NTA
Údarás Náisiúnta Iompair
National Transport Authority

Greater Dublin Area Transport Strategy 2022 2042

Issues Paper

Consultation Report

November 2021

1 Introduction

1.1 Overview of the Strategy

The National Transport Authority (NTA) has now started to review the 2016 - 2035 Transport Strategy (the 2016 Strategy) which was formally adopted in February 2016. This review will assess the implementation of the current plan, and look to produce an updated strategy which will set out the framework for investment in transport infrastructure and services, taking us to 2042.

The 2016 Strategy set out to contribute to the economic, social and cultural progress of the Greater Dublin Area by providing for the efficient, effective and sustainable movement of people and goods. Its aim was to make the Dublin region a better place for those people who live and work there, and for those who visit. It provided a framework for the planning and delivery of transport infrastructure and services in the Greater Dublin Area, and a transport planning policy around which other agencies involved in land use planning, environmental protection and delivery of other infrastructure such as housing, water and power, can align their own investment priorities.

This Report details the initial 'Issues Paper' stage consultation process undertaken by the project team prior to the preparation of the draft Strategy and provides a summary of the feedback received during consultation. The feedback received has been reviewed by the Project Team, and the themes and common issues that arose during the analysis of responses have been documented in this report.

The NTA recognises that it is important for the Strategy to be developed in a collaborative and informed manner and is committed to ensuring this continues throughout the lifecycle of the Strategy and its implementation.

1.2 Consultation on the NTA Strategy

The views and opinions of the public and stakeholders in the development of the draft Strategy were considered a central element of the process. Section 12 (8) of the Dublin Transport Authority Act sets out the requirement to engage with a number of stakeholders and members of the public at the outset, during the preparation of the draft Strategy. In this regard, the Strategy Team sought the views of the public and stakeholders on the development of the Transport Strategy policy direction and objectives, and prepared an 'Issues Paper' that was presented to the public for consideration.

Due to Covid-19 restrictions, it was not possible to undertake a more traditional approach to public consultation, and the Issues Paper consultation was therefore undertaken online. To gauge general opinions the public were given the opportunity to participate either via an online survey or by submitting a written response (or both if desired).

The feedback gathered has enabled the Strategy team to consider and ultimately reflect the views of the public in the preparation of the draft Transport Strategy. It is intended to have further public consultation in late 2021 once the draft Strategy is complete, and prior to finalising the report for consideration by the Minister of Transport.

1.3 Issues Paper Consultation Process

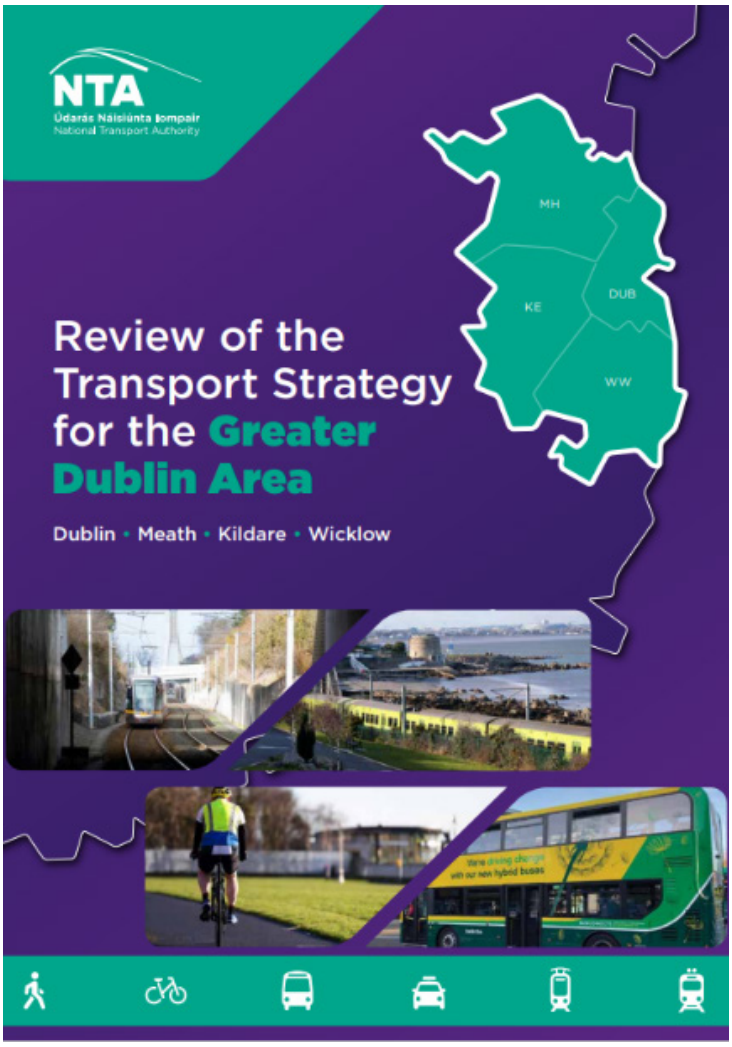

Figure 1: Pre-Draft Issues Paper

The Strategy team prepared a Pre-Draft Issues Paper in November 2020. This Issues Paper highlighted some of the main considerations and opportunities for the new Transport Strategy, and sought public input into its development at the inception stage.

A full Public Consultation then commenced from 23rd November 2020 to 22nd January 2021, and the public were asked to assist in the development of the strategy goals and objectives, and to help identify transport requirements and opportunities.

Due to the Covid-19 related restrictions it was not possible to undertake in-person events, and instead the consultation was run online with the public given an opportunity to submit commentary via a pre-prepared questionnaire and, if required, via a written submission portal. Accessible versions of the Issues Paper were prepared, and direct contact was made with various Disability Groups to ensure they were aware of the ongoing process.

To maximise exposure of the Strategy Consultation, an extensive publicity campaign was undertaken, with advertisements placed in national and local newspapers, on radio, on social media and also utilising outdoor advertising on bus shelters. Figure 2 illustrates an example of the outdoor advertisement used for the Strategy review.

Figure 2: Outdoor Advertisement on Transport Strategy Review from November 2020

1.4 Overview of submissions

In total 4,051 submissions were received from the public, with an additional 92 submissions received from various stakeholders and groups.

	Total Submissions
Public	4,051
Stakeholder /Group	92

Table 1: Breakdown of Submissions

1.5 Structure of this report

This report assesses the findings of the consultation in two parts. The first section breaks down the main results of the consultation survey data, highlighting the main issues and themes raised by the public in response to a set of questions prepared by the NTA Strategy team. The second section highlights the main issues and themes raised in the written submissions made in more detailed public submissions, as well as the submissions provided by various interest groups and stakeholders.

2 Public Submissions

All public submissions were received via an online survey portal (in addition to a limited number of hand written submissions). This asked a series of high-level policy questions, which allowed the NTA Strategy Team to assess and review the public's views on broad transport policies, themes and issues. This section breaks down the results and illustrates the main findings of this survey. The online survey portal also allowed the public to submit or attach more written feedback if required. The main topics raised in this feedback are also listed at the end of this section.

2.1 Spatial Breakdown of Respondents

There were over 4,000 submissions in total for the public consultation. The spatial breakdown of the respondents is set out in the following graph (Figure 2.1). From this graph it is clear that a significant number of submissions (45%) were received from County Meath, which was noted as abnormally high, against the fact that only 42% of submissions in total came from the four Local Authority areas within County Dublin. Submissions were received from all Local Authorities in the Greater Dublin Area (GDA), and 2.5% of submissions came from those residing outside the GDA.

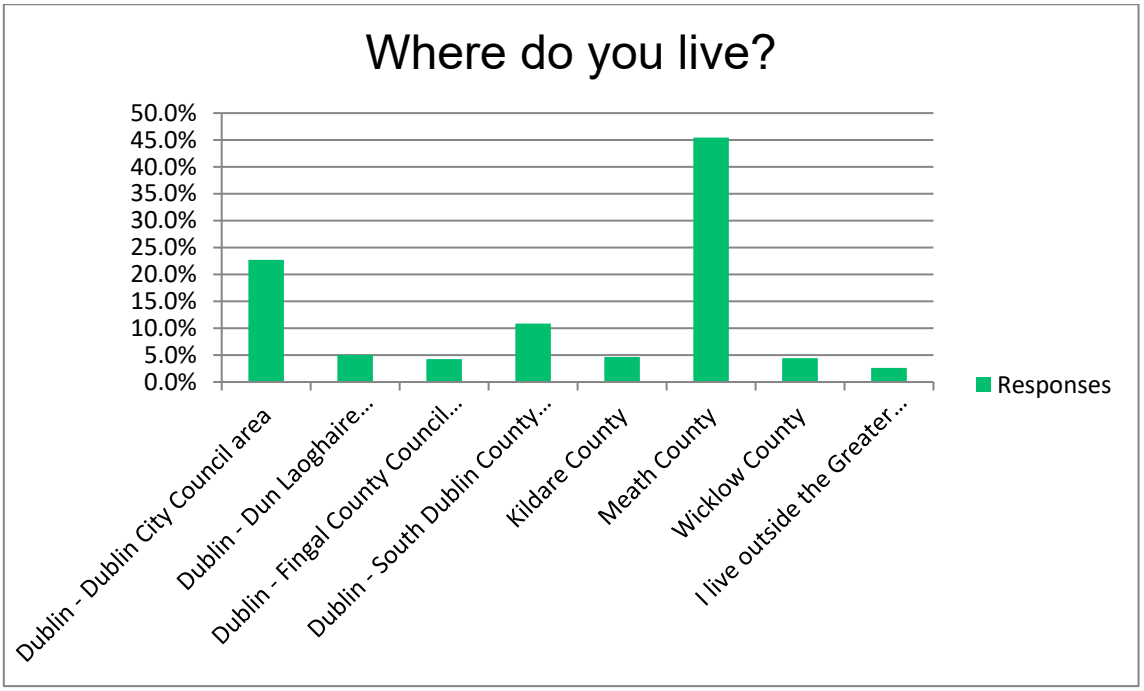

Figure 3: Where do you live?

2.2 Use of Transport (pre-Covid 19)

To gauge the feedback from different transport user groups it was important to note the 'normal' transport arrangements the survey recipients used, prior to Covid 19 restrictions. The NTA Strategy team noted that 47% of respondents deemed private cars to be the most important transport option to their daily life, with transport by bus at 17%, rail/Luas at 19%, cycling at 9% and walking at 8.5%. Based on these figures, it could be considered that the general opinions of the main transport user types have been captured in the survey. It was noted, however, that submissions were also received from other transport user groups, such as e-scooters and motorbikes, although numbers were low, corresponding to just 1% of respondents.

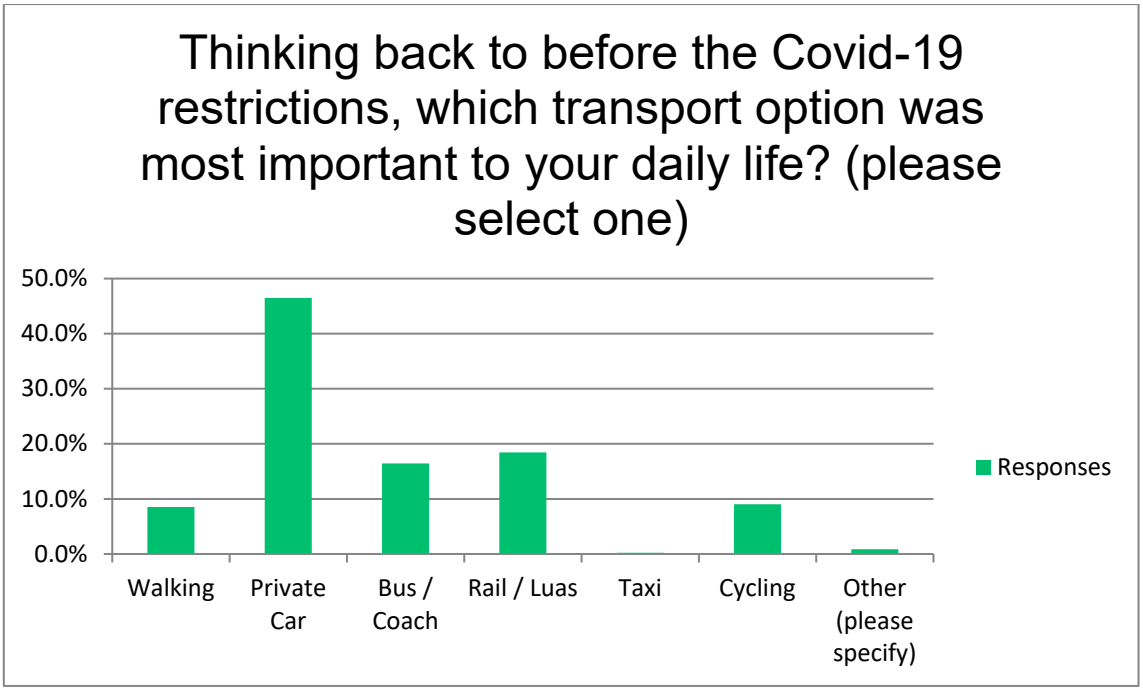

Figure 4: Which transport option was most important to your daily life, pre-Covid?

