.00
J3:2/1 (A120 W Entry)	U	F	2	3	6.1	Geom	-	3.97	0.00	Y	Arm J3:3 Left	74.20
J3:2/2 (A120 W Entry)	U	F	5	3	20.0	User	1800	-	-	-	-	-
J3:2/3 (A120 W Entry)	U	F	2	3	20.0	User	1800	-	-	-	-	-
J3:3/1 (M11 NB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:3/2 (M11 NB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J4: M11 SB Offslip

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length	Sat Flow	Def User Saturation Flow	Lane Width	Gradient	Nearside	Turns	Turning Radius
J4:1/1	U	A	2	3	18.6	Geom	-	3.05	0.00	N	Arm J4:3 Ahead	72.00
J4:1/2	U	A	2	3	18.6	Geom	-	3.05	0.00	N	Arm J4:3 Ahead Arm J5:1 Ahead	72.00 Inf
J4:1/3	U	A	2	3	20.5	Geom	-	3.05	0.00	N	Arm J7:1 Right	68.00
J4:2/1 (M11 SB Off Slip)	U	B	2	3	7.0	Geom	-	3.80	0.00	Y	Arm J4:3 Left	39.00
J4:2/2 (M11 SB Off Slip)	U	B	2	3	60.0	Geom	-	3.80	0.00	N	Arm J4:3 Left	39.00
J4:2/3 (M11 SB Off Slip)	U	B	2	3	60.0	Geom	-	3.76	0.00	N	Arm J5:1 Ahead Arm J7:1 Ahead	56.00 68.00
J4:2/4 (M11 SB Off Slip)	U	B	2	3	7.0	Geom	-	3.75	0.00	N	Arm J7:1 Ahead	Inf
J4:3/1 (Thremhall Ave Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

J4:3/2 (Thremhall Ave Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J5: A120E												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length	Sat Flow Type	Def User Saturation Flow	Lane Width	Gradient	Nearside Lane	Turns	Turning Radius
J5:1/1	U	C	2	3	6.6	User	1800	-	-	-	-	-
J5:1/2	U	C	2	3	6.6	User	1800	-	-	-	-	-
J5:2/1 (Thremhall Avenue)	U	D	2	3	10.3	Geom	-	3.78	0.00	Y	Arm J5:3 Left	44.00
											Arm J6:1 Ahead	54.00
J5:2/2 (Thremhall Avenue)	U	D	5	3	60.0	Geom	-	3.78	0.00	N	Arm J6:1 Ahead	54.00
J5:2/3 (Thremhall Avenue)	U	D	5	3	60.0	Geom	-	3.78	0.00	N	Arm J6:1 Ahead	54.00
J5:3/1 (Dunmow Rd Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J6: Dunmow Road												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length	Sat Flow Type	Def User Saturation Flow	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J6:1/1 (Dunmow Rd Circ)	U	E	2	3	3.9	Geom	-	3.65	0.00	N	Arm J7:2 Right	67.00
J6:1/2 (Dunmow Rd Circ)	U	E	2	3	4.7	Geom	-	3.65	0.00	N	Arm J7:2 Right	67.00
J6:1/3 (Dunmow Rd Circ)	U	E	2	3	6.1	Geom	-	3.65	0.00	N	Arm J7:2 Right	67.00
J6:2/1 (Dunmow Rd Entry)	U	F	2	3	7.0	Geom	-	3.42	0.00	Y	Arm J7:2 Ahead	22.00
J6:2/2 (Dunmow Rd Entry)	U	F	2	3	60.0	Geom	-	3.42	0.00	N	Arm J7:2 Ahead	28.00
J6:2/3 (Dunmow Rd Entry)	U	F	2	3	7.0	Geom	-	3.42	0.00	N	Arm J7:2 Ahead	28.00

Junction: J7: M11 Junction 8 Internal												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (m)	Sat Flow Type	Def User Saturation Flow	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J7:1/1	U	H	2	3	23.5	User	1800	-	-	-	-	-
J7:1/2	U	H	2	3	23.5	User	1800	-	-	-	-	-
J7:1/3	U	H	2	3	23.5	User	1800	-	-	-	-	-
J7:2/1	U	G	2	3	16.9	Geom	-	4.38	0.00	Y	Arm J7:3 Ahead	80.00
J7:2/2	U	G	2	3	16.9	User	1800	-	-	-	-	-
J7:2/3	U	G	2	3	16.9	User	1800	-	-	-	-	-
J7:3/1 (M11 SB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
J7:3/2 (M11 SB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flows, Desired

FG3: '2016 AM Existing'

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	739	68	0	151	227	1185
	B	673	0	70	0	24	718	1485
	C	81	17	1	356	3	71	529
	D	0	0	125	0	148	464	737
	E	49	18	1	249	0	15	332
	F	367	469	117	669	17	3	1642
	Tot.	1170	1243	382	1274	343	1498	5910

FG4: '2016 PM Existing'

Desired Flow :

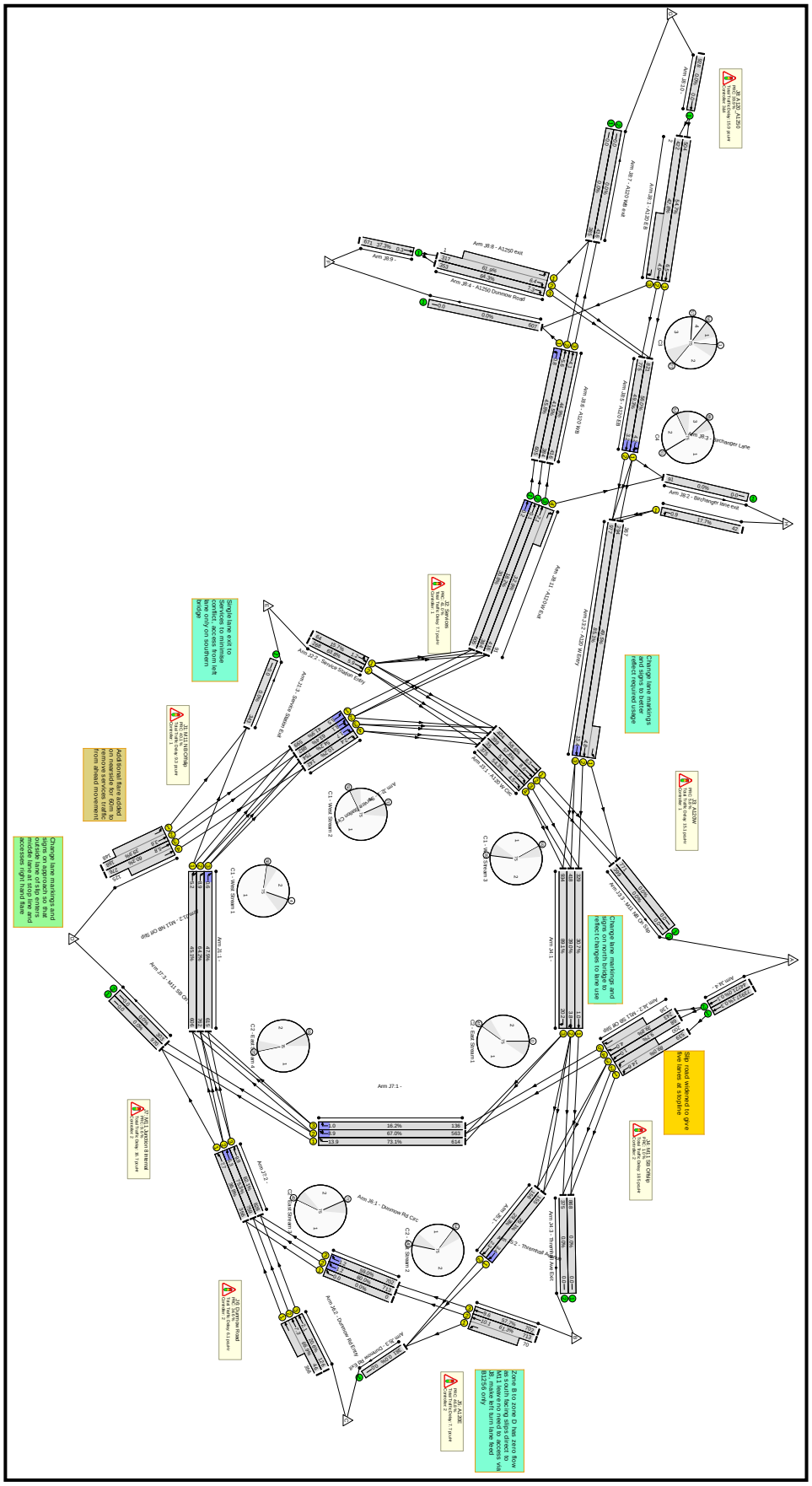
		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	1	709	77	0	117	274	1178
	B	566	0	71	0	61	662	1360
	C	209	68	2	119	21	216	635
	D	0	0	127	0	206	668	1001
	E	164	86	12	104	0	55	421
	F	227	827	324	405	28	8	1819
	Tot.	1167	1690	613	628	433	1883	6414

		2016 AM		2016 PM	
Item	**Lane Description**	**DoS**	**MMQ**	**DoS**	**MMQ**
Network: M11 Junction 8 Model - Existing Layout	**-**	**91.1%**	**-**	**114.8%**	**-**
J1: M11 NB Offslip	**-**	**77.4%**	**-**	**91.0%**	**-**
1/1	Ahead Right	67.8%	6.2	87.9%	18.6
1/2	Right	77.4%	10.2	88.2%	20.0
1/3	Right	15.5%	0.1	24.6%	2.7
2/2+2/1	M11 NB Off Slip Ahead Ahead2	76.1%	7.6	91.0%	13.1
2/3	M11 NB Off Slip Ahead	30.0%	2.4	22.9%	2.2
3/1	Service Station Exit	0.0%	0.0	0.0%	0.0
3/2	Service Station Exit	0.0%	0.0	0.0%	0.0
J2: Services	**-**	**79.8%**	**-**	**73.5%**	**-**
1/1	Service Station Circ Left	61.9%	7.3	73.5%	15.9
1/2	Service Station Circ Left Right	67.8%	10.3	71.4%	9.5
1/3	Service Station Circ Right	35.3%	2.3	40.1%	6.2
1/4	Service Station Circ Right	10.0%	2.1	13.2%	1.6
2/1	Service Station Entry Left Ahead	16.8%	1.2	67.2%	5.3
2/2	Service Station Entry Ahead	79.8%	7.2	70.1%	5.1
3/1	A120 W Exit	0.0%	0.0	0.0%	0.0
3/2	A120 W Exit	0.0%	0.0	0.0%	0.0
J3: A120W	**-**	**78.1%**	**-**	**114.8%**	**-**
1/1	A120 W Circ Ahead	65.9%	7.7	101.9%	22.5
1/2	A120 W Circ Ahead	72.6%	8.6	110.7%	39.2
1/3	A120 W Circ Right	6.0%	0.5	34.6%	3.4
1/4	A120 W Circ Right	64.7%	6.3	55.3%	5.7
2/2+2/1	A120 W Entry Ahead Left	78.1%	12.1	114.8%	125.9
2/3	A120 W Entry Ahead	63.5%	10.0	36.1%	4.1
3/1	M11 NB On Slip	0.0%	0.0	0.0%	0.0

3/2	M11 NB On Slip	0.0%	0.0	0.0%	0.0
J4: M11 SB Offslip	**-**	**84.8%**	**-**	**79.8%**	**-**
1/1	Ahead	24.3%	2.5	62.1%	8.8
1/2	Ahead Ahead2	43.0%	3.6	67.2%	10.8
1/3	Right	84.8%	12.9	54.0%	9.2
2/2+2/1	M11 SB Off Slip Left	79.4%	8.7	79.8%	11.2
2/3+2/4	M11 SB Off Slip Ahead Ahead2	55.8%	6.0	45.0%	4.3
3/1	Thremhall Ave Exit	0.0%	0.0	0.0%	0.0
3/2	Thremhall Ave Exit	0.0%	0.0	0.0%	0.0
J5: A120E	**-**	**59.1%**	**-**	**60.8%**	**-**
1/1	Ahead	59.1%	3.9	49.2%	4.4
1/2	Ahead	58.7%	3.9	49.6%	4.5
2/2+2/1	Thremhall Avenue Left Ahead	52.8%	7.6	60.8%	9.8
2/3	Thremhall Avenue Ahead	48.3%	7.0	52.9%	8.4
3/1	Dunmow Rd Exit	0.0%	0.0	0.0%	0.0
J6: Dunmow Road	**-**	**70.9%**	**-**	**56.7%**	**-**
1/1	Dunmow Rd Circ Right	0.0%	0.0	0.0%	0.0
1/2	Dunmow Rd Circ Right	59.2%	3.6	56.7%	0.8
1/3	Dunmow Rd Circ Right	57.1%	3.3	51.7%	0.7
2/2+2/1	Dunmow Rd Entry Ahead	70.9%	7.6	44.4%	4.0
2/3	Dunmow Rd Entry Ahead	17.8%	1.7	47.5%	5.3
J7: M11 Junction 8 Internal	**-**	**91.1%**	**-**	**83.8%**	**-**
1/1	Right	79.9%	13.4	70.8%	5.2
1/2	Right Right2	91.1%	15.0	73.2%	8.0
1/3	Right	17.7%	0.9	40.1%	4.5
2/1	Ahead	35.8%	7.6	9.8%	1.8
2/2	Ahead	88.7%	9.6	83.1%	11.3
2/3	Ahead	90.0%	10.7	83.8%	12.1

3/1	M11 SB On Slip	0.0%	0.0	0.0%	0.0
3/2	M11 SB On Slip	0.0%	0.0	0.0%	0.0

M11 J8 Improvement Scheme



Lane Input Data

Junction: J1: M11 NB Offslip

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1	U	A	2	3	20.7	User	1800	-	-	-	-	-
J1:1/2	U	A	6	3	20.7	Geom	-	3.07	0.00	N	Arm J2:1 Right	75.00
J1:1/3	U	A	2	3	16.5	Geom	-	3.07	0.00	N	Arm J2:1 Right	75.00
J1:2/1 (M11 NB Off Slip)	U	B	2	3	10.4	Geom	-	3.50	0.00	Y	Arm J1:3 Ahead	79.00
J1:2/2 (M11 NB Off Slip)	U	B	2	3	60.0	Geom	-	3.64	0.00	N	Arm J2:1 Ahead	79.00
J1:2/3 (M11 NB Off Slip)	U	B	2	3	60.0	Geom	-	3.64	0.00	N	Arm J2:1 Ahead	79.00
J1:2/4 (M11 NB Off Slip)	U	B	2	3	9.2	Geom	-	3.64	0.00	N	Arm J2:1 Ahead	79.00
J1:3/1 (Service Station Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J2: Services												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1 (Service Station Circ)	U	C	2	3	4.5	User	1800	-	-	-	-	-
J2:1/2 (Service Station Circ)	U	C	2	3	5.2	Geom	-	3.30	0.00	N	Arm J3:1 Right	77.00
											Arm J8:11 Ahead	77.00
J2:1/3 (Service Station Circ)	U	C	2	3	6.1	Geom	-	3.30	0.00	N	Arm J3:1 Right	77.00
J2:1/4 (Service Station Circ)	U	C	2	3	7.0	Geom	-	3.30	0.00	N	Arm J3:1 Right	77.00
J2:2/1 (Service Station Entry)	U	D	2	3	60.0	Geom	-	4.87	0.00	Y	Arm J3:1 Ahead	50.00
											Arm J8:11 Left	37.00
J2:2/2 (Service Station Entry)	U	D	2	3	60.0	User	1800	-	-	-	-	-

