6 Material Assets (Traffic and Transport)

6.1 Introduction

6.1.1 This chapter of the Environmental Impact Assessment Report (EIAR) identifies, describes, and assesses the direct and indirect significant effects of the Proposed Order on surface access, which is one of the matters identified in the Environmental Protection Agency (EPA) Guidance on the Information to be Contained in EIAR (2022) for consideration under the Material Assets factor. The other matters identified by the EPA Guidance under Material Assets, namely waste and built services, are addressed separately in Chapter 16: Material Assets (Waste) and Chapter 17: Material Assets (Built Services), respectively.

6.1.2 Traffic and transport data were collected in October 2025 and used as the basis for developing traffic estimates for the 2029 future-year assessment (Principal Assessment) and traffic data representative of 2023 for the Supporting Assessments. Consequently, the structure of this chapter differs slightly from that adopted in other chapters. The chapter first describes the state of the environment for the relevant assessment years and operational conditions in chronological order. It then presents the results and findings of the Principal Assessment, and a qualitative 2040 Assessment, followed by those of the Supporting Assessments.

6.1.3 A number of supporting documents have been prepared to accompany this chapter, which present a comprehensive review of the transport impacts of the Proposed Order:

- Appendix 6-1 Dublin Airport Surface Access Monitoring Framework;
- Appendix 6-2 Dublin Airport Surface Access Monitoring Report;
- Appendix 6-3 Dublin Airport Demand Model Summary;
- Appendix 6-4 Dublin Airport Surface Access Report; and
- Appendix 6-5 Full LinSig Input/Output Summary Reports.

6.1.4 This chapter was prepared by Keith Dalton, BA (Hons), MSc, MCIHT, a Principal Consultant in AECOM's Transportation team, with 18 years' professional experience as a transport planner and traffic modeller undertaking Traffic and Environmental Impact Assessments for EIARs. Keith has gained significant experience working on projects relating to Dublin Airport, having prepared the traffic and transport chapters for the EIARs for the Western Vehicle Underpass and North Runway Relevant Action applications.

6.1.5 The traffic and transport assessment was managed and coordinated by Oliver Baldwin BSc (Hons), MSc, an Associate Director in AECOM's Transport Planning team with 21 years' experience in transport planning and modelling, which also includes over 18 years' experience relating to airport surface access.

6.1.6 The chapter was reviewed by Elaine Brick BSocS, MSc, MIPI, PMP, a Regional Director in AECOM's Future Mobility team, with over 20 years' experience in planning, design, and project management of transport projects. She has successfully overseen the delivery of several large and multi-disciplinary transport projects and, as such, has in-depth experience of strategic infrastructure requirements from concept development to optioneering and business case development through to planning stages and execution. She was project manager for the surface access elements of the Dublin Airport Masterplan (2018) and was involved in recent stakeholder engagement around the potential growth of Dublin Airport to 40 mppa.

6.1.7 The chapter was also reviewed by Colin Acton BEng (Hons) CEng MIEI FCIHT a Regional Director with AECOM Ireland and a Chartered Member of Engineers Ireland with 40 years' experience. Colin was overall surface access lead for the project, having worked on the planning and design of major infrastructure projects in Ireland and the UK over the length of his career. He has a proven track record in managing complex multi-disciplinary project teams and integrating stakeholders into the project. Colin has design and management experience of roads, traffic, and bus priority projects from concept design

stages through to operation and maintenance. He has experience in road planning and design, traffic modelling, traffic impact assessments and economic evaluations.

6.2 Legislation, Policy and Guidance

6.2.1 The assessment of Material Assets (Traffic and Transport) presented in this chapter has been undertaken in accordance with the relevant legislation, policy and guidance identified below. Legislation, policy, and guidance of general relevance to the preparation of the EIAR and the assessment methodology are set out in Chapter 5: Methodology.

6.2.2 The following legislation, policy and guidance documents relevant to this chapter have informed the assessment:

- Dublin Airport (Passenger Capacity) Act 2026[1].
- 'Traffic and Transport Assessment Guidelines'[2];
- 'A Study of Lane Capacity in the Greater Dublin Area'[3];
- 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports'[4];
- 'National Investment Framework for Transport in Ireland' (NIFTI)[5]; and

6.3 Dublin Airport Surface Access Monitoring Framework

6.3.1 The Dublin Airport Surface Access Stakeholder Group (SASG) is made up of members representing daa, Fingal County Council (FCC), Transport Infrastructure Ireland (TII) and the National Transport Authority (NTA). It was established to consider the needs of the airport in terms of access by public transport and roads, as well as considering the effect of airport-related demand on the public transport and road networks in the context of the potential future growth of airport operations.

6.3.2 Previous assessments of the future growth of airport operations indicated a potential for negative impacts on the surrounding transport network, in particular at the Airport Roundabout, which is the primary access point to the airport campus, and key other interfaces with the local and strategic road networks.

6.3.3 In response to this, the SASG developed the Dublin Airport Surface Access Monitoring Framework (henceforth simply referred to as the Monitoring Framework) to oversee operating performance of the transport network surrounding the airport, on an ongoing basis. This multi-modal framework (included in Appendix 6-1) outlines three primary surface access indicators for the monitoring of car mode share and vehicular movement. These indicators include thresholds for optimal performance of the transport network around the airport which, if exceeded, would trigger the requirement for mitigating action by members of the SASG. The principles of both the Monitoring Framework and the establishing of thresholds were agreed by the members of the SASG in 2024.

6.3.4 Since the Monitoring Framework was established, a significant volume of transport data has been collected, as outlined in Section 6.4. Comparisons against the Monitoring Framework thresholds have been undertaken and documented in the Dublin Airport Surface Access Monitoring Report (Appendix 6-2). The recorded data demonstrate that previous forecasts of the potential effects of airport growth were conservative, with indicators such as mode share and recorded traffic volumes on the surrounding network lower at approximately 36 mppa in 2025 than previously forecast for comparable levels of airport activity. Those forecasts deliberately adopted assumptions that did not rely on further improvements in mode share or reductions in road traffic demand, thereby providing a reasonable worst-case basis for assessing the potential transport effects associated with airport growth.

[1] Dublin Airport (Passenger Capacity) Act 2026, Available at: https://www.irishstatutebook.ie/eli/2026/act/25/enacted/en/html
[2] Transport Infrastructure Ireland (TII), 2014, Available at: https://www.tiipublications.ie/document/?id=3010
[3] TII, 2012, Available at: https://www.tii.ie/media/5ibeml3l/a-study-of-lane-capacity-in-the-greater-dublin-area.pdf
[4] Environment Protection Agency (EPA), 2022, Available at: https://www.epa.ie/publications/monitoring--assessment/assessment/guidelines-on-the-information-to-be-contained-in-environmental-impact-assessment-reports-eiar.php
[5] Department of Transport, 2021, Available at: https://www.gov.ie/en/department-of-transport/publications/national-investment-framework-for-transport-in-ireland-nifti/

6.4 Assessment Methodology

6.4.1 This section outlines the methodology used to assess the traffic and transport environmental effects of the Proposed Order.

6.4.2 As described in Chapter 5: Methodology, the assessment has been carried out using the following methodology outlined in the EPA Guidance:

- Establishment of the baseline conditions, including identification and assessment of the receiving environment and receptor sensitivity;
- Identification of the potential effects, and assessment of the magnitude of potential effects, and their significance;
- Identification of mitigation measures; and
- Assessment of residual effects.

Extent of External Surface Access Network Assessed

6.4.3 The effects of the Proposed Order have been considered in relation to both the internal surface access network and associated facilities within the airport campus, and the external surface access network, including the principal junctions providing access to and from the airport.

6.4.4 For the existing internal road network and facilities, in addition to applying the principles of the Monitoring Framework, the assessment considers the operation and management of the existing Ground Transportation Centre (GTC), as well as the bus passenger drop off areas.

6.4.5 The extent of the external road network included in the assessment (henceforth simply referred to as the 'assessment area') is illustrated in Figures 6-1 and 6-2 and summarised in Table 6-1. In addition to applying the principles of the Monitoring Framework, TII's Traffic and Transport Assessment Guidelines were used to determine the appropriate threshold for any forecast changes to traffic volumes. Specifically, Table 2.1 of TII's Guidelines notes that, if traffic changes are greater than 10% of background traffic, then a full Traffic and Transport Assessment is required. Any increase of 10% or higher was therefore considered to represent a significant impact.

Table 6-1: Extent of External Surface Access Network Assessed

Links Assessed	
M50 J2-J3	Old Airport Road
M50 J3-J4	R132 (north of M50)
M50 J4-J5	R132 (north of Old Airport Road)
M1 J1-J2	R132 (north of Corballis Road South)
M1 J2-J3	R132 (north of Airport Roundabout)
R108 (north of M50)	R132 (north of Cloghran Roundabout)
	Naul Road
Junctions Assessed	
Airport Roundabout	
R132/Corballis Road South	
Naul Road/Castlemoate Road	

Data Collection and Collation

6.4.6 This chapter uses the extensive data collected in 2025 representing the current surface access conditions at the airport. As such, the future year forecasts of mode share/demand etc. pivot from these current conditions, which is reflected in the assessment of the operation of transport services and existing infrastructure in future year operational conditions.

6.4.7 A comprehensive data collection and collation exercise, undertaken in October 2025 to inform the assessment of the surface access effects, is described in detail in the Dublin Airport Surface Access Report (Appendix 6-4) and summarised below.

6.4.8 TII maintains permanent automatic traffic monitoring units (TMUs), installed on the strategic road network. Data from TII counters within the assessment extent area was collated for October 2025 (coinciding with the traffic survey time period) and used to determine existing traffic flows on external road links with TMUs.

6.4.9 daa installed permanent traffic counters at all three entrance points to the main airport campus in May 2024. These counters record the volume and type of vehicles entering and exiting the campus in 15-minute intervals. Data from these permanent counters was used in the EIAR traffic assessment.

6.4.10 Barrier data for the passenger and staff car parks was used in the EIAR. The data records the number of entries to and exits from car parks controlled by daa. The data was used in determining passenger and staff entry and exit profiles across a typical day during the same period in October 2025 covered by the traffic surveys.

6.4.11 A wide range of traffic surveys was undertaken from the 11th to the 17th of October 2025, a neutral month for background traffic, as identified through analysis of TII TMU data. The data collected was used in the calibration and validation of the demand model, as well as the bus demand assessment. Surveys included:

- Junction turning counts (JTCs) were undertaken using video survey equipment on a number of key junctions within the assessment area. Data was collected for an extended AM peak period (04:00 – 10:00) and PM peak period (16:00 – 19:00) on a neutral weekday for background traffic to capture both the background peak and airport demand. All information was collected in 15-minute intervals;
- Pedestrian crossing counts were also undertaken at crossing points within a number of the JTC sites. These surveys recorded the number of two-way crossing movements at each location over the JTC survey period. Separate pedestrian crossing counts were also undertaken at key crossing points within the airport's internal network;
- Automatic traffic counts (ATCs) were undertaken on key road links, both on the internal airport network and on the external public road network within the assessment area. The ATCs recorded daily and weekly traffic profiles, in hourly periods, during the week-long survey period outlined above;
- Kerbside surveys were undertaken at Terminal 1 (T1) arrivals and departures kerbs and at Terminal 2 (T2) departures kerb. Each of the locations were separated into distinct zones, with a screenline at the entrance to each location providing vehicle classification and occupancy. Vehicles were further monitored to identify the zone they parked in along with arrival and departure times (and dwell times) together with observations of any vehicles that didn't stop and drove straight through. Data was collected for an extended AM peak period (04:00 – 10:00) and PM peak period (15:00 – 19:00) on a neutral weekday;
- Automatic number plate recognition (ANPR) surveys were undertaken on the approach roads to the airport and at various locations within the airport to determine the origins and destinations for various types of trips to/from the airport. Full registrations of vehicles passing each of the sites were collected in real time (hh:mm:ss). Using Micromatch, trip matrices were produced for vehicles matched entering the network and exiting at the airport. The survey was undertaken over a 24-hour period on a neutral day, with data recorded in 15-minute intervals;
- Bus surveys were undertaken at the T1 and T2 kerbside drop off and pick-up areas, in the GTC, and in the Coach Park, over a 24-hour period on a neutral day. The surveys recorded the arrival time, operator, service number, departure time, dwell time, and the number of passengers boarding/alighting for each bus; and
- Cyclist surveys were undertaken at the three access points to the main airport campus and recorded the number of cyclists entering and exiting over the period 04:00 to 19:00.

6.4.12 daa undertakes regular ongoing surveys of passengers and staff with the aim of gaining a comprehensive picture of how both groups travel to and from the airport. Relevant information taken from the 2025 and previous survey results includes time of travel, mode choice (and reason for same),

origin/destination (within Ireland), reason for trip (business, leisure etc.) party details (number of travellers, number of children, luggage arrangements etc).

Assessment Tools

6.4.13 A review of the collected survey data identified the AM and PM peak hours on the background transport network in the vicinity of Dublin Airport as 08:00–09:00 and 17:00–18:00, respectively. These periods represent the times at which demand on the surrounding transport network is greatest and therefore provide a robust basis for assessing the effects of the Proposed Order under the most constrained network conditions. Accordingly, these peak hours have been used for the assessment of both the local and strategic transport networks.

6.4.14 A bespoke demand and trip distribution model was developed to inform the assessment of the Proposed Order. This demand model was calibrated to a 2025 observed base using:

- Extensive traffic survey data collected in October 2025, including link counts, junction counts, car park entry and exit counts, bus boarding and alighting counts, origin-destination surveys (full details provided above);
- Flight schedules for the same period as the traffic surveys; and
- Recorded passenger and staff mode shares.

6.4.15 Plate 6-1 illustrates the structure of the demand model. Future demand was derived based on future flight schedules, employee travel assumptions, and forecast future mode shares to determine the effect on different surface access modes, for both passengers and staff. Recorded existing origin-destination survey data was used to distribute forecast demand on to the surface access network. From this, the effect of the Proposed Order was determined in terms of increased demand for public transport services from the existing GTC and the increase in traffic flows on the external roads at the airport access junctions. Further details on the demand model are provided in Appendix 6-3.

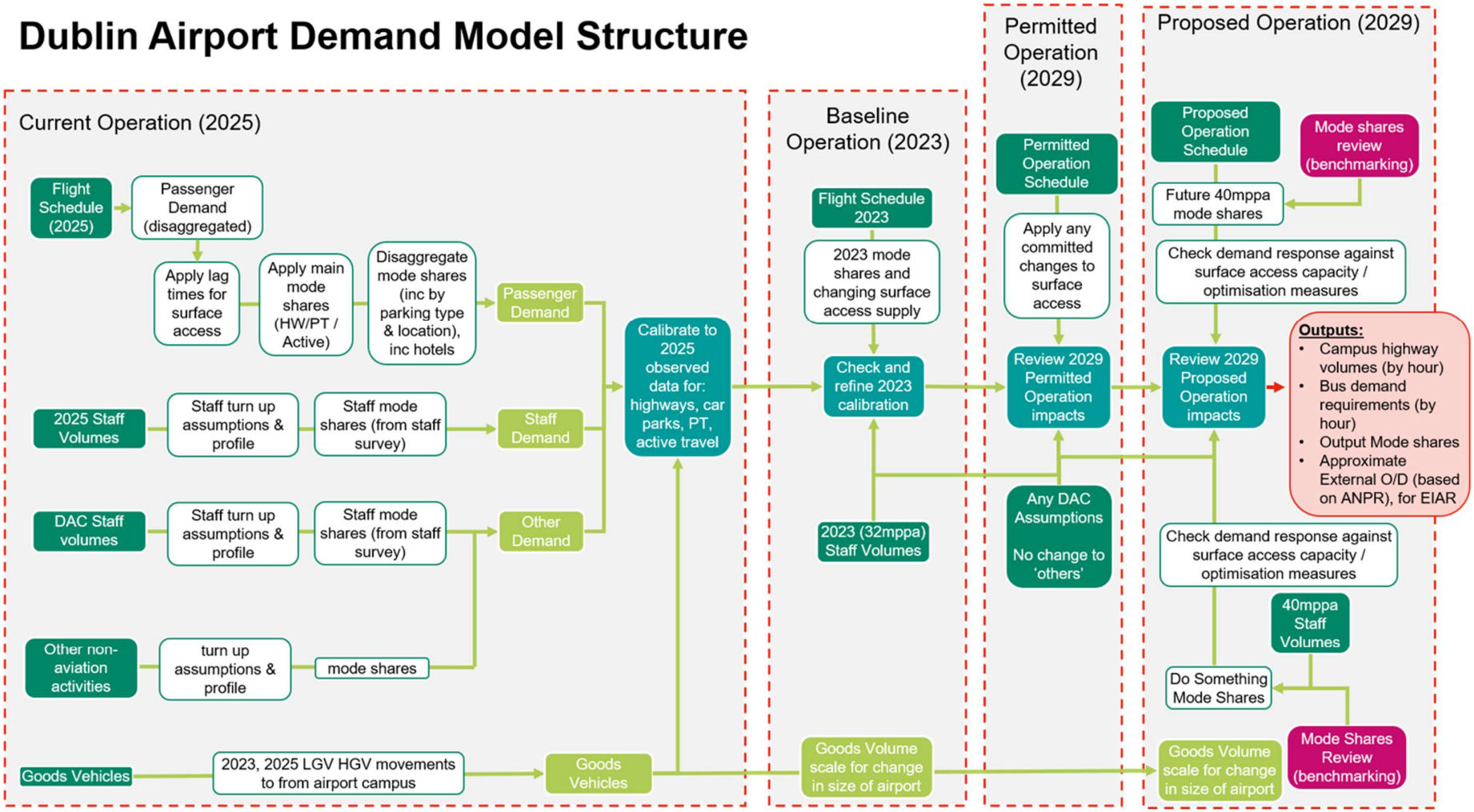
6.4.16 A separate public transport capacity model was also developed to assess the effects on the public transport demand at the airport. This assessment had two elements:

- Ability of the proposed bus services to cater for the modelled demand in terms of number of passengers and services; and
- Ability of the existing physical bus infrastructure at the airport, including the existing layout of the GTC, to cater for the modelled number of services forecast to use it.

6.4.17 The public transport capacity model used published existing and planned airport bus service timetables, as well as outputs from the demand model.

6.4.18 Junction Capacity has been assessed at the three airport access junctions using LinSig, an industry-standard junction modelling software.

Plate 6-1: Dublin Airport Demand Model Structure



Assessment Topics

6.4.19 The assessment of surface access effects considers the following topics:

- Active travel infrastructure – a qualitative assessment of the effect of the Proposed Order on the quality of the existing pedestrian and cycling infrastructure within the assessment area;
- Public transport infrastructure – a qualitative assessment of the effect of the Proposed Order on the quality of the existing public transport infrastructure within the assessment area;
- Bus services – a quantitative assessment of bus demand compared to the ability of the existing and proposed airport bus services to meet this demand;
- Bus facilities (GTC) – a quantitative assessment of the operational arrangements of the existing GTC to cater for proposed airport bus services; and
- General traffic – a quantitative assessment of the effects of the Proposed Order on general traffic within the assessment area.

Airport Operational Conditions in the Assessment

6.4.20 The surface access conditions within the assessment area were established for the following airport operational conditions:

- 2023 Baseline Operation (32 mppa) – This represents the permitted 32 mppa baseline condition, using the 2023 operational schedule as a representative basis for airport activity. In terms of surface access, it is informed by traffic and transport data collected in 2025, which has been input to the demand model, along with historic mode shares from 2023 and the 2023 operational schedule.
- 2025 Current Operation (36.4 mppa) – This represents the current operation of Dublin Airport based on 2025 passenger throughput. The existing infrastructure described is as per 2025. The existing mode share, distribution of airport-related demand, existing traffic flows and existing network performance are based on a comprehensive data collection exercise undertaken in 2025 during which the airport operated at 36.4 mppa.
- 2029 Permitted Operation (32 mppa) – To determine the potential effect of the growth of Dublin Airport to 40 mppa, it is necessary to establish a 'do nothing' reference for how the surface access network within the assessment area would operate in the assessment year without the Proposed Order in place. The assessment year is 2029, as described in Chapter 5: Methodology, with forecast growth in background (non-airport-related) traffic included, together with any committed or planned external transport schemes expected to be implemented by 2029. Airport-related demand is represented using 2023 mode shares and the 32 mppa forecast flight schedule. Although the demand model is calibrated to observed 2025 conditions, this calibration does not carry forward the airport-related demand associated with the 2025 Current Operation at 36.4 mppa into the 2029 Permitted Operation. Instead, airport-related demand is reset to the 32 mppa operational condition, while only non-airport background traffic is forecast forward to 2029. This provides a reasonable worst-case representation of the 2029 Permitted Operation because it does not assume that the more recent improvements in passenger and staff mode share observed by 2025 would be retained at 32 mppa. As a result, forecast airport-related road traffic is higher than it would be if those improved mode shares were assumed to continue.
- 2029 Proposed Operation (40 mppa) – This assesses the operation of the surface access network within the assessment area with the Proposed Order in place, as well as any committed/planned external transport schemes forecast to be implemented by 2029. The assessment year is 2029 with associated background traffic growth, and a flight schedule representative of 40 mppa.
- 2040 Proposed Operation (40mppa) – A qualitative assessment of the operation of the surface access network within the assessment area with the Proposed Order in place, as well as any changes to the transport network as a result of committed/planned external transport schemes forecast to be implemented by 2040, and background travel demand growth. The assessment year is 2040 with assumed background traffic growth, and a flight schedule representative of 40mppa. Two sub-scenarios are considered, Without MetroLink and With MetroLink.

Table 6-2: Summary of Operational Conditions

Airport Operational Condition	Year	Demand	Infrastructure Included
Baseline Operation	2023	32.0 mppa	Existing
Current Operation	2025	36.4 mppa	Existing
Proposed Operation	2029	40.0 mppa	Existing, Permitted & Committed
Permitted Operation	2029	32.0 mppa	Existing, Permitted & Committed

Application of the Assessment Framework

6.4.21 Consistent with the project-wide assessment methodology presented in Chapter 5: Methodology, the Principal Assessment is the primary environmental assessment undertaken for Traffic and Transport.

6.4.22 As set out in Chapter 5: Methodology, the Principal Assessment compares the 2029 Permitted Operation with the 2029 Proposed Operation. Both operational conditions are assessed for the same future year and against the same Future Receiving Environment and other baseline assumptions. The comparison therefore identifies the change in environmental effects associated with the Proposed Order relative to the 2029 Permitted Operation. This comparison provides the basis for identifying likely significant effects, determining any additional mitigation measures and reporting residual effects. Consideration is also given to the impact of the Proposed Operation in 2040, in the context of additional transport demand growth, and the delivery of MetroLink.

6.4.23 A number of supporting assessments have also been undertaken, as outlined below, comparing various different operational conditions. They have been included as they provide useful operational context for interpreting the assessment findings.

- Supporting Assessment 1: 2023 Baseline Operation (32 mppa) vs 2029 Proposed Operation (40 mppa). Supporting Assessment 1 illustrates the wider change in surface access conditions associated with the development of the airport and transport network between 2023 and 2029. Its findings provide contextual information on how surface access conditions are expected to change over that period. However, those changes reflect a combination of factors and are not attributable solely to the Proposed Order. The environmental effects associated with the Proposed Order are identified through the Principal Assessment, which compares the 2029 Permitted Operation and 2029 Proposed Operation against the same Future Receiving Environment and other baseline assumptions.
- Supporting Assessment 2: 2025 Current Operation (36.4 mppa) vs 2029 Proposed Operation (40 mppa). This assessment has been undertaken to provide context on the operational change between current airport operations (2025) and the future operation under the Proposed Order (2029). This illustrates the scale of the additional operational change associated with the Proposed Order.
- Supporting Assessment 3: 2025 Current Operation (36.4 mppa) vs 2029 Permitted Operation (32 mppa). This assessment has been undertaken to provide context on the operational change between current airport operations (2025) and the future permitted airport operation (2029) if the Proposed Order is not made.

6.4.24 Differences between the various operational conditions have been described as Positive/Beneficial, Negative/Adverse, or Neutral, in accordance with the assessment terminology outlined below.

Determining the Nature of Effects

6.4.25 When determining the nature of effects in this chapter, the following terminology is used:

- Positive/Beneficial Effects – A change which improves the quality of the environment;
- Negative/Adverse Effects – A change which reduces the quality of the environment; and
- Neutral Effects – No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.

Determining the Significance of Effects

6.4.26 The methodology for determining the significance of effects in the EIAR is set out in Chapter 5: Methodology. Adverse or beneficial effects are described as follows:

- Imperceptible – An effect capable of measurement but without significant consequences.
- Not significant – An effect which causes noticeable changes in the character of the environment but without significant consequences.
- Slight Effects – An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
- Moderate Effects – An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
- Significant Effects – An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
- Very Significant – An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
- Profound Effects – An effect which obliterates sensitive characteristics.

6.4.27 For this traffic and transport Assessment, effects that could be described as 'profound', 'very significant,' 'significant' or 'moderate' are considered to be significant effects, that will require mitigation. All other effects are considered not significant.

6.4.28 In line with the methodology outlined in Chapter 5: Methodology, the traffic and transport assessment has considered the magnitude of effects and the sensitivity of the resources/receptors that could be affected to classify the effect of the Proposed Order.

6.4.29 In its simplest form, the effect of the Proposed Order will be an increase in the number of passengers using the airport and, as a result, an increase in the number of trips to and from the airport on the surface access transport network. Changes in demand on the transport network are not, in themselves, necessarily an indicator of the level of effect. Rather, the ability of the network to facilitate these changes must first be established. The performance of the transport network was measured in terms of the assessment topics outlined above.

6.4.30 Assessment of these topics without the Proposed Order provides an indication of the areas of the transport network that may be sensitive to additional demand. For example, a junction with limited spare capacity would be categorised as a high sensitivity receptor.

6.4.31 Assessment of the topics with the Proposed Order is then used to identify the magnitude of the impact of the Proposed Order. For example, where the additional traffic associated with the Proposed Order causes the same junction to operate above capacity, this would be considered a high impact and, combined with the high sensitivity of the receptor, would constitute a significant negative effect.

6.5 Limitations and Assumptions

6.5.1 The assessment of the Proposed Order has been undertaken on the basis of a number of assumptions relating to:

- Planned and committed transport schemes within the assessment area;
- Internal daa projects unrelated to the Proposed Order;
- Mode shares for airport passengers and staff, and associated traffic volumes;
- BusConnects services, premium commercial coach and other private bus services provision; and
- Bus service dwell times.

6.5.2 These assumptions, and their applications are outlined in their respective sections within this chapter. They are considered to be relevant, robust and appropriate to the assessments undertaken.

6.6 Description of Operational Conditions

6.6.1 This section outlines the surface access conditions at the airport and on the surrounding transport network under each of the operational conditions outlined above, in chronological order, and provides descriptions of the following:

- Transport infrastructure within the assessment area;
- Mode shares, for airport passengers and staff;
- Transport demand;
- Distribution of airport-related demand;
- Bus services;
- Network traffic flows; and
- Junction turning movements and junction performance.

6.6.2 As discussed in Section 6.1, the structure of this section differs from other technical chapters of the EIAR, as the surface access conditions are presented for each of the four operational conditions in chronological order to provide the data required for the Principal Assessment and Supporting Assessments. Within this structure, the 2025 Current Operation represents the Current Receiving Environment, and the 2029 Permitted Operation represents the Future Receiving Environment. The 2023 Baseline Operation and 2029 Proposed Operation are also described to provide the corresponding surface access conditions for the assessment comparisons.

6.6.3 Analysis and assessment are provided in subsequent sections.

2023 Baseline Operation

Overview

6.6.4 The information provided in this section informs Supporting Assessment 1.

6.6.5 This section provides an overview of the surface access conditions within the assessment area in 2023, when passenger throughput reached the level of the existing passenger throughput planning conditions. The infrastructure described and mode shares are as per 2023. The distribution of airport-related demand, traffic flows and network performance are based on a comprehensive data collection exercise undertaken in 2025, with appropriate adjustments to factor this data to 2023 conditions, as described below.

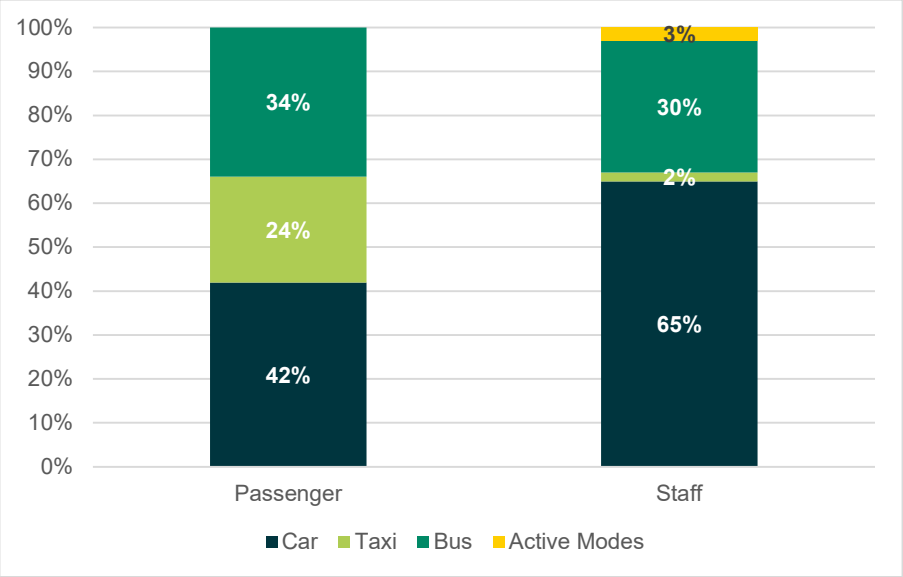
Existing Infrastructure

6.6.6 The transport infrastructure within the assessment area has not changed since 2023. As such, the descriptions provided for the 2025 Current Operation (starting with Section 6.6.26) apply to the Baseline Operation.

Baseline Operation Mode Share (2023)

6.6.7 Dublin Airport undertakes regular passenger and staff travel surveys to monitor travel demand. The 2023 mode share, illustrated in Plate 6-2, was determined through these surveys. The figures outlined in Plate 6-2 represent a daily average, and mode share varies across a 24-hour period.

Plate 6-2: 2023 Passenger and Staff Mode Shares



Baseline Operation Transport Demand

6.6.8 Airport-related transport demand for the Baseline Operation was derived from the demand model, using a 32 mppa flight profile and the recorded 2023 mode shares.

6.6.9 For non-airport demand on the surrounding transport network, TII Project Appraisal Guidelines (PAG) Unit 5.3[6] – Travel Demand Projections were used to derive adjustment factors, which were then applied to the recorded 2025 traffic flows to generate factored 2023 non-airport traffic flows, as summarised in Table 6-3.

Table 6-3: TII Metropolitan Area Link-Based Growth Rates used to Derive Transport Demand

Metropolitan Area	Growth	Light Vehicle	Heavy Vehicle
Dublin	Annual Rate (Central)	1.0162	1.0295
	2025-2023 Adjustment Factor	0.9684	0.9435

Distribution of Airport-Related Demand

6.6.10 Since there have been no significant developments to the local transport network in the vicinity of the airport since 2023, it was considered appropriate for the distribution of airport-related demand to be taken as in line with the 2025 Current Operation. This current distribution was determined using results from ANPR surveys undertaken in October 2025 and illustrated in Figure 6-13 and Figure 6-14.

Baseline Operation Traffic Flows

Network Flows

6.6.11 The 2023 traffic flows during the peak hours on the road network within the assessment area are set out below. Plate 6-3 illustrates the locations referenced in

6.6.12 Table 6-4, which summarises the flows at key locations on the transport network.

[6] https://cdn.tii.ie/publications/PE-PAG-02017-03.pdf

Plate 6-3: Locations of Recorded Directional Flows on Transport Network

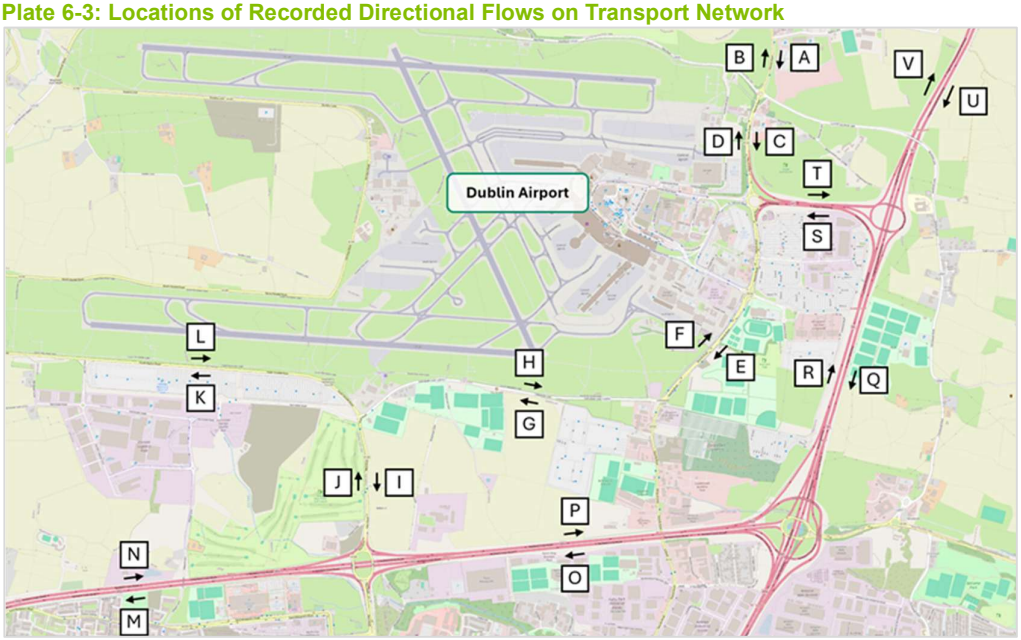


Table 6-4: 2023 Baseline Operation Traffic Flows (vehicles) on Transport Network

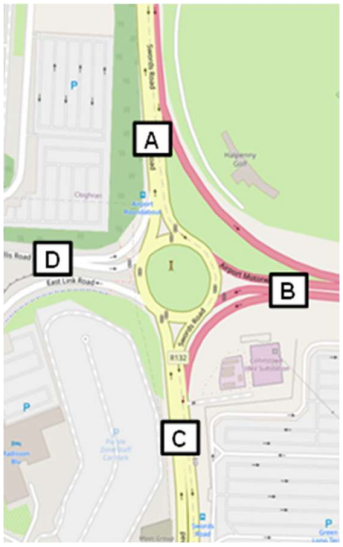
Directional Flows	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Directional Flows	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)
A	1,090	946	**L**	381	257
B	586	897	**M**	3,676	5,215
C	1,021	866	**N**	5,575	5,431
D	659	1,222	**O**	3,594	4,078
E	1,335	1,214	**P**	4,563	5,131
F	712	1,123	**Q**	4,247	4,190
G	476	880	**R**	4,407	5,592
H	665	682	**S**	2,433	1,698
I	462	972	**T**	1,179	2,300
J	747	656	**U**	4,136	3,110
K	240	326	**V**	3,220	5,193

Junction Turning Movements

6.6.13 The 2023 turning movements at the airport access junctions are outlined below.

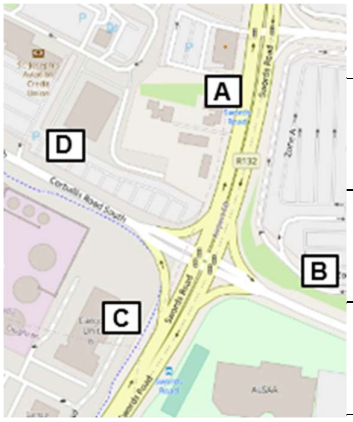
6.6.14 Table 6-5 illustrates the peak hour turning movements at the Airport Roundabout and highlights that the dominant movement at the roundabout was the east-west movement between the M1 Link and the airport. The westbound flow towards the airport was the largest single movement in the AM peak, and the eastbound flow out of the airport was the largest single movement in the PM peak. This illustrates the importance of the M1 Link for airport access.

