# SEA Potential Measures Report BACKGROUND DOCUMENT

# **Greater Dublin Area**

# **Draft Transport Strategy** 2011-2030

2030 vision





# 2030Vision

# Final/post-consultation Strategy Potential Measures SEA Report

July 2009

Reference 0087648

Prepared by: Olan Howell & Walter Bruton

For and on behalf of

**Environmental Resources Management** 

Approved by: Bruce Davidson

Signed:

Position: **Partner** 

Date: 27th July 2009

This report has been prepared by Environmental Resources Management, the trading name of ERM Environmental Resources Management Ireland Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

# **CONTENTS**

1	INTRODUCTION & BACKGROUND	1
1.1	BACKGROUND TO THIS SEA REPORT	1
1.2	KEY ASPECTS OF 2030VISION	2
1.3	STRUCTURE OF THIS SEA REPORT	3
2	2030VISION SEA PROCESS	4
2.1	INTRODUCTION	4
2.2	SEA PROCESS	4
3	MEASURES ENVIRONMENTAL ASSESSMENT	9
3.1	INTRODUCTION	9
3.2	METHODOLOGY	9
3.3	STRATEGY MEASURES	11
3.4	SEA OBJECTIVES	13
4	CONSULTATION	19
4.1	Introduction	19
4.2	CONSULTATION RESPONSES	20
5	SUMMARY OF RESULTS	21
5.1	Introduction	21
5.2	OVERVIEW OF RESULTS	26
6	NEXT STEPS	29
6.1	Introduction	29
6.2	ENVIRONMENTAL ASSESSMENT OF STRATEGY ALTERNATIVES	29
	ANNEX A	

# 1 INTRODUCTION & BACKGROUND

#### 1.1 BACKGROUND TO THIS SEA REPORT

Environmental Resources Management (ERM) has been commissioned by the Dublin Transportation Office (DTO) to work with the DTO in undertaking a strategic environmental assessment (SEA) of their transport strategy - 2030Vision for Greater Dublin Transport.

The DTO is required to undertake an SEA of 2030 Vision in accordance with European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004).

SEA is a formal, systematic evaluation of the likely significant environmental effects of implementing, in this case a transport strategy, before a decision is made to adopt the strategy.

This document is the Final Strategy Potential Measures SEA Report (SEA Report), which sets out the results of a high-level/initial environmental assessment of generic travel and transport measures which could potentially be included in 2030 Vision. This document is not the Environmental Report. The Environmental Report - which will report on the environmental assessment of both the Strategy Alternatives and the draft Strategy - will be prepared and published towards the end of 2009.

A draft version of this report was prepared in February 2009 and was subject to both statutory and public consultation. The submissions received have been considered by the DTO and the draft report hereby amended. This document is the Final/post-consultation SEA Measures Report. Further information in relation to the consultation can be found in *Section 4*.

This Final Potential Measures SEA Report is an early output of the SEA process. The DTO is committed to ensuring that the SEA process influences and informs the development of 2030Vision. SEA is being used to inform all stages of the development of 2030Vision, from early identification of themes and measures through to alternative strategies, the preferred strategy and the adoption of a final transport strategy.

The key reporting stages in the development of 2030Vision and the SEA process are explained in Section 2 of this report.

There is no formal requirement to produce a separate SEA Report (such as this final SEA Report), in addition to the Environmental Report. The DTO has chosen to prepare this SEA Report as it is keen to ensure that environmental considerations are fully integrated into the strategy-preparation and adoption process and presented in a transparent manner.

#### 1.2 KEY ASPECTS OF 2030VISION

# 1.2.1 Scope of 2030Vision

The Scope is to **develop a Regional Transport Strategy for the Greater Dublin Area.** 2030 Vision will set out how transport will be provided and how demand for transport will be managed within the Greater Dublin Area, for the period 2010 to 2030. It will also **seek to support and influence policies in other sectors** as appropriate.

In the case of spatial planning it will seek to support or influence policies:

# • At <u>regional level</u> by:

- Collaborating with the RPG project team and Steering Committee during the concurrent preparation of the Strategy and the revised Regional Planning Guidelines for the Greater Dublin Area; and
- o Consulting Dublin and Mid-East Regional Authority members at key points during the Strategy development process.

#### • At local authority level by:

- Working with local authority planning and transport departments during preparation of the Strategy;
- Commenting on draft local authority Development Plans, and other plans as appropriate, during Strategy preparation and implementation stage.

# 1.2.2 Overall Vision and Objectives of 2030Vision

Following extensive public consultation in 2008, the final and agreed vision for 2030Vision is:

"Our vision of the Greater Dublin Area in 2030 is a competitive, sustainable cityregion with a good quality of life for all."

Based on this Vision, a series of five overarching objectives have been developed for the 2030Vision which are:

- 1. Build & Strengthen Communities;
- 2. Improve Economic Competitiveness;
- 3. Improve the Built Environment;
- 4. Respect and Sustain the Natural Environment; and
- 5. Reduce Personal Stress.

These five objectives form the basis for the preparation and development of 2030Vision.

#### 1.3 STRUCTURE OF THIS SEA REPORT

The remainder of this Final SEA Report is structured as follows:

**Section 2** provides greater detail on the 2030 Vision SEA Process.

**Section 3** describes the Strategy Potential Measures stage of the SEA process (the current stage), including the environmental assessment methodology and the SEA Objectives. The role that SEA will play in the wider 2030 *Vision* appraisal process is also discussed.

**Section 4** summarises the public and statutory consultation process, which was completed on the draft SEA Report.

**Section 5** provides an overview of the results of the environmental assessment of the generic travel and transport themes and measures considered in the Strategy Potential Measures stage.

**Section 6** outlines the next steps in the SEA Process.

**Annex A** contains the environmental assessment tables for each of the transport measures considered.

# 2 2030VISION SEA PROCESS

#### 2.1 Introduction

This section presents an overview of the SEA process for 2030Vision highlighting where the Strategy Potential Measures SEA Report fits into the overall SEA process.

Although the SEA process is primarily focused on environmental factors (generally as per the SEA Regulations), the development of 2030Vision is also considering other factors, such as economic, social and accessibility factors. In order to consider the range of relevant factors, the outputs from the SEA process will feed into a separate strategy appraisal process, called a Multi Criteria Analysis (MCA). There are six components in the MCA and these are:

- 1. Safety;
- 2. Economy;
- 3. Accessibility;
- 4. Social inclusions;
- 5. Integration; and
- 6. Environment.

The SEA process will provide all of the environmental inputs. Additionally, the MCA itself will provide some of the non-environmental inputs to the SEA for issues such as quality of life; safety & accidents; and accessibility. A summary of this process is illustrated in *Figure 3.2* later in this document.

#### 2.2 SEA PROCESS

The SEA process consists of a number of discrete stages and these are summarised below.

# 2.2.1 Screening

This is the first stage in the SEA process and is the mechanism for determining whether 'full' SEA is required (i.e. the preparation of an Environmental Report) for a plan or programme (2030 Vision this case). The key basis for this decision is whether significant effects on the environment are likely to arise as a result of the implementation of the plan or programme.

The DTO prepared a Screening Report (Strategic Environmental Assessment Screening Report and Determination – Transport Strategy for the Greater Dublin Area 2010-2030, March, 2008) that concluded that SEA of DTO Strategy was necessary. Consultation on this Screening Report with the designated environmental authorities (and also some non-statutory bodies, such as the relevant Local Authorities in the GDA) was undertaken and the views expressed in the submissions received were that full SEA was required.

Following a review of the submissions, the DTO's final determination was that SEA was required and that it would proceed to the next stage in the SEA process, scoping.

# 2.2.2 Scoping

The second stage in the SEA process is the determination of the key issues, which are to be addressed in the Environmental Report. Scoping ensures that the SEA is focused on the relevant environmental issues and examines issues at the appropriate level of detail.

A report (Scoping Report) summarising the proposed scope of an SEA is often produced at this stage although the SEA Regulations do not specifically require the preparation of a Scoping Report. However, it is generally recognised as good practice to prepare a Scoping Report as this typically assists consultation and helps to lead to a well-defined SEA scope.

In this regard, a Draft Scoping Report was prepared and submitted (in September 2008) to the relevant designated environmental authorities so that they could make submissions on the proposed scope of the Environmental Report.

The Draft Scoping Report was submitted to 32 consultees, all of whom were invited to make a submission of its contents. A total of 10 submissions were received and subsequently reviewed and considered. A Final Scoping Report – incorporating amendments made in light of these consultation submissions – was prepared and published in January 2009. A summary of these submissions can be found in a separate document called the Scoping Consultation Submissions Report which was published in parallel with the Final Scoping Report.

# 2.2.3 Preparation of the Environmental Report

This is the stage in the SEA process where the environmental assessment takes place and is then reported in an Environmental Report. The DTO has elected to undertake a *phased* environmental assessment and this has resulted in the preparation of a draft and Final SEA Report (i.e. this document), in addition to the draft and Final Environmental Report. The main elements to the phased environmental assessment are illustrated in *Figure 2.1* and summarised below:

Strategy Potential Measures SEA Report (SEA Report)

As noted earlier in *Section 1.1*, this SEA Report represents the final results of a high-level environmental assessment of a set of transport measures which could potentially be included in *2030Vision*. This document is the final report of this stage of the environmental assessment.

# Environmental Report

The Environmental Report is the key document in the SEA process as it outlines the likely significant effects on the environment and details the iterative process through which mitigation measures to address the significant adverse effects have been recommended and considered.

The Environmental Report will also report on the environmental assessment of strategic alternatives, of which three will be developed and assessed in relation to 2030Vision. The results of the assessment of these strategic alternatives will form the basis for the development of the preferred draft strategy. It is likely that the preferred draft strategy will be comprised of various elements of each of the strategic alternatives.

#### 2.2.4 Consultation

Consultation on the draft strategy (i.e. 2030Vision) and the Environmental Report is required with the relevant designated environmental authorities and also with the public. Regarding the SEA of 2030Vision, a draft environmental Report and a draft 2030Vision will be made available. Submissions on both draft documents will be invited from all the consultees and the general public.

# 2.2.5 Consideration of Submissions

Following the statutory and public consultation stage, there is a requirement that all submissions received must be considered and the draft Strategy amended, if deemed necessary. Any amendments to 2030Vision may warrant the identification of additional/new significant environmental effects. If such additional significant effects do arise, there is likely to be a need to develop additional mitigation measures.

A key output from this stage will be a Final Environmental Report, which will reflect any additional effects from revisions to the draft 2030Vision. It may also reflect any submissions made by the public and the statutory consultees.

Following a consideration of the consultation submissions received (and associated amendments to 2030Vision), the DTO may adopt the 2030Vision.

# 2.2.6 Preparation of the SEA Statement

Following the formal adoption of the 2030Vision by the DTO, the final stage in the SEA process is the preparation of the SEA Statement, which is a document summarising how environment considerations have been integrated into the adoption of the 2030Vision. It also summarises how the various submissions were considered and whether or not these resulted in the 2030Vision being amended.

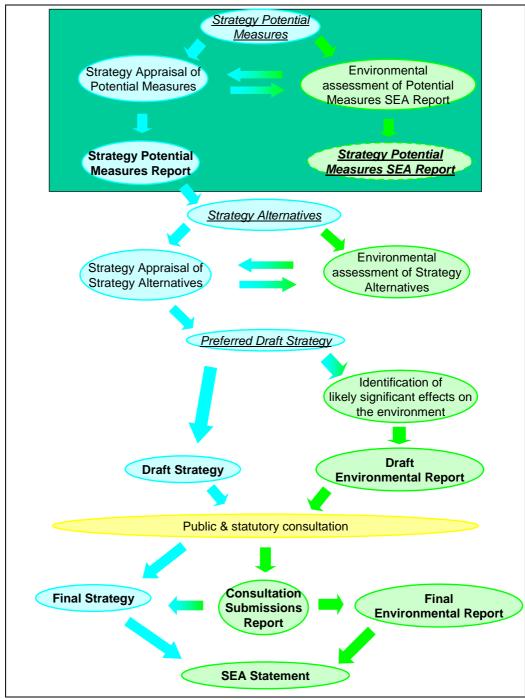
In parallel with the publication of the SEA Statement, a Final Environmental Report will be prepared, containing amendments following a consideration of

submissions received during the consultation stage of the SEA (*Section 2.2.4* above).

# 2.2.7 Monitoring

Following publication of the SEA Statement, the SEA process is concluded. However, monitoring of the implementation of the adopted 2030Vision will be undertaken for its duration, up until the next iteration of the Strategy is adopted. The overall objective of monitoring is to monitor the significant environmental effects of the implementation of 2030Vision so as "to identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action" (Article 10 of SEA Directive and Regulation No. 17 of S.I. 435 of 2004).

Figure 2.1 Environmental assessment process and its inputs to the Strategy appraisal and development process



Current stage in the environmental assessment is shown with the dark green box.

This SEA Reports position in the environmental assessment process is illustrated by underlined & bold text Other reports and outputs are presented in **bold**.

Strategy outputs as developed by the DTO are presented *underlined and in italics*.

Source: ERM and DTO (2009)

#### 3.1 Introduction

This section presents the environmental assessment methodology regarding the various transport measures. The environmental assessment methodology, SEA Objectives and rating system are discussed below.

The aim of the environmental assessment of the transport measures is to gain an understanding of the level of contribution each individual measure can make to improve the environment or otherwise and whether they will have a role to play as part of *Vision 2030*. The outcome of this assessment will then inform decisions by the DTO as to which measures to take forward to the Strategy Alternatives stage.

#### 3.2 METHODOLOGY

This environmental assessment has been undertaken using the SEA Objectives (see *Section 3.3* below). In considering the significance of the effects on the environment, the assessment evaluates whether the measure would be likely to alter the current (and future, where applicable) baseline environment and what the outcome of this change would be in relation to the SEA Objectives. The assessment considers whether the intervention is likely to move in the positive or negative direction, or is likely to have no effect (i.e. it is neutral).