Junction: J3: A120W												
Lane	Lane	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J3:1/1 (A120 W Circ)	U	E	2	3	6.3	Geom	-	3.54	0.00	N	Arm J3:3 Ahead	79.00
J3:1/2 (A120 W Circ)	U	E	2	3	7.0	Geom	-	3.54	0.00	N	Arm J3:3 Ahead	79.00
J3:1/3 (A120 W Circ)	U	E	2	3	7.7	Geom	-	3.54	0.00	N	Arm J4:1 Right	79.00
J3:1/4 (A120 W Circ)	U	E	2	3	8.5	Geom	-	3.54	0.00	N	Arm J4:1 Right	79.00
J3:2/1 (A120 W Entry)	U	F	2	3	6.1	Geom	-	3.97	0.00	Y	Arm J3:3 Left	74.20
J3:2/2 (A120 W Entry)	U	F	5	3	20.0	User	1800	-	-	-	-	-
J3:2/3 (A120 W Entry)	U	F	2	3	20.0	User	1800	-	-	-	-	-
J3:3/1 (M11 NB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:3/2 (M11 NB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J4: M11 SB Offslip												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius
J4:1/1	U	A	2	3	18.6	Geom	-	3.05	0.00	N	Arm J4:3 Ahead	Inf
J4:1/2	U	A	2	3	18.6	Geom	-	3.05	0.00	N	Arm J4:3 Ahead	Inf
											Arm J5:1 Ahead	Inf
J4:1/3	U	A	2	3	20.5	Geom	-	3.05	0.00	N	Arm J7:1 Right	68.00
J4:2/1 (M11 SB Off Slip)	U	B	2	3	60.0	Geom	-	3.30	0.00	Y	Arm J4:3 Left	Inf
J4:2/2 (M11 SB Off Slip)	U	B	2	3	9.0	Geom	-	3.30	0.00	N	Arm J4:3 Left	Inf
J4:2/3 (M11 SB Off Slip)	U	B	2	3	9.0	Geom	-	3.30	0.00	N	Arm J5:1 Ahead	56.00
J4:2/4 (M11 SB Off Slip)	U	B	2	3	60.0	Geom	-	3.30	0.00	N	Arm J7:1 Ahead	Inf
J4:2/5 (M11 SB Off Slip)	U	B	2	3	9.0	Geom	-	3.65	0.00	N	Arm J7:1 Ahead	Inf
J4:3/1 (Thremhall Ave Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J4:3/2 (Thremhall Ave Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

J4:4/1	U		2	3	60.0	Geom	-	3.75	0.00	Y	Arm J4:2 Ahead	Inf
J4:4/2	U		2	3	60.0	Geom	-	3.75	0.00	N	Arm J4:2 Ahead	Inf

Junction: J5: A120E

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J5:1/1	U	C	2	3	6.6	User	1800	-	-	-	-	-
J5:1/2	U	C	2	3	6.6	User	1800	-	-	-	-	-
J5:2/1 (Thremhall Avenue)	U	D	2	3	10.3	Geom	-	3.78	0.00	Y	Arm J5:3 Left	44.00
J5:2/2 (Thremhall Avenue)	U	D	5	3	60.0	Geom	-	3.78	0.00	N	Arm J6:1 Ahead	54.00
J5:2/3 (Thremhall Avenue)	U	D	5	3	60.0	Geom	-	3.78	0.00	N	Arm J6:1 Ahead	54.00
J5:3/1 (Dunmow Rd Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J6: Dunmow Road												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J6:1/1 (Dunmow Rd Circ)	U	E	2	3	3.9	Geom	-	3.65	0.00	N	Arm J7:2 Right	67.00
J6:1/2 (Dunmow Rd Circ)	U	E	2	3	4.7	Geom	-	3.65	0.00	N	Arm J7:2 Right	67.00
J6:1/3 (Dunmow Rd Circ)	U	E	2	3	6.1	Geom	-	3.65	0.00	N	Arm J7:2 Right	67.00
J6:2/1 (Dunmow Rd Entry)	U	F	2	3	7.0	Geom	-	3.42	0.00	Y	Arm J7:2 Ahead	22.00
J6:2/2 (Dunmow Rd Entry)	U	F	2	3	60.0	Geom	-	3.42	0.00	N	Arm J7:2 Ahead	28.00
J6:2/3 (Dunmow Rd Entry)	U	F	2	3	7.0	Geom	-	3.42	0.00	N	Arm J7:2 Ahead	28.00

Junction: J7: M11 Junction 8 Internal												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J7:1/1	U	H	2	3	23.5	User	1800	-	-	-	-	-
J7:1/2	U	H	2	3	23.5	User	1800	-	-	-	-	-
J7:1/3	U	H	2	3	23.5	User	1800	-	-	-	-	-
J7:2/1	U	G	2	3	16.9	Geom	-	4.38	0.00	Y	Arm J7:3 Ahead	80.00
J7:2/2	U	G	2	3	16.9	User	1800	-	-	-	-	-
J7:2/3	U	G	2	3	16.9	User	1800	-	-	-	-	-
J7:3/1 (M11 SB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
J7:3/2 (M11 SB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flows

FG5: 'AM 2028 With Airport 35 mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	0	878	81	0	180	109	144	16	1408
	B	812	0	84	0	29	350	463	53	1791
	C	96	20	1	420	3	34	45	5	624
	D	0	0	156	0	186	235	311	35	923
	E	59	22	1	299	0	7	10	1	399
	F	190	243	61	347	9	0	2	0	852
	G	263	337	84	480	12	2	0	0	1178
	H	12	15	4	22	1	0	0	0	54
	Tot.	1432	1515	472	1568	420	737	975	110	7229

FG6: 'PM 2028 With Airport 35 mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	1	819	89	0	135	97	213	7	1361
	B	656	0	82	0	71	236	516	16	1577
	C	246	80	3	140	25	78	171	5	748
	D	0	0	143	0	231	230	504	16	1124
	E	184	97	14	117	0	19	42	1	474
	F	134	487	190	238	16	0	5	0	1070
	G	124	449	176	220	15	4	0	0	988
	H	13	48	19	24	2	0	0	0	106
	Tot.	1358	1980	716	739	495	664	1451	45	7448

FG7: 'AM 2028 With Airport 43 mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	0	900	83	0	184	112	148	17	1444
	B	803	0	83	0	29	347	458	52	1772
	C	96	20	1	420	3	34	45	5	624
	D	0	0	165	0	196	248	327	37	973
	E	61	23	1	309	0	8	10	1	413
	F	193	247	62	352	9	0	2	0	865
	G	267	342	86	488	13	2	0	0	1198
	H	12	16	4	22	1	0	0	0	55
	Tot.	1432	1548	485	1591	435	751	990	112	7344

FG8: 'PM 2028 With Airport 43 mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	1	855	93	0	141	101	222	7	1420
	B	753	0	94	0	81	270	592	18	1808
	C	246	80	3	140	25	78	171	5	748
	D	0	0	158	0	256	255	559	17	1245
	E	200	105	15	127	0	21	45	1	514
	F	136	495	194	242	17	0	5	0	1089
	G	126	457	179	224	15	4	0	0	1005
	H	14	49	19	24	2	0	0	0	108
	Tot.	1476	2041	755	757	537	729	1594	48	7937

FG11: 'AM 2033 With Airport 35mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	0	908	84	0	186	113	149	17	1457
	B	837	0	87	0	30	361	478	54	1847
	C	99	21	1	435	3	35	46	5	645
	D	0	0	161	0	191	242	320	36	950
	E	62	23	1	314	0	8	10	1	419
	F	196	251	63	359	9	0	2	0	880
	G	272	348	87	496	13	0	2	0	1218
	H	12	16	4	23	1	0	0	0	56
	Tot.	1478	1567	488	1627	433	759	1007	113	7472

FG12: 'AM 2033 With Airport 43mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	0	929	86	0	190	116	153	17	1491
	B	829	0	86	0	30	358	473	54	1830
	C	99	21	1	435	3	35	46	5	645
	D	0	0	199	0	237	300	397	45	1178
	E	69	26	1	350	0	9	11	1	467
	F	199	255	64	364	9	0	2	0	893
	G	276	353	88	504	13	0	2	0	1236
	H	13	16	4	23	1	0	0	0	57
	Tot.	1485	1600	529	1676	483	818	1084	122	7797

FG13: 'PM 2033 With Airport 35mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	1	846	92	0	139	100	220	7	1405
	B	667	0	83	0	72	240	525	16	1603
	C	255	83	3	146	26	81	178	6	778
	D	0	0	147	0	237	236	517	16	1153
	E	193	101	15	122	0	20	43	1	495
	F	138	503	197	247	17	0	5	0	1107
	G	128	465	182	228	16	0	4	0	1023
	H	14	50	20	24	2	0	0	0	110
	Tot.	1396	2048	739	767	509	677	1492	46	7674

FG14: 'PM 2033 With Airport 43mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	1	882	96	0	145	105	229	7	1465
	B	763	0	95	0	83	274	600	19	1834
	C	255	83	3	146	26	81	178	6	778
	D	0	0	162	0	262	261	572	18	1275
	E	209	110	16	132	0	21	47	1	536
	F	141	512	200	251	17	0	5	0	1126
	G	130	472	185	231	16	0	4	0	1038
	H	14	51	20	25	2	0	0	0	112
	Tot.	1513	2110	777	785	551	742	1635	51	8164

2028 Scenario

2028 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
Network: M11 J8 A120 Option 3 LinSig Assessment	**-**	**105.2%**	**-**	**117.0%**	**-**
J1: M11 NB Offslip	**-**	**79.2%**	**-**	**82.4%**	**-**
1/1	Ahead Right	58.5%	5.9	61.7%	8.1
1/2	Right	79.2%	17.1	81.7%	17.4
1/3	Right	49.9%	0.8	49.4%	0.8
2/2+2/1	M11 NB Off Slip Ahead Ahead2	49.8%	4.7	55.9%	5.2
2/3+2/4	M11 NB Off Slip Ahead	75.6%	8.1	82.4%	9.4
J2: Services	**-**	**78.9%**	**-**	**81.6%**	**-**
1/1	Service Station Circ Ahead	59.4%	7.3	63.0%	8.3
1/2	Service Station Circ Right Ahead	78.3%	14.6	81.5%	13.9
1/3	Service Station Circ Right	64.8%	1.4	67.3%	3.9
1/4	Service Station Circ Right	13.2%	3.3	13.8%	3.4
2/1	Service Station Entry Ahead Left	16.7%	1.4	17.3%	1.4
2/2	Service Station Entry Ahead	78.9%	8.1	81.6%	8.7
J3: A120W	**-**	**102.0%**	**-**	**113.7%**	**-**
1/1	A120 W Circ Ahead	70.0%	7.8	60.9%	7.4
1/2	A120 W Circ Ahead	69.6%	7.6	63.3%	8.6
1/3	A120 W Circ Right	6.3%	0.8	4.3%	0.5
1/4	A120 W Circ Right	68.8%	10.6	62.8%	9.7
2/2+2/1	A120 W Entry Ahead Left	87.9%	10.1	98.5%	29.9
2/3	A120 W Entry Ahead	102.0%	43.6	113.7%	90.6
J4: M11 SB Offslip	**-**	**104.6%**	**-**	**117.0%**	**-**

2028 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
1/1	Ahead	55.9%	2.4	66.4%	3.8
1/2	Ahead Ahead2	27.6%	4.2	32.2%	4.9
1/3	Right	104.6%	59.0	115.6%	102.4
2/1+2/2	M11 SB Off Slip Left	89.5%	13.2	117.0%	90.9
2/3	M11 SB Off Slip Ahead	12.5%	1.3	10.2%	1.1
2/4+2/5	M11 SB Off Slip Ahead	50.2%	5.2	43.3%	4.7
4/1	Ahead	44.1%	0.4	45.2%	0.4
4/2	Ahead	24.9%	0.2	25.5%	0.2
J5: A120E	**-**	**69.1%**	**-**	**73.4%**	**-**
1/1	Ahead	64.2%	4.7	41.5%	4.1
1/2	Ahead	69.1%	5.2	47.1%	4.5
2/2+2/1	Thremhall Avenue Left Ahead	67.5%	11.6	73.4%	14.1
2/3	Thremhall Avenue Ahead	56.7%	9.3	65.5%	12.0
J6: Dunmow Road	**-**	**81.8%**	**-**	**83.1%**	**-**
1/1	Dunmow Rd Circ Right	-	-	-	-
1/2	Dunmow Rd Circ Right	74.5%	5.1	71.8%	2.5
1/3	Dunmow Rd Circ Right	65.7%	3.9	67.0%	2.2
2/2+2/1	Dunmow Rd Entry Ahead	81.8%	10.3	83.1%	10.6
2/3	Dunmow Rd Entry Ahead	26.7%	2.7	22.8%	2.2
J7: M11 Junction 8 Internal	**-**	**105.2%**	**-**	**100.0%**	**-**
1/1	Right	101.8%	31.1	100.0%	25.4
1/2	Right Right2	105.2%	40.2	98.2%	20.8
1/3	Right	23.8%	1.0	26.4%	1.3
2/1	Ahead	41.1%	9.1	39.1%	9.0
2/2	Ahead	104.6%	50.3	98.3%	20.5