Table 6-5: 2023 Baseline Operation Turning Movements at Airport Roundabout

Reference	Movement From	To		2023 AM Peak	2023 PM Peak
	R132 North	R132 North	A to A	0	0
		M1 link	A to B	313	368
		R132 South	A to C	490	335
		Corballis Road North	A to D	214	194
	M1 Link	R132 North	B to A	303	396
		M1 link	B to B	1	0
		R132 South	B to C	720	299
		Corballis Road North	B to D	1,314	1,001
	R132 South	R132 North	C to A	190	436
		M1 link	C to B	121	383
		R132 South	C to C	0	0
		Corballis Road North	C to D	34	29
	Corballis Road North	R132 North	D to A	154	432
		M1 link	D to B	549	1,403
		R132 South	D to C	308	255
		Corballis Road North	D to D	1	0
			Total	**4,713**	**5,530**

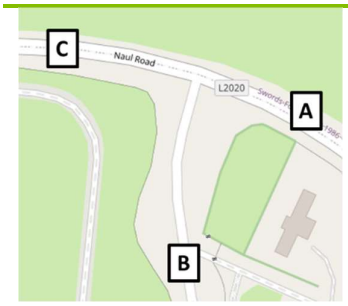
6.6.15 Table 6-6 illustrates the peak hour turning movements at the R132/Corballis South junction and illustrates that the dominant movement at the junction was along the R132, with the north to south movement being the largest single movement in the AM peak and PM peak. Movements from the R132 South to Corballis Road South also made up a substantial single movement, providing access to the passenger Terminals 1 and 2 from the southern side of the airport.

Table 6-6: 2023 Baseline Operation Turning Movements at R132/Corballis Road South

Reference	Movement From	To		2023 AM Peak	2023 PM Peak
	R132 North	Eastlands	A to B	163	242
		R132 South	A to C	1,097	510
		Corballis Rd S	A to D	136	64
	Eastlands	R132 North	B to A	67	83
		R132 South	B to C	33	134
		Corballis Rd S	B to D	87	150
	R132 South	R132 North	C to A	255	456
		Eastlands	C to B	33	94
		Corballis Rd S	C to D	416	688
	Corballis Road South	R132 North	D to A	31	186
		Eastlands	D to B	63	98
		R132 South	D to C	136	383
			Total	**2,517**	**3,087**

6.6.16 Table 6-7 illustrates the peak hour turning movements at the Naul/Castlemoate Road junction and illustrates that traffic movements at this junction were highly tidal in 2023. The dominant movement was west to east on Naul Road during the AM Peak, and the reverse of this movement during the PM peak. Similarly, the volume of traffic entering the airport from Naul Road in the AM peak was mirrored by the volume of traffic exiting in the PM peak.

Table 6-7: 2023 Baseline Operation Turning Movements at Naul Road/Castlemoate Road

Reference	Movement From	Movement To		2023 AM Peak	2023 PM Peak
	Naul Road East	Castlemoate Road	A to B	183	32
		Naul Road West	A to C	489	891
	Castlemoate Road	Naul Road East	B to A	31	107
		Naul Road West	B to C	68	283
	Naul Road West	Naul Road West	C to A	572	442
		Castlemoate Road	C to B	171	57
			Total	**1,514**	**1,812**

Baseline Operation Junction Performance

6.6.17 Analysis of the Baseline junction performance was undertaken, using LinSig junction modelling software, at the signal-controlled airport entrance junctions, namely, Airport Roundabout and the R132/Corballis Road South junction.

6.6.18 Three industry standard Key Performance Indicators (KPIs) from LinSig are considered in this assessment:

- Degree of Saturation (DoS) – A measure of volume of traffic on an entry lane to a junction, relative to the capacity available. LinSig works on the basis that a junction is at capacity when any individual junction arm has a DoS higher than 90%. Above this threshold, queues begin to increase rapidly.
- Practical Reserve Capacity (PRC) - A measure of overall capacity remaining at a junction. As the DoS on any arm increases, PRC decreases. A negative PRC value indicates that the overall junction is operating above practical capacity.
- Queue Lengths - LinSig reports the mean maximum queue (MMQ) on each lane of the junction.

Airport Roundabout

6.6.19 The 2023 model layout for the Airport Roundabout in LinSig is illustrated in the model input and output report for the junction in EIAR Appendix 6-5. The junction runs on a SCATS with variable timings. The junction capacity analysis used the optimised cycle time generated by LinSig for the junction.

6.6.20 Table 6-8 summarises the junction performance and indicates that the junction operated above capacity, in both peak hours, with queuing occurring on Corballis Road North in the PM peak.

Table 6-8: Airport Roundabout 2023 LinSig Results

	AM Peak		PM Peak	
PRC	-4.6%		-36.8%	
Cycle time	54		83	
Location	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	94.2%	11.4	83.8%	12.9
Eastbound Circulatory	40.9%	1.5	67.1%	5.9
M1 Link	89.2%	13.7	96.6%	21.7
Southbound Circulatory	63.5%	7.6	51.0%	2.9
R132 South	52.2%	3.5	82.6%	12.6
Westbound Circulatory	65.3%	4.8	53.4%	4.8
Corballis Road North	81.6%	8.8	123.1%	122.3
Northbound Circulatory	59.3%	2.8	86.5%	6.5

R132/Corballis Road South Junction

6.6.21 The 2023 model layout for the R132/Corballis Road South Junction in LinSig is illustrated in the model input and output report for the junction in EIAR Appendix 6-5. The junction runs on SCATS, with variable cycle time. A 90 second cycle time has been used in the LinSig assessment.

6.6.22 Table 6-9 summarises the junction performance and indicates that the junction operated above capacity, in both peak hours, with queuing occurring on Corballis Road South in the PM peak.

Table 6-9: R132/Corballis South Junction 2023 LinSig Results

	AM Peak		PM Peak	
PRC	-3.5%		-39.9%	
Cycle time	90		90	
Location	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	93.1%	17.1	90.1%	12.2
Eastlands	50.5%	2.5	65.9%	4.5
R132 South	48.9%	3.9	119.2%	35.8
Corballis Road South	92.2%	9	125.9%	62.6

2025 Current Operation (Current Receiving Environment)

Overview

6.6.23 The information provided in this section informs:

- Supporting Assessment 2; and
- Supporting Assessment 3.

6.6.24 This section provides an overview of the current surface access conditions within the assessment area, which have been established using a combination of site visits, survey data and a desktop review of up-to-date aerial photography. The existing infrastructure described, existing mode share, distribution of airport-related demand, existing traffic flows and existing network performance are all based on a comprehensive data collection exercise undertaken in 2025.

6.6.25 The Department of Transport's NIFTI outlines a modal hierarchy that prioritises sustainable modes above low occupancy private vehicles, in accordance with National Strategic Outcomes. This hierarchy places walking and cycling above public transport, which is in turn above private vehicles (general traffic). The subsequent sections are structured in accordance with this hierarchy.

Existing Infrastructure and Modes of Transport

Pedestrian Infrastructure

6.6.26 Outside of the airport campus, the local and regional roads within the assessment area are the R132, Naul Road, Old Airport Road and the R108:

- The R132 runs directly along the eastern boundary of the airport campus in a north-south alignment. There are five junctions on the R132 within the assessment area, Cloghran Roundabout, Airport Roundabout, Airport Business Park, Corballis Road South and the Old Airport Road.
- Cloghran Roundabout is partially signalised, however, dedicated pedestrian crossing facilities are limited to uncontrolled dropped kerbs on the eastern (Stockhole Lane) and western (Naul Road) arms, facilitating north-south pedestrian movement. There are no formal east-west pedestrian crossing facilities at the roundabout.
- Naul Road runs along the northern boundary of the airport campus in an east-west alignment. Pedestrian facilities on Naul Road are limited to a very short length of footway on the southern side of the road at the junction with Castlemoate Road.
- Between Cloghran Roundabout and the Airport Roundabout, there is a continuous shared pedestrian and cyclist path on the western side of the R132. On the eastern side of the road, there is a short section of footway, approximately 175m, between Cloghran Roundabout and a number of commercial premises.
- The Airport Roundabout is fully signal controlled. On the western (Corballis Road North) arm, there are signalised pedestrian crossings with dropped kerbs and tactile paving. There are no formal crossing facilities on any of the other arms.

- Between the Airport Roundabout and the Old Airport Road junction, there are shared pedestrian and cycle path facilities on both sides of the R132.
- Airport Business Park junction is a signalised T-junction. There are signalised crossings with dropped kerbs and tactile paving on the northern and eastern arms.
- Corballis South junction is a four-arm signalised crossroad. There are signalised crossing facilities, with dropped kerbs and tactile paving, on all entry arms.
- The Old Airport Road junction is a four-arm signalised crossroad. There are signalised crossing facilities, with dropped kerbs and tactile paving, on the northern (R132), eastern (Dardistown Cemetery) and western (Old Airport Road) arms.
- The Old Airport Road runs in an east-west alignment along the southern boundary of the airport. Pedestrian facilities are limited to a short (350m) stretch of footway on the southern side of the road on approach to the R108 junction at the western end of the road.
- The R108/Old Airport Road junction is a four-arm signalised crossroad. There are crossing facilities, with dropped kerbs and tactile paving, on the southern (R108) arm only.
- The M50 and M1, both within the assessment area, are motorways and accordingly do not have any pedestrian facilities.

6.6.27 Within the airport campus, there is an extensive network of footways and crossings, illustrated in Figure 6-4 which provide a connection between all key landmarks within the site. Covered walkways and segregated footways have also been provided to encourage walking within the campus. Dedicated signalised pedestrian crossing locations are provided at all the major road crossing points. Other busy interaction points between pedestrians and vehicles are designated as zebra crossings with provision of dropped kerbs along the primary pedestrian desire lines, for example, in the GTC.

Cycling Infrastructure

6.6.28 Outside of the airport campus, as mentioned previously, between the Airport Roundabout and the Old Airport Road junction, there are shared pedestrian and cycle track facilities on both sides of the R132. There is also a shared pedestrian and cycle facility on the western side of the R132 between the Airport Roundabout and Cloghran Roundabout. There are no other dedicated cycle facilities on the external network within the assessment area.

6.6.29 Within the airport, there are approximately six kilometres of cycle tracks provided, as illustrated in Figure 6-5. Many of these are segregated and connect the major trip generators within the campus. Over 250 bicycle parking spaces are currently provided at a number of different locations within the airport campus. These facilities are a mixture of type (Sheffield Stands – locks to the bicycle frame, Toaster Stands – locks to the bicycle wheel, etc.), and quality (covered/uncovered, locked/unsecure).

Public Transport Infrastructure

6.6.30 Outside of the airport campus, bus lanes are provided in both directions on the R132 between the Old Airport Road and the Airport Roundabout. Between the Airport Roundabout and Cloghran Roundabout, there is a northbound bus lane only. There are no bus priority facilities on any of the other roads within the assessment area. There are a number of bus stops on the R132 in the vicinity of the airport served by bus routes that run along the road but do not enter the airport campus.

6.6.31 There are limited sections of designated bus lanes throughout the airport campus, generally on approach to drop-off and pick-up locations and on the approach to the Airport Roundabout on Corballis Road North. All other sections are shared with general traffic. The locations of the various bus set-down and pick-up areas are illustrated in Figure 6-6 and described below.

1. **Terminal 1 Kerbside:** A drop off and pick-up area for premium coach services to Dublin City Centre, Cork and Belfast, with seven stands located directly outside the terminal building. These services are clearly signed with employees available to assist passengers. Shelters are provided at all stops.
2. **GTC:** This is the main bus terminal within the airport, providing 24 stands, and is located to the rear of the T1 multi-storey car park (MSCP). Public bus operators and commercial bus/coach operators provide services to Dublin (City Centre and other locations) and regional locations from this facility. Car park shuttle services also pick-up and drop-off at this location. The GTC is located a short walking distance from T1 with a longer, but sheltered, walking

distance to/from T2. Shelters are provided at most bus stops. General traffic runs through the GTC to enter/exit the T1 MSCPs.

3. **Coach Park:** This is a set-down and pick-up area for hotel shuttle services and for commercial bus/coach operators. It is located 150m further north of the GTC to the rear of the Church. There are 13 'Drive In Reverse Out' (DIRO) stands with additional minibus stands that facilitate hotel shuttle services There are sheltered walking routes to the eastern and western ends of the Coach Park and a sheltered waiting area.
4. **Terminal 2 Kerbside Pick-Up:** A pick-up area for premium coach services, as well as long-stay car park shuttles. There are six stands located here. A large canopy provides shelter for waiting passengers. This area is a short walk from the terminal building, with access via a pedestrian overbridge.
5. **Terminal 2 Kerbside Set-Down:** A general set-down area for all bus services, located directly outside the terminal building. There are no formal stands defined and any service can drop off here at any available point on the kerb.
6. **Other Bus Stops:** There are a number of other bus stops located on the airport campus that are served by public bus services to various Dublin locations.

Public Transport Services

6.6.32 Dublin Airport is served by a mixture of public bus and commercial coach services, consisting of:

- Local public bus services – regular stopping buses which serve the city centre and other locations within Dublin.
- Local Premium Commercial Coach services – express or limited stopping services, primarily to the city centre, but also serving some other locations such as Sandyford and Bray.
- Regional Bus/Coach services – regular stopping services to areas outside of Dublin and the Greater Dublin Area (GDA).
- Regional Commercial Coach services – a mixture of express and regular stopping services to areas outside of Dublin and the GDA.

6.6.33 daa is committed to providing sustainable travel solutions at the airport and has worked collaboratively with various transport service providers to ensure that the level of bus and coach service provision, both public and commercial, has grown in response to demand caused by increasing passenger and staff numbers at Dublin Airport. This is reflected in a bus mode share which has remained consistent for the last 10 years as demand has increased. There are 13 dedicated bus/coach routes within Dublin and an additional 32 routes to/from regional locations throughout Ireland, making Dublin Airport the busiest bus interchange in the country.

6.6.34 There is a mixture of public and express premium services to/from Dublin City Centre, with a combined total of approximately 490 timetabled services per day, with a maximum combined hourly frequency of 28 services. There are a number of public and commercial coach services to other areas of Dublin, including Dundrum, Balbriggan and Sutton Dublin Area Rapid Transit (DART) station that don't run to or through the city centre. Combined, there are approximately 70 timetabled services per day, with a maximum combined hourly frequency of five services.

6.6.35 There is a mixture of public and commercial coach services to regional locations, as summarised below:

- Approximately 90 timetabled services to other Greater Dublin Area locations (Kildare, Meath, Louth and Wicklow), with a maximum combined hourly frequency of five services.
- Approximately 64 timetabled services to the locations in the southeast (Waterford and Wexford), with a maximum combined hourly frequency of six services.
- Approximately 78 timetabled services to the locations in the southwest (Cork, Kerry, Tipperary, Limerick, Clare), with a maximum combined hourly frequency of six services.
- Approximately 30 timetabled services to the locations in the midlands (Longford, Laois, Offaly), with a maximum combined hourly frequency of three services.
- Approximately 52 timetabled services to the locations in the west (Galway and Mayo), with a maximum combined hourly frequency of five services.
- Approximately 63 timetabled services to the locations in the northwest (Sligo, Donegal and Derry), with a maximum combined hourly frequency of five services.

- Approximately 64 timetabled services to the north (Belfast), with a maximum combined hourly frequency of four services.

General Road Infrastructure

External Road Network

6.6.36 Dublin Airport has direct access to both the National, Regional and local road networks. The National Road network connections from all major cities in Ireland converge on the M50, Dublin's orbital motorway immediately south of the airport. This route also provides access to the northern, western and southern suburbs of Dublin. The route has a critical function on the road network not just within the Greater Dublin Area but also as a distributor route for traffic nationally. The M50 also provides access to the Dublin Port Tunnel which comprises a 4.5km tunnel connecting to Dublin Port and to South County Dublin/the South Coast. The section of the M50 within the assessment area runs from Junction 2 (Coolock) to Junction 5 (Finglas) and includes the M1 and Ballymun interchanges.

6.6.37 The M1, running in a north/south direction to the east of Dublin Airport, is also a critical connection with most traffic accessing the airport from this route. The M1 is the main north-south road link within the region and connects Dublin to the A1 (Belfast) motorway at Newry. The section of the M1 within the assessment area runs from Junction 1 (M50 interchange) to Junction 3 (Drynan) and includes the airport interchange.

6.6.38 The airport is connected to the M1 via the M1 Link Road, which retains motorway designation up to its intersection with R132 at the Airport Roundabout.

6.6.39 The R132 runs from Parnell Street in the city centre to north of Dundalk via Dublin Airport. It was reclassified from a National Road (formerly the N1) to a Regional Road following the opening of the M1. The R132 runs directly along the eastern boundary of the airport campus, and the main access points to the airport are on this road at the Airport Roundabout and Corballis Road South junction. Within the assessment area, the R132 generally comprises two general traffic lanes and a bus lane in both directions.

6.6.40 Naul Road is a local road which runs in an east-west alignment along the northern boundary of the airport. It generally comprises a single carriageway layout, with one lane in each direction.

6.6.41 The Old Airport Road is a local road which runs in an east-west alignment along the southern boundary of the airport. It generally comprises a single carriageway layout, with one lane in each direction.

6.6.42 The section of the R108 within the assessment area runs in a north-south alignment from the M50 Ballymun Interchange to the junction with Old Airport Road. It generally comprises a single carriageway layout, with one lane in each direction.

Airport Access Junctions

6.6.43 The primary access junction to the airport is the Airport Roundabout, illustrated in Figure 6-7. This key interface between the airport and strategic road networks is a four-arm, signal-controlled roundabout, with the following layout:

- The western arm provides access to and exit from the airport and consists of three entry lanes, plus a left-turn slip consisting of one general traffic lane and one bus lane, and two exit lanes.
- The northern arm is the R132 and consists of two entry lanes plus a left-turn slip, and two exit lanes.
- The eastern arm is the M1 Link Road, which consists of three entry lanes plus a left-turn slip, and two exit lanes.
- The southern arm is the R132 and consists of two entry lanes and two exit lanes.
- There are three circulating lanes on the roundabout for east-west (i.e. airport) movements, and two circulating lanes for north-south movements.
- Although northbound and southbound bus lanes are present on the R132 to the north and south of Airport Roundabout, these bus lanes terminate on approach to the roundabout. There are no bus lanes on the circulating carriageway.

6.6.44 The R132/Corballis Road South junction is illustrated in Figure 6-8. A key interface between the airport and the local road network, the junction connects the airport to the R132 from the south, whilst also providing access to passenger car parks. The junction is a four-arm signal-controlled junction, with the following layout:

- The western arm, Corballis Road South, is the secondary access to/exit from the airport campus. It consists of two entry lanes plus a left-turn slip, and two exit lanes.
- The northern arm is the R132. It consists of three entry lanes (two general traffic and one bus lane), plus a right-turn flare and a left-turn slip, and three exit lanes (two general traffic and one bus lane).
- The eastern arm provides access to the airport's Express Red Long-Term car park, as well as car rental facilities and a sports centre. It consists of three entry lanes (two general traffic and one bus lane), plus a left-turn slip, and one exit lane.
- The southern arm is the R132. It consists of three entry lanes (two general traffic and one bus lane), plus a right-turn flare and a left-turn slip, and three exit lanes (two general traffic and one bus lane).

6.6.45 There is an additional access to the airport from the Naul Road, illustrated in Figure 6-9, which is located north of the main campus area. This access is predominantly used by airport staff only and is not heavily-trafficked. This priority-controlled T-junction has the following layout:

- The major arms are Naul Road east and west, a single carriageway road with one lane in each direction.
- The minor arm is Castlemoate Road, a single carriageway road with one lane in each direction.

Internal Airport Road Network

6.6.46 The internal airport road network (as illustrated in Figure 6-10) follows an approximate 'horseshoe' layout with a clockwise one-way system in operation in most areas.

6.6.47 The primary access route for general traffic is from the Airport Roundabout via the East Link Road, a north-south four-lane carriageway which diverges at the southern end, where:

- One lane turns left on to Corballis Road South;
- Two lanes continue underneath T2 towards T1;
- Two lanes continue to the T2 (departures) drop-off forecourt;
- A bus-only lane continues to the T2 (arrivals) pick-up forecourt; and
- A single lane continues to the T2 MSCP entrance.

6.6.48 Secondary access is via Corballis Road South, an east-west, two-way, four-lane single carriageway, which also provides a secondary exit from the airport, as well as access to the cargo terminals. Corballis Road South intersects the East Link Road at a complex signal-controlled junction east of T2.

6.6.49 The T1 short-stay MSCP is located directly adjacent to the pick-up forecourt. To the north of this, there is a Ground Transportation Centre (GTC) which consists of four bus drop-off/pick-up lanes. Vehicular access to and from the Terminal 1 MSCPs is also via this area.

6.6.50 The primary exit route from the airport is via Corballis Road North, an east-west, one-way, four-lane carriageway. A slip-lane from Corballis Road North to the East Link Road facilitates the re-circulation of vehicles within the horseshoe.

Passenger General Traffic & Taxi Set Down Areas and Bus Drop-Off & Pick-Up Areas

6.6.51 The Terminal 1 (T1) departures area is located on the first floor of the terminal building. An elevated set down forecourt for general traffic is located directly adjacent to this and is accessed via a ramp, which in turn is accessed via a 'tunnel' beneath Terminal 2 (T2). The set down forecourt is approximately 260m long and consists of two set down lanes, with a third bypass lane. Approximately half-way along the set down forecourt there is a pedestrian crossing, which links to the short-term MSCP opposite T1. On the exit ramp from the set down forecourt, the road reduces to a single lane, before first merging with the exit from the bus pick-up forecourt and then the exit from the MSCPs/bus drop off area, and eventually the exit road from T2 to form the four-lane Corballis Road North, the primary exit road from the airport.

6.6.52 The T1 Arrivals area is located on the ground floor. A bus pick-up forecourt is located directly adjacent to this, and access is restricted to taxis, hotel shuttles and certain bus services.

6.6.53 There are two segregated departures forecourts outside T2. The inner forecourt, directly outside the terminal building is for buses and hotel/car park shuttles drop off only. It is approximately 290m long and consists of two through-lanes and a bus lay-by/pull-in area that runs the length of the drop-off forecourt. The outer set down forecourt is for general traffic. It is approximately 310m long and consists of two through-lanes and a set down area off the inner lane. The outer set down forecourt is linked to the terminal building by three pedestrian crossings which cross the inner bus drop-off forecourt. At the exit to the outer set down, the two lanes merge to a single lane before merging with the exit from the bus and taxi pick-up forecourt to form the West Link Road, which eventually intersects Corballis Road North in a signalised junction. Access to the T2 pick-up forecourt is restricted to taxis and certain bus services, as well as long-term car park shuttles. Pedestrian access to the bus and taxi pick-up forecourt is via a pedestrian bridge from the first floor of the terminal building, across the drop-off and set down forecourts.

6.6.54 There are no pick-up forecourts for general traffic at either terminal, with the short-term carparks available for this purpose.

Taxis

6.6.55 Dedicated taxi ranks are provided directly outside both terminals. The T1 rank has capacity for 26 spaces, between pick-up spaces and an intermediate holding area. The T2 rank has capacity for 57 spaces. A designated holding area with capacity for 400 taxis, 'The Kesh', is provided on the eastern side of the airport campus, allowing taxis to queue for access to the arrivals kerbs in a location remote from the terminal. Taxis are called up to the terminal kerb to collect passengers in manageable batches as required. While there are no restrictions on taxis dropping off at the airport, drivers wishing to pick-up there must apply for a permit. daa therefore controls the number of taxis that can operate from the airport.

Car Parking

6.6.56 There are three main types of parking provided at Dublin Airport, as outlined in Table 6-10. The distribution of parking across the campus at various locations shown in Figure 6-11.

Table 6-10: Car Parking Facilities at Dublin Airport

Type	Location(s)	No. of Spaces
Short-Term Passenger Parking	On-Site: adjacent to both terminals	3,821
Long-Term Passenger Parking	Off-Site: various locations	25,561
Staff Parking	On-Site: various locations	4,152

6.6.57 Short-term car parking spaces are generally provided within the MSCPs located opposite T1 and T2. The T1 MSCP is divided into three separate blocks: A, B and C. In total there are 2,078 spaces in the T1 MSCP. The T2 MSCP is a single-block facility with 1,706 spaces. T2 also has a further 37 surface short-term parking spaces on lands between the T2 MSCP and the Coach Park. Figure 6-12 indicates the access routes to the short-term car parks. As shown, some access routes to short-term car parks at T1 run through the GTC.

6.6.58 As previously outlined, there are currently 25,561 long-term car parking spaces serving Dublin Airport; 19,439 of which are controlled by daa in their Express Red, Express Green and Holiday Blue car parks. An additional 6,122 spaces are provided in the privately owned facility operated by Park2Travel. The long-term car parks are remote from the terminal buildings and passengers making use of these car parks are transferred via shuttle buses.

6.6.59 The Express Red long-term car park is located to the east of the R132. Access is via the Corballis Road South junction. Shuttle buses operate with a frequency of ten minutes and the journey time to the terminals is approximately five minutes.

6.6.60 The Express Green long-term car park is a seasonal car park, open from May through August. It is located to the east of the R132, with access via the Airport Business Park junction. Shuttle buses operate with a frequency of ten minutes and the journey time to the terminals is approximately five minutes.

6.6.61 The Holiday Blue long-term car park is located off the R108, adjacent to the southern boundary of the airport. Access is via a dedicated junction on the R108. Shuttle buses operate with a frequency of 15 minutes and the journey time to the terminals is approximately 15 minutes.

6.6.62 The privately-operated long-term car park is located on the western side of the R132, approximately 200m south of the Old Airport Road Junction. Access is via a dedicated junction on the R132. Shuttle buses operate with a frequency of 12 minutes and the journey time to the terminals is approximately six minutes.

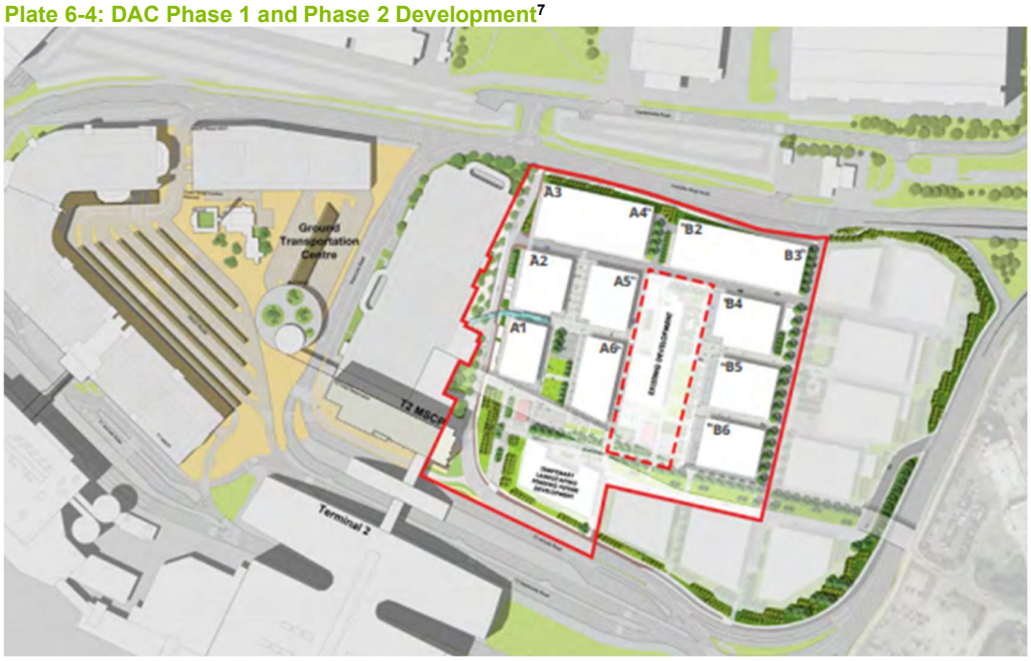
6.6.63 There are 4,152 staff parking spaces provided at various locations on the airport campus.

Dublin Airport Central

6.6.64 Dublin Airport Central (DAC) is a commercial office development located within the main airport campus. A Masterplan developed for DAC assumes two phases of development:

- Phase 1 (Cluster A) development of 41,677m^2 office space to the east of the existing T2 MSCP, which is shown by the plots labelled with an 'A' in **Error! Reference source not found.**. This phase has planning permission and is not functionally or legally interdependent with the Proposed Order. Blocks A1 and A6 have already been constructed and are in use and, as such, the traffic generated by them contributes to the current state of the environment. There are currently no plans to commence development of Blocks A2 and A5 and it is assumed that they will not be in place by 2029. As such, they are not included in the assessment of the 2029 Proposed Operation or the 2029 Permitted Operation.
- Phase 2 (Cluster B) further development of 33,787m^2 of office space planned to the east of the existing DAC development, which is shown by the plots labelled with a 'B' in Plate 6-4. This phase does not have planning permission and as such is not included in the assessment of the 2029 Proposed Operation or the 2029 Permitted Operation

Plate 6-4: DAC Phase 1 and Phase 2 Development[7]



Current Operation Mode Share

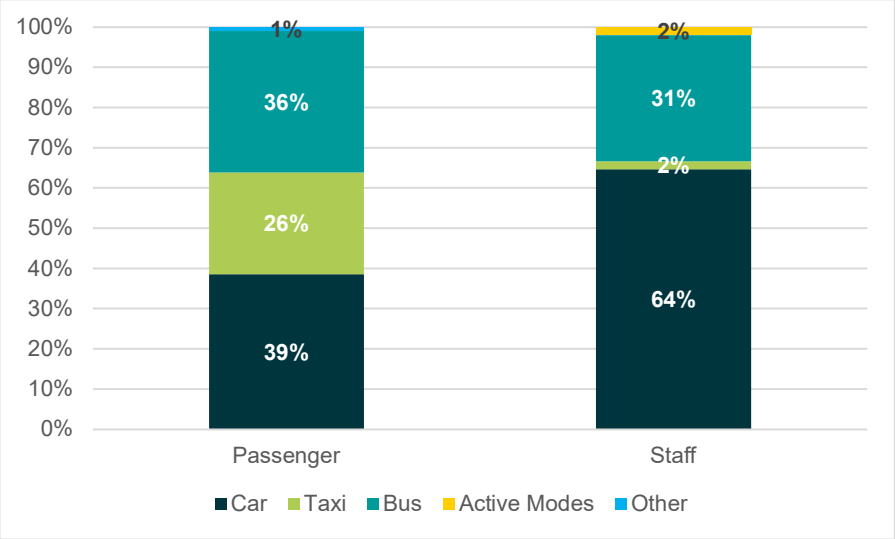
6.6.65 The nature of airport travel is unique and not directly comparable with more 'traditional' types of development. A high volume of early morning flight departures, coupled with a requirement for passengers to arrive at the airport up to several hours in advance of their flight leads to a higher level of trip generation outside of traditional commuting peaks, for both passengers and staff. Similarly, there is

[7] *Source: DAC Masterplan 2016 (Site Layout Plan)*

a large volume of flight arrivals late at night. A high proportion of daily demand therefore occurs outside of traditional public transport operating hours.

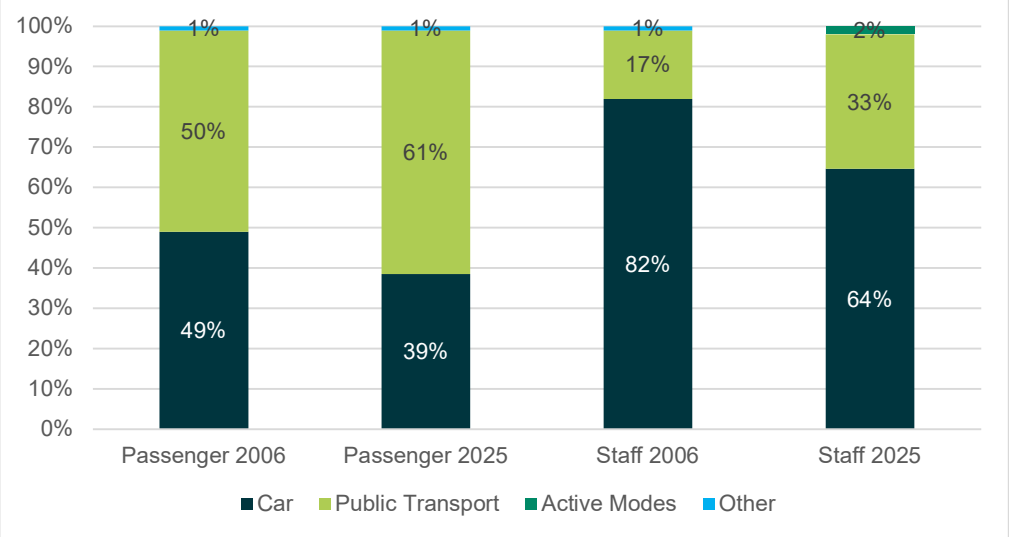
6.6.66 Dublin Airport undertakes regular passenger and staff travel surveys to monitor travel demand. The current mode share, from 2025, illustrated in Plate 6-5, was determined through these surveys. The figures outlined in Plate 6-5 represent a daily average, and mode share varies across a 24-hour period.