In addition to the primary mode of transport, it was notable that respondents stated that they also regularly walk (50%), cycle (21%) and use a taxi (11%), relative to the responses observed in relation to the main transport modes.

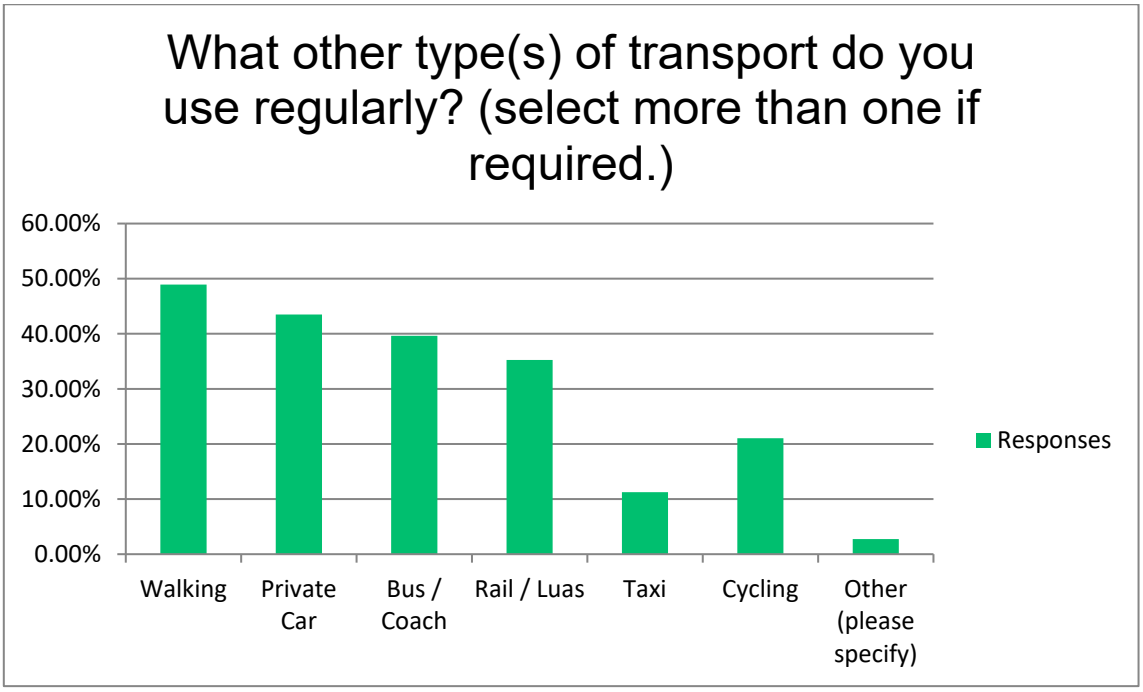

Figure 5: What other type of transport do you use regularly?

2.3 Investment in Transport

The Strategy Team wanted to gauge whether any particular modes of transport merited more attention based on the public investment priorities. However, it was clear that respondents consider

almost all modes of transport to be an important focus when it comes to assisting in the reduction of carbon emissions.

Notably, 69% of respondents believe heavy rail infrastructure is very important, with roughly two-thirds of respondents suggesting that heavy rail, Luas and Metro should be the focus of future investment. Walking and cycling were a very important focus for over 60% of respondents, while bus and Park & Ride were important to over 50%. It is also worth noting that e-working from home has emerged as very important for almost 60% of respondents.

At the other side of the equation, micro mobility was only considered by just over 22% of respondents to be a very important mode for our future investment focus. This may reflect that use and exposure of this new mode is still in its infancy.

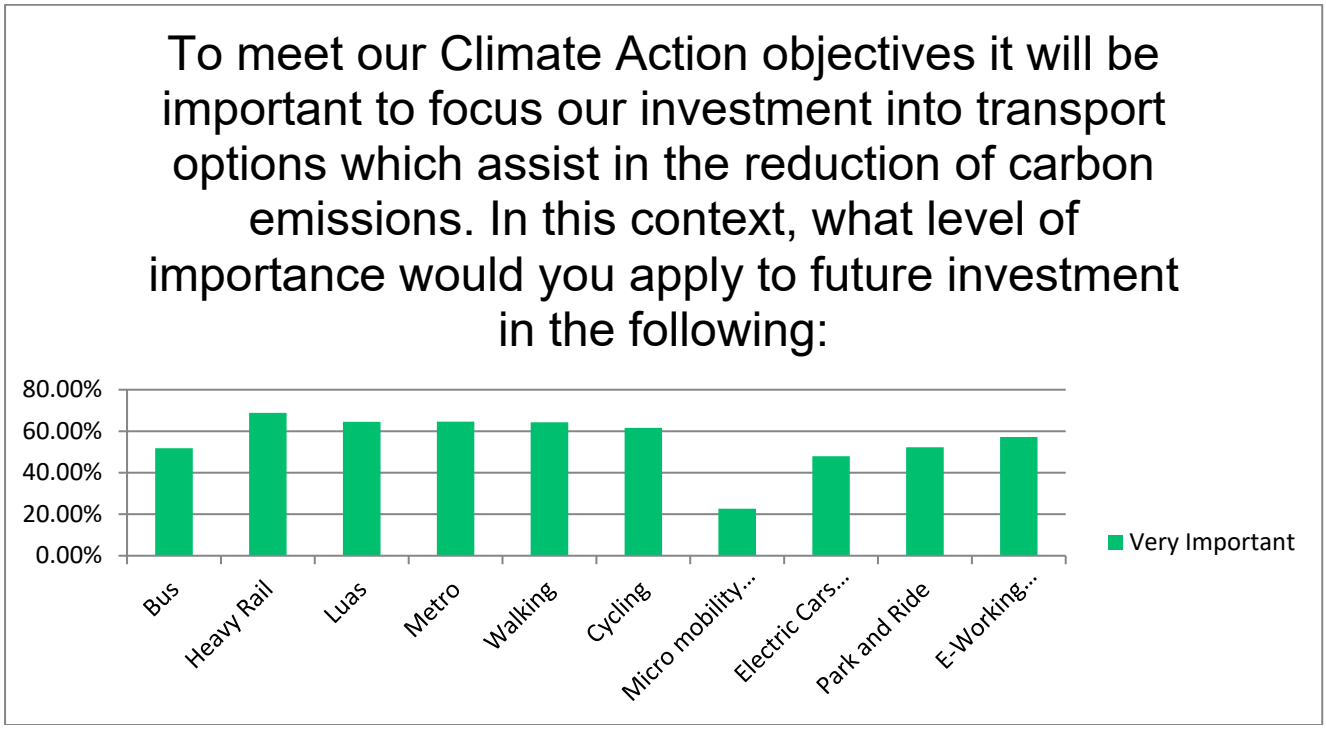

Figure 6: What level of importance would you apply to future investment in the following?

2.4 Policy Issues for Consideration

The Strategy Team sought to gauge whether any specific issues bore more relevance for the public in terms of the focus for the Strategy. In general, respondents agreed that all the elements identified for consideration in the Strategy merited attention, with each element deemed to be very important by over 50% of respondents.

The highest levels of support were related to 'Accessibility & Safe Travel', 'Community', and 'Making sure homes, jobs and services are easy to get to', with 3 out of 4 respondents stating that these elements were very important.

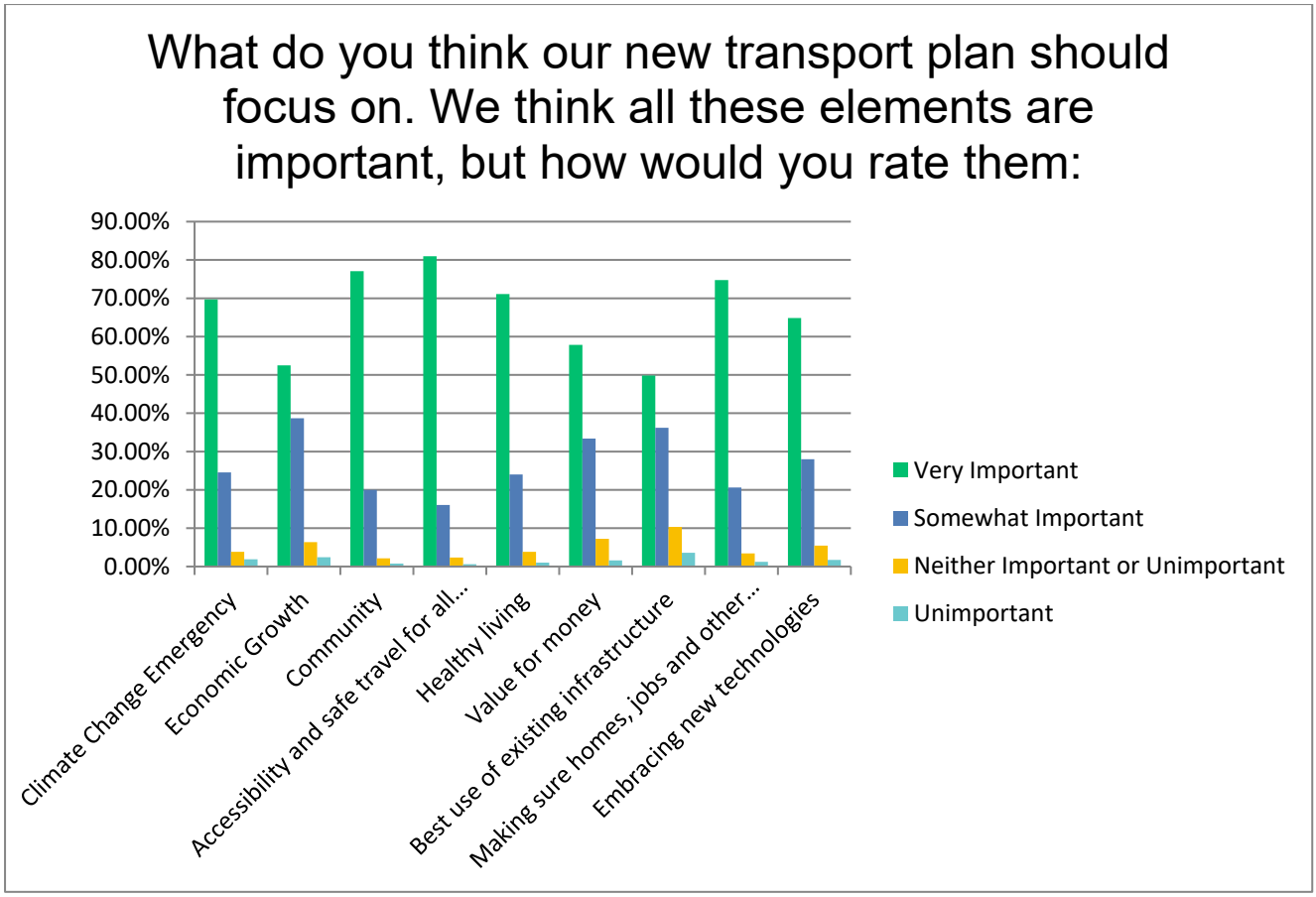

Figure 7: What do you think our new transport plan should focus on?

2.5 Transportation Priorities

The Strategy Team wished to establish, what the public, from their own perspective, wanted from a future transport system. Based on feedback, 73% of respondents believe the most important requirement was 'convenient and safe access to my local services'.

It is notable that 'fast access to Dublin City Centre' is a 'very important' requirement for 66% of respondents and 'better access to their nearest large town' is 'very important' to over 50% of those surveyed. It is also acknowledged that while some suggested requirements were not deemed 'very important' they were all generally seen as at least 'somewhat important' by most respondents.