2028 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
2/3	Ahead	104.8%	50.8	98.8%	22.3
J8: A120_A1250	**-**	**78.0%**	**-**	**77.8%**	**-**
1/1	A120 EB Ahead	70.5%	9.5	75.0%	10.4
1/2+1/3	A120 EB Ahead Right	60.5%	8.0	62.5%	8.2
3/1	Birchanger Lane Left	28.4%	1.2	25.7%	1.2
4/2+4/1	A1250 Dunmow Road Right Left	78.0%	9.8	77.8%	10.1
4/3	A1250 Dunmow Road Right	69.1%	8.6	65.7%	8.2
5/1	A120 EB Ahead Left	69.0%	4.8	72.7%	10.6
5/2	A120 EB Ahead	60.0%	4.1	60.9%	8.0
6/1	A120 WB Left	53.4%	2.4	56.7%	1.5
6/2	A120 WB Ahead	61.1%	6.8	61.5%	8.5
6/3	A120 WB Ahead	48.1%	5.8	55.8%	7.7
9/1	Ahead	47.3%	0.4	48.1%	0.5
11/1	A120 W Exit Ahead	35.9%	0.3	38.1%	0.3
11/2	A120 W Exit Ahead	25.3%	0.2	24.6%	0.2
11/3+11/4	A120 W Exit Right Ahead	47.6%	2.6	44.5%	2.5

2028 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
Network: M11 J8 A120 Option 3 LinSig Assessment	-	**94.8%**	-	**102.9%**	-
J1: M11 NB Offslip	-	**91.5%**	-	**102.5%**	-
1/1	Ahead Right	56.1%	9.1	74.1%	11.6
1/2	Right	88.6%	21.9	102.5%	45.0
1/3	Right	84.4%	5.1	97.0%	22.8
2/2+2/1	M11 NB Off Slip Ahead Ahead2	43.1%	4.2	45.5%	4.5
2/3+2/4	M11 NB Off Slip Ahead	91.5%	15.3	94.1%	18.4
J2: Services	-	**94.8%**	-	**102.9%**	-
1/1	Service Station Circ Ahead	40.9%	5.2	52.4%	6.1
1/2	Service Station Circ Right Ahead	94.8%	19.7	102.6%	65.6
1/3	Service Station Circ Right	59.1%	1.5	65.4%	1.8
1/4	Service Station Circ Right	14.6%	3.0	15.6%	2.8
2/1	Service Station Entry Ahead Left	90.6%	8.7	98.4%	12.6
2/2	Service Station Entry Ahead	81.4%	6.6	102.9%	15.1
J3: A120W	-	**94.1%**	-	**102.8%**	-
1/1	A120 W Circ Ahead	85.5%	13.2	98.6%	22.6
1/2	A120 W Circ Ahead	85.5%	13.2	98.8%	22.9
1/3	A120 W Circ Right	21.7%	2.4	8.0%	0.6
1/4	A120 W Circ Right	49.3%	6.9	70.8%	6.4
2/2+2/1	A120 W Entry Ahead Left	83.6%	16.6	100.7%	40.6
2/3	A120 W Entry Ahead	94.1%	16.2	102.8%	48.9
J4: M11 SB Offslip	-	**83.7%**	-	**101.0%**	-
1/1	Ahead	75.3%	6.7	98.5%	29.0

2028 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
1/2	Ahead Ahead2	68.9%	9.3	96.8%	26.0
1/3	Right	54.7%	5.1	73.8%	11.6
2/1+2/2	M11 SB Off Slip Left	83.7%	10.3	101.0%	35.0
2/3	M11 SB Off Slip Ahead	14.9%	1.4	10.4%	1.2
2/4+2/5	M11 SB Off Slip Ahead	44.8%	4.2	35.8%	3.4
4/1	Ahead	41.2%	0.3	43.0%	0.4
4/2	Ahead	25.4%	0.2	26.5%	0.2
J5: A120E	**-**	**67.1%**	**-**	**75.4%**	**-**
1/1	Ahead	58.4%	6.8	67.4%	7.1
1/2	Ahead	54.3%	5.9	67.6%	5.3
2/2+2/1	Thremhall Avenue Left Ahead	67.1%	11.6	75.4%	14.7
2/3	Thremhall Avenue Ahead	61.9%	10.8	72.5%	14.2
J6: Dunmow Road	**-**	**62.4%**	**-**	**76.0%**	**-**
1/1	Dunmow Rd Circ Right	0.0%	0.0	-	-
1/2	Dunmow Rd Circ Right	62.4%	1.1	75.1%	4.0
1/3	Dunmow Rd Circ Right	60.5%	1.0	76.0%	4.1
2/2+2/1	Dunmow Rd Entry Ahead	54.5%	5.1	51.5%	5.0
2/3	Dunmow Rd Entry Ahead	58.1%	6.6	49.1%	5.8
J7: M11 Junction 8 Internal	**-**	**85.3%**	**-**	**90.3%**	**-**
1/1	Right	71.1%	9.9	82.9%	11.5
1/2	Right Right2	75.9%	7.4	81.9%	8.7
1/3	Right	37.4%	1.2	43.0%	2.4
2/1	Ahead	11.6%	0.3	11.1%	0.9
2/2	Ahead	81.3%	18.5	85.9%	21.8
2/3	Ahead	85.3%	18.8	90.3%	24.2

2028 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
J8: A120_A1250	**-**	**88.5%**	**-**	**92.5%**	**-**
1/1	A120 EB Ahead	68.8%	9.0	70.1%	9.2
1/2+1/3	A120 EB Ahead Right	44.8%	5.2	45.4%	5.3
3/1	Birchanger Lane Left	55.8%	2.7	56.9%	2.8
4/2+4/1	A1250 Dunmow Road Right Left	88.1%	13.3	90.0%	14.3
4/3	A1250 Dunmow Road Right	88.5%	14.2	89.8%	15.0
5/1	A120 EB Ahead Left	71.9%	4.7	73.4%	4.8
5/2	A120 EB Ahead	58.7%	2.9	59.6%	2.9
6/1	A120 WB Left	49.9%	2.8	54.9%	1.8
6/2	A120 WB Ahead	85.7%	16.0	88.8%	17.9
6/3	A120 WB Ahead	86.0%	15.3	92.5%	20.6
9/1	Ahead	59.4%	0.7	60.5%	0.8
11/1	A120 W Exit Ahead	33.6%	0.3	36.9%	0.3
11/2	A120 W Exit Ahead	34.3%	0.3	35.5%	0.3
11/3+11/4	A120 W Exit Right Ahead	36.8%	1.1	39.4%	1.3

2033 Scenario

2033 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
Network: M11 J8 A120 Option 3 LinSig Assessment	**-**	**118.1%**	**-**	**120.8%**	**-**
J1: M11 NB Offslip	**-**	**86.8%**	**-**	**92.2%**	**-**
1/1	Ahead Right	63.7%	9.5	66.7%	10.6
1/2	Right	86.8%	11.6	92.2%	25.5
1/3	Right	49.3%	1.4	50.6%	0.8
2/2+2/1	M11 NB Off Slip Ahead Ahead2	51.3%	4.9	57.1%	6.1

2033 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
2/3+2/4	M11 NB Off Slip Ahead	77.7%	8.5	89.1%	12.4
J2: Services	**-**	**108.3%**	**-**	**90.2%**	**-**
1/1	Service Station Circ Ahead	58.3%	5.9	69.5%	9.7
1/2	Service Station Circ Right Ahead	75.8%	12.5	90.2%	23.8
1/3	Service Station Circ Right	63.1%	8.6	69.7%	2.6
1/4	Service Station Circ Right	12.3%	0.5	16.8%	4.2
2/1	Service Station Entry Ahead Left	23.0%	1.6	18.4%	1.6
2/2	Service Station Entry Ahead	108.3%	25.3	87.3%	10.6
J3: A120W	**-**	**111.7%**	**-**	**117.3%**	**-**
1/1	A120 W Circ Ahead	73.6%	11.3	63.7%	9.2
1/2	A120 W Circ Ahead	73.7%	11.3	63.3%	9.1
1/3	A120 W Circ Right	5.8%	0.8	6.1%	0.8
1/4	A120 W Circ Right	68.2%	8.5	71.2%	10.6
2/2+2/1	A120 W Entry Ahead Left	83.6%	12.6	101.6%	40.4
2/3	A120 W Entry Ahead	111.7%	89.4	117.3%	107.8
J4: M11 SB Offslip	**-**	**118.1%**	**-**	**120.8%**	**-**
1/1	Ahead	60.6%	4.0	69.4%	4.6
1/2	Ahead Ahead2	38.5%	5.0	34.6%	5.3
1/3	Right	115.9%	104.0	120.0%	124.6
2/1+2/2	M11 SB Off Slip Left	118.1%	96.4	120.8%	106.7
2/3	M11 SB Off Slip Ahead	10.3%	1.1	10.6%	1.2
2/4+2/5	M11 SB Off Slip Ahead	43.7%	4.7	44.8%	4.8
4/1	Ahead	45.6%	0.4	46.7%	0.4
4/2	Ahead	25.8%	0.2	26.4%	0.2
J5: A120E	**-**	**69.9%**	**-**	**69.8%**	**-**

2033 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
1/1	Ahead	53.4%	4.1	64.5%	5.1
1/2	Ahead	60.5%	4.7	69.8%	5.5
2/2+2/1	Thremhall Avenue Left Ahead	69.9%	12.6	67.8%	11.7
2/3	Thremhall Avenue Ahead	63.4%	11.4	61.7%	10.8
J6: Dunmow Road	**-**	**80.0%**	**-**	**83.3%**	**-**
1/1	Dunmow Rd Circ Right	-	-	-	-
1/2	Dunmow Rd Circ Right	77.6%	5.3	74.9%	5.0
1/3	Dunmow Rd Circ Right	74.0%	4.6	71.7%	4.4
2/2+2/1	Dunmow Rd Entry Ahead	80.0%	10.3	83.3%	11.0
2/3	Dunmow Rd Entry Ahead	19.8%	2.0	20.3%	2.0
J7: M11 Junction 8 Internal	**-**	**104.8%**	**-**	**101.8%**	**-**
1/1	Right	104.8%	37.3	99.2%	24.1
1/2	Right Right2	93.9%	15.1	100.6%	24.9
1/3	Right	26.6%	1.2	27.2%	1.5
2/1	Ahead	40.5%	8.0	40.5%	9.4
2/2	Ahead	102.5%	43.8	101.7%	40.9
2/3	Ahead	102.6%	44.2	101.8%	41.2
J8: A120_A1250	**-**	**79.3%**	**-**	**82.6%**	**-**
1/1	A120 EB Ahead	71.6%	9.8	73.5%	10.2
1/2+1/3	A120 EB Ahead Right	60.0%	7.9	63.9%	8.6
3/1	Birchanger Lane Left	29.5%	1.3	30.0%	1.3
4/2+4/1	A1250 Dunmow Road Right Left	79.3%	9.9	82.6%	11.1
4/3	A1250 Dunmow Road Right	79.0%	10.4	71.7%	9.1
5/1	A120 EB Ahead Left	70.2%	5.8	72.5%	5.0
5/2	A120 EB Ahead	63.2%	4.5	62.9%	4.3

2033 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	Lane Description	Degree of Sat	MMQ	Degree of Sat	MMQ
6/1	A120 WB Left	56.7%	1.1	61.3%	1.5
6/2	A120 WB Ahead	58.5%	7.8	64.3%	9.1
6/3	A120 WB Ahead	52.0%	7.6	58.8%	7.4
9/1	Ahead	48.9%	0.5	49.6%	0.5
11/1	A120 W Exit Ahead	38.1%	0.3	41.2%	0.4
11/2	A120 W Exit Ahead	25.0%	0.2	26.6%	0.2
11/3+11/4	A120 W Exit Right Ahead	49.4%	2.8	53.4%	3.1

2033 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
Network: M11 J8 A120 Option 3 LinSig Assessment	-	**101.5%**	-	**106.0%**	-
J1: M11 NB Offslip	-	**101.5%**	-	**105.0%**	-
1/1	Ahead Right	64.1%	10.1	70.3%	12.0
1/2	Right	101.5%	45.1	105.0%	58.4
1/3	Right	68.8%	2.5	81.5%	8.0
2/2+2/1	M11 NB Off Slip Ahead Ahead2	46.6%	4.5	48.9%	4.9
2/3+2/4	M11 NB Off Slip Ahead	101.5%	27.5	103.8%	35.5
J2: Services	-	**97.6%**	-	**101.6%**	-
1/1	Service Station Circ Ahead	49.8%	3.1	53.4%	6.5
1/2	Service Station Circ Right Ahead	97.6%	36.0	101.6%	58.8
1/3	Service Station Circ Right	61.3%	6.0	63.9%	2.7
1/4	Service Station Circ Right	15.2%	0.8	15.9%	2.7
2/1	Service Station Entry Ahead Left	86.1%	7.9	93.1%	10.4
2/2	Service Station Entry Ahead	90.2%	8.4	97.7%	12.0
J3: A120W	-	**100.9%**	-	**106.0%**	-
1/1	A120 W Circ Ahead	100.6%	24.3	99.9%	23.9
1/2	A120 W Circ Ahead	100.9%	24.7	101.4%	26.8
1/3	A120 W Circ Right	8.0%	0.9	12.4%	0.4
1/4	A120 W Circ Right	76.4%	10.4	73.3%	7.4
2/2+2/1	A120 W Entry Ahead Left	97.2%	29.9	99.6%	40.6
2/3	A120 W Entry Ahead	100.9%	33.8	106.0%	64.9
J4: M11 SB Offslip	-	**100.2%**	-	**104.1%**	-
1/1	Ahead	100.2%	33.8	102.3%	40.0

2033 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
1/2	Ahead Ahead2	99.4%	31.5	98.8%	30.1
1/3	Right	75.8%	12.3	74.0%	12.1
2/1+2/2	M11 SB Off Slip Left	99.9%	31.7	104.1%	46.1
2/3	M11 SB Off Slip Ahead	10.3%	1.2	10.7%	1.2
2/4+2/5	M11 SB Off Slip Ahead	35.3%	3.4	36.9%	3.6
4/1	Ahead	42.5%	0.4	44.3%	0.4
4/2	Ahead	26.2%	0.2	27.3%	0.2
J5: A120E	**-**	**69.7%**	**-**	**81.9%**	**-**
1/1	Ahead	65.4%	7.5	64.5%	3.6
1/2	Ahead	69.6%	7.9	63.5%	5.6
2/2+2/1	Thremhall Avenue Left Ahead	69.7%	12.4	81.9%	17.8
2/3	Thremhall Avenue Ahead	61.4%	10.7	71.5%	13.9
J6: Dunmow Road	**-**	**66.4%**	**-**	**73.0%**	**-**
1/1	Dunmow Rd Circ Right	-	-	-	-
1/2	Dunmow Rd Circ Right	66.4%	1.3	73.0%	1.6
1/3	Dunmow Rd Circ Right	61.4%	1.1	66.8%	1.3
2/2+2/1	Dunmow Rd Entry Ahead	56.3%	5.4	58.1%	5.4
2/3	Dunmow Rd Entry Ahead	56.4%	6.6	63.9%	7.3
J7: M11 Junction 8 Internal	**-**	**97.4%**	**-**	**105.2%**	**-**
1/1	Right	91.6%	13.6	93.5%	12.9
1/2	Right Right2	94.0%	13.3	101.0%	21.6
1/3	Right	47.3%	2.8	51.8%	5.4
2/1	Ahead	11.8%	2.9	11.6%	2.8
2/2	Ahead	97.4%	32.4	104.7%	60.7
2/3	Ahead	97.3%	32.3	105.2%	63.4

