

SEA ENVIRONMENTAL REPORT

APPENDIX II: NON-TECHNICAL SUMMARY

FOR THE

DRAFT DUBLIN CITY CENTRE TRANSPORT PLAN 2023

for: National Transport Authority

Dún Scéine
Iveagh Court
Harcourt Lane
Dublin 2



by: CAAS Ltd.

1st Floor
24-26 Ormond Quay Upper
Dublin 7



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Section 1 Introduction and Terms of Reference

This is the Non-Technical Summary of the Strategic Environmental Assessment (SEA) Environmental Report for the Draft Dublin City Centre Transport Plan 2023 (referred to hereafter as the Draft Plan). The purpose of the Environmental Report is to comply with SEA legislation and provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan.

What is an SEA?

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a proposed plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic, social and other considerations.

Why is it needed?

The SEA was carried out in order to comply with the provisions of the SEA Regulations, as amended, and in order to contribute towards environmental management and sustainable development.

How does it work?

Relevant aspects of the current state of the environment were assembled and presented to the team who prepared the Plan. This helped them to devise a Plan that protects whatever is sensitive in the environment. To decide how best to make a Plan that helps to protect the environment as much as possible, different alternatives for the Plan were explored. This helped to highlight where conflicts could occur and facilitated the development of mitigation measures which will help to avoid/reduce adverse environmental effects.

What is included in the Environmental Report that accompanies the Plan?

The Environmental Report contains the following information:

- A description of the relevant aspects of the current state of the environment;
- A description and assessment of alternatives;
- An assessment of the Plan provisions; and,
- Mitigation measures which set out to aid compliance with important environmental protection legislation - e.g. the Water Framework Directive, the Habitats Directive - and which will help to avoid/reduce the adverse environmental effects of implementing the Plan.

No significant difficulties have been encountered during the undertaking of the assessment.

What happens at the end of the process?

On finalisation of the Plan, an SEA Statement is prepared and made available. The SEA Statement includes information on how environmental considerations were integrated into the Plan and why the preferred alternative was chosen for the Plan.

Section 2 The Plan

2.1 Introduction

The purpose of the Dublin City Centre Transport Plan is to identify and prioritise changes to the current transport arrangements, which are necessary to fulfil the vision for the City as a sustainable, dynamic, and inclusive place, as set out in the Dublin City Development Plan (the "Development Plan"). The Plan also facilitates the implementation of the NTA's Transport Strategy for the Greater Dublin Area 2022-42 (the "Transport Strategy") by providing a more detailed framework for accommodating significantly higher numbers of people travelling into the City Centre, in particular by rail, bus, cycling and walking.

Since 2016, there has been significant investment in transport projects in Dublin City Centre, including Luas Cross City and improvements to the cycle network. This expenditure will increase exponentially as major infrastructure projects are realised over the coming decade.

While in the longer term MetroLink and future expansions to the Luas network will provide significant capacity improvements, the roll out of BusConnects and DART+ over the period of the Plan will provide a major increase in public transport capacity. Investment in active travel schemes is also predicted to significantly improve the offer for pedestrians, wheelers and cyclists. These projects, some of which are already underway, will fundamentally change the public transport, walking and cycling provision in the city. In line with this, implementing these projects will require a change from the current transportation arrangements in the City Centre, particularly in terms of how traffic is managed.

New opportunities arise out of these proposed changes, and the reconfiguration of the transport networks within the City Centre offers a chance to explore how places can be transformed for the benefit of the city. The Plan identifies some of these new spaces, and offers examples of how they might develop into new focal points for Dublin.

The Plan envisages a new low traffic city centre with more space given over to the sustainable modes and with frequent and efficient public transport links and interchanges.

By reorienting the City Centre towards sustainable transport modes, the Plan will allow Dublin City Council to meet the mode share targets for 2028 set out in the Development Plan, as well as supporting the Council's efforts to achieve the national objective to reduce emissions from transport by 50% by 2030 in accordance with the 2023 Climate Action Plan.

2.2 Updating the 2016 City Centre Plan

In 2016, Dublin City Council, in conjunction with the National Transport Authority (NTA), published the Dublin City Centre Transport Study, which set out a framework for the managed implementation of transport projects across Dublin City Centre in line with the vision and objectives of the Dublin City Development Plan and the NTA's Transport Strategy for the Greater Dublin Area 2016-2035.

The current Dublin City Development Plan (2022- 2028) has encompassed the framework set out in the previous study, but the new policies and objectives of the Development Plan have required a corresponding update of the 2016 City Centre Transport Study. In line with this, the Development Plan Objective SMT05 requires Dublin City Council: "To review the City Centre Transport Plan 2016 in collaboration with the NTA in the lifetime of the plan, setting out a clear strategy to prioritise active travel modes and public transport use, whilst ensuring the integration of high quality public realm."

The Transport Plan gives local effect to the following national policies for Dublin City Centre: Climate Action Plan 2023; National Sustainable Mobility Policy; and National Investment Framework for Transport in Ireland.

2.3 The Plan Area

To develop the Plan, a study area roughly aligned with the area generally bounded by the Royal and Grand Canals was identified. This central part of Dublin City has a population of approximately 130,000 residents, contains approximately 195,000 jobs, as well as a variety of different land uses, levels of activity and accessibility.

Within this wider study area however, it became clear during the early stages of the plan development that the focus was moving towards a more central inner-city core. This Inner Core captures the highest order attractions within the city, notably in terms of retail, employment, nightlife, as well as a concentration of nationally important cultural, educational and governmental institutions.

Analysis of existing travel data also highlighted that while this core is a key destination for people coming into the city, much of the private car traffic is travelling through it. In this regard, 6 out of every 10 cars driving into the Inner Core had a destination outside this core area.

2.4 Implementing the Dublin City Development Plan

The Plan identifies policies and projects that will assist in the implementation of the transport policies and objectives of the Dublin City Development Plan, within the City Centre area. Importantly, the Plan outcomes also support the delivery of a myriad of other Development Plan policies, including improving air quality, reducing the impacts of noise and protecting the built heritage.

In particular, the City Centre Transport Plan frames the implementation of the following Development Plan Sustainable Mobility and Transport policies, and their associated objectives:

- SMT1 – Modal Shift and Compact Growth
- SMT2 – Decarbonising Transport
- SMT3 – Integrated Transport Network
- SMT8 – Public Realm Enhancements
- SMT11 – Pedestrian Network
- SMT12 – Pedestrians and Public Realm
- SMT14 – City Centre Road Space
- SMT15 – Last Mile Delivery
- SMT16 – Walking, Cycling and Active Travel
- SMT18 – The Pedestrian Environment
- SMT22 – Key Sustainable Transport Projects
- SMT25 – On-Street Parking
- SMT28 – Repurposing of Multi-Storey Car Parks

The City Centre Transport Plan also provides detail in support of, inter alia, the following Development Plan policies:

- SC1 – Consolidation of the Inner City
- SC2 – City's Character
- SC10 – Urban Density
- SC11 – Compact Growth
- QHSN4 – Key Regeneration Areas
- QHSN6 – Urban Consolidation
- QHSN10 – 15-Minute City
- CEE26 – Tourism in Dublin
- CCUV15 – Premier Shopping Area
- CCUV17 – Diversifying the City Centre
- CCUV18 – Residential Development
- CCUV19 – Parking and the Retail Core
- CCUV42 – Public Realm – City Centre
- SI34 – Management of Air Quality

Taken together, these policies give clear direction in terms of land use development and management of all transport modes in the City Centre. Notably, there is clear direction from the Development Plan that vehicular traffic in the City Centre needs to be managed. This is accompanied by a renewed emphasis on the need to better provide for higher capacity sustainable modes of travel, active travel and to more efficiently service the diversity of business, commercial and cultural activities within the city.

The Development Plan includes mode share targets for travel into Dublin City Centre. These targets are based on the Canal Cordon Counts undertaken every year and relate to travel into the centre during the peak 3-hour morning period.

The largest change required to the Canal Cordon mode share targets for 2028, as set out in the Development Plan, is in the Car/Taxis/Goods category where a 40% reduction in the existing mode share level is targeted in the Development Plan, with the reduction falling mainly on the private car as the demand for taxis and goods is likely to grow over the next number of years. The achievement of these targets will require a reorientation of the City Centre's streets towards sustainable modes of transport.

2.5 Implementing the Transport Strategy for the Greater Dublin Area

The Plan identifies priorities and objectives that will assist in the implementation of a number of key measures from the Transport Strategy. The delivery of these measures is critical to facilitate greater numbers of people travelling into the City Centre by sustainable modes of transport. These include the following:

- CYC1 – GDA Cycle Network
- BUS1 – Core Bus Corridor Programme
- BUS4 – New Dublin Area Bus Service Network
- LRT1 – MetroLink
- RAIL1 – DART+

By 2030, the combination of major transport projects will facilitate a significant increase in the number of people travelling into the City Centre every day by public transport. The BusConnects service changes will increase capacity across the Metropolitan Area by approximately 25% with the City Centre remaining the focus of this network. DART+ West will increase capacity from 5,000 passengers per hour to 13,500 and DART+ South West from 5,000 to 20,000.

The Plan also facilitates and will be supported by other Transport Strategy measures such as Next Generation Ticketing, Transport Technology and Behavioural Change programmes, which will contribute to the delivery of these significant changes in how people move and live in Dublin City.

In addition to the above, there are numerous other DCC and NTA policies and objectives, such as parking standards, workplace parking charges and other emerging demand management measures, which will have a direct bearing on the transportation system in Dublin City Centre. Although the Plan does not address all of these issues specifically, it provides a context in terms of new transport arrangements, which can underpin the future delivery of these wider reaching policy measures.

While the concentration of public transport investment in the city centre is welcome, these schemes, along with numerous active travel projects, present considerable challenges to ensure that high frequency and high-capacity public transport services can operate efficiently. They also present a real opportunity for the city to be transformed and to realise the vision as set out by the elected members in the City Development Plan.

