Appendix 6-1: Dublin Airport Surface Access Monitoring Framework

Dublin Airport Surface Access Monitoring Framework

Dublin Airport Authority (daa)

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Delivering a better world

Quality information

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Executive Summary

The Dublin Airport Surface Access Monitoring Framework has been developed to oversee operating performance of the transport network surrounding Dublin Airport as the airport grows. This first version of the framework, which is proposed to be managed through a collaborative arrangement between all key stakeholders for Dublin Airport access, is proposed as the basis for initial discussions and further development.

The Monitoring Framework proposes an alternative use of a passenger cap as a means of determining transport network conditions, as imposed by the 2007 Terminal 2 Planning Conditions, with a more structured, robust, multi-modal and live transport monitoring framework. The objectives of the framework are to:

- Ensure a sustainable approach to airport passenger and staff growth by minimising car-based travel;
- Ensure transparency in the identification and assessment of transport issues around the airport;
- Foster collaboration with key stakeholders in assessing and responding to identified transport issues; and
- Propose and agree a series of measurable Key Performance Indicators (KPIs) and thresholds, beyond which, a response will be required either from the key stakeholders to mitigate impacts on the transport network.

To achieve these objectives, two tiers of transport monitoring indicators are proposed, as follows:

- Primary indicators for car mode share and vehicular movement will be the main indicators of performance on the transport network around the airport and if exceeded, trigger the requirement for mitigating action. Primary indicators are shown in **Table 1.1**; and
- Secondary indicators will be used to provide more in-depth evidence of transport network performance. So, for example, where car mode share is increasing, secondary indicators will report on a range of causation factors such as the extent of public transport services, capacity and journey times. The secondary indicators will assist in assigning responsibility for mitigating actions.

Table 1.1: Proposed Primary Surface Access Indicators

Primary Surface Access Indicators		32-40mppa threshold
Passenger car mode share	**Decrease passenger car mode share**	43% to 37%
Staff car mode share	**Decrease staff car mode share**	66% to 53%
Vehicular Movement	**Maximum vehicle movements in the peak hour**	6,800 – 7,650

The monitoring framework identifies a series of interventions which can be brought forward to influence travel demand, in the event that primary indicators are not progressing as forecast. The interventions are prioritised, setting out a process by which additional interventions can be brought forward by stakeholders in the instance of primary surface access indicator exceedance. This includes the requirement to determine the consequences of exceeding the threshold, alongside the requirement to attribute any proposed intervention to the relevant stakeholder or group of stakeholders.

Importantly, the monitoring framework sets out proposals for framework management and the need for close stakeholder engagement to deliver it. It is proposed that the Dublin Airport Surface Access Monitoring Group convenes on a quarterly basis to oversee delivery of the framework and manage delivery of required actions. The Group should include representation from daa, Fingal County Council (FCC), the National Transport Authority (NTA) and Transport Infrastructure Ireland (TII), at a minimum.

1. Introduction

1.1 Background

The Dublin Airport Surface Access Monitoring Framework has been developed to oversee operating performance of the transport network surrounding Dublin Airport as the airport grows. This first version of the framework, which is proposed to be managed through a collaborative arrangement between all key stakeholders for Dublin Airport access, is proposed as the basis for initial discussions and further development.

The Monitoring Framework proposes an alternative use of a passenger cap as a means of determining transport network conditions, within a more structured, robust, multi-modal and live transport monitoring framework.

The framework has been developed to reflect the draft objectives for surface access management at Dublin Airport, as follows:

- Improve accessibility and journey times to the airport for all modes;
- Increase the movement of people to and through the airport campus;
- Manage the impact of surface access to the airport on the strategic road network;
- Reduce carbon emissions resulting from surface access to the airport;
- Bring forward practical and deliverable improvement measures;
- Support greater interchange between car-based travel and sustainable modes;
- Ensure planned/committed improvement schemes are complemented; and
- Agree a strategy for the provision and management of car parking.

1.2 Monitoring Framework Purpose and Objectives

The purpose of the Dublin Airport Surface Access Monitoring Framework is to provide a structured and transparent approach to analysing trends in transport demand to and from the airport, its impacts over time and to provide an early warning of emerging transport issues. The framework will be used by stakeholders to ensure a prompt response where mitigation actions on the transport network are required. Ultimately, the framework aims to ensure that car-based travel remains within the transport targets for Dublin Airport. The objectives of the monitoring framework are as follows:

- Ensure a sustainable approach to airport passenger and staff growth by minimising car-based travel;
- Ensure transparency in the identification and assessment of transport issues around the airport;
- Foster collaboration with key stakeholders in assessing and responding to identified transport issues; and
- Propose and agree a series of measurable Key Performance Indicators (KPIs) and thresholds, beyond which, a response will be required to mitigate impacts on the transport network.

1.3 Governance and Reporting Approach

Four key stakeholders will share responsibility for management and delivery of the Monitoring Framework, as follows:

- **Dublin Airport Authority (daa):** daa own and manage Dublin Airport with a core purpose to connect Ireland with the world and be an airport industry leader. It is a semi-state organisation, commercially run and self-financing. Maintaining excellent access to Dublin Airport for passengers and staff is a critical objective for daa who have a role in influencing passenger and staff travel choice, provision of on-campus infrastructure to support public transport and active travel, provision of car parking and travel information;

- **Fingal County Council (FCC):** The airport campus is located within the FCC area and as such the Council has a responsibility to ensure that any proposed development and / or infrastructure is delivered in accordance with local policy requirements. The local authority also has responsibility for most infrastructure on local and regional roads surrounding the airport;
- **National Transport Authority (NTA):** The NTA is responsible for developing and implementing strategies to provide high quality, accessible and sustainable transport across Ireland and has specific responsibility for strategic transport planning in the Greater Dublin Area. The NTA plans, procures and oversees public transport, ensuring that vital bus and rail services are available to communities. The NTA also works with other authorities throughout Ireland to deliver active travel infrastructure that facilitates cycling, walking and wheelchair use; and
- **Transport Infrastructure Ireland (TII):** TII has a remit for light rail and metro infrastructure and is the Approving Authority for greenways on behalf of the Department of Transport. TII is the approving authority for national road projects and works in partnership with local authorities, which are the road authorities for all roads, including national roads.

Section 4 of this monitoring framework sets out the intended management approach to the framework among the identified stakeholders.

2. Monitoring Framework

2.1 Overview

The Dublin Airport Surface Access Monitoring Framework has been developed using the widely accepted logic mapping approach to identifying the causal link between the draft objectives and intended surface access outcomes. The maps were used as the basis for identifying appropriate KPIs as well as potential data sources for monitoring.