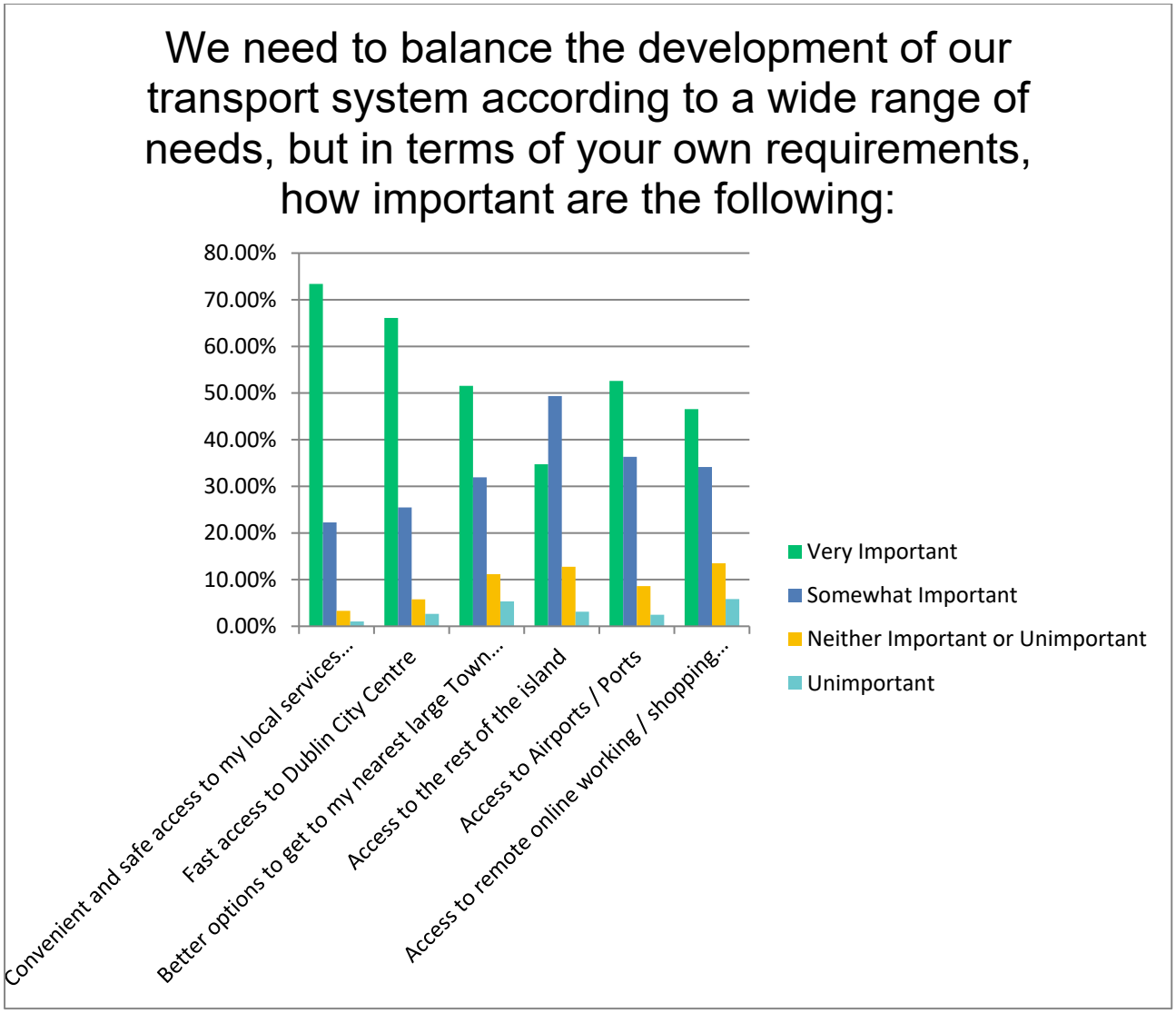

Figure 8: In terms of your own requirements, how important are the following considerations?

2.6 Reliance on the Private Car for Travel

The Strategy Team wished to gauge public opinion in relation to whether the strategy should seek to reduce the reliance on the private car for travel. The results were clear cut, with over 90% of all respondents agreeing that the Strategy should address this issue.

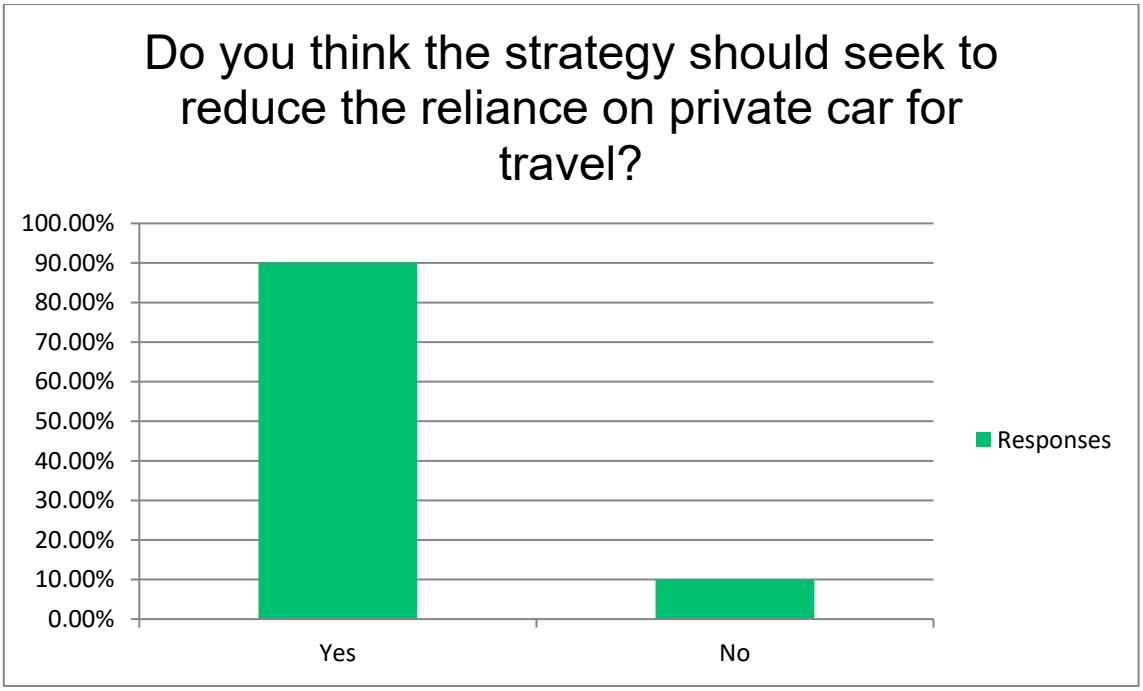

Figure 9: Do you think the strategy should seek to reduce the reliance on private car for travel?

2.7 Additional Issues Raised

While it was not a requirement of the Survey to leave comments (or attach a document), a number of respondents did submit additional feedback. These submissions covered a wide spectrum of issues and suggestions which were considered by the Strategy team. In general, the collective feedback raised the following issues for consideration and these were incorporated into the Strategy development process:

1. Consideration of a new Navan/Dunshaughlin Rail Line;
2. Consideration of a Metro link to Knocklyon (South West Dublin);
3. Establishment of new and/or improved Metro and Rail connections to Dublin City Centre;
4. Concerns over the development of Metro at Charlemont;
5. Improved DART/train services on Maynooth Line;
6. Improve and/or Expand Green / Red Luas lines;
7. Improve Cycle Infrastructure;
8. Improve Walking Infrastructure; and,
9. Concerns and consideration around the BusConnects Dublin project; and,
10. Concerns and consideration around the use of E-mobility.

3 Review of Detailed Feedback

While the questionnaire survey gathered the general themes and issues raised by the wider public, there were a number of more detailed submissions received by various interest groups, stakeholders and from some dedicated individuals.

The NTA Strategy team is grateful for the time and effort put into formulating these detailed submissions, all of which have been read and considered carefully. It is noted that in some cases very specific recommendations / concerns have been raised which, while important, were not deemed directly relevant to the development of a regional transport strategy. It must also be accepted that in many instances there were conflicting requests and suggestions; such instances nevertheless assisted in the strategy development process.

The general themes and main points of consideration raised in the detailed feedback have been categorised and summarised in this section.

Strategy Scope and Process

A number of responses raised points in relation to the scope of the Strategy and the process of its preparation. Some of the main points have been broken down under the following subheadings (with details highlighted in Appendix 1):

- Context – Taking into account wider EU, National, Regional and Local policy as well as an understanding of the real world context, including Brexit, Covid 19 and Climate Change;
- Vision – A wide ranging set of views in relation to what should feed into the overall vision of the Strategy;
- Evaluation/Monitoring – Ensuring monitoring and assessment (including SEA) are an output of the Strategy;
- Spatial Extent – Consideration of the geographical extent of the Strategy, and how the Strategy should address all of its study area;
- Engagement – Better engagement and participation;
- Process – Direction in relation to how the Strategy could be formulated and structured; and,
- Ambition – the Strategy needs to be more ambitious than the last NTA Strategy.

Impact of Covid-19

The influence of Covid-19 on transport throughout the past year, and its potential impact on travel patterns in future, were identified in several submissions as key themes that require careful consideration (with details highlighted in Appendix 2).

Accessibility

The need to provide for all sectors of society in the Transport Strategy was raised in a number of submissions. It was recommended that all transport infrastructure should be age- and disability-proofed, and that Universal Design principles should be applied to all new developments, as well as to public spaces, parks and greenways.

Climate Change

The Strategy Issues Paper identified Climate Change as a key theme and challenge for the new Transport Strategy. This was echoed in several submissions, which included a number of statements and recommendations in this regard (with details highlighted in Appendix 3).

Behaviour Change

The use of behaviour change programmes as complementary to investment in transport, was raised in some submissions. Existing initiatives such as Smarter Travel Workplaces and Smarter Travel Campus were endorsed, with recommendations to expand their scope and reach through increased funding. Workplace Travel Plans and Active Travel Plans were also supported. For active travel modes, it was recommended that funding should be provided for Walkability and Cycleability Audits; that cycling to schools should be incentivised; and that cycling should be promoted through a campaign of positive images of cycling to normalise it as a mode of transport for all ages, genders and abilities.

Transport and Land Use Integration

One of the key themes raised in the detailed submissions was the integration of transport and land use planning. This was highlighted in relation to a number of spatial scales, in relation to how the strategy should integrate with the Regional Spatial and Economic Strategy (RSES) and the Metropolitan Area Strategic Plan (MASP), to how new land use development needs to be served by appropriate transport options. Details from the submissions raised are set out in Appendix 4.

Compact Urban Form

The National Planning Framework contains a high-level objective to promote Compact Urban Form, which is given effect through a number of National Policy Objectives and through Regional Policy Objectives in the EMRA Regional Spatial and Economic Strategy. This was reflected in a number of submissions. Whilst a range of terms were used across the submissions – including 10-Minute City, 15-Minute Neighbourhood, 15 Minute Village/Town/City, and 30-minute commute from anywhere within the M50 to the city centre – the submissions shared a common ambition.

There is a growing recognition that longer journeys, primarily by private car, are not sustainable, and to the greatest extent possible the needs of citizens should be met at the local level. This includes developing housing in or near established settlements, the siting of new schools close to residential areas, and provision of services and retail opportunities in existing or new multi-functional settlements. This approach to land use planning both supports and is supported by the use of sustainable transport for local trip-making, reduces reliance on the private car, and assists in the fulfilment of a number of higher-level objectives such as climate change mitigation.

Transit-Oriented Development

A specific example of Compact Urban Form is Transit-Oriented Development (TOD), which was supported by some respondents. This entails the provision of mixed-use, high-density development at key rail nodes and public transport interchanges, and was recommended not only for existing locations that are well-served by public transport, but also for new development areas that would benefit from planned high-capacity public transport projects such as DART+ and Metro.

Self-Sustaining Settlements/Communities

Changes in travel patterns arising from the Covid-19 pandemic also served to highlight the growing requirement for self-sustaining settlements, where most needs can be met at the local level. In particular, a number of submissions noted that the growth in remote working and reduced demand for commuting to employment provide an opportunity to focus investment in neighbourhoods and town centres, and recommended improving provision for walking and cycling, renewing and enhancing the public realm, developing flexible employment hubs, and promoting balanced development across the region. As noted above, sustainable transport both supports and is supported by such an approach.

There was also a number of suggestions as to how and where such developments could and should take place some details in this regard are highlighted in Appendix 5.

Growth Forecasts

Some submissions raised questions regarding the population forecasts on which the Strategy will be based. It was suggested that the Strategy should review RSES population projections to ensure their accuracy as actual growth may have been higher. Specific examples of this were highlighted, such as in Greystones, which 'will be well over the old Development Plan population target and even further over the EMRA 2031 population target'. Other areas, such as Whitehall/Beaumont, were highlighted as locations with net in-flow of commuters, which generates significant inward demand for travel from a large catchment area.

Infrastructure Design

A number of submissions made recommendations on what design guidance should be supported and / or changed in the Strategy. While much of this was at a level not necessarily appropriate for the formation of a regional transport strategy, the submissions provided useful context. Details of specific comments are set out in Appendix 6.

Permeability

Support for sustainable transport modes involves not only investment in dedicated infrastructure, but also a variety of other complementary physical measures. One such measure is filtered permeability, i.e. providing connections for walking and cycling between adjacent sites or land uses. It was stated that '…there should be a greater focus on retrofitting the existing urban environment to enhance connectivity and permeability [for walking and cycling]', and that '[all] new developments should provide for optimum levels of connectivity and permeability, particularly for pedestrians and cyclists'.

Mode Share Targets

While there was widespread support in principle for a transition to sustainable transport, a number of submissions recommended that the Strategy should include specific and ambitious targets for sustainable transport mode share. Measures proposed to meet this objective included demonstration towns for walking or cycling such as 'cyclehub towns' which would focus on radically increasing the mode split in favour of walking/cycling, the provision of assistance to local authorities to achieve defined modal shift to active travel to schools, and guidance for local authorities on how they can contribute to these targets. One submission recommended that mode share targets should be coupled to specific emissions reduction targets.