Plate 6-5: Current Operation (2025) Passenger and Staff Mode Shares



6.6.67 Dublin Airport is committed to providing sustainable travel options for passengers and staff and has worked in collaboration with various transport providers to ensure additional bus services and improved facilities in response to increased demand at the airport. This is reflected in the model shift away from private car towards more sustainable modes since the first airport Mobility Management Plan (MMP) was produced in 2006, as illustrated in Plate 6-6.

Plate 6-6: Current Operation (2025) Passenger and Staff Mode Shares vs 2006 MMP Mode Shares[8]



6.6.68 The proportion of staff using car to travel to and from the airport reflects the nature of operations at the airport, where there is a broad spectrum of employment and shifts, with only 39% working normal office hours of 09:00 – 17:00. According to the Dublin Airport Mobility Study, 21% of staff start work before

[8] Public Transport includes taxi

06:00, while 35% finish after 18:00, which demonstrates that a higher proportion of staff are travelling to work outside the traditional commuting period, at a time when fewer public transport services are available. This means that, although daa remains committed to encouraging sustainable travel options, car travel will continue to be necessary for some employees.

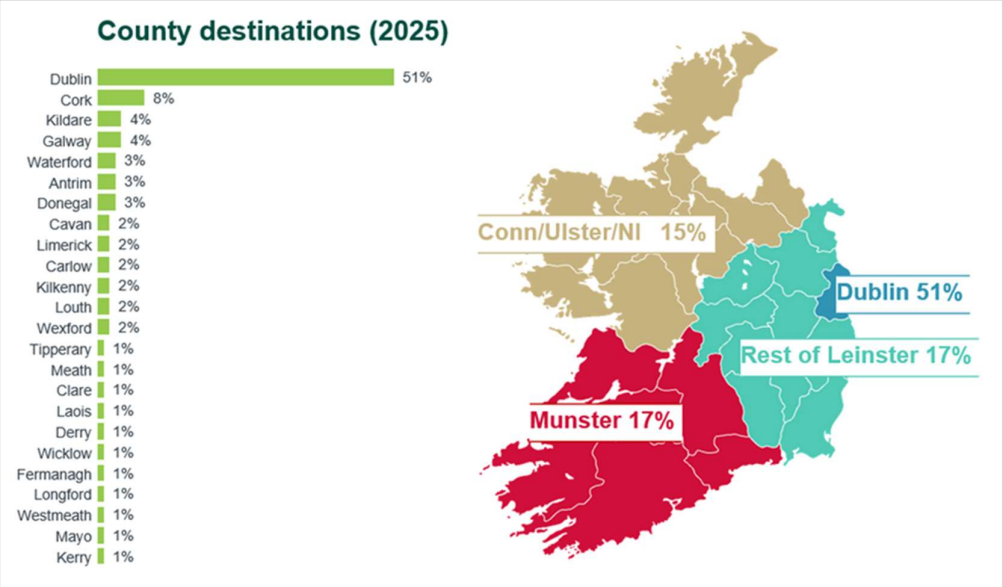
Distribution of Airport-Related Demand

Passenger Demand

6.6.69 Results from ANPR surveys undertaken in October 2025 (Figure 6-13) illustrate the distribution within the assessment area of passengers entering the airport. The results indicate that the highest proportion of passengers entering the airport (67%) travel via the M1 Link Road, with 51% via the M1 northbound and 16% via the M1 southbound. A further 24% of trips travel via the R132 northbound, with 29% travelling via the R132 southbound.

6.6.70 Beyond the immediate assessment area, the origins and destinations of passenger demand was established based on the results of the passenger insights survey, undertaken regularly by daa. The results emphasise the national importance of Dublin Airport, with 49% of passengers who use the airport travelling to/from a location outside of Dublin.

Plate 6-7: Current Operation (2025) Distribution of Wider Airport Passenger Demand[9]



Staff Demand

6.6.71 Results from ANPR surveys undertaken in October 2025 (Figure 6-14) were also used to illustrate the distribution within the assessment area of staff entering the airport. The results show that almost half of all employee trips entering the airport originate from north of the main airport campus, with 28% coming from the R132 southbound, 50% from the M1 Link (27% southbound, 19% northbound), while 28% come from the R132 northbound.

6.6.72 Beyond the immediate assessment area, the origins and destinations of staff demand was established based on the results of a 2025 staff travel survey, undertaken by daa. The results indicated that 57% of staff are based in Dublin North, which is consistent with the results of the ANPR surveys outlined previously. Although the majority of staff are based in Dublin, 27% are commuting from outside Dublin.

Current Operation Traffic Flows

Network Flows

6.6.73 The recorded 2025 Current Operation traffic flows during the peak hours on the road network within the assessment area are set out below. Plate 6-8 illustrates the locations referenced in Table 6-11, which summarises the flows at key locations on the transport network.

[9] Source: daa Passenger Insights Survey 2025

Plate 6-8: Locations of Recorded Directional Flows on Transport Network

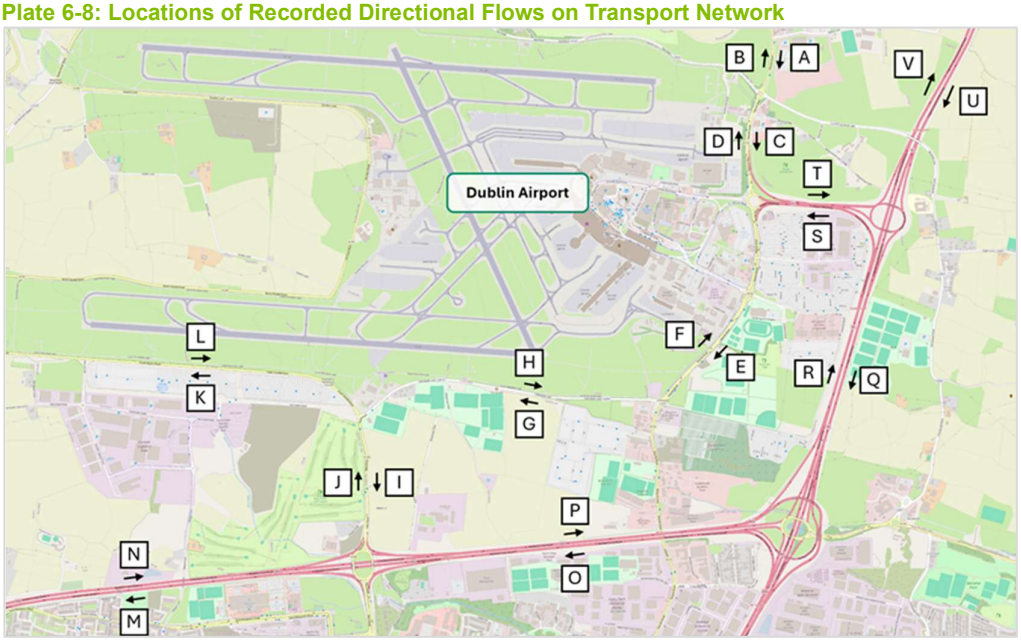


Table 6-11: 2025 Current Operation Traffic Flows (vehicles) on Transport Network

Directional Flows	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Directional Flows	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)
A	1,133	946	**L**	397	234
B	607	857	**M**	3,815	5,034
C	1,065	844	**N**	5,787	5,423
D	687	1,124	**O**	3,722	4,054
E	1,399	952	**P**	4,732	5,204
F	749	1,015	**Q**	4,398	4,088
G	508	653	**R**	4,581	5,628
H	695	585	**S**	2,559	1,535
I	466	817	**T**	1,228	2,020
J	785	585	**U**	4,288	3,139
K	252	278	**V**	3,327	5,247

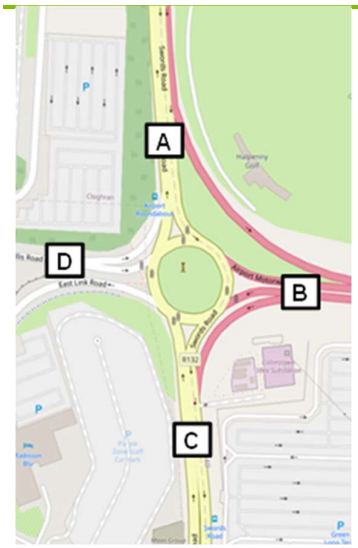
Junction Turning Movements

6.6.74 The recorded 2025 turning movements at the airport access junctions are outlined below.

6.6.75 Table 6-12 illustrates the peak hour turning movements at the Airport Roundabout and illustrates that the dominant movement is the east-west movement between the M1 Link and the airport. The westbound flow towards the airport is the largest single movement in the AM peak, and the eastbound flow out of the airport is the largest single movement in the PM peak. This reflects the importance of the M1 Link for airport access.

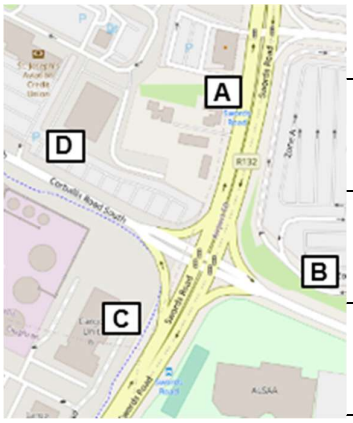
Table 6-12: 2025 Current Operation Turning Movements at Airport Roundabout

Movement				2025 Base	
Reference	**From**	**To**		**AM Peak**	**PM Peak**
	R132 North	R132 North	A to A	0	0
		M1 link	A to B	323	380
		R132 South	A to C	524	333
		Corballis Road North	A to D	224	169

Reference	Movement From	To		2025 Base AM Peak	2025 Base PM Peak
	M1 Link	R132 North	B to A	313	409
		M1 link	B to B	1	0
		R132 South	B to C	814	255
		Corballis Road North	B to D	1,377	873
	R132 South	R132 North	C to A	193	443
		M1 link	C to B	120	383
		R132 South	C to C	0	0
		Corballis Road North	C to D	36	25
	Corballis Road North	R132 North	D to A	178	363
		M1 link	D to B	636	1,180
		R132 South	D to C	357	214
		Corballis Road North	D to D	1	0
			Total	**5,097**	**5,027**

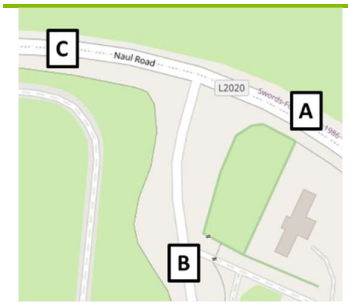
6.6.76 Table 6-13 illustrates the peak hour turning movements at the R132/Corballis South junction and illustrates that the dominant movement at the junction is along the R132, with the north to south movement being the largest single movement in the AM peak and second largest in the PM peak. Movements from the R132 South to Corballis Road South also make up a substantial single movement, providing access to the passenger Terminals 1 and 2 from the southern side of the airport.

Table 6-13: 2025 Current Operation Turning Movements at R132/Corballis Road South

Reference	Movement From	To		2025 Base AM Peak	2025 Base PM Peak
	R132 North	Eastlands	A to B	256	183
		R132 South	A to C	1,133	527
		Corballis Rd S	A to D	143	56
	Eastlands	R132 North	B to A	61	66
		R132 South	B to C	30	106
		Corballis Rd S	B to D	91	131
	R132 South	R132 North	C to A	263	471
		Eastlands	C to B	52	71
		Corballis Rd S	C to D	436	600
	Corballis Road South	R132 North	D to A	36	156
		Eastlands	D to B	73	82
		R132 South	D to C	157	322
			Total	**2,733**	**2,778**

6.6.77 Table 6-14 illustrates the peak hour turning movements at the Naul/Castlemoate Road junction and illustrates that traffic movements at this junction are highly tidal. The dominant movement is west to east on Naul Road during the AM Peak, and the reverse of this movement during the PM peak. Similarly, the volume of traffic entering the airport from Naul Road in the AM peak is mirrored by the volume of traffic exiting in the PM peak.

Table 6-14: 2025 Current Operation Turning Movements at Naul Road/Castlemoate Road

Reference	Movement From	Movement To		2025 Base AM Peak	2025 Base PM Peak
	Naul Road East	Castlemoate Road	A to B	192	28
		Naul Road West	A to C	505	920
	Castlemoate Road	Naul Road East	B to A	36	90
		Naul Road West	B to C	79	238
	Naul Road West	Naul Road West	C to A	591	457
		Castlemoate Road	C to B	179	50
			Total	**1,583**	**1,783**

Current Operation Junction Performance

6.6.78 Analysis of the current operation junction performance has been undertaken, using LinSig junction modelling software, at the signal-controlled airport entrance junctions, namely, Airport Roundabout and the R132/Corballis Road South junction.

6.6.79 The same three industry standard KPIs from LinSig as outlined previously are considered in this assessment, namely; Degree of Saturation, Practical Reserve Capacity, and Queue Lengths.

Airport Roundabout

6.6.80 The modelled current operation layout for the Airport Roundabout in LinSig is illustrated in the model input and output report for the junction in EIAR Appendix 6-5. The junction runs on a SCATS with variable timings. The junction capacity analysis used the optimised cycle time generated by LinSig for the junction.

6.6.81 Table 6-15 summarises the junction performance and indicates that the roundabout currently operates over capacity during both peaks, with queuing on the R132 North during the AM peak, and Corballis Road North in the PM peak.

Table 6-15: Airport Roundabout 2025 Current Operation LinSig Results

	AM Peak		PM Peak	
PRC	-23.5%		-21.1%	
Cycle time	51		80	
Location	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	111.2%	31.2	80.9%	12
Eastbound Circulatory	43.7%	1.1	66.6%	5.8
M1 Link	91.2%	14.4	85.0%	13.5
Southbound Circulatory	66.5%	6.5	50.5%	3.1
R132 South	61.4%	3.8	80.1%	11.9
Westbound Circulatory	64.1%	4.8	49.0%	3.2
Corballis Road North	94.1%	13.0	109.0%	56.9
Northbound Circulatory	60.0%	3.8	85.0%	5.8

R132/Corballis Road South Junction

6.6.82 The current operation model layout for the R132/Corballis Road South Junction in LinSig is illustrated in the model input and output report for the junction in EIAR Appendix 6-5. The junction runs on a SCATS with variable timings. A 90 second cycle time has been used in the LinSig assessment.

6.6.83 Table 6-16 summarises the junction performance and indicates that the junction currently operates slightly over capacity during both peaks, although significant queuing does not occur on any of the arms of the junction.

Table 6-16: R132/Corballis South Junction 2025 Current Operation LinSig Results

	AM Peak		PM Peak	
PRC	-9.6%		-4.5%	
Cycle time	90		90	
Location	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	95.3%	19	87.3%	12.1
Eastlands	48.2%	2.4	36.9%	2.5
R132 South	52.2%	4.2	92.8%	9.9
Corballis Road South	98.7%	12	94.1%	12.2

2029 Permitted Operation (Future Receiving Environment)

Overview

6.6.84 The information provided in this section informs:

- The Principal Assessment; and
- Supporting Assessment 3.

6.6.85 The 2029 Permitted Operation represents the surface access conditions within the assessment area in 2029 without the Proposed Order in place with annual passenger numbers reverting to the Baseline Operation number of 32 mppa. It outlines the Future Receiving Environment against which the Proposed Order is assessed.

Planned and Committed Transport Schemes by daa and by Others

6.6.86 There are a number of planned and committed schemes which will be delivered by daa and others by 2029, including:

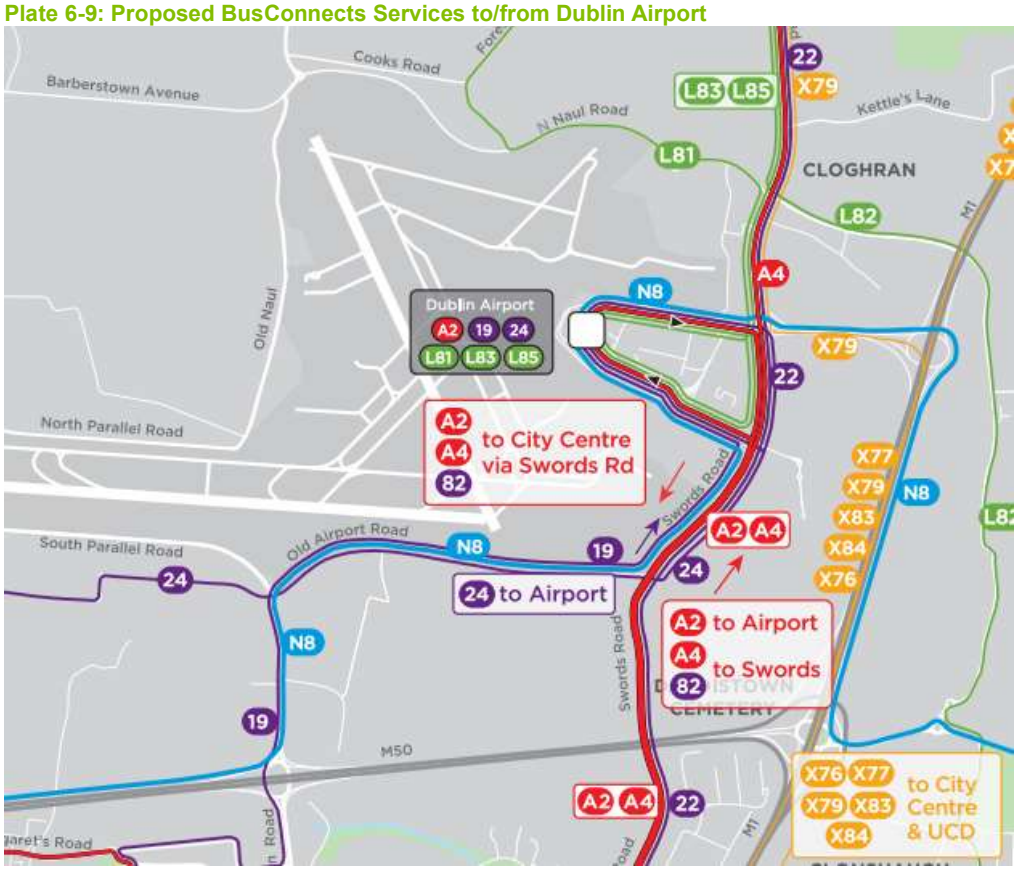
- BusConnects Programme (NTA)
  - Bus network redesign and additional services (on-going roll out)
  - Swords to City Centre Core Bus Corridor Scheme (planning permission granted June 2024)
- Dublin Airport Landside Transformation Programme (daa)
  - Staff South Car Park (planning permission granted May 2026)
  - Various sustainable travel initiatives

6.6.87 It is assumed that these schemes will go ahead regardless of the Proposed Order. These schemes are described below.

BusConnects Programme

6.6.88 A key element of the future public transport services within the GDA is the NTA's BusConnects programme, which will see an overhaul to the bus network in Dublin, with revised services and improved facilities. Plate 6-9 provides an overview of the proposed BusConnects services to/from the airport; some of these new services have already been implemented and the remaining ones are scheduled to be introduced in Q3/Q4 2026.

Plate 6-9: Proposed BusConnects Services to/from Dublin Airport



6.6.89 The NTA's BusConnects infrastructure upgrades that are of relevance to the airport entail the proposed improvements on the R132 in the vicinity of the airport as part of the Swords to City Centre Core Bus Corridor (CBC) Scheme, including:

- Bus lanes, including junction modifications, on the R132
- Upgrade of Cloghran Roundabout (location 1 on Figure 6-15) to a signalised junction – location henceforth referred to as Cloghran Junction
- Additional north-south bus priority measures at the Airport Roundabout (location 2), R132/Corballis Road South junction (location 3), and R132/Old Airport Road junction (location 4)

6.6.90 The layouts for these road sections and junctions included in the 2029 Permitted Operation are as per the designs for the Swords to City Centre CBC Scheme which received statutory planning approval in June 2024, and which is anticipated to be implemented by the NTA by 2029. The approved bus priority measures will improve journey time reliability for bus services along the R132 corridor to the airport. They will also provide benefits for taxis, which can use them for travelling to/from the airport.

Dublin Airport Landside Transformation Programme

6.6.91 As well as external transport schemes noted in this chapter, a number of internal projects (i.e. delivered by daa as part of their on-going Landside Transformation Programme) are also assumed to be in place for the 2029 Permitted Operation.

Staff South Car Park

6.6.92 daa is committed to reducing the impact of staff travel to and from the airport. As such, there are no current plans to provide additional staff parking above the number that is currently permitted and to accommodate future staff growth through sustainable modes. As Dublin Airport has developed through the years, however, some staff parking has been lost to new landside developments. In order to reduce the impact of staff parking on the key R132 junctions providing access to the airport, daa will accommodate the displaced car parking at a location remote from the main airport campus, while keeping the overall total in line with what is permitted. To this end, daa was granted planning permission in May 2026 for the remote Staff South Car Park, which will be located to the south of the airport, on a

site adjacent to the Holiday Blue long-stay car park, as illustrated in Figure 6-16. This will provide 951 spaces and is planned to be implemented by 2029. Therefore, it is included for the 2029 Permitted Operation.

6.6.93 A key supporting element of the remote staff car park is a revised staff commuting policy that will look to assign spaces in the new car park based on an employee's home location. Permits for the Staff South Car Park will therefore be issued to employees living south of the airport. This will reduce the need for staff trips on the road network in the direct vicinity of the airport.

6.6.94 The Staff South Car Park will therefore remove staff car trips from the main airport area. It will also help to reduce the environmental impact of staff travel by transferring staff to a shuttle bus for the 'last mile' of their journey, thereby reducing the overall vehicle kilometres travelled. Furthermore, provision of parking at a remote location will disincentivise car travel for some staff and encourage them to switch to active travel or public transport for their commute.

2029 Permitted Operation Transport Demand

6.6.95 Airport demand has been forecast in the demand model using 32 mppa flight profiles. The transport demand used for the assessment also reflects non-airport growth on the surrounding transport network. To this end, link-based growth rates from TII Project Appraisal Guidelines (PAG) Unit 5.3[10] – Travel Demand Projections were used to derive growth factors, which were then applied to the recorded 2025 traffic flows to produce forecast 2029 non-airport traffic flows, as summarised in Table 6-17.

Table 6-17: TII Metropolitan Area Link-Based Growth Rates used to Derive Transport Demand

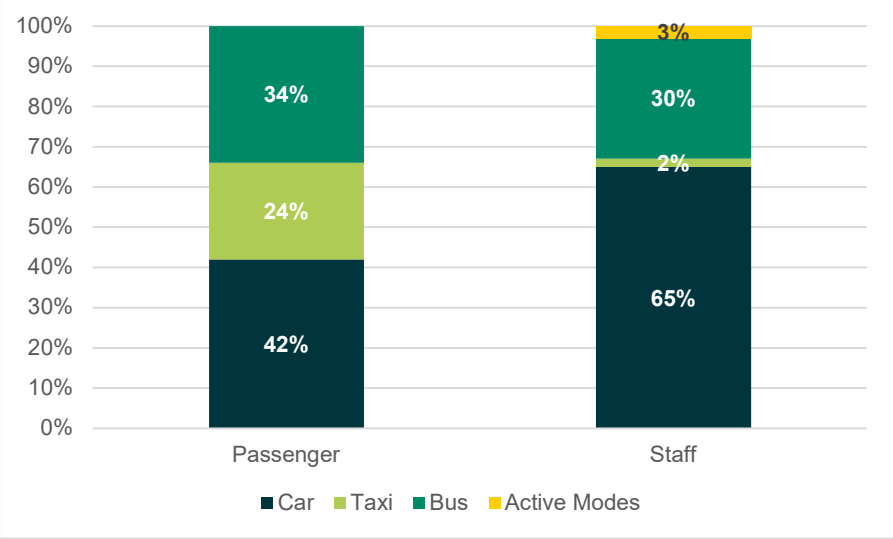
Metropolitan Area	Growth	Light Vehicle	Heavy Vehicle
Dublin	Annual Rate (Central)	1.0162	1.0295
	2025-2029 Growth Factor	1.0663	1.1233

Mode Share

6.6.96 The 2029 Permitted Operation represents airport activity at 32 mppa. For this assessment, passenger and staff mode shares are assumed to revert to the recorded 2023 levels associated with the 32 mppa operational condition. This provides a reasonable worst-case representation of road traffic demand because it does not assume that the improvements in mode share observed by 2025 would be retained at 32 mppa. As a result, airport-related road traffic is higher than it would be if those improved mode shares were assumed to continue.

6.6.97 The recorded 32 mppa mode shares from 2023, are outlined in Plate 6-10.

Plate 6-10: 2029 Permitted Operation Passenger and Staff Mode Shares



[10] https://cdn.tii.ie/publications/PE-PAG-02017-03.pdf

Distribution of Airport-Related Demand

6.6.98 The forecast distribution of airport-related demand in the 2029 Permitted Operation in terms of origin and destination was informed by the recorded distributions of both passengers and staff in the 2025 Base. As such, the 2029 Permitted Operation distribution does not differ significantly from the recorded distribution outlined previously for the 2025 Current Operation.

2029 Permitted Operation Bus Services Demand

6.6.99 The 2029 Permitted Operation includes the various service amendments and updated frequencies from the BusConnects programme. It assumes that premium commercial coach services and other private bus services remain as per the 2025 Base. The 2029 Permitted Operation bus passenger hourly demand across the busiest day 24-hour period was calculated using outputs from the demand model. In total, it was estimated that air passenger demand would result in approximately 31,000 two-way bus passengers per day, while staff demand would result in approximately 8,250, as summarised in Table 6-18.

6.6.100 Since bus demand reverts to 32 mppa levels for the 2029 Permitted Operation, no additional services are assumed to be required.

Table 6-18: 2029 Permitted Operation Bus Passenger Demand Calculations

Hour Commencing	Passengers					Staff					Total Bus Passengers	
	Air Passengers (at-door)		Mode Share	Bus Passengers		Entering	Exiting	Mode Share	Bus Passengers		Entering	Exiting
	Entering	Exiting		Entering	Exiting				Entering	Exiting		
00:00	0	763	34%	0	259	29	247	30%	9	74	9	333
01:00	0	32	34%	0	11	19	175	30%	6	52	6	63
02:00	8	0	34%	3	0	118	96	30%	35	29	38	29
03:00	388	170	34%	132	58	309	35	30%	93	10	225	68
04:00	2,062	889	34%	701	302	783	53	30%	235	16	936	318
05:00	3,217	158	34%	1,094	54	913	68	30%	274	20	1,368	74
06:00	3,198	1,197	34%	1,087	407	1,878	575	30%	563	172	1,651	579
07:00	2,507	2,572	34%	852	874	1,408	488	30%	422	146	1,275	1,021
08:00	2,287	1,479	34%	777	503	2,100	81	30%	630	24	1,408	527
09:00	2,535	2,689	34%	862	914	1,399	119	30%	420	36	1,282	950
10:00	2,816	3,014	34%	957	1,025	417	149	30%	125	45	1,082	1,069
11:00	3,123	3,393	34%	1,062	1,154	435	267	30%	130	80	1,192	1,234
12:00	3,101	3,110	34%	1,054	1,058	577	620	30%	173	186	1,227	1,243
13:00	3,538	2,431	34%	1,203	827	597	820	30%	179	246	1,382	1,073
14:00	3,183	2,446	34%	1,082	832	342	1,066	30%	103	320	1,185	1,151
15:00	3,076	2,365	34%	1,046	804	212	2,480	30%	64	744	1,109	1,548
16:00	3,087	2,203	34%	1,050	749	186	897	30%	56	269	1,105	1,018
17:00	3,203	3,868	34%	1,089	1,315	480	2,711	30%	144	813	1,233	2,128
18:00	2,296	2,469	34%	781	839	357	1,843	30%	107	553	888	1,392
19:00	1,383	2,107	34%	470	716	515	671	30%	155	201	625	918
20:00	631	1,011	34%	214	344	119	324	30%	36	97	250	441
21:00	438	2,481	34%	149	844	55	379	30%	16	114	165	957
22:00	149	2,265	34%	51	770	40	255	30%	12	76	63	847
23:00	5	2,176	34%	2	740	24	157	30%	7	47	9	787
24-Hour Total	**46,230**	**45,288**	**34%**	**15,718**	**15,398**	**13,315**	**14,573**		**3,994**	**4,372**	**19,713**	**19,770**

2029 Permitted Operation Traffic Flows

Network Flows

6.6.101 The forecast peak hour 2029 Permitted Operation traffic flows on the road network within the assessment area were derived using the growth factors for background (non-airport related) traffic outlined above, and by assuming that for airport related traffic the car mode share and associated volumes revert to the recorded values from 2023. The resultant general traffic demand is set out below. Plate 6-11 illustrates the locations referenced in Table 6-19, which summarises the flows at key locations on the transport network.

Plate 6-11: Directional Flows on Transport Network

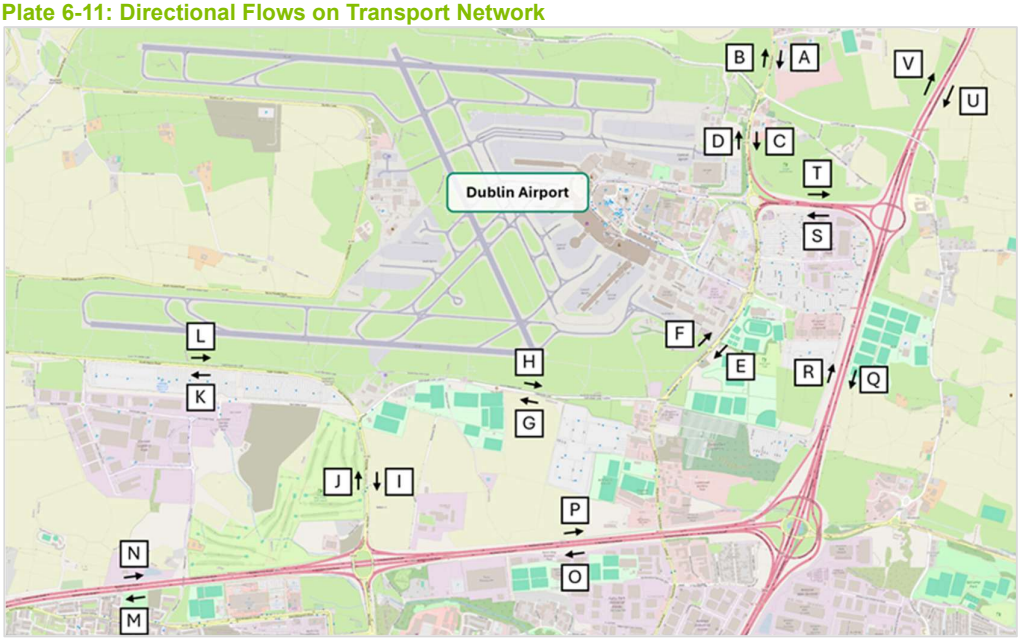


Table 6-19: Forecast 2029 Permitted Operation Traffic Flows (vehicles) on Transport Network

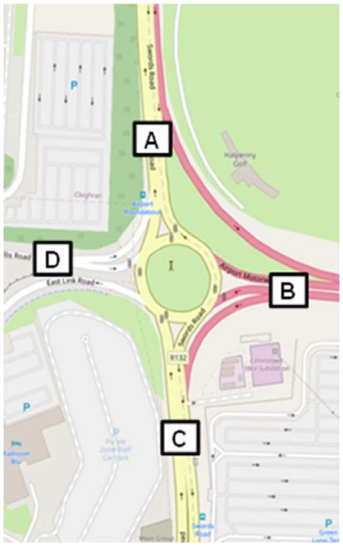
Directional Flows	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Directional Flows	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)
A	1,179	1,023	**L**	407	263
B	626	941	**M**	3,952	5,448
C	1,089	922	**N**	6,030	5,864
D	693	1,256	**O**	3,957	4,394
E	1,392	1,054	**P**	4,949	5,639
F	667	1,131	**Q**	4,607	4,403
G	475	684	**R**	4,693	6,055
H	640	681	**S**	2,462	1,720
I	455	976	**T**	1,190	2,238
J	876	687	**U**	4,499	3,380
K	248	306	**V**	3,510	5,637

Junction Turning Movements

6.6.102 The forecast 2029 Permitted Operation turning movements at the airport access junctions are outlined in detail in Table 6-20 to Table 6-22 and summarised below.

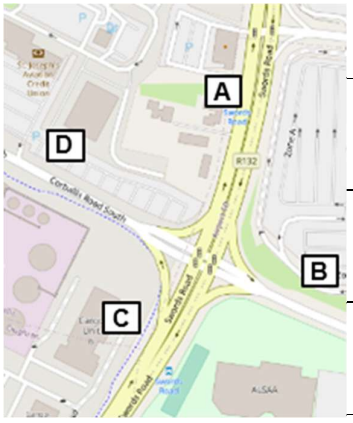
6.6.103 The dominant movement at the Airport Roundabout is forecast to remain the east-west movement between the M1 Link and the airport, with the westbound flow towards the airport the largest single movement in the AM peak, and the eastbound flow out of the airport the largest single movement in the PM peak. This reflects the continuing importance of the M1 Link for airport access.

Table 6-20: Forecast 2029 Permitted Operation Turning Movements at Airport Roundabout

Reference	Movement From	Movement To		2025 Base AM Peak	2025 Base PM Peak
	R132 North	R132 North	A to A	0	0
		M1 link	A to B	345	405
		R132 South	A to C	537	364
		Corballis Road North	A to D	214	194
	M1 Link	R132 North	B to A	334	436
		M1 link	B to B	1	0
		R132 South	B to C	780	309
		Corballis Road North	B to D	1,314	1,001
	R132 South	R132 North	C to A	207	477
		M1 link	C to B	129	417
		R132 South	C to C	0	0
		Corballis Road North	C to D	34	29
	Corballis Road North	R132 North	D to A	154	432
		M1 link	D to B	549	1,403
		R132 South	D to C	308	255
		Corballis Road North	D to D	1	0
			Total	**4,908**	**5,722**

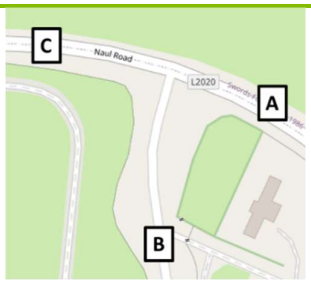
6.6.104 The forecast dominant movement at the R132/Corballis Road South junction is along the R132, with the south to north movement being the largest single movement in the AM peak. Movements from the R132 South to Corballis Road South also make up a substantial single movement, providing access to the passenger T1 and T2 from the southern side of the airport.

