



14. Traffic Management and Travel Options

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14.1 Introduction

The preceding chapters have set out an ambitious vision for the supply of public transport, walking and cycling infrastructure and a broad range of integration measures. These measures, even when combined, will not be sufficient to reduce emissions from transport in the GDA to the extent required under national policy. They are a necessity in terms of supplying the infrastructure and services required to meet demand, but they must be augmented by measures which seek to manage the manner in which traffic can move around the region, and by measures which seek to directly influence people's travel behaviour. This chapter sets out those measures which will apply at the regional level in the GDA and which will be implemented by the NTA, TII and the local authorities in accordance with current Government policy.

The main objective of Traffic Management is to ensure that the regional transport system continues to operate in an efficient manner, i.e., that the movement of people by public transport, walking and cycling, and the movement of goods, is not adversely affected by private car traffic, and that the impacts of traffic congestion can be minimised. Measures which confer an advantage on sustainable modes can help meet this objective. Many of these are set out in the Walking, Cycling and Bus sections of the strategy, but those aimed specifically at managing private vehicular traffic are included here.

“The desire for safe, attractive and vibrant streets is reflected in a range of existing transport, planning and environmental policies and objectives. These policies and objectives address how neighbourhoods, villages and towns are created and protected. They relate not only to road safety and civil engineering, but also to town planning, urban design, architecture, landscape architecture and conservation.

“More significantly, they bear directly on broad societal issues, ranging from economic development, employment, tourism and recreation, through health, crime and security and onto education, social inclusion, energy efficiency and climate change.”

Design Manual for Urban Roads and Streets, Government of Ireland, 2013



This chapter sets out a broad range of measures that aim to manage the transport supply network in a way which places sustainable modes at the top of the road user hierarchy (as set out in Figure 8.4), and which seek to rebalance the cost of travel (in its broadest sense) towards these modes.

14.2 Management of Dublin City Centre

Dublin City Centre is the location with the greatest intensity and mix of activities in the country. There is no other place in the region which contains a concentration of business, housing, retail, culture, heritage, and nightlife at the scale of the City Centre.

It is also the location with potentially the greatest level of conflict and contest over public space, including the road and street network. Every mode of travel needs to be accommodated in some form in order to ensure that the needs of residents, businesses, workers and visitors are met. These needs, however, must be balanced in a way that favours sustainable mobility and the transition to a zero-carbon transport system, and the level of accommodation of each mode will not be equal on every road and street.

Recovery from the Covid-19 pandemic is also paramount when setting out a pathway to a zero-carbon city centre transport environment. It is clear from the evidence over many decades that the economic well-being of Dublin has been decoupled from the need for car access. As the city centre's economy has



expanded and as the number of jobs has grown significantly, the numbers travelling in by private car has fallen. In 2019 approximately 46,000 cars entered the city in the morning peak period, compared to 59,000 in 2008. The corresponding figures for the total number of people entering the city are

217,000 and 199,000. In other words, fewer cars but more people working, shopping and going to education, supporting an expanding economy. As such, the post-Covid City Centre must be one in which sustainable transport is to the fore.

Based on the range of policies and objectives in this Transport Strategy and on those of the Dublin City Development Plan, the NTA will continue to implement measures, in collaboration with Dublin City Council, which deliver the capacity and quality of public transport and the cycling network required to serve the City Centre, and manage goods deliveries and taxis in a manner which serves the needs of all users of the city centre road network. The agencies will also deliver together the high quality public realm that will enhance the attractiveness and liveability of the city centre.

Measure TM1 - Management of Dublin City Centre

The NTA and Dublin City Council, in collaboration, will deliver the public transport, cycling and walking networks, and public realm that are required to serve an expanding City Centre and to facilitate a post-Covid recovery based on sustainable transport.

The NTA and Dublin City Council will also ensure that the delivery of goods to city centre businesses and the operation of taxis are managed to the benefit of all users of the city centre.