The scale and nature of all of these projects, however, cannot be accommodated within the existing road network without radical changes in how the general traffic network operates within the Inner Core.

2.6 Plan Vision

The vision for the Plan, as shared by Dublin City Council and the NTA is as follows: "A thriving, active City Centre with sustainability and facilitation of emissions reduction as fundamental goals, where the transport system enhances freedom of movement and meets the environmental, social, cultural and economic needs of the people it serves."

2.7 Objectives

The overarching objectives and sub-objectives of the Plan are as follows:

- **To Provide a Significantly Enhanced City Centre Environment**
 - Transition to a low traffic City Centre;
 - Remove unnecessary through private car traffic from the City Centre;
 - Improve Air Quality;
 - Reduce transport and traffic noise;
 - Enhance the visual environment;
 - Improve the public realm;
 - Increase biodiversity; and
 - Protect and enhance the experience of the city's natural and architectural heritage.
- **To Facilitate the Delivery of a Net-Zero City Centre Transport System**
 - Transition to Zero Emissions transport;
 - Reduce access for carbon emitting vehicles;
 - Accommodate high-capacity low-emission public transport;
 - Prioritise walking and cycling; and
 - Provide the transport interventions that support compact and consolidated development.
- **To Improve the City Centre's Economy and Liveability**
 - Increase the opportunities for people to travel to, from, within and through Dublin City Centre efficiently, effectively and sustainably;
 - Increase the capacity of the transport system;
 - Prioritise sustainable transport capacity;
 - Prepare for the introduction of the major public transport projects and take advantage of the opportunities they will create;
 - Support access for deliveries, people with disabilities, emergency services and other essential vehicles;
 - Allow limited vehicular access to the City Centre;
 - Meet the Dublin City Development Plan mode share targets;
 - Support the night-time economy and cultural sectors; and
 - Ensure that the City Centre is accessible for all.

2.8 Relationship with other relevant Plans and Programmes

The Transport Plan has been developed to be consistent with the wider planning framework, including the City Development Plan and the Transport Strategy, as detailed above.

The Plan aligns with legislation and documents setting out public policy for land use, transport and climate action and will be incorporated into the review and preparation of these documents. These include Project Ireland 2040, the Strategic Investment Framework for Land Transport, the National Investment Framework for Transport in Ireland, the Climate Action Plan 2023¹, the Regional Economic and Spatial Strategy for the Eastern and Midland Region and associated Dublin Metropolitan Area Strategic Plan, the Transport Strategy for the Greater Dublin Area and the City Development Plan. Certain transport related proposals already provided for by these documents (and considered by their environmental assessments) are amongst those included within the Plan.

The Plan is subject to a number of high-level environmental protection policies and objectives with which it must comply, including those which have been identified as Strategic Environmental Objectives (see Section 3.11). Examples of Environmental Protection Objectives include the aim of the EU Habitats Directive - which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States - and the purpose of the Water Framework Directive - which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, prevents deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status.

¹ Which includes various actions relating to transport planning e.g. Action No. TR/23/71(TF) "Strategic Transport Planning Work Programme" and associated steps relating to "Development & progression of national legislation, continued programme of review, update, appraisal and planning of services in line with MATS".

Section 3 Relevant aspects of the current state of the environment

3.1 Introduction

Reflecting the specifications in the SEA Directive, the relevant aspects of the current state of the environment for the following environmental components are summarised in this section: biodiversity and flora and fauna, population and human health, soil, water, air and climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

3.2 Likely Evolution of the Environment in the Absence of the Plan

In the absence of the Plan, none of the environmental effects summarised in this report (see Section 5) would happen as a result of the Plan; however, the Dublin City Development Plan and the Transport Strategy for the Greater Dublin Area (see Section 2) would continue to be implemented and applications for permission for new projects would continue to be made.

In the absence of the Plan, the delivery of the following, and associated environmental effects, would be less coherent and made more uncertain:

- Transport policies and objectives of the City Development Plan, within the City Centre area;
- A myriad of other Development Plan policies, including improving air quality, reducing the impacts of noise and protecting the built heritage; and
- Key measures from the Transport Strategy that are critical to facilitate greater numbers of people travelling into the City Centre by sustainable modes of transport.

Compliance with mitigation measures, including those outlined under Section 6 of this report, would be necessary in order to help ensure that significant adverse environmental effects do not occur.

3.3 Air and Climatic Factors

Introduction

The key issue involving the assessment of the effects of implementing the Plan on air and climatic factors relates to emissions, including greenhouse gas emissions, arising from transport.

Greenhouse Gas Emissions

The EPA's 2023 publication *Ireland's Greenhouse Gas Emissions Projections 2022-2040* provides an updated assessment of Ireland's total projected greenhouse gas emissions to 2040, using the latest inventory data for 2021 as the starting point. The report provides an assessment of Ireland's progress towards achieving its national ambitions under the Climate Action and Low Carbon Development (Amendment) Act 2021 and EU emission reduction targets for 2030 as set out under the Effort Sharing Regulation². Key findings identified as part of the report include that:

- Ireland is not on track to meet the 51% emissions reduction target (by 2030 compared to 2018) based on these projections, which include most 2023 Climate Action Plan measures. Further measures still need to be identified and implemented to achieve this goal.
- The first two carbon budgets (2021-2030), which aim to support the achievement of the 51% emissions reduction goal, are projected to be exceeded by a significant margin of between 24% and 34%.
- Sectoral emissions ceilings for 2025 and 2030 are projected to be exceeded in almost all cases, including agriculture, electricity, industry, and transport.

² Regulation (EU) 2018/842 of on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement.

- Transport emissions are projected to decrease by 1% to 35% over the period 2021-2030. Measures that are projected to contribute to higher emissions reductions include 943,500 EVs by 2030, a 20% biodiesel blend rate and a 20% reduction in total passenger vehicle kilometres.

Alternative Fuels and Renewable Electricity Generation Targets

The use of alternative fuels, including electricity, forms a significant part of government policy to reduce transport emissions. The Plan facilitates a mode shift away from the private car to public transport, walking and cycling and provisions relating to electric vehicles. This will contribute towards reductions in the consumption of non-renewable energy sources and the achievement of legally binding renewable energy targets.

The first Renewable Energy Directive (RED)³ was the most important legislation influencing the growth of renewable energy in the EU and Ireland for the decade ending in 2020. From 2021, RED was replaced by the second Renewable Energy Directive (REDII)⁴, which continues to promote the growth of renewable energy out to 2030. RED set out two mandatory targets for renewable energy in Ireland to be met by 2020, while REDII sets new targets and criteria to be met by Ireland in 2030 and the interim. These targets are in the process of being updated again. On 30 March 2023, a provisional agreement was reached for a binding overall RES target of at least 42.5% by 2030. Agreement was also reached for EU states to aim for an overall RES target of 45% by 2030. Once this process is completed, the new legislation will be formally adopted and enter into force.

Ambient Air Quality

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity generation and industry and, in sufficient amounts, could affect the well-being of the areas inhabitants. The EU Directives include details regarding how ambient air quality should be monitored, assessed and managed.

The EPA's (2023) *Air Quality in Ireland 2022 Report* identifies that:

- Air quality in Ireland is generally good, however, there are concerning localised issues.
- Ireland met all of its EU legal requirements in 2022 but it did not meet the more stringent health-based World Health Organisation (WHO) Air Quality guidelines.
- Fine particulate matter (PM_{2.5}) from solid fuel combustion and nitrogen dioxide (NO₂) from vehicle emissions are the main pollutants.
- It is estimated that there are approximately 1,300 premature deaths annually in Ireland due to poor air quality from PM_{2.5}.
- The choices people make in how they heat their homes and how they travel directly impact the quality of the air they breathe.
- Ireland's ambition in the Clean Air Strategy is to move towards the WHO Air Quality guidelines.

The report further identifies the critical role of local authorities in the enforcement and implementation of existing plans and investment in infrastructure to encourage cleaner and healthier air quality choices:

- Local authorities must provide more resources to increase air enforcement activities and implement the new solid fuel regulations.
- Dublin local authorities must fully implement the Dublin Region Air Quality Plan 2021 to improve NO₂ levels in the Dublin Region.
- Investment in clean public transport infrastructure across the country must be maintained and increased.
- More safe footpaths and cycle lanes must be created to continue to increase active travel as a viable and safe alternative to car use and associated NO₂ emissions.

Noise

Noise is unwanted sound. The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing EU policy on noise reduction from source. In compliance with the Directive and transposing Environmental Noise Regulations (S.I. No. 140 of 2006), Noise Action Plans have been prepared for each local authority area within the country, including the Dublin Agglomeration Environmental Noise

³ Directive 2009/28/EC on the promotion of the use of energy from renewable sources.

⁴ Directive (EU) 2018/2001 on the promotion of the use of energy from renewable resources (recast).

Action Plan (comprising: Dublin City Council; Fingal County Council; South Dublin County Council; and Dún Laoghaire-Rathdown County Council) in force within the Plan area.

Noise Action Plans act as a means of managing environmental noise, and meeting the aim of the Regulations of preventing, and reducing where necessary, environmental noise. One of the key inputs into Noise Action Plans is the development of strategic noise maps. Noise maps identify and prioritise cluster areas which will require further assessment and may require mitigation measures to be put in place. Roads, rail, Luas and port infrastructure are the dominant noise sources within the Plan area.

Dublin City Council has designated a number of quiet areas based on their low sound levels, meaning that they can provide people with a more tranquil space to visit, away from the noise of the rest of the City. The Plan takes into account available noise maps and the Dublin Agglomeration Environmental Noise Action Plan.

Existing problems

The Climate Change Advisory Council's *The Annual Review 2021* raised the issue of the implementation gap whereby ambition on climate policy was not being matched by verifiable actions. Several issues regarding implementation continue to cause concern and are re-emphasised throughout *The Annual Review 2022*, such as: achieving compliance with national and EU targets will require a significant acceleration in the planning of new measures; and full and rapid implementation of already announced measures will be necessary to achieve these goals.