2033 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
J8: A120_A1250	**-**	**90.2%**	**-**	**93.1%**	**-**
1/1	A120 EB Ahead	73.4%	9.8	71.6%	9.6
1/2+1/3	A120 EB Ahead Right	48.0%	5.6	47.8%	5.6
3/1	Birchanger Lane Left	57.9%	2.8	52.4%	2.7
4/2+4/1	A1250 Dunmow Road Right Left	87.3%	13.5	93.1%	16.2
4/3	A1250 Dunmow Road Right	88.3%	14.6	92.8%	16.8
5/1	A120 EB Ahead Left	74.2%	4.8	76.7%	5.2
5/2	A120 EB Ahead	61.0%	3.1	63.1%	3.3
6/1	A120 WB Left	51.2%	6.1	54.9%	1.5
6/2	A120 WB Ahead	89.4%	17.4	88.5%	17.1
6/3	A120 WB Ahead	90.2%	17.8	89.8%	18.2
9/1	Ahead	61.5%	0.8	62.6%	0.8
11/1	A120 W Exit Ahead	34.5%	0.3	36.9%	0.3
11/2	A120 W Exit Ahead	34.6%	0.3	35.4%	0.3
11/3+11/4	A120 W Exit Right Ahead	37.3%	1.1	38.4%	1.3

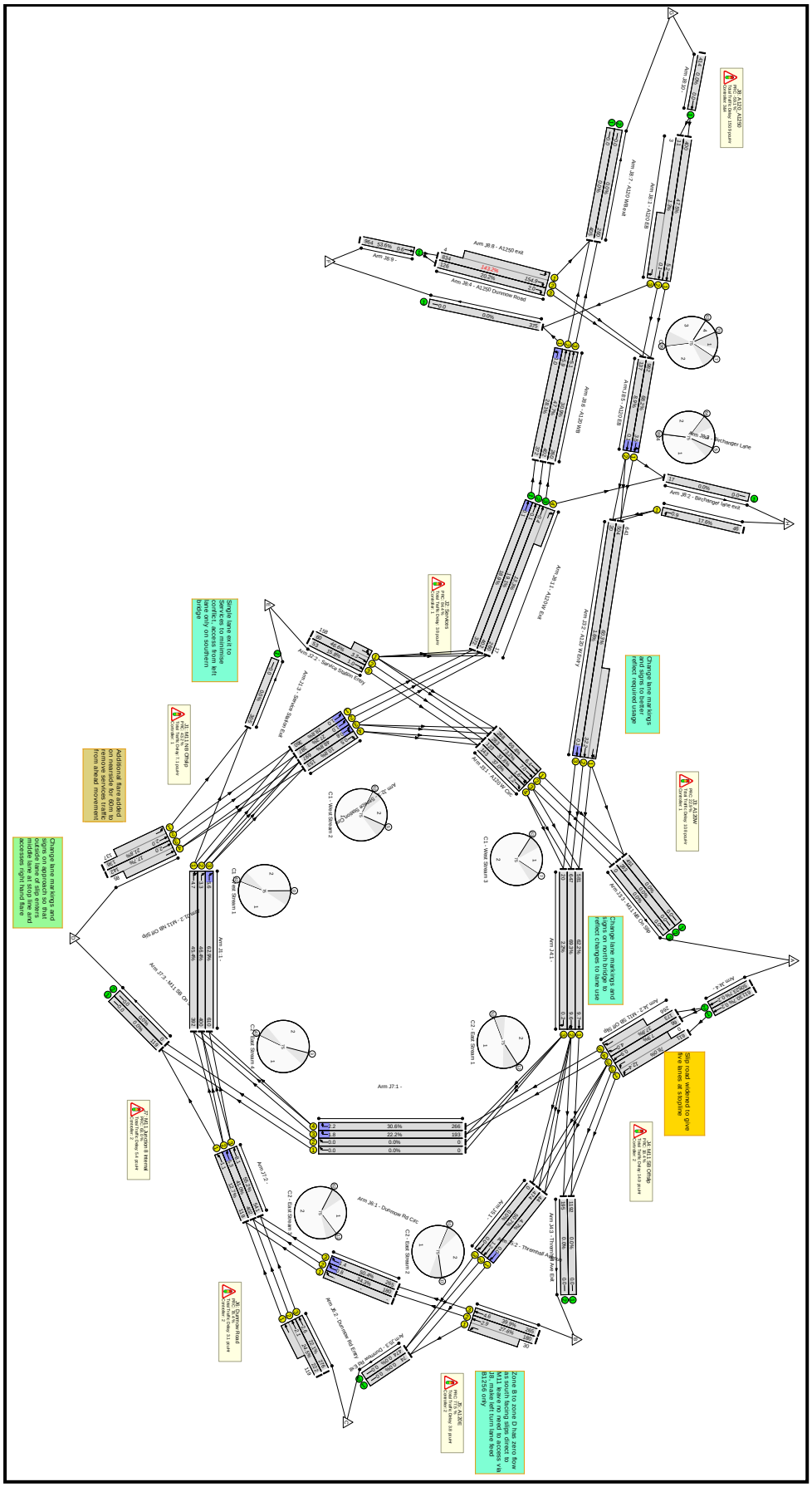
K M11 J8 Further Improvement Scheme Indicative Plans and LinSig Modelling Results

steer davies gleave

M11 Junction 8 Further Improvement Scheme LinSig Modelling Results

2028 and 2033 Sensitivity Test

This appendix summarises the inputs and results for the proposed improvement layout. Full details of the LinSig model are available on request.


Arm J8:8 - A1250 exit
Arm J8:9 -
Arm J8:1 - A1250 Ouseburn Road
Arm J8:7 - A1058 exit
Arm J8:6 - A1058 entry
Arm J8:5 - A1058 Coast
Arm J8:4 - Birchwood Lane
Arm J8:3 - Birchwood Lane exit
Arm J8:2 - Birchwood Lane entry
Arm J7:13 - Service Station Exit
Arm J7:12 - Service Station Entry
Arm J7:11 - A1058 Exit
Arm J7:10 - A1058 Entry
Arm J7:9 - A1058 Coast
Arm J7:8 - A1058 Entry
Arm J7:7 - Ouseburn Rd Entry
Arm J7:6 - Ouseburn Rd Circ
Arm J7:5 - Ouseburn Road
Arm J7:4 - Threshfield Ave Exit
Arm J7:3 - Threshfield Ave Entry
Arm J7:2 - M11 NB Off Slip
Arm J7:1 -
Arm J7:12 - M11 SB On Slip
Arm J7:11 -
Arm J7:14 -
Arm J7:15 -
Arm J7:16 -
Arm J7:17 -
C1 - West Stream 1
C1 - West Stream 2
C1 - West Stream 3
C2 - East Stream 1
C2 - East Stream 2
C2 - East Stream 3
Single lane exit to Service to minimise conflict access from left lane only on Southern bridge
Additional flare added on nearside for 60m to minimise weaving from ahead movement
Change lane markings and signs to better reflect required usage
Change lane markings and signs on north bridge to reflect changes to lane use
Change lane markings and signs to reflect changes to lane use
Slip road widened to give five lanes at taxpline
Zone B to zone D has zero flow in south facing slips direct to A1 and A1058 as vehicles in J8, make left turn have fixed B1250 only

Lane Input Data

Junction: J1: M11 NB Offslip

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1	U	A	2	3	20.7	User	1800	-	-	-	-	-
J1:1/2	U	A	6	3	20.7	Geom	-	3.07	0.00	N	Arm J2:1 Right	75.00
J1:1/3	U	A	2	3	16.5	Geom	-	3.07	0.00	N	Arm J2:1 Right	75.00
J1:2/1 (M11 NB Off Slip)	U	B	2	3	10.4	Geom	-	3.50	0.00	Y	Arm J1:3 Ahead	79.00
J1:2/2 (M11 NB Off Slip)	U	B	2	3	60.0	Geom	-	3.64	0.00	N	Arm J2:1 Ahead	79.00
J1:2/3 (M11 NB Off Slip)	U	B	2	3	60.0	Geom	-	3.64	0.00	N	Arm J2:1 Ahead	79.00
J1:2/4 (M11 NB Off Slip)	U	B	2	3	16.5	Geom	-	3.64	0.00	N	Arm J2:1 Ahead	79.00
J1:3/1 (Service Station Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J2: Services

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J2:1/1 (Service Station Circ)	U	C	2	3	4.5	User	1800	-	-	-	-	-
J2:1/2 (Service Station Circ)	U	C	2	3	5.2	Geom	-	3.30	0.00	N	Arm J8:11 Ahead	77.00
J2:1/3 (Service Station Circ)	U	C	2	3	6.1	Geom	-	3.30	0.00	N	Arm J3:1 Right	77.00
											Arm J8:11 Ahead	Inf
J2:1/4 (Service Station Circ)	U	C	2	3	7.0	Geom	-	3.30	0.00	N	Arm J3:1 Right	77.00
J2:2/1 (Service Station Entry)	U	D	2	3	3.8	Geom	-	4.87	0.00	Y	Arm J3:1 Ahead	50.00
											Arm J8:11 Left	37.00
J2:2/2 (Service Station Entry)	U	D	2	3	60.0	User	1800	-	-	-	-	-
J2:2/3 (Service Station Entry)	U	D	2	3	60.0	User	1800	-	-	-	-	-

Junction: J3: A120W												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length	Sat Flow Type	Def User Saturation	Lane Width (m)	Gradient	Nearside	Turns	Turning Radius (m)
J3:1/1 (A120 W Circ)	U	E	2	3	6.3	Geom	-	3.54	0.00	N	Arm J3:3 Ahead	79.00
J3:1/2 (A120 W Circ)	U	E	2	3	7.0	Geom	-	3.54	0.00	N	Arm J3:3 Ahead	79.00
J3:1/3 (A120 W Circ)	U	E	2	3	7.7	Geom	-	3.54	0.00	N	Arm J4:1 Right	79.00
											Arm J3:3 Ahead	Inf
J3:1/4 (A120 W Circ)	U	E	2	3	8.5	Geom	-	3.54	0.00	N	Arm J4:1 Right	79.00
J3:2/1 (A120 W Entry)	U	F	2	3	17.4	Geom	-	3.97	0.00	Y	Arm J4:1 Ahead	Inf
											Arm J3:3 Left	74.20
J3:2/2 (A120 W Entry)	U	F	5	3	20.0	User	1800	-	-	-	-	-
J3:2/3 (A120 W Entry)	U	F	2	3	20.0	User	1800	-	-	-	-	-
J3:3/1 (M11 NB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:3/2 (M11 NB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:3/3 (M11 NB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J4: M11 SB Offslip												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J4:1/1	U	A	2	3	18.6	Geom	-	3.05	0.00	N	Arm J4:3 Ahead	Inf
J4:1/2	U	A	2	3	18.6	Geom	-	3.05	0.00	N	Arm J4:3 Ahead	Inf
											Arm J5:1 Ahead	Inf
J4:1/3	U	A	2	3	20.5	Geom	-	3.05	0.00	N	Arm J7:1 Right	68.00
J4:2/1 (M11 SB Off Slip)	U	B	2	3	60.0	Geom	-	3.30	0.00	Y	Arm J4:3 Left	Inf
J4:2/2 (M11 SB Off Slip)	U	B	2	3	13.4	Geom	-	3.30	0.00	N	Arm J4:3 Left	Inf
J4:2/3 (M11 SB Off Slip)	U	B	2	3	9.0	Geom	-	3.30	0.00	N	Arm J5:1 Ahead	56.00
J4:2/4 (M11 SB Off Slip)	U	B	2	3	60.0	Geom	-	3.30	0.00	N	Arm J7:1 Ahead	Inf
J4:2/5 (M11 SB Off Slip)	U	B	2	3	9.0	Geom	-	3.65	0.00	N	Arm J7:1 Ahead	Inf
J4:3/1 (Thremhall Ave Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J4:3/2 (Thremhall Ave Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J4:4/1	U		2	3	60.0	Geom	-	3.75	0.00	Y	Arm J4:2 Ahead	Inf
J4:4/2	U		2	3	60.0	Geom	-	3.75	0.00	N	Arm J4:2 Ahead	Inf

Junction: J5: A120E												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J5:1/1	U	C	2	3	6.6	User	1800	-	-	-	-	-
J5:1/2	U	C	2	3	6.6	User	1800	-	-	-	-	-
J5:1/3	U	C	2	3	60.0	User	1800	-	-	-	-	-
J5:2/1 (Thremhall Avenue)	U	D	2	3	10.3	Geom	-	3.78	0.00	Y	Arm J5:3 Left	44.00
J5:2/2 (Thremhall Avenue)	U	D	5	3	60.0	Geom	-	3.78	0.00	N	Arm J6:1 Ahead	54.00
J5:2/3 (Thremhall Avenue)	U	D	5	3	60.0	Geom	-	3.78	0.00	N	Arm J6:1 Ahead	54.00
J5:3/1 (Dunmow Rd Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J5:3/2 (Dunmow Rd Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J6: Dunmow Road												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J6:1/1 (Dunmow Rd Circ)	U	E	2	3	3.9	Geom	-	3.65	0.00	N	Arm J7:2 Right	67.00
J6:1/2 (Dunmow Rd Circ)	U	E	2	3	4.7	Geom	-	3.65	0.00	N	Arm J7:2 Right	67.00
J6:1/3 (Dunmow Rd Circ)	U	E	2	3	6.1	Geom	-	3.65	0.00	N	Arm J7:2 Right	67.00
J6:2/1 (Dunmow Rd Entry)	U	F	2	3	7.0	Geom	-	3.42	0.00	Y	Arm J7:2 Ahead	22.00
J6:2/2 (Dunmow Rd Entry)	U	F	2	3	60.0	Geom	-	3.42	0.00	N	Arm J7:2 Ahead	28.00
J6:2/3 (Dunmow Rd Entry)	U	F	2	3	7.0	Geom	-	3.42	0.00	N	Arm J7:2 Ahead	28.00