Table 6-21: Forecast 2029 Permitted Operation Turning Movements at R132/Corballis Road South

Reference	Movement From	Movement To		2025 Base AM Peak	2025 Base PM Peak
	R132 North	Eastlands	A to B	163	242
		R132 South	A to C	1,208	562
		Corballis Rd S	A to D	136	64
	Eastlands	R132 North	B to A	67	83
		R132 South	B to C	33	134
		Corballis Rd S	B to D	87	150
	R132 South	R132 North	C to A	281	502
		Eastlands	C to B	33	94
		Corballis Rd S	C to D	416	688
	Corballis Road South	R132 North	D to A	31	186
		Eastlands	D to B	63	98
		R132 South	D to C	136	383
			Total	**2,657**	**3,189**

6.6.105 Traffic forecast movements at the Naul Road/Castlemoate junction are highly tidal. The dominant movement is west to east on Naul Road during the AM Peak, and the reverse of this movement during the PM peak. Similarly, the volume of traffic entering the airport from Naul Road in the AM peak is mirrored by the volume of traffic exiting in the PM peak.

Table 6-22: Forecast 2029 Permitted Operation Turning Movements at Naul Road/Castlemoate Road

Reference	Movement			2025 Base	
	From	To		AM Peak	PM Peak
	Naul Road East	Castlemoate Road	A to B	183	32
		Naul Road West	A to C	539	981
	Castlemoate Road	Naul Road East	B to A	31	107
		Naul Road West	B to C	68	283
	Naul Road West	Naul Road West	C to A	630	487
		Castlemoate Road	C to B	171	57
			Total	**1,622**	**1,948**

2029 Permitted Operation Junction Performance

6.6.106 The results presented examine the general performance of the junction in terms of capacity (Degree of Saturation and Practical Reserve Capacity), as well as queue lengths. Full LinSig output reports are provided in EIAR Appendix 6-5.

Airport Roundabout

6.6.107 LinSig analysis at the Airport Roundabout was based on a layout that reflects the NTA's approved BusConnects proposals at this location. This layout introduces north-south bus priority improvements at the roundabout. It is assumed that the junction will continue to run on a SCATS with variable timings. The junction capacity analysis used the optimised cycle time generated by LinSig for the junction.

6.6.108 Table 6-23 summarises the junction performance and indicates that the junction is forecast to operate in excess of capacity for the 2029 Permitted Operation, with significant queuing on the M1 Link and R132 North during the AM peak and on the M1 Lik and Corballis Road North during the PM peak.

Table 6-23: Airport Roundabout 2029 Permitted Operation LinSig Results

	AM Peak		PM Peak	
PRC	-137.2%		-236.9%	
Cycle time	47		45	
Location	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	75.6%	8.4	52.0%	4.4
Eastbound Circulatory	61.9%	5.5	73.8%	7.2
M1 Link	213.5%	212.0	170.3%	139.1
Southbound Circulatory	36.3%	3.9	26.9%	2.5
R132 South	62.2%	3.2	142.6%	79.0
Westbound Circulatory	32.3%	2.2	34.6%	2.2
Corballis Road North	171.2%	107.3	303.2%	359.9
Northbound Circulatory	49.7%	3.2	68.3%	3.8

R132/Corballis Road South Junction

6.6.109 The BusConnects scheme introduces a bus lane on the R132 North approach that extends to the stop line (in the current layout there is a bus lane on this approach to the junction, but this ends 80m prior to the stop line.) The BusConnects scheme also adds segregated cycle lanes along the northern, southern and western arms of the junction, and additional crossing locations are added across each corner of the junction. The aims of the scheme are to improve bus priority measures and active travel provision at the junction rather than to increase accommodation of highway capacity. The LinSig 2029 Permitted Operation junction layout for R132/Corballis Road South is illustrated in the model input and output report for the junction in EIAR Appendix 6-5.

6.6.110 Table 6-24 summarises the junction performance and indicates that junction is forecast to operate in excess of capacity for the 2029 Permitted Operation, with significant queuing in both peaks.

Table 6-24: R132 / Corballis Road South Junction 2029 Permitted Operation LinSig Results

	AM Peak		PM Peak	
PRC	-14.0%		-2.8%	
Cycle time	120		120	
Location	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	102.6%	43.4	86.4%	12.1
Eastlands	73.9%	4.4	92.5%	9.2
R132 South	38.2%	5	90.4%	20.2
Corballis Road South	101.8%	14.4	89.7%	17.8

2029 Proposed Operation

Overview

6.6.111 The information provided in this section informs:

- The Principal Assessment;
- Supporting Assessment 1; and
- Supporting Assessment 2.

6.6.112 The 2029 Proposed Operation represents the surface access conditions within the assessment area in 2029 with the Proposed Order in place. Annual passenger numbers of 40 mppa have been assumed, along with Flight Schedule 3, as outlined in Chapter 4:Proposed Order.

Planned and Committed Transport Schemes by daa and Others

6.6.113 The planned and committed schemes for 2029 for the Proposed Operation are the same as those outlined previously for the Permitted Operation (Section 6.6.86).

Proposed Operation Transport Demand

6.6.114 The Proposed Order comprises the amendment of the existing passenger capacity restriction of 32 mppa to 40 mppa. For the 2029 Proposed Operation, an assessment year 2029 has been used with the forecast passenger demand determined from Flight Schedule 3. Among other information, this schedule provides flight arrival and departure times on a typical busy day, as well as the number of seats, level of loading, and the number of transfer passengers on each flight.

6.6.115 The transport demand for the Proposed Operation (2029) includes the same non-airport growth on the surrounding transport network described previously for the 2029 Permitted Operation.

Mode Share

6.6.116 Two mode share projections have been applied to the 2029 Proposed Operation so that the assessment adopts the reasonable worst-case assumptions for different parts of the transport network. The projection resulting in the greatest credible effect is used for each element of the assessment, reflecting the fact that the mode share assumptions that are most adverse for one part of the network are not necessarily the most adverse for another. The application of each projection is described below.

6.6.117 Although there has been no new public transport infrastructure developed at the airport in recent years, the passenger and staff public transport mode shares have increased since 2023 (32 mppa). When assessing the impact of the Proposed Order on bus facilities, a ‘High Public Transport’ (High PT) mode share was used. This mode share assumes that rate of change in passenger and staff mode shares from 32 mppa to 36 mppa will continue up to 40 mppa. Since the Proposed Order does not include any improvements to public transport infrastructure, the High PT mode share provides the reasonable worst-case scenario for assessing effects on the existing bus facilities at the airport. This is because it assumes the greatest credible transfer of passengers and staff to public transport without any corresponding increase in bus infrastructure capacity, thereby maximising potential pressure on the existing facilities.

6.6.118 The High PT mode shares for passengers and staff are outlined in Plate 6-12 and Plate 6-13, respectively.

Plate 6-12: Proposed Operation (2029) Passenger Mode Shares – High PT

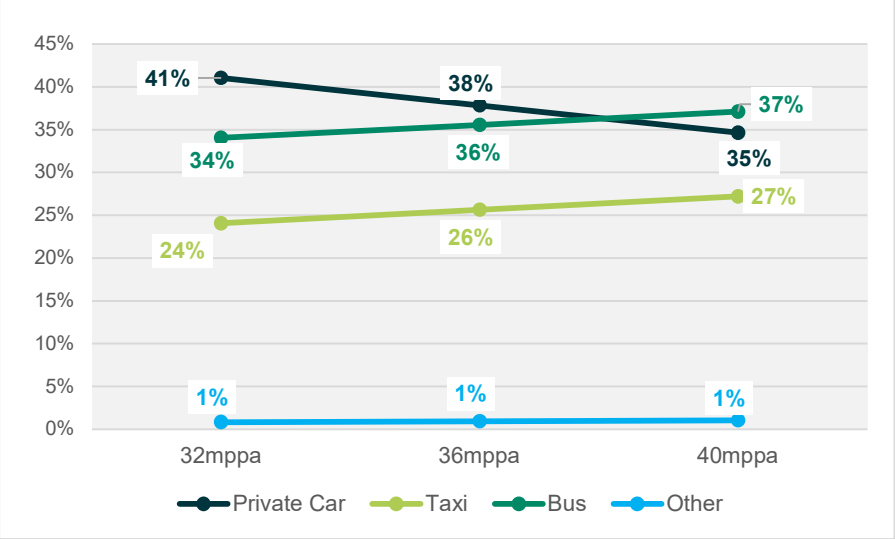
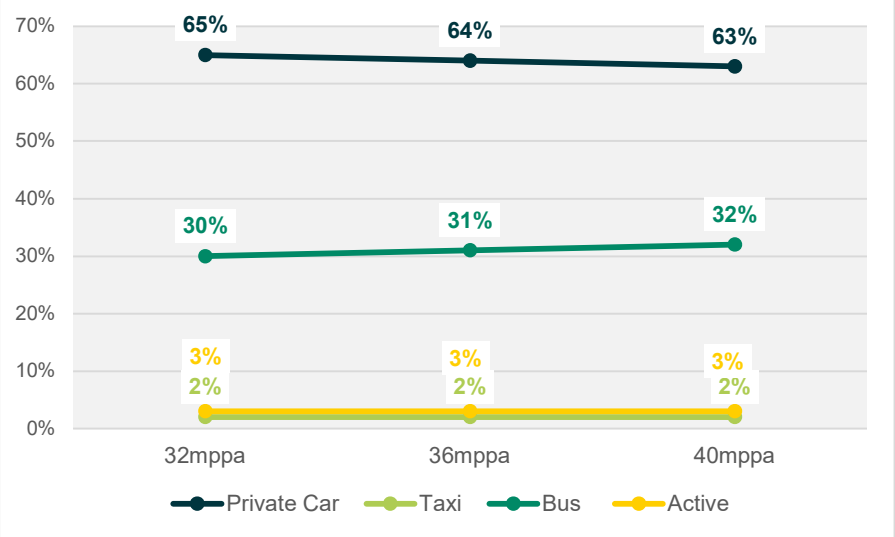


Plate 6-13: Proposed Operation (2029) Staff Mode Shares – High PT



6.6.119 Although Dublin Airport is working to facilitate a significant shift to more sustainable modes of travel, there is an acknowledgement that there are certain factors associated with the nature of airport travel that will always favour the use of car over sustainable modes, including:

- National catchment – 40% of Dublin Airport passengers travel to/from areas outside of Dublin and, while there are a range of bus services to and from Dublin City, options for sustainable access from other regional locations are more limited;
- Flight Schedules – A large volume of flights arrive/depart early in the morning or late at night, outside of the traditional operating hours of bus services, although this will improve once BusConnects services are fully implemented;
- Luggage requirements – larger parties, travelling with baggage, are difficult to accommodate on public transport; and
- Time sensitivity – the 'penalty' for a delay associated with a trip to the airport is far more severe than with other types of trips. This is particularly relevant for passengers travelling longer distances from areas outside of Dublin, where travelling by car provides greater flexibility, contingency and control compared to travelling by public transport.

6.6.120 When assessing the potential effects of the Proposed Order on the road network, a Business as Usual (BAU) mode share has been applied, whereby the 2025 mode shares are assumed to remain unchanged in 2029. This provides a reasonable worst-case scenario for the assessment of existing roads and junctions because it assumes that no further reduction in car mode share is achieved despite the increase in passenger and staff numbers associated with the Proposed Operation (2029). The resulting road traffic demand is therefore higher than would occur if further mode shift away from private car use were assumed. The BAU mode shares are consequently the same as the existing mode shares described for the Current Operation.

Distribution of Airport-Related Demand

6.6.121 The forecast distribution of airport-related demand in the 2029 Proposed Operation was informed by the recorded distributions of both passengers and staff in the 2025 Base. As such, the distribution does not differ substantially from the recorded distribution outlined previously for the 2025 Current Operation.

Proposed Operation (2029) Bus Services Demand

6.6.122 The Proposed Operation (2029) hourly bus passenger demand across the busiest 24-hour period was calculated using outputs from the demand model. This provides the reasonable worst-case scenario for bus passenger demand because it applies the highest forecast demand across the busiest operating day and therefore captures the greatest credible pressure on bus facilities and services. In total, air passenger demand is estimated to generate approximately 39,900 two-way (entering and exiting combined) bus passenger movements per day, with staff demand generating a further approximately 9,400, as summarised in Table 6-25.

Table 6-25: Airport Roundabout 2029 Permitted Operation LinSig Results

Hour Commencing	Passengers					Staff					Total Bus Passengers	
	Air Passengers (at-door)		Mode Share	Bus Passengers		Entering	Exiting	Mode Share	Bus Passengers		Entering	Exiting
	Entering	Exiting		Entering	Exiting				Entering	Exiting		
00:00	0	778	37%	0	288	30	260	32%	10	83	10	371
01:00	0	32	37%	0	12	20	183	32%	6	58	6	70
02:00	9	0	37%	3	0	127	101	32%	41	32	44	32
03:00	469	175	37%	173	65	334	37	32%	107	12	280	77
04:00	2,683	1,145	37%	993	424	834	56	32%	267	18	1,260	442
05:00	4,095	322	37%	1,515	119	979	73	32%	313	23	1,828	143
06:00	3,862	1,452	37%	1,429	537	1,992	606	32%	637	194	2,066	731
07:00	3,182	3,230	37%	1,177	1,195	1,492	512	32%	477	164	1,655	1,359
08:00	2,829	1,991	37%	1,047	737	2,225	85	32%	712	27	1,759	764
09:00	3,095	3,615	37%	1,145	1,337	1,467	124	32%	469	40	1,615	1,377
10:00	3,447	3,375	37%	1,275	1,249	435	156	32%	139	50	1,415	1,299
11:00	3,729	3,785	37%	1,380	1,400	454	278	32%	145	89	1,525	1,489
12:00	4,049	3,953	37%	1,498	1,462	602	647	32%	193	207	1,691	1,669
13:00	4,244	3,289	37%	1,570	1,217	621	858	32%	199	275	1,769	1,491
14:00	3,419	2,452	37%	1,265	907	355	1,112	32%	114	356	1,379	1,263
15:00	3,254	3,018	37%	1,204	1,117	220	2,597	32%	70	831	1,274	1,948
16:00	3,413	2,434	37%	1,263	901	194	941	32%	62	301	1,325	1,202
17:00	3,494	4,084	37%	1,293	1,511	501	2,844	32%	160	910	1,453	2,421
18:00	2,371	2,627	37%	877	972	374	1,937	32%	120	620	997	1,592
19:00	1,477	2,239	37%	546	829	536	704	32%	171	225	718	1,054
20:00	808	1,176	37%	299	435	126	344	32%	40	110	339	545
21:00	495	2,834	37%	183	1,049	59	403	32%	19	129	202	1,177
22:00	154	3,004	37%	57	1,112	43	270	32%	14	87	71	1,198
23:00	5	2,262	37%	2	837	26	164	32%	8	53	10	890
24-Hour Total	**54,583**	**53,276**		**20,196**	**19,712**	**14,047**	**15,292**		**4,495**	**4,894**	**24,691**	**24,605**

Proposed Operation (2029) Traffic Flows

Network Flows

6.6.123 The forecast peak hour 2029 Proposed Operation traffic flows on the road network within the assessment are set out below. Plate 6-14 illustrates the locations referenced in Table 6-26, which summarises the flows at key locations on the transport network.

Plate 6-14: Directional Flows on Transport Network

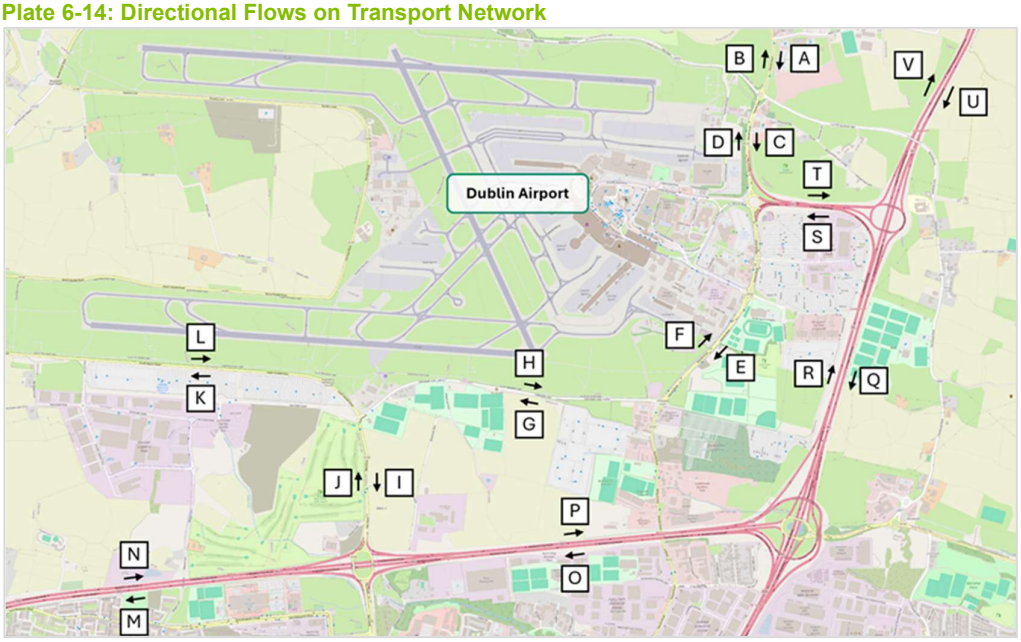


Table 6-26: Forecast 2029 Proposed Operation Traffic Flows (vehicles) on Transport Network

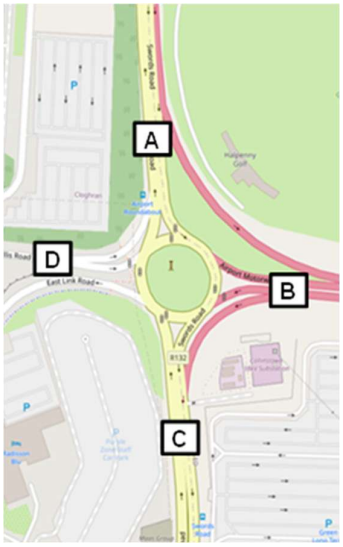
Directional Flows	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Directional Flows	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)
A	1,208	1,030	**L**	427	273
B	653	960	**M**	4,094	5,517
C	1,135	935	**N**	6,190	5,918
D	742	1,297	**O**	4,026	4,438
E	1,514	1,097	**P**	5,060	5,666
F	750	1,175	**Q**	4,711	4,469
G	576	720	**R**	4,861	6,097
H	710	718	**S**	2,709	1,782
I	537	1,001	**T**	1,344	2,336
J	930	713	**U**	4,579	3,400
K	276	315	**V**	3,560	5,668

Junction Turning Movements

6.6.124 The forecast turning movements at the airport access junctions for the 2029 Proposed Operation are outlined in detail in Table 6-27 to Table 6-29 and summarised below.

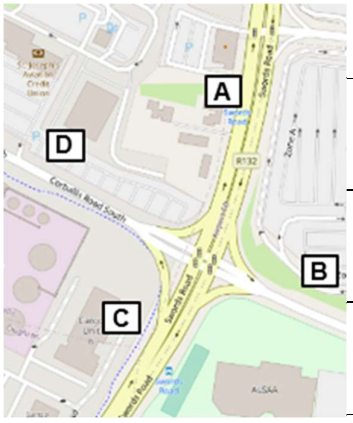
6.6.125 The dominant movement at the Airport Roundabout is forecast to remain the east-west movement between the M1 Link and the airport, with the westbound flow towards the airport the largest single movement in the AM peak, and the eastbound flow out of the airport the largest single movement in the PM peak. This reflects the continuing importance of the M1 Link for airport access.

Table 6-27: Forecast 2029 Proposed Operation Turning Movements at Airport Roundabout

Movement				2025 Base	
Reference	**From**	**To**		**AM Peak**	**PM Peak**
	R132 North	R132 North	A to A	0	0
		M1 link	A to B	345	405
		R132 South	A to C	541	365
		Corballis Road North	A to D	251	206
	M1 Link	R132 North	B to A	334	436
		M1 link	B to B	1	0
		R132 South	B to C	798	311
		Corballis Road North	B to D	1,542	1,062
	R132 South	R132 North	C to A	212	477
		M1 link	C to B	140	416
		R132 South	C to C	0	0
		Corballis Road North	C to D	40	30
	Corballis Road North	R132 North	D to A	193	462
		M1 link	D to B	690	1,502
		R132 South	D to C	387	272
		Corballis Road North	D to D	1	0
			Total	**5,475**	**5,944**

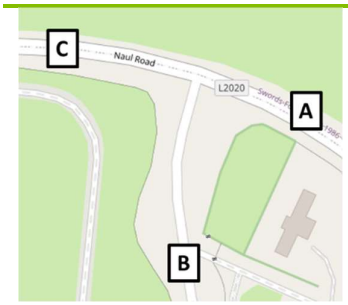
6.6.126 The forecast dominant movement at the R132/Corballis Road South junction is along the R132, with the north to south movement being the largest single movement in the AM peak and PM peak. Movements from the R132 South to Corballis Road South also make up a substantial single movement, providing access to the passenger Terminals 1 and 2 from the southern side of the airport.

Table 6-28: Forecast 2029 Proposed Operation Turning Movements at R132/Corballis Road South

Movement				2025 Base	
Reference	**From**	**To**		**AM Peak**	**PM Peak**
	R132 North	Eastlands	A to B	185	244
		R132 South	A to C	1,208	562
		Corballis Rd S	A to D	160	68
	Eastlands	R132 North	B to A	83	81
		R132 South	B to C	41	131
		Corballis Rd S	B to D	102	159
	R132 South	R132 North	C to A	281	502
		Eastlands	C to B	38	95
		Corballis Rd S	C to D	488	730
	Corballis Road South	R132 North	D to A	39	199
		Eastlands	D to B	79	104
		R132 South	D to C	170	410
			Total	**2,877**	**3,292**

6.6.127 Traffic forecast movements at the Naul Road/Castlemoate junction are highly tidal. The dominant movement is west to east on Naul Road during the AM Peak, and the reverse of this movement during the PM peak. Similarly, the volume of traffic entering the airport from Naul Road in the AM peak is mirrored by the volume of traffic exiting in the PM peak.

Table 6-29: Forecast 2029 Proposed Operation Turning Movements at Naul Road/Castlemoate Road

Reference	Movement			2025 Base	
	From	To		AM Peak	PM Peak
	Naul Road East	Castlemoate Road	A to B	215	34
		Naul Road West	A to C	539	981
	Castlemoate Road	Naul Road East	B to A	39	115
		Naul Road West	B to C	86	303
	Naul Road West	Naul Road West	C to A	630	487
		Castlemoate Road	C to B	200	61
			Total	**1,710**	**1,981**

Proposed Operation (2029) Junction Performance

6.6.128 The results presented examine the general performance of the junction in terms of capacity (Degree of Saturation and Practical Reserve Capacity), as well as queue lengths. Full LinSig output reports are provided in EIAR Appendix 6-5.

Airport Roundabout

6.6.129 As with the 2029 Permitted Operation, the Proposed Operation (2029) layout for the Airport Roundabout reflects the BusConnects proposals at this location and uses an optimised cycle time. The Proposed Operation (2029) model layout for the Airport Roundabout in LinSig is illustrated in the model input and output report for the junction in EIAR Appendix 6-5.

6.6.130 Table 6-30 summarises the junction performance and indicates that the junction is forecast to operate in excess of capacity for the 2029 Proposed Operation in both peaks, with significant queuing on the M1 Link and Corballis Road North arms.

Table 6-30: Airport Roundabout 2029 Proposed Operation LinSig Results

	AM Peak		PM Peak	
PRC	-175.7%		-261.4%	
Cycle time	46		45	
Location	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	85.7%	10.7	52.6%	4.4
Eastbound Circulatory	63.5%	5.7	73.8%	7.2
M1 Link	248.1%	280.7	182.1%	161.5
Southbound Circulatory	39.4%	4.8	26.1%	2.3
R132 South	67.4%	3.6	142.0%	78
Westbound Circulatory	34.9%	2.3	35.2%	2.3
Corballis Road North	211.2%	167	325.3%	392
Northbound Circulatory	54.0%	3.3	68.3%	3.8

R132/Corballis Road South Junction

6.6.131 The LinSig analysis of the R132/Corballis Road South junction also reflects the proposed BusConnects layout detailed previously in the analysis of the 2029 Permitted Operation. The 2029 Proposed Operation model layout for the junction in LinSig is illustrated in the model input and output report in EIAR Appendix 6-5.

6.6.132 Table 6-31 summarises the junction performance and indicates that the junction is forecast to operate above capacity during both peak hours, with significant queuing on the R132 North arm in the AM peak.

Table 6-31: R132/Corballis Road South Junction 2029 Proposed Operation LinSig Results

	AM Peak		PM Peak	
PRC	-22.8%		-4.0%	
Cycle time	120		120	
Location	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	108.9%	65.2	91.4%	13.9
Eastlands	97.0%	9.3	91.5%	9.4
R132 South	44.9%	6.5	93.6%	21.8
Corballis Road South	105.0%	19.6	93.5%	20.7

2040 Proposed Operation

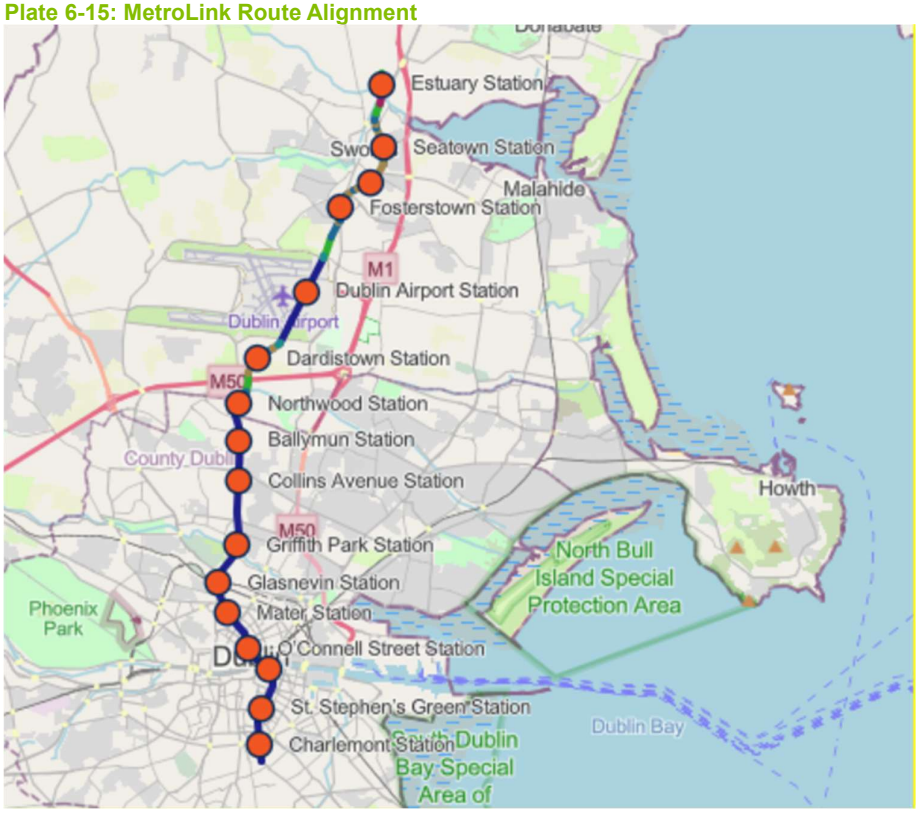
Overview

6.6.133 The 2040 Proposed Operation represents the surface access conditions within the assessment area in 2040 with the Proposed Order in place. As such, the 2040 Proposed Operation assumed annual passenger numbers of 40 mppa, along with Flight Schedule 3, as outlined previously.

Planned and Committed Transport Schemes

6.6.134 This most significant planned / committed transport scheme within the GDA in terms of surface access at Dublin Airport, scheduled for delivery by 2040, is MetroLink. This high-capacity, high-frequency metro railway from Swords to Charlemont will run via Dublin Airport, providing connectivity with the city centre and other key destinations through interchange with other public transport services.

Plate 6-15: MetroLink Route Alignment



6.6.135 Two potential scenarios are considered for the 2040 Proposed Operation, Without MetroLink and With MetroLink in place.

Without MetroLink

6.6.136 Although MetroLink is a committed scheme and received approval from Government to move to detailed tender stage in September 2026, a 'without MetroLink' scenario is considered as a worst-case in terms of surface access for the 2040 Proposed Operation.

6.6.137 It is assumed that airport-related transport demand in 2040 will remain at the same levels as 2029. Since there are no plans to provide additional passenger or staff parking spaces at the airport, the BAU mode share outlined for the 2029 Proposed Operation is similarly considered a worst-case in terms of the potential impact of airport-related demand on the adjacent transport network.

6.6.138 With airport-related demand remaining as per 2029, any additional impact on the adjacent transport network would come from external development and growth in background traffic, not related to the airport.

With MetroLink

6.6.139 As noted above, MetroLink will provide Dublin Airport with high-frequency rail connectivity to the City Centre and beyond, providing transport benefits for both passengers and staff.

6.6.140 Although the overall level of airport-related transport demand in 2040 will remain the same as 2029, the delivery of MetroLink will facilitate a modal shift away from private car. Chapter 9 (Table 9.95) of the MetroLink EIAR[11] outlines a modest increase in public transport mode share (+0.77pp) and reduction in car mode share (-0.30pp) in 2036 over a 12 hour period within the Project's area of influence, as a result of MetroLink. Considering MetroLink will serve Dublin Airport directly, however, the increase in mode share will be more significant, as detailed in Section 9.6.2.2.2 of the MetroLink EIAR.

6.6.141 The delivery of MetroLink will also reduce the bus mode share at the airport, for Dublin-based trips in particular, as it serves similar areas as several existing bus routes. This was highlighted in the MetroLink EIAR (Table 9.99) which noted significant modelled reductions in passenger kilometres travelled by bus with that scheme in place. For regional trips to/from areas outside of Dublin, bus is likely to remain the primary public transport mode for airport trips, although interchange opportunities with the wider public transport network may see some regional demand switching to MetroLink as well.

6.7 Assessment of Likely Significant Effects

Principal Assessment

6.7.1 The Principal Assessment considers the effects of the Proposed Order by comparing the Proposed Operation (2029, 40 mppa) with the Permitted Operation (2029, 32 mppa).

6.7.2 For this assessment, the effects on the following aspects of the internal and external surface access infrastructure have been considered:

- Airport Bus Services
- Ground Airport Bus Facilities
- Airport Traffic Generated
- External Roads
  - Link Flows
  - Junction Flows
    - R132/M1 Link/Airport Roundabout
    - R132/Corballis Road
    - Naul Road/Northern Airport Access

[11] MetroLink EIAR, Available at: https://downloads.metrolink.ie/documentsro/Chapter%2009%20Traffic%20and%20Transport.pdf

Airport Bus Services

6.7.3 Table 6-32 compares the Proposed Operation (2029) bus passenger demand to the equivalent demand for the 2029 Permitted Operation. It illustrates a significant increase in the 2029 Proposed Operation, as a result of the increase in airport-related demand and increase in bus mode share for both air passengers and staff.

Table 6-32: 2029 Forecast Bus Passenger Demand – Proposed Operation vs Permitted Operation

Hour Commencing	Permitted Operation Bus Passengers		Proposed Operation Bus Passengers		Proposed vs Permitted	
	Entering	Exiting	Entering	Exiting	Entering	Exiting
00:00	9	333	10	371	1	38
01:00	6	63	6	70	1	7
02:00	38	29	44	32	6	4
03:00	225	68	280	77	56	8
04:00	936	318	1,260	442	323	124
05:00	1,368	74	1,828	143	461	69
06:00	1,651	579	2,066	731	416	152
07:00	1,275	1,021	1,655	1,359	380	338
08:00	1,408	527	1,759	764	351	237
09:00	1,282	950	1,615	1,377	333	427
10:00	1,082	1,069	1,415	1,299	332	229
11:00	1,192	1,234	1,525	1,489	332	256
12:00	1,227	1,243	1,691	1,669	463	426
13:00	1,382	1,073	1,769	1,491	387	419
14:00	1,185	1,151	1,379	1,263	194	112
15:00	1,109	1,548	1,274	1,948	165	400
16:00	1,105	1,018	1,325	1,202	220	184
17:00	1,233	2,128	1,453	2,421	220	293
18:00	888	1,392	997	1,592	109	200
19:00	625	918	718	1,054	93	136
20:00	250	441	339	545	89	105
21:00	165	957	202	1,177	37	220
22:00	63	847	71	1,198	8	351
23:00	9	787	10	890	1	103
Total	**19,713**	**19,770**	**24,691**	**24,605**	**4,978**	**4,836**

6.7.4 Taking the above into consideration, a high-level assessment of the assumed 2029 bus services was undertaken. The process is summarised hereunder.

6.7.5 The 2029 future bus service provision was determined using proposed BusConnects services and frequencies/timetables for public services, and existing frequencies/timetables for regional and premium/commercial services. Based on this, the number of planned services, broken down by location/region served, is summarised in Table 6-33 and Table 6-34, which show a total of approximately 1,185 services entering and 1,180 services exiting the airport per day for the 2029 Permitted Operation.

6.7.6 The hourly combined capacity of the 2029 bus services was determined, based on standard average capacities of a number of different bus vehicle types, which were assigned to the various bus services, based on the typical vehicle type usually used for that service:

- Double Decker bus – 90
- Double Decker Bus (with luggage rack) – 84
- Public Coach – 49
- Public Double Decker Coach – 75
- Premium Coach – 55

6.7.7 These capacities were then applied to the planned services to establish the hourly and total daily bus passenger numbers that could be catered for by the combined services to and from each location/region, as summarised in Table 6-35 and Table 6-36. This analysis indicated that the services would cater for approximately 66,400 bus passengers entering and 67,075 bus passengers exiting the airport per day in 2029.

6.7.8 The hourly bus passenger demand was assigned to the various local and regional services, based on the likely distribution of bus passengers. This was determined based on recorded origin/destination data sources outlined previously for the 2025 Current Operation. The resultant hourly passenger demand is summarised in Table 6-37 and Table 6-38.