Air quality and noise present challenges, especially in urban areas, as detailed under the relevant sub-sections above. With regard to air quality, air pollution from transport is dominated by NO_x emissions. Of these, NO₂ is particularly impactful from a health perspective. The Plan will help to facilitate reductions in emissions and a transition from dependence on fossil fuel combustion powered transport.

3.4 Population and Human Health

Population

The Plan area covers the central part of Dublin City bounded by the Royal and Grand Canal with a population of approximately 130,000 persons. This area also contains approximately 195,000 jobs, as well as a variety of different land uses, levels of activity and accessibility. Within the Plan area, the Central Inner City Core captures the highest order attractions, notably in terms of retail, employment, nightlife, as well as a concentration of nationally important cultural, educational and governmental institutions.

Analysis of existing travel data highlighted that while the Central Inner City Core is a key destination for people coming into the city, much of the private car traffic is travelling through it. In this regard, 6 out of every 10 cars driving into the Central Inner City Core had a destination outside this core area. Most users of transport within the Plan area will reside in and commute to and from urban/suburban areas.

Dublin City Centre is reliant on public transport for its economic welfare and for fostering its role as a cultural and entertainment core. It is also a critical element of the liveability of the City Centre by providing accessibility to a range of services and attractions to a large population. Prioritising active travel modes and public transport use will result in reductions in energy usage and air and noise emissions.

Human Health

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors e.g. interactions with human health that could occur in urban locations that experience high levels of traffic congestion and associated particulate matter and noise emissions to air.

Emission limits for discharges to air, soil and water are set with regards to internationally recognised exposure limit values. These are generally set to be many times the safe exposure limit - in order to provide protection. In the event that a plan or programme began to have adverse health effects on surrounding populations it is likely that it would have been identified as being in breach of such emission standards at a very early stage - and long before the manifestation of any adverse health effects in the population.

Existing Problems

There is historic and predictive evidence of flooding within the area (see Section 3.8).

Parts of the Plan area are vulnerable to adverse effects from small changes in sea level combined with changes in the occurrence of severe rainfall events and associated flooding of rivers and a number of smaller urban streams. Flooding in certain circumstances could pose a risk to human health.

Air quality and noise (see Section 3.3) also present challenges that have the potential to interact with human health.

3.5 Biodiversity and Flora and Fauna

Information on biodiversity and flora and fauna which is relevant to lower tier project planning and development and associated environmental assessment includes available information on designated ecological sites and protected species, ecological connectivity (including stepping stones and corridors) and non-designated habitats.

Parks, rivers and canals are key areas for biodiversity across the Dublin City Centre area and provide multiple habitats for protected, rare and common species. Man-made and urban habitats within the Plan area can also include important biodiversity features. Areas containing the greatest extent of sensitive ecological features within the Plan area comprise Dublin City's ecological networks and corridors (such as the City's rivers, canals, railway lines, roadside verges, graveyards, amenity walks, old walls, gardens, old industrial sites, public parks and open spaces) – these features connect the Plan area with Dublin Bay, the Dublin and Wicklow Mountains, the Phoenix Park and other surrounding semi-natural areas.

The River Liffey, intersecting the central parts of the Plan area, supports protected fish species such as Atlantic salmon, brown trout, the critically endangered European eel, brook and river lamprey and the endangered white-clawed crayfish. The banks of the City's Royal and Grand canals, encompassing the Plan area, also provide important habitats for the extensive benthic communities (that include the protected opposite-leaved pondweed, glutinous snail, and coarse fish species). While many rivers are linked hydrologically by the River Liffey, the built-up nature of the riverbanks in urban areas is restricting terrestrial fauna from dispersing between the City's major rivers.⁵

Gardens provide habitats for a range of wildlife including various bird species, invertebrates such as bees and butterflies and mammals such as hedgehogs, mice, rats and foxes. These species move around between gardens using hedgerows and vegetated areas. These urban green spaces are of importance as they form part of a network of green spaces across the Plan area, in which animals and plants continue to thrive.

Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. They are composed of linear features, such as treelines, hedgerows and rivers/streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are important for the migration, dispersal and genetic exchange of species of flora and fauna particularly for mammals,

⁵ Dublin City Biodiversity Action Plan 2021-2025

especially for bats and small birds and facilitate linkages both between and within designated ecological sites, the non-designated surrounding countryside and urban areas.

Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the Natura 2000 network of designated ecological sites are maintained. Ecological islands or areas of habitat that are not connected to surrounding ecologically valuable habitats can also be important.

There are various sites within and surrounding the Plan area designated for ecological reasons. A selection of these (namely Special Areas of Conservation and Special Protection Areas⁶) are shown on Figure 3.1 maps European Sites within 15km of the Greater Dublin Area.

Existing Problems

Previous changes in land uses arising from human development have resulted in a loss of biodiversity and flora and fauna however legislative objectives governing biodiversity and fauna were not identified as being conflicted with.

The Plan includes robust measures to contribute towards the protection of biodiversity and flora and fauna.

⁶ Special Areas of Conservation (SACs) have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. Special Protection Areas (SPAs) have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) - referred to as the Birds Directive - due to their conservation value for birds of importance in the EU. Together, SACs and SPA are referred to as European sites.

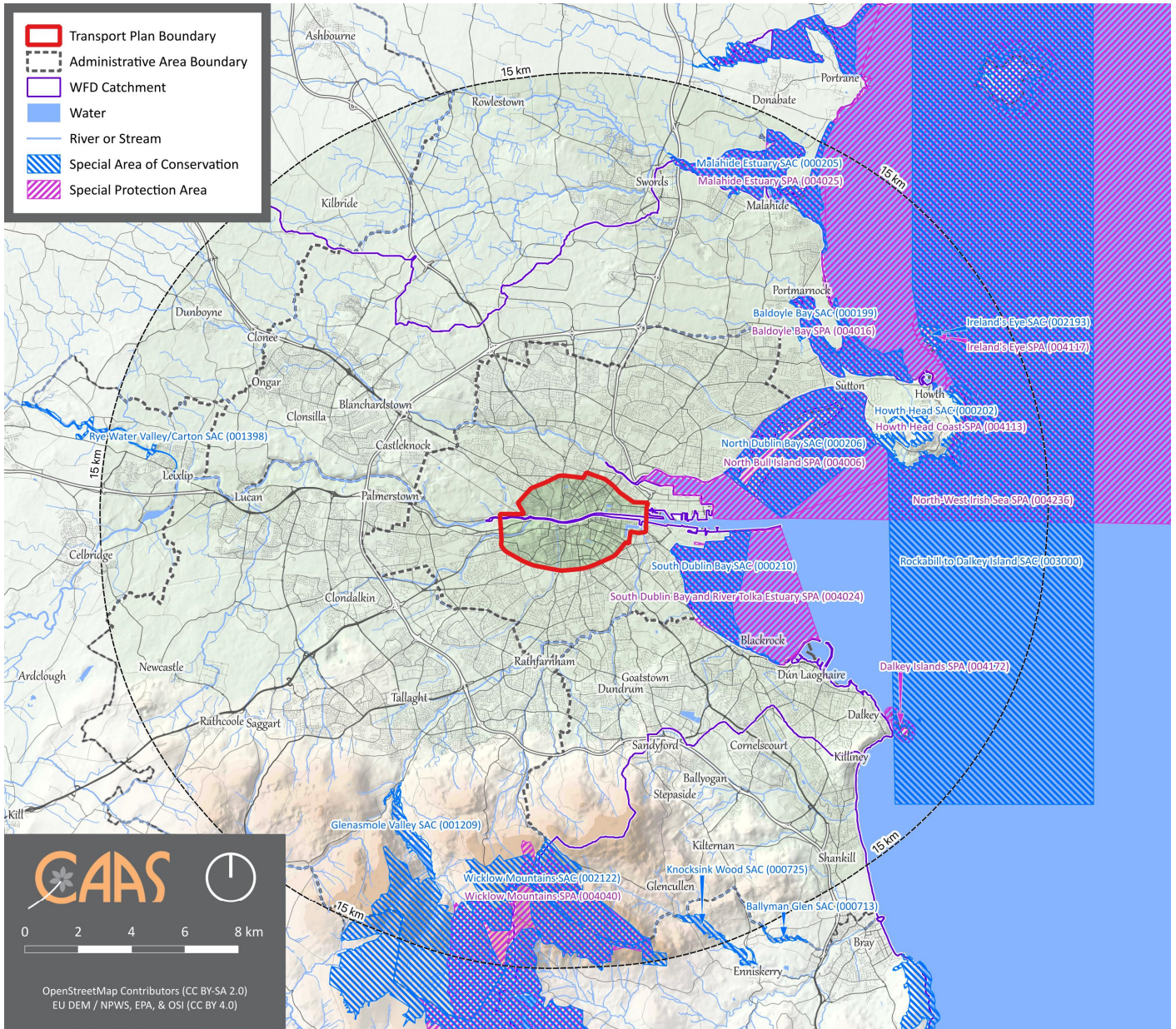


Figure 3.1 Selection of Ecologically Designated European Sites (SACs and SPAs)

3.6 Material Assets

Introduction

Other material assets, in addition to those detailed below, covered by the SEA include archaeological and architectural heritage, natural resources of economic value, such as water⁷, mineral resources and aggregates, County Geological Sites, fisheries and air.

Transport

The Plan relates to the transport sector and the management of traffic. Transport infrastructure is a material asset. Existing transport infrastructure across the Plan area includes railways, roads, bus and train stations, cycleways and paths. This infrastructure can support reductions in energy demand and emissions from the transport sector.