Multi-Modal Transport Options

A number of submissions raised details on how multi-modal design and operation should be a key concept in the Strategy, including examples of how and where this could happen. Details of specific comments are set out in Appendix 7.

Orbital Public Transport

A small number of submissions noted that the current public transport network in the GDA has a strong radial bias, and recommended that provision for orbital movement in the region should be significantly enhanced.

Park & Ride

A key aspect of a multi-modal transport landscape highlighted in some submissions was Park & Ride, although the definitions and types varied across the submissions. While Park & Ride generally refers to car parking at rail stations or strategically located bus stops, a number of related concepts were proposed, including Cycle Park & Ride (high capacity cycle parking to serve public transport stations and stops), Park & Stride (remote car parking to facilitate walking the 'last mile' of a journey), Park & Share close to motorway junctions (car parks to facilitate car-pooling) and Kiss & Ride (facilities for drop-off rather than parking at public transport). It was suggested that both strategic and local Park & Ride facilities should be developed to serve the full range of transport modes, and that guidance should be produced on this topic.

Goods Movement, Freight and Deliveries

A number of submissions raised the consideration of goods movement, freight and deliveries. The Covid-19 pandemic has brought about a paradigm shift in retail patterns, largely related to the growth in online retail and its associated requirement for home deliveries. The wide-ranging consequences of this shift were noted.

At a strategic level, logistics hubs to serve city centre businesses were recommended, with greater use of electric delivery fleet, cargo bikes, bike couriers and micro-mobility proposed to serve the 'last mile' deliveries. Similarly, delivery hubs for home deliveries were suggested, to facilitate shopping by bike/on foot. At the local level, the growth in delivery vehicles was noted as having a negative effect on walking and cycling due to illegal parking on footpaths and cycle tracks, and this should be taken into account in the design of such infrastructure.

In addition a number of considerations were raised in relation to freight movement, ports and airports. Details of these comments are set out in Appendix 8.

Electric Vehicles

A number of submissions mentioned Electric Vehicles (EVs). While there were some calls for the Strategy to support Electric Vehicles through their integration into spatial and planning policies and the development of EV charging stations, and suggestions for incentives related to private EV car ownership, other submissions noted the impact of EV infrastructure on the public realm and streetscapes. In this regard, it was recommended that the design of charging stations requires careful consideration, and concerns were raised about the use of on-street EV charging in the city centre due to limited kerb space.

Fuel

Submissions on the decarbonisation of transport addressed a range of transport modes and a range of alternative fuel types. Proposals for the bus fleet included full electrification (battery-based), the use of hydrogen, a policy not to purchase new diesel vehicles after 2022, and an overarching objective to convert the fleet to zero emissions. For rail, there was support for the electrification of the network, and a proposal that a Fleet Strategy for 2035 should be based on new EMUs (Electric Multiple Units). Transition of HGVs to hydrogen fuel was also recommended. Furthermore, as noted in one submission, 'Investment in environmentally sustainable transport systems will be important to support compact urban growth and regeneration and [in] achieving climate action objectives.'

Maintenance

Some submissions noted that funding for maintenance of transport infrastructure did not always align with levels of capital investment, and stated that addressing this disparity would be important in order to protect investment made to date and to safeguard existing transport assets. This point was made by a range of stakeholders and related to all transport modes, including strategic and local roads, heavy and light rail, bus routes and fleet, and cycle infrastructure. As noted, maintenance of transport infrastructure contributes in part to ensuring high quality, safety, service reliability, frequency, accessibility and connectivity across the GDA.

Avoid-Shift-Improve

There was support for the emerging principle of Avoid-Shift-Improve and its application to transport. This environmental objective entails first aiming to reduce travel (Avoid), then promoting the use of sustainable modes (Shift), and only then supporting improvements to vehicle efficiency (Improve). As an overarching principle, it would be given effect through such means as Compact Urban Form, Behavioural Change Programmes, support for remote working, and investment in walking and cycling infrastructure.

Coastal Issues

The impact of coastal erosion on existing and proposed transport infrastructure was raised in some submissions, primarily related to the northern and southern rail lines. While it was mainly seen as a challenge and threat that must be taken into consideration in long-term infrastructure planning, the opportunity to combine the delivery of transport infrastructure with improved coastal defences was also highlighted.

Public Transport Passenger Experience

A number of themes related to the passenger experience of public transport were raised in submissions, including fares, hours of operation and overall quality. Details of some of these issues are set out in Appendix 9.

Public Realm

The quality of the public realm was raised in a number of submissions. These noted that the experiences of pedestrians and cyclists are enhanced in well-designed urban areas. Public transport users also benefit from high quality streets as they are pedestrians or cyclists for the first and/or last mile of their journeys, and this was reflected in submissions that recommended urban realm improvements 'particularly in those areas of high traffic close to public transport and areas of high footfall'.

One respondent suggested 'sensitive, contextually appropriate and innovative design also of storage for devices on our streets' and recommended an 'approach joining arts, communities and scientist/engineering communities to transform our planning'.

In relation to this, a number of submissions highlighted ideas and opportunities in relation to road space reallocation. Details of some of these issues are set out in Appendix 10.

Road Safety & Speed Limits

The safety of all road users, but particularly of pedestrians and cyclists, was highlighted as a key requirement for the Strategy, although this found expression in a diverse range of suggestions. Recommendations included:

- Aim for zero road deaths through a 'Vision Zero' approach to road safety;
- Manage infrastructure, vehicles and speeds to reduce collision impacts to survivable levels;
- Enforcement of traffic laws through the use of cameras at pedestrian crossings and traffic lights;
- Restrict or enforce illegal and ad hoc parking on footpaths or cycleways;
- Introduce strict fines for not wearing helmets in order to save on the high costs of caring for those injured while not wearing helmets (mode of transport for which mandatory helmets were being proposed was not specified); and
- Increase the number of traffic wardens and give them greater authority to issue fines for illegally parked cars on footpaths, around schools and on cycle lanes.
- Reference was also made to the EU Directive on Road Infrastructure Safety Management (EU RISM) on the national road network, the new version of which places more emphasis on the needs of vulnerable road users, i.e., cyclists and pedestrians.

One specific aspect of road safety noted in some submissions was speed limits, primarily related to a request for a default limit of 30 km/h in all built-up areas in the GDA. Further investment in provision of facilities for active transport, including continued reduction of speed limits to levels appropriate to the setting, was also suggested.

Rural Transport

A number of submissions raised the issue of rural transport provision, including requests for improved local bus services, as well as ideas such as optimising rural school transport services. Details of some of the issues raised are set out in Appendix 11.

School Travel

A number of submissions raised the issue of school travel, notably in relation to walking and cycling links to schools, prioritisation of the Safer Routes to School programme, and measures to make the environment around schools as safe as possible. Details of some of the issues raised are set out in Appendix 12.

Traffic Management

The requirement for Traffic Management was set out in several submissions, notably in relation to the need for effective traffic management within and around cities to reduce congestion. Specifically TII would support the preparation of a "demand management scheme" and a "strategic traffic management plan" as indicated in the GDA Integrated Implementation Plan 2019-2024.

Transport and Technology

The increasing importance and use of technology in transport planning was raised several times, particularly in relation to the need for policy to explore and support opportunities to deliver Mobility as a Service (MaaS). Details of some of the other issues raised are set out in Appendix 13.

Support for Currently Planned Infrastructure

It should be noted that while there were plenty of new suggestions and ideas, a number of submissions fully supported the current planned infrastructure, including the full BusConnects programme, DART+ and other heavy rail schemes such as the City Centre Re-signalling Programme, as well as requests to accelerate implementation of current projects such as the Royal Canal Greenway. A further breakdown of some of the specific elements supported is set out in Appendix 14

Walking & Cycling

Many of the submissions received supported enhanced walking and cycling facilities, and in many cases presented policies and design options which can be considered in the context of the Strategy policy development. While there was support for cycling investment under BusConnects, it was also stated that cycling should be given equal priority to CBCs in BusConnects and there were concerns that cycling may be deemed to be of lesser importance. Some of the other issues raised are detailed in Appendix 15.

Bus Network

There were numerous submissions which raised bus services as an issue, including considerable support for the BusConnects programme. It was acknowledged that in urban areas the bus is likely to remain the most important form of public transport across the region for decades to come, and several submissions recommended that BusConnects should be implemented without delay.

Concerns were raised regarding the impact of the new network and the proposed Core Bus Corridors on the environment, heritage, and the viability of certain urban villages. It was also stated that the new network would not be adequate to serve particular areas of the city, and higher frequencies were requested on certain proposed routes in order to provide an effective and attractive bus service.

Specifically TII stated that the Strategy needs to recognise the role of national roads in supporting bus transport in the GDA, and noted that it is developing bus priority measures on several national road radial routes into Dublin. A number of other proposals for bus schemes, both within and separate from BusConnects were suggested, and have been set out in Appendix 16.

Luas and Metro Proposals

A number of submissions highlighted the opportunities to expand or enhance the Luas network in Dublin and / or provide new Metros. Numerous new alignment options as well as extensions to existing lines were suggested for consideration in the Strategy development process. Many of these suggestions were quite detailed, and are set out in Appendix 17.

There were also a number of suggestions and recommendations specifically in relation to Metrolink, these have also been set out in Appendix 17.

Rail Proposals

The largest single issue raised during the consultation was in relation to the provision of a new Rail Line to Navan via Dunshaughlin. This was raised numerous times, with a number of specific suggestions in relation to its design and alignment.

In addition, numerous submissions highlighted the opportunities to improve and enhance the rail network in the GDA, with specific proposals set down for almost all the suburban lines. This included references to the expansion of the DART+ Programme as well as the need to expand the rolling stock and provide new / improved stations. A full list of the rail suggestions put forward is set out in Appendix 18.

Roads and Provision for the Private Car

A number of submissions were made which covered several considerations for the strategy in relation to how the strategy should deal with the issue of road capacity and design, the use of roads, and indeed a number of specific road proposals. There were also several submissions which presented recommendations in relation to car parking, and demand management. These have been set out in Appendix 19.

Air Travel

The Transport Strategy is concerned with all land transport modes and, as such, does not consider air travel in any detail. However, the planned growth of Dublin Airport is germane to the Transport Strategy insofar as there would be an increase in passenger, employee and freight traffic, on both the road and public transport networks. It was recommended that this growth should be considered in the Strategy preparation, and that there should be formal coordination between transport bodies working to maintain and grow transport options for Dublin Airport.

Micro-mobility/Scooters

In the years since the last Strategy was published there has been considerable growth in new forms of mobility, including e-bikes and scooters/e-scooters. This diversification was reflected in calls to consider these modes in the new Strategy. However, as noted in some submissions, the legal situation regarding the use of micro-mobility on public roads, including on footpaths and cycle infrastructure, requires attention, and the growth in these modes brings challenges for road and street design.

Autonomous Vehicles

Only two submissions explicitly referred to Autonomous Vehicles (AVs); one was strongly in favour, while the other was more circumspect. In the former case, the submission proposed that future urban public transport vehicles should be multi-purpose AVs, adaptable and capable of carrying not just passengers during peak times but also deliveries off-peak, should incorporate a drone base on roof for post and package deliveries, should have advanced wireless charging for both the vehicle itself and the drones on the roof, and should feed into the national grid and act as a reserve battery for grid stabilisation. In the latter case, the submission expressed strong reservations about this emerging technology and its interactions with cyclists and pedestrians.

4 Conclusion

The survey responses and written submissions were all reviewed in detail following the conclusion of the public consultation phase. The output of this review and analysis was then used to assist in the development of the Strategy Objectives, and to expand and refine the original list of Transport Issues identified for consideration. As the strategy process progresses the more specific elements of policy and infrastructure proposals raised in the submissions will be used to assist in the development of Proposals and Measures to be tested as part of the Strategy process.

The NTA is grateful to all individuals, representative organisations and other stakeholders for their input into the Strategy to date, and looks forward to further engagement following the publication of the Draft Strategy for public consultation.

Appendix 1: Strategy Scope & Process

Context:

- Take account of Brexit, Covid and Climate Action Plan;
- Strategy should place emphasis on the integration with the National Planning Framework and the Regional Spatial and Economic Strategy;
- Recommend that the review is aligned with the objectives of City and County Councils, particularly in relation to protection of urban villages, community, environment and built heritage;
- Strategy should reflect existing County Mobility Strategies; and
- Emphasise need for LAPs to be consistent with Strategy to avoid reference to additional projects.