6.7.9 The hourly combined demand was compared to the corresponding bus service capacity. Volume to capacity (V/C) ratios were established on an hourly basis for the various locations/regions, as illustrated in Table 6-39 and Table 6-40. For V/C values up to 0.85, a service was considered to operate within capacity. For values between 0.85 and 1.0, a service was considered to be approaching capacity. In this scenario overcrowding would start to occur. For values above 1.0, a service was considered to be over capacity. At this point significant overcrowding would occur to the extent that some passengers would not be able to board and would have to wait for the next service.

6.7.10 The results indicated significant capacity issues on bus services on the Cork corridor, Waterford/Carlow/Kilkenny corridor, Limerick/ Kildare corridor, and Donegal/Cavan/Fermanagh corridor for large portions of the day between 04:00 and 18:00. Other locations showed capacity issues for a small number of hours across the day.

Table 6-33: 2029 Proposed Operation Planned Daily Bus Services Entering Airport by Location/Region

Hour	Dublin (city centre)	Dublin (Other)	Cork	Galway, W'meath	Waterford, Carlow, Kilkenny	Antrim	Donegal, Cavan, Fermanagh	Limerick, Kildare	Louth	Wexford, Wicklow	Tipperary, Kilkenny	Meath	Clare	Laois, Kildare	Derry	Longford, W'meath	Mayo	Kerry	Offaly, W'meath	Sligo, W'meath	Total
00:00	11	4	0	0	0	1	0	0	2	2	0	1	0	1	0	0	0	0	0	0	22
01:00	5	1	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	9
02:00	3	1	1	1	1	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	10
03:00	3	1	1	1	0	3	1	0	1	0	0	1	2	1	1	0	0	0	0	0	16
04:00	14	1	2	3	1	0	1	2	2	2	1	1	0	1	1	0	1	1	0	0	34
05:00	15	5	1	2	1	3	1	0	2	2	1	1	1	1	1	0	1	0	0	0	38
06:00	17	15	1	1	1	1	1	1	4	2	0	1	0	1	0	0	0	0	0	0	46
07:00	18	16	0	1	1	3	2	1	4	1	0	1	1	1	1	0	1	1	0	0	53
08:00	21	16	1	2	1	2	0	2	4	3	1	1	0	1	0	2	0	0	0	0	57
09:00	23	16	1	2	1	4	2	0	4	5	1	1	1	1	1	0	0	1	0	1	65
10:00	26	16	2	3	1	4	2	2	3	4	0	1	0	1	2	0	1	0	0	0	68
11:00	24	16	2	4	1	4	1	0	3	3	1	1	1	1	2	0	1	1	0	1	67
12:00	24	16	2	2	1	4	3	2	3	4	0	1	0	1	2	0	0	0	1	0	66
13:00	24	16	2	2	1	4	1	0	3	3	1	1	1	1	1	1	1	1	0	0	64
14:00	24	16	2	4	1	3	2	1	4	2	0	1	0	1	2	0	1	0	0	0	64
15:00	24	16	1	3	1	4	2	1	4	3	1	1	1	1	2	0	0	1	0	1	67
16:00	22	16	2	3	0	4	3	1	4	2	0	1	0	1	1	0	1	0	1	0	62
17:00	22	16	1	2	1	4	1	1	3	3	1	1	1	1	2	0	0	1	1	0	62
18:00	23	16	1	2	0	3	2	1	4	1	0	1	0	1	1	0	1	1	0	0	58
19:00	24	16	1	2	1	4	3	0	4	3	1	1	1	1	1	0	1	0	0	1	65
20:00	20	15	2	3	1	3	1	1	2	1	0	1	0	1	2	0	1	0	0	0	54
21:00	20	15	2	2	0	4	2	1	2	1	1	1	1	1	2	0	1	0	0	0	56
22:00	17	15	2	2	1	1	2	1	3	1	1	1	0	1	1	0	0	0	0	0	49
23:00	17	9	0	1	0	3	0	0	1	1	0	1	0	1	0	0	0	0	0	0	34
Total	**441**	**290**	**30**	**48**	**17**	**66**	**33**	**19**	**67**	**49**	**11**	**24**	**11**	**24**	**26**	**3**	**12**	**8**	**3**	**4**	**1,186**

Table 6-34: 2029 Proposed Operation Planned Daily Bus Services Exiting Airport by Location/Region

Hour	Dublin (city centre)	Dublin (Other)	Cork	Galway, W'meath	Waterford, Carlow, Kilkenny	Antrim	Donegal, Cavan, Fermanagh	Limerick, Kildare	Louth	Wexford, Wicklow	Tipperary, Kilkenny	Meath	Clare	Laois, Kildare	Derry	Longford, W'meath	Mayo	Kerry	Offaly, W'meath	Sligo, W'meath	Total
00:00	6	2	1	1	0	1	2	1	2	1	0	1	0	1	0	0	0	0	0	0	19
01:00	4	1	1	1	1	2	0	0	1	0	0	1	0	1	1	0	0	0	0	0	14
02:00	3	1	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	8
03:00	10	1	0	1	1	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	17
04:00	14	1	0	0	0	0	0	1	1	0	0	1	0	1	0	0	0	0	0	0	19
05:00	17	8	0	0	1	2	0	0	1	1	1	1	1	1	1	0	0	0	0	0	35
06:00	22	15	2	3	1	2	1	2	3	1	0	1	0	1	0	0	0	1	0	0	55
07:00	22	16	1	1	0	3	1	0	2	1	0	1	1	1	2	0	2	0	0	1	55
08:00	23	16	1	3	1	2	2	1	3	2	1	1	0	1	0	0	0	0	0	0	57
09:00	24	16	0	2	1	3	2	0	4	2	0	1	1	1	2	1	0	1	0	0	61
10:00	25	16	2	2	1	2	1	1	4	2	1	1	0	1	1	0	1	0	0	0	61
11:00	24	16	1	3	1	4	1	1	3	3	0	1	1	1	1	0	1	1	0	1	64
12:00	24	16	2	2	1	3	2	1	3	2	1	1	0	1	2	0	1	0	1	0	63
13:00	24	16	2	3	1	4	1	1	3	3	0	1	1	1	1	0	0	1	0	1	64
14:00	24	16	2	2	1	4	2	1	3	3	1	1	0	1	2	0	1	0	0	0	64
15:00	24	16	2	3	1	4	3	1	3	4	0	1	1	1	2	1	1	1	0	0	69
16:00	24	16	2	2	1	3	1	2	4	5	1	1	0	1	2	1	0	0	1	0	67
17:00	24	16	2	3	1	4	2	1	4	2	1	1	1	1	2	0	1	1	1	1	69
18:00	24	16	1	2	1	3	3	1	4	3	0	1	0	1	2	0	1	0	0	0	63
19:00	21	15	2	3	0	4	2	1	4	1	1	1	1	1	1	0	0	1	0	0	59
20:00	20	15	1	1	1	2	2	1	3	2	0	1	0	1	2	0	1	0	0	1	54
21:00	18	15	2	3	0	3	2	0	2	3	1	1	1	1	1	0	0	1	0	0	54
22:00	18	15	1	2	0	1	0	1	3	0	0	1	0	1	0	0	0	0	0	0	43
23:00	13	9	2	2	1	3	1	1	2	3	1	1	1	1	2	0	2	0	0	1	46
Total	**452**	**290**	**30**	**45**	**17**	**61**	**31**	**19**	**64**	**44**	**10**	**24**	**10**	**24**	**27**	**3**	**12**	**8**	**3**	**6**	**1,180**

Table 6-35: 2029 Proposed Operation Combined Capacities of Planned Daily Bus Services Entering Airport by Location/Region

Hour	Dublin (city centre)	Dublin (Other)	Cork	Galway, W'meath	Waterford, Carlow, Kilkenny	Antrim	Donegal, Cavan, Fermanagh	Limerick, Kildare	Louth	Wexford, Wicklow	Tipperary, Kilkenny	Meath	Clare	Laois, Kildare	Derry	Longford, W'meath	Mayo	Kerry	Offaly, W'meath	Sligo, W'meath	Total
00:00	688	307	0	0	0	41	0	0	91	83	0	56	0	41	0	0	0	0	0	0	1,307
01:00	333	55	0	0	0	0	0	0	53	0	0	56	0	41	0	0	0	0	0	0	538
02:00	223	55	44	41	41	0	0	41	0	0	0	56	0	41	0	0	0	0	0	0	543
03:00	223	55	41	41	0	138	39	0	53	0	0	56	83	41	44	0	0	0	0	0	813
04:00	878	55	85	124	41	0	39	83	91	83	41	56	0	41	28	0	41	41	0	0	1,727
05:00	933	343	44	83	41	151	39	0	91	83	41	56	41	41	44	0	39	0	0	0	2,070
06:00	1,068	1,135	41	41	41	41	39	41	196	83	0	56	0	41	0	0	0	0	0	0	2,824
07:00	1,068	1,043	0	41	41	151	77	41	196	41	0	56	41	41	44	0	41	41	0	0	2,965
08:00	1,249	1,043	44	83	41	83	0	83	196	124	41	56	0	41	0	83	0	0	0	0	3,165
09:00	1,359	1,043	41	83	41	193	80	0	196	206	41	56	41	41	44	0	0	41	0	41	3,548
10:00	1,524	1,043	85	124	41	193	77	83	144	165	0	56	0	41	72	0	39	0	0	0	3,685
11:00	1,414	1,043	85	165	41	193	39	0	144	124	41	56	41	41	72	0	41	41	0	41	3,622
12:00	1,414	1,043	85	83	41	193	118	83	144	165	0	56	0	41	85	0	0	0	41	0	3,591
13:00	1,414	1,043	85	83	41	193	39	0	144	124	41	56	41	41	44	41	39	41	0	0	3,509
14:00	1,414	1,043	85	165	41	138	80	41	196	83	0	56	0	41	72	0	41	0	0	0	3,495
15:00	1,414	1,043	44	124	41	193	77	41	196	124	41	56	41	41	72	0	0	41	0	41	3,630
16:00	1,304	1,043	85	124	0	193	118	41	196	83	0	56	0	41	44	0	39	0	41	0	3,407
17:00	1,304	1,043	44	83	41	193	39	41	144	124	41	56	41	41	72	0	0	41	41	0	3,388
18:00	1,359	1,043	41	83	0	138	80	41	196	41	0	56	0	41	44	0	41	41	0	0	3,245
19:00	1,414	1,043	44	83	41	193	118	0	196	124	41	56	41	41	44	0	39	0	0	41	3,559
20:00	1,291	1,135	85	124	41	138	41	41	91	41	0	56	0	41	85	0	41	0	0	0	3,253
21:00	1,291	1,135	85	83	0	193	80	41	91	41	41	56	41	41	72	0	39	0	0	0	3,330
22:00	1,126	1,135	85	83	41	41	77	41	144	41	41	56	0	41	44	0	0	0	0	0	2,997
23:00	1,126	679	0	41	0	151	0	0	53	41	0	56	0	41	0	0	0	0	0	0	2,189
Total	**26,831**	**19,643**	**1,282**	**1,980**	**701**	**3,135**	**1,293**	**784**	**3,238**	**2,021**	**454**	**1,350**	**454**	**990**	**1,023**	**124**	**479**	**330**	**124**	**165**	**66,398**

Table 6-36: 2029 Proposed Operation Combined Capacities of Planned Daily Bus Services Exiting Airport by Location/Region

Hour	Dublin (city centre)	Dublin (Other)	Cork	Galway, W'meath	Waterford, Carlow, Kilkenny	Antrim	Donegal, Cavan, Fermanagh	Limerick, Kildare	Louth	Wexford, Wicklow	Tipperary, Kilkenny	Meath	Clare	Laois, Kildare	Derry	Longford, W'meath	Mayo	Kerry	Offaly, W'meath	Sligo, W'meath	Total
00:00	388	139	44	55	0	41	77	41	77	41	0	56	0	41	0	0	0	0	0	0	1,001
01:00	278	55	41	55	41	96	0	0	53	0	0	56	0	41	44	0	0	0	0	0	761
02:00	223	55	0	0	0	55	0	0	53	0	0	56	0	41	0	0	0	0	0	0	483
03:00	632	55	0	55	41	41	0	0	53	0	0	56	0	41	0	0	0	0	0	0	975
04:00	868	55	0	0	0	0	0	41	53	0	0	56	0	41	0	0	0	0	0	0	1,114
05:00	1,041	667	0	0	41	96	0	0	53	41	41	56	41	41	44	0	0	0	0	0	2,163
06:00	1,374	1,279	85	165	41	96	39	83	144	41	0	56	0	41	0	0	0	41	0	0	3,485
07:00	1,277	1,043	44	55	0	151	39	0	91	41	0	56	41	41	72	0	80	0	0	41	3,072
08:00	1,332	1,043	41	165	41	83	77	41	144	83	41	56	0	41	0	0	0	0	0	0	3,188
09:00	1,387	1,043	0	110	41	151	80	0	196	83	0	56	41	41	85	41	0	41	0	0	3,397
10:00	1,442	1,043	85	110	41	83	39	41	196	83	41	56	0	41	44	0	39	0	0	0	3,383
11:00	1,387	1,043	44	165	41	193	39	41	144	124	0	56	41	41	44	0	41	41	0	41	3,526
12:00	1,387	1,043	85	110	41	138	80	41	144	83	41	56	0	41	72	0	39	0	41	0	3,441
13:00	1,387	1,043	85	165	41	193	39	41	144	124	0	56	41	41	44	0	0	41	0	41	3,526
14:00	1,387	1,043	85	110	41	193	77	41	144	124	41	56	0	41	72	0	41	0	0	0	3,496
15:00	1,387	1,043	85	165	41	193	118	41	144	165	0	56	41	41	85	41	39	41	0	0	3,727
16:00	1,387	1,043	85	110	41	138	39	83	196	206	41	56	0	41	72	41	0	0	41	0	3,620
17:00	1,387	1,043	85	165	41	193	77	41	196	83	41	56	41	41	85	0	41	41	41	41	3,741
18:00	1,387	1,043	41	110	41	138	118	41	196	124	0	56	0	41	72	0	39	0	0	0	3,446
19:00	1,218	984	85	165	0	193	80	41	196	41	41	56	41	41	44	0	0	41	0	0	3,268
20:00	1,264	1,279	44	55	41	83	80	41	144	83	0	56	0	41	72	0	41	0	0	41	3,364
21:00	1,154	1,279	85	165	0	151	77	0	91	124	41	56	41	41	44	0	0	41	0	0	3,392
22:00	1,154	1,279	44	110	0	41	0	41	144	0	0	56	0	41	0	0	0	0	0	0	2,911
23:00	805	751	85	110	41	138	39	41	91	124	41	56	41	41	72	0	80	0	0	41	2,597
Total	**26,933**	**20,388**	**1,282**	**2,475**	**701**	**2,874**	**1,210**	**784**	**3,080**	**1,815**	**413**	**1,350**	**413**	**990**	**1,064**	**124**	**479**	**330**	**124**	**248**	**67,074**

Table 6-37: 2029 Proposed Operation Combined Bus Passenger Demand for Services Entering Airport by Location/Region

Hour	Dublin (city centre)	Dublin (Other)	Cork	Galway, W'meath	Waterford, Carlow, Kilkenny	Antrim	Donegal, Cavan, Fermanagh	Limerick, Kildare	Louth	Wexford, Wicklow	Tipperary, Kilkenny	Meath	Clare	Laois, Kildare	Derry	Longford, W'meath	Mayo	Kerry	Offaly, W'meath	Sligo, W'meath	Total
00:00	5	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	10
01:00	4	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	6
02:00	24	11	0	0	0	0	0	0	4	1	0	3	0	0	0	0	0	0	0	0	44
03:00	121	52	14	7	10	5	10	8	14	6	3	11	2	6	2	2	2	2	1	1	280
04:00	504	215	79	42	60	30	60	41	45	33	20	32	10	31	10	12	10	10	7	7	1,260
05:00	717	305	121	64	91	45	91	62	60	49	30	41	15	47	15	19	15	15	11	11	1,828
06:00	864	372	114	61	86	43	86	61	90	51	29	68	14	47	14	18	14	14	11	11	2,066
07:00	686	295	94	50	71	35	71	50	69	41	24	52	12	38	12	15	12	12	9	9	1,655
08:00	768	333	84	44	63	31	63	46	89	40	21	70	10	36	10	13	10	10	8	8	1,759
09:00	670	288	92	49	69	34	69	49	68	40	23	51	11	37	11	14	11	11	9	9	1,615
10:00	536	226	102	54	77	38	77	52	39	40	26	24	13	39	13	16	13	13	10	10	1,415
11:00	576	243	110	59	83	41	83	56	42	43	28	26	14	42	14	17	14	14	10	10	1,525
12:00	645	272	120	64	90	45	90	61	48	47	30	31	15	46	15	19	15	15	11	11	1,691
13:00	674	285	126	67	94	47	94	64	50	49	31	32	16	48	16	20	16	16	12	12	1,769
14:00	518	218	101	54	76	38	76	51	36	39	25	22	13	39	13	16	13	13	9	9	1,379
15:00	472	198	96	51	72	36	72	49	31	37	24	18	12	37	12	15	12	12	9	9	1,274
16:00	489	205	101	54	76	38	76	51	31	39	25	18	13	38	13	16	13	13	9	9	1,325
17:00	553	234	103	55	78	39	78	53	41	41	26	26	13	40	13	16	13	13	10	10	1,453
18:00	381	161	70	37	53	26	53	36	29	28	18	19	9	27	9	11	9	9	7	7	997
19:00	291	124	44	23	33	16	33	23	27	18	11	20	5	17	5	7	5	5	4	4	718
20:00	130	55	24	13	18	9	18	12	10	9	6	6	3	9	3	4	3	3	2	2	339
21:00	76	32	15	8	11	5	11	7	5	6	4	3	2	6	2	2	2	2	1	1	202
22:00	28	12	5	2	3	2	3	2	2	2	1	2	1	2	1	1	1	1	0	0	71
23:00	5	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	10
Total	**9,737**	**4,142**	**1,616**	**858**	**1,212**	**606**	**1,212**	**835**	**835**	**660**	**404**	**579**	**202**	**633**	**202**	**252**	**202**	**202**	**151**	**151**	**24,691**

Table 6-38: 2029 Proposed Operation Combined Bus Passenger Demand for Services Exiting Airport by Location/Region

Hour	Dublin (city centre)	Dublin (Other)	Cork	Galway, W'meath	Waterford, Carlow, Kilkenny	Antrim	Donegal, Cavan, Fermanagh	Limerick, Kildare	Louth	Wexford, Wicklow	Tipperary, Kilkenny	Meath	Clare	Laois, Kildare	Derry	Longford, W'meath	Mayo	Kerry	Offaly, W'meath	Sligo, W'meath	Total
00:00	149	64	23	12	17	9	17	12	14	10	6	10	3	9	3	4	3	3	2	2	371
01:00	36	16	1	1	1	0	1	1	6	1	0	5	0	1	0	0	0	0	0	0	70
02:00	18	8	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	32
03:00	30	13	5	3	4	2	4	3	2	2	1	2	1	2	1	1	1	1	0	0	77
04:00	162	68	34	18	25	13	25	17	10	13	8	6	4	13	4	5	4	4	3	3	442
05:00	56	24	10	5	7	4	7	5	5	4	2	3	1	4	1	1	1	1	1	1	143
06:00	300	129	43	23	32	16	32	23	29	18	11	22	5	17	5	7	5	5	4	4	731
07:00	520	220	96	51	72	36	72	49	40	38	24	26	12	37	12	15	12	12	9	9	1,359
08:00	280	117	59	31	44	22	44	30	17	22	15	10	7	22	7	9	7	7	6	6	764
09:00	503	210	107	57	80	40	80	54	31	41	27	17	13	40	13	17	13	13	10	10	1,377
10:00	477	200	100	53	75	37	75	50	30	38	25	17	12	38	12	16	12	12	9	9	1,299
11:00	553	232	112	60	84	42	84	57	37	43	28	21	14	43	14	18	14	14	11	11	1,489
12:00	640	271	117	62	88	44	88	60	49	46	29	32	15	45	15	18	15	15	11	11	1,669
13:00	589	251	97	52	73	37	73	50	51	40	24	35	12	38	12	15	12	12	9	9	1,491
14:00	522	224	73	39	54	27	54	38	52	31	18	39	9	29	9	11	9	9	7	7	1,263
15:00	858	373	89	47	67	34	67	50	102	43	22	81	11	38	11	14	11	11	8	8	1,948
16:00	490	210	72	38	54	27	54	38	47	31	18	34	9	29	9	11	9	9	7	7	1,202
17:00	1,043	452	121	64	91	45	91	66	117	56	30	91	15	51	15	19	15	15	11	11	2,421
18:00	690	299	78	41	58	29	58	43	79	37	19	62	10	33	10	12	10	10	7	7	1,592
19:00	422	180	66	35	50	25	50	34	38	28	17	27	8	26	8	10	8	8	6	6	1,054
20:00	217	93	35	18	26	13	26	18	19	14	9	14	4	14	4	5	4	4	3	3	545
21:00	448	189	84	45	63	31	63	43	33	33	21	21	10	32	10	13	10	10	8	8	1,177
22:00	448	188	89	47	67	33	67	45	31	34	22	18	11	34	11	14	11	11	8	8	1,198
23:00	330	139	67	36	50	25	50	34	22	26	17	13	8	25	8	10	8	8	6	6	890
Total	**9,782**	**4,168**	**1,577**	**838**	**1,183**	**591**	**1,183**	**818**	**863**	**650**	**394**	**608**	**197**	**621**	**197**	**246**	**197**	**197**	**148**	**148**	**24,605**

Table 6-39: 2029 Proposed Operation Combined Volume to Capacity Assessment for Services Entering Airport by Location/Region

Hour	Dublin (city centre)	Dublin (Other)	Cork	Galway, W'meath	Waterford, Carlow, Kilkenny	Antrim	Donegal, Cavan, Fermanagh	Limerick, Kildare	Louth	Wexford, Wicklow	Tipperary, Kilkenny	Meath	Clare	Laois, Kildare	Derry	Longford, W'meath	Mayo	Kerry	Offaly, W'meath	Sligo, W'meath	Total
00:00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
01:00	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
02:00	0.11	0.19	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.08
03:00	0.54	0.95	0.34	0.18	0.00	0.04	0.27	0.00	0.26	0.00	0.00	0.19	0.02	0.14	0.04	0.00	0.00	0.00	0.00	0.00	0.34
04:00	0.57	3.91	0.93	0.34	1.44	0.00	1.55	0.50	0.50	0.40	0.48	0.57	0.00	0.76	0.36	0.00	0.24	0.24	0.00	0.00	0.73
05:00	0.77	0.89	2.75	0.78	2.20	0.30	2.36	0.00	0.66	0.60	0.73	0.74	0.37	1.15	0.34	0.00	0.39	0.00	0.00	0.00	0.88
06:00	0.81	0.33	2.77	1.47	2.08	1.04	2.23	1.48	0.46	0.61	0.00	1.20	0.00	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.73
07:00	0.64	0.28	0.00	1.21	1.71	0.23	0.92	1.21	0.35	0.99	0.00	0.92	0.29	0.93	0.27	0.00	0.29	0.29	0.00	0.00	0.56
08:00	0.61	0.32	1.90	0.54	1.52	0.38	0.00	0.56	0.46	0.32	0.51	1.25	0.00	0.86	0.00	0.16	0.00	0.00	0.00	0.00	0.56
09:00	0.49	0.28	2.22	0.59	1.67	0.18	0.86	0.00	0.35	0.19	0.56	0.90	0.28	0.90	0.26	0.00	0.00	0.28	0.00	0.21	0.46
10:00	0.35	0.22	1.20	0.44	1.86	0.20	0.99	0.63	0.27	0.24	0.00	0.43	0.00	0.95	0.18	0.00	0.33	0.00	0.00	0.00	0.38
11:00	0.41	0.23	1.29	0.36	2.01	0.22	2.15	0.00	0.29	0.35	0.67	0.46	0.33	1.02	0.19	0.00	0.33	0.33	0.00	0.25	0.42
12:00	0.46	0.26	1.41	0.77	2.18	0.23	0.76	0.74	0.34	0.29	0.00	0.55	0.00	1.12	0.18	0.00	0.00	0.00	0.27	0.00	0.47
13:00	0.48	0.27	1.47	0.81	2.28	0.24	2.45	0.00	0.35	0.40	0.76	0.58	0.38	1.17	0.36	0.48	0.41	0.38	0.00	0.00	0.50
14:00	0.37	0.21	1.19	0.33	1.84	0.28	0.95	1.24	0.18	0.48	0.00	0.39	0.00	0.94	0.18	0.00	0.31	0.00	0.00	0.00	0.39
15:00	0.33	0.19	2.19	0.41	1.75	0.19	0.94	1.18	0.16	0.30	0.58	0.32	0.29	0.89	0.17	0.00	0.00	0.29	0.00	0.22	0.35
16:00	0.37	0.20	1.19	0.43	0.00	0.20	0.64	1.23	0.16	0.47	0.00	0.32	0.00	0.93	0.29	0.00	0.33	0.00	0.23	0.00	0.39
17:00	0.42	0.22	2.35	0.67	1.88	0.20	2.01	1.28	0.29	0.33	0.63	0.47	0.31	0.96	0.18	0.00	0.00	0.31	0.24	0.00	0.43
18:00	0.28	0.15	1.70	0.45	0.00	0.19	0.66	0.87	0.15	0.67	0.00	0.33	0.00	0.66	0.20	0.00	0.21	0.21	0.00	0.00	0.31
19:00	0.21	0.12	0.99	0.28	0.79	0.09	0.28	0.00	0.14	0.15	0.26	0.35	0.13	0.42	0.12	0.00	0.14	0.00	0.00	0.10	0.20
20:00	0.10	0.05	0.28	0.10	0.43	0.07	0.43	0.30	0.11	0.23	0.00	0.11	0.00	0.22	0.04	0.00	0.07	0.00	0.00	0.00	0.10
21:00	0.06	0.03	0.17	0.09	0.00	0.03	0.14	0.18	0.06	0.14	0.09	0.06	0.04	0.14	0.03	0.00	0.05	0.00	0.00	0.00	0.06
22:00	0.02	0.01	0.05	0.03	0.08	0.04	0.04	0.06	0.02	0.05	0.03	0.03	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.02
23:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 6-40: 2029 Proposed Operation Combined Volume to Capacity Assessment for Services Exiting Airport by Location/Region

Hour	Dublin (city centre)	Dublin (Other)	Cork	Galway, W'meath	Waterford, Carlow, Kilkenny	Antrim	Donegal, Cavan, Fermanagh	Limerick, Kildare	Louth	Wexford, Wicklow	Tipperary, Kilkenny	Meath	Clare	Laois, Kildare	Derry	Longford, W'meath	Mayo	Kerry	Offaly, W'meath	Sligo, W'meath	Total
00:00	0.38	0.46	0.52	0.22	0.00	0.21	0.22	0.29	0.18	0.23	0.00	0.18	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.37
01:00	0.13	0.30	0.02	0.01	0.02	0.00	0.00	0.00	0.11	0.00	0.00	0.09	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.09
02:00	0.08	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
03:00	0.05	0.23	0.00	0.05	0.09	0.05	0.00	0.00	0.05	0.00	0.00	0.03	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.08
04:00	0.19	1.24	0.00	0.00	0.00	0.00	0.00	0.41	0.19	0.00	0.00	0.10	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.40
05:00	0.05	0.04	0.00	0.00	0.17	0.04	0.00	0.00	0.09	0.09	0.06	0.06	0.03	0.09	0.03	0.00	0.00	0.00	0.00	0.00	0.07
06:00	0.22	0.10	0.50	0.14	0.78	0.17	0.84	0.27	0.20	0.45	0.00	0.38	0.00	0.42	0.00	0.00	0.00	0.13	0.00	0.00	0.21
07:00	0.41	0.21	2.17	0.92	0.00	0.24	1.86	0.00	0.44	0.92	0.00	0.46	0.29	0.89	0.17	0.00	0.15	0.00	0.00	0.22	0.44
08:00	0.21	0.11	1.43	0.19	1.07	0.27	0.57	0.72	0.12	0.27	0.36	0.17	0.00	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.24
09:00	0.36	0.20	0.00	0.52	1.95	0.27	1.01	0.00	0.16	0.49	0.00	0.30	0.32	0.98	0.16	0.41	0.00	0.32	0.00	0.00	0.41
10:00	0.33	0.19	1.17	0.48	1.82	0.45	1.95	1.22	0.15	0.46	0.61	0.30	0.00	0.92	0.28	0.00	0.32	0.00	0.00	0.00	0.38
11:00	0.40	0.22	2.55	0.36	2.04	0.22	2.18	1.37	0.25	0.35	0.00	0.38	0.34	1.03	0.32	0.00	0.34	0.34	0.00	0.25	0.42
12:00	0.46	0.26	1.37	0.57	2.13	0.32	1.10	1.45	0.34	0.56	0.71	0.57	0.00	1.09	0.20	0.00	0.38	0.00	0.27	0.00	0.49
13:00	0.42	0.24	1.14	0.31	1.77	0.19	1.90	1.22	0.35	0.32	0.00	0.63	0.30	0.92	0.28	0.00	0.00	0.30	0.00	0.22	0.42
14:00	0.38	0.22	0.85	0.35	1.32	0.14	0.71	0.93	0.36	0.25	0.44	0.69	0.00	0.71	0.13	0.00	0.22	0.00	0.00	0.00	0.36
15:00	0.62	0.36	1.05	0.29	1.62	0.17	0.57	1.20	0.71	0.26	0.00	1.44	0.27	0.93	0.13	0.34	0.29	0.27	0.00	0.00	0.52
16:00	0.35	0.20	0.85	0.35	1.31	0.20	1.40	0.46	0.24	0.15	0.44	0.61	0.00	0.70	0.13	0.27	0.00	0.00	0.16	0.00	0.33
17:00	0.75	0.43	1.42	0.39	2.20	0.24	1.18	1.60	0.60	0.68	0.73	1.63	0.37	1.23	0.18	0.00	0.37	0.37	0.27	0.27	0.65
18:00	0.50	0.29	1.89	0.38	1.41	0.21	0.49	1.03	0.40	0.30	0.00	1.10	0.00	0.80	0.14	0.00	0.25	0.00	0.00	0.00	0.46
19:00	0.35	0.18	0.78	0.21	0.00	0.13	0.62	0.84	0.19	0.67	0.40	0.48	0.20	0.64	0.19	0.00	0.00	0.20	0.00	0.00	0.32
20:00	0.17	0.07	0.79	0.34	0.63	0.16	0.33	0.44	0.13	0.17	0.00	0.24	0.00	0.33	0.06	0.00	0.11	0.00	0.00	0.08	0.16
21:00	0.39	0.15	0.98	0.27	0.00	0.21	0.82	0.00	0.37	0.27	0.51	0.38	0.25	0.78	0.24	0.00	0.00	0.25	0.00	0.00	0.35
22:00	0.39	0.15	2.02	0.43	0.00	0.81	0.00	1.09	0.21	0.00	0.00	0.33	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.41
23:00	0.41	0.18	0.79	0.32	1.22	0.18	1.30	0.82	0.24	0.21	0.41	0.23	0.20	0.62	0.12	0.00	0.10	0.00	0.00	0.15	0.34

Airport Demand - Traffic

6.7.11 Table 6-41 summarises the outputs from the airport demand model and shows the overall daily traffic generated by the airport, as well as the AM and PM peak values, for the 2029 Permitted Operation and 2029 Proposed Operation. The table indicates that the scale of increase in airport-generated traffic in the AM peak (20%) is higher than the 24-hour total (15%), while the PM peak increase is lower (6%).

Table 6-41: Principal Assessment Airport-Generated Traffic (Vehicles) Comparison

	2029 Permitted Operation	2029 Proposed Operation	Difference	
			Actual	%
24-Hour Total	66,216	75,852	9,637	15%
AM Peak	3,772	4,518	746	20%
PM Peak	5,130	5,436	306	6%

External Roads

6.7.12 Table 6-42 outlines the peak hour traffic flows on the road network within the assessment area and compares the 2029 Permitted Operation forecast flows with the equivalent flows for the 2029 Proposed Operation. Plate 6-16 illustrates the locations referenced. Directional flows with a percentage change up to and including 5% are highlighted green, those with a change between 5% and 10% are highlighted yellow, while those 10% and higher are highlighted orange. The results of the comparison are discussed below.

6.7.13 In the AM peak, most directional flows show a slight increase in traffic flows. The majority of flows with an increase greater than ten percent are due to relatively low flows for the 2029 Permitted Operation and the actual increase is less than 100 vehicles. This includes:

- Northbound on R132, south of airport (directional flow F);
- Old Airport Road, both directions (G and H);
- R108 southbound (I); and
- R108 westbound (K).

6.7.14 Although there is a significant increase on the M1 Link (directional flows S and T), the 2029 Proposed Operation flows are still within the typical capacities of the road type (3 lane dual carriageway)[12].

6.7.15 The increase in overall airport demand in the PM peak is reflected in the general increase in directional flows, which are all less than 10%.