The Surface Access Monitoring Framework proposes the following two types of indicator, for regular monitoring:

- Primary indicators for car mode share and vehicular movement will be the main indicators of performance on the transport network around the airport. If agreed thresholds for these indicators are exceeded, it should trigger the requirement for action from stakeholders; and
- Secondary indicators will be used to provide more in-depth evidence of transport network performance. These indicators will be used to attribute causation for any exceedances in primary indicator thresholds. So, for example, where car mode share is increasing, secondary indicators will report on a range of causation factors such as the extent of public transport services provided, capacity and journey times. Secondary indicators will assist in assigning responsibility for delivery of mitigating actions.

All proposed monitoring is set out in **Table 2.1** and **Table 2.2**, including the proposed indicator, assessment regularity and data collection method. The responsible stakeholder for each indicator is also outlined, this stakeholder will have primary responsibility for delivery of mitigation action in the event of an exceedance of thresholds.

A review of the proposed indicators and thresholds should be undertaken every two years by stakeholders, to ensure they continue to align with the evolving transport context and passenger growth.

2.2 Primary Surface Access Indicators and Thresholds

Thresholds are proposed for three primary indicators which will demonstrate whether performance of the transport network is as forecast. Thresholds are proposed for the following three primary indicators, which if exceeded, will require mitigation:

- Airport passenger car mode share;
- Airport staff car mode share; and
- Vehicular movements at designated airport access points.

Threshold levels for these indicators have been developed, such that a trajectory can be determined through data collection to understand transport conditions relative to passenger numbers.

Each of the proposed thresholds are outlined in more detail in the following sections.

Table 2.1 Primary Surface Access Indicators

Monitoring Focus		Thresholds (32-40mppa)	Assessment Regularity (timing to be confirmed)	Data collection method	Baseline Data Available	Alignment with Proposed Objectives	Responsibility
Primary Surface Access Indicators							
Passenger car mode share	**Decrease passenger car mode share**	43% to 37%	Annually	Annual passenger survey (Insights Team)	✓	1. 3. 4. 6. 8.	daa
Staff car mode share	**Decrease staff car mode share**	66% to 53%	Annually	Annual staff survey (Insights Team)	✓	1. 3. 4. 6. 8.	daa
Vehicular Movement	**Maximum vehicle movements in the peak hour**	5,800 – 6,500	Continuous	Continuous monitoring	✓	1. 3. 4. 8.	daa

Proposed Dublin Airport Surface Access Strategy Objectives

1. Improve accessibility and journey times to the airport for all modes
2. Increase the movement of people to and through the airport campus
3. Manage the impact of surface access to the airport on the strategic road network
4. Reduce carbon emissions resulting from surface access to the airport
5. Bring forward practical and deliverable improvement measures
6. Support greater interchange between car-based travel and sustainable modes
7. Ensure planned / committed improvement schemes are complemented
8. Agree a strategy for the provision and management of car parking

2.2.1 Passenger and Staff Car Mode Share Threshold

Figure 2.1 outlines the existing and forecast 40mppa total daily passenger two-way person trips to and from the airport. Achieving the 40mppa car mode share of 37% will necessitate almost 20,000 more public transport trips to and from the airport per day, with a little over 1,000 additional car trips.

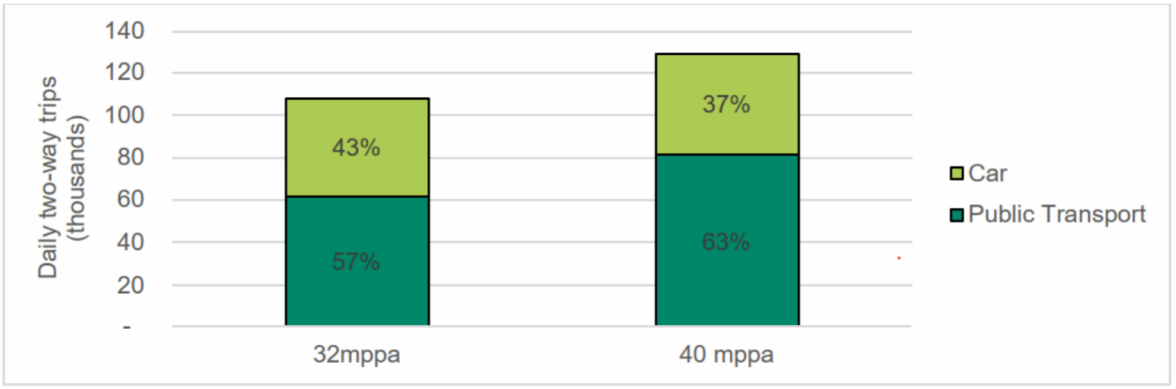


Figure 2.1 Airport PAX Two Way Trips to Airport for Existing and Forecast 40mppa Mode Share

Figure 2.2 outlines the existing (32mppa) and forecast 40mppa target daily staff two-way person trips to and from airport by mode. The target is to reduce car mode share from 66% at 32mppa to 53% at 40mppa. With this, there will be almost 8,000 more public transport trips by employees to and from the airport and 1,700 active travel trips, with almost no change in the number of employees travelling by car.

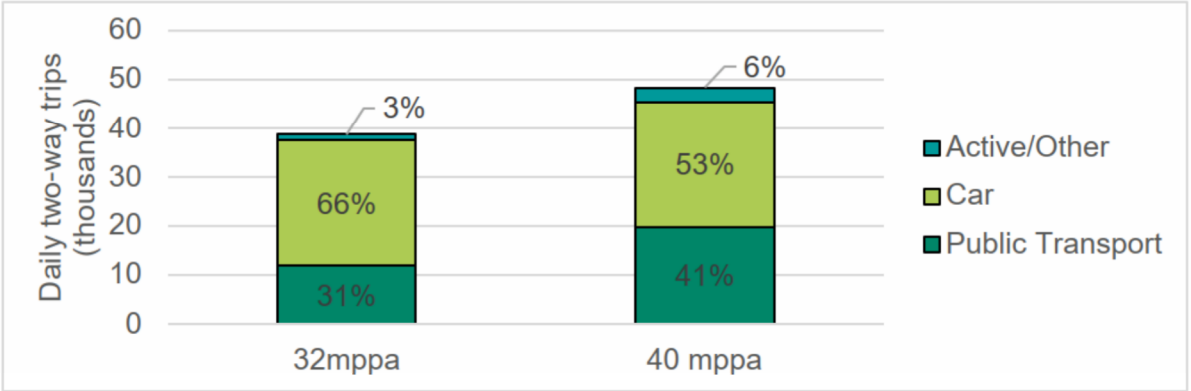


Figure 2.2 Airport Employees Two Way Trips to Airport for Existing and Forecast 40mppa Mode Share

Based on the mode share targets, it is estimated that the growth from the existing 32mppa to 36mppa will generate circa 15,400 additional daily two-way person trips to/from the airport. As shown in **Figure 2.3**, the majority of these trips, approximately 12,950, will be by public transport, with approximately 2,300 additional trips by car.