Vision:

- A high-quality, accessible, active travel network will accommodate people of all age groups, abilities, genders, ethnicities, and socio-economic backgrounds as part of a sustainable, nationwide transport system, where the majority of journeys can be completed safely and comfortably by walking, cycling, or on public transport;
- Consider the governance structure;
- Transport solutions should be based on a strategic approach encompassing all options in an integrated plan;
- We need a paradigm shift from an incremental predict-and-provide approach towards the domination of active modes and public transport in urban and suburban centres, as well as a decisive reduction in car use in less populated areas;
- It should include for the provision of a systematic model to be developed and trialled for greater alignment with thought leadership and engagement with transport innovation and related Sustainable Development Goals for healthy cities and sustainability;
- Strategy should be driven by the fact that interventions in the transport sector should be based on a long-term strategic vision for the sustainable mobility of people and goods as they take a long time to implement;
- The Framework should be fundamentally reviewed to include a value-led proposition that re-sets transport planning in its proper place vis a vis the needs of citizens and communities; and
- The strategy should address building resilience of key infrastructure. An example of this would be the inclusion of a new River Liffey crossing in the event of the M50 river crossing not being available.

Evaluation:

- A fresh Strategic Environmental Assessment must be undertaken before the Strategy can be properly evaluated. It is concerning that the contents of the previous Assessment are not adequately referenced though it is stated that the Strategy should be looked at “in parallel with the Assessment”;
- Strategy requires a CBA which includes climate change and public health; and
- Strategy should test policies against gender equality, child-friendly and non-discrimination targets.

Spatial Extent:

- Consider the needs of all users, commuters, business travel and freight, not only users living and working with the GDA but users from other regions who have a need to travel in the GDA;
- Contention that Strategy review is ‘city-centric’ and fails to consider wider needs in providing transport infrastructure;
- Perceived urban bias in Transport Strategy;

- Revise the definition of "The Greater Dublin Area" as applies to this review to include Co. Louth in the interests of more logical planning for future transport needs;
- Need for further engagement due to boundary anomaly with Co Louth;
- Strategy should either outline strategies for commissioning transport strategies for areas that are larger than a settlement but smaller than a region and that may cross county boundaries, or examine the needs of the Outer Metropolitan segments in greater detail as part of the review and include strategies for geographical sub-areas within the GDA that cover multiple towns with interdependencies; and
- There is a clear need for analysis to be undertaken within commuter towns such as Celbridge to understand the existing and projected travel patterns as a prerequisite for implementing appropriate measures but this has not happened.

Engagement:

- The Transport Policy which provides for the Framework for investment must provide for open engagement in innovation and thought leadership that is accessible to communities, and to systematic relationships with communities affected by proposed direct changes and impacts derived from the Strategy and plans;
- It should include for the provision of a systematic model to be developed and trialled for engagement with communities affected by changes arising from the implementation of proposals within the strategy and policy;
- The implementation of the Strategy thus far has led to learning from engagement and consultation. This should be analysed and set out meaningfully for the public, including as a set of guiding principles for future engagement, and key learning that will be brought forward as part of new ways of working with us in providing effective services as we live, learn and earn; and
- Highlight the Public Participation Network.

Monitoring:

- KPIs are needed on where we will improve pollution and air pollution (particularly in residential areas);
- Include indicators on mode share and carbon emissions;
- Include clear, measurable objectives (over lifetime of strategy and longer term) for greenhouse gases, emissions, noise, mode shift, the UN Sustainable Development Goals, and qualitative 'sustainable urban mobility indicators' to allow success to be measured;
- Need for a mechanism, e.g. monitoring programme, to review progress of implementation; and
- It was also recommended that, at the scheme level, there must be more monitoring and evaluation of the impact of different designs.

Process:

- Concerned about the transparency of the overall consultation process;
- Feedback should not be by online methods only as this precludes those without internet access or capabilities;
- Focussed messaging for each group;
- Present strategy by theme;
- Use case studies; and
- Include innovative concepts

Ambition:

- The current Strategy lacks ambition. Even though it projected a decreased modal share for cars by 2035, it projected that there would be more car trips in 2035 than in 2016.

Consultation

- At the scheme level, it was stated that wide public consultation is a critical element to buy-in on schemes. The use of emerging technologies, such as Virtual Reality and 3D imaging, should also be harnessed to improve engagement with infrastructure proposals as non-technical people often struggle with current scheme material.

Data Collection

- The importance of data collection as a key input into transport planning was noted by some respondents, who called for dedicated funding for improved/increased collection and research of transport data, improved collection and analysis of cycling data to inform scheme assessment, and improved traffic and transport research and monitoring, particularly within the canal ring of Dublin city centre.

Appendix 2: Impact of Covid 19

Submissions received included the following comments:

- It is recommended that there is careful monitoring and understanding of the potential impacts of COVID-19 on travel patterns and housing development, to avoid unsustainable development patterns followed by appropriate policy responses;
- During the pandemic, we have witnessed a stark contrast between the response of Kildare County Council and other local authorities in the GDA to the need to make more space for pedestrians and cyclists;
- Flexible work practices have significant potential to impact on public transport provision and capacity, for example staggering the start of the working day between 7am and 10am would have the potential to significantly enhance capacity at peak times. Initial feedback from companies is that post-crisis 81% will move to offer greater flexibility to their staff, however we also know that staff will be expected to be in the office 70-80% of the working week;
- Investment in transport should support regeneration and renewal post-Covid;
- Take account of the growth of online retail;
- Reference work done under Covid-19 schemes;
- Support for continued roll-out nationwide of active travel infrastructure as seen in response to COVID-19;
- Consider the possible long term societal changes;
- The strategy will need to consider how the opportunities [presented by Covid-19] can best be built upon to improve the transport system and how resilience can be improved within the system; and
- Proposed consideration of impacts of Covid-19 on medium-term transport and land use planning is welcome.

Appendix 3: Climate Change

- The Strategy should be based on resilience to climate change and extreme weather events, and should include specific objectives related to emissions;
- The Strategy should set out how it will achieve the step change that the NPF is seeking, to put in place environmentally sustainable public transport systems to secure climate actions goals;
- The Strategy requires a comprehensive set of measures to reduce GHG and a means to quantify the impact;
- Explicit, detailed, and rigorous modelling is required of the Greenhouse Gas Emissions associated with our transport system and the reductions associated with all new plans, along with a mechanism for constant updating and reporting of these calculations;
- The Strategy should be flexible to take account of updated climate change targets as they evolve;
- It is of critical importance that all future transport proposals consider climate change in their planning and development;
- The long term vision for the region should be based on carbon neutrality, through support for a carbon-free transport modes and the decarbonisation of the overall transport system;
- To help decarbonise transport in the GDA, an objective should be included in the GDATS to support the development of CNG refuelling infrastructure (in line with Climate Action Plan: Action 76);
- Strong support for the electrification of transport to address climate change/GHGs;
- The average rail passenger km creates approximately 28g of greenhouse gases (GHGs) vs. 102g for road vehicles, proving a step change in improving air quality levels in the GDA;
- Reduction in car use would dramatically improve air quality; and
- The statutory authorities urgently need to address air and noise quality for residential areas along the M50 corridor.

Appendix 4: Transport and Land Use Integration

- Transportation requirements for the three Key Metropolitan Towns should be fully integrated with the land use and spatial policies for the towns so as to identify the necessary enabling infrastructure;
- The strategic guidance set out in the MASP as part of the EMRA RSES must be adhered to in the preparation of the GDA Transport Strategy;
- By transforming bus depots into genuine living components of the city, Dublin Bus is reinforcing its position as a major contributor to the city, in addition to fulfilling its key mobility role;
- Demand for efficient transport from North Kildare to key employment and education destinations in North Kildare, Dublin city and western suburbs will remain high;
- Develop new rail stations in line with emerging spatial planning policy, subject to business case evaluation;
- Embed public transport and sustainable travel infrastructure in all new developments and area plans;
- Essential to consider spatial planning policy in the Transport Strategy review;
- Future lines to TUDB and the Employment lands in DEZ, also future links to Dunsink Residential Development;
- Greater mass transit is required along with densification of urban settlements, especially close to public transport nodes;
- High density residential, office as well as retail and hospitality areas must be well served by transport;
- Importance of Local Transport Plans;
- Integration of land use and transport should be foregrounded in Strategy document;
- Issues with isolation and poor public transport access to Campus;
- It is important that in line with the projections of population growth and urban density in the NDP & National Planning Framework (NPF) that the NTA ensures that capacity constraints do not occur in the future;
- The revised NTA strategy include policies surrounding the development of sites which adjoin or are located directly on lands associated with future transport facilities to ensure that these strategic locations are not sterilised from coming forward for development prior to the transportation services being implemented;
- The NTA should encourage the development of strategic sites impacted by future transportation proposals and engage with land owners during the planning application process to agree a development proposal that incorporates the future transport plans without the need to restrict development in these areas until such time that the public transport service is delivered;
- Need to prioritise Bray and Environs Transport Study measures in Strategy;
- New schools should not be sited on national primary or secondary roads which have higher speed limits;
- Post pandemic public transport will be central to not only facilitating economic recovery, but to the creation of a new, more sustainable GDA;
- Prioritise appraisal of projects that support growth in particular settlements – e.g. Navan line and Luas expansion;
- Provide safe cycling infrastructure for new high density developments to enable safe cycling to local shops, schools and amenities;
- Request that the NTA actively engage with Kildare County Council, the various agencies responsible for project delivery and the landowners of the lands zoned for development at Confey. Confey can be a demonstration project to illustrate how sustainable suburban residential communities can be delivered;

- Strategy must support growth of RSES Key Town of Maynooth through provision of enabling transport infrastructure, in line with NPF and RSES Objectives;
- Successfully connect transport to land use policies to allow people to choose where they want to live and work, rather than having these decisions dictated by circumstance;
- Support for full integration between land use planning and transportation planning; transport infrastructure required to support western expansion of Maynooth and new land uses;
- Support the expansion of sustainable public transport to provide more capacity and cater in an environmentally sustainable way for the population and employment growth that is projected longer term under the NPF;
- The public transport system around Ballyboden area is nowhere near sufficient to reduce the car traffic. Within the next 3-5 years, cars will be unable to travel at the minimum speed of 10km per hour towards the motorway access at Knocklyon;
- There need to be better integration of planning and transport, particularly regarding school locations;
- Transport investment should be integrated with land use and development objectives established under the National Planning Framework, the EMRA Regional Spatial & Economic Strategy and the Metropolitan Area Strategic Plan for Dublin. The outcome should result in an ambitious multimodal transport network;
- Travel infrastructure for regeneration areas in place in advance of development (Naas Road, Tallaght, Citywest/Saggart) including consideration of an additional Luas station on Naas Road;
- Understand the impact of plans for expansion of housing, employment areas, Dublin port and Dublin airport and other large developments; and
- Vital that Dublin is seen as an attractive place to live and to invest and public transport is an essential element of this.

Appendix 5: Future Growth Areas

- Any additional tram or metro route needs to address the growing populations in South and West Tallaght. If the population targets of 34k residents for the large Tallaght town centre area (6k residents today) are delivered - the current bus service and Luas route / frequency will not cope with the additional demand. This is a growth of 450%, with no parallel increase in transport options or service;
- Highlights North Blanchardstown deficit, Ballycullen-Oldcourt, Rathfarnham corridor and importance of high quality bus;
- Imperative that a North Kildare Transport Strategy (NKTS) is commissioned;
- Importance of strategic land reserve at Old Connaught;
- In this context it is submitted that the early provision of the new link from Ferndale Road to Dublin Road at Shanganagh becomes critical in facilitating local traffic movements in the area. Importantly, the provision of this road can be undertaken independently of the upgrade of the M11 and Wilford Interchange and a decision on the extension of Luas to Bray and would therefore allow the earliest release of lands zoned for development at Old Conna;
- Incorporate emerging Core Strategies;
- Need for strategy to support new development areas;
- Prioritise Dunboyne and Environs Transport Plan;
- Priority Public Transport and high density Corridor through north west quadrant in Naas;
- Progress in the delivery of water/ waste water infrastructure. For example, Arklow and Blessington are likely to see significant housing developments arising from the provision of such infrastructure;
- Regard should be had to the Leixlip Strategic Transportation Assessment (LSTA) published by Kildare County Council in 2019, and the 2020 Leixlip Local Area Plan which followed this study and zoned lands to deliver 1,760 units immediately adjacent to Confey rail station;
- Request that the recommendations of the Naas Sallins Transport Strategy (for the Naas Sallins LAP) are incorporated into the review of the GDA Transport Strategy and in particular that funding be made available for transport infrastructure that will facilitate the release of zoned lands for residential development;
- Significant growth in population in Co. Wicklow, due in particular to fast tracked housing delivery;
- Strategy needs to account for Naas Road redevelopment and requirements for Kylemore station, a new stop on Red Line, and upgrading of Red Line services and bus;
- The area of Dublin between the Red and Green Luas lines (which correlates somewhat to Corridor E) has been ignored in the current strategy. Specifically, TSGDA fails to recognise the ongoing largescale residential development in the south west where over 480 hectares are currently zoned for residential development. In addition to greenfield sites, there is also significant brownfield activity including redevelopment of institutional lands as well as repopulation of established areas;
- The focus of this submission is on areas of Santry, Kilmore, Clonshaugh and their environs, and how the principles of the strategy are applied to adequately meet the transport demands of the area both now and in the future to support the on-going growth in the area; and
- A feasibility study for the whole triangle between the present Red Luas Line and Green Luas Line and not merely Corridor E as described in the Transport Strategy for the Greater Dublin Area 2016 – 2035 is required.