Junction: J7: M11 Junction 8 Internal												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J7:1/1	U	H	2	3	60.0	User	1800	-	-	-	-	-
J7:1/2	U	H	2	3	23.5	User	1800	-	-	-	-	-
J7:1/3	U	H	2	3	23.5	User	1800	-	-	-	-	-
J7:1/4	U	H	2	3	23.5	User	1800	-	-	-	-	-
J7:2/1	U	G	2	3	16.9	Geom	-	4.38	0.00	Y	Arm J7:3 Ahead	80.00
J7:2/2	U	G	2	3	16.9	User	1800	-	-	-	-	-
J7:2/3	U	G	2	3	16.9	User	1800	-	-	-	-	-
J7:3/1 (M11 SB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
J7:3/2 (M11 SB On Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flows

FG5: 'AM 2028 With Airport 35 mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	0	878	81	0	180	109	144	16	1408
	B	812	0	84	0	29	350	463	53	1791
	C	96	20	1	420	3	34	45	5	624
	D	0	0	156	0	186	235	311	35	923
	E	59	22	1	299	0	7	10	1	399
	F	190	243	61	347	9	0	2	0	852
	G	263	337	84	480	12	2	0	0	1178
	H	12	15	4	22	1	0	0	0	54
	Tot.	1432	1515	472	1568	420	737	975	110	7229

FG6: 'PM 2028 With Airport 35 mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	1	819	89	0	135	97	213	7	1361
	B	656	0	82	0	71	236	516	16	1577
	C	246	80	3	140	25	78	171	5	748
	D	0	0	143	0	231	230	504	16	1124
	E	184	97	14	117	0	19	42	1	474
	F	134	487	190	238	16	0	5	0	1070
	G	124	449	176	220	15	4	0	0	988
	H	13	48	19	24	2	0	0	0	106
	Tot.	1358	1980	716	739	495	664	1451	45	7448

FG7: 'AM 2028 With Airport 43 mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	0	900	83	0	184	112	148	17	1444
	B	803	0	83	0	29	347	458	52	1772
	C	96	20	1	420	3	34	45	5	624
	D	0	0	165	0	196	248	327	37	973
	E	61	23	1	309	0	8	10	1	413
	F	193	247	62	352	9	0	2	0	865
	G	267	342	86	488	13	2	0	0	1198
	H	12	16	4	22	1	0	0	0	55
	Tot.	1432	1548	485	1591	435	751	990	112	7344

FG8: 'PM 2028 With Airport 43 mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	1	855	93	0	141	101	222	7	1420
	B	753	0	94	0	81	270	592	18	1808
	C	246	80	3	140	25	78	171	5	748
	D	0	0	158	0	256	255	559	17	1245
	E	200	105	15	127	0	21	45	1	514
	F	136	495	194	242	17	0	5	0	1089
	G	126	457	179	224	15	4	0	0	1005
	H	14	49	19	24	2	0	0	0	108
	Tot.	1476	2041	755	757	537	729	1594	48	7937

FG11: 'AM 2033 With Airport 35mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	0	908	84	0	186	113	149	17	1457
	B	837	0	87	0	30	361	478	54	1847
	C	99	21	1	435	3	35	46	5	645
	D	0	0	161	0	191	242	320	36	950
	E	62	23	1	314	0	8	10	1	419
	F	196	251	63	359	9	0	2	0	880
	G	272	348	87	496	13	0	2	0	1218
	H	12	16	4	23	1	0	0	0	56
	Tot.	1478	1567	488	1627	433	759	1007	113	7472

FG12: 'AM 2033 With Airport 43mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	0	929	86	0	190	116	153	17	1491
	B	829	0	86	0	30	358	473	54	1830
	C	99	21	1	435	3	35	46	5	645
	D	0	0	199	0	237	300	397	45	1178
	E	69	26	1	350	0	9	11	1	467
	F	199	255	64	364	9	0	2	0	893
	G	276	353	88	504	13	0	2	0	1236
	H	13	16	4	23	1	0	0	0	57
	Tot.	1485	1600	529	1676	483	818	1084	122	7797

FG13: 'PM 2033 With Airport 35mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	1	846	92	0	139	100	220	7	1405
	B	667	0	83	0	72	240	525	16	1603
	C	255	83	3	146	26	81	178	6	778
	D	0	0	147	0	237	236	517	16	1153
	E	193	101	15	122	0	20	43	1	495
	F	138	503	197	247	17	0	5	0	1107
	G	128	465	182	228	16	0	4	0	1023
	H	14	50	20	24	2	0	0	0	110
	Tot.	1396	2048	739	767	509	677	1492	46	7674

FG14: 'PM 2033 With Airport 43mppa'

Desired Flow :

		Destination								
		A	B	C	D	E	F	G	H	Tot.
Origin	A	1	882	96	0	145	105	229	7	1465
	B	763	0	95	0	83	274	600	19	1834
	C	255	83	3	146	26	81	178	6	778
	D	0	0	162	0	262	261	572	18	1275
	E	209	110	16	132	0	21	47	1	536
	F	141	512	200	251	17	0	5	0	1126
	G	130	472	185	231	16	0	4	0	1038
	H	14	51	20	25	2	0	0	0	112
	Tot.	1513	2110	777	785	551	742	1635	51	8164

2028 Scenario

2028 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
Network: M11 J8 A120 Option 3 LinSig Assessment	-	**234.6%**	-	**97.7%**	-
J1: M11 NB Offslip	-	**73.9%**	-	**66.6%**	-
1/1	Ahead Right	63.1%	8.0	63.5%	9.1
1/2	Right	58.8%	6.4	66.6%	7.2
1/3	Right	73.9%	15.2	66.0%	4.0
2/2+2/1	M11 NB Off Slip Ahead Ahead2	49.8%	4.7	52.6%	5.0
2/3+2/4	M11 NB Off Slip Ahead	31.1%	2.9	56.1%	6.0
J2: Services	-	**91.4%**	-	**80.7%**	-
1/1	Service Station Circ Ahead	61.9%	7.3	61.8%	10.7
1/2	Service Station Circ Right Ahead	40.7%	3.7	42.3%	3.8
1/3	Service Station Circ Right	91.4%	24.1	72.6%	12.7
1/4	Service Station Circ Right	13.2%	3.3	43.7%	6.8
2/1	Service Station Entry Ahead Left	18.6%	1.4	20.4%	1.5
2/2	Service Station Entry Ahead	24.0%	1.8	80.7%	8.1
J3: A120W	-	**101.6%**	-	**83.8%**	-
1/1	A120 W Circ Ahead	73.1%	7.9	45.3%	4.0
1/2	A120 W Circ Ahead	72.9%	7.2	45.1%	4.0
1/3	A120 W Circ Right	6.3%	0.7	73.2%	5.9
1/4	A120 W Circ Right	38.3%	5.6	78.6%	9.9
2/2+2/1	A120 W Entry Ahead Left	101.6%	65.9	70.7%	27.4
2/3	A120 W Entry Ahead	2.2%	0.2	83.8%	14.1
J4: M11 SB Offslip	-	**76.8%**	-	**94.5%**	-

2028 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
1/1	Ahead	54.3%	2.6	11.2%	0.3
1/2	Ahead Ahead2	63.3%	15.0	63.7%	6.9
1/3	Right	2.0%	0.1	94.5%	23.4
2/1+2/2	M11 SB Off Slip Left	76.8%	10.5	93.1%	15.2
2/3	M11 SB Off Slip Ahead	12.5%	1.3	17.0%	1.5
2/4+2/5	M11 SB Off Slip Ahead	63.7%	7.1	63.3%	6.3
4/1	Ahead	44.1%	0.4	45.2%	0.4
4/2	Ahead	34.5%	0.3	25.5%	0.2
J5: A120E	**-**	**234.6%**	**-**	**63.0%**	**-**
1/1	Ahead	38.5%	2.6	49.6%	3.2
1/2	Ahead	234.6%	224.7	52.7%	3.4
2/2+2/1	Thremhall Avenue Left Ahead	0.0%	0.0	49.6%	3.2
2/3	Thremhall Avenue Ahead	60.9%	9.6	63.0%	10.2
J6: Dunmow Road	**-**	48.8%	7.2	57.6%	9.4
1/1	Dunmow Rd Circ Right	**83.8%**	**-**	**75.9%**	**-**
1/2	Dunmow Rd Circ Right	-	-	-	-
1/3	Dunmow Rd Circ Right	66.8%	4.0	75.9%	6.8
2/2+2/1	Dunmow Rd Entry Ahead	56.6%	3.2	73.1%	6.1
2/3	Dunmow Rd Entry Ahead	83.8%	10.7	74.3%	9.3
J7: M11 Junction 8 Internal	**-**	20.4%	2.0	18.7%	1.9
1/1	Right	**98.4%**	**-**	**97.7%**	**-**
1/2	Right Right2	0.0%	0.0	97.5%	21.1
1/3	Right	0.0%	0.0	97.7%	21.3
2/1	Ahead	46.3%	3.0	53.2%	3.8
2/2	Ahead	54.3%	3.3	27.5%	1.1

2028 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
2/3	Ahead	41.1%	9.1	38.1%	9.0
J8: A120_A1250	**-**	98.4%	21.7	95.4%	14.0
1/1	A120 EB Ahead	88.6%	18.7	96.8%	21.6
1/2+1/3	A120 EB Ahead Right	**103.4%**	**-**	**82.2%**	**-**
3/1	Birchanger Lane Left	69.0%	9.1	62.1%	8.0
4/2+4/1	A1250 Dunmow Road Right Left	1.3%	0.1	63.2%	8.7
4/3	A1250 Dunmow Road Right	14.7%	0.6	29.0%	1.3
5/1	A120 EB Ahead Left	103.4%	30.1	80.4%	9.9
5/2	A120 EB Ahead	58.5%	6.7	82.2%	10.8
6/1	A120 WB Left	76.3%	5.2	64.8%	4.1
6/2	A120 WB Ahead	22.2%	0.2	66.0%	4.4
6/3	A120 WB Ahead	55.6%	2.6	56.7%	1.1
9/1	Ahead	62.9%	8.6	62.6%	9.7
11/1	A120 W Exit Ahead	29.0%	3.9	44.1%	5.4
11/2	A120 W Exit Ahead	51.7%	0.5	48.1%	0.5
11/3+11/4	A120 W Exit Right Ahead	37.4%	0.3	38.1%	0.3

2028 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
Network: M11 J8 A120 Option 3 LinSig Assessment	**-**	**171.6%**	**-**	**90.4%**	**-**
J1: M11 NB Offslip	**-**	**122.1%**	**-**	**83.3%**	**-**
1/1	Ahead Right	55.6%	11.8	62.1%	9.0
1/2	Right	47.0%	5.7	81.9%	11.9
1/3	Right	122.1%	165.9	83.3%	10.5

2028 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
2/2+2/1	M11 NB Off Slip Ahead Ahead2	43.1%	4.2	60.3%	5.6
2/3+2/4	M11 NB Off Slip Ahead	47.5%	5.4	82.7%	9.7
J2: Services	**-**	**90.6%**	**-**	**90.4%**	**-**
1/1	Service Station Circ Ahead	40.9%	5.2	53.3%	7.7
1/2	Service Station Circ Right Ahead	45.4%	6.7	54.5%	10.0
1/3	Service Station Circ Right	76.7%	6.0	90.4%	13.5
1/4	Service Station Circ Right	14.0%	2.8	42.6%	5.3
2/1	Service Station Entry Ahead Left	90.6%	9.2	85.8%	8.1
2/2	Service Station Entry Ahead	34.6%	1.8	79.5%	6.0
J3: A120W	**-**	**76.8%**	**-**	**89.4%**	**-**
1/1	A120 W Circ Ahead	66.0%	7.6	71.2%	8.4
1/2	A120 W Circ Ahead	66.1%	7.7	71.4%	8.4
1/3	A120 W Circ Right	20.6%	2.7	84.3%	12.2
1/4	A120 W Circ Right	37.7%	5.3	76.8%	7.9
2/2+2/1	A120 W Entry Ahead Left	76.8%	34.6	89.4%	18.1
2/3	A120 W Entry Ahead	2.3%	0.2	47.5%	6.3
J4: M11 SB Offslip	**-**	**92.0%**	**-**	**83.5%**	**-**
1/1	Ahead	65.2%	6.3	58.2%	5.5
1/2	Ahead Ahead2	62.9%	8.3	83.5%	11.6
1/3	Right	2.4%	0.0	53.8%	5.9
2/1+2/2	M11 SB Off Slip Left	73.4%	9.2	79.6%	10.4
2/3	M11 SB Off Slip Ahead	14.9%	1.4	17.2%	1.6
2/4+2/5	M11 SB Off Slip Ahead	92.0%	16.1	49.4%	4.7
4/1	Ahead	41.2%	0.3	43.0%	0.4
4/2	Ahead	39.6%	0.3	26.5%	0.2

2028 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
J5: A120E	**-**	**94.0%**	**-**	**67.3%**	**-**
1/1	Ahead	23.8%	2.9	64.6%	4.7
1/2	Ahead	94.0%	15.9	66.7%	5.3
2/2+2/1	Thremhall Avenue Left Ahead	0.0%	0.0	64.6%	4.7
2/3	Thremhall Avenue Ahead	42.1%	5.6	67.3%	11.5
J6: Dunmow Road	**-**	61.6%	10.8	62.9%	11.3
1/1	Dunmow Rd Circ Right	**60.2%**	**-**	**66.2%**	**-**
1/2	Dunmow Rd Circ Right	0.0%	0.0	-	-
1/3	Dunmow Rd Circ Right	37.7%	0.5	66.2%	2.3
2/2+2/1	Dunmow Rd Entry Ahead	60.2%	1.0	65.6%	2.2
2/3	Dunmow Rd Entry Ahead	54.5%	5.1	65.8%	6.2
J7: M11 Junction 8 Internal	**-**	58.1%	6.6	62.5%	6.6
1/1	Right	**88.9%**	**-**	**81.8%**	**-**
1/2	Right Right2	0.0%	0.0	77.5%	7.4
1/3	Right	0.0%	0.0	80.5%	9.0
2/1	Ahead	44.2%	2.2	65.7%	3.7
2/2	Ahead	88.9%	8.4	54.5%	2.1
2/3	Ahead	11.6%	0.3	10.2%	0.5
J8: A120_A1250	**-**	57.5%	9.3	80.6%	19.3
1/1	A120 EB Ahead	85.1%	18.7	81.8%	19.4
1/2+1/3	A120 EB Ahead Right	**171.6%**	**-**	**85.7%**	**-**
3/1	Birchanger Lane Left	66.6%	8.5	49.9%	8.9
4/2+4/1	A1250 Dunmow Road Right Left	1.6%	0.1	51.6%	10.0
4/3	A1250 Dunmow Road Right	33.2%	1.5	55.6%	3.7
5/1	A120 EB Ahead Left	171.6%	243.8	84.0%	17.1