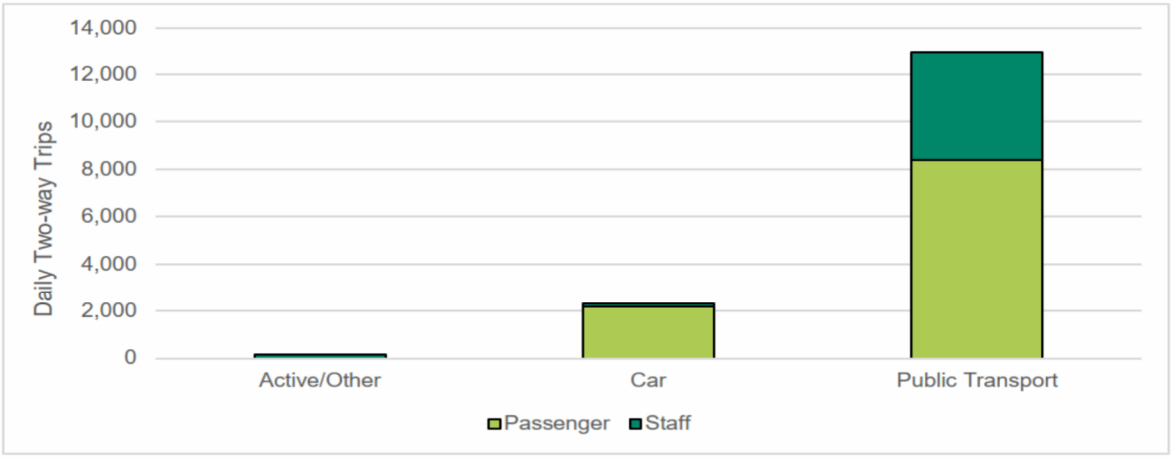


Figure 2.3 Increase in Daily Two-Way Airport Trips from Existing (32mppa) to Interim Forecast Growth Scenario (36mppa)

In summary, the following mode share thresholds are proposed for both growth scenarios outlined in the IA submission:

	32-40mppa
Passenger car mode share threshold	43% to 37%
Staff car mode share threshold	66% to 53%

2.2.2 Vehicular Movement Threshold

A defined threshold for vehicular movements entering and exiting the airport has been developed to monitor the impact of airport growth on the transport network. The Vehicular Movement Threshold (VMT) sets a threshold for traffic movement at the airport junctions, shown in **Figure 2.4**, in the AM peak. The majority of all airport traffic passes through these three junctions which are part of Dublin Airport's Live Traffic Monitoring System. The system, set up in June 2024, monitors data on a 24-hour live basis and will eventually form part of a wider Intelligent Mobility System for the airport campus.

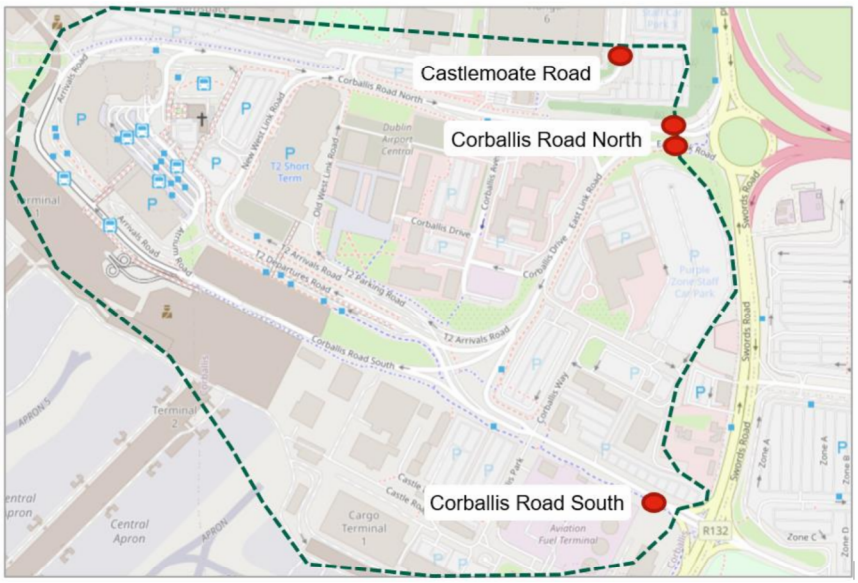


Figure 2.4 Cordon Boundary of Vehicular Movement Threshold (VMT)

The VMT has been developed based on maximum observed movements in Summer 2024 as well as forecast changes in travel demand to/from Dublin Airport, as follows:

- **Planned and Permitted development:** The Dublin Airport Central **(**DAC) Cluster A development is currently under construction and will deliver 742 additional parking spaces within a new multistorey car park. Given the office-based nature of this development, peak access to/from this development will be typically during commuter AM and PM peaks. As DAC is accessed from the airport campus, DAC related committed growth has been included within the threshold. Further development at DAC, including the Cluster B development has not been included in the threshold. Other planned and permitted scheme such as BusConnects will also impact on traffic routing in the vicinity of the Airport, with a small in change in the forecast volumes of traffic routing through the airport.
- **North Runway Relevant Action (NRRA):** The airport flight schedule directly influences the timing of travel demand to and from the airport. The North Runway Relevant Action (NRRA) seeks a change to permitted runway operations, replacing them with a Noise Quota System and amending the hours within which the North Runway (10L/28R) can be used. Approval of the NRRA would mean that 40mppa at the airport would be reached by 2031; alternatively, if the NRRA is not approved, the airport will continue to grow to 40mppa, however this would not be reached until closer to 2034. The NRRA was consented (with some adjustments) by FCC, incorporating the Aircraft Noise Competent Authority (ANCA) Regulatory Decision, in August 2022. The decision is on appeal to ABP. A draft Regulatory Decision was issued by ABP on 16th September 2024, and is subject to consultation until 23rd December 2024. daa intends to make a submission in respect of the draft decision. A final Regulatory Decision is not likely to issue until at least the end of Q1 2025. Considering the potential impact of the NRRA on surface access, development of the VMT considers both scenarios with and without the NRRA.
- **Airport Growth and Mode Share:** As Dublin Airport grows to 40mppa, a key priority for daa is that growth in travel demand is predominantly catered for by non-car modes with minimal impact on the road network. The mode share targets for the airport up to 40mppa propose a 6% reduction in car-based mode share among passengers and 13% reduction among staff (See **Figure 2.5**). To achieve these targets, a range of measures such bus priority, the proposed Integrated Transport Hub and bus service enhancements are proposed. Regardless, due to the increase in both passenger and staff travel demand at 40mppa, there is still expected to be a limited increase in vehicular volumes through the airport in the peak hours which is included in the VMT.