[12] https://www.tii.ie/media/5ibeml3l/a-study-of-lane-capacity-in-the-greater-dublin-area.pdf

Plate 6-16: Directional Flows on Transport Network

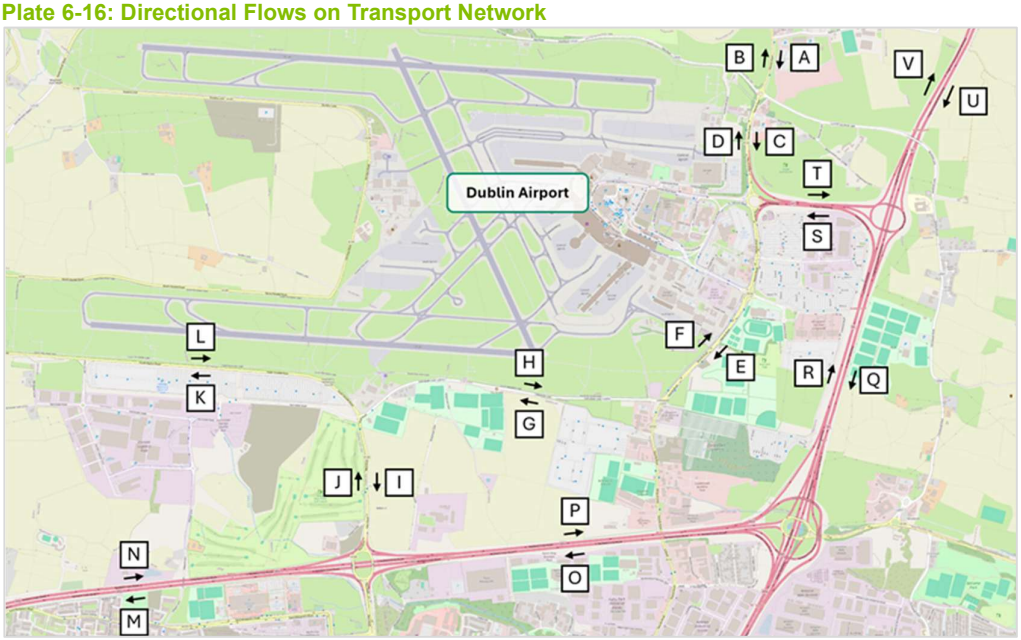


Table 6-42: Principal Assessment Traffic Flows (Vehicles) Comparison

Directional Flow	AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
	2029 Permitted Operation	2029 Proposed Operation	Difference		2029 Permitted Operation	2029 Proposed Operation	Difference	
			Actual	%			Actual	%
A	1,179	1,208	29	2.5%	1,023	1,030	8	0.8%
B	626	653	27	4.3%	941	960	20	2.1%
C	1,089	1,135	46	4.3%	922	935	13	1.4%
D	693	742	50	7.2%	1,256	1,297	41	3.3%
E	1,392	1,514	122	8.8%	1,036	1,079	43	4.1%
F	667	750	83	12.5%	1,131	1,175	44	3.9%
G	475	576	101	21.3%	684	720	35	5.1%
H	640	710	70	10.9%	681	718	36	5.3%
I	455	537	82	17.9%	976	1,001	25	2.6%
J	876	930	54	6.2%	687	713	26	3.9%
K	248	276	28	11.4%	306	315	10	3.2%
L	407	427	19	4.7%	263	273	10	3.8%
M	3,952	4,094	142	3.6%	5,448	5,517	69	1.3%
N	6,030	6,190	160	2.7%	5,864	5,918	54	0.9%
O	3,957	4,026	68	1.7%	4,394	4,438	44	1.0%
P	4,949	5,060	110	2.2%	5,639	5,666	28	0.5%
Q	4,607	4,711	104	2.3%	4,403	4,469	67	1.5%
R	4,693	4,861	168	3.6%	6,055	6,097	42	0.7%
S	2,462	2,709	248	10.1%	1,720	1,782	62	3.6%
T	1,190	1,344	154	12.9%	2,238	2,336	98	4.4%
U	4,499	4,579	80	1.8%	3,380	3,400	20	0.6%
V	3,510	3,560	50	1.4%	5,637	5,668	31	0.6%

Junction Turning Movements

6.7.16 This section outlines the peak hour turning movements at the three airport entrance junctions and compares the 2029 Proposed Operation forecast flows with the equivalent 2029 Permitted Operation flows. The results of the comparison are discussed below. The same highlighting as above is used to illustrate the percentage changes, i.e. green for up to 5%, yellow for 5% to 10% and orange for 10% and above.

Airport Roundabout

6.7.17 Table 6-43 indicates that the overall volume of traffic through the Airport Roundabout increases by approximately 570 vehicles (12%) in the AM peak and increases by approximately 220 vehicles (4%) in the PM peak, reflecting the increase in overall airport demand in the AM peak.

6.7.18 Most increases greater than 10% in the AM peak are due to relatively low turning movements for the 2029 Permitted Operation. This includes:

- R132 North to Corballis Road North (A to D) and R132 South to Corballis Road North (C to D)
- Corballis Road North to R132 North (D to A), and Corballis Road North to R132 South (D to C)

6.7.19 However, east-west movements between the M1 Link and the airport (B to D and D to B) exhibit significant increases.

6.7.20 All movements in the PM peak show percentage changes less than 10%.

R132/Corballis South Junction

6.7.21 Table 6-44 indicates that the overall volume of traffic through the junction increases by approximately 220 vehicles (8%) in the AM peak and by approximately 100 vehicles (3%) in the PM peak.

6.7.22 The movements through the junction outlined below experience increases greater than 10% in the AM peak. However, all of these increases are due to relatively low turning movements for the 2029 Permitted Operation:

- R132 North to Eastlands and Corballis Road South (A to B and A to D, respectively)
- All movements from Eastlands (B to A, C and D)
- R132 South to Eastlands and Corballis Road South (C to B and C to D, respectively)
- All movements from Corballis Road South (D to A, B and C)

6.7.23 All increased turning movements in the PM peak are less than 10%.

Naul Road/Castlemoate Road Junction

6.7.24 Table 6-45 indicates that the overall volume of traffic through the junction increases by approximately 85 vehicles (5%) in the AM peak and by approximately 30 vehicles (2%) in the PM peak. All individual movements with increases greater than 10% are in the AM peak and are due to the relatively low flows at this junction:

- Naul Road East to Castlemoate Road (A to B)
- Castlemoate Road to Naul Road East and West (B to A and C, respectively)
- Naul Road West to Castlemoate Road (C to B)

Table 6-43: Principal Assessment Airport Roundabout Turning Movements Comparison (Vehicles)

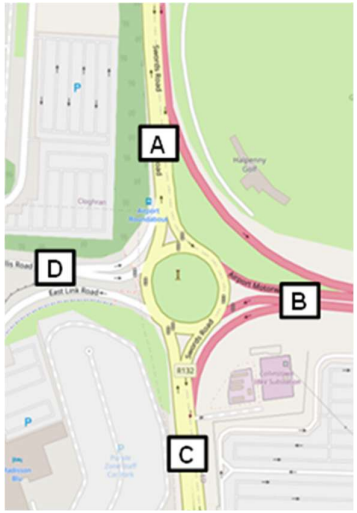
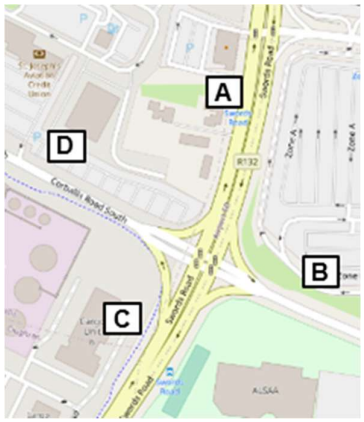
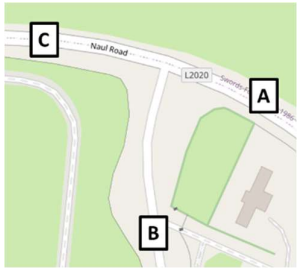
Movement		AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
		2029 Permitted Operation	2029 Proposed Operation	Difference		2029 Permitted Operation	2029 Proposed Operation	Difference	
				Actual	%			Actual	%
	A to B	345	345	0	0.0%	405	405	0	0.0%
	A to C	537	541	4	0.8%	364	365	0	0.1%
	A to D	214	251	37	17.4%	194	206	12	6.0%
	B to A	334	334	0	0.0%	436	436	0	0.0%
	B to C	780	798	18	2.3%	309	311	2	0.5%
	B to D	1,314	1,542	228	17.4%	1,001	1,062	61	6.0%
	C to A	207	212	6	2.8%	477	477	-1	-0.2%
	C to B	129	140	10	7.8%	417	416	-1	-0.3%
	C to D	34	40	6	17.4%	29	30	2	6.0%
	D to A	154	193	39	25.5%	432	462	30	7.0%
	D to B	549	690	140	25.5%	1,403	1,502	99	7.0%
	D to C	308	387	79	25.5%	255	272	18	7.0%
	Total	**4,906**	**5,473**	**567**	**11.6%**	**5,722**	**5,944**	**221**	**3.9%**

Table 6-44: Principal Assessment R132/Corballis Road South Junction Turning Movements Comparison (Vehicles)



Movement	AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
	2029 Permitted Operation	2029 Proposed Operation	Difference		2029 Permitted Operation	2029 Proposed Operation	Difference	
			Actual	%			Actual	%
A to B	163	185	22	13.5%	242	244	2	0.8%
A to C	1,208	1,208	0	0.0%	562	562	0	0.0%
A to D	136	160	24	17.4%	64	68	4	6.0%
B to A	67	83	16	23.5%	83	81	-2	-2.4%
B to C	33	41	8	23.5%	134	131	-3	-2.4%
B to D	87	102	15	17.4%	150	159	9	6.0%
C to A	281	281	0	0.0%	502	502	0	0.0%
C to B	33	38	4	13.5%	94	95	1	0.8%
C to D	416	488	72	17.4%	688	730	42	6.0%
D to A	31	39	8	25.5%	186	199	13	7.0%
D to B	63	79	16	25.5%	98	104	7	7.0%
D to C	136	170	35	25.5%	383	410	27	7.0%
Total	**2,655**	**2,875**	**220**	**8.3%**	**3,186**	**3,285**	**99**	**3.1%**

Table 6-45: Principal Assessment Naul Road/Castlemoate Road Junction Turning Movements Comparison (Vehicles)

Movement		AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
		2029 Permitted Operation	2029 Proposed Operation	Difference		2029 Permitted Operation	2029 Proposed Operation	Difference	
				Actual	%			Actual	%
	A to B	183	215	32	17.4%	32	34	2	6.0%
	A to C	539	539	0	0.0%	981	981	0	0.0%
	B to A	31	39	8	25.5%	107	115	8	7.0%
	B to C	68	86	17	25.5%	283	303	20	7.0%
	C to A	630	630	0	0.0%	487	487	0	0.0%
	C to B	171	200	30	17.4%	57	61	3	6.0%
	Total	**1,622**	**1,709**	**87**	**5.4%**	**1,948**	**1,981**	**33**	**1.7%**

Junction Performance

6.7.25 This section compares the results of the LinSig analysis of the Airport Roundabout for the 2029 Proposed Operation with the 2029 Permitted Operation. Significant increases are highlighted in orange in the results tables.

Airport Roundabout

6.7.26 Table 6-46 and Table 6-47 indicate that that significant capacity and queuing issues are forecast at the Airport Roundabout for the 2029 Permitted Operation. These issues are exacerbated with the 2029 Proposed Operation as a result of additional airport-related demand, with significant increases in Degree of Saturation and queuing on the M1 Link and Corballis Road North, during both peaks.

Table 6-46: Principal Assessment Airport Roundabout LinSig Results Comparison – AM Peak (08:00 – 09:00)

	2029 Permitted Operation		2029 Proposed Operation		Proposed vs Permitted	
PRC	**-137.2%**		**-175.7%**		**-38.5%**	
Cycle time	**47**		**46**		n/a	
Arm	**DoS%**	**MMQ**	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	75.6%	8.4	85.7%	10.7	10.1%	2.3
Eastbound Circulatory	61.9%	5.5	63.5%	5.7	1.6%	0.2
M1 Link	213.2%	212.0	248.0%	280.7	34.8%	68.7
Southbound Circulatory	36.3%	3.9	39.4%	4.8	3.1%	0.9
R132 South	62.2%	3.2	67.4%	3.6	5.2%	0.4
Westbound Circulatory	32.3%	2.2	34.9%	2.3	2.6%	0.1
Corballis Road North	171.2%	107.3	211.2%	167	40.0%	59.7
Northbound Circulatory	49.7%	3.2	54.0%	3.3	4.3%	0.1

Table 6-47:Principal Assessment Airport Roundabout LinSig Results Comparison – PM Peak (17:00 – 18:00)

	2029 Permitted Operation		2029 Proposed Operation		Proposed vs Permitted	
PRC	**-236.9%**		**-261.4%**		**-24.5%**	
Cycle time	**45**		**45**		n/a	
Arm	**DoS%**	**MMQ**	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	52.0%	4.4	52.6%	4.4	0.6%	0.0
Eastbound Circulatory	73.8%	7.2	73.8%	7.2	0.0%	0.0
M1 Link	170.3%	139.1	182.1%	161.5	11.8%	22.4
Southbound Circulatory	26.9%	2.5	26.1%	2.3	-0.8%	-0.2
R132 South	142.6%	79.0	142.0%	78	-0.6%	-1.0
Westbound Circulatory	34.6%	2.2	35.2%	2.3	0.6%	0.1
Corballis Road North	303.2%	359.9	325.3%	392	22.1%	32.1
Northbound Circulatory	68.3%	3.8	68.3%	3.8	0.0%	0.0

6.7.27 It should be noted that the future year analysis assumes the approved BusConnects Swords to City Centre Core Bus Corridor (CBC) layout at the Roundabout is in place. The CBC design philosophy prioritises efficient north-south movement for buses at this location, which explains why conditions deteriorate for non-public transport movements, and for east-west movements in particular. The LinSig analysis therefore reflects the potential detrimental impact of the CBC on general traffic. It cannot capture other potential impacts of the BusConnects programme, which may reduce traffic flows at the Roundabout and therefore improve its operational performance. These effects include a modal shift from private car to bus arising from the improved services and journey times associated with the CBC, together with the reassignment of general traffic away from the CBC to alternative routes with less public transport priority. The analysis therefore provides a reasonable worst-case assessment of future

conditions at the Airport Roundabout for both the 2029 Permitted and Proposed Operations, as it assumes the combination of changes that would place the greatest credible pressure on the roundabout.

R132/Corballis Road South Junction

6.7.28 Table 6-48 indicates that the junction is forecast to operate above capacity in the AM peak for both the 2029 Permitted Operation and the 2029 Proposed Operation. Although there is a reduction in PRC and increase in queuing on the R132 North Arm with the 2029 Proposed Operation, the resulting MMQ does not block back as far as the Airport Roundabout upstream.

6.7.29 Table 6-49 indicates that, in the PM peak, there is limited change in the forecast operation of the junction between the 2029 Permitted Operation and the 2029 Proposed Operation.

Table 6-48: Principal Assessment R132/Corballis Road South Junction LinSig Results Comparison – AM Peak (08:00 – 09:00)

	2029 Permitted Operation		2029 Proposed Operation		Proposed vs Permitted	
PRC	**-14.0%**		**-22.8%**		**-8.8%**	
Cycle time	**120**		**120**		n/a	
Arm	**DoS%**	**MMQ**	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	102.6%	43.4	108.9%	65.2	6.3%	21.8
Eastlands	73.9%	4.4	97.0%	9.3	23.1%	4.9
R132 South	38.2%	5	44.9%	6.5	6.7%	1.5
Corballis Road South	101.1%	14.4	105.0%	19.6	3.9%	5.2

Table 6-49: Principal Assessment R132/Corballis Road South Junction LinSig Results Comparison – PM Peak (17:00 – 18:00)

	2029 Permitted Operation		2029 Proposed Operation		Proposed vs Permitted	
PRC	**-2.8%**		**-4.0%**		**-1.2%**	
Cycle time	**120**		**120**		n/a	
Arm	**DoS%**	**MMQ**	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	86.4%	12.1	91.4%	13.9	5.0%	1.8
Eastlands	92.5%	9.2	91.5%	9.4	-1.0%	0.2
R132 South	90.4%	20.2	93.6%	21.8	3.2%	1.6
Corballis Road South	89.7%	17.8	93.5%	20.7	3.8%	2.9

2040 Assessment

6.7.30 The Principal Assessment considers the effects of the Proposed Order by comparing the Proposed Operation (2029, 40 mppa) with the Permitted Operation (2029, 32 mppa). As such, for the 2040 assessment, the impact of the Proposed Order is assumed to be the same as for 2029. Any changes to the surface access characteristics of airport staff / passengers or operation of the adjacent transport network Is therefore considered to be related to non-airport developments and growth in background traffic. As such, a qualitative assessment has been undertaken for 2040, referencing publicly-available information, as well as other sections of this chapter.

6.7.31 As noted in Section 6.6.133, the most significant non-airport development that will impact on surface access and the adjacent transport network between 2029 and 2040 is MetroLink. Two Scenarios are considered in the 2040 assessment, Without MetroLink and With MetroLink.

Without MetroLink

6.7.32 In a Without MetroLink scenario, the main impact on the adjacent transport network will come from transport demand / background traffic growth.

6.7.33 The principal assessment indicated that a number of airport bus services are predicted to operate at or over capacity in the Proposed Operation. An increase in general transport demand would potentially lead to an increase in non-airport passengers on these services, which may exacerbate the identified capacity issues and / or lead to capacity issues on other airport services.

6.7.34 The principal assessment indicated potential capacity issues at the Airport Roundabout and R132 / Corballis South Junction in the Proposed Operation. Non-Airport Background traffic growth would potentially exacerbate these capacity issues by increasing north/south traffic flows on the R132, and movements between the R132 and M1 Link.

With MetroLink

6.7.35 As noted above, MetroLink will provide Dublin Airport with high-frequency rail connectivity to the City Centre and beyond.

6.7.36 The principal assessment indicated that a number of airport bus services are predicted to operate at or over capacity in the Proposed Operation. The delivery of MetroLink will reduce the bus mode share at the airport, for Dublin-based trips in particular, as it serves similar areas as several existing bus routes. For regional trips to/from areas outside of Dublin, bus is likely to remain the primary public transport mode for airport trips, although interchange opportunities with the wider public transport network may see some regional demand switching to MetroLink as well. This will potentially reduce some of the capacity issues identified in the principal assessment.

6.7.37 The principal assessment indicated capacity issues at the Airport Roundabout and R132 / Corballis South Junction in the Proposed Operation. The delivery of MetroLink will result in a modal shift away from private car and a reduction in traffic flows. This is illustrated in Chapter 6 of the MetroLink EIAR[13] (Table 9.119) which outlined reductions in Annual Average Daily Traffic (AADT) on key roads adjacent to the airport, with that project in place. In particular, reductions of up to 5,000 AADT on the M1, up to 2,500 on the M1 Link up to 5,000 on the R132 Swords Bypass in 2035. This will likely reduce the junction capacity issues identified in the principal assessment.

Determination of Effects

Active Travel

6.7.38 The determination effects on active travel are based on a qualitative assessment of the impact of the Proposed Order on the quality of pedestrian and cycling infrastructure within the assessment area. The Proposed Order does not include any additional active travel infrastructure beyond what is already planned or committed.

6.7.39 The increase in bus passengers using the existing GTC, relative to the 2029 Permitted Operation, will lead to an increase in the number of pedestrians crossing through it. This will lead to additional demand on pedestrian crossings within the GTC.

6.7.40 It is considered that the Proposed Order will have a slight negative effect on users of active modes. In the context of this assessment, as outlined in Section 6.4, this is not significant.

Public Transport

6.7.41 The determination of effects on public transport was based on an assessment of the impact of the Proposed Order on the capacity of airport bus services. Analysis indicated that an increase in bus passengers linked to the 2029 Proposed Operation will result in demand in excess of capacity on multiple bus services, consistently throughout the day.

6.7.42 It is therefore considered that the Proposed Order will have a significant negative effect on public transport users. In the context of this assessment, as outlined in Section 6.4, this is significant and would therefore require mitigation.

General Traffic

6.7.43 The 2029 Proposed Operation is forecast to generate an increase in general traffic, relative to the 2029 Permitted Operation. Although the total daily increase is relatively minor, the difference in flight schedules results in a different profile of demand throughout the day, and, as a result, a higher increase in the AM Peak and a significantly higher increase in the PM peak.

[13] MetroLink EIAR, Available at: https://downloads.metrolink.ie/documentsro/Chapter%2009%20Traffic%20and%20Transport.pdf

6.7.44 The most significant increase in the 2029 Proposed Operation is on the Airport Roundabout during the PM peak, in particular the movements between the M1 Link and the airport. However, the PM peak represents a significant spike in the profile of airport demand, relative to the rest of the day, and demand in the hours either side of it are significantly lower.

6.7.45 In determining the effects of the 2029 Proposed Operation, a reasonable worst-case assessment has been undertaken. The assessment assumes that car mode shares remain at the levels observed for the Current Operation, notwithstanding recent trends showing a reduction in car mode share and an increase in public transport use. This is a conservative assumption because it does not take credit for any further mode shift away from private car travel and therefore results in a higher level of forecast road traffic than would arise if recent trends were assumed to continue.

6.7.46 LinSig analysis indicates that the airport access junctions are forecast to operate above capacity during both peak periods under the 2029 Permitted Operation. The 2029 Proposed Operation is forecast to result in further increases in demand at these junctions, with associated increases in queuing. Based on the methodology for determining effects outlined in Section 6.4, this would be considered a Moderate Effect, since it alters the character of the environment in a manner that is consistent with existing and emerging baseline trends. In the context of this assessment, as outlined in Section 6.4, Moderate Effects are considered significant and would therefore require mitigation.

6.7.47 The background transport network is at its busiest during peak periods. Outside of these, the network will have sufficient capacity to facilitate additional airport-related demand. The duration of the effects of the Proposed Order is therefore limited to these peak periods; 07:00-10:00 in the AM peak, and 16:00-19:00 in the PM peak.

6.8 Mitigation and Monitoring

6.8.1 The Principal Assessment identified that, in the absence of mitigation, the 2029 Proposed Operation would result in significant negative effects on public transport services and the Airport Roundabout. This section describes the iterative process undertaken to identify and develop the measures required to mitigate these effects.

Public Transport

Airport Bus Services

6.8.2 The Principal Assessment identified that, in the absence of mitigation, increased bus passenger demand associated with the 2029 Proposed Operation would exceed the available capacity of multiple airport bus services throughout the day, resulting in a significant negative effect on public transport users. Mitigation in the form of additional bus services is therefore required to address the identified capacity shortfall and accommodate the forecast bus passenger demand associated with the Proposed Order.

6.8.3 To quantify the additional bus service capacity required to address the identified capacity shortfalls, an iterative assessment was undertaken. Additional services were progressively added to the planned and committed service provision on routes where capacity shortfalls were identified, with the capacity assessment updated at each stage until, as far as practicable, services achieved a V/C ratio below 1.0. The results, presented in Table 6-50, indicate that an increase of approximately 8% in daily bus services above the planned and committed provision would be required to accommodate the forecast 2029 Proposed Operation demand. This level of additional provision therefore forms the basis for the mitigation measures identified below.

6.8.4 Airport bus services are dynamic, and providers frequently respond to additional demand with new or adjusted timetables. This is evidenced by the increase in bus services since 2023 which has resulted in an improved public transport mode share. In 2026 alone, additional services have been provided on six routes to/from the airport. As such, while daa cannot provide additional bus services, it is considered reasonable to assume that service providers will respond to the projected additional demand with the required services.

Table 6-50: 2029 Proposed Operation Required Bus Service Provision

Hour Commencing	Existing Planned Services		Additional Required Services		Overall Total Services	Required
	Entering	Exiting	Entering	Exiting	Entering	Exiting

00:00	22	18	0	0	22	18
01:00	9	14	0	0	9	14
02:00	10	8	0	1	10	9
03:00	16	17	1	0	17	17
04:00	34	19	6	3	40	22
05:00	38	35	11	0	49	35
06:00	46	56	12	0	58	56
07:00	53	55	8	8	61	63
08:00	57	57	5	2	62	59
09:00	65	61	5	8	70	69
10:00	68	61	4	4	72	65
11:00	67	64	8	9	75	73
12:00	66	63	5	6	71	69
13:00	64	64	8	5	72	69
14:00	64	64	4	1	68	65
15:00	67	69	4	5	71	74
16:00	62	67	5	2	67	69
17:00	62	69	5	7	67	76
18:00	58	63	4	5	62	68
19:00	65	59	1	3	66	62
20:00	54	54	0	0	54	54
21:00	56	54	1	4	57	58
22:00	49	43	0	9	49	52
23:00	34	46	0	2	34	48
24-Hour	**1,186**	**1,180**	**97**	**84**	**1,283**	**1,264**

Airport Bus Facilities

6.8.5 The analysis above identified that an approximately 8% increase in daily bus services, above the planned and committed provision, would be required to mitigate the significant negative effect associated with insufficient bus service capacity. The introduction of these additional services would increase the number of bus movements using the existing airport bus facilities. A further assessment was therefore undertaken to determine whether the additional services could be accommodated within the existing GTC, T1 kerbs and Coach Park and, where necessary, to identify the operational measures required to facilitate them.

6.8.6 The current indicative hourly capacity of the bus facilities was determined, based on the number of stands provided for the different types of service and the average dwell times established for these from bus surveys undertaken in October 2025. This was then compared to the maximum hourly demand for the various types of service. For timetabled services, this was established from the demand analysis outlined previously. For tour operators and private coaches that use the Coach Park, the maximum hourly demand was established based on the 2025 bus survey results. This maximum demand was then factored using a linear growth rate based on the growth in passenger demand from 2025 (36 mppa) to 2029 (40 mppa).

6.8.7 To inform the assessment, an exercise was undertaken to determine how many independent stands can be accommodated within the bus facilities in their current arrangement, with no changes to kerb lines (an independent stand being one where the bus can pull in and out without interaction with a bus in front/behind them). Swept path analysis was used to establish this using a Volvo 9700 (15 metres in length), a typical length coach representing the reasonable worst case. The results indicated 14 stands are available within the GTC (excluding shuttle stands located in Zone 8 and 9), 13 coach stands in the Coach Park and 5 stands on the T1 kerbs, resulting in 32 in total.

6.8.8 The output from the assessment was a volume to capacity (V/C) ratio, which indicated how the facilities are forecast to operate, relative to their capacity. Table 6-51 summarises the results of the capacity analysis and indicates that the bus facilities have adequate capacity to cater for the forecast required bus services at 40 mppa.

Table 6-51: Summary of Bus Facilities Capacity Assessment

Location - Service Type	No. of Stands	Average Dwell Time	Hourly Capacity	Projected Peak Hourly Movements	V/C
GTC - Local	4	8 mins	30	26	0.87
GTC – Regional	10	20 mins	30	24	0.80
T1 Kerbs Services	5	7 mins	43	21	0.49
Coach Park Services	13	25 mins	31	29	0.93
Total	**32**		**134**	**100**	**0.75**

6.8.9 The assessment above uses the maximum demand in a single hour in either direction, i.e. entering or exiting the airport. Where there is a difference between the number of services entering and the number exiting, the maximum value was used. It also assumes that all services will pick-up and drop-off in a single movement. In effect, it reflects the most optimistic scenario in terms of the operation of the bus facilities.

6.8.10 In practice, some services will lay over off-site after dropping off passengers and return later to pick up, resulting in two separate trips to stand. A sensitivity test was therefore undertaken using a reasonable worst-case assumption that all services make separate drop-off and pick-up trips to stand. The exception is GTC – Local services, for which the service frequency is such that an off-site layover between drop-off and pick-up is not considered a credible operating assumption. This sensitivity test therefore represents the greatest credible stand demand arising from service operation. While this scenario is unlikely to occur in practice, it provides a conservative sensitivity test of the maximum credible demand that could be placed on the existing bus facilities at 40 mppa, by assuming that all relevant services make separate drop-off and pick-up trips to stand. The same average dwell times as those applied in the initial assessment have been used. The results are summarised in Table 6-52 and indicate that facilities serving GTC Regional and Coach Park services would operate above capacity under this sensitivity scenario. Facilities serving GTC Local and T1 Kerbside services would remain within capacity.

Table 6-52: Summary of Bus Facilities Capacity Assessment – Sensitivity 1

Location - Service Type	No. of Stands	Average Dwell Time	Hourly Capacity	Projected Peak Hourly Movements	V/C
GTC - Local	4	8 mins	30	26	0.87
GTC – Regional	10	20 mins	30	44	1.47
T1 Kerbside Services	5	7 mins	43	37	0.86
Coach Park Services	13	25 mins	31	58	1.86
Total	**32**		**134**	**165**	**1.23**

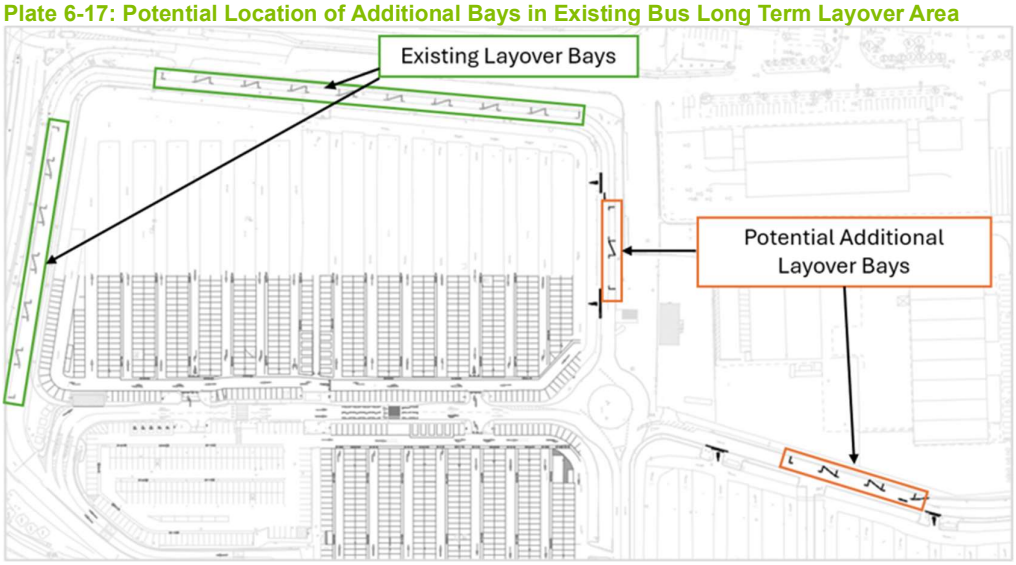
6.8.11 Further sensitivity testing, summarised in Table 6-53, considered whether the capacity constraints identified under the reasonable worst-case scenario could be addressed through reduced dwell times. The testing found that, with dwell times reduced to 12 minutes for GTC Local and Coach Park services, the associated facilities would operate within capacity. Although these dwell times are lower than the current averages for these service types, they are considered feasible and achievable in operational terms. Active management of the bus facilities may, however, be required during periods of peak demand to maintain the necessary throughput.

Table 6-53: Summary of Bus Facilities Capacity Assessment – Sensitivity 2

Location - Service Type	No. of Stands	Average Dwell Time	Hourly Capacity	Projected Peak Hourly Movements	V/C
GTC - Local	4	8 mins	30	26	0.87
GTC – Regional	10	12 mins	44	44	0.88
T1 Kerbside Services	5	7 mins	43	37	0.86
Coach Park Services	13	12 mins	65	58	0.89
Total	**32**		**134**	**165**	**0.86**

6.8.12 To ensure efficiency in the use of the bus facilities, the dwell times outlined above will need to be achieved, with any longer layovers required being carried out in the existing long stay bus facilities located in the red car park. The current arrangement of the long-term layout facilities has 14 layover bays situated around the outside of the car park. No data is available to assess the existing usage of the long-term layover. It is therefore recommended that this facility is monitored and additional layover bays added as required. A sketch of where potential additional bays could be located is shown below in Plate 6-17. Provision of these additional bays which will require amendments to road markings only.

Plate 6-17: Potential Location of Additional Bays in Existing Bus Long Term Layover Area



6.8.13 Active management will be required to ensure that the existing bussing areas can operate effectively with the increased passenger and vehicle movements. This will include enforcement of the required dwell times (as outlined above) and also the strict enforcement of restrictions on other vehicles entering these areas and using the facilities incorrectly (cars using the area for drop off and pick up and/or buses using other operators stands).

6.8.14 Following initial assessment of the increase in the forecast pedestrian numbers using the zebra crossing facilities in the GTC area, pedestrian modelling analysis was carried out using Viswalk 2025 (a pedestrian simulation software) to establish if these crossings will require management during peak hours. Pedestrian survey data from 2025 was used to establish the number of pedestrians using these crossings to access the wider airport site including links to T2 and car parking facilities. These pedestrian numbers were factored, using growth factors derived from the airport demand model to represent the 40 mppa conditions. Pedestrians accessing the Coach Park and GTC were calculated from the bus analysis set out above.

6.8.15 The simulation results indicated that increased pedestrian volumes at crossing points during peak times leads to near-continuous occupancy of the crossings, significantly limiting gaps for buses and cars to pass through. As a result, vehicle queues were shown to increase markedly, with substantial delays and widespread congestion across the network. The interaction between pedestrians and vehicles becomes the primary limiting factor in the network performance, rather than vehicular demand alone. In addition,

bus boarding passengers on the western side of the crossing were shown to build up as buses are delayed in arriving at the stands to pick them up, resulting in passenger accumulation and localised overcrowding.

Bus Services and Facilities - Mitigation Measures and Monitoring

6.8.16 The analysis above demonstrates that the additional bus services required to mitigate the identified bus service capacity shortfall can be accommodated within the existing GTC, T1 kerbs and Coach Park, subject to implementation of the operational measures identified through the assessment. While daa cannot provide the required additional bus services, it can ensure that the following measures are implemented as mitigation for the 2029 Proposed Operation:

- Application of necessary dwell time restrictions within the GTC and Coach Park, with longer layovers accommodated within the existing bus layover facilities in the Red Long-Stay Car Park;
- Active management by daa staff of key pedestrian crossing points within the GTC during peak periods to regulate pedestrian flows and provide safe gaps for bus movements; and
- Monitoring of the use of the existing bus layover facilities within the Red Long-Stay Car Park, with additional layover capacity to be provided if monitoring indicates that the capacity of the existing facilities is becoming constrained.

6.8.17 The operational arrangement assessed represents a practicable arrangement based on the existing and planned service patterns and operators, together with the 2025 distribution of staff and passenger demand forecast to 2029. As the precise pattern of bus passenger demand and service provision may evolve over time, daa will continue to monitor the use and operation of the GTC and wider bus facilities on the airport campus, applying the principles of the Monitoring Framework and working with the NTA and bus service providers. Where monitoring identifies changes in demand or operational requirements, the operational arrangements will be adapted as necessary, including through changes to stand allocation and dwell times.

6.8.18 With the implementation of these measures, the assessment demonstrates that the existing GTC, T1 kerbs and Coach Park have sufficient operational capacity to accommodate the additional bus services required to meet the forecast demand associated with the 2029 Proposed Operation. No new infrastructure, construction works, demolition works or alterations to existing kerb lines are required to accommodate the forecast demand. This approach is consistent with the NIFTI intervention hierarchy, whereby the operation of existing infrastructure is optimised before infrastructure improvements are considered.

6.8.19 As well as the Proposed Operation, these mitigation measures are considered applicable in both 2040 scenarios, since:

- The Without MetroLink scenario has the same airport-related demand and mode shares as the Proposed Operation.
- In the With MetroLink scenario, although bus passenger numbers will likely decrease, the location of the MetroLink station on the far side of the GTC from the airport terminals means that there will still be a high volume of pedestrians using the crossings within the GTC.