Appendix 6: Infrastructure Design

- Road and street design should accord with the provisions of DMURS;
- Cycle-friendly traffic signal sequencing;
- Longer distance cycling by e.g. e-bike should be enabled;
- Shared paths (ped and cycle) should not be considered in the absence of a forecast of levels of active travel;
- Siting of bus stops should be as close as possible to key destinations in city centre;
- Segregate pedestrians and cyclists in busy areas to remove conflict;
- Improve greenways and consider boardwalks for coastal route development;
- Improved (e.g. segregated) infrastructure for cyclists;
- Infrastructure should be segregated and should connect directly with schools to improve mode-shifts. Linear coastal routes and greenways should be planned to link with schools to increase usage and reduce vehicle trips to and from schools;
- Open space and recreation audits should be carried out to better understand and provide for enhanced linkages to local schools;
- Infrastructure that restricts the use of ad hoc parking should be 'self-regulating' and be adequately and transparently policed;
- The Design Manual for Urban Roads and Streets should be statutorily adopted and implemented on the ground including both new infrastructure and retrofits;
- That provision of walking and cycling infrastructure is mandatory as part of the design and planning process for any new school build;
- Cycleability Audits should be reviewed prior to the design of cycling infrastructure to determine the needs and opinions of the users;
- Acknowledge severance of major roads and support additional ped / cycle bridges;
- Update National Cycle Manual;
- Need for continuity of pedestrian and cycle infrastructure;
- Supports improved infrastructure;
- Strongly supports the introduction of improved cycling infrastructure and all cycling schemes that promote cycling;
- Cycling needs to be made much safer to encourage more people, and particularly women and girls to participate;
- BusConnects should be stronger on the provision of active travel infrastructure. It needs to be built on a continuous basis alongside mass transit infrastructure;
- Object to a cycle bridge over the Dodder as part of BusConnects infrastructure proposals;
- Request to expedite the proposed new 'Santry Greenway' along the Santry River as it traverses from West to East via the Swords Rd- M1 underpass and create suitable cycle lane linkage and safe pedestrian walkways and various access points to the Greenway to promote its use.

Appendix 7: Multi-Modal Transport Options

- Accommodating the multimodal needs of staff and passengers in the short and long term, while the transport network evolves, is critical to the growth of the airport;
- Consider mini-bus services in city centre to connect radial bus and rail routes (as can be seen in Nairobi, for example);
- Critical to connect bus to DART stations;
- Currently, there is an inadequate level of synchronisation across the various modes;
- E-scooters will further encourage modal shift from the private car and will complement the public transport value chain;
- Greater emphasis must be placed on multi-modal infrastructure such as transport interchanges where students move from buses to walking or cycling. This would allow for greater connectivity and less travel time;
- Important role for walking and cycling as 'first mile' and 'last mile' modes, connecting with higher capacity PT;
- Improve cycle interaction with PT- secure parking at stations and stops, and subsidised cycle hire at major bus and rail stations;
- Integration of bikes and public transport / high quality cycle parking provision;
- More emphasis required on interchange at M3 Parkway – BE 109 and DB services;
- More needs to be done to support the 'last mile' part of journeys;
- Orbital bus connections to heavy rail;
- Provide for carriage of bicycles on commuter buses with e.g. front rack;
- Safe bicycle routes to DART stations to be planned and marked;
- Some communities request that NTA should revert to the creation of an integrated transport hub in St. Stephens Green which would allow for the interchange between the MetroLink and the LUAS Green line and cater for the development of the DART Underground should it ever be resurrected instead of having the LUAS/MetroLink interchange at Charlemont;
- Suggest that further work is required to link the Centre to the Dart + stations; While Bus Connects provides a quality bus link to Clonsilla Station, no link is provided to Coolmine Station. The closure of the level crossing at the Coolmine station presents an opportunity to provide a high frequency local bus link from this station to Blanchardstown Town Centre to provide for trips between the Centre and the local catchment and interchange with Dart +;
- Support for a strategy that enables multi-modal journeys and interchange;
- Support for development of PT interchanges to facilitate multi-modal journeys;
- Support walking and cycling as 'last mile' modes;
- Supports the development of an integrated transport hub at St. Stephen's Green which would also facilitate the development of DART Underground. Interchange with Luas/MetroLink should happen at this location rather than Charlemont which would allow MetroLink to continue to UCD or south-west;
- Sustainable Interchange Programme - ease of interchange between rail and all other modes, prioritising those that are sustainable – cycling, electric charging, wayfinding and shared modes;
- The Luas only directly serves north Tallaght - Kilnamanagh, Kingswood, Belgard, town centre. Places like Jobstown, Killinarden, Kiltipper, old Bawn, Tymon North, Old Court, Firhouse are 2 to 3km away from a Luas stop, with poor linkage to it;
- The Strategy should also consider how the future suite of transport options can be integrated at Local Mobility Hubs;
- The Transport Policy should consider directly micro mobility options and devices within public service transport planning. Cohort specific mobility devices and access schemes need to be designed and made available within and proximate to areas designated as Corridors, based on

needs, key services, amenities and requirements- let the micro meet the meso. Priority must be given to neighbourhoods within Bus Gates. Needs will vary according to cohort, and community;

- Transport hubs and Park & Ride should be prioritised; and
- Walking, cycling and other active modes should be integrated with public transport, e.g. as last-mile solutions.

Appendix 8: Ports and Freight

- Take account of Drogheda and Bremore ports in assessment;
- Freight management is an essential element;
- Access to Arklow and Wicklow Ports is critical if the land bridge is further compromised by Brexit;
- The strategy needs to make adequate provision for the transport of goods and freight. In particular, the strategy needs to recognise that there will be a continued dependence on diesel powered HGVs for most, if not all, of the period to 2042;
- The strategy needs to facilitate the provision of congestion-free road capacity to enable HGVs operate as efficiently as possible so that their emissions can be minimised;
- The NTA strategy should support the development of as much rail freight capacity as it is practically possible to provide in Dublin Port;
- The challenges of HGV traffic, and of port-related HGV traffic in particular, cannot be wished away; they must be explicitly recognised and addressed in the NTA's Transport Strategy for the GDA;
- There should be a Rail Freight Strategic Plan;
- The importance of Dublin Airport and Dublin Port to the economy of Ireland should be a key consideration of the strategy;
- Consequent to Brexit and changes to freight routes to Europe and increasing use of Rosslare and Cork Harbours, the NTA and TII need to monitor the impact on the use of the M50 and the potential for increased heavy goods vehicle use on the southern portion in particular; and
- The 2035 Transport Network in the current transport strategy for the GDA does not refer to Dublin Airport or Dublin Port. These transport hubs facilitate the bulk of international trade and tourism activity for the GDA and Ireland as a whole. The NTA needs to work with DAA, the EPA, and local authorities to rethink the planning and regulation of these strategic transport hubs.

Appendix 9: Public Transport Passenger Experience

Public Transport Fares

Among the submissions that commented on public transport fares there was a range of views regarding the appropriate fare structure and costs. Some submissions recommended that all public transport should be free, while others proposed limited use of free travel, e.g. for school children only, for all students, or for all users at off-peak times only. Other submissions proposed a single all-day flat fare across the GDA.

Other changes proposed for fares included:

- Leap Cards should extend the child fare to the age of 21 so that students who are transitioning into universities can continue to avail of a reduced fare;
- Dynamic pricing;
- Consistent fare zones;
- Extending the Tax Saver public transport ticket to all public transport users regardless of employment type or status; and
- Ensuring that the Leap Card can be used on all public transport services nationwide.

Public Transport Quality

The quality of the public transport offer was also highlighted in a number of submissions. At the service level, the key themes mentioned were Capacity, Frequency, Connectivity/Integration and Reliability. At the individual passenger level, the main themes were Safety, Attractiveness and User-Friendliness. Such characteristics allow passengers to have confidence in the public transport offer across the region and support a move away from car-dependency.

As noted in one submission, 'in the absence of total confidence in public transport, for many commuters the temptation will be to take the private car, and the city may grind to a halt again as we emerge post-covid. Steps and measures must be taken quickly both to bolster public confidence in public transport, where possible, and to provide a range of options for the public other than the private car.'

Public Transport Service Hours

Some submissions noted that current public transport service hours do not reflect the needs of a modern city region in their focus on the movement of passengers at peak commuting times. It was suggested that public transport should be 24-hour to support the night-time economy and non-standard work hours, and that late-night transport provision would support economic recovery post-pandemic.

Appendix 10: Road Space Reallocation

- The provision of additional road capacity around Maynooth offers an opportunity for improved public transport, walking and cycling networks, through reallocation of road space within the town centre;
- Support for reallocation of road space for cycling and walking, and enhanced public realm;
- Reducing the priority of the car relative to pedestrian and bike like they do in Holland;
- Roadspace reallocation should be prioritised;
- Need a city where priority lies with the public transport user, the pedestrian and the cyclist – helping to bring about optimal journey times for public transport users;
- Dublin does not have to be a car dominated, congested city. We now know that streets can be reclaimed for people and businesses. It is essential if we are to have a truly sustainable GDA by 2035;
- The assumption should be that public and active transport are the preferred road usages; and
- Main Streets prioritise single occupancy car journeys through an abundance of on-street car packing and no dedicated cycle infrastructure and substandard walking provision with major severance issues.

Appendix 11: Rural Transport

- Request for increased local transport to support apparently un-sustainable small communities;
- A detailed study of the school transport system needs to be conducted in consultation with rural school communities. The last review of the school bus service was undertaken in 2011 and indications from recent studies have shown that 56,000 unused places were available on routes during the 2017/18 school year. Some school routes travel excessive distances or pass potential passengers owing to eligibility criterion. Targeted engagement with rural schools will optimise this system and reduce traffic outside schools;
- Investment is needed to improve public transport infrastructure in rural areas to improve signage, bus stops and bus shelters;
- Investigate whether or not the Local Link service is an efficient way to offer school transport in more remote rural communities;
- Enhance Local Link;
- Importance of rural areas and smaller towns and villages;
- Expand Local Link – connect east and west Wicklow;
- Introduce Local Passenger Transport Plans with local authorities charged with their development and implementation; and
- Support for the commitments within the NTA Issues Paper which seek to continue the investment in the rural Local Link services in county Meath.

Appendix 12: School Travel

- Prioritise Safe Routes to Schools – it should be prioritised and increased;
- Cycle networks serving schools should be of particularly high quality;
- Cycle parking and repair facilities at schools;
- Cycle networks serving schools should be a high priority;
- Support for School Streets and School Zones 'but their introduction should involve benchmarking the before with after situation in terms of mode of travel, carbon generated and air/noise quality';
- Traffic management plan and implementation strategy to be developed by every school;
- Development of school 'Transport Hubs' to better coordinate students travelling from school;
- Designating the front of school environs as a vehicle free zone where possible;
- Designating the front of school environs as a no idling zone for both cars and buses;
- Introduction of 30kph zones outside schools across the GDA in tandem with engineering solutions such as entry treatment, build-outs and pinch points to reduce the drivers' tendency to speed in these areas and optimise the efficacy of the zones;
- A publicity campaign to explain the introduction of school zone specific speed limits, highlighting the rationale and benefits to all road users;
- Development of new School Zone specific speed warning signs (450 mm and 600mm versions) and the deployment of this signage at all schools and to an additional extent where the 85th percentile is greater than 30kph;
- Enforcement of speed limits outside schools either through the use of speed cameras or traffic calming measures. A School Speed Detection Programme which avails of the 170 new Laser speed detection units supplied to the Gardaí in 2020 could be used to facilitate this;
- That the GDA takes the lead in the establishment of school specific slow zones with a zero tolerance policy;
- There is a need to radically improve infrastructure around schools to support sustainable travel modes to school;
- Support the expansion of 'school streets' or 'school zones' with the appropriate funding mechanisms;
- Cycle Right training must be available to secondary schools and ideally as a mandatory subject;
- Calls for a Dublin Bus Schools System to reduce traffic congestion associated with school traffic;
- There should be 3 to 5 km of segregated cycle lanes leading to all secondary schools;
- The NTA should adopt a strategy for cycling to school, based around segregated cycle lanes and the elimination of parking, idling, and dropping off around the entrance to schools; and
- The review should consider School Buses and the advantages they could bring in terms of relieving traffic.