To assist with the clarity of reporting, a seven-point rating scale has been used:

- -3 Major negative effect (*significant*);
- -2 Moderate negative effect (*significant*);
- -1 Minor negative effect (not significant);
- 0 Neutral;
- +1 Minor positive effect (not significant);
- +2 Moderate positive effect (significant); and
- +3 Major positive effect (*significant*).

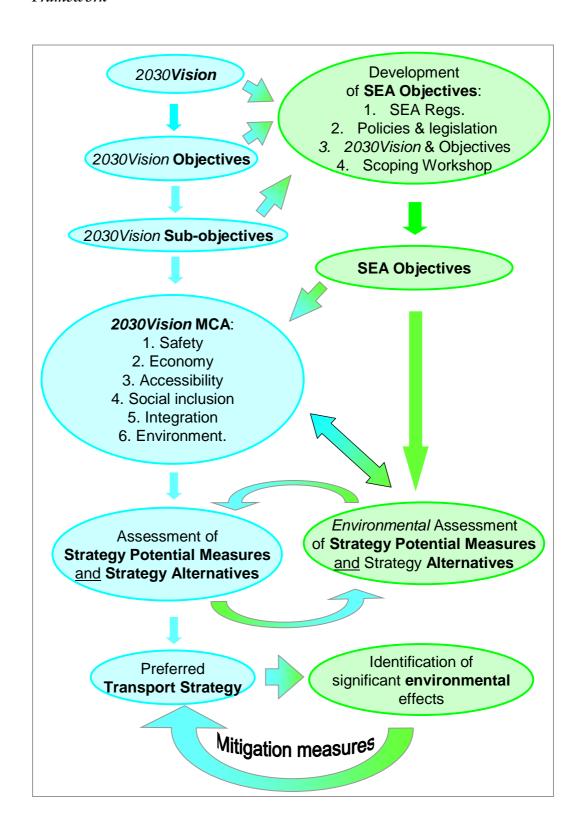
A key point is that the transport measures being considered at this stage are very strategic and generic in detail – they are not specifically developed for the GDA at this point nor do they have spatial elements or a geographic context. Thus, the environmental assessment is high-level in nature at this early stage. The high-level assessment is not based on bespoke transport modelling, but available data on the qualitative performance of the various transport strategy measures against each of the SEA Objectives. The potential impacts considered are generic and do not have a specific geographic component.

Each measure was also assessed as a stand-alone element; there is no consideration of the combined or cumulative effects with other measures.

Such an assessment will take place during the environment assessment of the strategy alternatives: this is the next stage in the overall SEA process (*Section* 2.2.3).

As noted previously in *Section 2.1*, the SEA results are only one of the inputs to the MCA process (with the SEA results informing the environmental component of the MCA), which is the main and overall strategy assessment tool. *Figure 3.2* below shows the integration and linkages between the SEA process and the wider/overall MCA process.

Figure 3.2 Links and interactions between the SEA and the Strategy Appraisal Framework



# 3.3 STRATEGY MEASURES

The strategy measures are the 'building blocks', which will be used to develop three strategy alternatives. In order to determine which of the measures performs best (and also to determine which measures are not as effective as

was hoped), each measure will be assessed as per the methodology in *Section* 3.2 above.

There are a total of 76 transport measures spread across a total of 21 main themes as follows (respective codes for each of the individual measures are contained in brackets after each category below):

- 1. Bus Strategy (BS1 BS6);
- 2. Direct charges on road users (DC1 DC6);
- 3. Network integration and development (NI1 NI7);
- 4. Improved passenger environment (PE1, PE2 & PE4);
- 5. Rail and light rail strategy (RL3, RL5, RL6, RL8 RL10);
- 6. Motorcycle strategy (MC1);
- 7. Water network (WN4);
- 8. Traffic management (TM1 TM3);
- 9. Multi modal Information (MM3, MM5 MM7);
- 10. New Road Capacity (RC1, RC2, RC4 RC6);
- 11. Streetscape (SS3, SS6 & SS7);
- 12. Fiscal Measures to encourage transport and land use integration (FM1, FM3 & FM4);
- 13. Integration with Other Government Sectors (IG1);
- 14. Planning measures which reduce the need to travel(PM2 PM4, PM6, PM9 & PM10);
- 15. Smarter Choices (SC6, SC8, SC10 SC12);
- 16. Walking strategy (WS5);
- 17. Cycling (CY8 CY10);
- 18. Freight Strategy (FS4 FS6);
- 19. Parking strategy (PS1, PS3, PS4, PS7 & PS9);
- 20. Transport and Social Inclusion (SI3 & SI4); and
- 21. Transport and Environment (TE1 & TE2).

Specific detail on each of the measures within the above 21 themes can be found in the respective assessment tables (A.1 - A.76) in Annex A.

The draft SEA Potential Measures Report contained a total of 94 transport measures. Following the public consultation phase in February / March 2009 a number of changes were made to the long-list of measures for packaging and appraisal, thus completing and finalising the Stage 1 assessment process. The changes resulted from a combination of feedback from the public consultation exercise, suggestions received from Technical Groups, SSG and DTO, and significant changes in groups of measures, held over from the pre-consultation phase of Stage 1.

A number of themes defined the types of changes made to the long-list of measures, i.e. measures missed from the original list, measures too narrowly defined, measures that did not reflect the local context and those that were deemed enabling tools only. As a result only four wholly new measures emerged from the public consultation including:

- lower public transport fares at all times;
- rail station parking expansion;
- motorcycle measures; and
- traffic and parking enforcement.

In addition a number of existing measures were re-grouped and redefined. For the most part, these fell into the 'Information and Marketing', 'Smarter Choices', 'Rail and Luas', 'Traffic Management' and 'Freight and Distribution' categories, where there had been some previous difficulty experienced in attaching schemes to measures This final process of redefinition resulted in the reduction of the long-list from 94 to 76 types of measures.

# 3.4 SEA OBJECTIVES

*Table 3.1* below contains the SEA Objectives. It should be noted that these have been the subject of extensive consideration and consultation with a range of statutory authorities including the Department of Communications, Marine & Natural Resources; the Department of Environment, Heritage & Local Government (Development Applications Unit); and the Environmental Protection Agency during the SEA scoping exercise (see *Section 2.2.2*; the Final SEA Scoping Report and the SEA Scoping Consultations Submissions Report: both available on *www.23030vision.ie*).

Table 3.1 SEA Objectives

SEA Topic	Proposed SEA Objective	Comments					
Biodiversity, flora & fauna	To avoid impacts on the integrity of European Conservation Sites (SACs and SPAs) and nationally designated sites (NHAs).	This Objective is focused on the protection of Natura 2000 sites (SACs and SPAs), which are ecological sites of European-level importance. Also included are NHAs; ecological sites of national importance. The focus is on significant impacts, as this is the threshold used in the Habitats Directive (and associated Irish Regulations) with regards to European-designated ecological sites.					
	To support the overall goal of the National Biodiversity Plan.	The overall goal is to secure the conservation, including where possible the enhancement, and sustainable use of biological diversity in Ireland and to contribute to conservation and sustainable use of biodiversity globally.					
	To minimise impacts on locally-important biodiversity in the Greater Dublin Area.	The focus for this Objective is local-level biodiversity. The basis for this Objective is that ecological sites can still be of value, even if they are not.					
Landscape	To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	This Objective is focused on the protection of designated and protected landscapes and landscape features. Also included are Conservation Areas, primarily in urban or townscape settings.					
	To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	This Objective is addressing the various undesignated landscape features and areas, which make up the majority of the GDA.					
Population	To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	This Objective is focused on increasing access to employment opportunities, especially for those who are physically, economically or socially disadvantaged. Access refers to both assisting with the creation of additional employment opportunities and also providing better, faster, reliable and frequent access to the main centres of employment in the GDA.					
	To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	The purpose of this Objective is to increase accessibility to quality public, cultural and community services, such as the full range (pre-school to 3 <sup>rd</sup> /4 <sup>th</sup> level) of education facilities, health and medical care facilities and services, public offices and community facilities (e.g. libraries, local authority offices, community halls), professional services (e.g. banking), cultural and leisure facilities (e.g. cinemas, theatres, museums etc.) and retail and service areas (e.g. local shops to large/regional retail centres).					

SEA Topic	Proposed SEA Objective	Comments					
Human health	To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	This Objective is directed at the relevant (i.e. transport-related) aspects of quality of life (QoL) of the residents, workers and visitors in the GDA. Potential positive aspects of QoL regarding transport issues include journeys faster and shorter (thereby shortening the daily commuting times for people); more attractive and pleasant journeys (reducing over crowding and delays, providing modern transport infrastructure) and reducing travel/commuting stress (more frequent, safer and reliable transport services). It is acknowledged that the overall Vision for the Strategy (Section 3.3) is also focused on "improving quality of life"; however, QoL regarding this specific SEA Objective is primarily focused on aspects of QoL linked to travel and transport use.					
	To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	This Objective is focused on the impact that noise and vibration from transport activities and infrastructure (road traffic, rail and tram/LUAS transport etc.) and is based around the Environmental Noise Directive (EU Directive 2002/49/EC). The overall objective of this Directive is to provide a basis for developing EU-wide measures to reduce noise emitted by the major sources of noise, in particular road and rail vehicles and infrastructure, aircraft, outdoor and industrial equipment.					
	To minimise safety risks to human health arising from transport related activity.	This Objective is designed to address the risks to human safety and health from transport activities and infrastructure. Typical risks include risk of accidents/collisions between pedestrians and cyclists and cars and buses.					
	To support health improvements and benefits from transport-related activities.	This Objective is focused on potential health improvement and benefits which could arise from transport-related activities, principally promoting and encouraging greater uptake of softer modes of transport.					

SEA Topic	Proposed SEA Objective	Comments						
Water	To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD).	The Objective is focused on the WFD and the associated RMBP and POMs. The fundamental objective of the WFD aims at maintaining 'high status' of waters where it exists, preventing any deterioration in the existing status of waters and achieving at least 'good status' in relation to all waters by 2015. The WFD sets a framework for comprehensive management of water resources in the European Community, within a common approach and with common objectives, principles and basic measures. The WFD will be implemented by the local authorities through a series of RBMPs (8 for the island of Ireland) as associated POMs (drafts of which are likely to be available in January 2009).						
	To minimise impacts to surfacewater systems and resources.	The aim of this Objective is to minimise impacts to surfacewater systems and resources, such as rivers, streams, lakes and surfacewater abstraction points.						
	To minimise impacts to groundwater systems and resources.	The purpose of this Objective is to minimise impacts to groundwater systems and resources, such as vulnerable aquifers and groundwater abstraction points.						
	To minimise impacts to coastal systems and resources.	The purpose of this Objective is to minimise impacts to coastal systems and resources.						
	To minimise impacts to transitional systems and resources.	The purpose of this Objective is to minimise impacts to transitional systems and resources, such as estuarine and wetland systems.						
	To minimise the risk of flooding.	This Objective is focused on minimising the risk of flooding.						
Air	To reduce negative air quality impacts arising from transport-related emissions.	The focus of this Objective is on reducing negative air quality impacts from transport-related emissions, such as traffic emissions (e.g. $PM_{10s}$ , $NO_2$ , etc)						
	To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	This Objective is focused on the EU Air Quality Directives, which set down air quality standards in Ireland and the other member states for a wide variety of pollutants. The various thresholds in the Directives have been transposed into Irish Law via appropriate Irish Regulations.						

SEA Topic	Proposed SEA Objective	Comments					
Climatic factors &	To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	The overall purpose of this Objective is to reduce the production of greenhouse gas emissions arising from transport and related activities. The Objective is focused on the fact that all forms of mechanised transport (i.e. all transport options apart from soft-modes) produce greenhouse gases and consume fossil fuels (either directly of indirectly). This Objective attempts to reduce the overall carbon footprint of the wider transport network. Ideally, there would be no need to use mechanised transport (i.e. use soft modes), thereby having zero greenhouse gas emissions. Where there is a need to travel, the Strategy will seek to promote more sustainable forms of transport and travel patterns. Examples of these include use of public transport services such as bus, Luas, DART, etc. These more sustainable forms of travel have per capita/head lower greenhouse gas production levels and lower fossil fuel consumption levels, in comparison to an equivalent private-car based journey.					
Soil & geology	To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	This Objective is focused on the conservation of important and vulnerable soils, which are used for agricultural production.					
	To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	This Objective is designed to reduce the overall need for new construction materials and to reduce the generation of construction wastes as part of the construction of transport infrastructure projects. Ways to achieve this Objective include greater demolition and construction materials reuse and recycling.					
	To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	The focus of this Objective is to minimise impacts to protected and designated geological and geomorphological sites, which may arise as a result of transport infrastructure projects.					

SEA Topic	Proposed SEA Objective	Comments
Material assets	To protect public assets and infrastructure.	This Objective is focused on the protection of public assets and infrastructure. This Objective covers a wide-range of '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 may be impacted with the development of future transport infrastructure projects.
	To reduce the fossil fuel demand by the transport sector.	This Objective is focused on the rising demand for fossil fuels for transport-related proposals and activities. This Objective sees fossil fuels as an important and non-renewable asset, for both the economy and for the population of the GDA (and the country). Reducing fossil fuel consumption will make a contribution to addressing the issue of security of fossil fuel supplies, a significant issue for Ireland as the State is one of the nations most dependant on the importation of fossil fuels.
	To assist with the reuse and regeneration of brownfield sites.	The basis for this Objective is to promote the reuse and regeneration of brownfield sites (previously developed sites) instead of greenfield (new/undeveloped) sites, especially those close to key transport corridors and large centres of population in the GDA.
Cultural heritage (inc. architectural and archaeological heritage)	To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	This Objective is focused on minimising impacts to designated cultural, architectural and archaeological resources (e.g. Protected Structures, Areas of Architectural Heritage, Areas of High Archaeological Potential), which may be affected by transport infrastructure projects or policy recommendations in the Strategy.