The long term trend in Dublin has been a significant reduction in the use of private cars to travel into the City Centre in the morning peak. The previous Dublin City Centre Transport Study (2016) identified that 192,000 people (2014 Canal Cordon Count data) travelled into the city centre in the morning peak, and that by 2023 it was expected that an additional 42,000 trips would need to be catered for. Between 2014 and 2019 the numbers travelling into the City centre rose by almost 25,000; however walking and cycling rose by 31,000 while people travelling by car reduced by 6,000. One of the main reasons for the rise in public transport was due to the successful introduction of the Luas Cross city link and the reduction in bus journey times along the Quays by the North and South Quay bus lanes.

Since the pandemic ended, there has been an overall recovery in public transport numbers across Dublin. The increase in home-working however, which is evident from the Census 2022 results, is also borne out by the 2022 Canal Cordon Count. Data from the 2022 count shows that overall demand to the City Centre in AM peak hours is down from 217,000 persons in 2019 to 177,000 in 2022. Car trips make up 27.7% of AM peak demand into the City Centre, steady with the share pre-pandemic. Overall, the proportion of trips into Dublin City Centre by sustainable modes stood at 71%, the 2nd highest figure on record after 2019.

Ongoing traffic surveys are regularly undertaken by Dublin City Council, and the most recent counts undertaken for traffic passing O'Connell Bridge, highlight the significant reduction in general traffic using the City Quays as a route through the city. Since 2017, there has been a 53% reduction in traffic on the North Quays and a 34% reduction in traffic on the South Quays. On average only 270 cars use the Bachelor's Walk approach to O'Connell Bridge per hour during the AM Peak period.

Public Assets and Infrastructure

Public assets and infrastructure which have the potential to be impacted upon by the development of transport infrastructure, if unmitigated, include 'on the ground' resources such as public open spaces, parks and recreational areas; public buildings and services; utility infrastructure (electricity, gas, telecommunications, water supply, wastewater infrastructure etc.). These resources are located throughout the Plan area.

Land

The Plan encompasses the area of the City generally bounded by the Royal and Grand Canals. The land within this area is developed and includes various brownfield sites. Facilitating a transport system that is capable of accommodating a significant growth in the City's population would help to facilitate a higher efficiency of land utilisation in the City, thereby minimising land-take on greenfield lands beyond the City centre.

Green Infrastructure

There is a variety of green infrastructure throughout the Plan area. Parks and open space promote health and well-being, provide recreational facilities and a range of habitats for various species. Green infrastructure is also a crucial component in building resilient communities capable of adapting to the

⁷ Including freshwater, transitional and coastal waters.

consequences of climate change with trees, woodlands and wetlands providing carbon capture and slowing water flows while improving air quality.

Coastline

Management of Dublin's coastline and coastal erosion are topics with relevance to various environmental components. Coastlines can be amongst the most sensitive and valuable resources, in terms of natural and cultural heritage, scenic beauty and recreation. The coast is also an important economic resource - particularly for the fishing, aquaculture, leisure and tourism industries.

Waste Management

Any construction waste arising from the development of infrastructure is required to be dealt with in compliance with relevant EU and National waste management policy, including that relating to the waste hierarchy of prevention, recycling, energy recovery and disposal.

For the purposes of waste management planning, Ireland is now divided into three regions: Southern, Eastern-Midlands and Connacht-Ulster. Waste management plans for each waste management region were published in 2015. Dublin City is located within the Eastern-Midlands region. The 2015 plans will be replaced by a new National Waste Management Plan for a Circular Economy, which will take account of the various measures outlined in *A Waste Action Plan for A Circular Economy - Ireland's National Waste Policy 2020-2025*.

Existing Problems

As the next tranche of public transport and active travel projects identified by the wider planning framework, including the City Development Plan and the Transport Strategy for the Greater Dublin Area, are brought forward for implementation, the issues of how to provide the physical space for this transport infrastructure as well as the additional people it will bring into the City Centre has become the most urgent transport planning challenge facing the City.

3.7 Soil

Soils across the Plan area are urban soils that have been affected by human activities including development over many years. The audit of County Geological Sites (CGSs) in Dublin City was completed in 2014, which identified 12 CGSs. There are nine designated CGSs occurring within/partially within the Plan area, as listed below:

- DC001 – St. Stephen's Green;
- DC008 – Oscar Wilde Statue;
- DC006 – Museum Building – Trinity College;
- DC012 – Temple Bar Street Well;
- DC003 – General Post Office;
- DC011 – River Poddle;
- DC002 – Dublin City Walls;
- DC005 – Guinness Wells; and
- DC009 – Phoenix Park.

3.8 Water

Water Framework Directive

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving *good status*. All public bodies are required to coordinate their policies and operations so as to maintain the *good status* of water bodies which are currently unpolluted and improve polluted water bodies to *good status*.

Status of surface and ground waters

The WFD defines 'overall surface water status' as the general expression of the status of a body of surface water, determined by the poorer of its ecological status and its chemical status. Thus, in order to achieve 'good surface water status' both the ecological status and the chemical status of a surface water body need to be at least 'good'.

The current WFD (2016-2021) status of various sections of the river waterbodies draining the Plan area is:

- *Good* (identified by the EPA as 'Royal Canal main Line - Liffey and Dublin Bay' and 'Grand Canal Basin – Liffey and Dublin Bay');
- *Moderate* (identified by the EPA as 'Dodder_050'); and
- *Poor* (identified by the PA as 'Camac_040' and 'Poddle_010').

The WFD surface water status (2016-2021) of coastal and transitional waterbodies within and surrounding the Plan area is identified as good (Liffey Estuary Upper) and moderate (Liffey Estuary Lower).

Figure 3.2 illustrates the WFD surface water status within and surrounding the Plan area. The River Camac and River Poddle are currently identified in the combined 2016-2021 data as being at risk of not meeting the WFD's objectives.

The WFD status (2016-2021) of all groundwater underlying the Plan area is currently identified as being of good status, meeting the objectives of the WFD.

Flooding

Flooding is an environmental phenomenon which, as well as causing economic and social impacts, could in certain circumstances pose a risk to human health. The existence of flood risk across the country is illustrated by various sources of information on historical flooding events – including those available from the Office of Public Works, the lead Authority on flooding in the country, the National Flood Hazard Mapping website⁸. In addition to this historic mapping there is predictive, modelled Preliminary Flood Risk Assessment and Flood Risk and Hazard mapping available from the OPW including through the National Catchment Flood Risk Management Programme. Historical and predictive flood risk indicators are also available from Geological Survey of Ireland. These mapping sources identify flood risk from various sources, including fluvial, pluvial, coastal and groundwater.

Eastern parts of the Plan area are identified as being at elevated risk from coastal flooding (as identified by the OPW's National Coastal Flood Extents mapping) and lands along the Plan area's various streams and rivers are identified as being at elevated risk from coastal flooding (as identified by the OPW's CFRAMS Flood Extent mapping) – such risk is likely to increase as a result of climate change.

The City Development Plan provides for land use zoning across the Transport Plan area and has been informed by a Strategic Flood Risk Assessment (SFRA). The SFRA has facilitated the integration of flood risk management measures into the Plan with which development proposals must comply. The Transport Plan is consistent with the provisions of the City Development Plan, including land use zoning, and any proposals emanating will need to comply with relevant flood risk management requirements.

Existing Problems

Subject to exemptions provided for by Article 4 of the WFD, based on available water data, certain surface water bodies will need improvement in order to comply with the objectives of the WFD.

There is historic and predictive evidence of elevated levels of flood risk from fluvial and coastal sources at various locations across the the Plan area.

⁸ <https://www.floodinfo.ie/>

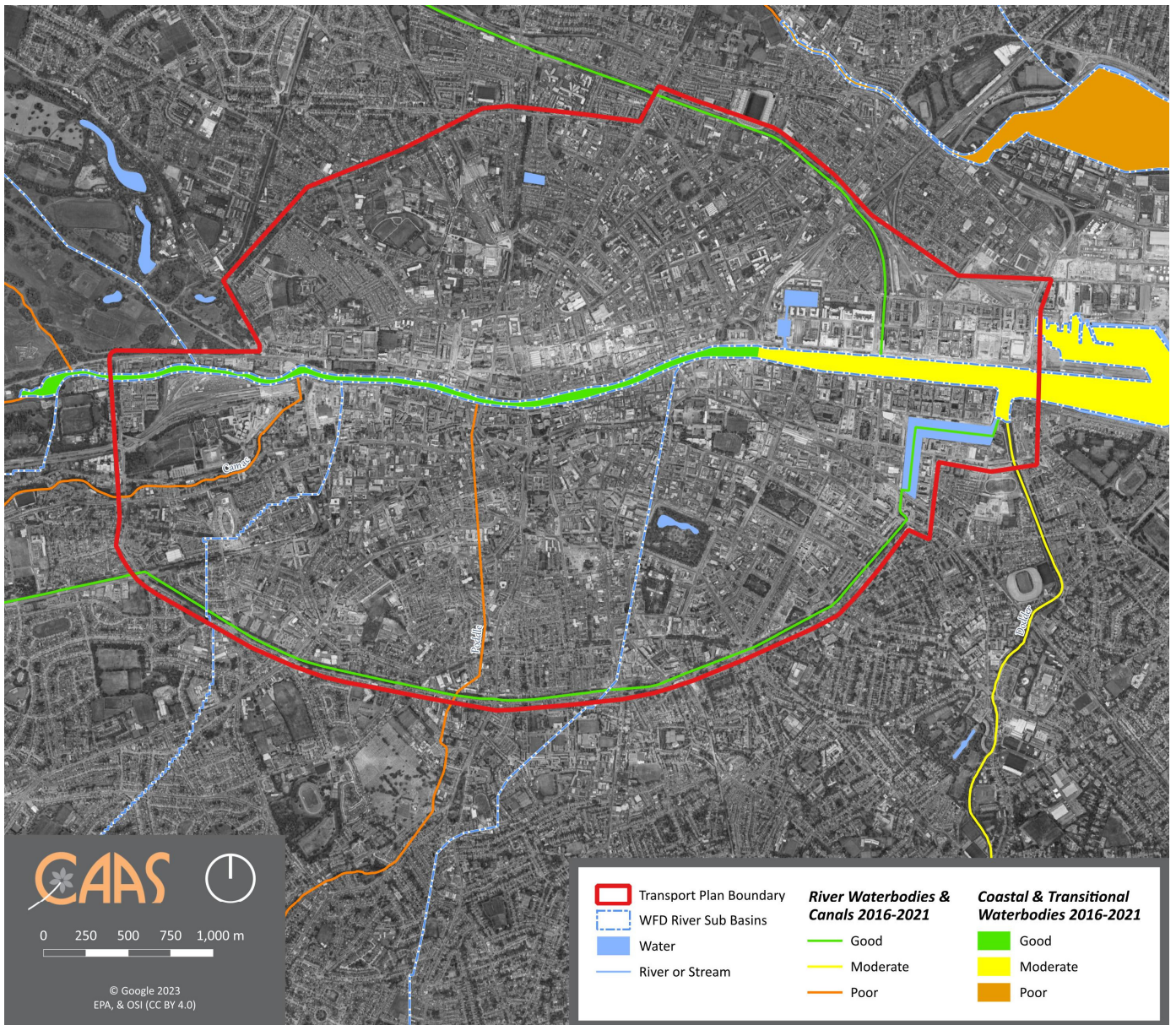


Figure 3.2 WFD Surface Water Status (2016-2021)