Appendix 13: Transport and Technology

- Digital Information and Sharing Platforms are important;
- Micro-mobility and MaaS will become increasingly important;
- Consideration of technology and demand management measures to support greater modal shift to more sustainable travel, enhancing accessibility and reliability of journey times;
- The Greater Dublin Area Transport Strategy needs to reinforce Dublin's Smart City credentials;
- Single website for all services;
- Support for Mobility as a Service (MaaS) and Demand Responsive Transit (DRT);
- Customer Information Services Strategy required;
- Include some assessment of the impact of automation and digitalisation on transport; and
- The GDA Transport Strategy must give innovations that are happening elsewhere serious attention and include MaaS (Mobility as a Service), car sharing, etc. prominence as important elements of the strategy for the GDA.

Appendix 14: Support for Currently Planned Infrastructure

- Prioritisation should be given to key public transport and accessibility projects that can have a transformational impact upon the sustainable development of the GDA;
- DART+ Programme;
- City Centre Re-signalling Programme;
- National Train Control Centre;
- Accelerate delivery of transport projects already in the pipeline (Metrolink, Dart Underground, Luas expansion) to ensure new developments are served from the outset;
- Dublin Bus strongly supports the implementation of BusConnects;
- Examine delivery models;
- It is disappointing to see the DART Underground is not on the list of priority infrastructure projects in the existing National Development Plan;
- It is essential that the Government does not repeat mistakes of past recessions and practice false economy by failing to invest in capital projects. The Government should also take advantage of the current very low costs of capital and invest in these badly needed infrastructure project;
- Local Authorities should not only be funded adequately but resourced with appropriately trained personnel that have expertise in the delivery of active travel interventions;
- Many good projects exist already; focus must now move to implementation/delivery;
- Need to plan for accelerated delivery of public transport projects and place even greater emphasis on achieving sustainable mobility and compact growth NSOs of the NPF;
- New funding for cycle schemes must be supported by other resources, including qualified personnel, and by commitment at local authority level to delivery;
- Prioritise Bus Connects for delivery, as long as cycle infrastructure is of sufficient standard and given equal priority with bus on CBCs;
- Prioritise the DART Underground project, which will support an overall commuter and inter-city rail capacity increase on the existing rail line and at Connolly and Heuston stations;
- Progress the Metrolink, Luas extension to Finglas and Luas Green Line Capacity Enhancement, and DART+ projects without delay;
- Projects in planning: BusConnects, the Greater Dublin Area Cycling Plan, MetroLink, DART+, Luas expansion, and the DART Underground project;
- Projects in planning: expanded DART network, Metro system, new Luas lines and BusConnects;
- Projects in planning: Metrolink, DART West, Luas Finglas and Bus Connects – would like clarity on delivery timeframes;
- Recommend that delivery of CBCs and related cycle infrastructure be expedited;
- Request that the NTA commit to completing the Royal Canal Greenway from Maynooth to the City Centre by Q4 of 2022;
- Strategy should provide certainty in what infrastructure is to be provided over defined periods and provide clarity on any measures that will need to be implemented by various stakeholders, e.g. role of local authorities;
- Support for BusConnects, MetroLink, the DART Expansion Programme and Luas network expansion; would also like to see progress on the DART Underground Project;
- Support for Projects completed/underway - further investment in Green and Red Luas lines, Luas Cross City, expansion of Dublin Bikes and BusConnects (especially the O Orbital route);
- Support for projects in planning - BusConnects, Luas extension to Finglas, Metro North, Metro, Dart Plus, MetroLink, other light rail lines;
- The most important public transport projects for prioritisation are MetroLink, the DART Expansion Programme including DART Underground, and BusConnects. Funding decisions

regarding these projects must be considered in light of the cost to Ireland of EU fines for non-compliance with environmental targets, and the need to compensate for past underinvestment in infrastructure; and

- The progression of the Luas Green Line Extension to Finglas and DART+ in recent times is welcomed.

Appendix 15: Pedestrian & Cycling Facilities

Pedestrian Facilities

- Provision for pedestrians should be significantly enhanced - crossings, junctions, new technology;
- Support for the creation of pedestrian zones within the city and greater pedestrian friendly measures wherever practical (should not compromise bus traffic, for example);
- Footpaths should be sufficiently wide to accommodate walkers passing each other – minimum of 2m wide;
- Consider an assessment of existing and emerging levels of walkability within Dublin City and whether existing and future desire lines are likely to be met;
- A Regional Walking Strategy should be developed with key targets to increase walking and cycling to school. This strategy should also be supported by Walking and Cycling Officers in every local authority;
- Celbridge bridge enhanced facilities for walking and cycling should be provided; and
- Recommend further investment in provision of facilities for active transport including pedestrian facilities.

Cycle Network

- 10 year Cycle South Dublin programme requires additional NTA commitment;
- Better walking & cycling facilities especially within towns;
- Bicycle and walking access to Dublin Airport especially for workers;
- Celbridge has 'cycle provision' which does not meet national standards and ensures that cycling is an unattractive option for many;
- Deliver city region wide network of cycling infrastructure;
- Identify key projects outside CBC programme that are required to deliver a regional cycle network;
- Implement GDA Cycle Network Plan, in particular greenway parallel to N3 and Royal Canal route;
- Implementation of GDA Cycle Network, in particular routes connecting various TCD campuses and accommodation locations;
- Network must be connected – cycling is omitted from some links in CBC plans – and link into settlements, not just close to them;
- New school builds must support walking and cycling with the provision of proper infrastructure. Carpark spaces should be kept to a minimum and 'park and stride' locations should be supported for larger rural catchments;
- Prioritise delivering a coherent, segregated cycle network which connects population centres, as a matter of urgency;
- Recommend further investment in provision of facilities for active transport including segregated cycling facilities;
- Strategy 'must help to shape a significant modal shift to cycling and public transport by expediting the building a comprehensive network of cycling and bus routes - and building it quickly';
- Strategy should identify a dense, connected network of safe cycling infrastructure from the local level out;
- Support for Greenways;

- The implementation of the permanent Liffey Cycle Scheme, the Royal Canal Greenway and Primary Route V, which traverses the Grangegorman Site via St Brendan's Way, are particularly key components of the CNP for Grangegorman;
- The provision of segregated facilities for cyclists and pedestrians both parallel to and across high-speed roads and National Roads should be explored;
- There is widespread public support for radical measures to improve cycling infrastructure; and
- Update the GDA Cycle Network Plan and provide a supporting implementation plan to set out a planned delivery programme.

Cycle Facilities

- Cycle parking infrastructure needs to be increased in larger towns and cities. Students have consistently stated that bike theft is a deterrent to cycling to school as often they travel on to other locations where no cycle parking is available;
- Education and employment destinations should have good cycle parking, lockers and drying facilities;
- Lack of parking at or near bus stops in large rural towns needs to be looked as it is a major deterrent to its uptake, similarly so for parking policies (lack of long-term parking);
- Provision of bicycle infrastructure in business premises, such as bike storage and repair facilities and provision of shower facilities, should be incentivised;
- Our major retail outlets provide underground car parking and even e-charging bays for electric cars, but not all provide facilities for bicycles and e-bikes. Cyclists are entitled to secure and covered places at retail centres and business centres for their bicycles;
- Our sports arenas and stadia should consider enabling cyclists to park within the perimeter of these facilities – so many cyclists have to double and triple lock their bikes for fear of them being stolen while they participate in activities; and
- We have to legislate and provide capital for the development of secure, state of the art bicycle parking facilities indoors that people of all ages feel safe using at any time of day or night.

Bike Share

- Expand Dublin Bikes to inner suburbs, e.g. Poolbeg, Grangegorman; and
- Integration of bike sharing schemes with public transport and public transport interchanges.

Cycle Proposals

- Completion of the Grand Canal Greenway between Hazelhatch and Lucan;
- Grand Canal Greenway;
- Greenway from Portmarnock to Malahide and onwards to Donabate to be completed providing a route for both tourists and residents to access the city safely by bicycle or walking;
- It's time for Dublin to embrace the spirit of 'Ciclovia' (e.g. like in Columbia were streets are blocked off to cars for runners, skaters, and cyclists);
- Ped / cycle link from Celbridge to Leixlip;
- Proposal for Mountains to Sea greenway in north-east Wicklow connecting Newtownmountkennedy, Kilcoole, Greystones, Kilpeddar, Roundwood, Annamoe, Laragh and Glendalough (see attachment for Feasibility Study Executive Summary);
- Safe cycle route from Celbridge out to Hazelhatch;
- Supports cycling through the Liffey-Tolka Project which DPC plans to complete by end-2021. In conjunction with the SPAR, proposed as part of the 3FM Project, the Liffey-Tolka Project can deliver a key central part of the overall Sutton to Sandycove route;

- The State should introduce Cycling Training as a mandatory element of the primary school curriculum, with basic training on bicycle use and safety provided as part of the core physical education curriculum; and
- Object to the apparent abandonment of the S2S on the seafront and its replacement by an inland on-road facility which is clearly indicated in the maps included in the proposed strategy.

Appendix 16: Bus Network

Specific proposals for bus schemes, both within and separate from BusConnects, included:

- Radial Core Bus Corridor between the City Centre, Finglas, and Corduff via Ballycoolin;
- Orbital Core Bus Corridor from Kilbarrack to Blanchardstown via Ballycoolin;
- Orbital bus route from Tallaght to Santry via Blanchardstown;
- Support for enhanced and increased bus services for Co. Meath;
- Request for service connecting Drogheda to Dundalk and DkIT;
- Better service to North Wicklow and Blessington;
- Linking of Ashbourne into Swords BusConnects and Dunboyne into Blanchardstown;
- Improvements required on the N81 corridor;
- Improvements beyond the main BusConnects routes in Wicklow;
- Shuttle buses connecting towns to rail stations in advance of the implementation of new routes;
- Additional outer orbital routes connecting towns in the hinterland of the GDA; and
- Consideration of interim bus priority measures on national roads, such as on the M11/N11 in Wicklow.

There were also requests to consider Bus Rapid Transit on certain corridors, including:

- Metro West Corridor;
- Luas Line F Corridor;
- An orbital route connecting the western suburbs; and
- A route connecting Bray and Greystones to Dublin City Centre.

Appendix 17: Luas Proposals

- Luas line linking Blanchardstown Town Centre to Dublin City Centre should be examined as a medium term proposal, to provide a high quality radial public transport link between the Blanchardstown catchment, Blanchardstown Town Centre and Dublin City Centre. This route could service Ongar/Hansfield/Clonsilla, Blanchardstown Town Centre, Blanchardstown Village, Castleknock, Phoenix Park to Heuston station linking with the Luas red line;
- Luas line from Sandyford to Tallaght via Leopardstown, Ballinteer, Churchtown, Ballyboden and Knocklyon;
- The timing of the Green Line extension should be confirmed;
- The Luas Red Line needs enhancement as it is at or near capacity and can't take the additional traffic that planned developments will bring;
- Extend Broombridge Luas to Damastown, a Luas Green Line spur connecting its planned extension to Finglas with Damastown via Dunsink, Sport Ireland Campus, and DEZ;
- It is queried how the Luas will meet the demands of the population growth in its catchment area, based on current and planned residential development;
- Important for NTA to specifically rule in or rule out the extension of the Luas from The Point to the Poolbeg Peninsula so that, again, the Dublin City Development Plan can be definitive on this issue. This is necessary to allow Dublin Port Company (DPC) design the 3FM Project, particularly the proposed Southern Port Access Road (SPAR), which DPC intends to provide as a private road for port-related HGV traffic (but open to public transport also). The issue to be determined is whether or not the SPAR, which will be designed and constructed by DPC, needs to make provision for a subsequent future extension of the Luas;
- Luas to Blessington should be explored;
- Luas to Bray – commence preparatory work in advance of Metro to Sandyford;
- Luas to Hazelhatch;
- Luas to Lucan/Rathcoole. With new developments planned for Rathcoole soon this is urgent. If new residents start using their cars it will be difficult to break that habit when a delayed service arrives;
- Luas/Metro to Bray;
- Requirement for additional capacity on Red Line;
- Support for Lucan Luas;
- The Firhouse, Oldbawn and Knocklyon areas have grown exponentially over the past 20 years. It is vitally important that this area has a direct Luas link to the city centre to alleviate traffic congestion, and a greener environment;
- Through running from Bray to City Centre required without interchange; and
- Unambiguous commitment required for the delivery of Green Line extension to Bray.