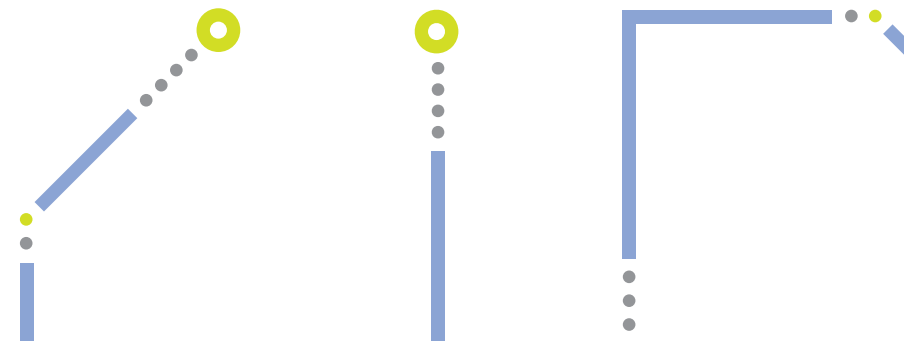
14.3 Management of Urban Centres in the GDA

As the towns and urban settlements in the GDA grow, there will be need to ensure that the transport environment and public realm as developed in a way that favours sustainable mobility and the transition to a zero-carbon transport system

Measure TM2 - Management of Urban Centres

The NTA and relevant local authorities, in collaboration, will deliver the public transport, cycling and walking networks, and public realm that are required to serve local centres, and to facilitate a post-Covid recovery based on sustainable transport.

The NTA and local authorities will also ensure that the delivery of goods to urban centre businesses and the operation of taxis are managed to the benefit of all users of these areas.



14.4 Reduced Speed Limits

The reduction of speed limits in urban areas has the potential to make the use of the streets by other modes safer. Streets with lower speed limits encourage the use of sustainable modes, in particular for the most vulnerable road users and their parents or carers.

Measure TM3 – Reduced Speed Limits

In accordance with speed limit policies to be determined by each local authority following consultation with the NTA, the reduction of speed limits to 30 kph on urban roads and streets will be supported.

Reduced speed limits of 30kph have been implemented on many roads throughout Dublin City and in various locations across the GDA. This is a key traffic management measure for the promotion of place-making plus walking and cycling.

14.5 Variable Speed Limits

A variable speed limit is a dynamic speed restriction on a given stretch of road. The speed limit changes according to the current environmental and traffic conditions and is displayed on an electronic traffic sign. This helps avoid stop-start driving behaviour and reduces disruptions along the strategic road

network. TII are currently progressing plans for variable speed limits on the M50, subject to legislative updates.

Over the period of the strategy, assessments will be carried out to identify other roads or sections of road where the implementation of Variable Speed Limits will enhance the operation or safety of the relevant road link.

Measure TM4 – Variable Speed Limits

Variable Speed Limits will be considered for implementation on appropriate sections of the strategic road network as a means of reducing turbulence, improving traffic flow and enhancing safety.

14.6 Low-Traffic Neighbourhoods

Low traffic neighbourhoods comprise groups of residential streets, bordered by distributor roads, where “through” motor vehicle traffic is either discouraged or removed entirely. There are a number of measures that can be implemented to create such a neighbourhood, including modal filters (similar to a filtered permeability approach set out in section 8.7); no entry signs; or turning bans. In all cases, residents can still drive to their house and deliveries can still be made, but through movement is either prohibitively inconvenient or simply not permitted.