General Traffic

6.8.20 The Principal Assessment identified that, in the absence of mitigation, the additional traffic associated with the Proposed Order would result in a significant negative effect on general traffic during the peak periods, with the Airport Roundabout particularly affected. Mitigation is therefore required to address the identified effect. Further analysis was therefore undertaken to determine the reduction in airport-related vehicle trips required to mitigate the effect at the Airport Roundabout.

6.8.21 The dominant movements through the roundabout in all operational conditions are between the airport and the M1 Link; westbound in the AM peak, and eastbound in the PM peak. This is reflected in the MMQs on the respective entry arms during these peaks. Reducing the volume of airport-related trips through the roundabout would mitigate the impact of the Proposed Order.

6.8.22 A sensitivity analysis was undertaken in LinSig whereby the airport-related traffic flows were incrementally reduced until the resulting MMQs were reduced back to the same level as the 2029

Permitted Operation. The results of this sensitivity analysis are summarised in Table 6-54 and Table 6-55 and indicated that a reduction of approximately 250 airport-related trips from the M1 would be required.

6.8.23 The reduction in airport-related traffic reduces queuing on the M1 Link to a level below that of the 2029 Permitted Operation, in both peak hours. A similar impact is seen on Corballis Road North in the AM peak. In the PM peak, however, even with the reduction in airport-related traffic flows, the 2029 Proposed Operation still results in an increase in capacity issues and queuing on this arm. This impact is restricted to the internal airport campus, however, and does not negatively impact on the external local and strategic network.

Table 6-54: Principal Assessment Airport Roundabout LinSig Sensitivity Test Results – AM Peak (08:00 – 09:00)

	2029 Permitted Operation		2029 Proposed Operation – Reduced Airport Demand		Proposed vs Permitted	
PRC	**-137.2%**		**-120.2%**		**17.0%**	
Cycle time	**47**		**43**		n/a	
Arm	**DoS%**	**MMQ**	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	75.6%	8.4	97.2%	17.0	21.6%	8.6
Eastbound Circulatory	61.9%	5.5	62.4%	5.6	0.5%	0.1
M1 Link	213.2%	212.0	198.1%	199.7	-15.1%	-12.3
Southbound Circulatory	36.3%	3.9	40.4%	5.3	4.1%	1.4
R132 South	62.2%	3.2	64.5%	3.4	2.3%	0.2
Westbound Circulatory	32.3%	2.2	37.8%	2.4	5.5%	0.2
Corballis Road North	171.2%	107.3	197.1%	155.7	25.9%	48.4
Northbound Circulatory	49.7%	3.2	58.2%	3.4	8.5%	0.2

Table 6-55: Principal Assessment Airport Roundabout LinSig Results Comparison – PM Peak (17:00 – 18:00)

	2029 Permitted Operation		2029 Proposed Operation – Reduced Airport Demand		Proposed vs Permitted	
PRC	**-236.9%**		**-181.7%**		**55.2%**	
Cycle time	**45**		**37**		n/a	
Arm	**DoS%**	**MMQ**	**DoS%**	**MMQ**	**DoS%**	**MMQ**
R132 North	52.0%	4.4	63.9%	4.8	11.9%	0.4
Eastbound Circulatory	73.8%	7.2	73.8%	7.2	0.0%	0
M1 Link	170.3%	139.1	165.9%	142.2	-4.4%	3.1
Southbound Circulatory	26.9%	2.5	28.2%	3.6	1.3%	1.1
R132 South	142.6%	79.0	128.9%	61.9	-13.7%	-17.1
Westbound Circulatory	34.6%	2.2	39.5%	2.6	4.9%	0.4
Corballis Road North	303.2%	359.9	253.5%	298.4	-49.7%	-61.5
Northbound Circulatory	68.3%	3.8	82.0%	5.9	13.7%	2.1

6.8.24 There is higher potential for demand management for airport staff as these trips are habitual, undertaken by the same people on a regular basis. There is also a greater potential for daa to influence these trips through measures such as those outlined below. Demand management for passenger trips is less feasible given their irregular and infrequent nature.

6.8.25 Interrogation of staff car park access barrier data provided by daa indicated that an average of approximately 535 vehicles enter the daa-controlled staff car parks during the AM peak hour. These car parks account for approximately 65% of the total staff parking provision at the airport. Assuming they are a representative sample of the overall total, it is estimated that the total number of vehicles accessing staff car parks at the airport in the AM peak hour is approximately 800. This indicates that there is potential to reduce the volume of airport-related trips by the required amount.

6.8.26 The Monitoring Framework provides a mechanism for regular and active monitoring of the established key performance indicators for surface access, namely, passenger car mode share, staff car mode share, and the combined total number of vehicles entering and exiting the airport campus in a single hour. It allows for early intervention through mitigation measures if KPIs are not met.

6.8.27 The monitoring framework was developed when the airport was accommodating 32 mppa and presented thresholds for the KPIs at 40 mppa. A monitoring review (presented in EIAR Appendix 6-2) was undertaken using 2025 data, with the airport at 36 mppa. A straight-line interpolation between the 32 mppa and 40 mppa thresholds provided an indication of the expected progress of the KPIs towards the 40 mppa thresholds at a 'mid-point. The results of the monitoring review were then compared to these expected values to determine actual progress.

6.8.28 The results indicated that two KPIs, passenger car mode share and total vehicles entering/exiting the airport, are performing in line with expectations. The staff car mode share, however, is higher at 36 mppa than the projected mid-point.

General Traffic - Mitigation Measures and Monitoring

6.8.29 The analysis above demonstrates that the identified significant negative effect on general traffic can be mitigated through demand management measures targeted at reducing staff car travel during the peak periods. These measures can be implemented without the provision of additional transport infrastructure. This approach is consistent with the intervention hierarchy set out in NIFTI, which prioritises maintaining and optimising the use of existing infrastructure before improvement or new infrastructure is considered.

6.8.30 A range of potential demand management measures is identified within the Monitoring Framework (Appendix 6-1). Based on the analysis above, the measures below have been identified to reduce staff car travel and achieve the reduction in peak-period airport-related vehicle trips required to mitigate the identified effect. These measures will be delivered by daa's Commercial Development and Planning department through their ongoing Landside Development Programme:

- Active travel – improvements to end-of-trip facilities, including bicycle parking, showers and lockers, together with improvements to walking and cycling routes within the airport campus.
- Modal Shift Rewards – daa staff who choose not to renew an existing parking permit, or not to take up a permit, will be offered a financial incentive to travel by sustainable modes. daa will also contribute towards the cost of annual TaxSaver public transport tickets.
- Review of parking permit charges – parking permit charges will be increased, with differentiated charges applied so that permits for off-campus car parks cost less than those for on-campus car parks.
- Staggered working hours – daa will promote staggered working arrangements to distribute staff travel demand across a wider period, reducing peak-hour traffic volumes and associated pressure on the local road network and key junctions serving the airport campus.

6.8.31 Measures involving changes to working arrangements or financial incentives can be directly implemented by daa only in relation to its own employees. While sufficient mitigation can be provided through targeting of daa employees only, other employers operating within the airport campus will be encouraged to implement equivalent or complementary measures for their employees, which may provide further mitigation.

6.8.32 The assessment considered two future-year mode share scenarios. The Business as Usual (BAU) scenario provides the reasonable worst-case assessment of private car demand because it assumes that the 2025 mode shares remain unchanged, with no further shift away from private car travel despite the increase in passenger and staff numbers. The High Public Transport (High PT) scenario provides the reasonable worst-case assessment of demand on airport bus services and facilities because it assumes the greatest credible transfer of passengers and staff to public transport without corresponding improvements to bus infrastructure. The demand management measures identified above are intended to mitigate the significant effect identified under the BAU scenario by reducing staff car travel during peak periods.

6.8.33 The analysis indicates that, if the required reduction in staff car trips were achieved entirely through transfer to public transport, approximately 250 additional staff trips would be made by public transport during the relevant peak period. As the majority of airport staff live in Dublin, these additional trips would

predominantly be expected to use services to and from Dublin. The bus service capacity assessment presented in Table 6-39 and Table 6-40 demonstrates that these services are forecast to operate within capacity during the peak periods and would therefore be capable of accommodating this additional demand. No additional bus services would be required as a consequence of this modal shift and there would consequently be no increase in the number of bus movements requiring accommodation within the GTC.

6.8.34 The modal shift would increase the number of bus passengers and could therefore increase pedestrian movements within the GTC. However, the active management of pedestrian crossings identified as part of the bus facilities mitigation would accommodate increased pedestrian movements during peak periods. In addition, staff use a number of bus stops across the airport campus, and not all additional staff public transport trips would therefore pass through the GTC. The staff modal shift required as part of the general traffic mitigation would consequently not give rise to a significant negative effect on bus services or bus facilities.

6.8.35 The Monitoring Framework will be used to monitor the effectiveness of the demand management measures and changes in the key surface access indicators, including passenger and staff mode share. Monitoring will identify whether travel patterns are developing towards the BAU or High PT forecasts and will enable the demand management measures to be reviewed and adapted as necessary to maintain the required reduction in peak-period staff car travel.

6.8.36 As well the 2029 Proposed Operation, these mitigation measures are considered applicable in the 2040 Without MetroLink scenario, since it has the same airport-related demand and mode shares as the Proposed Operation. In the With MetroLink scenario, however, the modal shift to public transport from private car, and resultant reduction in general traffic volumes should negate the requirement for mitigation. The Monitoring Framework will be used to determine the impact of MetroLink, both during construction and post-delivery, which will allow for any potential changes to the mitigation measures to be identified and agreed by the Surface Access Stakeholder Group.

6.9 Residual Effects

6.9.1 Section 6.7, the Principal Assessment, indicated that the Proposed Order would have significant negative effects on airport bus services and the Airport Roundabout. Section 6.8 outlined measures to mitigate these effects. This section outlines the residual effects with these mitigations applied.

6.9.2 These residual effects apply to the 2029 Proposed Operation and to the 2040 Without MetroLink scenario.

Active Travel

6.9.3 The increase in bus passengers using the existing GTC, relative to the 2029 Permitted Operation, will lead to an increase in the number of pedestrians crossing through it. This will necessitate active management of the pedestrian crossings to allow bus services to continue to operate efficiently, which may lead to longer wait times for pedestrians than is/was the case otherwise.

6.9.4 It is considered that, with mitigation, the Proposed Order will have a slight negative effect on users of active modes. In the context of this assessment, as outlined in Section 6.4, this is not significant.

Public Transport

6.9.5 Mitigation of the effects of the Proposed Order on public transport will necessitate an increase in the number of bus services at the airport. Analysis indicated that this can be accommodated by optimising the existing facilities, kerbside and within the GTC.

6.9.6 The increase in bus passengers using the existing GTC will lead to an increase in the number of pedestrians crossing through it. Even with active management, as noted above, this will likely lead to a slight increase in journey times for buses through the kerbside and GTC areas.

6.9.7 It is considered that, with mitigation, the Proposed Order will have a slight negative effect on public transport users. In the context of this assessment, as outlined in Section 6.4, this is not significant.

General Traffic

6.9.8 The Proposed Order is forecast to generate some significant increases in general traffic at peak times, based on worst case assumptions in respect of private car mode share by staff and passengers. The effect of this additional airport-related traffic on the Airport Roundabout in particular, leads to additional queuing and delays, beyond those experienced for the 2029 Permitted Operation. These impacts can be mitigated through demand management to reduce airport staff related transport demand. With mitigation, it is therefore considered that the Proposed Order will not have a significant impact on general traffic at peak times.

6.9.9 The Monitoring Framework (provided in Appendix 6-1) provides a mechanism for regular and active monitoring of the established key performance indicators for surface access and allows for early intervention through non-infrastructural demand management mitigation measures if KPIs are not met.

6.10 Cumulative Effects

6.10.1 The surface access conditions assumed for both the Permitted Operation and Proposed Operation in 2029 take account of planned and permitted schemes expected to be delivered by that year. The effects of these schemes are therefore reflected in the future-year network conditions used for the Principal Assessment and are inherently accounted for in the assessment of cumulative effects.

6.11 Indirect, Transboundary and Secondary Effects

6.11.1 Indirect and secondary effects associated with changes in surface access traffic resulting from the Proposed Order, including effects on air quality and non-aircraft noise, are assessed in Chapter 7: Air Quality and Chapter 8: Non-Aircraft Noise, respectively. Transboundary effects associated with surface access traffic are not anticipated.

6.12 Supporting Assessments and Interpretation

Supporting Assessment 1: Baseline Operation (2023, 32 mppa) vs Proposed Operation (2029, 40 mppa)

6.12.1 This assessment has been undertaken to provide context on the overall change in surface access conditions between the 2023 Baseline Operation and the 2029 Proposed Operation.

Airport Demand

6.12.2 Table 6-56 summarises the outputs from the airport demand model and shows the overall daily traffic generated by the airport, as well as the AM and PM peak values, for the 2023 Baseline Operation and 2029 Proposed Operation. The table indicates that the scale of increase in airport-generated traffic in the AM peak is higher (20%) than the 24-hour total (15%), while the PM peak increase is lower (6%).

Table 6-56: Supporting Assessment 1 Airport-Generated Traffic (Vehicles) Comparison

	2023 Baseline Operation	2029 Proposed Operation	Difference	
			Actual	%
24-Hour Total	66,216	75,852	9,637	15%
AM Peak	3,772	4,518	746	20%
PM Peak	5,130	5,436	306	6%

External Roads

6.12.3 Table 6-57 outlines the peak hour traffic flows on the road network within the assessment area and compares the 2029 Proposed Operation forecast flows with the equivalent 2023 Baseline Operation flows. Plate 6-18 illustrates the locations referenced. Directional flows with a percentage change up to and including 5% are highlighted green, those with a change between 5% and 10% are highlighted yellow, while those 10% and higher are highlighted orange. The results of the comparison are discussed below.

6.12.4 Most links are forecast to have an increase greater than 10% in the AM Peak. This is due to a combination of six years of background growth plus 25% growth in passenger demand in the same period. Most of the significant percentage increases, are due to relatively low flows on these links in 2023, such as:

- R108 north of Ballymun Interchange, both directions (directional flows I and J),
- R108 West WB (K),
- R132 north of Cloghran Roundabout northbound (B)
- Old Airport Road, both directions (G and H)

6.12.5 The relocation of a proportion of staff parking away from the main campus to the Staff South Car Park on the R108 (adjacent to the Holiday Blue long-stay car park) also contributes to the increases in traffic flows on the R108 north of Ballymun interchange (I and J) and Old Airport Road WB (G).

6.12.6 On other links, such as the R132 North of Cloghran Roundabout southbound (directional flow A) and R132 South of Dublin Airport southbound (E), the percentage increase is significant, yet the resultant 2029 Proposed Operation flows are still within the typical capacities of the road types (dual carriageways).

6.12.7 The impacts in the PM peak are less pronounced. Again, significant percentage increases are due to relatively low 2023 flows, such as southbound on R108 north of Ballymun Interchange (directional flow I), or produce flows that are within the capacities of the associated road types, such as northbound on the M50 east of Ballymun (P).

6.12.8 The maximum link flows on the motorway network with the 2029 Proposed Operation are on the M50 northbound in the AM peak (directional flow N) and the M1 northbound in the PM peak (R) and are consistent with the current maximum hourly flows at these locations[14].

Plate 6-18: Directional Flows on Transport Network

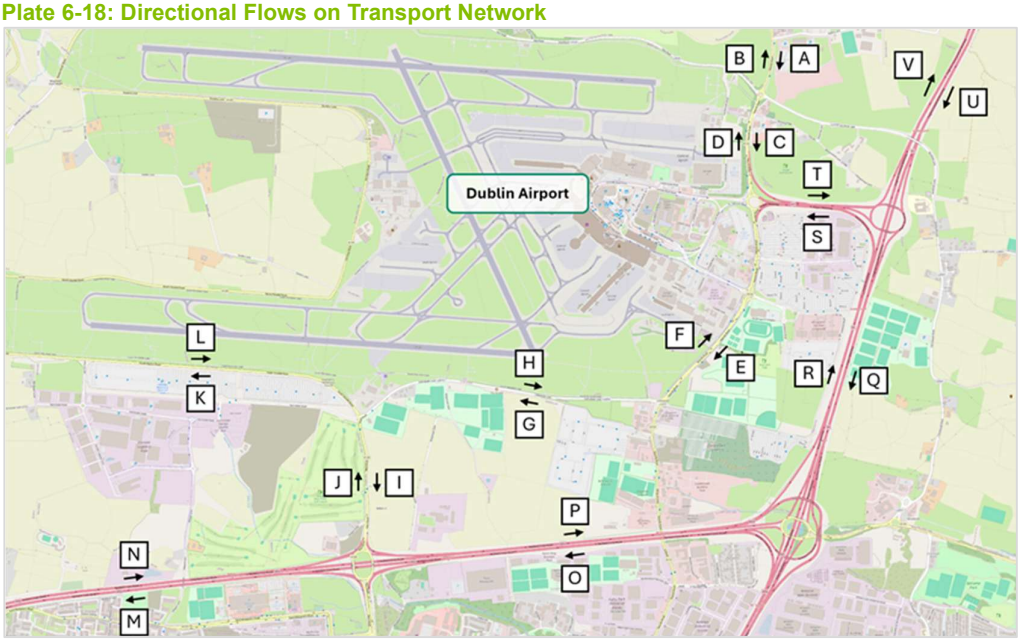


Table 6-57: Supporting Assessment 1 Traffic Flows (Vehicles) Comparison

Directional Flow	AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
	2023 Baseline Operation	2029 Proposed Operation	Difference		2023 Baseline Operation	2029 Proposed Operation	Difference	
			Actual	%			Actual	%
A	1,086	1,208	122	11.2%	943	1,030	88	9.3%
B	578	653	75	12.9%	881	960	80	9.0%

[14] Source: TII Permanent Traffic Counters - https://trafficdata.tii.ie/publicmultinodemap.asp

Directional Flow	AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
	2023 Baseline Operation	2029 Proposed Operation	Difference		2023 Baseline Operation	2029 Proposed Operation	Difference	
			Actual	%			Actual	%
C	1,014	1,135	121	12.0%	861	935	74	8.6%
D	647	742	96	14.8%	1,196	1,297	102	8.5%
E	1,308	1,514	206	15.7%	1,024	1,097	73	7.2%
F	706	750	44	6.2%	1,114	1,175	60	5.4%
G	453	576	123	27.2%	716	720	3	0.5%
H	660	710	50	7.6%	674	718	43	6.4%
I	443	537	94	21.1%	841	1,001	160	19.0%
J	743	930	187	25.2%	650	713	63	9.7%
K	235	276	41	17.3%	292	315	23	7.9%
L	380	427	46	12.2%	256	273	18	6.9%
M	3,640	4,094	454	12.5%	5,046	5,517	471	9.3%
N	5,561	6,190	629	11.3%	5,417	5,918	501	9.2%
O	3,577	4,026	449	12.6%	4,039	4,438	399	9.9%
P	4,553	5,060	506	11.1%	5,124	5,666	542	10.6%
Q	4,220	4,711	491	11.6%	4,131	4,469	338	8.2%
R	4,393	4,861	468	10.7%	5,581	6,097	517	9.3%
S	2,411	2,709	299	12.4%	1,681	1,782	102	6.1%
T	1,136	1,344	207	18.3%	2,209	2,336	128	5.8%
U	4,128	4,579	451	10.9%	3,104	3,400	296	9.5%
V	3,205	3,560	355	11.1%	5,160	5,668	508	9.8%

Junction Turning Movements

6.12.9 This section outlines the peak hour turning movements at the three airport entrance junctions and compare the forecast 2029 Proposed Operation flows with the 2023 Baseline Operation flows. The results of the comparison are discussed below. The same highlighting as above is used to illustrate the percentage changes, i.e. green for up to 5%, yellow for 5% to 10% and orange for 10% and above.

Airport Roundabout

6.12.10 Table 6-58 indicates that the overall volume of traffic through the Airport Roundabout increases by approximately 760 vehicles (16%) in the AM peak. and approximately 415 vehicles (8%) in the PM peak.

6.12.11 In the AM peak, there are numerous individual turning movements with large percentage increases; however, this is due to low turning flows on these movements in 2023, including:

- R132 North to M1 Link, R132 South and Corballis Road North (Movements A to B, C and D, respectively)
- M1 Link to R132 North (B to A) and R132 South (B to C)
- R132 South to R132 North, M1 Link, and Corballis Road North (Movements C to A, B and D, respectively)
- Corballis Road North to R132 North and South (D to A and C, respectively)

6.12.12 The most significant increases in terms of actual values are the straight-ahead movements between the M1 Link and Corballis Road North (B to D and D to B).

6.12.13 In the PM peak, the scale of increase for individual movements is lower, in line with the difference between AM and PM peaks in terms of overall flow increases. The only movements with percentage

increases greater than 10% are due to low 2023 turning flows between the R132 North and the M1 Link (A to B and B to A).

R132/Corballis South Junction

6.12.14 Table 6-59 indicates that the overall volume of traffic through the junction increases by approximately 355 vehicles (14%) in the AM peak and approximately 195 vehicles (6%) in the PM peak.

6.12.15 The largest actual increase on any single movement is approximately 110 vehicles on the straight through movement North to South in the R132 (A to C). The movements through the junction outlined below experience increases greater than 10% in the AM peak. All of these increases are due to relatively low 2023 turning movements, however:

- R132 North to Eastlands and Corballis Road South (A to B and A to D, respectively)
- All movements from Eastlands (B to A, C and D)
- All movements from R132 South (C to A, B and D)
- All movements from Corballis Road South (D to A, B and C)

6.12.16 In the PM peak, the scale of increase for individual movements is lower, in line with the difference between AM and PM peaks in terms of overall flow increases. The only movements with percentage increases greater than 10% are due to low 2023 turning flows between the R132 North and South (A to C and C to A).

Naul Road/Castlemoate Road Junction

6.12.17 Table 6-60 indicates that the overall volume of traffic through the junction increases by approximately 195 vehicles (13%) in the AM peak and approximately 170 vehicles (9%) in the PM peak. Individual movements with increases greater than 10% are due to the relatively low flows at this junction, namely:

- All movements in the AM peak
- Movements between Naul Road East and West (A to C and C to A) in the PM peak

Table 6-58: Supporting Assessment 1 Airport Roundabout Turning Movements Comparison (Vehicles)

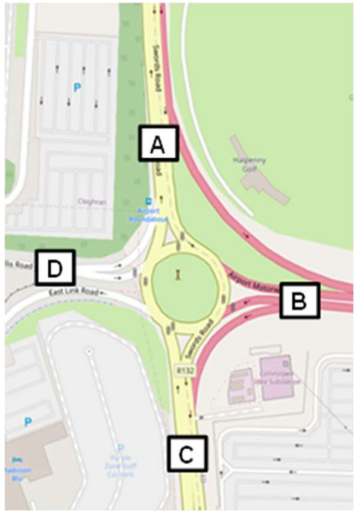
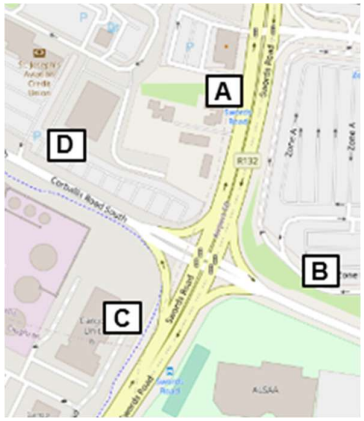
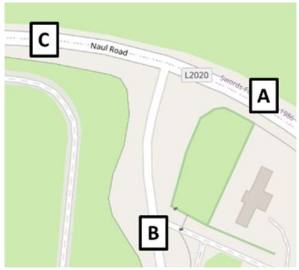
Movement		AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
		2023 Baseline Operation	2029 Proposed Operation	Difference		2023 Baseline Operation	2029 Proposed Operation	Difference	
				Actual	%			Actual	%
	A to B	313	345	32	10.2%	368	405	37	10.2%
	A to C	490	541	51	10.4%	335	365	30	8.8%
	A to D	214	251	37	17.4%	194	206	12	6.0%
	B to A	303	334	31	10.2%	396	436	40	10.2%
	B to C	720	798	78	10.8%	299	311	12	4.1%
	B to D	1,314	1,542	228	17.4%	1,001	1,062	61	6.0%
	C to A	190	212	23	11.9%	436	477	41	9.3%
	C to B	121	140	18	14.9%	383	416	32	8.4%
	C to D	34	40	6	17.4%	29	30	2	6.0%
	D to A	154	193	39	25.5%	432	462	30	7.0%
	D to B	549	690	140	25.5%	1,403	1,502	99	7.0%
	D to C	308	387	79	25.5%	255	272	18	7.0%
	Total	**4,712**	**5,473**	**762**	**16.2%**	**5,530**	**5,944**	**414**	**7.5%**

Table 6-59: Supporting Assessment 1 R132/Corballis Road South Junction Turning Movements Comparison (Vehicles)



Movement	AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
	2023 Baseline Operation	2029 Proposed Operation	Difference		2023 Baseline Operation	2029 Proposed Operation	Difference	
			Actual	%			Actual	%
A to B	163	185	22	13.5%	242	244	2	0.8%
A to C	1,097	1,208	112	10.2%	510	562	52	10.2%
A to D	136	160	24	17.4%	64	68	4	6.0%
B to A	67	83	16	23.5%	83	81	-2	-2.4%
B to C	33	41	8	23.5%	134	131	-3	-2.4%
B to D	87	102	15	17.4%	150	159	9	6.0%
C to A	255	281	26	10.2%	456	502	46	10.2%
C to B	33	38	4	13.5%	94	95	1	0.8%
C to D	416	488	72	17.4%	688	730	42	6.0%
D to A	31	39	8	25.5%	186	199	13	7.0%
D to B	63	79	16	25.5%	98	104	7	7.0%
D to C	136	170	35	25.5%	383	410	27	7.0%
Total	**2,517**	**2,875**	**357**	**14.2%**	**3,087**	**3,285**	**197**	**6.4%**

Table 6-60: Supporting Assessment 1 Naul Road/Castlemoate Road Junction Turning Movements Comparison (Vehicles)

Movement		AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
		2023 Baseline Operation	2029 Proposed Operation	Difference		2023 Baseline Operation	2029 Proposed Operation	Difference	
				Actual	%			Actual	%
	A to B	183	215	32	17.4%	32	34	2	6.0%
	A to C	489	539	50	10.2%	891	981	91	10.2%
	B to A	31	39	8	25.5%	107	115	8	7.0%
	B to C	68	86	17	25.5%	283	303	20	7.0%
	C to A	572	630	58	10.2%	442	487	45	10.2%
	C to B	171	200	30	17.4%	57	61	3	6.0%
	Total	**1,514**	**1,709**	**195**	12.9%	**1,812**	**1,981**	**169**	9.3%

Junction Performance

6.12.18 Table 6-61 summarises and compares the results of the LinSig analysis of the Airport Roundabout and R132/Corballis Road South junction for the 2029 Proposed Operation and 2023 Baseline Operation. The results indicate that PRC is forecast to reduce and queuing to increase at both locations in 2029 with the 2029 Proposed Operation, relative to the 2023 Baseline Operation.

Table 6-61: Supporting Assessment 1 LinSig Results Comparison

Junction	AM Peak (08:00 – 09:00)				PM Peak (17:00 – 18:00)			
	2023 Baseline Operation		2029 Proposed Operation		2023 Baseline Operation		2029 Proposed Operation	
	PRC	Max. Queue Length	PRC	Max. Queue Length	PRC	Max. Queue Length	PRC	Max. Queue Length
Airport Roundabout	-4.6%	13.7	-175.7%	280.7	-36.8%	122.3	-261.4%	392.0
R132/Corballis Road South	-3.5%	17.1	-22.8%	65.2	-39.9%	62.6	-4.0%	21.8

6.12.19 The results of the LinSig analysis reflect the combined effects of forecast growth in background traffic, increased airport-related traffic and the change from the existing roundabout and junction layouts to the BusConnects layout. As with the Principal Assessment, the LinSig analysis does not account for other effects of the BusConnects scheme that could reduce traffic demand at the junctions, including modal shift to public transport and the reassignment of background traffic to alternative routes. The analysis therefore provides a reasonable worst-case assessment of junction performance, as it assumes the additional traffic and layout changes without taking credit for these potential demand-reducing effects.

Summary

6.12.20 Supporting Assessment 1 demonstrates the overall change in surface access conditions between the 2023 Baseline Operation and the 2029 Proposed Operation. The comparison reflects both the increase in airport-related demand associated with the 2029 Proposed Operation and changes in the background transport network and growth in background traffic between 2023 and 2029. Therefore, the changes identified through this Supporting Assessment do not represent effects attributable solely to the Proposed Order.

6.12.21 The assessment indicates that the increase in passenger and staff demand between 2023 and 2029 would result in increased use of all surface access modes. Planned and committed improvements to public transport infrastructure and services would provide substantially greater public transport capacity by 2029; however, increased bus passenger demand would result in capacity constraints on some airport bus services. The associated increase in bus services can be accommodated within the existing airport bus facilities through the optimisation and operational management measures identified in Section 6.8.

6.12.22 General traffic volumes would also increase between the 2023 Baseline Operation and 2029 Proposed Operation as a consequence of both increased airport-related demand and background traffic growth. This results in increased pressure on parts of the road network, including key junctions serving the airport. The comparison also incorporates the effects of planned and committed transport infrastructure and changes to the operation of the network between 2023 and 2029.

6.12.23 Supporting Assessment 1 therefore illustrates the wider change in surface access conditions associated with the development of the airport and transport network between 2023 and 2029. Its findings provide contextual information on how surface access conditions are expected to change over that period. However, those changes reflect a combination of factors and are not attributable solely to the Proposed Order. The environmental effects associated with the Proposed Order are identified through the Principal Assessment, which compares the 2029 Permitted Operation and 2029 Proposed Operation for the same future year and against the same future baseline assumptions.

Supporting Assessment 2: Current Operation (2025, 36.4 mppa) vs Proposed Operation (2029, 40 mppa)

6.12.24 This assessment has been undertaken to provide context on the operational change between current airport operations (2025 Current Operation) and the future operation under the Proposed Order (2029 Proposed Operation).

Airport Demand

6.12.25 Table 6-62 summarises the outputs from the airport demand model and shows the overall daily traffic generated by the airport, as well as the AM and PM peak values, for the 2025 Current Operation and 2029 Proposed Operation. The table indicates that the scale of increase in airport-generated traffic in the AM peak (8%) is higher than the 24-hour total (2%), while the PM peak increase is significantly higher (21%). This is a result of the 40 mppa flight schedules in the 2029 Proposed Operation.

Table 6-62: Supporting Assessment 2 Airport-Generated Traffic (Vehicles) Comparison

	2025 Current Operation	2029 Proposed Operation	Difference	
			Actual	%
24-Hour Total	74,065	75,852	1,788	2%
AM Peak	4,166	4,518	352	8%
PM Peak	4,484	5,436	953	21%

External Roads

6.12.26 Table 6-63 outlines the peak hour traffic flows on the road network within the assessment area and compares the 2029 Proposed Operation flows with the equivalent 2025 Current Operation flows. Plate 6-19 illustrates the locations referenced. Directional flows with a percentage change up to and including 5% are highlighted green, those with a change between 5% and 10% are highlighted yellow, while those 10% and higher are highlighted orange. The results of the comparison are discussed below.

6.12.27 The change in link flows reflect the overall changes in demand outlined above, with numerous directional flows forecast to have an increase greater than 10% in the PM Peak, and a lower scale of increase in the AM peak.

6.12.28 Many of the increases greater than 10% are associated with actual increases of less than 100 vehicles and are caused by relatively low Current Operation flows, including:

- Old Airport Road WB (directional flow G) in both peaks
- R108 north of Ballymun Interchange northbound (J) in the AM peak
- R132 north of the airport southbound (C) in the PM peak
- R108 west, both directions (K and L) in the PM peak

6.12.29 Some directional flows are forecast to increase by more than 100 vehicles. Despite this, the resultant 2029 Proposed Operation flows are still within the typical capacities for regional roads:

- R132 north of airport northbound (directional flows B and D), in the PM peak
- The R132 south of the airport, both directions (E and F), in the PM peak
- Old Airport Road EB (H), in the PM peak
- R108 north of Ballymun Interchange southbound (I), in the PM peak, and northbound (J), in both peaks

6.12.30 Similarly, despite the increase, the 2029 Proposed Operation flows on the M1 Link (S and T) are still within the typical capacities of the road type (3 lane dual carriageway).

6.12.31 The maximum link flows on the motorway network for the 2029 Proposed Operation are on the M50 northbound in the AM peak (directional flow N) and the M1 northbound in the PM peak (R) and are consistent with the current maximum hourly flows at these locations[15].