Source: ERM (2008)

#### 4 CONSULTATION

#### 4.1 Introduction

This section presents a summary of the consultation which was undertaken on the draft SEA Potential Measures Report, which was published in February 2009. As part of the SEA scoping consultation process, a total of 32 consultees were identified and consulted on the draft SEA Scoping Report. 10 of these consultees made submissions. All the 10 consultees who formally responded to the SEA Scoping Consultation were posted a hard copy of the draft SEA Potential Measures Report. These consultees were:

- Dublin City Council;
- Meath County Council;
- Irish Rail;
- National Roads Authority;
- Dept. of Env. Heritage & Local Government;
- Environmental Protection Agency (EPA);
- Dept. of Communications, Energy & Natural Resources;
- Northern Ireland Environment Agency;
- Dublin Airport Authority; and
- Geological Survey of Ireland.

It should be noted that the 10 consultees also included the three designated environmental authorities (in italics in the above list).

The remaining 22 consultees were formally sent a letter notifying them that the draft SEA Potential Measures Report was available for their review and comment on <a href="www.2030vision.ie">www.2030vision.ie</a> and that the DTO was inviting them to make a formal submission on the contents of the Report. These 22 consultees were:

- Fingal County Council;
- Dun Laoghaire-Rathdown County Council;
- South Dublin County Council;
- Kildare County Council;
- Wicklow County Council;
- Dublin Bus:
- Bus Eireann;
- Railway Procurement Agency;
- Dept. of Transport;
- Dept. of Env. Heritage & Local Government: Spatial Policy Unit;
- Dublin Regional Authority;
- Border Regional Authority;
- Mid-East Regional Authority;
- South-East Regional Authority;
- Midlands Regional Authority;

- An Taisce;
- Dept. for Regional Development Northern Ireland;
- Grangegorman Development Agency;
- Eastern Regional Fisheries Board;
- Fáilte Ireland;
- Office of Public Works; and
- Dublin Docklands Development Authority.

#### 4.2 CONSULTATION RESPONSES

Comments were received from the EPA and the key points raised in this submission were:

- it would be useful if the overall DTO 'Vision'/objectives of the Strategy up-front in the document;
- use of 'SEA Report' in the title is confusing its not the environmental report / full assessment. Elaboration regarding the SEA Report and its role in the overall SEA is required.;
- need to elaborate on the phased-nature of the overall environmental assessment process;
- further detail required on the linkages between the SEA and MCA processes;
- summary of overview of results should focus on the main/significant positive and negative results.

This SEA Report has been amended to reflect the above points raised by the EPA.

# **SUMMARY OF RESULTS**

#### 5.1 Introduction

5

This section presents a summary of the results of the high-level environmental assessment of the transport measures. It should be noted that the purpose of this high-level assessment is to identify the various environmental attributes - against the SEA Objectives - of each of the measures. This information will assist the DTO, through the MCA process, in deciding how to combine the measures into various Strategy Alternatives (the next stage in the strategy development and SEA process).

The assessment tables in *Annex A* set out the anticipated performance of each of the measures in relation to each of the 27 SEA Objectives. *Figure 5.1* below presents an illustrated summary of these results. Note that summary results are presented here under each of the nine environmental topics, rather than the 27 SEA Objectives. In order to condense the results against the 27 SEA Objectives under the nine environmental topic headings, it was necessary to summarise the various scores under the SEA Objectives. This summarising was precautionary in nature and generally took a 'worse-case' score (e.g. if there were scores of 0, 0 and -1 under the three Biodiversity SEA Objectives, -1 was typically assumed to be the summary score). For a full discussion and commentary of the performance against the SEA Objectives please refer to *Annex A*.

The seven-point rating scale used in both *Figure 5.1* and in *Annex A* represents the potential for a range of positive, neutral and negative impacts as follows:

- -3 Major negative effect (*significant*);
- -2 Moderate negative effect (significant);
- -1 Minor negative effect (not significant);
- 0 Neutral;
- +1 Minor positive effect (not significant);
- +2 Moderate positive effect (significant); and
- +3 Major positive effect (*significant*).

Figure 5.1 Summary of the environmental assessment results

		Biodiversity	Landscape	Population	Human health	Water	<b>.</b>	Climate	Soil & geology	Material assets	Cultural heritage
	To an and a situation	Bio	La	Po	Hr	W	Air	Ü	So	Mass	Cu
BS1	Increased priority for buses	0	0	1	2	0	2	2	0	2	0
BS2	Enhanced quality bus corridor services	0	1	2	2	0	1	1	0	1	0
BS3	New and improved bus fleet	0	0	1	1	0	1	1	0	1	0
BS4	Quicker bus boarding/alighting	0	0	1	2	0	1	1	0	1	0
BS5	More evening and weekend buses	0	0	1	1_	0	-1	-1	0	-1	0
BS6	Additional bus services	0	0	2	1	0	1	1	0	1	0
DC1	Region-wide 'road pricing'	0	1	2	3	0	3	3	0	3	1
DC2	Daytime city centre charging	0	1	-2	2	0	2	2	0	2	1
DC3	Rush-hour city centre charging	0	1	-1	2	0	2	2	0	2	1
DC4	New Toll Roads or lanes	-2	-2	1	-1	-1	-1	-1	-2	-1	-2
DC5	Tolls on existing motorways	0	-1	0	-1	0	-1	0	0	0	0
DC6	Lorry charges (on major roads)	0	1	0	1	0	1	1	0	1	0
NI1	Better access to stops and stations	0	0	2	2	0	0	0	0	0	0
NI2	On-demand taxis and minibuses	0	0	1	1	0	0	0	0	0	0
NI3	Bicycles on public transport	0	0	1	1	0	0	0	0	0	0
NI4	All public transport tickets	0	0	1	1	0	0	0	0	0	0

		Biodiversity	cape	ation	un 1			ıte	ε gy	ial	ral ge
		Biodi	Landscape	Population	Human health	Water	Air	Climate	Soil & geology	Material assets	Cultural heritage
NI5	Through-fares on public transport	0	0	1	1	0	0	0	0	0	0
NI6	Lower fares outside rush hours	0	0	1	1	0	0	0	0	0	0
NI7	Lower public transport fares	0	0	2	1	0	1	1	0	1	0
PE1	Higher quality buses and trains	0	0	0	1	0	0	0	0	0	0
PE2	Improve public transport interchanges	0	2	1	1	0	0	0	0	0	0
PE4	Improvements to bus stops	0	1	1	1	0	0	0	0	0	0
RL3	More evening and weekend trains	0	0	1	2	0	0	0	0	0	0
RL5	New train and Luas lines and extensions	-2	-2	2	2	-1	2	2	-2	2	-2
RL6	More rail stations/stops	-1	-1	2	2	-1	1	1	-1	1	-1
RL8	Parking at stations	-1	-1	1	1	-1	1	1	-1	1	-1
RL9	More frequent and bigger trains	-2	-2	2	2	-2	2	2	-2	2	-2
RL10	More frequent trams	0	0	2	2	0	2	2	-1	2	0
MC1	Motorcycling strategy	0	0	1	0	0	0	0	0	0	0
WN4	River / sea boat services	0	0	1	1	-1	0	0	0	0	0
TM1	Urban traffic management	0	1	1	1	0	1	1	0	1	0
TM2	Traffic signal control and co- ordination	0	0	1	1	0	0	0	0	0	0

		Biodiversity	Landscape	Population	an h	Ħ		ate	& ogy	rial s	ıral age
		Biod	Land	Popu	Human health	Water	Air	Climate	Soil & geology	Material assets	Cultural heritage
ТМ3	Active traffic management on strategic and major roads	0	-1	1	-1	0	-1	-1	0	-1	0
MM3	Live public transport information	0	0	1	1	0	0	0	0	0	0
MM5	Public transport information	0	0	1	1	0	0	0	0	0	0
MM6	Better signing and wayfinding	0	0	1	1	0	0	0	0	0	0
MM7	Real time road user information	0	0	1	-1	0	0	0	0	0	0
RC1	Local road improvements	-1	-1	1	-1	-1	-1	-1	-1	-1	-1
RC2	New local road links	-2	-2	1	-1	-1	-2	-2	-2	-2	-2
RC4	Widening 'strategic' roads	-2	-2	2	-1	-1	-2	-2	-2	-2	-2
RC5	New main roads and bypasses	-3	-3	2	-2	-1	-2	-2	-3	-2	-3
RC6	New river/canal crossings	-2	-2	1	-1	-2	-1	-1	-2	-1	-2
SS3	Build residential 'Home Zones'	0	2	0	1	0	1	0	0	0	0
SS6	Pedestrian areas in town centres	0	2	0	2	0	2	1	0	1	1
SS7	Look after streets better	0	2	0	1	0	0	0	0	0	0
FM1	Tax value of land not property	0	1	1	1	0	1	1	0	2	0
FM3	Increase taxes on motoring	0	0	-2	1	0	1	1	0	1	0
FM4	Fuel or carbon taxes	0	0	-2	2	0	2	2	0	2	0

		Biodiversity	Landscape	Population	Human health	Water	Air	Climate	Soil & geology	Material assets	Cultural heritage
IG1	Better located Government developments and facilities	0	0	2	1	0	1	1	0	1	0
PM2	More 'mixed use' development	0	1	2	1	0	2	2	0	2	0
PM3	Mix housing types in schemes	0	0	1	1	0	1	1	0	1	0
PM4	More accessible housing estates	0	1	1	1	0	1	1	0	1	0
PM6	Make developers improve transport	0	1	1	1	0	1	1	0	1	0
PM9	Offices, shops. etc. near stations	0	1	2	2	0	2	2	0	2	0
PM10	Homes close to public transport	0	0	2	1	0	2	2	0	2	0
SC6	Personal journey planning	0	0	1	1	0	1	1	0	1	0
SC8	Develop 'Car clubs'	0	1	1	1	0	1	1	0	1	0
SC10	On-line working etc.	0	0	0	1	0	1	1	0	1	0
SC11	'Mobility management' planning	0	0	2	1	0	1	1	0	1	0
SC12	Promotion of sustainable travel	0	0	1	1	0	0	0	0	0	0
WS5	Improve pedestrian facilities	0	1	1	1	0	1	1	0	1	0
CY8	Improve/extend cycle routes	0	0	1	1	0	1	1	0	1	0
CY9	Provide secure cycle parking	0	0	0	1	0	0	0	0	0	0
CY10	On-street bicycle rental	0	0	1	1	0	0	0	0	0	0

		Biodiversity	Landscape	Population	Human health	Water	Air	Climate	Soil & geology	Material assets	Cultural heritage
FS4	More non-road carriage of freight	-2	0	0	1	-2	0	1	0	1	0
FS5	Strategic freight network	-1	1	1	1	-1	1	1	-1	1	-1
FS6	Sustainable distribution and servicing strategy	-1	1	1	1	-1	2	1	-1	1	-1
PS1	More commuter car parking	0	1	0	1	0	0	0	0	0	1
PS3	Control on-street parking stays	0	0	-1	0	0	2	2	0	2	0
PS4	Park-and-ride on bus	-1	-1	1	1	-1	1	1	0	1	-1
PS7	Limit parking in developments	0	1	-1	0	0	1	1	0	1	0
PS9	Limit commuter car parking	0	0	-1	0	0	2	2	0	2	0
SI3	Physical access improvements	0	0	2	2	0	0	0	0	0	0
SI4	Access to community facilities	0	0	3	2	0	2	2	0	2	0
TE1	'Eco-friendly' vehicles	0	0	0	1	0	1	1	0	1	0
TE2	Low Emission Zone controls	0	0	0	0	0	2	1	0	1	0

# 5.2 OVERVIEW OF RESULTS

It is unlikely that the majority of the transport measures would result in significant improvement to the environment in their own right or in isolation. For a transport strategy to be effective in bringing about positive environmental change, it must contain a whole range of complimentary measures. The combining and packaging-up of the various measures into possible strategy alternatives will be the next stage in the process.

Relatively large-scale changes in traffic are required to bring about a marked environmental change. For example, a 25% change in traffic would be expected to change traffic noise levels by approximately 1dB(A), a level of change, which is just perceptible to the human ear. When assessing the environmental effects of traffic, as a rule of thumb, a change of more than 10%-30% in traffic flows can be taken as a general indicator of marked environmental change.

Measures based on charging for road use (DC measures), such as the region-wide road pricing, would have a potential to bring about substantial reductions in traffic with consequent environmental benefits in terms of reduced air pollution, traffic noise and greenhouse gas emissions. The extent of any reduction in traffic will depend greatly on the level of road pricing/charge, which is applied. There is a potential with such measures that they can lead to some adverse impacts on accessibility, particularly for those on low incomes and those who are highly-car dependent. In implementing such measures, it is important that there is an appropriate level of provision of public transport in order to provide all travellers with an alternative mode of transport to the road user charge.

Some of the most important measures relate to better integration and fiscal encouragement of better land use planning and transport (e.g. the **PM** and **FM** measures). These measures would be expected to reduce overall car-based trip generation, improve accessibility and Quality of Life (QoL), and also have air quality, noise, climate change and fossil fuel efficiency benefits.

A key theme to emerge from the high level assessment is that measures which are targeted at creating a modal shift from car to public transport (PT) – such as the **BS** and **RL** series of measures - would be expected to result in improvements in air quality (through reducing car-based emissions) and a corresponding decrease in fossil fuel consumption and greenhouse gas production, all of which would be positive environmental effects. These types of measure would also be expected to play a role in improving accessibility by public transport and QoL for the wider GDA population.