Measure TM5 – Low-Traffic Neighbourhoods

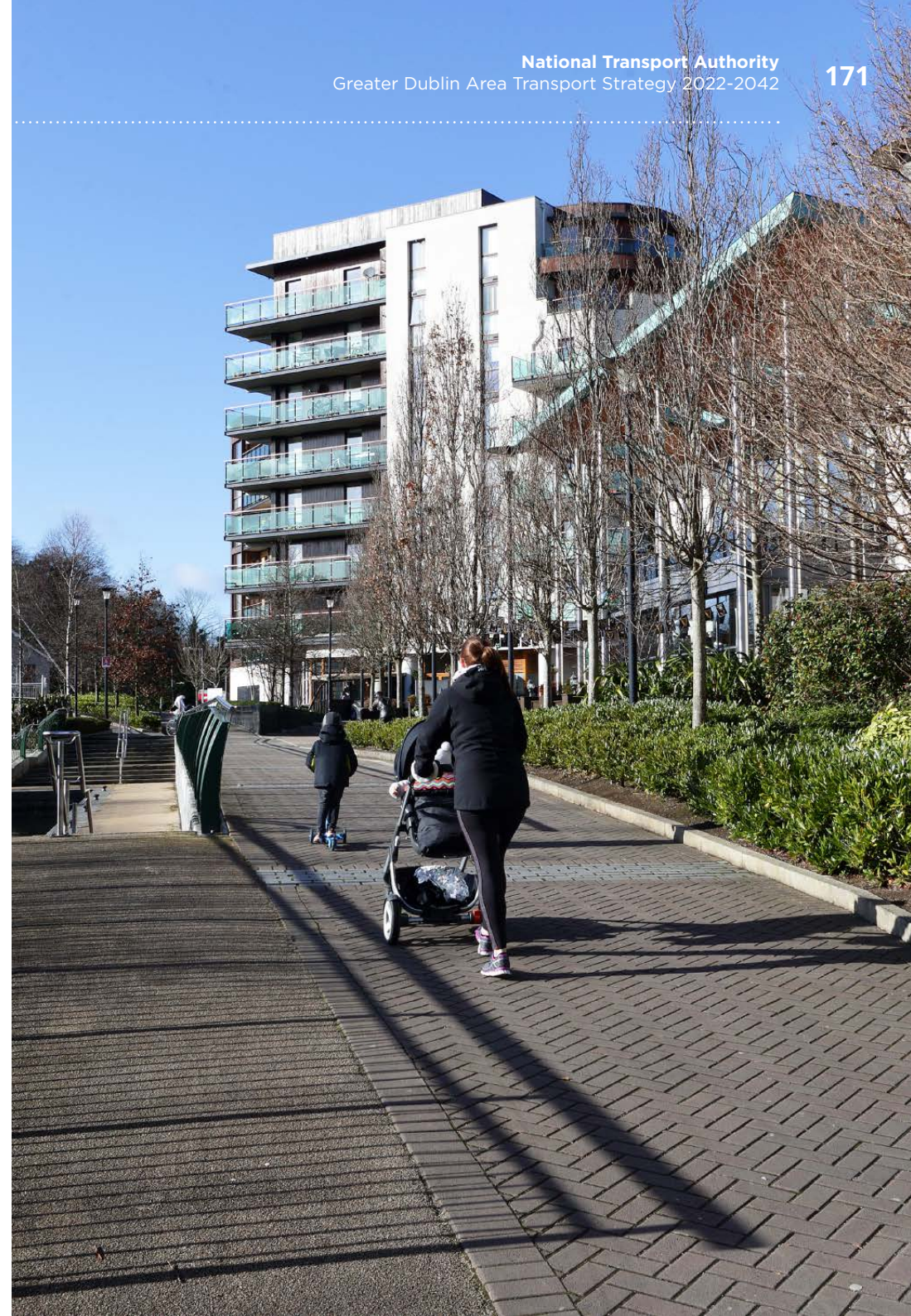
The NTA will support local authorities seeking to implement Low-Traffic Neighbourhoods in urban areas across the region.

14.7 Car-Free Zones

Car-free zones have the potential to confer advantage to sustainable modes of transport, and to reprioritise the use of, and enhance, public space. Car-free zones can be implemented on a small or large scale, for instance at a city block level or at a wider neighbourhood level, while still maintaining access for those who live in the area or for essential services and facilitating public transport. They can also be implemented at various times of the day or days of the week, in particular in a trial phase which allows the strengths and weaknesses of the proposals to be understood.

Measure TM6 – Car Free Zones

The NTA will support local authorities seeking to provide car free zones in urban areas where there are benefits to transport, traffic and/or the local economy.



14.8 Home Zones

A Home Zone is street or group of streets designed to meet the needs of pedestrians, cyclists, children and residents and where the dominance of the car is reduced. The concept is that the space is shared between all users, rather than one user mode having priority, and vehicular through-traffic is removed. Speeds are reduced through design, where streets are narrow, and curves/bends in the road are designed into the plan rather than requiring retrofitting of ramps for example at a later stage.

Measure TM7 – Home Zones

The NTA will support local authorities seeking to provide home zones in residential areas as appropriate.

14.9 Safe Routes to School

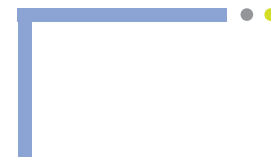
The Safe Routes to School programme was established in early 2021 and is operated by the An Taisce Green-Schools Programme in partnership with the NTA and the local authorities, supported by the Department of Transport and the Department of Education. The Safe Routes to School Programme is designed to encourage as many pupils and students as possible in primary and post-primary schools to walk and cycle. It has three aims:

- To accelerate the delivery of walking and cycling infrastructure on key access routes to schools;
- To provide “front of school” treatments which will enhance access to school grounds;
- To expand the amount of bike parking available at schools.