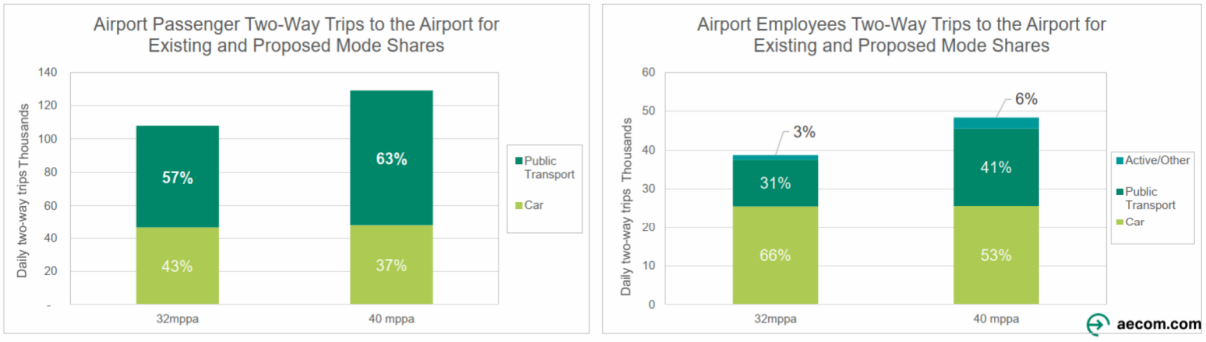


Figure 2.5: Passenger and employee mode share at Dublin Airport at 32 and 40 mppa

Based on the above factors, **Figure 2.6** outlines development of the VMT and a potential range of 5,800-6,500, dependent on the outcome of the NRRA process. The daa will liaise with stakeholders to agree an appropriate VMT over the coming months to ensure it forms an integral part of the wider monitoring framework.

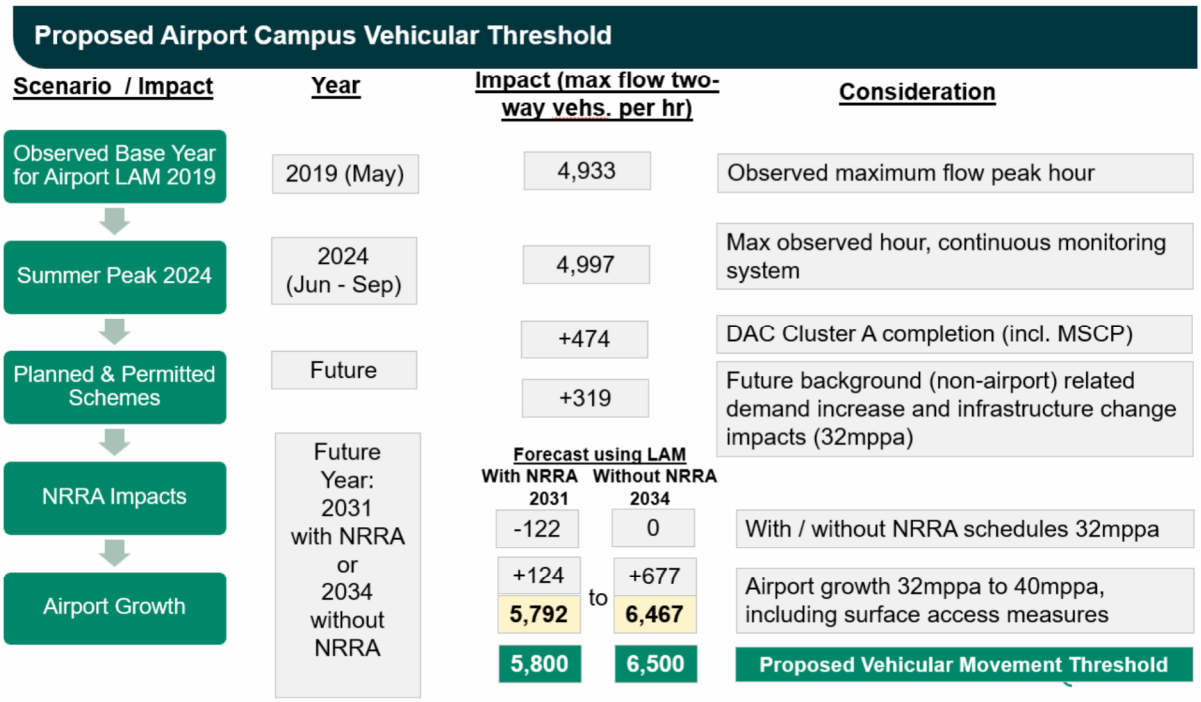


Figure 2.6: Development of Proposed Vehicular Movement Threshold (VMT)

2.3 Secondary Surface Access Indicators and Targets

Secondary indicators have been identified to monitor changes on the transport network in more detail. The indicators mainly focus on public transport and active travel mode share targets, bus service monitoring and observation of strategic traffic movements. The inclusion of these indicators provides more evidence regarding transport conditions and supports an understanding of the wider transport context. The proposed indicators are shown in **Table 2.2**.

Table 2.2: Surface Access Monitoring Framework

Monitoring Focus		Targets (32-40mppa)	Assessment Regularity (timing to be confirmed)	Data collection method	Baseline Data Available	Alignment with Proposed Objectives	Responsibility
Secondary Surface Access Indicators							
Passenger public transport mode share	**Increase passenger public transport mode share**	57% to 63%	Annually	Annual passenger survey (Insights Team)	✓	1. 2. 6.	daa
Staff public transport mode share	**Increase staff public transport mode share**	31% to 41%	Annually	Annual staff survey (Insights Team)	✓	1. 2. 6.	daa
Active travel mode share	**Staff active mode share**	3% to 6%	Annually	Annual staff survey (Insights Team)	✓	1. 2.	daa
Boarding and alighting surveys (demand)	**Number of boarders and alighters at airport bus stops in the peak hour (0800-0900) and (1700-1800)**	TBC via baseline	Annually	Stop survey	To be collected / analysed	1. 2. 6.	NTA
Monitoring of bus journey times within airport campus	**Bus journey time to be comparable, if not improved compared to private car within the airport campus**	TBC via baseline	Annually	Bus journey time survey/extraction of operator data	To be collected / analysed	1. 2. 6.	NTA
	Bus journey time relative to car journey time from start to end of journey	TBC via baseline	Annually	Bus journey time survey/extraction of operator data	To be collected / analysed	1. 2. 6.	NTA
Strategic traffic movements	**Change in quantum of vehicles on key routes in airport proximity**	TBC via baseline	Quarterly	Analysis of permanent counters	To be collected / analysed	1. 2. 3. 4.	daa/TII/FCC
	Distribution of traffic entering the airport	TBC via baseline	Every 5 Years	ANPR Survey	To be collected / analysed	1. 2. 3. 4. 8.	daa/TII/FCC
Bus services	**Number of peak hour (0800-0900) and (1700-1800) services arriving/departing the airport**	TBC via baseline	Quarterly	On site survey	To be collected / analysed	1. 2.	NTA
	Number of services to the airport and key destinations served within 60/120/180 minutes travel time	TBC via baseline	Annually	Accessibility analysis	To be collected / analysed	1. 2.	NTA
	Number/proportion of services arriving/departing on time from the airport	TBC via baseline	Annually	Observed arrival/departure time relative to timetabled services	To be collected / analysed	1. 2.	NTA
	Public transport vehicle queue length surveys on the road network - queues not to exceed a defined point	TBC via baseline	Annually	Queue length monitoring via camera	To be collected / analysed	1	NTA
	Bus journey time relative to timetabled information (reliability), including segmentation by section	TBC via baseline	Annually	Bus journey time survey/extraction of operator data	To be collected / analysed	1. 2. 6.	NTA
Active travel	**Targeted active mode counts**	TBC via baseline	Quarterly	Survey data	To be collected / analysed	1. 2.	daa/FCC
	Cycle parking data	TBC via baseline	Quarterly	Survey data	To be collected / analysed	1. 2.	daa/FCC