Any measures that involve sizeable landtake to construct new transport infrastructure - such as new toll roads (e.g. DC4), road widening and new strategic links (RC series), new railways and trams (e.g. RL9 and RL5) - have the potential to result in negative environmental effects on areas, which might have a value for their biodiversity, landscape, water, cultural heritage etc. While these measures may improve accessibility and offer other transport benefits, from an environmental perspective, these measures are generally seen to perform less well than those that make more efficient use of existing infrastructure. However, it is important to note that through appropriate design and the application of appropriate mitigation measures, the potential for environmental impacts can be reduced in many cases.

Some of the measures considered at this stage are based around limiting access (physically, regulatory and fiscally) of the private car in favour of softer

modes of transport or PT (e.g. FM3 & 4, DC1, 3 & 5 and SS6). These measures would be expected to result in improvements in overall accessibility and QoL for the non-car user, although residual car users may have a reduced QoL and accessibility. This impact will be exacerbated for those with little alternatives to car use.

Measures which increase the overall level of information and travel knowledge (such as SC6, 11 & 12 and MM3 & 5) would be expected to result in some improvements in overall accessibility and QoL, although these positive effects can be limited by the overall capacity of the PT network and the availability and proximity to the PT system.

From an environmental perspective, it is unlikely that any of the potential measures would be completely discounted on environmental grounds alone at this stage, particularly given their generic nature. The measures with the greatest potential negative scores are **RC4**, **5** & **6**. These measures propose a significant element of strategic road building and the nature and scope of these developments are such that moderate to major negative impacts are likely. However, there will also be associated increases in accessibility and QoL for subsequent road users.

# 6 NEXT STEPS

# 6.1 Introduction

This final section will outline the next steps in this stage of the SEA and also the future stages in the SEA process and the strategy development processes.

#### 6.2 ENVIRONMENTAL ASSESSMENT OF STRATEGY ALTERNATIVES

Following the completion of this stage of the environmental assessment, the SEA process will progress towards the environmental assessment of the strategy alternatives. Emerging from this stage will be a preferred strategy, which shall also be subjected to environmental assessment. Both of these assessments will be reported in the draft Environmental Report. This will be publically available for consultation along with the draft 2030 Vision.

# Annex A

Themes & Measures environmental assessment tables

Table A.1 Themes & Measures environmental assessment table

Strategy In		Discussion of impacts							
BS1: Increa	se road priority for buses	1							
	SEA Objectives	Rating	The key aspect of this measure						
	1. To avoid impacts on the integrity of European Conservation Sites	0	is that it is focused on						
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		enhancing and improving						
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	existing infrastructure. Thus,						
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	the potential impacts associated						
	Dublin Area.		with new development arising						
	4. To avoid or, where infeasible, minimise impacts on designated and	0	from landtake are not						
Landscape	protected landscapes and conservation areas.  5. To minimise impacts on undesignated landscape resources		anticipated. The main benefits						
	(townscapes, seascapes, riverscapes, general landscapes).	0	are improvements in the						
	6. To increase accessibility to economic and employment opportunities,		accessibility across the GDA						
	in particular for those who are physically, economically or socially	+1	(but only for those along bus						
	disadvantaged within the GDA.		routes which are subject to						
Population	7. To increase accessibility to quality public, cultural and community								
	services, in particular, for those who are physically, economically or	+1	these enhancement measures) and a modal shift from private						
	socially disadvantaged within the GDA.		car to the (now-improved) bus						
	8. To contribute to improvements to transport-related aspects of quality	+2	service, resulting in lower air						
	of life for residents, workers and visitors to the GDA.	+2	pollution emissions and						
	9. To support the objectives of the Environmental Noise Directive in	0	-						
Human	relation to transport-related noise.	U	greenhouse gas emissions.						
Health	10. To minimise safety risks to human health arising from transport	0	Moderately significant						
	related activity.	Ü	improvements are expected for						
	11. To support health improvements and benefits from transport-related	0	the QoL of commuters, due to						
	activities.		shorter and faster bus journeys						
	12. To support the forthcoming River Basin Management Plans (RBMP)		as well as better bus service						
	and Programme of Measures (POM). Where these are not available, the	0	reliability.						
	objective is to support the aims and objectives of the Water Framework Directive (WFD)								
	13. To minimise impacts to surfacewater systems and resources.	0							
Water	To minimise impacts to groundwater systems and resources.  14. To minimise impacts to groundwater systems and resources.	0							
	15. To minimise impacts to coastal systems and resources.	0							
	16. To minimise impacts to transitional systems and resources.	0							
	17. To minimise the risk of flooding.	0							
	18. To reduce negative air quality impacts arising from transport-related	+2							
	emissions.								
Air	19. To ensure compliance with the Air Framework Directive and	. 2							
	associated daughter Directives (and the transposing Regulations in	+2							
	Ireland).  20. To contribute to the reduction of greenhouse gas emissions arising								
Climate	from transport-related activities.	+2							
	21. To minimise negative impacts on important and vulnerable soils								
	resources used for agricultural purposes.	0							
Soils &	22. To reduce consumption of construction material and generation of		-						
geology	construction waste as part of transport infrastructure projects.	0							
0 0)	23. To avoid or, where infeasible, minimise impacts to protected and	-	1						
	designated geological and geomorphological sites.	0							
	24. To protect public assets and infrastructure.	0	1						
Material	25. To reduce the fossil fuel demand by the transport sector.	+2	-						
assets	26. To assist with the reuse and regeneration of brownfield sites.	0							
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	1						
	cultural, architectural and archaeological resources.	0							
Heritage	canarai, arciniecturai ana arciaeologicai resources.								

 Table A.2
 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts
BS2: Better	'Quality Bus Corridor' services	T	
	SEA Objectives	Rating	As with BS1, this measure
	1. To avoid impacts on the integrity of European Conservation Sites	0	focuses on overall
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	_	improvements (through
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	reorganisation of the bus
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	network) to the GDA's overall
	Dublin Area.		bus services. As this will be
Landscape	4. To avoid or, where infeasible, minimise impacts on designated and	+1	based on no additional infrastructural corridors, the
	protected landscapes and conservation areas.		
	5. To minimise impacts on undesignated landscape resources	+1	majority of the effects are
	(townscapes, seascapes, riverscapes, general landscapes).		neutral to positive. Moderately
	6. To increase accessibility to economic and employment opportunities,	+2	positive effects are predicted for
	in particular for those who are physically, economically or socially		the QoL of commuters (improved journeys times,
Population	disadvantaged within the GDA.		
	7. To increase accessibility to quality public, cultural and community	+1	
	services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+1	frequency, reliability,
	8. To contribute to improvements to transport-related aspects of quality		connectivity, timetabling etc.)
	of life for residents, workers and visitors to the GDA.	+2	which is anticipated to have
	9. To support the objectives of the Environmental Noise Directive in		similar improvements for
Human	relation to transport-related noise.	0	accessibility to economic and
Health	10. To minimise safety risks to human health arising from transport	0	employment opportunities. Other minor improvements are expected for designated and
	related activity.		
	11. To support health improvements and benefits from transport-related		
	activities.	0	undesignated
	12. To support the forthcoming River Basin Management Plans (RBMP)		landscapes/townscapes
Water	and Programme of Measures (POM). Where these are not available, the	0	(through the rationalisation of
	objective is to support the aims and objectives of the Water Framework	U	bus stop infrastructure), for
	Directive (WFD)		access to services and for
	13. To minimise impacts to surfacewater systems and resources.	0	improvements in air quality and greenhouse gas emissions (as a result in a modal shift to public transport).
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related		
	emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	. 1	
	from transport-related activities.	+1	
Soils & geology	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	U	
	22. To reduce consumption of construction material and generation of	0	
	construction waste as part of transport infrastructure projects.	U	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	U	
Material assets	24. To protect public assets and infrastructure.	0	
	25. To reduce the fossil fuel demand by the transport sector.	+1	
	26. To assist with the reuse and regeneration of brownfield sites.	0	1
	<del>-</del>	l	1
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	

 Table A.3
 Themes & Measures environmental assessment table

Strategy Intervention BS3: New and improved bus fleet			Discussion of impacts
Doo. INEW a	SEA Objectives	Rating	This measure is focused on
Biodiversity Flora & fauna	To avoid impacts on the integrity of European Conservation Sites	_	
	(SACs and SPAs) and nationally designated sites (NHAs).	0	improving capacity on bus
	To support the overall goal of the National Biodiversity Plan.	0	routes which are currently at or above capacity. Thus, this measure, while benefitting
	To minimise impacts on locally-important biodiversity in the Greater	0	
	Dublin Area.	0	
Landscape	4. To avoid or, where infeasible, minimise impacts on designated and	0	those on these specific routes,
	protected landscapes and conservation areas.	0	will only positively impact on a
	5. To minimise impacts on undesignated landscape resources	0	small portion of the overall
	(townscapes, seascapes, riverscapes, general landscapes).	U	GDA's population. There may
	6. To increase accessibility to economic and employment opportunities,		be some small mode shift and
	in particular for those who are physically, economically or socially	+1	efficiencies per passenger km in
Population	disadvantaged within the GDA.		emissions and fuel
-1	7. To increase accessibility to quality public, cultural and community		consumption.
	services, in particular, for those who are physically, economically or	+1	
	socially disadvantaged within the GDA.		
	8. To contribute to improvements to transport-related aspects of quality	+1	
	of life for residents, workers and visitors to the GDA.		
I I	9. To support the objectives of the Environmental Noise Directive in	+1	
Human Health	relation to transport-related noise.		
Health	10. To minimise safety risks to human health arising from transport related activity.	0	
	11. To support health improvements and benefits from transport-related		
	activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the		
	objective is to support the aims and objectives of the Water Framework	0	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
vvater	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	U	
Air	emissions.	+1	
	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
	20. To contribute to the reduction of greenhouse gas emissions arising	. 1	
Climate	from transport-related activities.	+1	
Soils & geology	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	0	
	22. To reduce consumption of construction material and generation of	0	
	construction waste as part of transport infrastructure projects.	U	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
Material assets	24. To protect public assets and infrastructure.	0	
	25. To reduce the fossil fuel demand by the transport sector.	+1	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	1
Heritage	cultural, architectural and archaeological resources.	0	

Table A.4 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
BS4: Reduc	e delays in boarding buses		
	SEA Objectives	Rating	This measure is focused on
	1. To avoid impacts on the integrity of European Conservation Sites	0	minimising time delays at the
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	bus-boarding stage of a journey
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	The main benefit (moderately
fauna	3. To minimise impacts on locally-important biodiversity in the Greater Dublin Area.	0	positive) is for QoL of bus users
	4. To avoid or, where infeasible, minimise impacts on designated and		who will benefit from much
	protected landscapes and conservation areas.	0	easier bus boarding and also
Landscape	5. To minimise impacts on undesignated landscape resources	0	from the subsequent faster
	(townscapes, seascapes, riverscapes, general landscapes).	U	journeys and improved journey times. This improvement will
	6. To increase accessibility to economic and employment opportunities,	. 1	also make bus services more
	in particular for those who are physically, economically or socially	+1	
Population	disadvantaged within the GDA.		attractive, potentially resulting
•	7. To increase accessibility to quality public, cultural and community	. 1	in a modal shift to bus services,
	services, in particular, for those who are physically, economically or	+1	thereby resulting in lower air
	socially disadvantaged within the GDA.		pollution and lower greenhouse
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+2	gas emissions. Modal shift is
	9. To support the objectives of the Environmental Noise Directive in	0	likely to be small scale from this
Human	relation to transport-related noise.	0	measure alone.
Health	10. To minimise safety risks to human health arising from transport	0	
	related activity.	0	
	11. To support health improvements and benefits from transport-related	0	
	activities.	U	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework		
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	. 1	
	emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+1	
	from transport-related activities.		
	21. To minimise negative impacts on important and vulnerable soils	0	
Soils &	resources used for agricultural purposes.  22. To reduce consumption of construction material and generation of		
geology	construction waste as part of transport infrastructure projects.	0	
geology	23. To avoid or, where infeasible, minimise impacts to protected and		
	designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	1
Material	25. To reduce the fossil fuel demand by the transport sector.	+1	-
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	-
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	U	
Heritage	cultural, architectural and archaeological resources.	0	
1 ICIIMEE	canara, arcinecturar and arcineciogical resources.	l	

 Table A.5
 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
BS5: More e	evening and weekend buses		
	SEA Objectives	Rating	
	1. To avoid impacts on the integrity of European Conservation Sites	0	improving the frequency of off-
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		peak bus services. The main
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	benefits are to the QoL of off-
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	peak travellers (including
	Dublin Area.	0	disadvantaged groups), who
	4. To avoid or, where infeasible, minimise impacts on designated and	0	will have greater off-peak
Landscape	protected landscapes and conservation areas.	Ŭ	transport frequency and
1	5. To minimise impacts on undesignated landscape resources	0	availability. This is also
	(townscapes, seascapes, riverscapes, general landscapes).		1
	6. To increase accessibility to economic and employment opportunities,		expected to have positive effects
	in particular for those who are physically, economically or socially	+1	for accessibility. However, there
Population	disadvantaged within the GDA.		are some minor negative effects
•	7. To increase accessibility to quality public, cultural and community	. 1	(on air quality and greenhouse
	services, in particular, for those who are physically, economically or	+1	gas production), due to the
	socially disadvantaged within the GDA.		increased bus mileage in the off-
	8. To contribute to improvements to transport-related aspects of quality	+1	peak (where, per-capita off-
	of life for residents, workers and visitors to the GDA.		peak bus emissions can be
T.T	9. To support the objectives of the Environmental Noise Directive in	0	higher than the peak-period
Human	relation to transport-related noise.		per-capita emissions).
Health	10. To minimise safety risks to human health arising from transport	0	Effectively, these off-peak bus
	related activity.		services are unlikely to have a
	11. To support health improvements and benefits from transport-related	0	I
	activities.		significant impact on modal
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the		shift (from car to bus), so the
		0	per-capita reduction in air
	objective is to support the aims and objectives of the Water Framework Directive (WFD)		pollution and greenhouse gas
	13. To minimise impacts to surfacewater systems and resources.	0	emissions (which is positive
Water			during the peak period), is
	14. To minimise impacts to groundwater systems and resources.	0	expected to be negative during
	15. To minimise impacts to coastal systems and resources.	0	the off-peak.
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	-1	
	emissions.	-1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	-1	
	from transport-related activities.	_	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.		
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	-1	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
		,	