This programme has already delivered significant improvements to front-of-school environments through physical measures to prevent inappropriate and dangerous drop-off, parking and idling by motorists, and through new road markings and signage which clearly mark out the stretch of road as one in which there may be increased pedestrian and cycle activity, in particular by young children. In some cases, “School Streets” have been implemented whereby vehicular traffic is restricted during school opening and closing times.

Measure TM8 – Safe Routes to School

The Safe Routes to School programme will be rolled out and expanded over the period of the Transport Strategy in a collaborative manner by An Taisce, NTA, the local authorities, supported by the Departments of Transport and Education.



14.10 Car Sharing

Car sharing schemes have the potential to reduce the demand for private car ownership and thereby reduce reliance on the private car for all journeys. These can include workplace based car-pooling schemes whereby colleagues share vehicles; those related to multi-unit residential developments; as well as public car sharing schemes or clubs which anyone can join, subject to conditions.

Measure TM9 – Car Sharing

The NTA will support the local authorities, workplaces and other relevant agencies and companies in the implementation of car sharing initiatives, in particular as part of new housing developments.



Car sharing schemes can also play a significant role in reducing the requirement for car parking spaces associated with new residential development.

14.11 Car Parking

The provision of car parking at origin and destination is a key determinant of the likelihood of someone using a car. Over a number of years, and a number of development plan periods, local authorities in the GDA have moved to providing parking standards as maxima rather than the traditional minima, based in part on the recommendations of the NTA.

Today, the developments planned for the public transport network, the growth of cycling, and emergence of shared mobility could feasibly facilitate reduced car ownership rates across the GDA and an associated reduced demand for car parking.

In general, the most restrictive parking standard would apply in Dublin City Centre, where accessibility levels to destinations by non-car modes is at its highest and where the highest development densities are applied. Restrictive parking standards would also apply in key towns in the region and suburban centres where the public transport system offers an alternative to the car and where walking and cycling are viable transport options.

The least restrictive standards would apply in the most peripheral locations, where (insofar as residential development and commercial development can be justified), the lowest densities would apply.

14.11.1 Car-Free Residential Development

At locations served by a range of high-quality public transport services and within convenient cycling distance of Dublin City Centre, the NTA recommends that residential development proposals consider providing zero parking spaces (excluding parking for persons with disabilities). This will apply primarily to developments within 6km of Dublin City Centre or at major rail interchanges.

In providing for car-free developments, the two key considerations will be the level of mobility that can be offered to future residents by the transport network in terms of public transport and the provision of high-quality cycle infrastructure, and the potential for adverse effects of overspill parking on neighbouring residential roads and streets.

Measure TM10 – Car Free Residential Developments

The NTA will support local authorities in assessing the potential for, and delivery of car-free residential developments in locations close to Dublin City Centre and at major rail-based interchanges / Mobility Hubs.

14.11.2 Car Parking Standards

The manner in which car parking is considered, in conjunction with other planning policies, can have a critical influence on:

- Car ownership / car usage;
- Mode choice, for a range of journey purposes;
- Residential development densities in cities and towns;
- Development layouts which achieve permeability for walking and cycling, enabling non-car accessibility at the local level;
- Car-based congestion; and
- The achievement of higher levels of public transport service provision.

Given the critical influence which the provision of parking can have on the above and more generally on the management of transport demand, it is recommended that parking standards are expressed as maximum values, to which degrees of constraint can then be applied by planning authorities, in the process of determining the most appropriate level of parking provision.

The approach taken to parking standards by local authorities in the GDA should seek to do the following:

- Set the lowest level of provision for the most accessible areas and offer more flexibility where public transport connectivity is less comprehensive;



- Take into account the availability of amenities / services at the local level and accessibility to major town centres, reducing the need to travel by car;
- Reflect the options open to new development areas to design in sustainable travel from the outset; and
- Recognise differences between central and less central areas, such as differences in trip distances, which can sometimes reduce opportunities for walking and cycling.

Residential Car Parking Standards

Table 14.1 sets out the proposed residential parking standards by location for the GDA, which the NTA recommends is incorporated into all Development Plans

Measure TM11 – Residential Parking Standards

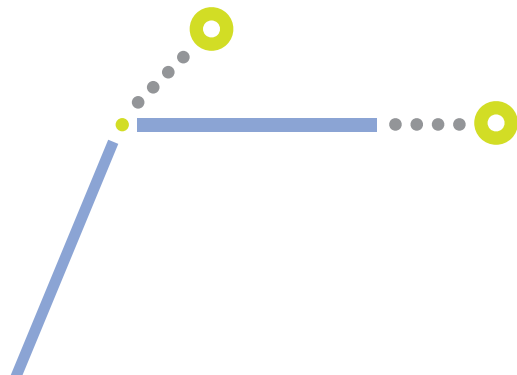
It is recommended that local authorities incorporate maximum residential parking standards into their Development Plans guided by the provisions set out in Table 14.1.