2028 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
5/2	A120 EB Ahead	26.8%	2.7	85.0%	18.5
6/1	A120 WB Left	75.2%	4.8	62.6%	3.3
6/2	A120 WB Ahead	11.1%	0.1	64.0%	3.7
6/3	A120 WB Ahead	49.9%	2.1	50.2%	6.3
9/1	Ahead	85.7%	17.0	85.7%	25.4
11/1	A120 W Exit Ahead	60.6%	4.0	77.2%	20.7
11/2	A120 W Exit Ahead	65.1%	0.9	60.5%	0.8
11/3+11/4	A120 W Exit Right Ahead	33.6%	0.3	36.9%	0.3

2033 output

2033 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
Network: M11 J8 A120 Option 3 LinSig Assessment	**-**	**103.3%**	**-**	**102.2%**	**-**
J1: M11 NB Offslip	**-**	**72.6%**	**-**	**76.1%**	**-**
1/1	Ahead Right	63.9%	10.4	68.4%	8.7
1/2	Right	60.3%	2.6	69.3%	12.6
1/3	Right	72.6%	4.9	73.5%	14.6
2/2+2/1	M11 NB Off Slip Ahead Ahead2	54.5%	5.0	57.1%	6.1
2/3+2/4	M11 NB Off Slip Ahead	58.3%	5.6	76.1%	9.3
J2: Services	**-**	**82.0%**	**-**	**81.3%**	**-**
1/1	Service Station Circ Ahead	62.6%	7.3	70.2%	9.9
1/2	Service Station Circ Right Ahead	40.3%	3.2	47.4%	6.9
1/3	Service Station Circ Right	74.9%	18.9	78.0%	7.9
1/4	Service Station Circ Right	45.9%	3.4	52.3%	5.7

2033 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
2/1	Service Station Entry Ahead Left	20.5%	1.5	20.8%	1.6
2/2	Service Station Entry Ahead	82.0%	8.4	81.3%	8.9
J3: A120W	**-**	**86.9%**	**-**	**90.7%**	**-**
1/1	A120 W Circ Ahead	42.6%	2.8	40.2%	4.5
1/2	A120 W Circ Ahead	42.8%	2.8	40.2%	4.5
1/3	A120 W Circ Right	73.5%	8.6	76.0%	11.9
1/4	A120 W Circ Right	77.2%	11.9	83.0%	10.7
2/2+2/1	A120 W Entry Ahead Left	73.7%	26.4	72.9%	27.3
2/3	A120 W Entry Ahead	86.9%	21.4	90.7%	21.3
J4: M11 SB Offslip	**-**	**95.9%**	**-**	**102.2%**	**-**
1/1	Ahead	23.2%	1.1	13.7%	2.0
1/2	Ahead Ahead2	52.0%	4.4	67.6%	5.9
1/3	Right	95.9%	25.0	102.2%	52.8
2/1+2/2	M11 SB Off Slip Left	93.9%	15.9	91.0%	14.2
2/3	M11 SB Off Slip Ahead	17.2%	1.5	16.7%	1.5
2/4+2/5	M11 SB Off Slip Ahead	63.9%	6.4	63.0%	6.4
4/1	Ahead	45.6%	0.4	46.7%	0.4
4/2	Ahead	25.8%	0.2	26.4%	0.2
J5: A120E	**-**	**68.8%**	**-**	**66.7%**	**-**
1/1	Ahead	45.1%	2.0	49.7%	3.5
1/2	Ahead	37.1%	2.1	54.5%	3.7
2/2+2/1	Thremhall Avenue Left Ahead	45.8%	2.3	49.3%	3.4
2/3	Thremhall Avenue Ahead	68.8%	12.2	66.7%	11.4
J6: Dunmow Road	**-**	61.8%	10.8	60.2%	10.2
1/1	Dunmow Rd Circ Right	**80.8%**	**-**	**82.7%**	**-**

2033 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
1/2	Dunmow Rd Circ Right	-	-	-	-
1/3	Dunmow Rd Circ Right	76.1%	5.2	75.2%	5.6
2/2+2/1	Dunmow Rd Entry Ahead	71.9%	4.5	71.5%	4.9
2/3	Dunmow Rd Entry Ahead	80.8%	10.4	82.7%	10.9
J7: M11 Junction 8 Internal	**-**	27.7%	2.8	22.0%	2.2
1/1	Right	**103.3%**	**-**	**101.2%**	**-**
1/2	Right Right2	103.3%	31.0	101.2%	27.1
1/3	Right	103.0%	30.2	101.0%	26.8
2/1	Ahead	55.9%	1.4	54.8%	5.5
2/2	Ahead	28.8%	0.3	28.3%	1.7
2/3	Ahead	38.6%	9.3	39.5%	9.4
J8: A120_A1250	**-**	93.8%	12.4	98.5%	17.9
1/1	A120 EB Ahead	101.6%	42.2	100.0%	35.9
1/2+1/3	A120 EB Ahead Right	**101.1%**	**-**	**77.5%**	**-**
3/1	Birchanger Lane Left	56.4%	6.9	67.8%	8.9
4/2+4/1	A1250 Dunmow Road Right Left	57.9%	7.8	69.3%	9.7
4/3	A1250 Dunmow Road Right	23.6%	1.2	26.7%	1.3
5/1	A120 EB Ahead Left	101.1%	20.5	76.4%	9.5
5/2	A120 EB Ahead	101.1%	21.5	77.5%	10.3
6/1	A120 WB Left	68.0%	5.0	68.0%	8.2
6/2	A120 WB Ahead	69.1%	5.5	69.3%	9.1
6/3	A120 WB Ahead	57.4%	1.0	61.9%	1.4
9/1	Ahead	53.5%	6.5	71.6%	11.5
11/1	A120 W Exit Ahead	42.6%	8.0	52.5%	6.8
11/2	A120 W Exit Ahead	48.9%	0.5	49.6%	0.5

2033 Scenario		AM- 35 MPPA		AM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
11/3+11/4	A120 W Exit Right Ahead	38.6%	0.3	41.6%	0.4

2033 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
Network: M11 J8 A120 Option 3 LinSig Assessment	**-**	**91.9%**	**-**	**97.0%**	**-**
J1: M11 NB Offslip	**-**	**88.3%**	**-**	**85.0%**	**-**
1/1	Ahead Right	57.8%	9.4	63.7%	10.9
1/2	Right	73.9%	11.6	85.0%	15.2
1/3	Right	77.2%	6.9	83.9%	18.4
2/2+2/1	M11 NB Off Slip Ahead Ahead2	59.0%	5.2	61.2%	5.7
2/3+2/4	M11 NB Off Slip Ahead	88.3%	11.8	84.7%	10.5
J2: Services	**-**	**85.7%**	**-**	**92.6%**	**-**
1/1	Service Station Circ Ahead	49.8%	6.6	56.7%	8.2
1/2	Service Station Circ Right Ahead	49.6%	6.7	56.8%	10.6
1/3	Service Station Circ Right	85.7%	16.5	92.6%	16.1
1/4	Service Station Circ Right	39.6%	3.8	49.6%	5.8
2/1	Service Station Entry Ahead Left	78.2%	5.9	78.8%	7.5
2/2	Service Station Entry Ahead	57.2%	3.6	69.9%	5.4
J3: A120W	**-**	**91.8%**	**-**	**93.6%**	**-**
1/1	A120 W Circ Ahead	55.1%	5.8	56.8%	6.5
1/2	A120 W Circ Ahead	55.3%	5.8	56.8%	6.5
1/3	A120 W Circ Right	82.6%	11.9	86.8%	15.1
1/4	A120 W Circ Right	55.1%	7.2	59.5%	5.1

2033 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
2/2+2/1	A120 W Entry Ahead Left	91.8%	45.0	93.6%	50.0
2/3	A120 W Entry Ahead	51.7%	5.8	53.8%	5.9
J4: M11 SB Offslip	**-**	**81.8%**	**-**	**86.6%**	**-**
1/1	Ahead	60.8%	5.4	60.0%	4.5
1/2	Ahead Ahead2	81.8%	9.2	86.6%	11.7
1/3	Right	54.2%	5.8	55.7%	3.6
2/1+2/2	M11 SB Off Slip Left	78.7%	10.2	82.1%	11.1
2/3	M11 SB Off Slip Ahead	17.0%	1.6	17.7%	1.6
2/4+2/5	M11 SB Off Slip Ahead	48.8%	4.6	51.1%	4.8
4/1	Ahead	42.5%	0.4	44.3%	0.4
4/2	Ahead	26.2%	0.2	27.3%	0.2
J5: A120E	**-**	**62.5%**	**-**	**69.8%**	**-**
1/1	Ahead	58.6%	4.5	64.4%	5.7
1/2	Ahead	52.3%	4.2	63.3%	5.6
2/2+2/1	Thremhall Avenue Left Ahead	59.1%	4.6	60.8%	4.9
2/3	Thremhall Avenue Ahead	62.5%	10.2	69.8%	12.5
J6: Dunmow Road	**-**	57.7%	9.6	64.9%	11.9
1/1	Dunmow Rd Circ Right	**65.4%**	**-**	**68.9%**	**-**
1/2	Dunmow Rd Circ Right	-	-	-	-
1/3	Dunmow Rd Circ Right	60.5%	1.5	68.9%	3.8
2/2+2/1	Dunmow Rd Entry Ahead	59.0%	1.5	67.8%	3.7
2/3	Dunmow Rd Entry Ahead	65.4%	6.3	66.4%	6.4
J7: M11 Junction 8 Internal	**-**	62.2%	6.8	61.2%	6.7
1/1	Right	**90.0%**	**-**	**97.0%**	**-**
1/2	Right Right2	81.0%	7.2	89.2%	10.2

2033 Scenario		PM- 35 MPPA		PM- 43 MPPA	
Item	**Lane Description**	**Degree of Sat**	**MMQ**	**Degree of Sat**	**MMQ**
1/3	Right	80.7%	7.2	88.3%	9.9
2/1	Ahead	71.4%	6.8	79.2%	4.4
2/2	Ahead	59.1%	5.4	65.6%	2.3
2/3	Ahead	10.9%	0.7	10.7%	2.4
J8: A120_A1250	**-**	89.1%	14.7	96.5%	20.7
1/1	A120 EB Ahead	90.0%	15.3	97.0%	34.0
1/2+1/3	A120 EB Ahead Right	**91.9%**	**-**	**97.0%**	**-**
3/1	Birchanger Lane Left	57.2%	6.8	56.0%	6.7
4/2+4/1	A1250 Dunmow Road Right Left	59.5%	7.6	58.8%	7.5
4/3	A1250 Dunmow Road Right	57.9%	2.8	59.0%	2.9
5/1	A120 EB Ahead Left	90.8%	14.7	96.6%	18.8
5/2	A120 EB Ahead	91.9%	16.2	97.0%	20.2
6/1	A120 WB Left	66.5%	3.9	67.6%	4.0
6/2	A120 WB Ahead	68.2%	4.4	69.3%	4.5
6/3	A120 WB Ahead	51.2%	4.1	56.1%	2.3
9/1	Ahead	90.6%	18.4	94.8%	23.5
11/1	A120 W Exit Ahead	85.5%	15.7	92.1%	20.9
11/2	A120 W Exit Ahead	61.5%	0.8	62.6%	0.8
11/3+11/4	A120 W Exit Right Ahead	34.5%	0.3	37.8%	0.3

N

A120 EAST WEST

SLIP ROAD

LP

RS

3.50m 3.50m 3.50m 3.50m 3.85m

3.65m 3.65m

3.75m 3.75m 3.25m

4.20m 4.20m 4.20m 4.20m

4.20m 4.20m 4.20m 4.20m

3.75m 3.75m 3.25m

4.20m 4.20m 4.20m 4.20m

4.20m 4.20m 4.20m 4.20m

3.75m 3.75m 3.25m

3.75m 3.75m 3.25m

A120

B1256

FB

Greencroft

Tocher House
(Training Centre)

0 12.5m 25m 37.5m 50m

NOTES:

1. THIS DRAWING IS BASED ON INFORMATION PROVIDED BY RINGWAY JACOBS.
2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
3. DO NOT SCALE FROM THIS DRAWING.
4. SUBJECT TO CAPACITY TESTING.

Rev.	Date	Comments	Des	Chk	App
P1	28/11/17	ORIGINAL ISSUE			

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Client:

Project Title: M11 JUNCTION 8 IMPROVEMENTS

Drawing Title: M11 SOUTHBOUND OFFSLIP / A120 EAST

Status: WORK in PROGRESS

Drawing Number:
SDG Ref. 23003401 | Originator SDG | Volume HGN | Location 100 | Type DR | Role D | Number 00103 | Series 100

Scale: 1:500

Suitability S0

Rev. P1

Size: A1

DATE: 29/11/2017 CAD REF/FILE NO: I:\Users\Strong\Public\CAD Items\CAD Items Schemes\M11 J8 Location 1_CAD_03-11-17\23003401-SDG-HGN-100-DR-D-00101 - 00103 - 00103

N

Ambulance Station

Sewage Works (disused)

Pond

Depot

Track

Gantry

A120 WEST

A120 WEST

0 12.5m 25m 37.5m 50m

NOTES:

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2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
3. DO NOT SCALE FROM THIS DRAWING.
4. SUBJECT TO CAPACITY TESTING.

Rev.	Date	Comments	Des	Chk	App
P1	28/11/17	ORIGINAL ISSUE			

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Client:

Project Title:
M11 JUNCTION 8 IMPROVEMENTS

Drawing Title:
A120 WEST

Status:
WORK IN PROGRESS

Drawing Number:
SDG Ref. 23003401 | Originator SDG | Volume HGN
Location 100 | Type DR | Role D
Number 00102 | Series 100

Scale: 1:500
Suitability S0
Rev. P1
Size: A1

N

NOTES:

1. THIS DRAWING IS BASED ON INFORMATION PROVIDED BY RINGWAY JACOBS.
2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
3. DO NOT SCALE FROM THIS DRAWING.
4. SUBJECT TO CAPACITY TESTING.