Table A.6 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
BS6: New b		D - C	This are a second and the
	SEA Objectives	Rating	
District in	1. To avoid impacts on the integrity of European Conservation Sites (SACs and SPAs) and nationally designated sites (NHAs).	0	spatial expansion of the existing
Biodiversity	To support the overall goal of the National Biodiversity Plan.	0	bus network in the GDA. This
Flora & fauna		U	will benefit the residents which
iauria	3. To minimise impacts on locally-important biodiversity in the Greater Dublin Area.	0	will be served by these new bus
Landasana	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	services. However, the actual numbers served is likely to be
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	small (notwithstanding the positive effects for accessibility
Donalation	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	+2	and QoL). Minor benefits are expected for air quality and greenhouse gas emissions and
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+2	use of natural resources.
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport related activity.	0	
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+1	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+1	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
3.5	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	+1	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.7 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
DCI. Pay-l	by-Use' driving charge in GDA  SEA Objectives	Dating	This massure would be
	•	Rating	This measure would be
D: 1: '	1. To avoid impacts on the integrity of European Conservation Sites	0	expected to result in a
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).  2. To support the overall goal of the National Biodiversity Plan.	0	significant modal shift away
Flora & fauna		U	from car use and toward the
laulia	3. To minimise impacts on locally-important biodiversity in the Greater Dublin Area.	0	public transport system, due to
	4. To avoid or, where infeasible, minimise impacts on designated and		increased costs associated with
	protected landscapes and conservation areas.	0	private, car-based transport.
Landscape	To minimise impacts on undesignated landscape resources		This would, depending on the
	(townscapes, seascapes, riverscapes, general landscapes).	+1	levels of charge, be expected to
	6. To increase accessibility to economic and employment opportunities,		result in significant
	in particular for those who are physically, economically or socially	-2	improvements (i.e. reductions)
D 1.0	disadvantaged within the GDA.		in air pollution, greenhouse
Population	7. To increase accessibility to quality public, cultural and community		production and fossil fuel
	services, in particular, for those who are physically, economically or	-2	consumption as well as
	socially disadvantaged within the GDA.		supporting the objectives of the
	8. To contribute to improvements to transport-related aspects of quality	+1	Environmental Noise Directive.
	of life for residents, workers and visitors to the GDA.	+1	Lower levels of traffic will also
	9. To support the objectives of the Environmental Noise Directive in	+3	
Human	relation to transport-related noise.	10	result in improvements to the
Health	10. To minimise safety risks to human health arising from transport	+1	town and cityscapes and
	related activity.		historic streetscapes. It will also
	11. To support health improvements and benefits from transport-related	+1	encourage greater uptake of
	activities.		softer-modes of transport with
	12. To support the forthcoming River Basin Management Plans (RBMP)		possible health benefits from
	and Programme of Measures (POM). Where these are not available, the	0	people walking and cycling for
	objective is to support the aims and objectives of the Water Framework		more than 30 minutes a day.
	Directive (WFD)	0	However, significant negative
Water	13. To minimise impacts to surfacewater systems and resources.	0	effects may arise under
	14. To minimise impacts to groundwater systems and resources.	0	population as accessibility to
	15. To minimise impacts to coastal systems and resources.	0	employment, services, facilities
	16. To minimise impacts to transitional systems and resources.	0	and amenities is reduced. These
	17. To minimise the risk of flooding.	0	negative effects are acerbated
	18. To reduce negative air quality impacts arising from transport-related	+3	for those on lower incomes and
	emissions.	+3	those who are physically,
Air	19. To ensure compliance with the Air Framework Directive and		economically and socially
	associated daughter Directives (and the transposing Regulations in	+3	
	Ireland).		disadvantaged. The extent of
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+3	this effect on accessibility will
Chinate	from transport-related activities.	10	very much depend on the
	21. To minimise negative impacts on important and vulnerable soils	0	extent to which any revenue
	resources used for agricultural purposes.	Ů	raised from charging is
Soils &	22. To reduce consumption of construction material and generation of	0	reallocated to expenditure on
geology	construction waste as part of transport infrastructure projects.		public transport.
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	+3	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	⊥1	1
Heritage	cultural, architectural and archaeological resources.	+1	

 Table A.8
 Themes & Measures environmental assessment table

Strategy In DC2: Week	tervention day driver charge in city centre		Discussion of impacts
	SEA Objectives	Rating	This measure would be
	1. To avoid impacts on the integrity of European Conservation Sites	_	expected to result in a
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	significant modal shift away
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	from car use and toward the
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		public transport system, due to
	Dublin Area.	0	increased costs associated with
	4. To avoid or, where infeasible, minimise impacts on designated and	0	private, car-based transport,
Landscape	protected landscapes and conservation areas.	U	
Lanuscape	5. To minimise impacts on undesignated landscape resources	+1	although the effects are confined the central area of
	(townscapes, seascapes, riverscapes, general landscapes).	11	
	6. To increase accessibility to economic and employment opportunities,		Dublin city centre. The modal
	in particular for those who are physically, economically or socially	-2	shift will also be lower than that
Population	disadvantaged within the GDA.		for DC1. This will result in
1	7. To increase accessibility to quality public, cultural and community		significant improvements (i.e.
	services, in particular, for those who are physically, economically or	-2	reductions) in air pollution,
	socially disadvantaged within the GDA.		greenhouse production and
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	fossil fuel consumption. Lower
			levels of traffic will also result
Human	9. To support the objectives of the Environmental Noise Directive in	+2	in improvements to the town
Health	relation to transport-related noise.  10. To minimise safety risks to human health arising from transport		and cityscapes and historic
Health	related activity.	+1	streetscapes. It will also
	11. To support health improvements and benefits from transport-related		encourage greater uptake of
	activities.	+1	softer-modes of transport with
	12. To support the forthcoming River Basin Management Plans (RBMP)		possible health benefits from
	and Programme of Measures (POM). Where these are not available, the		people walking and cycling for
	objective is to support the aims and objectives of the Water Framework	0	
	Directive (WFD)		more then 30 minutes a day.
Water	13. To minimise impacts to surfacewater systems and resources.	0	However, significant negative
water	14. To minimise impacts to groundwater systems and resources.	0	effects will arise under
	15. To minimise impacts to coastal systems and resources.	0	population as accessibility to
	16. To minimise impacts to transitional systems and resources.	0	employment, services, facilities
	17. To minimise the risk of flooding.	0	and amenities is reduced. While
	18. To reduce negative air quality impacts arising from transport-related	U	a congestion charge will result
	emissions.	+2	in a barrier to accessibility for
Air	19. To ensure compliance with the Air Framework Directive and		private vehicle users it will
	associated daughter Directives (and the transposing Regulations in	+2	allow for increased accessibility
	Ireland).		for others. These negative
	20. To contribute to the reduction of greenhouse gas emissions arising	_	effects are acerbated for those
Climate	from transport-related activities.	+2	on lower incomes and those
	21. To minimise negative impacts on important and vulnerable soils	0	who are physically,
	resources used for agricultural purposes.	0	economically and socially
Soils &	22. To reduce consumption of construction material and generation of	0	disadvantaged. The extent of
geology	construction waste as part of transport infrastructure projects.	U	this effect on accessibility will
	23. To avoid or, where infeasible, minimise impacts to protected and	0	very much depend on the
	designated geological and geomorphological sites.	U	extent to which any revenue
Mator! -1	24. To protect public assets and infrastructure.	0	raised from charging is
Material	25. To reduce the fossil fuel demand by the transport sector.	+2	reallocated to expenditure on
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	_
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	. 1	public transport.
Heritage	cultural, architectural and archaeological resources.	+1	

Table A.9 Themes & Measures environmental assessment table

Strategy In		Discussion of impacts	
DC3: Rush	hour driver city centre entry charge		
	SEA Objectives	Rating	
	1. To avoid impacts on the integrity of European Conservation Sites	0	modal shift away from car use
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	and toward the public transport
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	system, due to increased costs
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	associated with private, car-
	Dublin Area.		based transport during the
	4. To avoid or, where infeasible, minimise impacts on designated and	0	peak-periods. The effects are
Landscape	protected landscapes and conservation areas.		confined the central area of
	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	+1	Dublin city centre. The modal
	6. To increase accessibility to economic and employment opportunities,		shift will also be lower than that
	in particular for those who are physically, economically or socially	-1	for DC1 and DC2. This will
	disadvantaged within the GDA.	1	result in improvements (i.e.
Population	7. To increase accessibility to quality public, cultural and community		reductions) in air pollution,
	services, in particular, for those who are physically, economically or	-1	greenhouse production and
	socially disadvantaged within the GDA.		fossil fuel consumption. It will
	8. To contribute to improvements to transport-related aspects of quality	. 1	_
	of life for residents, workers and visitors to the GDA.	+1	also encourage greater uptake
	9. To support the objectives of the Environmental Noise Directive in	. 2	of softer-modes of transport.
Human	relation to transport-related noise.	+2	However, significant negative
Health	10. To minimise safety risks to human health arising from transport	+1	effects will arise under
	related activity.	+1	population as accessibility to
	11. To support health improvements and benefits from transport-related	+1	employment, services, facilities
	activities.	' -	and amenities is reduced. While
	12. To support the forthcoming River Basin Management Plans (RBMP)		a congestion charge will result
	and Programme of Measures (POM). Where these are not available, the	0	in a barrier to accessibility for
	objective is to support the aims and objectives of the Water Framework		private vehicle users it will
	Directive (WFD)	0	allow for increased accessibil
Water	13. To minimise impacts to surfacewater systems and resources.	0	for others. These negative
	14. To minimise impacts to groundwater systems and resources.	0	effects are exacerbated for those
	15. To minimise impacts to coastal systems and resources.	0	on lower incomes and those
	16. To minimise impacts to transitional systems and resources.	0	who are physically,
	17. To minimise the risk of flooding.	0	economically and socially
	18. To reduce negative air quality impacts arising from transport-related	+2	disadvantaged. The extent of
	emissions.	12	this effect on accessibility will
Air	19. To ensure compliance with the Air Framework Directive and		very much depend on the
	associated daughter Directives (and the transposing Regulations in	+2	extent to which any revenue
	Ireland).		raised from charging is
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+2	0 0
	from transport-related activities.		reallocated to expenditure on
	21. To minimise negative impacts on important and vulnerable soils	0	public transport.
0 11 4	resources used for agricultural purposes.		
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	-
Material			-
assets	25. To reduce the fossil fuel demand by the transport sector.	+2	-
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	+1	
Heritage	cultural, architectural and archaeological resources.	1	

Table A.10 Themes & Measures environmental assessment table

Strategy In	tervention de new tolled roads or toll lanes		Discussion of impacts
DC1.110VI	SEA Objectives	Rating	This measure will result in the
	To avoid impacts on the integrity of European Conservation Sites		new construction of tolled
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	roads, or the development of
Flora &	To support the overall goal of the National Biodiversity Plan.	-1	-
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		tolled lanes. This will have
	Dublin Area.	-2	negative effects associated with new infrastructure
	4. To avoid or, where infeasible, minimise impacts on designated and	2	
Landscape	protected landscapes and conservation areas.	-2	(biodiversity, landscape, water,
Lanuscape	5. To minimise impacts on undesignated landscape resources	-2	cultural heritage) and will also increase car-based traffic,
	(townscapes, seascapes, riverscapes, general landscapes).	-2	
	6. To increase accessibility to economic and employment opportunities,		resulting in greater air
	in particular for those who are physically, economically or socially	+1	pollution, greenhouse gas
Population	disadvantaged within the GDA.		production and fossil fuel
1	7. To increase accessibility to quality public, cultural and community	. 1	consumption. The extent and
	services, in particular, for those who are physically, economically or	+1	significance of any impacts will
	socially disadvantaged within the GDA.		depend on the design of the
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	new infrastructure. However,
	9. To support the objectives of the Environmental Noise Directive in  9. To support the objectives of the Environmental Noise Directive in		benefits will arise for increasing
Human	relation to transport-related noise.	-1	accessibility through out the
Health	10. To minimise safety risks to human health arising from transport		GDA and for improving specific
	related activity.	-1	car-based commutes
	11. To support health improvements and benefits from transport-related	0	(notwithstanding the additional
	activities.	0	economic cost borne by the user
	12. To support the forthcoming River Basin Management Plans (RBMP)		which would be difficult in
	and Programme of Measures (POM). Where these are not available, the	-1	particular for low income
	objective is to support the aims and objectives of the Water Framework	-1	groups).
	Directive (WFD)		groups).
Water	13. To minimise impacts to surfacewater systems and resources.	-1	
	14. To minimise impacts to groundwater systems and resources.	-1	
	15. To minimise impacts to coastal systems and resources.	-1	
	16. To minimise impacts to transitional systems and resources.	-1	
	17. To minimise the risk of flooding.	-1	
-	18. To reduce negative air quality impacts arising from transport-related		
	emissions.	-1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	-1	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	-1	
Cinnate	from transport-related activities.	-	
	21. To minimise negative impacts on important and vulnerable soils	-1	
0.11.4	resources used for agricultural purposes.		
Soils &	22. To reduce consumption of construction material and generation of	-1	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	-2	
	designated geological and geomorphological sites.	1	-
Material	24. To protect public assets and infrastructure.	-1	-
assets	25. To reduce the fossil fuel demand by the transport sector.	-1	-
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	-2	
Heritage	cultural, architectural and archaeological resources.		