Proposed Dublin Airport Surface Access Strategy Objectives

1. Improve accessibility and journey times to the airport for all modes
2. Increase the movement of people to and through the airport campus
3. Manage the impact of surface access to the airport on the strategic road network
4. Reduce carbon emissions resulting from surface access to the airport
5. Bring forward practical and deliverable improvement measures
6. Support greater interchange between car-based travel and sustainable modes
7. Ensure planned / committed improvement schemes are complemented
8. Agree a strategy for the provision and management of car parking

3. Primary Indicator Thresholds

3.1 Overview

Potential for threshold exceedance will be monitored on a regular basis. This will enable the early deployment of mitigating actions should forecasts indicate that a threshold may be reached. Forecast exceedance in the agreed Primary Indicator thresholds will be identified, causation factors will be determined and roles and responsibilities for delivery of mitigating actions will be discussed and agreed.

3.2 Threshold Exceedance

During regular review of the primary surface access indicators, the proposed Primary Surface Access Indicators could be monitored across the following three threshold categories:

- **Green – trajectory in primary indicator data is considered acceptable**

  The Primary Indicator is being met i.e. appropriate increase / decrease in mode shares are being realised and traffic volumes are maintained as expected.

- **Amber – an unacceptable trend is identified in primary indicator data**

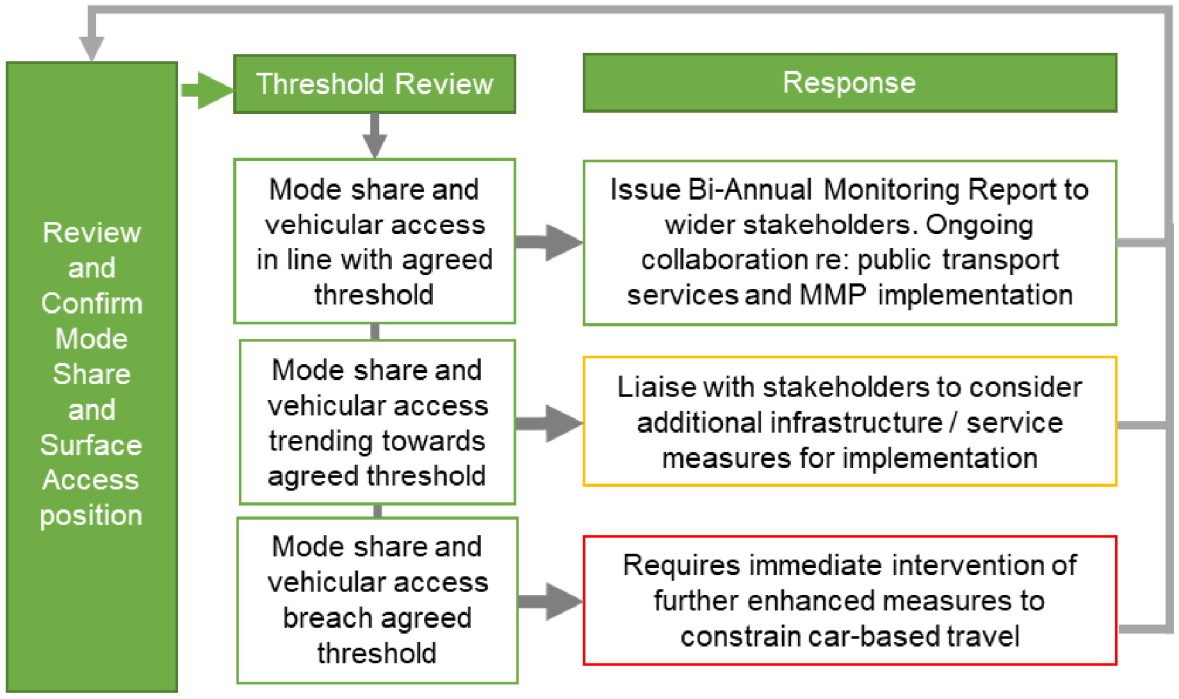
  Where progress towards primary indicators is not as forecast, secondary indicator data should be used to identify potential areas of causation. The data should be used to commence identification of the potential mitigating actions to avoid further erosion of progress towards thresholds.

- **Red – Intervene**

  Where there is evidence that agreed Primary Indicators are within 10% of threshold or have been exceeded, immediate intervention would be required to constrain car-based travel. At this point, it is critical that all stakeholders engage as regularly as needed to ensure the delivery of mitigating actions.

The three threshold categories and intervention logic are shown in **Figure 3.1**.

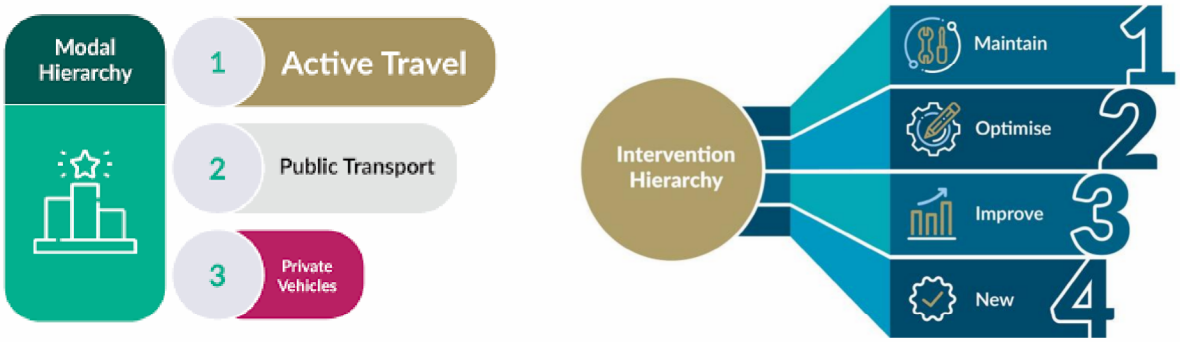
Figure 3.1 Threshold Intervention Logic



3.3 Potential Mitigating Actions

Prompt identification and implementation of mitigating actions will be critical where progress towards Primary Indictor thresholds is categorised as Amber or Red. In determining the appropriate actions to be taken, the principles of the National Investment Framework for Transport in Ireland (NIFTI) in terms of both the modal hierarchy and investment hierarchy (see **Figure 3.2**) should be prioritised.