Rev.	Date	Comments	Des	Chk	App
P1	28/11/17	ORIGINAL ISSUE			

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Client:

Project Title:
M11 JUNCTION 8 IMPROVEMENTS

Drawing Title:
M11 NORTHBOUND OFFSLIP / SERVICES EXIT

Status:
WORK IN PROGRESS

Drawing Number:			Scale:	Suitability
SDG Ref. 23003401	Originator SDG	Volume HGN	1:500	S0
Location 100	Type DR	Role D	Rev. P1	Size: A1
Number 00101		Series 100		

0 12.5m 25m 37.5m 50m

L Round Coppice Road Roundabout and Priory Wood Roundabout ARCADY Modelling Results

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Round Coppice Road Roundabout and Priory Wood Roundabout ARCADY Results

2016, 2028 and 2033 Sensitivity Test

This appendix summarises the inputs and results for the proposed improvement layout. Full details of the ARCADY models are available on request.

Priory Wood Roundabout

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	7.50	7.50	0.00	35.00	101.89	35.00	
2	3.90	7.32	15.19	17.95	101.89	43.00	
3	9.20	9.88	2.49	53.07	386.04	39.00	
4	8.90	11.20	11.47	20.93	143.50	51.00	

Vehicle Inputs

2016 AM

		To			
		1	2	3	4
From	1	1.00	130.00	96.00	98.00
	2	181.00	2.00	1383.00	19.00
	3	182.00	1102.00	6.00	0.00
	4	118.00	6.00	3.00	2.00

2016 PM

		To			
		1	2	3	4
From	1	1.00	136.00	101.00	103.00
	2	189.00	2.00	1450.00	20.00
	3	190.00	1154.00	6.00	0.00
	4	124.00	6.00	3.00	2.00

2028 35 mppa AM

		To			
		1	2	3	4
From	1	1.00	170.00	126.00	129.00
	2	214.00	2.00	1635.00	23.00
	3	212.00	1283.00	7.00	0.00
	4	183.00	9.00	5.00	3.00

2028 35 mppa PM

		To			
		1	2	3	4
From	1	2.00	213.00	158.00	161.00
	2	222.00	3.00	1697.00	24.00
	3	261.00	1580.00	9.00	0.00
	4	136.00	7.00	4.00	2.00

2028 43 mppa AM

		To			
		1	2	3	4
From	1	1.00	170.00	126.00	128.00
	2	214.00	2.00	1640.00	23.00
	3	230.00	1393.00	8.00	0.00
	4	200.00	10.00	5.00	3.00

2028 43 mppa PM

		To			
		1	2	3	4
From	1	2.00	223.00	165.00	169.00
	2	223.00	3.00	1710.00	24.00
	3	286.00	1736.00	10.00	0.00
	4	153.00	8.00	4.00	3.00

2033 35 mppa AM

		To			
		1	2	3	4
From	1	1.00	174.00	129.00	131.00
	2	221.00	3.00	1695.00	24.00
	3	217.00	1313.00	7.00	0.00
	4	187.00	10.00	5.00	3.00

2033 35 mppa PM

		To			
		1	2	3	4
From	1	2.00	216.00	160.00	164.00
	2	230.00	3.00	1757.00	25.00
	3	267.00	1621.00	9.00	0.00
	4	137.00	7.00	4.00	2.00

2033 43 mppa AM

		To			
		1	2	3	4
From	1	1.00	173.00	128.00	131.00
	2	222.00	3.00	1699.00	24.00
	3	235.00	1422.00	8.00	0.00
	4	204.00	11.00	5.00	4.00

2033 43 mppa PM

		To			
		1	2	3	4
From	1	2.00	227.00	168.00	172.00
	2	231.00	3.00	1770.00	25.00
	3	293.00	1777.00	10.00	0.00
	4	155.00	8.00	4.00	3.00

Summary of roundabout performance

	(0700 - 0800) AM Peak				(1700 - 1800) PM Peak			
	Queue (PCU)	Delay (min)	RFC	LOS	Queue (PCU)	Delay (min)	RFC	LOS
	(Default Analysis Set) - 2016							
Arm 1	0.29	0.05	0.21	A	0.34	0.05	0.24	A
Arm 2	3.73	0.12	0.78	A	4.81	0.15	0.82	A
Arm 3	0.77	0.03	0.43	A	0.95	0.04	0.47	A
Arm 4	0.10	0.04	0.09	A	0.12	0.05	0.10	A
	(Default Analysis Set) - 2028 w/airport (35)							
Arm 1	0.55	0.07	0.34	A	1.50	0.15	0.59	A
Arm 2	16.61	0.49	0.96	D	49.21	1.23	1.02	F
Arm 3	1.24	0.04	0.54	A	2.20	0.06	0.68	A
Arm 4	0.24	0.06	0.19	A	0.33	0.12	0.24	A
	(Default Analysis Set) - 2028 w/airport (43)							
Arm 1	0.65	0.08	0.38	A	3.42	0.33	0.77	C
Arm 2	17.23	0.51	0.96	D	61.29	1.48	1.04	F
Arm 3	1.49	0.05	0.59	A	3.07	0.08	0.75	A
Arm 4	0.33	0.08	0.24	A	0.79	0.25	0.43	B
	(Default Analysis Set) - 2033 w/airport (35)							
Arm 1	0.59	0.07	0.36	A	1.78	0.17	0.63	B
Arm 2	30.12	0.81	0.99	E	83.16	1.90	1.06	F
Arm 3	1.31	0.04	0.56	A	2.39	0.07	0.70	A
Arm 4	0.26	0.07	0.20	A	0.38	0.13	0.27	A
	(Default Analysis Set) - 2033 w/airport (43)							
Arm 1	0.70	0.08	0.40	A	5.05	0.49	0.84	D
Arm 2	31.69	0.85	1.00	F	97.67	2.20	1.08	F
Arm 3	1.59	0.05	0.60	A	3.39	0.09	0.77	A
Arm 4	0.37	0.09	0.26	A	1.11	0.35	0.52	C

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

Round Coppice Road Roundabout

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.10	7.63	31.49	22.17	68.86	40.00	
2	3.60	8.45	20.22	18.73	68.86	38.00	
3	7.40	10.16	34.52	16.14	68.86	43.00	

Vehicle Inputs

2016 AM

		To		
		1	2	3
From	1	0.00	98.00	286.00
	2	106.00	0.00	32.00
	3	380.00	99.00	3.00

2016 PM

		To		
		1	2	3
From	1	0.00	103.00	300.00
	2	111.00	0.00	33.00
	3	398.00	104.00	3.00

2028 35mppa AM

		To		
		1	2	3
From	1	0.00	120.00	349.00
	2	125.00	0.00	37.00
	3	607.00	158.00	5.00

2028 35 mppa PM

		To		
		1	2	3
From	1	0.00	137.00	400.00
	2	131.00	0.00	39.00
	3	482.00	126.00	4.00

2028 43 mppa AM

		To		
		1	2	3
From	1	0.00	119.00	348.00
	2	125.00	0.00	37.00
	3	629.00	164.00	5.00

2028 43 mppa PM

		To		
		1	2	3
From	1	0.00	144.00	419.00
	2	131.00	0.00	39.00
	3	512.00	134.00	4.00

Summary of roundabout performance

	(0700 - 0800) AM Peak				(1700 - 1800) PM Peak			
	Queue (PCU)	Delay (min)	RFC	LOS	Queue (PCU)	Delay (min)	RFC	LOS
	(Default Analysis Set) - 2016							
Arm 1	0.33	0.05	0.24	A	0.35	0.05	0.25	A
Arm 2	0.10	0.04	0.09	A	0.11	0.04	0.09	A
Arm 3	0.26	0.03	0.20	A	0.28	0.03	0.21	A
	(Default Analysis Set) - 2028 w/airport (35)							
Arm 1	0.45	0.05	0.30	A	0.54	0.05	0.34	A
Arm 2	0.13	0.04	0.11	A	0.14	0.04	0.12	A
Arm 3	0.49	0.03	0.32	A	0.36	0.03	0.25	A
	(Default Analysis Set) - 2028 w/airport (43)							
Arm 1	0.44	0.05	0.30	A	0.58	0.06	0.36	A
Arm 2	0.13	0.04	0.11	A	0.14	0.04	0.12	A
Arm 3	0.52	0.04	0.33	A	0.39	0.03	0.27	A

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

M Priory Wood Roundabout Indicative Highway Plan and LinSig Modelling Results

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Priory Wood Roundabout LinSig Results – Signalisation Test

2028 and 2033 Sensitivity Test

This appendix summarises the inputs and results for the proposed improvement layout. Full details of the LinSig models are available on request.

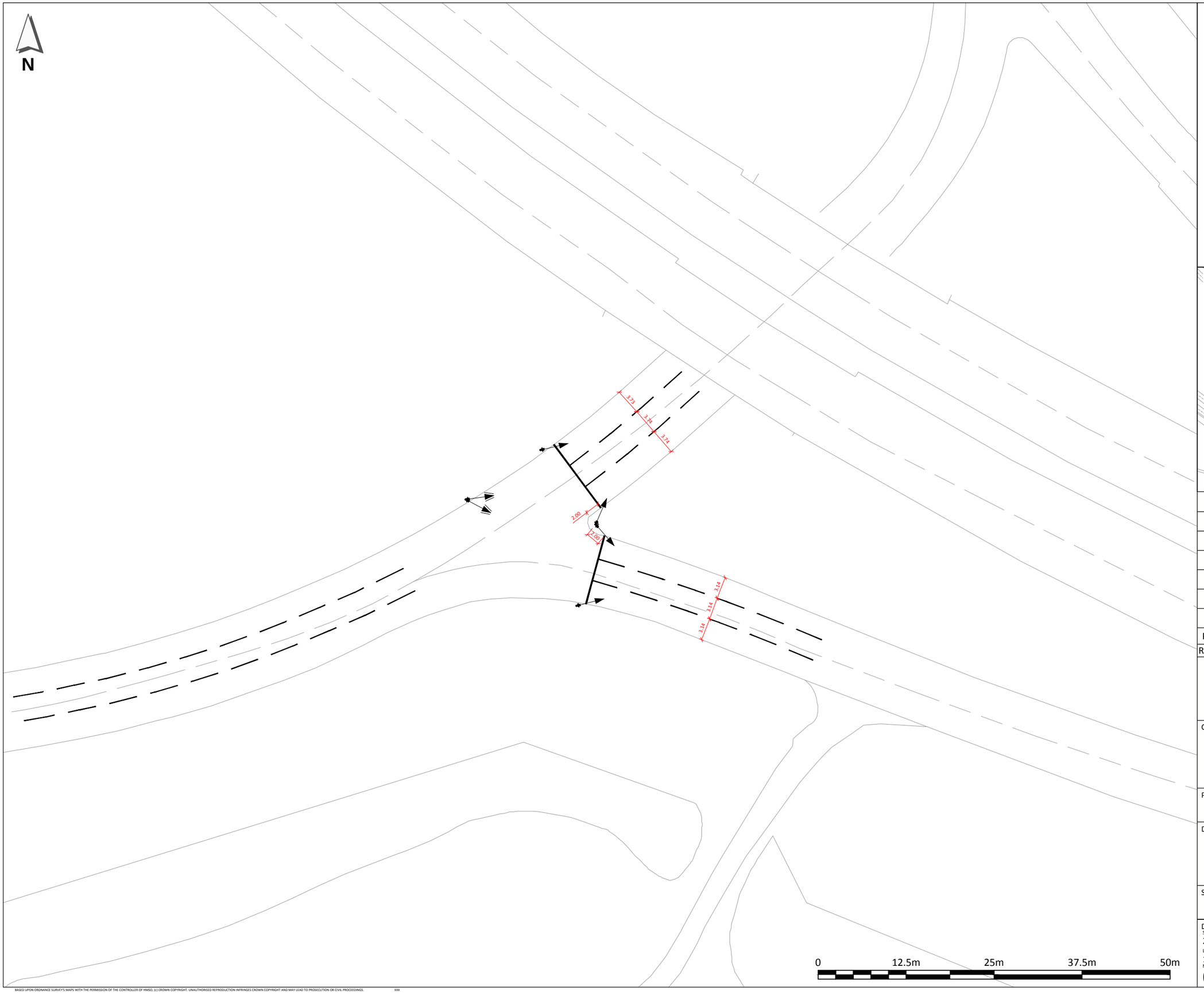
Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Roundabout)	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Ahead	Inf
1/2 (Roundabout)	U	A	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 3 Ahead	Inf
1/3 (Roundabout)	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Ahead	Inf
2/1 (A120)	U	B	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 3 Left	Inf
2/2 (A120)	U	B	2	3	60.0	Geom	-	3.16	0.00	Y	Arm 3 Left	Inf
2/3 (A120)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Left	Inf
3/1 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/2 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/3 (Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

			2028 AM 43mppa		2028 PM 43 mppa		2033 AM 43 mppa		2033 PM 43 mppa	
Item	**Lane Description**	**Lane Type**	**DoS**	**MMQ**	**DoS**	**MMQ**	**DoS**	**MMQ**	**DoS**	**MMQ**
Network	**-**	**-**	**43.4%**	**-**	**46.4%**	**-**	**44.8%**	**-**	**48.1%**	**-**
Unnamed Junction	**-**	**-**	**43.4%**	**-**	**46.4%**	**-**	**44.8%**	**-**	**48.1%**	**-**
1/1	Roundabout Ahead	U	39.1%	2.5	42.6%	3.1	39.6%	2.5	43.3%	3.2
1/2	Roundabout Ahead	U	39.8%	2.6	44.0%	3.3	41.4%	2.7	44.7%	3.4
1/3	Roundabout Ahead	U	39.1%	2.5	42.6%	3.1	39.6%	2.5	43.3%	3.2
2/1	A120 Left	U	42.7%	5.4	45.9%	6.4	44.3%	5.8	47.5%	6.9
2/2	A120 Left	U	42.8%	5.4	46.0%	6.5	44.4%	5.9	47.6%	6.9
2/3	A120 Left	U	43.4%	5.6	46.4%	6.6	44.8%	6.0	48.1%	7.1
3/1	Exit	U	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
3/2	Exit	U	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
3/3	Exit	U	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0

N



0 12.5m 25m 37.5m 50m

NOTES:

1. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED.
2. DO NOT SCALE FROM THIS DRAWING.