Figure 14.1: Proposed Maximum Residential Parking Standards

Location	Maximum Parking Provision
Central Dublin (Inside Canals and including Docklands)	Zero to 0.5 spaces per unit
Locations Between the M50 and Canals	Zero to 1.5 space per unit
Locations Between the Metropolitan Boundary and the M50	Up to 1.5 space per unit
Hinterland Towns	Up to 2 spaces per unit
Small Settlements / Areas with low Accessibility levels	Subject to local assessment

Destination Car Parking Standards

The provision of regional standards for the various destination uses for each part of the GDA would be too complex an issue to address satisfactorily in the Transport Strategy. Instead, the measures below will be used by local authorities when devising their parking standards.



The NTA is also supportive of an approach that caps car parking on an area-wide basis in locations where the highest intensity of development occurs, or in areas that have high levels of accessibility by public transport, walking or cycling.

Measure TM12 – Destination Parking Standards

It is the intention of the NTA to develop guidance on maximum car parking standards for different land-uses and locations, in association with local authorities.

Measure TM13 – Dublin City Centre Parking Standards

It is recommended that the Dublin City Development Plan incorporate a policy which states that proposals for commercial development in Dublin City Centre will seek to provide zero parking, other than those spaces that may be required for persons with disabilities.

Measure TM14 – Parking at Major Interchanges and Mobility Hubs

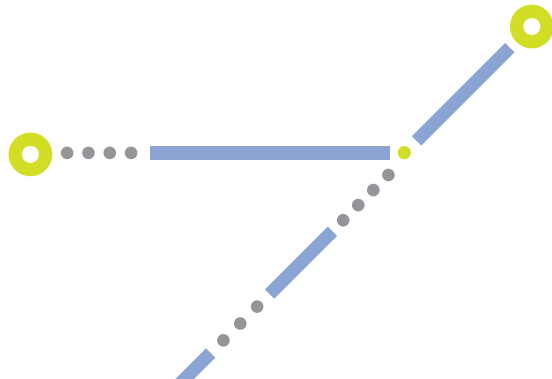
Proposals for major employment development close to major interchanges or Mobility Hubs, which seek to provide car parking, should provide evidence as to why their proposed development cannot operate without car parking.

Measure TM15 – Public Sector Parking in Dublin City Centre

It is the intention of the NTA to seek the development of a programme of public sector car-parking reduction and removal from all office locations in Dublin City Centre.

Measure TM16 – Parking at Out-Of-Town Retail Developments

The NTA will, in conjunction with local authorities, assess the need for the introduction of parking charges at out-of-town retail centres in order to reduce the impact of car traffic on these locations and their local communities and will seek the implementation of the outcomes of that assessment.



14.11.3 On-Street Parking

The availability of cheap or free on-street parking can encourage the use of the private car over sustainable modes. In town centres, parking charges should be set at a rate which deters commuter or long-stay parking but facilitates shoppers and visitors who will use them for a short period and contribute to the local economy.

On-street parking can also have a significant opportunity cost in terms of using up valuable street space for the storage of vehicles which could be used for public transport and cycle priority, or as pedestrian space. As such, and based on measures implemented to date, the NTA would encourage local authorities to review on-street parking in urban areas with a view to its reallocation to other modes; or the use of parking charges to ensure spaces are turned over regularly rather than being used by commuters.

Measure TM17 – On-Street Parking

The NTA will support local authorities in seeking to reduce the level of free or cheaply available on-street parking with a view to the reallocation of the roadspace to sustainable modes, and/or the implementation of charging regimes which facilitates motorists contributing to the local economy.

14.12 Electric Vehicles

The previous sections of the strategy have set out the vast array of transport supply and transport demand measures that are proposed to be implemented up to 2040 with the aim of reducing car dependency by providing alternative modes and managing car use in order to meet a range of strategy objectives, including climate change targets. There will still be a demand for car use, and in places this demand will remain high relative to today. As such, there will be an imperative to convert the private car fleet to non-polluting vehicles.

While many of the measures required to achieve this conversion are outside the remit of this Transport Strategy and will rest with Government, there are a number of measures that the NTA and local authorities will implement. As such, the Development Plans in the GDA will need to reflect these objectives.