3.9 Landscape

Landscapes are areas which are perceived by people and are made up of a number of layers: landform, which results from geological and geomorphological history; landcover, which includes vegetation, water, human settlements, and; human values which are a result of historical, cultural, religious and other understandings and interactions with landform and landcover.

The landscape of the Plan area is characterised by its predominantly urban character, which encompasses individual buildings, streets, urban spaces, neighbourhoods and landscapes. The unique historical character of the City Centre ranges from 'old' medieval origins and the Georgian squares and streets to the new, modern and contemporary built environment, such as the area of the Docklands.

The River Liffey intersects the central parts of the Plan area, which are bounded by the Royal and Grand Canals. The Plan area also encompasses the estuaries adjacent to the Dublin Bay coastline. Dublin City Centre's rivers and canals with their riparian zones form important elements of the green infrastructure network, facilitating wildlife corridors and aquatic habitats, floodplains, green spaces, cultural setting, water-focused amenity, sports and riverside cycle and walkways.

The importance of landscape and visual amenity and the role of its protection are recognised in the Planning and Development Act 2000 as amended, which requires that Development Plans include objectives for the preservation of the landscape, views and the amenities of places and features of natural beauty. These objectives and associated plan content often designate different aspects of the landscape. Such designations, which vary from local authority to local authority and change over time, should be taken into account by lower tier planning and environmental assessments.

The following landscape designations and sensitivities have been designated by the Dublin City Development Plan 2022-2028:

- Parks and Open Spaces⁹;
- Tree Preservation Orders¹⁰;
- Special Amenity Area Order sites¹¹; and
- Key views and prospects for Dublin City¹².

Existing Problems

New developments have resulted in changes to the visual appearance of lands over time however legislative objectives governing landscape and visual appearance were not identified as being conflicted with.

3.10 Cultural Heritage

Archaeological Heritage

Archaeology is the study of past societies through the material remains left by those societies and the evidence of their environment. Archaeological sites and monuments vary greatly in form and date; examples include earthworks of different types and periods, (e.g. early historic ringforts and prehistoric burial mounds), megalithic tombs from the Prehistoric period, medieval buildings, urban archaeological deposits and underwater features.

⁹ Parks are key areas for biodiversity across the city and provide multiple habitats for legally protected, and rare as well as common species.

¹⁰ TPOs are a planning mechanism whereby individual trees or groups of trees can be identified as important and protected by a TPO. There is one within the Plan area with trees protected by the Order – at St. Patrick's House in Kilmainham. Refer to City Development Plan Figure 4-1.

¹¹ The purpose of these Orders is to preserve/enhance landscape character and to prevent/limit development. Such areas should also be taken into account by lower tier planning and environmental assessments where/if relevant. The closest designated SAAOs to the Plan area are the Liffey Valley to the west of the Plan area and the North Bull Island to the north-east of the Plan area.

¹² There are Views of Landmarks designated within the Plan area including those of Hueston Station, Collins Barracks, Four Courts, Christ Church Cathedral, St. Patrick's Cathedral, City Hall, Dublin Castle, Spire, Parnell Square, St. Stephen's Green, Merrion Square, Trinity College, Custom House, River Liffey and St. Stephen's Church. Refer to City Development Plan Figure 10-4.

As identified in the City Development Plan, Dublin City has a rich archaeological heritage. It has a recorded history of human settlement of over 9,000 years, centred along the line of the River Liffey. There are significant upstanding monuments of archaeological interest across the city centre including the ancient city walls, castles, churches and graveyards, and the River Liffey's quay walls. As with other European capital cities, Dublin also has important subsurface archaeological remains that represent the history of the development of the city from its origins through the medieval period right up to modern times. Mesolithic fish traps were excavated at Spencer Dock, while an exceptionally well-preserved Viking town was uncovered at Wood Quay. The industrial heritage of the City c.1750-1950 survives in areas such as St. James's Gate.

Archaeological heritage is protected under the National Monuments Acts (1930-2004), Natural Cultural Institutions Act 1997 and the Planning Acts.

Architectural Heritage

The term architectural heritage is defined in the Architectural Heritage (National Inventory) and Historic Monuments Act 1999 as meaning all: structures and buildings together with their settings and attendant grounds, fixtures and fittings; groups of structures and buildings; and, sites which are of technical, historical, archaeological, artistic, cultural, scientific, social or technical interest.

The City's architectural assets, include protected structures, Architectural Conservation Areas, conservation areas (designated with land use zonings¹³), mews structures, vernacular buildings, 20th century heritage, industrial heritage and street furniture, which may not be protected structures but which contribute significantly to the streetscape and to the character of the City.

3.11 Strategic Environmental Objectives

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies which generally govern environmental protection objectives established at international, Community or Member State level and are used as standards against which the provisions of the Plan and the alternatives can be evaluated in order to help identify significant environmental effects. SEOs are shown on the table below.

Table 3.1 Strategic Environmental Objectives

Environmental Component	SEO Code	Strategic Environmental Objectives
Air	A	<ul style="list-style-type: none"> To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from transport Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution Meet Air Quality Directive standards for the protection of human health — Air Quality Directive Significantly decrease noise pollution and move closer to WHO recommended levels

¹³ The "Z8 Georgian Conservation Areas", "Z2 Residential Conservation Areas" and red-lined "Conservation Areas" are extensive throughout the city. Whilst these areas do not have a statutory basis in the same manner as protected structures or ACAs, they are recognised as areas that have conservation merit and importance and warrant protection through zoning and policy application.

Designated Conservation Areas include extensive groupings of buildings, streetscapes and associated open spaces and include (parts of) the medieval/walled city, the Georgian Core, the 19th and 20th century city, and the city quays, rivers and canals. The special interest/value of Conservation Areas lies in the historic and architectural interest and the design and scale of these areas. Therefore, all of these areas require special care in terms of development proposals. The City Council will encourage development that enhances the setting and character of Conservation Areas.

As with Architectural Conservation Areas, there is a general presumption against development which would involve the loss of a building of conservation or historic merit within the Conservation Areas or that contributes to the overall setting, character and streetscape of the Conservation Area. Such proposals will require detailed justification from a viability, heritage, and sustainability perspective.

Environmental Component	SEO Code	Strategic Environmental Objectives
Climatic Factors	C	<ul style="list-style-type: none"> • To minimise emissions of greenhouse gasses • Integrate sustainable design solutions into infrastructure • Contribute towards the reduction of greenhouse gas emissions in line with national targets • Promote development resilient to the effects of climate change • Promote the use of renewable energy, energy efficient development and increased use of public transport
Population and Human Health	PHH	<ul style="list-style-type: none"> • Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management • Ensure that existing population and planned growth is matched with the required public infrastructure and the required services • Safeguard citizens from environment-related pressures and risks to health and well-being
Biodiversity, Flora and Fauna	BFF	<ul style="list-style-type: none"> • To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species • Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function • Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species • Enhance biodiversity in line with the National Biodiversity Strategy and its targets • To protect, maintain and conserve natural capital
Material Assets	MA	<ul style="list-style-type: none"> • Optimise existing infrastructure and provide new infrastructure to match population distribution proposals • Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes
Soil (and Land)	S	<ul style="list-style-type: none"> • Protect soils against pollution, and prevent degradation of the soil resource • Promote the sustainable use of infill and brownfield sites over the use of greenfield • Safeguard areas of prime agricultural land and designated geological sites
Water	W	<ul style="list-style-type: none"> • Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive and Marine Strategy Framework Directive • Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas • Integrate sustainable water management solutions (such as SuDS, porous surfacing, etc.) into new projects
Landscape	L	<ul style="list-style-type: none"> • To implement the identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention
Cultural Heritage	CH	<ul style="list-style-type: none"> • Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage

Section 4 Consideration of Alternatives

4.1 Description of Alternatives Considered

Taking into account the objectives and geographical scope of the Plan, alternatives were considered under two tiers as follows:

4.1.1 Tier 1 Alternatives: Overall Approach

Alternative A - Congestion Charging

As a means of reducing the number of cars driving in Dublin City Centre, the introduction of a zone within which motorists would be required to pay a charge to drive.

The zone could encompass the Inner Core or the Study Area as a whole and would be monitored and enforced by means of cameras. The cost of the scheme would be subject to detailed analysis but would be set at a rate to discourage driving.

Specific arrangements would be considered for blue badge holders as would reduced rates for Low and Zero Emissions vehicles.