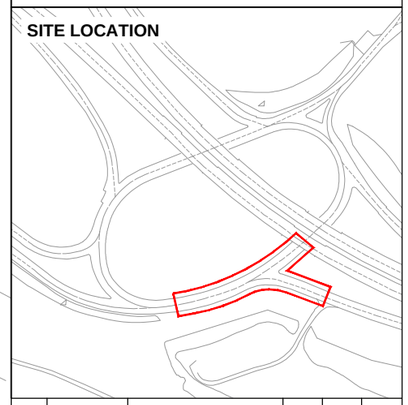
KEY:

PROPOSED WHITE ROAD MARKINGS

PROPOSED PRIMARY SIGNAL

PROPOSED SECONDARY SIGNAL

SITE LOCATION



Rev.	Date	Comments	Des	Chk	App
P1	18/01/18	ORIGINAL ISSUE	TRS		

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t +44 (0)20 7910 5000 e sdginfo@sdgworld.net

Client:
-

Project Title:
-

Drawing Title:
PROPOSED LAYOUT

Status:
WORK IN PROGRESS

Drawing Number:
SDG Ref. 23003401 | Originator SDG | Volume HGN
Location 100 | Type DR | Role D
Number 00101

Scale: 1:500

Suitability S0

Rev. P1

Size: A3

DATE: 15/02/2018 CAD REFERENCE: P:\Projects\23700\03_SAFETY\CAD\Drawings\23003401-SDG-HGN-100-SK-D-00101 - 00101

N Rail Distribution

Rail Distribution Assumptions

Passengers

Passenger – Rail Service Distribution

Train	Distribution
Stansted Express - London	87%
Stansted Express - Cambridge	4%
CrossCountry	9%
Total	**100%**

Passengers – All Areas

Residence	Rail
Inner London	54%
Outer London (North East)	4%
Outer London (South East)	2%
Outer London (South West)	3%
Outer London (North West)	9%
Outer South East (North East)	3%
Outer South East (North West)	1%
Outer South East (South West)	1%
Outer South East (South East)	2%
Southwest & Wales	2%
West Midlands	2%
East Midlands	3%
East Anglia	12%
Rest of UK	2%
Residence not reported	0%
Foreign	0%
Total	**100%**

Employees

Employees – Rail Service Distribution

Train	Distribution
Stansted Express - London	76%
Stansted Express - Cambridge	12%
CrossCountry	12%
Total	**100%**

Employees – All Areas

Residence	Rail
Inner London	2.0%
Outer London (North East)	5.4%
Outer London (South East)	0.1%
Outer London (South West)	0.4%
Outer London (North West)	12.1%
Outer South East (North East)	74.1%
Outer South East (North West)	0.6%
Outer South East (South West)	0.4%
Outer South East (South East)	0.1%
Southwest & Wales	0.1%
West Midlands	0.1%
East Midlands	0.1%
East Anglia	4.2%
Rest of UK	0.1%
Residence not reported	0.0%
Foreign	0.0%
Total	**100.0%**

Employees – South East England (North East) Proportions

SE England - NE	Distribution
Essex	78%
Hertfordshire	22%

Employees – Essex/Hertfordshire Proportions per District

SE England - NE	Employees
Essex	
Uttlesford	34%
Braintree	31%
Harlow	11%
Chelmsford	7%
Colchester	5%
Epping Forest	4%
Basildon	2%
Tendring	1%
Maldon	1%
Brentwood	1%
Castle Point	1%
Rochford	1%
Southend-on-Sea	1%
Thurrock	1%
Total	*100%*
Hertfordshire	
East Hertfordshire	79%
Broxbourne	10%
North Hertfordshire	5%
Welwyn Hatfield	2%
St. Albans	1%
Hertsmere	1%
Stevenage	1%
Watford	1%
Dacorum	0%
Three Rivers	0%
Total	*100%*

O G1 Application Transport Related Planning Conditions and S106 Obligations

steer davies gleave

Stansted Airport Surface Access- G1 Conditions and S106 Elements

Technical Note
October 2017

1 Introduction

1.1 This note outlines a review of the planning obligations outlined for the G1 planning application. It outlines the transport obligations outlined in the planning applications, as well as their current status.

1.2 The following documents have been reviewed in preparing this note:

- Letter from the Communities and Local Government addressed to CMS Cameron McKenna LLP granting permission to the application by Stansted Airport (dated 8 October 2008);
- Section 106 obligations by Stansted Airport to Uttlesford District Council and Essex County Council (dated 26 September 2008);
- Section 106 obligations by Stansted Airport to Hertfordshire County Council (dated 26 September 2008).

2 Conditions and S106 Requirements

2.1 The specific highway conditions that apply to the G1 permission are outlined in Table 2 1 below:

Table 2.1: Highway conditions outlined in the Letter from the HCA

Condition	Condition Deadline	Status
HA1: Highway Schemes		
Completion of three highway schemes: • M11 Junction 8 as in Carillion-URS 95274/I/HM/050 Rev A • Priory Wood Roundabout as in Carillion-URS 95274/I/HM/051 Rev A • Bassingbourn Roundabout as in Faber Maunsell 51029/100/1 Rev 2	Within 18 months of permission granted	Completed Completed Completed
HA2: Highway Safety Scheme		
Highway safety scheme for A120 between Bassingbourn and Priory Wood Roundabouts to be submitted for approval	Within 18 months of permission granted; implemented within 6 months of approval	Understood to be implemented
HA3: Monitoring		
Scheme is to be implemented to monitor the impact of the development on motorway and trunk roads and Airport Roads at Priory Wood roundabout and eastern access and exit to and from the Airport from the A120. Data to be sent to Hertfordshire CC, Essex CC, HA and Local Planning Authority six monthly.	Submitted with 6 months of permission; implemented within 12 weeks of approval.	Ongoing monitoring
HA4: Trigger Point One		
Implement widening of Round Coppice Road / Priory Wood Roundabout as shown on plan Carillion-URS 95274/I/HM/051 Rev A - or other scheme as may be agreed by writing to Local Planning Authority	When 50th greatest hourly in a 8760 hours period recorded exceeds 2000 vehicles on Thremhall Avenue Eastbound from Jct 8	Not yet exceeded
HA5: Trigger Point Two		

Implement Highway Scheme for A120 on-slip as in Faber Maunsell 51029/100/2 Rev.1 - or other may be agreed by writing to Local Planning Authority	When 50th greatest hourly in a 8760 hours period recorded exceeds 3000 vehicles on the A120 Eastbound at Parsonage Road overbridge	Not yet exceeded

2.2 In summary, conditions within HA1 have been met for two out of the three junctions (the works outlined for Bassingbourn Roundabout are unknown). Also, monitoring is ongoing at Stansted, with automatic traffic counters set up around the site, as shown in Figure 2.1.

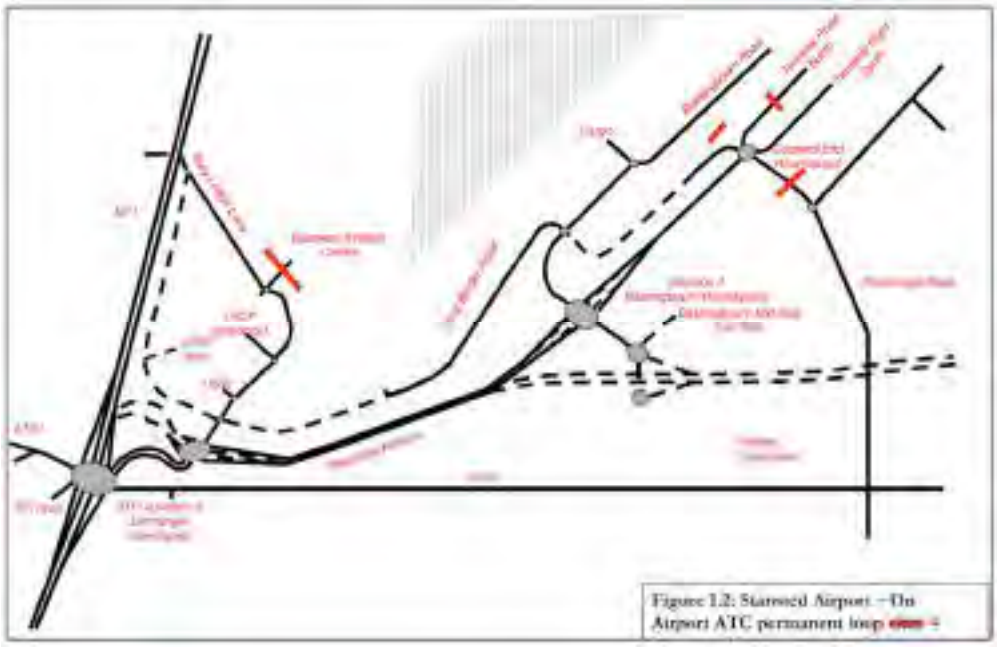

Figure 2.1: Location of ATCs at Stansted Airport.

Trigger Points

2.3 It is understood that some trigger points have not been met yet, and annual monitoring is required. Data has been taken from the Highways Agency TRADS website to estimate the current traffic flows for the areas outlined in HA4 and HA5. It should be noted that the exact locations of the trigger points for HA4 and HA5 are not clear from the conditions, however, an assumption has been undertaken based on the wording outlined in Table 2-1.

2.4 In terms of HA4, the eastbound flows on the A120 between Round Coppice Roundabout and the off-slips to Stansted Airport have been reviewed for 2012. The data shows that the 50th highest hourly flow over the year is less than the trigger point (1772 vehicles). Only one hour over the whole year is above the 2000-vehicle mark.

2.5 For HA5, the eastbound flows close to the Parsonage Road overbridge have been calculated for 2012. The data shows that trigger point has not been met, the 50th highest hourly flow over 2012 is 2677 vehicles.

Other Conditions

2.6 Table 2.2- outlines the other transport conditions for the expansion of Stansted and the G1 permissions.

Table 2.2: Other relevant conditions outlined in the Letter from the HCA

Condition	Condition Deadline	Status
H		
Grade separation of Junction 3 (Bassingbourn Roundabout)	Before Site H is completed	Still to be met
J		
Dualling of Bassingbourn Road between Junction 3 and Pincey Roundabout	Before Site J is completed	Still to be met
Q1 and Q2		
Extension of two main rail tracks, approval of siting, design and external appearance of rail tracks to accommodate 12 rail carriages	Before Site Q is completed	Platform 1 extended by 70 meters to allow the operation of a 12 car Stansted Express service
S1		
Dualling of Thremhall Avenue from Bassingbourn Roundabout to Coopers End Roundabout	Before Site S is completed	Still to be met

2.7 All but one of these conditions are yet to be met as these sites are not currently being constructed. Platforms have been extended at the rail station to accommodate 12 cars.

2.8 Section 106 transport requirements relating to transport in Hertfordshire are set out in Table 2.3.

Table 2.3: section 106 conditions for Hertfordshire CC

Condition	Condition Deadline	Status
1.1 and 1.2		
Contribution to Hertfordshire County Council for local road schemes within a 5 mile radius of airport boundary, and may include measures from the Herts LTP, Eastern Herts TP and other highway safety schemes identified by STAL with HCC. Cost of £350,000	Paid within 3 months of invoice sent to STAL from HCC (will be before 31st December 2015), then any money not spent will be returned 31st December 2018	Unpaid to date
1.3		
Contribution of £250,000 to Little Hadham Bypass	Within 3 months of practical completion of Bypass - if not completed by 31st December 2018, obligation will cease to have effect	Scheme not delivered
2		
Contribution to the Passenger Transport Levy for Bishops Stortford Transport Strategy (£150,000)	Paid within 3 months of invoice sent to STAL from HCC (will be before 31st December 2017), then any money not spent will be returned	Not paid to date

2.10 This table shows that monies have not been paid for these conditions. This is due to Little Hadham Bypass not being constructed and Hertfordshire County Council not requesting other monies.

2.11 Table 2.4 below outlines the Section 106 conditions for ECC and UDC that are relevant to transport.

Table 2.4: Requirements outlined in the Section 106 for Essex County Council and UDC

Requirement	Condition Deadline	Status
Part 4.1		
Reduction of number of people employed driving to the Airport to no more than 76%	By 31st December 2014	achieved
Part 4.2		
Consider the means by which non-transfer air passenger mode share to public transport could be increased to 43% and identify extent to which STAL could reasonably and proportionately contribute towards its achievement	By 31st December 2014	achieved
Part 5.1		
Make available land for Network Rail to accommodate enhanced rail services and make available funds to bring this forward	When Network Rail request	Accepted
Part 5.2		
Monitor Rail Patronage on airport-related rail services	Ongoing	Completed
Part 5.4		
Improve waiting conditions for rail passengers departing from Platform 2	Ongoing	Completed
1.1 and 1.2		

Contribution of £500,000 to Essex County Council for local road schemes within a 5 mile radius of airport boundary, and may include measures from the Essex LTP, and other highway safety schemes identified by STAL with ECC	Paid within 3 months of invoice sent to STAL from ECC (will be before 31st December 2015), then any money not spent will be returned 31st December 2025	Unpaid to date and no schemes identified
1.3		
Contribution of up to £610,000 or 30% of costs (whatever is less) to works associated with A120/B1383 roundabout	Within 3 months of practical completion of works - if not completed by 31st December 2018, obligation will cease to have effect	Scheme not delivered to date
Contribution of up to £130,000 or 21% of costs (whatever is less) to works associated with A120/A1250 roundabout		Scheme not delivered to date
Contribution of up to £60,000 or 23% of costs (whatever is less) to works associated with A120 eastern approach to J8 of the M11		Scheme not delivered to date
2		
Contribute £2,000,000 for public transport schemes to increase number of passengers arriving by PT modes	Date not given	Approx £600k spent to date on new service developments
3		
Need agreements with the HA before implementing the development for a number of schemes; M11 J8, as in Carillion-URS/I/HM/050 Rev A	Before construction starts on these junctions	Completed
Need agreements with the HA before implementing the development for a number of schemes; Priory Wood Roundabout - Carillion-URS 95274/I/HM/051 Rev A (excluding widening of Round Coppice Road/Priory Wood		Completed
Need agreements with the HA before implementing the development for a number of schemes; Bassingbourn Rbt as in Faber Maunsell 51029/100/1 Rev 2		Completed
4		
Need to enter a s278 Highway widening scheme for Round Coppice Road/Priory Wood Roundabout	Within 12 months of Date of Grant	S278 awaiting completion. Road scheme completed
5		
Need to enter a s278 for improvements to the A120 on-slip	Within 12 months of Date of Grant	S278 awaiting completion

2.12 In terms of the rail related contributions, improvements to Platform 2 have been completed, as well as monitoring for rail patronage- other land remains available but not currently required.

2.13 In terms of contributions to Essex County Council for local road schemes within 5 miles of the airport, these have been unpaid to date as no schemes have been identified.

2.14 Around 600k has been provided to ECC for public transport schemes around the airport (of a total of £2m).

2.15 Agreements have been completed with the HA for the three improvement schemes at Bassingbourn Roundabout, Priory Wood Roundabout and M11 J8.

2.16 The S278 are awaiting completion for the highway widening scheme at Round Coppice Road / Priory Wood Roundabout and the improvements at the A120 on-slip.

2.17 The three schemes in the vicinity of M11 Junction 8 have not been implemented and no payments made to date.

CONTROL INFORMATION

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