Table A.11 Themes & Measures environmental assessment table

Strategy In DC5: Toll o	tervention n existing lanes on strategic roads		Discussion of impacts
	SEA Objectives	Rating	This measure is focused on
	1. To avoid impacts on the integrity of European Conservation Sites	_	tolling specific sections of
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	existing strategic roads in the
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	GDA. While there would be
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		some benefits from reduced
	Dublin Area.	0	congestions, there would also
ī 4	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	be disbenefits arising from
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	-1	increased costs of access which would affect low income groups
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	0	in particular. Tolling would be expected to result in reduced
Population	disadvantaged within the GDA.		congestion on strategic routes,
ropulation	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or	0	but may lead to more traffic using local roads to avoid tolls
	socially disadvantaged within the GDA.		with consequent adverse effects
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	on congestion and noise.
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	-1	
Health	10. To minimise safety risks to human health arising from transport related activity.	0	
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
vvatei	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	-1	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	-1	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
0-0-05	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.  24. To protect public assets and infrastructure.	0	1
Material		0	
assets	25. To reduce the fossil fuel demand by the transport sector.	0	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.12 Themes & Measures environmental assessment table

	tervention Charges (on major roads)		Discussion of impacts
<u> </u>	SEA Objectives	Rating	This measure is focused on
	1. To avoid impacts on the integrity of European Conservation Sites	_	creating a modal shift from
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	HGV to rail-based freight
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	C C
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		transport. Minor benefits will
	Dublin Area.	0	arise for the landscape, noise, air quality, greenhouse gas
	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	production and fossil fuel
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	+1	consumption.
	6. To increase accessibility to economic and employment opportunities,		-
	in particular for those who are physically, economically or socially	0	
		U	
Population	disadvantaged within the GDA.		-
	7. To increase accessibility to quality public, cultural and community	0	
	services, in particular, for those who are physically, economically or	0	
	socially disadvantaged within the GDA.		-
	8. To contribute to improvements to transport-related aspects of quality	0	
	of life for residents, workers and visitors to the GDA.		-
. T	9. To support the objectives of the Environmental Noise Directive in	+1	
Human	relation to transport-related noise.		-
Health	10. To minimise safety risks to human health arising from transport	+1	
	related activity.		
	11. To support health improvements and benefits from transport-related	0	
	activities.		
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework		
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related		-
	emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and		1
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).	11	
	20. To contribute to the reduction of greenhouse gas emissions arising		
Climate	from transport-related activities.	+1	
	21. To minimise negative impacts on important and vulnerable soils		+
	resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of		1
		0	
geology	construction waste as part of transport infrastructure projects.		-
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	0	-
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	+1	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.	U	

 Table A.13
 Themes & Measures environmental assessment table

Strategy In NI1: Better	tervention access to stops and stations		Discussion of impacts
	SEA Objectives	Rating	This measure will improve the
	1. To avoid impacts on the integrity of European Conservation Sites	_	physical integration between
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	the different modes of public
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	transport. Positive benefits are
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	_	_
	Dublin Area.	0	expected for accessibility and health (greater use of softer
T am do aam o	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	modes of transport, following
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	use of the public transport system). Some small scale
D1C	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	+2	modal shift from car to public transport would be expected.
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+2	
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+2	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport related activity.	0	
	11. To support health improvements and benefits from transport-related activities.	+1	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
vvater	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	0	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

 Table A.14
 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
NI2: More t	axis, flexible minibus services	1	
	SEA Objectives	Rating	This measure is based around
	1. To avoid impacts on the integrity of European Conservation Sites	0	improving links to the existing
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		transport network. Benefits are
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	expected for accessibility and
fauna	3. To minimise impacts on locally-important biodiversity in the Greater Dublin Area.	0	QoL.
T 1	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	
Domulation	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	+1	
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+1	
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport related activity.	0	
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	0	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.15 Themes & Measures environmental assessment table

Strategy In NI3: Carria	tervention ge of bicycles on bus / train		Discussion of impacts
	SEA Objectives	Rating	This measure is aimed at
	1. To avoid impacts on the integrity of European Conservation Sites	0	permitting cycles on the bus
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	U	and rail-related public transport
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	network. Benefits are expected
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	_	for accessibility and QoL,
	Dublin Area.	0	although these benefits are
	4. To avoid or, where infeasible, minimise impacts on designated and	0	confined to those who will
Landscape	protected landscapes and conservation areas.  5. To minimise impacts on undesignated landscape resources		actually being cycles on the
	(townscapes, seascapes, riverscapes, general landscapes).	0	transport system.
	6. To increase accessibility to economic and employment opportunities,		-
	in particular for those who are physically, economically or socially	+1	
	disadvantaged within the GDA.		
Population	7. To increase accessibility to quality public, cultural and community		-
	services, in particular, for those who are physically, economically or	+1	
	socially disadvantaged within the GDA.		
	8. To contribute to improvements to transport-related aspects of quality		
	of life for residents, workers and visitors to the GDA.	+1	
	9. To support the objectives of the Environmental Noise Directive in	0	
Human	relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport	0	
	related activity.	0	
	11. To support health improvements and benefits from transport-related	. 1	
	activities.	+1	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework	U	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
774101	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	-
	17. To minimise the risk of flooding.	0	
		U	
	18. To reduce negative air quality impacts arising from transport-related	0	
Air	emissions.		
All	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in	0	
	Ireland).	0	
	20. To contribute to the reduction of greenhouse gas emissions arising		
Climate	from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils		
	resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of		-
geology	construction waste as part of transport infrastructure projects.	0	
00)	23. To avoid or, where infeasible, minimise impacts to protected and		1
	designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	1
Material	25. To reduce the fossil fuel demand by the transport sector.	0	-
assets	26. To assist with the reuse and regeneration of brownfield sites.		-
C.1. 1		0	-
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.		

Table A.16 Themes & Measures environmental assessment table

Strategy In NI4: One tid	tervention cket for all public transport		Discussion of impacts
	SEA Objectives	Rating	This measure is focused on an
	1. To avoid impacts on the integrity of European Conservation Sites	_	integrated and multi-modal
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	system ticketing system. It
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	improves accessibility and QoL
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		1 -
	Dublin Area.	0	by making a small number of journeys more affordable due to
T am do asmo	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	reduced interchange penalty.
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	Modal shift effects will be positive, but of very small scale
D 14	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	+1	and taken to be neutral.
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+1	
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport related activity.	0	
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
vvater	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	0	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	1
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	1
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.17 Themes & Measures environmental assessment table

Strategy In NI5: Throu	tervention gh fares on public transport		Discussion of impacts
	SEA Objectives	Rating	This measure is focused on
	1. To avoid impacts on the integrity of European Conservation Sites	_	better integration of fares (as
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	opposed to ticketing systems).
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	Modal shift effects will be
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		1
	Dublin Area.	0	positive, but of very small scale and taken to be neutral.
Landscape	<ol><li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li></ol>	0	
Lanuscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	
Daniel d'an	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	+1	
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+1	
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport	0	
	related activity.  11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
rater	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	0	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
- 3,	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	1
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.	U	

Table A.18 Themes & Measures environmental assessment table

	tervention fares outside rush hours		Discussion of impacts
	SEA Objectives	Rating	This measure will reduce off-
	To avoid impacts on the integrity of European Conservation Sites	_	peak fares. Minor benefits are
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	expected for accessibility and
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	_
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		QoL. No significant off-peak
	Dublin Area.	0	increase in travel is expected.
	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	
Landscape	5. To minimise impacts on undesignated landscape resources	0	
	(townscapes, seascapes, riverscapes, general landscapes).		
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+1	
		+1	
Population	disadvantaged within the GDA.  7. To increase accessibility to quality public, cultural and community		
		+1	
	services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	71	
	8. To contribute to improvements to transport-related aspects of quality		1
	of life for residents, workers and visitors to the GDA.	+1	
	9. To support the objectives of the Environmental Noise Directive in		
Human	relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport		
	related activity.	0	
	11. To support health improvements and benefits from transport-related		
	activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the		
	objective is to support the aims and objectives of the Water Framework	0	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
vvater	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	0	
	emissions.		
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	0	
	from transport-related activities.		
	21. To minimise negative impacts on important and vulnerable soils	0	
Pails 0	resources used for agricultural purposes.		
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	0	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.	U	

Table A.7 Themes & Measures environmental assessment table

Strategy Intervention NI7: Lower fares at all times			Discussion of impacts
	SEA Objectives	Rating	This measure will reduce public
	1. To avoid impacts on the integrity of European Conservation Sites		transport fares at all times. It is
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	anticipated that this measure
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	will result in a greater modal
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		© .
	Dublin Area.	0	shift (in comparison to NI6: <i>Table A.18</i> ) to public transport,
Landasana	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	thereby resulting in minor
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	benefits for noise, air quality and climate. Moderate benefits
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+2	are expected for population (i.e. accessibility) through the
Population	disadvantaged within the GDA.		general lowering of fares. Those
Topulation	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or	+2	on low incomes will especially benefit.
	socially disadvantaged within the GDA.		
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	+1	
Health	10. To minimise safety risks to human health arising from transport related activity.	0	
	11. To support health improvements and benefits from transport-related activities.	+1	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework	0	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+1	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+1	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of	0	
Scology	construction waste as part of transport infrastructure projects.  23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	0	
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	+1	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.8 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts
PE1: Highe	r quality buses and trains	I — .	
	SEA Objectives	Rating	This measure will improve the
	1. To avoid impacts on the integrity of European Conservation Sites	0	quality, attractiveness, features
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	of onboard facilities on public
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	transport vehicles, including
fauna	3. To minimise impacts on locally-important biodiversity in the Greater Dublin Area.	0	onboard information. Minor benefits will arise under QoL
T 1	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	and safety (in the form of
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	improved security).
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	0	
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	0	
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport related activity.	+1	
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	0	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.9 Themes & Measures environmental assessment table

Strategy In		Discussion of impacts	
PEZ: Impro	ve main rail / bus stations	Datina	This management and to immunous
	SEA Objectives	Rating	This measure seeks to improve
D: 1: :	1. To avoid impacts on the integrity of European Conservation Sites	0	the physical aspects of
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).  2. To support the overall goal of the National Biodiversity Plan.	0	interchanges. Benefits expected
Flora &		U	under landscape (physical
fauna	3. To minimise impacts on locally-important biodiversity in the Greater Dublin Area.	0	improvements around the
Landosano	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	interchanges), accessibility (encouraging greater use of
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	+2	public transport), QoL and safety (sense of security at
Domilation	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	+1	interchanges). No significant modal shift from the private car is expected.
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+1	
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport related activity.	+1	
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	0	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
Material 1	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.10 Themes & Measures environmental assessment table

Strategy In PE4: Impro	t <b>tervention</b> vements to bus stops		Discussion of impacts
	SEA Objectives	Rating	This measure seeks to improve
	1. To avoid impacts on the integrity of European Conservation Sites	_	the physical aspects of bus
Biodiversity	(0.0 100.) 1 1 1 1 1 0	0	stops. Minor benefits expected
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	under landscape (physical
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		improvements around the bus
	Dublin Area.	0	stops), accessibility
	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	(encouraging greater use of
Landscape	To minimise impacts on undesignated landscape resources	. 1	buses), QoL and safety (sense of
	(townscapes, seascapes, riverscapes, general landscapes).	+1	security at bus stops). No significant modal shift from the
	6. To increase accessibility to economic and employment opportunities,		_
	in particular for those who are physically, economically or socially	+1	private car is expected.
Population	disadvantaged within the GDA.		
1	7. To increase accessibility to quality public, cultural and community		
	services, in particular, for those who are physically, economically or	+1	
	socially disadvantaged within the GDA.		
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	
	9. To support the objectives of the Environmental Noise Directive in		
Human	relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport		
Health	related activity.	+1	
	11. To support health improvements and benefits from transport-related		
	activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the		
	objective is to support the aims and objectives of the Water Framework	0	
	Directive (WFD)		
TA7 .	13. To minimise impacts to surfacewater systems and resources.	0	
Water	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
-	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	0	
Air	emissions.		
All	19. To ensure compliance with the Air Framework Directive and	0	
	associated daughter Directives (and the transposing Regulations in Ireland).	U	
	20. To contribute to the reduction of greenhouse gas emissions arising		
Climate	from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils		
	resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of		
geology	construction waste as part of transport infrastructure projects.	0	
8	23. To avoid or, where infeasible, minimise impacts to protected and	_	
	designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	1
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets			-
C 11 1	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.		