Alternative B - Traffic Management

As a means of reducing the number of cars driving in Dublin City Centre, introduce a number of traffic management interventions that would reduce the potential for vehicles to travel through the Inner Core, but would facilitate travel into the area, and access to car parks.

4.1.2 Tier 2 Alternatives: Traffic Management

Alternative A - Urban Design/ Planting / Amenity/ Plaza

This approach would provide for the traffic management measures to reduce through traffic alongside significant investment in the public realm in the form of new civic plazas, wider footpaths, high-quality segregated cycle tracks, lighting, greening etc.

It would capitalise on the opportunities provided by the traffic management interventions to deliver a more attractive City Centre.

Alternative B – Minimalist traffic management measures only

This approach would provide for the traffic management measures only and would effectively leave the traffic-free streets and spaces as they are today.

4.2 Summary of Assessment of Alternatives

A strategic multi-criteria analysis under the headings of Economy, Safety, Integration, Accessibility and Social Inclusion and Environment is provided below as is a summary of the assessment.

4.2.1 Tier 1 Alternatives: Overall Approach

Both Tier 1 alternatives (Alternative A “Congestion Charging” and Alternative B “Traffic Management”) would facilitate improvements in sustainable mobility and overall reductions in traffic flows, including a shift from car to more sustainable and non-motorised transport modes. Improvements in sustainable mobility would result in the following significant positive effects:

- Reductions in greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets;
- Reductions in all emissions to air, including noise, and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health;

- Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and
- Energy security.

Both Tier 1 alternatives could facilitate significant investment in the public realm in the form of new civic plazas, wider footpaths, high-quality segregated cycle tracks, lighting, greening etc., allowing the opportunities provided by the traffic management interventions to deliver a more attractive City Centre. This enhancement of the public realm would both result in spaces where people wish to congregate and where movement is safer and more convenient and benefit cultural heritage (including archaeological and architectural heritage) and its context. It would also provide for enhanced biodiversity and potentially contributes towards urban climate adaptation objectives.

Both Tier 1 alternatives would contribute towards the achievement of a transport system that is capable of accommodating a significant growth in population. By facilitating a significant growth in population in well serviced, well connected and generally less environmentally sensitive areas, both alternatives would help to facilitate a higher efficiency of land utilisation, increases in sustainable mobility and a reduction in the need to develop areas (including greenfield areas) that are less well serviced, less well connected and generally more environmentally sensitive. This avoids potential significant adverse environmental effects that would otherwise occur beyond the city centre. The reduced need to develop areas that are less well serviced, less well connected and generally more environmentally sensitive would result in lower adverse effects upon environmental components, including air and climatic factors (emissions), ecology, landscape designations, water and soil.

Although there would be an overall reduction in traffic flows and associated interactions with air, noise and human health, there would be potential for displacement of traffic to lead to localised increases traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels, both within the City Centre Transport Plan area and beyond. Potential effects, before mitigation is applied, would have the potential to be less significant under **Alternative A**. Potential effects, before mitigation is applied, would have the potential to be more significant under **Alternative B**.

In combination with the wider planning framework, the potential construction and operational effects of physical works would be mitigated so that adverse effects would not be significant. Potential effects, before mitigation is applied, would have the potential to be less significant under **Alternative A**, as less physical works would be required under this alternative. Potential effects, before mitigation is applied, would have the potential to be more significant under **Alternative B**, as more physical works would be required under this alternative.

Table 4.1 Comparative Multi-Criteria Analysis of Tier 1 Alternatives

Tier Alternative 1 (selected alternative in bold)	Economy	Safety	Integration	Accessibility and Social Inclusion	Environment (Refer also to text summarising assessment above)
Alternative A – Congestion Charging	Payments could be ring-fenced for better PT and Cycling	Potential reduced collisions due to reduced traffic	Would support wider transport, public realm and environment objectives	May lead to a situation where those who can afford it simply pay it, excluding those who cannot. May be perceived as unjust for people with disabilities who may have to drive.	Reduced air and noise pollution Reduced carbon emissions Potentially enhanced public realm Lower potential for displacement effects and associated interactions as some traffic with no economic or commercial justification for being there more likely to be removed

Tier 1 Alternative (selected alternative in bold)	Economy	Safety	Integration	Accessibility and Social Inclusion	Environment (Refer also to text summarising assessment above)
Alternative B - Traffic Management	Removes traffic with no economic or commercial justification for being there, freeing up the space for those who need to be there. Less impact on retail etc.	Potential reduced collisions due to reduced traffic	Would support wider transport, public realm and environment objectives.	More equitable than congestion charging in that physical traffic measures apply to all motorists equally. Without specific arrangements, it may be perceived as exclusionary for people with disabilities who may have to drive.	Reduced air and noise pollution Reduced carbon emissions Potentially enhanced public realm Higher potential for displacement effects and associated interactions as some traffic with no economic or commercial justification for being there less likely to be removed

4.2.2 Tier 2 Alternatives: Traffic Management

Both Tier 2 alternatives (Alternative A “Urban Design/ Planting / Amenity/ Plaza” and Alternative B “Minimalist traffic management measures only”) would facilitate improvements in sustainable mobility and overall reductions in traffic flows, including a shift from car to more sustainable and non-motorised transport modes. Improvements in sustainable mobility would result in the following significant positive effects:

- Reductions in greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets;
- Reductions in all emissions to air, including noise, and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health;
- Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and
- Energy security.

Alternative A would facilitate significant investment in the public realm in the form of new civic plazas, wider footpaths, high-quality segregated cycle tracks, lighting, greening etc., allowing the opportunities provided by the traffic management interventions to deliver a more attractive City Centre. This enhancement of the public realm will both result in spaces where people wish to congregate and where movement is safer and more convenient and benefit cultural heritage (including archaeological and architectural heritage) and its context. It would also provide for enhanced biodiversity and potentially contributes towards urban climate adaptation objectives.

Both Tier 2 alternatives would contribute towards the achievement of a transport system that is capable of accommodating a significant growth in population. By facilitating a significant growth in population in well serviced, well connected and generally less environmentally sensitive areas, both alternatives would help to facilitate a higher efficiency of land utilisation, increases in sustainable mobility and a reduction in the need to develop areas (including greenfield areas) that are less well serviced, less well connected and generally more environmentally sensitive. This avoids potential significant adverse environmental effects that would otherwise occur beyond the city centre. The reduced need to develop areas that are less well serviced, less well connected and generally more environmentally sensitive would result in lower adverse effects upon environmental components, including air and climatic factors (emissions), ecology, landscape designations, water and soil.

Although there would be an overall reduction in traffic flows and associated interactions with air, noise and human health, there would be potential under **both Tier 2 alternatives** for displacement of traffic to lead to localised increases traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels, both within the City Centre Transport Plan area and beyond.

In combination with the wider planning framework, the potential construction and operational effects of physical works would be mitigated so that adverse effects would not be significant. Potential effects, before mitigation is applied, would have the potential to be more significant under **Alternative A**, as more physical works would be required under this alternative. Potential effects, before mitigation is applied, would have the potential to be less significant under **Alternative B**, as less physical works would be required under this alternative.

Table 4.2 Comparative Multi-Criteria Analysis of Tier 2 Alternatives

Alternative (selected alternative in bold)	Economy	Safety	Integration	Accessibility and Social Inclusion	Environment (Refer also to text summarising assessment above)
Alternative A - Urban Design/ Planting / Amenity/ Plaza	This would be a higher-cost alternative but, by significantly enhancing the attractiveness of the City Centre, would be likely to draw more people into the area, increasing footfall for retail and hospitality.	Higher levels of pedestrian activity and supporting activities could enhance the perception of the City Centre from a personal security point of view.	Introduction of new spaces, enhanced footpaths etc. would meet a range of urban design and environmental objectives.	The decision to pursue Traffic Management may be perceived as exclusionary for those with disabilities and the relative differences within Tier 2 are not significant.	Provides for enhanced biodiversity and potentially contributes towards urban climate adaptation objectives. Provides for an enhanced public realm, including enhancement of cultural heritage and its context.
Alternative B - Minimalist traffic management measures only	Cheaper to implement but would not provide the attractive environment of Alternative A.	This alternative would still likely attract a higher number of pedestrians but less likely to attract the investment in active land uses, therefore may be less advantageous in terms of safety and personal security.	Built environment would be left unchanged; urban design and environmental objectives would not be significantly be contributed towards.	The decision to pursue Traffic Management may be perceived as exclusionary for those with disabilities and the relative differences within Tier 2 are not significant.	Does not provide for enhanced biodiversity or contribute towards urban climate adaptation objectives. Does not provide for an enhanced public realm, including enhancement of cultural heritage and its context.

4.3 Reasons for Choosing the Selected Alternative in light of Other Reasonable Alternatives Considered

The alternatives selected for the Plan are selected having regard to both:

1. The environmental effects that are identified by the SEA and are summarised above; and
2. Other effects (under the headings of Economy, Safety, Integration and Accessibility and Social Inclusion) that are also described above.

Section 5 Assessment of Plan Provisions

The City Centre Transport Plan facilitates improvements in sustainable mobility and overall reductions in traffic flows, including a shift from car to more sustainable and non-motorised transport modes. Improvements in sustainable mobility will result in the following significant positive effects:

- Reductions in greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets;
- Reductions in all emissions to air, including noise, and associated achievement of air quality objectives, thereby contributing towards improvement of air quality and protection of human health;
- Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and
- Energy security.

The Plan contributes towards the achievement of a transport system that is capable of accommodating a significant growth in population. By facilitating a significant growth in population in well serviced, well connected and generally less environmentally sensitive areas, the Plan would help to facilitate a higher efficiency of land utilisation, increases in sustainable mobility and a reduction in the need to develop areas (including greenfield areas) that are less well serviced, less well connected and generally more environmentally sensitive. This avoids potential significant adverse environmental effects that would otherwise occur beyond the city centre. The reduced need to develop areas that are less well serviced, less well connected and generally more environmentally sensitive would result in lower adverse effects upon environmental components, including air and climatic factors (emissions), ecology, landscape designations, water and soil.