Figure 3.2 NIFTI Modal and Intervention Hierarchies



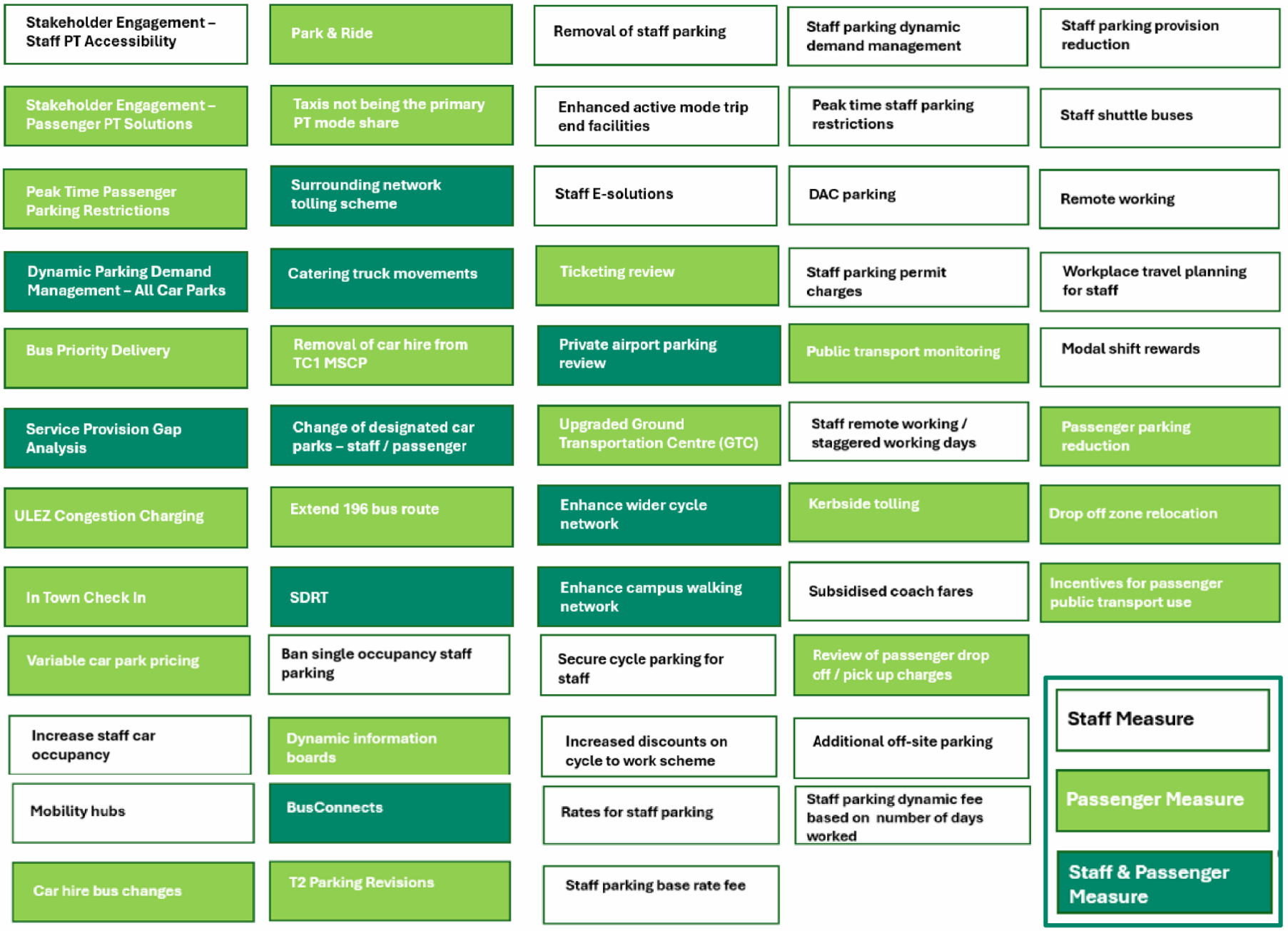
The Dublin Airport Mobility Management Plan (MMP) will be a critical initial resource to identifying potential mitigating actions to address an increase in car mode share. A list of potential demand management actions is included within the MMP, and outlined in Appendix A of this report, which could be implemented to ensure that mode share remains on track across up to 40mppa. The list of potential actions, summarised in **Figures 3.3**, is presented in draft only with additional recommendations welcomed.

The proposed actions have also been considered in terms of priority i.e. how quickly they could be implemented to address a threshold exceedance. The prioritisation has been considered across three categories as summarised in **Table 3.1** with each demand management measure assigned a priority timescale

Table 3.1 Demand Management Measures - Prioritisation Categories

Priority Category	Timescale	Logic
1	**Short Term**	Quick win in terms of delivery / operational change. Immediate response to unacceptable data trends in either growth scenario.
2	**Medium Term**	May require collective delivery from stakeholders. Triggered by poor progression towards mode share threshold and / or need for more significant interventions than short term quick wins.
3	**Long Term**	Delivery of major infrastructure or operational change – largely reliant on multi-party involvement and delivery.

Figure 3.3 Potential Demand Management Measures – 32-40mppa



3.4 Benchmarking

The proposed mitigating actions will be benchmarked against similar schemes delivered elsewhere to inform the decision-making process in relation to appropriate phasing of mitigating actions.

3.5 Attribution

Understanding the likely cause of a threshold exceedance will enable all stakeholders to identify actions to take forward. Attribution can be used to establish the requirement for mitigation and where the associated responsibility for funding and delivery lies.

A number of factors may ultimately determine attribution, which will need to be agreed amongst stakeholders. It will be critical to understand where the causation is arising, for example, why are alternatives to car-based airport trips not attractive. Similarly, there may be obvious attribution related to the responsibilities of each stakeholder. For example, public transport capacity will lie with the NTA and parking measures targeting airport staff travel will sit with daa, as previously outlined in Tables 2.1 and 2.3.

It is recommended that a potential approach to attribution is discussed and agreed among stakeholders following establishment of the Surface Access Monitoring Group.

3.6 Consequences

This monitoring framework sets out the approach to be taken in instances should the car mode share or vehicle thresholds be exceeded. There is also a need to understand the consequences of exceeding the thresholds (beyond the need to intervene and deliver further transport interventions). It is appropriate that the consequences of exceeding the threshold are agreed with all stakeholders, given the potential impact.

Potential threshold exceedance will be reviewed as the airport grows, including tracking airport growth, in the context of a midpoint review point of 36mppa. This approach will enable the early deployment of enhanced measures should forecasts indicate the threshold may be reached, so that control mechanisms can be applied prior to threshold exceedance.

4. Management of the Monitoring Framework

4.1 Management of Monitoring Process

A key component of the monitoring framework is the requirement for robust management. It is proposed that a Dublin Airport Surface Access Monitoring Group is convened to meet quarterly, in order to:

- Review transport and travel trends and indicator status;
- Provide an update on any planned infrastructure or service changes affecting the airport; and
- Determine the need to implement any mitigating measures and associated responsibility.