Metro Proposals

- A Platform for Change by the DTO carried out comprehensive transport modelling. It found that a 'bus only' solution would not be sufficient in South West Dublin and that a metro would be required. Yet 'bus only' is the 'solution' which is proposed;
- BusConnects only is not the solution to the transport needs of the population of South West Dublin;
- Calls for a detailed feasibility study to be carried out into a Metrolink South West line including the practicality, desirability and potential cost and route of such a line;
- Conduct an evaluation of new underground metro routes within the M50;
- Proposal of a Metro South West route to Firhouse/Old Bawn (Rathmines, Rathgar, Terenure, Rathfarnham and Templeogue);

- Metro for South West Dublin (South-East of South Dublin County, Firhouse-Knocklyon) as per Minister's direction;
- MetroLink should be routed through St. Stephens Green and, contrary to finishing at Beechwood, should continue through Cathal Brugha Barracks towards Harold's Cross, Terenure, Spawell to Firhouse, to serve the huge bus dependant population there;
- Situated in the wedge between the Green and Red Luas Lines, there is a population in the region of 136,000 (Census 2016). Unlike other parts of the city, this vast population is totally dependent on Bus Transport;
- There should be an assessment of Metro to UCD and to the south-west of Dublin;
- The area with the greatest need for rail transport lies within the Red and Green Luas Lines;
- The finalised RSES contains the following significant objective on page 190: "Complete construction of Metrolink from Swords to Sandyford and consider extensions to other locations from Charlemont". Therefore, this Review of the Transport Strategy must examine and consider the extension of Metrolink from Charlemont to serve the south-west community. A stand-alone line, such as is proposed in the Feasibility Study being undertaken at present, would be inconsistent with the RSES. In addition, a stand-alone line would take longer to design and would be more costly;
- The termination of Metro at Charlemont is premature pending the assessment of other possible routes to UCD or Rathfarnham;
- The Terms of Reference for the "Metro to Knocklyon Feasibility Study" need to be revisited urgently;
- Suggest exploring the future possibility of linking a South-West line to the Red Luas at Tallaght;
- Proposal to extend MetroLink northwards to connect to northern rail line at e.g. Rush & Lusk;

MetroLink

- Concerned that, pending the outcome of the strategic review, the NTA/TII is proceeding with incremental investment in solutions that are aligned with current strategy, but which may pre-empt the conclusions of the current strategy review including the Rail Order on Metrolink, possible alternatives to the current proposed Charlemont/Luas solution as well as a potential city-centre location for an integrated public transport hub;
- Deconstruction of the Luas Green Line is not the solution – it should be left as it is with the now longer and more frequent trams;
- Investment of incremental taxpayers' monies should not be targeted on decommissioning existing essential and well-proven transport assets, specifically light-rail services;
- MetroLink should proceed without delay;
- Object to closing Dunville Avenue as part of the Metrolink project because of the significant consequences for the community and the general area. Closure of the Green Luas for prolonged periods of time for construction is also untenable;
- Opposed to demolition of Markievicz Pool & Gym for MetroLink;
- Opposed to Metrolink as it removes residential units at Townsend Street;
- Recommendation that MetroLink should now be considered as two separate projects (Estuary to CC; CC to southside terminus) and there is no statutory obligation to deliver full planned alignment;
- The proposed extension of the MetroLink to Sandyford at a later date is not an acceptable solution for the communities living along the Luas Green Line;
- The Transport Strategy review needs to include a full review of south-side options;
- To start the Metro along the route to tie-in with the Green Line Luas means you are preordaining the Green Line Luas upgrade route and is a waste of public funds as it may not be used in the future if another route is selected;

- Upgrading of the Luas to Metro still needs to be considered;
- The Metro North project should proceed to St Stephens Green and once the various option reviews for south-side routes are completed then decide the route on the south-side; and
- The NTA strategy to place the south-side terminus at Charlemont- Dartmouth Road is fundamentally flawed - the residential area is not fit for purpose to place a major transportation infrastructure terminus.

Appendix 18: Rail Proposals

Improve Kildare Rail Line

- Provide a new train station at Aderrig along the Hazelhatch / Celbridge to Dublin line, adjacent to the Adamstown SDZ area.

Improve Maynooth Rail Line

- Support for the DART+ proposals to upgrade the Maynooth line to DART standard with enhanced frequency;
- DART+ and Interconnector should proceed;
- Kishogue station should open in 2022 as homes are delivered in Clonburris;
- Kylemore should be served;
- Regional services should serve Clonburris (Kishogue); and
- Request clear timeframe for delivery of DART+ West.

Improve Northern Rail Line

- Strongly supportive of an all-island approach to connectivity and growth, significantly improved connectivity between Dublin, Dundalk and Belfast, high speed, high-frequency rail between Dublin and Belfast;
- DART to Drogheda;
- Extend short hop zone to Laytown, Gormanstown and Enfield;
- Support for station at Bettystown; and
- Support for Train Station in South Drogheda.

Improve Southern Rail Line

- DART + Coastal South improvements to Greystones; DART Underground; Extension of DART services south of Greystones to Wicklow;
- DART+ to study how to improve rail service south of Bray both frequency and speed (duration);
- Increased frequency of train services from Arklow;
- Installation of passing loops as necessary to accommodate increased train movements south of Bray;
- Lengthening on station platforms to accommodate new fleet as required and upgrade of stations and signalling as required; and
- Optimising the use of the existing single track line.

Rail Proposals

- Take note of existing proposals for new station at Drogheda North;
- The DART+ West project should include provision of a new railway station on the western side of Maynooth at a distance of 1.5km to 2km west of the existing railway station to support western expansion of the town; accessed from new (realigned) Western Orbital Route, with dedicated pedestrian and cycle access across the canal;
- There should be station improvement/other enhancement programmes; and
- There should be non-DART fleet enhancement;

- Access to DART West depot could be from the new Western Orbital Route, obviating the need for separate dedicated depot access;
- Consider introducing a 5/6/7 Zone ticket pricing structure, while "rebalancing" prices;
- Consider new rail line Drogheda-Ashbourne-Airport-DCU-Grangegorman-Heuston to free up capacity on northern line and remove conflict between Enterprise and DART;
- Continue to expand heavy rail as a high capacity high frequency mode choice with proven ability to attract private car users;
- DART Line running parallel to M50 with large car parks at motorway junctions;
- DART Underground is essential in the medium to long-term for the continued development of the rail network in the GDA;
- DART+ with expansion to Kilcock and Sallins;
- High-speed urban rail solutions should run underground when servicing the city centre and inner-suburban neighbourhoods;
- Incremental development of urban rail transport should prioritise areas of high demand where there is no existing rail link;
- New commuter station proposed for Bettystown;
- New southern rail alignment should be considered (inland from Bray to Wicklow town) to future-proof the rail network against deterioration of current coastal alignment;
- Proposal to set up an 'Orient Express experience' luxury train service to Rathdrum in the tourist season and ferrying tourists from the railhead to Glendalough;
- Propose a single brand identity for all rail-based services, with unified design;
- Protection of a heavy rail alignment to Dublin Airport;
- Recommend that the Dart Interconnector/ Dart Underground as was described in earlier transport strategies is re-examined as an essential component of transport in our capital; and
- Review limit of Short Hop Zone on Northern Rail Line.

Navan Rail Line

- Support the electrification of the line to Navan;
- The design of the rail line to Navan should look at route options to the east and west of Dunshaughlin, which is particularly important given the existing and expected population growth in Dunshaughlin, Ratoath and Ashbourne;
- Support for the continuation of the rail line from Dunboyne to North of Navan;
- The rail line is required to address unsustainable levels of car use, but also for tourism potential;
- In the longer term, there should be an ambition to extend the Dublin-Navan rail line northwards to Kells, Cavan, Tyrone, Derry and Donegal, providing a vital rail link to our capital from the north-west;
- Navan is the only administrative capital in the Greater Dublin Area that does not have a rail service to Dublin city centre, for example both Wicklow Town and Naas have a rail link to Dublin. Indeed, in the Eastern and Midlands Region there is a rail service to Dublin from all 12 administrative capitals with the exception of Navan. This anomaly should be positively addressed in this Greater Dublin Area Transport Strategy;
- The line is essential not only to cater for the large number of commuters in the southern portion of county Meath who travel to Dublin every day for work, but also for the possibility of additional rail connections in the future to Kells, Kingscourt and Drogheda and the potential for transport-led housing development; and
- The need for the continuation of the line north of Navan is reflected in the current Programme for Government which commits to "continue the investment programme in public transport to improve our bus, light rail, commuter, and inter-city rail network across our country".

Appendix 19: Road and Provision for the Private Car

Private Car

- BusConnects doesn't adequately take account of people who must use their cars;
- The delays incurred by car-bound residents of the Gallops, in exiting the estate, to make journeys that they cannot make by public transport should be addressed;
- Increase the cost of private car use – access control, road pricing, parking charges, etc.;
- Must provide for car access to the city centre for people who don't have access to PT, people making large purchases, and at key peak shopping periods;
- One car family concept;
- Concern that safety risks, congestion and emissions are being exacerbated by the trend towards larger cars and requests the NTA to consider policy options to reverse the traditional vehicle-dominated road hierarchy to favour non-motorised traffic and transition to low emissions vehicles;
- Infrastructure authorities need to address the reality that driving is a requirement of participation in daily life for many - not a 'choice';
- The new Strategy should also ensure that vehicular access requirements can continue to be met in the context of the traffic management changes;
- There's a trend towards larger, heavier, more dangerous and more polluting cars. Dublin should adopt strong policies to incentivise and favour smaller vehicles; and
- Demand management measures should be implemented.

Road Proposals

- Additional Outer Orbital – N81-N4-N3;
- Assessment of further access point from N11 to Arklow Town;
- Completion of parallel service road at Kilmacanogue;
- Councils should be funded to acquire land for road widening;
- Delivery of key road infrastructure identified in ongoing Arklow and Greystones Traffic Studies;
- Delivery of key Road Objectives as identified in the Wicklow County Development Plan;
- Delivery of proposals with particular relevance to the functioning of the national road network including the Blessington Inner Relief Road (N81) and a second crossing of the river Dargle in Bray (N11);
- Demand Management on the M50;
- Due to lack of permeability, intra-urban and urban-edge road proposals should not be discounted;
- Improve the N81 – physical environment and crossings;
- Improve traffic flow - lessen pollution Investment in widening of pinch points on major routes into the city e.g. Goblet Pub on Malahide Rd;
- Improve access to Dublin Airport - the roundabout at the Airport is a disaster waiting to happen in terms of road traffic and air travel chaos;
- Invest in roads to enhance the interaction between 'key towns' and other urban centres within the Dublin Metropolitan Area, such as the N11 upgrade;
- Investment in road widening at junctions to accommodate right turn lanes;
- Kilcock R148 to R158 link;
- Kiltiernan link road and M50 overbridge are required – other roads serving SE of County;
- M/N11 improvements including bus lanes;
- M11/N11 Junction 4-14 Improvement scheme

- Maintain the strategic capacity and safety of the national roads network to ensure connectivity between the Regions;
- N2 to Dublin Airport;
- N2-N3-N4;
- N81 – continued maintenance and safety improvement schemes necessary;
- N81 improvements including Blessington By-pass;
- N81 Tallaght Hollywood Road Improvement scheme;
- Newbridge bridge;
- Proposals for demand control measures on M11/N11 to be accompanied by appropriate parallel service road provision;
- Protect capacity of strategic roads;
- Request clear timeframe in relation to the delivery of the N3 – N4 Road Link, as described in Section 5.8.2 of the Strategy. This study also needs to consider connectivity around the north and west of Leixlip regardless of the ultimate routing of the N3 – N4 link. This aligns with the Strategy's objective to develop orbital roads around town centres accompanied by and facilitating enhanced public transport, cycling and pedestrian facilities in the relevant centre;
- Support for a Western Orbital Route (as proposed in current Maynooth LAP, but on a different alignment);
- National road access to Dublin Airport and freight access to Dublin Port should be safeguarded in order to secure high quality international connectivity. The Trans-European Transport Networks (TEN-T) core network in the GDA consists of the M1, M50 and N7/M7 and is of strategic importance as it connects the regions to Dublin Port and Dublin Airport;
- NTA to address the blighting created by the maintenance of a reservation in the Dublin City Development Plan for the Eastern Bypass along East Wall Road, through Dublin Port, across the Liffey and into the Poolbeg Peninsula;
- Review need for Eastern Bypass; and
- The Eastern Bypass Corridor as delineated on the Poolbeg Peninsula encroaches on the southern part of ESB's Ringsend site and is being used as an impediment to the development of this essential generation capacity. Alignment in Ringsend should be amended. -The Eastern Bypass Corridor (EBC) reservation is an extensive area and has a significant impact on critical land uses at ESB's Ringsend site on the Poolbeg Peninsula.

Car Parking

- Increase to 20% the number of parking spaces which should have provision for electric vehicle charging infrastructure, in accordance with the EU Energy Performance of Buildings Directive;
- Tax employee parking as Benefit In Kind, with revenue directed towards improving transport infrastructure and the public domain;
- Apply more restrictive parking standards in line with better public transport provision;
- Limit car parking within new developments and reducing car parking provision across all categories of land use;
- Smart Parking, i.e. the application of technological solutions to optimise parking; and
- Better enforcement of illegal parking, particularly where illegal parking impacts on bus lanes, cycle infrastructure and footpaths.
- Use decommissioned on-street parking spaces for public realm improvements, cycle parking, taxi ranks and electric vehicle charging points;
- Use off-street parking spaces for growing hydroponic fruit and vegetable to serve city restaurants; and
- Use spare capacity in public car parks as taxi ranks, e.g. at night when demand for car parking is lower.