The Plan facilitates traffic management measures to reduce through traffic alongside significant investment in the public realm in the form of new civic plazas, wider footpaths, high-quality segregated cycle tracks, lighting, greening etc., allowing the opportunities provided by the traffic management interventions to deliver a more attractive City Centre. This enhancement of the public realm will both result in spaces where people wish to congregate and where movement is safer and more convenient and benefit cultural heritage (including archaeological and architectural heritage) and its context.

The key potential benefits of the implementation of the Plan can be summarised as follows:

- Reduction in car traffic in the Core City Centre of up to 60%;
- More reliable journey times for economically essential traffic;
- Reduced emissions of CO₂ in the City Centre due to a reduction of 34% in the number of kilometres travelled by private car;
- Improved Air Quality due to reduced traffic levels;
- Reduction in population exposed to traffic noise due to reduced traffic levels;
- A more active and healthier population owing to the increased attractiveness of walking and cycling;
- Reduced risk of traffic collisions due to reduced traffic levels;
- Protection of the architectural heritage of the City Centre from the negative impacts of car traffic;
- Efficient and reliable public transport operations as a result of improved priority and reduction in car traffic;
- Improved cycling facilities in terms of safety, convenience and legibility;
- Improved pedestrian environment with wider footpaths and improved crossings;
- Improved cross-city pedestrian connectivity with 30% less time waiting at junctions on the walk from Stephen's Green to the Spire, and a 17% reduction in pedestrian wait time at O'Connell Bridge;
- Significant public realm benefits through new public spaces;
- A more inclusive City Centre transport environment; and
- A City Centre transport system that is capable of accommodating a significant growth in population; economic activity; social vibrancy; cultural attraction; tourism; and all the other elements of a modern, progressive European capital city.

The National Transport Authority are integrating all recommendations arising from the SEA and AA processes into the Plan (see Section 5 of this report), facilitating compliance of the Plan with various European and National legislation and Guidelines relating to the protection of the environment and the achievement of sustainable development. Implementation of the Plan will contribute towards efforts to achieve a number of the 17 United Nations Sustainable Development Goals of the 2030 Agenda for Sustainable Development.

Table 5.1 details the various types of environmental effects likely to arise with respect to the Plan (as developed from the selected alternatives – see Section 4) as a direct result of development and activities under the Plan and in combination with the wider planning framework.

Table 5.1 Overall Effects Arising from the Plan

Environmental Component	Likely Environmental Effects, as a direct result of development and activities under the Plan and in combination with the wider planning framework		
	Significant Positive Effect likely to occur	Potentially Significant Adverse Effect, if unmitigated	Residual Adverse Effect ¹⁴
Air and climatic factors	<p>The City Centre Transport Plan facilitates improvements in sustainable mobility and overall reductions in traffic flows, including a shift from car to more sustainable and non-motorised transport modes. Improvements in sustainable mobility will result in the following significant positive effects:</p> <ul style="list-style-type: none"> • Reductions in greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets; • Reductions in all emissions to air, including noise, and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health; and • Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets. 	<ul style="list-style-type: none"> • Localised emissions to air and associated issues¹⁵. 	<ul style="list-style-type: none"> • An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility.
Population and human health	<ul style="list-style-type: none"> • Provides for, in combination with the wider planning framework, the development of transport infrastructure and services in locations which will facilitate use by those living and working in urban/suburban areas. • Facilitates contribution towards the protection of human health as a result of contributing towards the protection of environmental vectors, especially air. 	<ul style="list-style-type: none"> • Potential interactions if effects upon environmental vectors such as air are not mitigated (refer to "Air and climatic" factors above). 	<ul style="list-style-type: none"> • An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility.

¹⁴ Residual adverse environmental effects would be generally non-significant. Significant residual adverse effects would be in compliance with the relevant environmental protection legislation.

¹⁵ Traffic flow modelling has been undertaken by the NTA under two scenarios: one with implementation of both the interventions proposed by the Plan and the planned and committed schemes expected to be in place by 2028; and one with implementation of the planned and committed schemes expected to be in place by 2028 only, prior to any interventions proposed by the Plan. The modelling shows a significant and overall reduction in traffic flows, both within the City Centre and across the wider Greater Dublin Area. This reduction would lead to an overall reduction in the numbers of people exposed to pollution from emissions to air, including noise levels from traffic, in particular within and surrounding the City Centre.

There is potential for displacement of traffic to lead to localised increases traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels. These localised impacts occur along a small number of existing City Centre roads and junctions (where there are existing levels of traffic) and at a number of locations within the wider Greater Dublin Area. The greatest increases in traffic flows under the model occur at the Red Cow and Balally Park and Ride locations, which would seem to imply a greater number of people switching to public transport rather than driving into the City Centre at peak hours.

DCC and the NTA will monitor potential adverse effects relating primarily to Air Quality and Noise due to the displacement of traffic arising out of Plan measures on a regular basis in the context of the wider benefits that are forecast to accrue from the Plan, and mitigate any negative impacts that may emerge, as appropriate. Proposed interventions will be required to demonstrate that they are consistent with all relevant legislative requirements.

Environmental Component	Likely Environmental Effects, as a direct result of development and activities under the Plan and in combination with the wider planning framework		
	Significant Positive Effect likely to occur	Potentially Significant Adverse Effect, if unmitigated	Residual Adverse Effect ¹⁴
Biodiversity and flora and fauna	<ul style="list-style-type: none"> Facilitates lower overall effects on ecology (including designated sites, ecological connectivity and habitats) – due to higher efficiency of land utilisation with the city centre and a reduction in the need to develop more sensitive areas (including greenfield areas) elsewhere. Contributes towards the protection of vegetation as a result of contributing towards the protection of environmental vectors, especially air. Potential ecological enhancement opportunities as a result of facilitating improvements in the public realm. 	<ul style="list-style-type: none"> In combination with the wider planning framework, arising from both construction and operation of transport infrastructure and services and associated facilities/ infrastructure: loss of/damage to biodiversity in designated sites, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna. In combination with the wider planning framework, habitat loss, fragmentation and deterioration, including patch size and edge effects. In combination with the wider planning framework, disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species. In combination with the wider planning framework, effects in riparian zones where new crossings of waters, if any, are progressed. In combination with the wider planning framework, potential effects on vegetation from transport emissions. 	<ul style="list-style-type: none"> In combination with the wider planning framework, loss of an extent of non-protected habitats as a result of new or widened transport infrastructure that involves the replacement of semi-natural land covers with artificial surfaces. In combination with the wider planning framework, losses or damage to ecology (these would be in compliance with relevant legislation).
Material Assets	<ul style="list-style-type: none"> Contributions towards energy security (in combination with plans and programmes from all sectors, including energy, transport and land use planning) as a result of reducing traffic flows and associated energy use. Contributions towards a mode shift away from the private car to public transport, walking and cycling and associated enhancement of the public realm. Contributions towards the protection and enhancement of built/amenity assets and infrastructure. Contributions towards the achievement of a transport system that is capable of accommodating a significant growth in population. By facilitating a significant growth in population in well serviced, well connected and generally less environmentally sensitive areas, the Plan would help to facilitate a higher efficiency of land utilisation, increases in sustainable mobility and a reduction in the need to develop areas (including greenfield areas) that are less well serviced, less well connected and generally more environmentally sensitive. This avoids potential significant adverse environmental effects that would otherwise occur beyond the city centre. Contributions towards appropriate waste management. 	<ul style="list-style-type: none"> In combination with the wider planning framework, generation of construction waste. In combination with the wider planning framework, loss or damage to built/amenity assets and infrastructure including as a result of new or widened transport infrastructure. 	<ul style="list-style-type: none"> In combination with the wider planning framework, residual wastes (these would be disposed of in line with higher level waste management policies). In combination with the wider planning framework, potential residual losses to built/amenity assets and infrastructure including as a result of new or widened transport infrastructure.

Environmental Component	Likely Environmental Effects, as a direct result of development and activities under the Plan and in combination with the wider planning framework		
	Significant Positive Effect likely to occur	Potentially Significant Adverse Effect, if unmitigated	Residual Adverse Effect ¹⁴
Soil	<ul style="list-style-type: none"> Minimises land-take and loss of extent of soil resource – as a result of facilitating a higher efficiency of land utilisation and a reduction in the need to develop areas (including greenfield areas) beyond the city centre. Contributions towards the protection of the environment from contamination arising from brownfield development. Contributions towards the protection of features or areas of geological/geomorphological interest. 	<ul style="list-style-type: none"> In combination with the wider planning framework, adverse impacts on the hydrogeological and ecological function of the soil resource as a result of construction of transport and associated transport facilities/infrastructure. In combination with the wider planning framework, adverse impacts on features or areas of geological/geomorphological interest as a result of construction of transport and associated transport facilities/infrastructure. In combination with the wider planning framework, potential for increase in river bank erosion. 	<ul style="list-style-type: none"> In combination with the wider planning framework, loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces and from sea level rise/coastal erosion.
Water	<ul style="list-style-type: none"> Facilitates lower overall effects on ground and surface waters due to higher efficiency of land utilisation with the city centre and a reduction in the need to develop areas less well served by water services capable of delivering Water Framework Directive targets (including greenfield areas) elsewhere. Contributions towards compliance with the Flood Risk Management Guidelines. 	<ul style="list-style-type: none"> In combination with the wider planning framework, adverse impacts upon the status of water bodies and entries to the WFD Register of Protected Areas, arising from changes in quality, flow and/or morphology. In combination with the wider planning framework, increase in the risk of flooding. 	<ul style="list-style-type: none"> Flood related risks remain due to uncertainty with regard to extreme weather events.
Landscape	<ul style="list-style-type: none"> Facilitates lower overall effects on landscapes due to higher efficiency of land utilisation with the city centre and a reduction in the need to develop more sensitive landscapes (including greenfield areas) elsewhere. Contributions towards the protection of landscape designations as a result of facilitating compliance with relevant plans. 	<ul style="list-style-type: none"> In combination with the wider planning framework, occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape. 	<ul style="list-style-type: none"> In combination with the wider planning framework, residual visual effects (these would be in compliance with landscape designation provisions).
Cultural Heritage	<ul style="list-style-type: none"> Contributions towards the protection of cultural heritage (archaeological and architectural) as a result of facilitating compliance with relevant legislation. Contributions towards the enhancement of cultural heritage and its context as a result of replacing motorised modes with more sustainable and non-motorised modes and enhancing the public realm. 	<ul style="list-style-type: none"> In combination with the wider planning framework, potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	<ul style="list-style-type: none"> In combination with the wider planning framework, potential alteration to the context and setting of designated cultural heritage however these will occur in compliance with legislation. Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Plan.