Each meeting will require representation from each stakeholder to proceed. It is intended that a Surface Access Monitoring Update will be sent to all attendees for consideration in advance of the meeting, acknowledging that some datasets are programmed for annual collection only. Stakeholders will agree upon a meeting schedule on a quarterly basis, which will align with the flight schedule planning requirement.

The following elements, at minimum, should be discussed and agreed by the Monitoring Group:

- Indicators, thresholds and attribution agreed;
- Agree further areas of refinement needed to the monitoring framework;
- Representation on Steering Group;
- Chair and secretariat roles for the group;
- Use of a Collaboration Agreement;
- Clear roles and responsibilities;
- Schedule of meetings; and
- Report templates.

A series of reporting indicators have been put forward as a demonstration of accountability. These are to ensure that monitoring meetings are attended, data is collected, analysed and disseminated and that the monitoring thresholds and targets are reviewed at set timeframes to ensure ongoing suitability.

Following agreement of the scope of the Monitoring Framework, some potential indicators for ongoing management of the framework are as follows:

- Quarterly meetings of the Surface Access Monitoring Group with representation (including deputising where necessary). The meetings should be arranged ahead of flight scheduling decisions to ensure any changes in this regard do not adversely impact thresholds with Amber or Red status;
- A full Monitoring Report will be issued quarterly which summarises all available data including a summary of available live vehicular monitoring data; and
- Indicator coverage and thresholds to be reviewed every two years.

4.2 Management of Data

Data collection proposed as part of this monitoring framework such as queue length, journey time and boarding and alighting surveys may require appointment of third-party sub-contractors. The appointed sub-contractor will be required to hold relevant quality assurance certificates such as ISO-9001 or equivalent. This will give confidence to stakeholders that the Quality Management Systems (QMS) and processes operated by the supplier meets the required standards.

Data collection undertaken should be undertaken in accordance with GDPR regulations and subject to internal QMS processes. Some information gathered may be commercially sensitive in nature and will require controls in relation to how information is stored and disseminated.

The following items should be discussed and agreed:

- How contractors for data collection will be procured;
- Who will manage contractors; and
- Where and how is data stored.

Appendix A Potential Transport Interventions

Long List	Description	Objectives Alignment	Stakeholder Responsibility ✓✓✓Primary (lead); ✓✓Secondary (contributor) ✓Tertiary (support)				Demand Management Category - Main Mode Impacted	Measure Type	Prioritisation
			DAA	FCC	NTA	TII			
Staff parking reduction	Further reduce staff parking provision on campus	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1
Staff shuttle buses	Provide staff shuttle buses from key locations	Landside Demand / Mobility Management	✓✓✓		✓✓		Private Car	Staff	1
Remote working	Scale up where possible	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1
Workplace travel planning for airport staff	Implement personalised travel planning for airport staff to better inform travel choices	Landside Demand / Mobility Management	✓✓✓		✓✓		Private Car	Staff	1
Modal Shift Rewards	Provide increased incentives for staff who switch to sustainable modes	Landside Demand / Mobility Management	✓✓✓		✓		Private Car	Staff	2
Stakeholder engagement re. passenger public transport solutions	Engagement with transport authorities on public transport solutions to accommodate origin/destination demand from passengers	Additional Public Transport Service Provision / Priority Measures	✓✓✓	✓	✓✓✓	✓	Bus	Passenger	2
Passenger parking reduction	Further reduce passenger parking provision on campus	Landside Demand / Mobility Management	✓✓✓				Private Car	Passenger	1
Drop off zone relocation	Relocation of the passenger drop-off zone to discourage car travel	Landside Demand / Mobility Management	✓✓✓	✓✓			Private Car	Passenger	2
Incentives for passenger public transport use	Liaise with operators to provide incentives for passengers arriving by public transport outside peak hours	Landside Demand / Mobility Management	✓✓✓		✓✓✓		Private Car	Passenger	1
Staff parking dynamic demand management	Implement dynamic parking demand management measures for staff - variable tariffs dependent on demand	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1
Peak time staff parking restrictions	Restrict staff access during external commuter peaks	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1
Peak time passenger parking restrictions	Constraints on pre-book passenger parking, with reduced parking availability for car park entry during commuter peaks	Landside Demand / Mobility Management	✓✓✓				Private Car	Passenger	2
Dublin Airport Central (DAC) parking	Restrictions on DAC parking	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1
Staff parking permit charges	Staff parking permit charges for all airport staff, with additional charges for staff entering / leaving car parks during peak hours	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1
Dynamic parking demand management - all car parks	Additional dynamic parking charges to be applied to all car parks i.e. reflective of peak periods	Landside Demand / Mobility Management	✓✓✓	✓✓			Private Car	Staff & Passenger	2
Deliver bus priority	Increased bus priority on-campus particularly where bus journey times are negatively impacted	Additional Public Transport Service Provision / Priority Measures	✓✓✓	✓	✓✓✓	✓✓	Bus	Passenger	3
Public transport monitoring	Ongoing monitoring to be shared with bus operators will determine opportunities for new services, especially for those services approaching capacity	Additional Public Transport Service Provision / Priority Measures	✓✓	✓	✓✓✓	✓	Bus	Passenger	2