Table A.23 Themes & Measures environmental assessment table

Strategy In RL3: More	tervention evening and weekend trains		Discussion of impacts
	SEA Objectives	Rating	This measure will improve off-
	1. To avoid impacts on the integrity of European Conservation Sites	_	peak rail services with higher
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	off peak frequencies. This
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	assessment assumes that the rai
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		and tram systems are electrical
	Dublin Area.	0	(and not diesel-powered).
T 1	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	Benefits are expected for
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	accessibility and significant benefits expected for QoL, but
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+1	only for commuters who are regular rail-users. This measure
Population	disadvantaged within the GDA.		will significantly improve the
	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+1	situation, making rail transport a more viable alternative to private vehicles where
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+2	available. Overall, however, no
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	significant modal shift from roads is expected.
Health	10. To minimise safety risks to human health arising from transport related activity.	0	
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
vvatei	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	0	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
0-0-05	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.  24. To protect public assets and infrastructure.	0	
Material			
assets	25. To reduce the fossil fuel demand by the transport sector.	0	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.24 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts
RL5: New t	rain and tram lines	1	
	SEA Objectives	Rating	This measure proposed new rail
	1. To avoid impacts on the integrity of European Conservation Sites	0	and tram lines. Given the
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		additional infrastructure
Flora &	2. To support the overall goal of the National Biodiversity Plan.	-1	required, negative impacts are
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	-2	likely under biodiversity,
	Dublin Area.	_	landscape, water, cultural
	4. To avoid or, where infeasible, minimise impacts on designated and	-2	heritage, soils, geology, waste
Landscape	protected landscapes and conservation areas.	_	and (potentially) material
1	5. To minimise impacts on undesignated landscape resources	-2	assets. However, it is difficult to
	(townscapes, seascapes, riverscapes, general landscapes).		estimate the severity of these
	6. To increase accessibility to economic and employment opportunities,	. 0	
	in particular for those who are physically, economically or socially	+2	negative impacts at this stage in
Population	disadvantaged within the GDA.		the assessment process. Once
•	7. To increase accessibility to quality public, cultural and community		operational, significant positive
	services, in particular, for those who are physically, economically or	+2	effects are expected for
	socially disadvantaged within the GDA.		accessibility, QoL, health
	8. To contribute to improvements to transport-related aspects of quality	+2	(through increased uptake of
	of life for residents, workers and visitors to the GDA.		softer modes of transport, likely
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	+1	to arise as a secondary benefit
Health			of the large anticipated modal
Health	10. To minimise safety risks to human health arising from transport	0	shift to public transport); air
	related activity.  11. To support health improvements and benefits from transport-related		quality, climate change and
	activities.	+1	fossil fuel consumption.
	12. To support the forthcoming River Basin Management Plans (RBMP)		rossii idei consumption.
	and Programme of Measures (POM). Where these are not available, the		
	objective is to support the aims and objectives of the Water Framework	-1	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	-1	
vvater	14. To minimise impacts to groundwater systems and resources.	-1	
	15. To minimise impacts to coastal systems and resources.	-1	
		-1	
	16. To minimise impacts to transitional systems and resources.		
	17. To minimise the risk of flooding.	-1	
	18. To reduce negative air quality impacts arising from transport-related	+2	
	emissions.		
Air	19. To ensure compliance with the Air Framework Directive and	. 0	
	associated daughter Directives (and the transposing Regulations in	+2	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+2	
	from transport-related activities.		
	21. To minimise negative impacts on important and vulnerable soils	-1	
Soils &	resources used for agricultural purposes.		
	22. To reduce consumption of construction material and generation of	-1	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	-2	
	designated geological and geomorphological sites.  24. To protect public assets and infrastructure.	1	1
Material		-1	
assets	25. To reduce the fossil fuel demand by the transport sector.	+2	
	26. To assist with the reuse and regeneration of brownfield sites.	+1	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	-2	
Heritage	cultural, architectural and archaeological resources.	l -	

Table A.25 Themes & Measures environmental assessment table

Strategy In RL6: More	t <b>tervention</b> rail stations / stops		Discussion of impacts
	SEA Objectives	Rating	This measure is focused on the
	1. To avoid impacts on the integrity of European Conservation Sites	_	development of additional
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	stops and stations on existing
Flora &	2. To support the overall goal of the National Biodiversity Plan.	-1	rail and tram lines. Minor
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		1
	Dublin Area.	-1	positive impacts are expected for accessibility and QoL, but
т 1	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	-1	this is confined to the additional
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	-1	populations who will benefit from these new stops. It would
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+2	also present opportunities for modal transfer from private car
Population	disadvantaged within the GDA.		to public transport which will
Торшаноп	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or	+2	allow for a positive effect on air quality, greenhouse gas
	socially disadvantaged within the GDA.		emissions and the fossil fuel
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+2	demand. However, this measure will have minor
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	negative effects on biodiversity,
Health	10. To minimise safety risks to human health arising from transport related activity.	0	landscape, water resources, soil, geology and cultural heritage.
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	-1	
Water	13. To minimise impacts to surfacewater systems and resources.	-1	
vvatei	14. To minimise impacts to groundwater systems and resources.	-1	
	15. To minimise impacts to coastal systems and resources.	-1	
	16. To minimise impacts to transitional systems and resources.	-1	
	17. To minimise the risk of flooding.	-1	
	18. To reduce negative air quality impacts arising from transport-related emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+1	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+1	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	-1	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	-1	
0 0)	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	-1	
	24. To protect public assets and infrastructure.	0	1
Material	25. To reduce the fossil fuel demand by the transport sector.		
assets	26. To assist with the reuse and regeneration of brownfield sites.	+1	
Cultur-1		0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	-1	

Table A.26 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts
KL8: Parkir	ng at stations		
	SEA Objectives	Rating	This measure proposed to
	1. To avoid impacts on the integrity of European Conservation Sites	0	provide additional car parking
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		at existing or planned rail and
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	Metro stops. However, no
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	-1	additional transport capacity is
	Dublin Area.	•	provided. It is assumed that the
	4. To avoid or, where infeasible, minimise impacts on designated and	0	provision of parking will result
Landscape	protected landscapes and conservation areas.		in a modal shift towards rail-
1	5. To minimise impacts on undesignated landscape resources	-1	based transport and that this
	(townscapes, seascapes, riverscapes, general landscapes).		will result in noise, air quality
	6. To increase accessibility to economic and employment opportunities,	. 1	and climate benefits. It will also
	in particular for those who are physically, economically or socially	+1	
Population	disadvantaged within the GDA.		improve accessibility. However,
	7. To increase accessibility to quality public, cultural and community	. 1	the construction of the
	services, in particular, for those who are physically, economically or	+1	additional parking facilities will
	socially disadvantaged within the GDA.		result in localised impacts to
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	biodiversity, water, cultural
	9. To support the objectives of the Environmental Noise Directive in		heritage, soils & geology and
Human	relation to transport-related noise.	+1	landscape.
Health	10. To minimise safety risks to human health arising from transport	_	
	related activity.	0	
	11. To support health improvements and benefits from transport-related		
	activities.	+1	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework	0	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	-1	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	-1	
	16. To minimise impacts to transitional systems and resources.	-1	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related		
	emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
C1: 1	20. To contribute to the reduction of greenhouse gas emissions arising	. 1	
Climate	from transport-related activities.	+!	
	21. To minimise negative impacts on important and vulnerable soils	-1	
	resources used for agricultural purposes.	-1	
Soils &	22. To reduce consumption of construction material and generation of	-1	
geology	construction waste as part of transport infrastructure projects.	-1	
	23. To avoid or, where infeasible, minimise impacts to protected and	-1	
	designated geological and geomorphological sites.	1	
Maton! -1	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	+1	
assets	26. To assist with the reuse and regeneration of brownfield sites.	+1	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	-1	

Table A.27 Themes & Measures environmental assessment table

Strategy Intervention RL9: More frequent and bigger trains			Discussion of impacts
	SEA Objectives	Rating	This measure will increase
	1. To avoid impacts on the integrity of European Conservation Sites	_	capacity and frequency on rail-
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	based transport (such as bigger
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	and longer trains and additiona
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		-
	Dublin Area.	-2	rail capacity). It assumes that al works are largely confined to
т 1	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	the existing rail alignments,
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	-2	however with four-tacking proposed with this measure,
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+2	moderately negative impacts might arise along certain
Population	disadvantaged within the GDA.  7. To increase accessibility to quality public, cultural and community		corridors. The creation of a
	services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+2	significant volume of additional rail-based transport capacity will provide moderate benefits
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+2	to accessibility, air quality,
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	+1	climate, reducing fossil fuel demand and noise (note that
Health	10. To minimise safety risks to human health arising from transport related activity.	+1	there will be negative impacts along the rail alignments, but
	11. To support health improvements and benefits from transport-related activities.	+1	these are off-set by the region- wide noise benefits); all as a result of the expected significant modal shift toward rail-based transport. Safety and
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	-1	
TA7 .	13. To minimise impacts to surfacewater systems and resources.	-2	health benefits are also expected
Water	14. To minimise impacts to groundwater systems and resources.	0	as the lower car volumes should
	15. To minimise impacts to coastal systems and resources.		make the softer-modes of
		0	transport easier and safer (as
	16. To minimise impacts to transitional systems and resources.	0	well as increase uptake). The
	17. To minimise the risk of flooding.	0	provision of greater capacity
	$18. \ To \ reduce negative air quality impacts arising from transport-related emissions.$	+2	along rail lines will also increase
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+2	the viability (and thus potential for redevelopment) of brownfield sites along these rai
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+2	corridors. The provision of additional rail capacity will
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	-2	have increased energy consumption, but this is
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	-1	significantly smaller than the
Scorogy	23. To avoid or, where infeasible, minimise impacts to protected and	0	overall energy saved from the modal shift to PT.
	designated geological and geomorphological sites.	, 1	-
Material	24. To protect public assets and infrastructure.	+1	-
assets	25. To reduce the fossil fuel demand by the transport sector.	+2	
	26. To assist with the reuse and regeneration of brownfield sites.	+1	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	-2	

Table A.28 Themes & Measures environmental assessment table

Strategy In RL10: More	tervention e frequent trams		Discussion of impacts
	SEA Objectives	Rating	This measure will increase
	1. To avoid impacts on the integrity of European Conservation Sites	0	capacity and frequency on Luas
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	U	and Metro systems (such as
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	bigger and longer trams and
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	_	additional rail capacity). It
	Dublin Area.	0	assumes that all works are
	4. To avoid or, where infeasible, minimise impacts on designated and	0	largely confined to the existing
Landscape	protected landscapes and conservation areas.  5. To minimise impacts on undesignated landscape resources		rail alignments. The creation of
	(townscapes, seascapes, riverscapes, general landscapes).	0	a significant volume of
	6. To increase accessibility to economic and employment opportunities,		additional rail-based transport
	in particular for those who are physically, economically or socially	+2	capacity will provide moderate
	disadvantaged within the GDA.	12	benefits to accessibility, air
Population	7. To increase accessibility to quality public, cultural and community		quality, climate, reducing fossil
	services, in particular, for those who are physically, economically or	+2	
	socially disadvantaged within the GDA.	12	fuel demand and noise; all as a
	8. To contribute to improvements to transport-related aspects of quality		result of the expected
	of life for residents, workers and visitors to the GDA.	+2	significant modal shift toward
	9. To support the objectives of the Environmental Noise Directive in	_	rail-based transport. Safety and
Human	relation to transport-related noise.	+2	health benefits are also expected
Health	10. To minimise safety risks to human health arising from transport	. 1	as the lower car volumes should
	related activity.	+1	make the softer-modes of
	11. To support health improvements and benefits from transport-related	. 1	transport easier and safer (as
	activities.	+1	well as increase uptake). The
	12. To support the forthcoming River Basin Management Plans (RBMP)		provision of greater capacity
	and Programme of Measures (POM). Where these are not available, the	0	along rail lines will also increase
	objective is to support the aims and objectives of the Water Framework	U	the viability (and thus potential
	Directive (WFD)		for redevelopment) of
Water	13. To minimise impacts to surfacewater systems and resources.	0	brownfield sites along these rail
	14. To minimise impacts to groundwater systems and resources.	0	_
	15. To minimise impacts to coastal systems and resources.	0	corridors. The provision of
	16. To minimise impacts to transitional systems and resources.	0	additional tram capacity will
	17. To minimise the risk of flooding.	0	have increased energy
		U	consumption, but this is
	18. To reduce negative air quality impacts arising from transport-related	+2	significantly smaller than the
Air	emissions.  19. To ensure compliance with the Air Framework Directive and		overall energy saved from the
All	associated daughter Directives (and the transposing Regulations in	+2	modal shift to PT.
	Ireland).	12	
	20. To contribute to the reduction of greenhouse gas emissions arising		
Climate	from transport-related activities.	+2	
	21. To minimise negative impacts on important and vulnerable soils		
	resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of		
geology	construction waste as part of transport infrastructure projects.	-1	
0 07	23. To avoid or, where infeasible, minimise impacts to protected and		
	designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	+1	1
Material	25. To reduce the fossil fuel demand by the transport sector.	+2	-
assets	26. To assist with the reuse and regeneration of brownfield sites.		1
Cultur-1		+1	-
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.		

Table A.11 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
MC1: Moto	rcycling strategy	D - C	This was a second of
	SEA Objectives	Rating	This measures seeks to promote
D: 1: :	1. To avoid impacts on the integrity of European Conservation Sites	0	and support motorcycling,
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	through means such as free
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	parking provision, permission
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	to use bus lanes and exemption
	Dublin Area.		from demand restraint
	4. To avoid or, where infeasible, minimise impacts on designated and	0	measures (e.g. congestion
Landscape	protected landscapes and conservation areas.		charging). This measure is
	5. To minimise impacts on undesignated landscape resources	0	expected to have minor positive
	(townscapes, seascapes, riverscapes, general landscapes).		benefits for accessibility but the
	6. To increase accessibility to economic and employment opportunities,	. 1	small change is not sufficient to
	in particular for those who are physically, economically or socially	+1	~
Population	disadvantaged within the GDA.		have any other changes in the
	7. To increase accessibility to quality public, cultural and community	+1	remaining environmental topics
	services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+1	(although a small modal shift is
	8. To contribute to improvements to transport-related aspects of quality		expected). Any positive benefits
	of life for residents, workers and visitors to the GDA.	0	from this small modal shift
	9. To support the objectives of the Environmental Noise Directive in  9. To support the objectives of the Environmental Noise Directive in		away from car-based transport
Human	relation to transport-related noise.	0	(such as noise, air quality etc.)
Health	10. To minimise safety risks to human health arising from transport		would be off-set by
Health		0	corresponding impacts from
	related activity.  11. To support health improvements and benefits from transport-related		increased use of motorcycles.
	activities.	0	increased ase of motorey crest
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the		
	objective is to support the aims and objectives of the Water Framework	0	
	Directive (WFD)		
T.1.7 .	13. To minimise impacts to surfacewater systems and resources.	0	-
Water	14. To minimise impacts to groundwater systems and resources.	0	-
			_
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	0	
	emissions.	O	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	0	
	from transport-related activities.		
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.		
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		1
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	0	
40000	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.	0	