[15] Source: TII Permanent Traffic Counters - https://trafficdata.tii.ie/publicmultinodemap.asp

Plate 6-19: Directional Flows on Transport Network

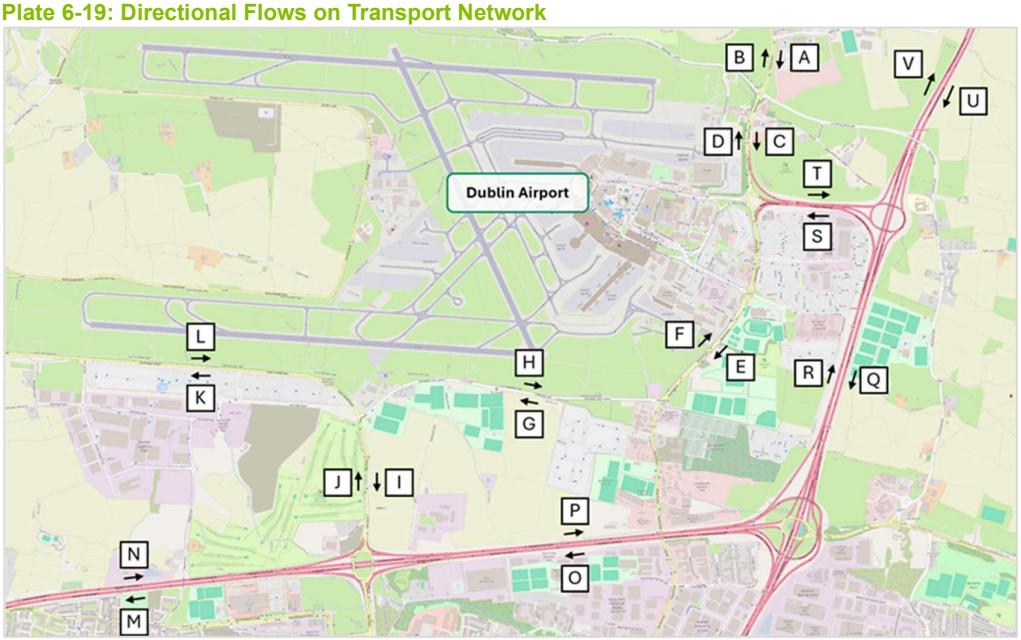


Table 6-63: Supporting Assessment 2 Traffic Flows (Vehicles) Comparison

Directional Flow	AM Peak (08:00 – 09:00)				PM Peak (17:00 – 18:00)			
	2025 Current Operation	2029 Proposed Operation	Difference		2025 Current Operation	2029 Proposed Operation	Difference	
			Actual	%			Actual	%
A	1,133	1,208	75	6.6%	946	1,030	84	8.9%
B	607	653	46	7.6%	857	960	104	12.1%
C	1,065	1,135	70	6.6%	844	935	91	10.8%
D	687	742	55	8.1%	1,124	1,297	173	15.4%
E	1,399	1,514	115	8.3%	952	1,097	145	15.2%
F	749	750	1	0.1%	1,015	1,175	160	15.8%
G	508	576	69	13.5%	653	720	66	10.1%
H	695	710	15	2.2%	585	718	133	22.7%
I	466	537	71	15.3%	817	1,001	184	22.5%
J	785	930	145	18.4%	585	713	128	21.9%
K	252	276	24	9.5%	278	315	37	13.5%
L	397	427	30	7.4%	234	273	40	16.9%
M	3,812	4,094	282	7.4%	5,033	5,517	484	9.6%
N	5,786	6,190	404	7.0%	5,422	5,918	496	9.2%
O	3,719	4,026	307	8.2%	4,054	4,438	384	9.5%

Directional Flow	AM Peak (08:00 – 09:00)				PM Peak (17:00 – 18:00)			
	2025 Current Operation	2029 Proposed Operation	Difference		2025 Current Operation	2029 Proposed Operation	Difference	
			Actual	%			Actual	%
P	4,732	5,060	328	6.9%	5,202	5,666	464	8.9%
Q	4,397	4,711	314	7.1%	4,088	4,469	381	9.3%
R	4,582	4,861	279	6.1%	5,627	6,097	470	8.4%
T	1,230	1,344	114	9.3%	2,020	2,336	316	15.7%
U	4,287	4,579	292	6.8%	3,139	3,400	261	8.3%
V	3,327	3,560	233	7.0%	5,246	5,668	422	8.0%

Junction Turning Movements

6.12.32 This section outlines the peak hour turning movements at the three airport entrance junctions and compares the forecast 2029 Proposed Operation flows with the equivalent 2025 Current Operation flows. The results of the comparison are discussed below. The same highlighting as above is used to illustrate the percentage changes, i.e. green for up to 5%, yellow for 5% to 10% and orange for 10% and above.

Airport Roundabout

6.12.33 Table 6-64 indicates that the overall volume of traffic through the Airport Roundabout increases by approximately 375 vehicles (7%) in the AM peak and approximately 920 vehicles (18%) in the PM peak. The PM peak increase, in particular, is reflective of the overall increase in airport demand during this peak, as outlined previously.

6.12.34 There are numerous individual turning movements with increases greater than 10%; however, this is due to low turning flows on these movements in 2025, including:

- R132 North to Corballis Road North (Movement A to D) in both peak hours
- M1 Link to R132 South (B to C) in the PM peak
- R132 South to R132 North, M1 Link (C to A and B, respectively) in the AM peak and R132 South to Corballis Road North (C to D) in both peak hours
- Corballis Road North to R132 North and South (D to A and C, respectively) in the PM peak

6.12.35 The most significant increases in terms of actual values are the straight-ahead movements between the M1 Link and Corballis Road North (B to D and D to B).

R132/Corballis South Junction

6.12.36 Table 6-65 indicates that the overall volume of traffic through the junction increases by approximately 145 vehicles (5%) in the AM peak and approximately 510 vehicles (19%) in the PM peak. The PM peak increase, in particular, is reflective of the overall increase in airport demand during this peak, outlined previously.

6.12.37 The movements through the junction outlined below experience increases greater than 10%. However, all of these increases are due to relatively low 2025 turning movements:

- R132 North to Eastlands (A to B) in the PM peak, and to Corballis Road South (A to D) in both peak hours
- All movements from Eastlands (B to A, C and D) in both peak hours
- R132 South to Eastlands (C to B) in the PM peak, and to Corballis Road South (C to D) in both peak hours
- All movements from Corballis Road South (D to A, B and C) in the PM peak

Naul Road/Castlemoate Road Junction

6.12.38 Table 6-66 indicates that the overall volume of traffic through the junction increases by approximately 125 vehicles (8%) in the AM peak and approximately 200 vehicles (11%) in the PM peak. Individual movements with increases greater than 10% are largely due to the relatively low 2025 Current Operation flows at this junction and include:

- Naul Road East and West to Castlemoate Road (Movements A to B and C to B, respectively) in both peak hours
- All movements from Castlemoate Road (B to A and C) in the PM peak

Table 6-64:Supporting Assessment 2 Airport Roundabout Turning Movements Comparison (Vehicles)

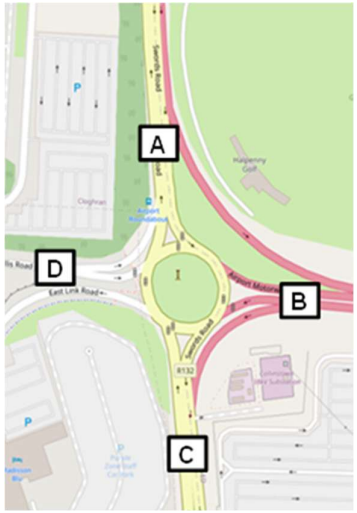
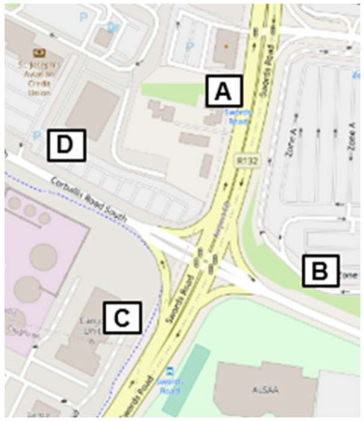
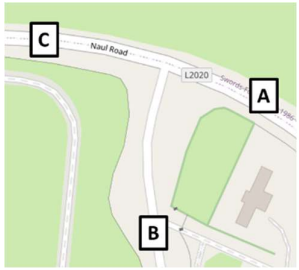
Movement		AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
		2025 Current Operation	2029 Proposed Operation	Difference		2025 Current Operation	2029 Proposed Operation	Difference	
				Actual	%			Actual	%
	A to B	323	345	22	6.7%	380	405	25	6.7%
	A to C	524	541	17	3.3%	333	365	32	9.5%
	A to D	224	251	27	12.0%	169	206	37	21.6%
	B to A	313	334	21	6.7%	409	436	27	6.7%
	B to C	814	798	-16	-2.0%	255	311	56	21.9%
	B to D	1,377	1,542	165	12.0%	873	1,062	189	21.6%
	C to A	193	212	19	10.1%	443	477	34	7.6%
	C to B	120	140	20	16.3%	383	416	33	8.5%
	C to D	36	40	4	12.0%	25	30	5	21.6%
	D to A	178	193	15	8.4%	363	462	99	27.3%
	D to B	636	690	54	8.4%	1,180	1,502	322	27.3%
	D to C	357	387	30	8.4%	214	272	58	27.3%
	Total	**5,095**	**5,473**	**378**	**7.4%**	**5,027**	**5,944**	**917**	**18.2%**

Table 6-65:Supporting Assessment 2 R132/Corballis Road South Junction Turning Movements Comparison (Vehicles)



Movement	AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
	2025 Current Operation	2029 Proposed Operation	Difference		2025 Current Operation	2029 Proposed Operation	Difference	
			Actual	%			Actual	%
A to B	256	185	-71	-27.7%	183	244	61	33.1%
A to C	1,133	1,208	75	6.7%	527	562	35	6.7%
A to D	143	160	17	12.0%	56	68	12	21.6%
B to A	61	83	22	36.3%	66	81	15	23.3%
B to C	30	41	11	36.3%	106	131	25	23.3%
B to D	91	102	11	12.0%	131	159	28	21.6%
C to A	263	281	18	6.7%	471	502	31	6.7%
C to B	52	38	-14	-27.7%	71	95	24	33.1%
C to D	436	488	52	12.0%	600	730	130	21.6%
D to A	36	39	3	8.4%	156	199	43	27.3%
D to B	73	79	6	8.4%	82	104	22	27.3%
D to C	157	170	13	8.4%	322	410	88	27.3%
Total	**2,731**	**2,875**	**144**	**5.3%**	**2,771**	**3,285**	**514**	**18.5%**

Table 6-66:Supporting Assessment 2 Naul Road/Castlemoate Road Junction Turning Movements Comparison (Vehicles)

Movement		AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
		2025 Current Operation	2029 Proposed Operation	Difference		2025 Current Operation	2029 Proposed Operation	Difference	
				Actual	%			Actual	%
	A to B	192	215	23	12.0%	28	34	6	21.6%
	A to C	505	539	34	6.7%	920	981	61	6.7%
	B to A	36	39	3	8.4%	90	115	25	27.3%
	B to C	79	86	7	8.4%	238	303	65	27.3%
	C to A	591	630	39	6.7%	457	487	30	6.7%
	C to B	179	200	21	12.0%	50	61	11	21.6%
	Total	**1,582**	**1,709**	**127**	8.0%	**1,783**	**1,981**	**198**	11.1%

Junction Performance

6.12.39 Table 6-67 summarises and compares the results of the LinSig analysis of the Airport Roundabout and R132/Corballis Road South junction for the 2029 Proposed Operation with the 2025 Current Operation. The results indicate that PRC is forecast to reduce and queuing to increase at both locations in 2029 with the 2029 Proposed Operation, relative to the 2025 Current Operation.

Table 6-67: Supporting Assessment 2 LinSig Results Comparison

Junction	AM Peak (08:00- 09:00)				PM Peak (17:00- 18:00)			
	2025 Current Operation		2029 Proposed Operation		2025 Current Operation		2029 Proposed Operation	
	PRC	Max. Queue Length	PRC	Max. Queue Length	PRC	Max. Queue Length	PRC	Max. Queue Length
Airport Roundabout	-23.5%	31.2	-175.7%	280.7	-21.1%	56.9	-261.4%	392.0
R132/Corballis Road South	-9.6%	19.0	-22.8%	65.2	-4.5%	12.2	-4.0%	21.8

6.12.40 The results of the LinSig analysis illustrate the impact of the increase in background traffic and airport-related traffic, but also the change from the existing roundabout and junction layouts to the BusConnects layouts. As with the Principal Assessment, the LinSig analysis does not capture other potential impacts of the BusConnects scheme such as modal shift and the re-assignment of background traffic and so it presents a worst-case scenario.

Summary

6.12.41 Supporting Assessment 2 demonstrates the change in surface access conditions between the 2025 Current Operation and the 2029 Proposed Operation. Overall daily airport-generated traffic is forecast to increase relatively modestly, by approximately 2%. However, the different flight schedule and associated profile of surface access demand result in greater increases during the peak periods, with airport-generated traffic increasing by approximately 8% in the AM peak and 21% in the PM peak.

6.12.42 These changes in airport-generated demand, together with forecast background traffic growth, result in increased traffic flows across the surrounding road network. The greatest changes are generally forecast during the PM peak, when a number of directional link flows increase by more than 10%. Some of these percentage increases reflect relatively low existing traffic flows, although larger absolute increases are also forecast on parts of the network.

6.12.43 Junction modelling indicates a deterioration in network performance between the 2025 Current Operation and the 2029 Proposed Operation, with reduced practical reserve capacity and increased queuing forecast at both the Airport Roundabout and the R132/Corballis Road South junction. These results reflect the combined effects of changes in airport-related traffic, background traffic and the future transport network, including the BusConnects layout. The modelling does not take account of potential demand-reducing effects associated with BusConnects, including modal shift to public transport and the reassignment of background traffic to alternative routes. It therefore provides a reasonable worst-case assessment of junction performance by assuming the forecast traffic growth and network changes without taking credit for those potential reductions in traffic demand.

6.12.44 Supporting Assessment 2 therefore provides context for understanding the scale and nature of the change in surface access conditions from the 2025 Current Operation to the 2029 Proposed Operation. As the comparison also incorporates changes in background traffic and transport infrastructure between 2025 and 2029, the changes identified cannot be attributed solely to the Proposed Order. The significance of effects attributable to the Proposed Order is determined through the Principal Assessment, which compares the 2029 Permitted Operation and 2029 Proposed Operation under common future receiving environment conditions.

Supporting Assessment 3: Current Operation (2025, 36.4 mppa) vs Permitted Operation (2029, 32 mppa)

6.12.45 This assessment has been undertaken to provide context on the operational change between current airport operations (2025) and the future permitted airport operation (2029) if the Proposed Order is not made.

Airport Demand

6.12.46 Table 6-68 summarises the outputs from the airport demand model and shows the overall daily traffic generated by the airport, as well as the AM and PM peak values, for the 2025 Current Operation and 2029 Permitted Operation. The table indicates that, while the 24-hour total and AM peak volume of airport-generated traffic reduces as expected (11% and 9% reduction), the PM peak volume actually increases (14%). This is due to differences in how flights are scheduled throughout the day between Schedule 2 and Schedule 4.

Table 6-68: Supporting Assessment 3 Airport-Generated Traffic (Vehicles) Comparison

	2025 Current Operation	2029 Permitted Operation	Difference	
			Actual	%
24-Hour Total	74,065	66,216	-7,849	-11%
AM Peak	4,166	3,772	-393	-9%
PM Peak	4,484	5,130	646	14%

External Roads

6.12.47 Table 6-69 outlines the peak hour traffic flows on the road network within the assessment area and compares the 2025 Current Operation flows with the equivalent 2029 Permitted Operation flows. Plate 6-20 illustrates the locations referenced. Directional flows with a percentage change up to and including 5% are highlighted green, those with a change between 5% and 10% are highlighted yellow, while those 10% and higher are highlighted orange. The results of the comparison are discussed below.

6.12.48 In the AM peak, most links show either a decrease in traffic flows, where airport traffic makes up a significant proportion of overall link flow, or a slight increase where background traffic growth is greater than the reduction in airport-related demand. The exception is the R108 north of Ballymun Interchange northbound (directional flow J) which shows an increase greater than 10%, due to the redistribution of some staff demand as a result of the Staff South car park.

6.12.49 The increase in overall airport demand in the PM peak is reflected in the general increase in link flows, the majority of which are less than 10%. For links with increases greater than 10%, such as on the R132 (directional flows D, E and F), the Old Airport Road (H) and R108 North of Ballymun Interchange (I and J), the resultant 2029 Permitted Operation flows are still within the typical capacities for a regional road.

6.12.50 Similarly, despite the increase, the 2029 Permitted Operation flows on the M1 Link (directional flows S and T) are still within the typical capacities of the road type (3 lane dual carriageway).

Plate 6-20: Directional Flows on Transport Network

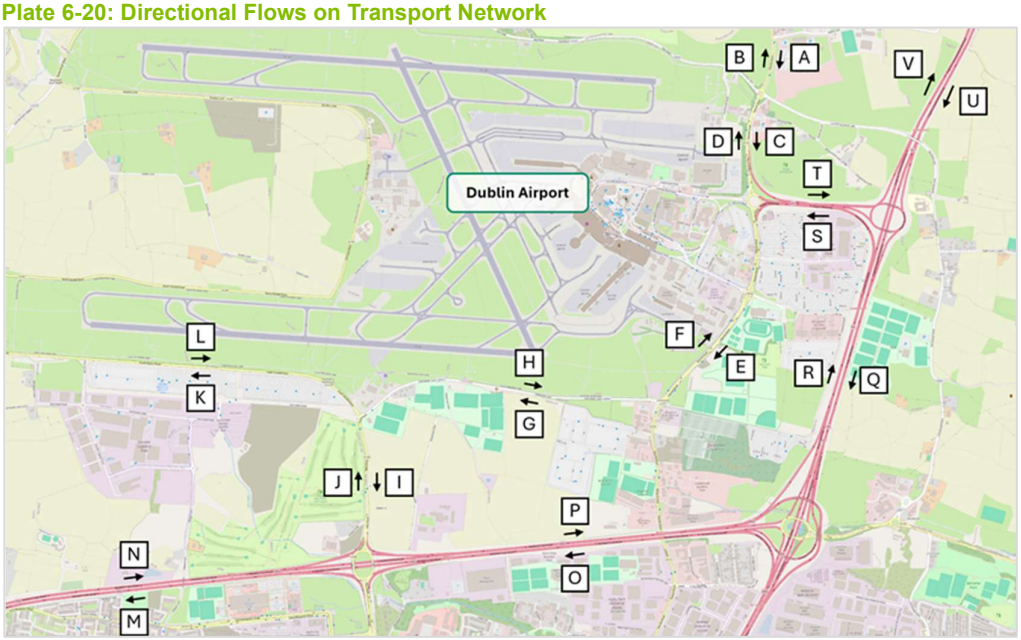


Table 6-69: Supporting Assessment 3 Traffic Flows (Vehicles) Comparison

Directional Flow	AM Peak (08:00 – 09:00)				PM Peak (17:00 – 18:00)			
	2025 Current Operation	2029 Permitted Operation	Difference		2025 Current Operation	2029 Permitted Operation	Difference	
			Actual	%			Actual	%
A	1,133	1,179	46	4.1%	946	1,023	76	8.1%
B	607	626	19	3.2%	857	941	84	9.8%
C	1,065	1,089	24	2.2%	844	922	78	9.3%
D	687	693	6	0.8%	1,124	1,256	132	11.7%
E	1,399	1,392	-6	-0.5%	952	1,054	102	10.7%
F	749	667	-83	-11.0%	1,015	1,131	116	11.4%
G	508	475	-33	-6.4%	653	684	31	4.7%
H	695	640	-55	-7.9%	585	681	96	16.5%
I	466	455	-10	-2.3%	817	976	159	19.4%
J	785	876	91	11.5%	585	687	102	17.4%
K	252	248	-4	-1.7%	278	306	28	9.9%
L	397	407	10	2.6%	234	263	30	12.6%
M	3,812	3,952	140	3.7%	5,033	5,448	415	8.2%
N	5,786	6,030	244	4.2%	5,422	5,864	442	8.2%
O	3,719	3,957	238	6.4%	4,054	4,394	340	8.4%

Directional Flow	AM Peak (08:00 – 09:00)				PM Peak (17:00 – 18:00)			
	2025 Current Operation	2029 Permitted Operation	Difference		2025 Current Operation	2029 Permitted Operation	Difference	
			Actual	%			Actual	%
P	4,732	4,949	217	4.6%	5,202	5,639	437	8.4%
Q	4,397	4,607	210	4.8%	4,088	4,403	315	7.7%
R	4,582	4,693	111	2.4%	5,627	6,055	428	7.6%
S	2,559	2,462	-97	-3.8%	1,533	1,720	187	12.2%
T	1,230	1,190	-40	-3.2%	2,020	2,238	218	10.8%
U	4,287	4,499	212	4.9%	3,139	3,380	241	7.7%
V	3,327	3,510	183	5.5%	5,246	5,637	391	7.5%

Junction Turning Movements

6.12.51 This section outlines the peak hour turning movements at the three airport entrance junctions and compare the 2029 Permitted Operation flows with the equivalent 2025 Current Operation flows. The same highlighting as above is used to illustrate the percentage changes, i.e. green for up to 5%, yellow for 5% to 10% and orange for 10% and above. The results of the comparison are discussed below.

Airport Roundabout

6.12.52 Table 6-70 indicates that the overall volume of traffic through the Airport Roundabout decreases by approximately 190 vehicles (4%) in the AM peak and increases by approximately 700 vehicles (14%) in the PM peak, reflecting the increase in overall airport demand in the PM peak.

6.12.53 All changes in the AM peak are less than 10%.

6.12.54 Most increases greater than 10% in the PM peak are due to relatively low 2025 Current Operation turning movements, including:

- R132 North to the M1 Link (movement A to D)
- The M1 Link to R132 South (B to C)
- R132 South to Corballis Road North (C to D)
- Corballis Road North to R132 North and South (D to A and C, respectively)

6.12.55 However, the east-west movements between the M1 Link and Corballis Road North (B to D and D to B) exhibit significant increases.

R132/Corballis South Junction

6.12.56 Table 6-71 indicates that the overall volume of traffic through the junction decreases by approximately 75 vehicles (3%) in the AM peak and increases by approximately 410 vehicles (15%) in the PM peak. Increases greater than 10% are due to relatively low 2025 Current Operation turning movements, however, and include:

- R132 North to Eastlands and Corballis Road South (movements A to B and D, respectively) in the PM peak
- All movements from Eastlands (B to A, C and D) in the PM peak
- All movements from R132 South (C to A, B and D) in the PM peak
- All movements from Corballis Road South (D to A, B and C) in the PM peak

Naul Road/Castlemoate Road Junction

6.12.57 Table 6-72 indicates that the overall volume of traffic through the junction decreases by approximately 40 vehicles (3%) in the AM peak and increases by approximately 165 vehicles (9%) in the PM peak. Any individual movements with increases greater than 10% are due to the relatively low flows at this junction, and include:

- Naul Road East and West to Castlemoate Road (movements A to B and C to B, respectively) in the PM peak
- All movements from Castlemoate Road (B to A and B to C) in the PM peak

Table 6-70: Supporting Assessment 3 Airport Roundabout Turning Movements Comparison (Vehicles)

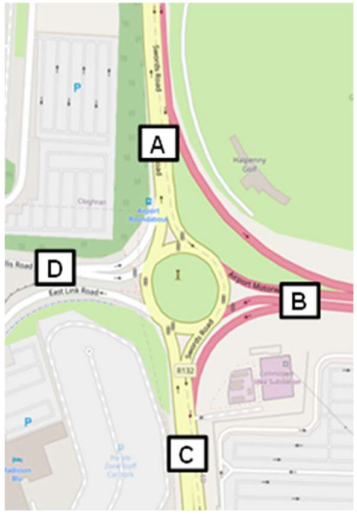
Movement		AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
		2025 Current Operation	2029 Permitted Operation	Difference		2025 Current Operation	2029 Permitted Operation	Difference	
				Actual	%			Actual	%
	A to B	323	345	22	6.7%	380	405	25	6.7%
	A to C	524	537	13	2.5%	333	364	31	9.4%
	A to D	224	214	-10	-4.6%	169	194	25	14.7%
	B to A	313	334	21	6.7%	409	436	27	6.7%
	B to C	814	780	-34	-4.2%	255	309	54	21.3%
	B to D	1,377	1314	-63	-4.6%	873	1001	128	14.7%
	C to A	193	207	14	7.1%	443	477	34	7.7%
	C to B	120	129	9	7.9%	383	417	34	8.8%
	C to D	36	34	-2	-4.6%	25	29	4	14.7%
	D to A	178	154	-24	-13.6%	363	432	69	18.9%
	D to B	636	549	-87	-13.6%	1,180	1403	223	18.9%
	D to C	357	308	-49	-13.6%	214	255	41	18.9%
	Total	**5,095**	**4,906**	**-189**	**-3.7%**	**5,027**	**5,722**	**695**	**13.8%**

Table 6-71: Supporting Assessment 3 R132/Corballis Road South Junction Turning Movements Comparison (Vehicles)

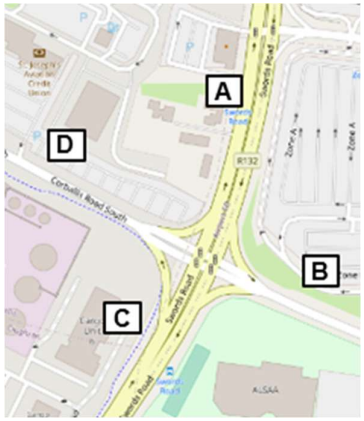
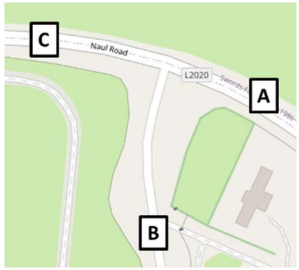
Movement		AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
		2025 Current Operation	2029 Permitted Operation	Difference		2025 Current Operation	2029 Permitted Operation	Difference	
				Actual	%			Actual	%
	A to B	256	163	-93	-36.3%	183	242	59	32.0%
	A to C	1,133	1,208	75	6.7%	527	562	35	6.7%
	A to D	143	136	-7	-4.6%	56	64	8	14.7%
	B to A	61	67	6	10.4%	66	83	17	26.4%
	B to C	30	33	3	10.4%	106	134	28	26.4%
	B to D	91	87	-4	-4.6%	131	150	19	14.7%
	C to A	263	281	18	6.7%	471	502	31	6.7%
	C to B	52	33	-19	-36.3%	71	94	23	32.0%
	C to D	436	416	-20	-4.6%	600	688	88	14.7%
	D to A	36	31	-5	-13.6%	156	186	30	18.9%
	D to B	73	63	-10	-13.6%	82	98	16	18.9%
	D to C	157	136	-21	-13.6%	322	383	61	18.9%
	Total	**2,731**	**2,655**	**-76**	**-2.8%**	**2,771**	**3,186**	**415**	**15.0%**

Table 6-72: Supporting Assessment 3 Naul Road/Castlemoate Road Junction Turning Movements Comparison (Vehicles)

Movement		AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
		2025 Current Operation	2029 Permitted Operation	Difference		2025 Current Operation	2029 Permitted Operation	Difference	
				Actual	%			Actual	%
	A to B	192	183	-9	-4.6%	28	32	4	14.7%
	A to C	505	539	34	6.7%	920	981	61	6.7%
	B to A	36	31	-5	-13.6%	90	107	17	18.9%
	B to C	79	68	-11	-13.6%	238	283	45	18.9%
	C to A	591	630	39	6.7%	457	487	30	6.7%
	C to B	179	171	-8	-4.6%	50	57	7	14.7%
	Total	**1,582**	**1,622**	**40**	2.6%	**1,783**	**1,948**	**165**	**9.3%**

6.12.58 Table 6-73 summarises and compares the results of the LinSig analysis of the Airport Roundabout and R132/Corballis Road South junction for the 2029 Proposed Operation and the 2025 Current Operation. The results indicate that PRC is forecast to reduce and queuing to increase at the Airport Roundabout in 2029 with the 2029 Permitted Operation, relative to the 2025 Current Operation. A similar but less-pronounced impact is forecast at the R132/Corballis Road South, but only in the PM peak.

Table 6-73: Supporting Assessment 3 LinSig Results Comparison

Junction	AM Peak (08:00- 09:00)				PM Peak (17:00- 18:00)			
	2025 Current Operation		2029 Permitted Operation		2025 Current Operation		2029 Permitted Operation	
	PRC	Max. Queue Length	PRC	Max. Queue Length	PRC	Max. Queue Length	PRC	Max. Queue Length
Airport Roundabout	-23.5%	31.2	-137.2%	212.0	-21.1%	56.9	-236.9%	353.9
R132/Corballis Road South	-14.5%	45.4	-14.0%	43.4	39.1%	11.1	-2.8%	20.2

6.12.59 Despite the decrease in airport-related traffic with the 2029 Permitted Operation, relative to the 2025 Current Operation, the PRC at the Airport Roundabout decreases and MMQ increases. This illustrates the impact of the change from the existing Airport Roundabout layout to the BusConnects layout and puts into context the decreased PRC and increased MMQs when the 2029 Permitted and Proposed Operation were compared in the Principal Assessment.

6.12.60 As with the Principal Assessment, the LinSig analysis does not account for potential demand-reducing effects associated with the BusConnects scheme, including modal shift to public transport and the reassignment of background traffic to alternative routes. It therefore provides a reasonable worst-case assessment of junction performance by assuming the forecast traffic and network changes without taking credit for those potential reductions in traffic demand.

Summary

6.12.61 Supporting Assessment 3 demonstrates the change in surface access conditions between the 2025 Current Operation and the 2029 Permitted Operation. Overall daily airport-generated traffic is forecast to reduce, reflecting the reduction in passenger throughput from 36.4 mppa to the permitted 32.0 mppa. This reduction is not uniform throughout the day, however. As a consequence of differences in the flight schedules and associated profile of surface access demand, airport-generated traffic is forecast to increase during the PM peak despite the reduction in overall daily demand.

6.12.62 Changes in traffic flows across the surrounding road network similarly vary by location, direction and time of day. In particular, the combination of the different temporal profile of airport-related demand and forecast background traffic growth means that reductions in airport passenger throughput do not necessarily translate into reductions in traffic flows across all parts of the network or during both peak periods. This is reflected at the Airport Roundabout, where total traffic is forecast to reduce by approximately 4% in the AM peak but increase by approximately 14% in the PM peak between the 2025 Current Operation and 2029 Permitted Operation.

6.12.63 Supporting Assessment 3 therefore demonstrates that a return from current passenger throughput to the permitted 32.0 mppa would not simply result in a uniform reduction in surface access demand or improved network conditions. The comparison incorporates changes in flight schedules, background traffic and transport infrastructure between 2025 and 2029 and provides context for understanding how surface access conditions would change from the 2025 Current Operation in the absence of the Proposed Order. The environmental effects attributable to the Proposed Order itself are determined through the Principal Assessment.

6.13 Conclusions

6.13.1 This chapter assesses the potential effects of the Proposed Order on surface access to Dublin Airport, including active travel infrastructure, public transport infrastructure and services, airport bus facilities and general traffic on the surrounding road network.

6.13.2 The Current Receiving Environment was established principally from comprehensive traffic and transport surveys undertaken in 2025. The assessment identifies existing constraints within the surrounding road network, with the Airport Roundabout and R132/Corballis Road South junction experiencing congestion and operating above theoretical capacity during parts of the peak periods. The assessment therefore considers the Proposed Order in the context of an existing surface access network which is already subject to pressure at particular locations and times.

6.13.3 Future surface access demand was forecast using a bespoke airport demand spreadsheet model, calibrated and validated against the 2025 Current Operation and informed by the flight schedules associated with each operational condition. The 2029 future conditions also incorporate planned and committed changes to transport infrastructure and services, including BusConnects, the Swords to City Centre Core Bus Corridor, the Dublin Airport Landside Transformation Programme and Staff South Car Park.

6.13.4 The Principal Assessment compares the 2029 Permitted Operation (32 mppa) with the 2029 Proposed Operation (40.0 mppa), thereby assessing the effects attributable to the Proposed Order under common future receiving environment conditions. The assessment identifies no significant effects on active travel infrastructure or public transport infrastructure. However, in the absence of mitigation, significant negative effects were identified in relation to the capacity of airport bus services and general traffic during peak periods, particularly at the Airport Roundabout.

6.13.5 For airport bus services, forecast demand associated with the 2029 Proposed Operation would exceed the available capacity of a number of planned bus services. Further analysis undertaken to develop the required mitigation identified that an uplift of approximately 8% in daily bus services above the planned and committed provision would be required to accommodate forecast demand. The additional services required can be accommodated within the existing GTC, T1 kerbs and Coach Park through operational measures, including optimisation and management of dwell times and active management of pedestrian movements. No significant new bus infrastructure is required. The residual effect on public transport users is assessed as slight negative and not significant.

6.13.6 The 2029 Proposed Operation would also increase airport-related vehicle movements on the surrounding road network. While changes across much of the network are relatively limited, the Principal Assessment identifies increased queuing and delay at particular locations during the peak periods, with the most notable effect occurring at the Airport Roundabout. In the absence of mitigation, this results in a significant negative effect on general traffic.

6.13.7 Further analysis identified the reduction in peak-period car travel by daa staff car required to mitigate this effect. A package of demand management measures targeted at staff travel will therefore be implemented, including improvements to active travel facilities (including improvements to existing cycle parking, showers etc), modal shift incentives, changes to staff parking charges and the promotion of staggered working arrangements. The Monitoring Framework, which was developed from previous stakeholder engagement with the Dublin Airport Surface Access Stakeholder Group, will provide for ongoing monitoring of staff and passenger travel patterns and enable the measures to be reviewed and adapted where necessary. With mitigation in place, the effect of the Proposed Order on general traffic during the peak periods is assessed as not significant.

6.13.8 Three Supporting Assessments have also been undertaken to provide additional context for the Principal Assessment. Supporting Assessment 1 considers the overall change between the 2023 Baseline Operation (32 mppa) and 2029 Proposed Operation (40 mppa), while Supporting Assessment 2 considers the change between the 2025 Current Operation (36.4 mppa) and 2029 Proposed Operation. These assessments demonstrate the wider changes in surface access demand and network conditions that would occur between the historic or existing permitted conditions and the 2029 Proposed Operation. The comparisons incorporate changes in background traffic, transport infrastructure and services and, where applicable, differences in flight schedules, and therefore do not represent effects attributable solely to the Proposed Order.

6.13.9 Supporting Assessment 3 compares the 2025 Current Operation (36.4 mppa) with the 2029 Permitted Operation (32 mppa) and demonstrates that surface access conditions would change between 2025 and 2029 even in the absence of the Proposed Order. In particular, the reduction in annual passenger throughput does not result in a uniform reduction in traffic demand throughout the day, due to differences in flight schedules and the temporal distribution of surface access demand.

6.13.10 Taken together, the Supporting Assessments demonstrate the importance of distinguishing wider changes in surface access conditions over time from the effects attributable specifically to the Proposed Order; the latter are determined through the Principal Assessment.

6.13.11 Overall, the Principal Assessment demonstrates that the additional surface access demand associated with the Proposed Order can be accommodated within the 2029 transport network, subject to implementation of the mitigation and monitoring measures identified in this chapter. Although significant negative effects are identified for airport bus services and general traffic in the absence of mitigation, the measures identified through the assessment reduce these effects such that no significant residual traffic and transport effects are predicted.

6.13.12 The proposed mitigation measures for airport bus services and general traffic are specific, robust, proportionate, relevant and within daa's control to implement. Measures proposed through consultation or third-party submissions that fall outside the scope of the Proposed Order, are not within daa's control to implement, or would require separate statutory consent or regulatory processes, have not been considered as mitigation and cannot be relied upon as mitigation for the purposes of this assessment.