The provision of electric vehicle fast-charging points at appropriate locations will play a key role in encouraging the continued trend in the purchase and use of electric vehicles. The widespread availability of electric vehicle charging points can mitigate the concern regarding electric vehicle range and therefore encourage the greater uptake of this type of vehicle. However, care is required in the implementation of charging infrastructure at origin, to ensure that it does not encroach on footpaths or otherwise compromise the free movement of pedestrians, cyclists and buses.

The provision of designated electric vehicle parking at both origin and destination helps to confer advantage to those who choose to use these vehicles. It also provides visibility to this technology and can play a role in encouraging their uptake.

The promotion of electric cars, however, should not detract from the core requirement of transport planning in the city region, which is to create a more sustainable transport system by enabling more people to use public transport, walking and cycling.

Measure TM18 – Electric Cars

The NTA, TII and local authorities will facilitate the conversion of the private car fleet to electric in the following ways:

- Providing public charging points at key destinations such as public car parks, Park and Ride facilities, on-street in town centres, and public parks;
- Ensuring that where car parking is proposed as part of new residential developments, provision is made for all spaces to be dedicated over time to electric cars with provision for charging infrastructure built-in from the outset;
- Providing significantly expanded electric car charging facilities at service stations on the road network, particularly the national road network; and
- Ensuring that charging infrastructure does not encroach on footpaths or otherwise compromise the free movement of pedestrians, cyclists and public transport.

14.13 Motorcycles and Mopeds

Motorcycles and Mopeds (including S-Pedelecs, as referred to in section 11.8.1) are an established form of transport in the GDA and have a role to play in reducing the impact of traffic, in particular in urban areas insofar as they take up less space in terms of parking and storage. On the road, they are regarded as a private motorised vehicle which takes up less space than a car, but as they are required by law to drive and queue within general traffic and operate at similar speeds to cars, they still require significant roadspace. The traditional motorcycle or moped does not fall into the category of public transport because they are individual, or into the definition of sustainable transport as they run on petrol engines and therefore produce emissions. As such, there is no policy basis upon which the NTA would seek to promote their use as an alternative to the private car. The advantages of smaller traditional mopeds in terms of space and reducing impact on the urban environment is acknowledged.

Measure TM19 - Motorcycles and Mopeds

The NTA acknowledges the role of motorcycles and mopeds in road transport and will work with other agencies and local authorities to ensure that these vehicles are facilitated as part of the transport network.

Motorcycle Parking

There is currently a shortage of dedicated motorcycle parking in Dublin City Centre and other settlements in the GDA, and at other destinations such as public transport stops and stations. This has resulted in motorcycles being parked illegally on footpaths, in car parking spaces, at dedicated (pedal) cycle parking or in other residual urban spaces such as on-street hatching. Dedicated parking has benefits not only for motorcyclists but also for other street users as it minimises street clutter and encroachment into both the footpath and vehicular carriageway arising from poorly parked motorcycles. In general, roads authorities should seek to provide on-street motorcycle parking on the vehicular carriageway, e.g. in repurposed car parking spaces, rather than on footpaths or in pedestrian areas. All motorcycle parking locations, regardless of the presence of dedicated racks or rails, should undergo an accessibility audit to ensure compliance with Universal Design principles.

Measure TM20 – Motorcycle Parking

The NTA will support local authorities in the provision of dedicated public motorcycle parking in the interests of improving the urban environment for all street users.

14.14 Connected and Autonomous Vehicles

Connected and autonomous vehicles are an emerging and potentially significant change to road transport. The term connected vehicles refers to vehicles that can communicate with each other; with infrastructure; and with the wider system of other road users and networks through data sharing.

Autonomous vehicles use automated driver-assistance systems such as Radar/LiDAR, ultrasound, and in-vehicle cameras, along with other on-board and roadside sensors and a whole set of state-of-the-art technologies to deliver self-driving vehicles capable of operating without any driver input.

The Department of Transport recently undertook a public consultation process in order to inform a new cross-Government national strategy. The NTA will seek to utilise and encourage appropriate emerging technologies as they relate to public transport, reducing reliance on private car use or supporting walking and cycling.

Measure TM21 – Connected and Autonomous Vehicles

The NTA will work with the Department of Transport and local authorities to take into account new emerging technology such as connected and autonomous vehicles and the benefits they may bring, in planning and designing the transport network in the GDA.