Section 6 Mitigation and Monitoring Measures

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Plan. Various environmental sensitivities and issues have been communicated to the Plan-preparation team through the SEA and Appropriate Assessment (AA)¹⁶ processes. By integrating related recommendations into the Plan, beneficial environmental effects of implementing the Plan have been and will be maximised and potential adverse effects have been and will be avoided, reduced or offset. Mitigation is achieved through:

- Strategic work undertaken by the Authorities to ensure contribution towards environmental protection and sustainable development;
- Considering alternatives for the Plan;
- The integration of individual environmental protection and management-related provisions into the text of the Plan (see selection at Table 6.1); and
- The integration of individual provisions into the environmental protection and management-related provisions into the existing Dublin City Development Plan and Transport Strategy for the Greater Dublin Area.

The Environmental Report contains proposals for **monitoring** the potential significant effects of implementing the Plan, if unmitigated, which are adopted alongside the preparation of the Plan. Monitoring is an ongoing process and the programme allows for flexibility and the further refinement of indicators and targets. The Monitoring Programme may also be updated to deal with specific environmental issues - including unforeseen effects - as they arise. Monitoring measures chosen for the SEA of the Plan align with those used in the SEA of the Transport Strategy for the Greater Dublin Area and in the SEA of the Dublin City Development Plan. This consistency across the hierarchy of land use/transport planning will improve the efficiency and effectiveness of future monitoring. DCC and the NTA are responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of corrective action, in combination with the relevant authorities. A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared during the implementation of the Plan, in advance of the review of the Plan. This report will address indicators including those set out below:

- Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels
- NO_x, SO_x, PM₁₀ and PM_{2.5} as part of Ambient Air Quality Monitoring
- Implementation of the Plan, which will contribute towards and facilitate climate action
- Carbon dioxide (CO₂) emissions
- A competitive, low-carbon, climate-resilient and environmentally sustainable economy
- Share of renewable energy in transport
- Energy consumption, the uptake of renewable options and solid fuels for residential heating
- Proportion of journeys made by private fossil fuel-based car compared to previous levels
- Proportion of people reporting regular cycling / walking to school and work above previous CSO figures
- Implementation of the Plan, which will contribute towards and facilitate economic growth
- Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan
- Proportion of people reporting regular cycling / walking to school and work above previous CSO figures
- Access to sustainable modes of transport
- Condition of European sites
- Number of projects that have integrated ecosystem services considerations
- EIAs and AAs as relevant for new projects
- Compliance of planning permissions with Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 21 of the Plan
- Proportion of people reporting regular cycling / walking to school and work above previous CSO figures
- Access to sustainable modes of transport
- To facilitate population growth occurring within the existing built-up footprint of the City (also relevant to Material Assets)
- Instances where contaminated material generated from brownfield and infill must be disposed of
- Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD
- Number of incompatible developments permitted within flood risk areas
- Integration of sustainable water management solutions (such as SuDS, porous surfacing, etc.) into new projects
- Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in the City Development Plan, resulting from development which is granted permission under the Plan

¹⁶ Stage 2 AA is being undertaken alongside the preparation of the Plan. The requirement for AA is provided under the EU Habitats Directive. The emerging conclusion of the AA is that the Plan will not affect the integrity of the Natura 2000 network of European sites.

Table 6.1 Integration of individual provisions relating to environmental protection and management into the Plan

Plan Reference	Plan Text
8. City Centre Traffic Management Proposals	DCC and the NTA will monitor these effects ¹⁷ on a regular basis in the context of the wider benefits which are forecast to accrue from this plan, and mitigate any negative impacts that may emerge, as appropriate.
21.1 Wider Planning Framework and the Regulatory Framework for Environmental Protection and Management	<p>As detailed earlier, the plan will complement, and support, the implementation of the Dublin City Development Plan 2022-2028 and the Transport Strategy for the Greater Dublin Area 2022-2042 by providing a more detailed framework for improving the transportation system within the City Centre.</p> <p>In order to be realised, projects identified in this plan (in a similar way to other projects from any other sectors) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework. It is a specific provision of this plan to ensure that all of the provisions from the Dublin City Development Plan and the Transport Strategy for the Greater Dublin Area identified as mitigation in the SEA Environmental Report and Natura Impact Statement that accompany the Study shall be complied with throughout the implementation of this Study.</p> <p>In implementing this plan, the City Council will cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management and will ensure that plans, programmes and projects comply with EU Directives – including the Habitats Directive (92/43/EEC), the Birds Directive (2009/147/EC), the Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EC) and the Strategic Environmental Assessment Directive (2001/42/EC) – and relevant transposing Regulations.</p>
21.2 Lower-level Decision Making	<p>Lower levels of decision making and environmental assessment should consider the environmental sensitivities identified in Section 4 of the SEA Environmental Report, including the following:</p> <ul style="list-style-type: none"> • Special Areas of Conservation and Special Protection Areas; • Features of the landscape that provide linkages/connectivity to designated sites (e.g. watercourses and areas of semi-natural habitat, such as linear woodlands); • Salmonid Waters; • Shellfish Waters; • Nature Reserves; • Natural Heritage Areas; • Areas likely to contain a habitat listed in Annex 1 of the Habitats Directive; • Entries to the Record of Monuments and Places and Zones of Archaeological Potential; • Entries to the Record of Protected Structures; • Un-designated sites of importance to wintering or breeding bird species of conservation concern; • Architectural Conservation Areas; and • Special Amenity Area Order sites and other relevant landscape designations.
21.4 Corridor and Route Selection Process	<p>The following Corridor and Route Selection Process will be undertaken for relevant new infrastructure:</p> <p>Stage 1 – Route Corridor Identification, Evaluation and Selection; and</p> <p>Stage 2 – Route Identification, Evaluation and Selection.</p> <p>In both stages, environmental constraints and opportunities will be key factors and the advice of relevant specialists will be sought. Site-specific field data will also be used. The need to consider other planning and transport matters is also recognised.</p>
21.5 Appropriate Assessment	<p>All projects and plans arising from this plan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and subsequent Appropriate Assessment where necessary, that:</p> <ul style="list-style-type: none"> • The plan or project will not give rise to adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or • The plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or • The plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative

¹⁷ Potential adverse effects relating primarily to Air Quality and Noise due to the displacement of traffic arising out of Plan measures.

Plan Reference	Plan Text
	solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.
21.6 Protection of Natura 2000 Sites	No projects giving rise to adverse effects on the integrity of European sites (cumulatively, directly or indirectly) arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this plan (either individually or in combination with other plans or projects), except as provided for in Article 6(4) of the Habitats Directive, viz. there must be: a) no alternative solution available; b) imperative reasons of overriding public interest for the project to proceed; and c) adequate compensatory measures in place.
21.7 Climate Change, Emissions and Energy	<p>As identified in the SEA Environmental Report that accompanies this plan, the plan facilitates sustainable mobility and associated positive effects, including those relating to:</p> <ul style="list-style-type: none"> • Reductions in greenhouse gas emissions and associated achievement of legally binding targets; • Reductions in emissions to air and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health; • Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and • Energy security. <p>In implementing the plan, the City Council will support, in addition to the provisions of the Dublin City Development Plan and the Transport Strategy for the Greater Dublin Area, relevant provisions contained in the National Energy and Climate Plan, the Climate Action Plan (2023), National Climate Change Adaptation Framework (2018), the National Mitigation Plan (2017), the Dublin City Council Climate Action Plan 2019-2024 and the Department of Transport's Sectoral Adaptation Plan for Transport Infrastructure, which builds on the 2017 "Adaptation Planning – Developing Resilience to Climate Change in the Irish Transport Sector".</p> <p>Cognisant of the imperative to reduce emissions, DCC and the NTA will seek to ensure primacy for transport options that provide for unit reductions in carbon emissions. This can most effectively be done by promoting public transport, walking and cycling, and by actively seeking to reduce car use in circumstances where alternative options are available. During the preparation and/or review of policies and plans relating to climate change, carbon emissions and energy usage, DCC and the NTA will seek to integrate plan objectives, as appropriate.</p> <p>By contributing towards a reduction in the use of the private car for trips, the plan provides for an overall reduction in the numbers of people exposed to pollution from emissions to air, including unacceptable noise levels from traffic, in particular within the City Centre. The plan has considered the potential for displacement of traffic to lead to localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels and identified that such impacts are unlikely to be significant. Proposed interventions will be required to demonstrate that they are consistent with all relevant legislative requirements.</p>
21.8 Other SEA and AA Recommendations	In implementing the Plan, the City Council will ensure that the measures included in Table 9.3 of the SEA Environmental Report and the Natura Impact Statement are complied with.
22. Monitoring	<p>As part of this plan, the NTA and DCC will implement an expanded annual monitoring of the following inside the Canals:</p> <ul style="list-style-type: none"> • Canal Cordon counts of travel by all modes; • Liffey Bridge counts of travel by all modes; • Air Quality monitoring; • Noise monitoring; • Public transport journey times through the City Centre; • Public transport passenger numbers; • Progress in implementing City Centre Plan measures