Long List	Description	Objectives Alignment	Stakeholder Responsibility ✓✓✓Primary (lead); ✓✓Secondary (contributor) ✓Tertiary (support)				Demand Management Category - Main Mode Impacted	Measure Type	Prioritisation
			DAA	FCC	NTA	TII			
Service provision gap analysis	Analysis of remaining gaps in service provision will be undertaken. In responding to these gaps, options for daa sponsored shuttle services will be considered, for example, connecting to wider transport corridors, or serving locations where a high number of employees live, though poorly served by bus	Additional Public Transport Service Provision / Priority Measures	✓✓		✓✓✓		Bus	Staff & Passenger	3
ULEZ - Congestion Charging	Use ANPR - flat rate or dynamic congestion charging within a specific cordon area of the airport.	Landside Demand / Mobility Management	✓✓✓	✓✓	✓✓	✓✓	Private Car	Passenger	3
Staff remote working / staggered working days	Influence working hours of airport staff (e.g. reduce daa work days down to 1-2 days/week and/or stagger working days/hours to reduce peak hour/day demand)	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	2
Kerbside tolling	Charge for kerbside pick-up/drop off - could be dynamic charging also to tackle peak hour congestion	Landside Demand / Mobility Management	✓✓✓	✓✓			Private Car	Passenger	2
In Town Check-In	In-town check in(with baggage drop-off) within Dublin City to encourage passengers to check-in. Could also tie in with discounted public transport fare	Landside Demand / Mobility Management	✓✓✓		✓✓✓		Bus	Passenger	3
Subsidised fares	Incentivise PT trips among passengers and staff	Landside Demand / Mobility Management	✓✓✓		✓✓		Private Car	Staff	2
Variable car park pricing	Dynamic dependent on arrival and departure times	Landside Demand / Mobility Management	✓✓✓				Private Car	Passenger	2
Park & Ride	Consider strategically located Park & Ride sites off campus	Integration with NTA Planned Park & Ride northern site at Lissenhall	✓✓✓	✓✓	✓✓✓	✓✓	Bus	Passenger	3
Increase staff car occupancy	Incentivise people who carpool/car share	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1
Secure cycle parking for staff	High-spec and secured (access control) bike parking	Enhanced /Resilient / Additional Surface Access Provision	✓✓✓		✓		Active Modes	Staff	1
Increased discount on bike to work scheme	Increase up to 80% (or even for free??)	Landside Demand / Mobility Management	✓✓✓				Active Modes	Staff	1
Mobility Hubs	Provision of staff mobility hub to encourage modal shift	Landside Demand / Mobility Management	✓✓✓	✓	✓✓✓		Private Car	Staff	2
Surrounding network tolling scheme	Multi-point tolling on the M50	Landside Demand / Mobility Management	✓✓		✓✓	✓✓✓	Private Car	Staff & Passenger	3
Car hire bus changes	Change to a single shared bus for those availing of car hire instead of multiple buses across individual operators	Landside Demand / Mobility Management	✓✓✓				Privately Operated Buses	Passenger	2
Catering truck movements	Move entry point for catering trucks from GP 4 to GP 1B	Landside Demand / Mobility Management	✓✓✓				Commercial Vehicles	n/a	2
Removal of Car hire from T1 MSCP	Have "premium" car hire in T2 MSCP only, all other car hire services from Eastlands	Landside Demand / Mobility Management	✓✓✓				Car Hire	Passenger	2
Rates for staff parking	Charge "non Shift" staff for on-site parking (Possibly provide X number of days for free)	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1

Long List	Description	Objectives Alignment	Stakeholder Responsibility ✓✓✓Primary (lead); ✓✓Secondary (contributor) ✓Tertiary (support)				Demand Management Category - Main Mode Impacted	Measure Type	Prioritisation
			DAA	FCC	NTA	TII			
Change of designated car parks - staff / passenger	Move Staff Purple and blue offsite and swap with public parking Current staff spaces get used an average of twice per day = 4 trips, Moving staff parking to a long term car park and using this as public parking would reduce movements to and average of 1/day/space	Landside Demand / Mobility Management	✓✓✓	✓✓			Private Car	Staff & Passenger	2
Extend 196 Bus route	Local Link Louth Meath Fingal (Flexibus) operate a Knocksedan to Swords 196 regular route which is leap card enabled and historically has been very underutilised. Potential to work with Local Link LMF and the NTA to extend the route to Dublin Airport and back to Knocksedan instead of going back the direction the bus came from.	Additional Public Transport Service Provision / Priority Measures	✓	✓	✓✓✓	✓	Bus	Passenger	3
SDRT	Avail of the NTA's Smart DRT pilot scheduled for 2024/2025 and put Dublin airport forward for one of the pilot routes. Essentially, this is an effort to roll out "DRT in the city" to combat the gaps in service provision after the Bus Connects rollout	Additional Public Transport Service Provision / Priority Measures	✓✓	✓✓	✓✓✓	✓	Bus	Staff & Passenger	3
Relocation of staff parking	Relocate all staff parking to off-site locations	Decanting of airport related passenger and / or staff parking to outer sites	✓✓✓	✓✓			Private Car	Staff	3
Staff parking base rate fee	Introduce annual charge for use of staff parking	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1
Staff parking dynamic fee	Rates apply dependent on the number of days / year staff use the car parks (i.e. those who drive the most pay a higher fee)	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1
Ban single-occupancy staff parking	Using ANPR technology, similar to what's used for HOV lane detection.	Landside Demand / Mobility Management	✓✓✓				Private Car	Staff	1
Dynamic information boards	Provision of dynamic information boards at key locations within the airport outlining journey times and pricing of various modes to allow passengers to make informed decisions	Landside Demand / Mobility Management	✓✓✓		✓		Private Car	Passenger	1
Review of passenger drop off / pick up charges	Potential to permanently increase drop off charges as opposed to dynamic	Landside Demand / Mobility Management	✓✓✓	✓✓	✓		Private Car	Passenger	1
Additional off-site parking	Delivery of off-site car parks - North / South	Decanting of airport related passenger and / or staff parking to outer sites	✓✓✓	✓✓	✓	✓	Private Car	Staff	2
BusConnects	Delivery of BusConnects junction upgrades - signalisation and bus priority	Additional Public Transport Service Provision / Priority Measures	✓	✓	✓✓✓	✓✓✓	Bus	Staff & Passenger	3
T2 Parking Revisions	Closure of T2 surface parking for bus facilities - MSCP Ext	Additional Public Transport Service Provision / Priority Measures	✓✓✓				Private Car	Passenger	2

Long List	Description	Objectives Alignment	Stakeholder Responsibility ✓✓✓Primary (lead); ✓✓Secondary (contributor) ✓Tertiary (support)				Demand Management Category - Main Mode Impacted	Measure Type	Prioritisation
			DAA	FCC	NTA	TII			
Enhanced active mode trip end facilities	Could link to mobility hub / E Hub - enhance facilities for active mode users	Enhanced /Resilient / Additional Surface Access Provision	✓✓✓	✓	✓✓		Active Modes	Staff	2
Staff E-Solutions	Could link to mobility hub / E-Hub - provide realistic sustainable first / last mile choices for staff	Enhanced /Resilient / Additional Surface Access Provision	✓✓✓	✓	✓✓		Active Modes	Staff	2
Ticketing review	Consideration of integrated ticketing / bundling / discounts - requires liaising with public transport operators	Landside Demand / Mobility Management	✓✓✓	✓	✓✓✓		Private Car	Passenger	2
Private airport parking review	Enhanced management of wider airport parking (non daa) potential to expand daa permit scheme	Decanting of airport related passenger and / or staff parking to outer sites	✓✓✓	✓✓			Private Car	Staff & Passenger	3
Upgraded Ground Transportation Centre (GTC)	Redevelopment to include additional bus bays (DIRO arrangement), reorganisation of bus operations and all staff / passenger shuttle buses to pick up / drop off at T1 kerbside.	Enhanced /Resilient / Additional Surface Access Provision	✓✓✓	✓✓✓	✓✓✓		Bus	Passenger	3
Enhance wider cycle network	Delivery of planned / committed improvements GDA strategy, Pathfinder	Enhanced /Resilient / Additional Surface Access Provision	✓	✓	✓✓✓	✓✓	Active Modes	Staff	3
Enhance campus walking network	Provision of well-connected and improved infrastructure	Enhanced /Resilient / Additional Surface Access Provision	✓✓✓	✓✓	✓		Active Modes	Staff	2