Table A.12 Themes & Measures environmental assessment table

Strategy In WN4: River	tervention r / sea boat services	Discussion of impacts	
	SEA Objectives	Rating	This measure is focused on the
	1. To avoid impacts on the integrity of European Conservation Sites	_	development of a water-based
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	public transport system. Minor
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	benefits are expected for
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		accessibility and QoL. Minor
	Dublin Area.	0	negative effects may arise in
T 1	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	relation to surfacewater, coastal
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	systems and transitional systems (as there is a risk of
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	+1	hydrocarbon-based pollution of the rivers used by the water taxis).
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+1	,
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport related activity.	0	
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	-1	
water	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	-1	
	16. To minimise impacts to transitional systems and resources.	-1	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	0	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
-	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.31 Themes & Measures environmental assessment table

Strategy Intervention TM1: Urban traffic management			Discussion of impacts
	SEA Objectives	Rating	This measure involves the
	1. To avoid impacts on the integrity of European Conservation Sites	_	establishment of a road user
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	hierarchy then reallocate road
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	space in accordance with new
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	_	priorities. This will involve
	Dublin Area.	0	managed restrictions for car
T 1	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	traffic in urban centres. A key
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	+1	aspect of this measure is the expected modal shift from car
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+1	to both the softer modes of transport as well as general
Population	disadvantaged within the GDA.		public transport. This will resul
1 op mation	7. To increase accessibility to quality public, cultural and community	_	in minor benefits for noise, air
	services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+1	quality, climate and fossil fuel consumption. Benefits will also
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	arise for accessibility, health
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	+1	and safety (due to less risks for pedestrians and cyclists), and
Health	10. To minimise safety risks to human health arising from transport related activity.	+1	health benefits (greater uptake of softer modes of transport).
	11. To support health improvements and benefits from transport-related	+1	or sorter modes or transport).
	activities.		
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
<b>TA7</b> - 1	13. To minimise impacts to surfacewater systems and resources.	0	
Water	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+1	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+1	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.  23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
Matorial	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	+1	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.32 Themes & Measures environmental assessment table

Strategy In		Discussion of impacts	
11VIZ: 1 raffi	ic signal control and co-ordination  SEA Objectives	Rating	This measure seeks to enhance
	To avoid impacts on the integrity of European Conservation Sites	_	road efficiency through
Biodiversity	(0.0 100.) 1 1 1 1 1 0.771.)	0	measures to reduce signal
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	delays for all users. Likely
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		-
	Dublin Area.	0	actions include adaptive traffic signal control, dynamic signal
	4. To avoid or, where infeasible, minimise impacts on designated and	0	timings, revised cycle times and
Landscape	protected landscapes and conservation areas.		traffic/pedestrian phases. This
1	5. To minimise impacts on undesignated landscape resources	0	measure is likely to result in
	(townscapes, seascapes, riverscapes, general landscapes).		improved accessibility for non-
	6. To increase accessibility to economic and employment opportunities,	. 1	car modes of transport
	in particular for those who are physically, economically or socially	+1	(especially pedestrians) and
Population	disadvantaged within the GDA.  7. To increase accessibility to quality public, cultural and community		
	services, in particular, for those who are physically, economically or	+1	health benefits. Note that it is
	socially disadvantaged within the GDA.	11	not envisaged that any modal
	8. To contribute to improvements to transport-related aspects of quality		shift away from car-based
	of life for residents, workers and visitors to the GDA.	+1	transport will be sufficient to
	9. To support the objectives of the Environmental Noise Directive in	_	have noticeable benefits for
Human	relation to transport-related noise.	0	noise, air quality etc.
Health	10. To minimise safety risks to human health arising from transport	0	
	related activity.	0	
	11. To support health improvements and benefits from transport-related	. 1	
	activities.	+1	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework		
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related		
	emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	0	
Cimilate	from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	,	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		-
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		-
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	0	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.		

 Table A.33
 Themes & Measures environmental assessment table

Strategy Intervention TM3: Active traffic management on strategic and major roads			Discussion of impacts
TWIS. ACTIV	SEA Objectives	Datina	The chiestive of this measure is
		Rating	The objective of this measure is
Dia dissansitas	1. To avoid impacts on the integrity of European Conservation Sites (SACs and SPAs) and nationally designated sites (NHAs).	0	to enhance the capacity on
Biodiversity Flora &	To support the overall goal of the National Biodiversity Plan.	0	national roads and motorways.
fauna	To minimise impacts on locally-important biodiversity in the Greater	U	Action may include hard
lauria	Dublin Area.	0	shoulder running, tidal flow operations, ramp metering and
Landscape	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	incident response. This measure will result in minor benefits for
Lanascape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	-1	accessibility, due to the greater
D 1.0	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	+1	road capacity and efficiency. However, it is likely to increase car-based modes of transport
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+1	with resulting minor negative impacts for noise, air quality, greenhouse gas production and
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	fossil fuel consumption. Note
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	-1	that a very large increase in car- usage is not anticipated as a
Health	10. To minimise safety risks to human health arising from transport related activity.	-1	result of this measure, although car use will be made more
	11. To support health improvements and benefits from transport-related activities.	0	attractive and there would be some growth in car usage.
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	-1	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	-1	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	-1	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
36	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	-1	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	1
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

 Table A.34
 Themes & Measures environmental assessment table

Strategy In	tervention		Discussion of impacts
	public transport information		•
	SEA Objectives	Rating	This measure will provide real
	1. To avoid impacts on the integrity of European Conservation Sites	_	time passenger information on
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	the public transport network
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	and also at key locations
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		1
	Dublin Area.	0	(hospitals, universities, retail
-	4. To avoid or, where infeasible, minimise impacts on designated and	0	centres etc.). Minor positive
	protected landscapes and conservation areas.	0	benefits to arise for accessibility,
Landscape	5. To minimise impacts on undesignated landscape resources	0	QoL. Note that it considered
	(townscapes, seascapes, riverscapes, general landscapes).	0	that any additional real time
	6. To increase accessibility to economic and employment opportunities,		signage will not result in any
	in particular for those who are physically, economically or socially	+1	negative landscape impacts,
Population	disadvantaged within the GDA.		given that such signs will be
1 opulation	7. To increase accessibility to quality public, cultural and community		placed in a suitable setting (e.g.
	services, in particular, for those who are physically, economically or	+1	transport interchanges,
	socially disadvantaged within the GDA.		rail/tram stops, public foyers of
	8. To contribute to improvements to transport-related aspects of quality	+1	retail areas etc.). This measure
	of life for residents, workers and visitors to the GDA.	1.1	may result in a small scale
	9. To support the objectives of the Environmental Noise Directive in	0	modal shift to public transport,
Human	relation to transport-related noise.	Ŭ	taken to be neutral.
Health	10. To minimise safety risks to human health arising from transport	0	taken to be neutral.
	related activity.	Ü	
	11. To support health improvements and benefits from transport-related	0	
	activities.	Ü	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework		
	Directive (WFD)	_	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	0	
	emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
Climata	20. To contribute to the reduction of greenhouse gas emissions arising	0	
Climate	from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	U	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	U	
36	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated		
Heritage	cultural, architectural and archaeological resources.	0	
	,	l .	<u>I</u>

 Table A.35
 Themes & Measures environmental assessment table

Strategy In	tervention		Discussion of impacts
	ic transport information		1
-	SEA Objectives	Rating	This measure will provide
	1. To avoid impacts on the integrity of European Conservation Sites	_	public transport information
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	and make this easily available
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	and visible at key locations. On-
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		line and printed information
	Dublin Area.	0	also to be easily available
-	4. To avoid or, where infeasible, minimise impacts on designated and	0	(including personalised journey
Landssans	protected landscapes and conservation areas.	U	
Landscape	5. To minimise impacts on undesignated landscape resources	0	timetables). This measure will
	(townscapes, seascapes, riverscapes, general landscapes).	U	improve accessibility and the
	6. To increase accessibility to economic and employment opportunities,		ease of use regarding public
	in particular for those who are physically, economically or socially	+1	transport. However, it is not
Population	disadvantaged within the GDA.		envisaged that this measure in
1	7. To increase accessibility to quality public, cultural and community	4	isolation will be sufficient to
	services, in particular, for those who are physically, economically or	+1	result in a modal shift towards
	socially disadvantaged within the GDA.		non-car modes of transport. The
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	sector of the population who
	9. To support the objectives of the Environmental Noise Directive in		are likely to greatly benefit from
Human	relation to transport-related noise.	0	this measure are visitors to the
Health	10. To minimise safety risks to human health arising from transport		GDA and those in economically
Ticulti	related activity.	0	deprived areas.
	11. To support health improvements and benefits from transport-related		
	activities.	0	
-	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework	U	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	0	
	emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	0	
	from transport-related activities.	Ů	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.		
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.  24. To protect public assets and infrastructure.	0	-
Material			-
assets	25. To reduce the fossil fuel demand by the transport sector.	0	-
G 1: :	26. To assist with the reuse and regeneration of brownfield sites.	0	-
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.		

Table A.36 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts	
MM6: Bette	er signing and wayfinding	1		
	SEA Objectives	Rating	This measure involves	
	1. To avoid impacts on the integrity of European Conservation Sites	0	simplifying and improving	
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		traffic signs. The objective is to	
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	focus on co-ordinated and	
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	simplified advanced direction	
	Dublin Area.  4. To avoid or, where infeasible, minimise impacts on designated and		signing on national, strategic	
T 1	protected landscapes and conservation areas.	0	and local roads. Softer-modes of	
Landscape	5. To minimise impacts on undesignated landscape resources	+1	transport will also be addressed in this measure. This measure	
	(townscapes, seascapes, riverscapes, general landscapes).  6. To increase accessibility to economic and employment opportunities,		will improve accessibility and	
	in particular for those who are physically, economically or socially	+1	ease of navigation around the	
Population	disadvantaged within the GDA.		GDA. However, it is not	
1 opulation	7. To increase accessibility to quality public, cultural and community		envisaged that this measure in	
	services, in particular, for those who are physically, economically or	+1	isolation will be sufficient to	
	socially disadvantaged within the GDA.		result in a modal shift towards	
	8. To contribute to improvements to transport-related aspects of quality	+1	non-car modes of transport. The	
	of life for residents, workers and visitors to the GDA.		sector of the population who	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	are likely to greatly benefit from	
Health	10. To minimise safety risks to human health arising from transport	_	this measure are visitors to the	
	related activity.	0	GDA. Minor localised	
	11. To support health improvements and benefits from transport-related	0	landscape benefits will arise	
	activities.	U	due to the rationalisation of on-	
	12. To support the forthcoming River Basin Management Plans (RBMP)		street signage.	
	and Programme of Measures (POM). Where these are not available, the	0		
	objective is to support the aims and objectives of the Water Framework			
	Directive (WFD)	0		
Water	13. To minimise impacts to surfacewater systems and resources.	0		
	14. To minimise impacts to groundwater systems and resources.	0		
	15. To minimise impacts to coastal systems and resources.	0		
	16. To minimise impacts to transitional systems and resources.	0		
	17. To minimise the risk of flooding.	0		
	18. To reduce negative air quality impacts arising from transport-related	0		
Air	emissions.  19. To ensure compliance with the Air Framework Directive and			
7111	associated daughter Directives (and the transposing Regulations in	0		
	Ireland).			
GI: .	20. To contribute to the reduction of greenhouse gas emissions arising	0		
Climate	from transport-related activities.	0		
	21. To minimise negative impacts on important and vulnerable soils	0		
	resources used for agricultural purposes.	U		
Soils &	22. To reduce consumption of construction material and generation of	0		
geology	construction waste as part of transport infrastructure projects.	Ŭ		
	23. To avoid or, where infeasible, minimise impacts to protected and	0		
	designated geological and geomorphological sites.			
Material	24. To protect public assets and infrastructure.	0		
assets	25. To reduce the fossil fuel demand by the transport sector.	0		
	26. To assist with the reuse and regeneration of brownfield sites.	0		
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0		
Heritage	cultural, architectural and archaeological resources.			

Table A.37 Themes & Measures environmental assessment table

Strategy In	tervention		Discussion of impacts
MM7: Real-	-time road user information		
	SEA Objectives	Rating	This measure will make road
	1. To avoid impacts on the integrity of European Conservation Sites	0	travel information easily
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	U	available by internet, mobile
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	phone, in-car devices (SatNav
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	etc.) and on-street live signing.
	Dublin Area.	0	Information provides will
	4. To avoid or, where infeasible, minimise impacts on designated and	0	include journey time and
Landscape	protected landscapes and conservation areas.	U	destination info, such as city
Lanascape	5. To minimise impacts on undesignated landscape resources	0	centre parking availability. This
	(townscapes, seascapes, riverscapes, general landscapes).	0	1 0
	6. To increase accessibility to economic and employment opportunities,		shall also incorporate the ability
	in particular for those who are physically, economically or socially	+1	to pre-book and/or pre-pay
Population	disadvantaged within the GDA.		parking and road user charge
1	7. To increase accessibility to quality public, cultural and community		fees. This measure will improve
	services, in particular, for those who are physically, economically or	+1	accessibility, but these minor
	socially disadvantaged within the GDA.		benefits will largely confined to
	8. To contribute to improvements to transport-related aspects of quality	+1	those who travel by private car.
	of life for residents, workers and visitors to the GDA.		The diversion of cars on
	9. To support the objectives of the Environmental Noise Directive in	-1	alternative routes (as and when
Human	relation to transport-related noise.		real-time road user information
Health	10. To minimise safety risks to human health arising from transport	0	is provided) may result in a
	related activity.		-
	11. To support health improvements and benefits from transport-related	0	noise impacts on lesser-used
	activities.		roads.
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework		
	Directive (WFD)  13. To minimize impacts to surfacewater systems and recourses	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	0	
	emissions.	U	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	0	
Cimate	from transport-related activities.	O	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	Ů	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
Material	25. To reduce the lossif fuel definite by the dansport sector.	-	
Material assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
	- <u></u>		

Table A.38 Themes & Measures environmental assessment table

Strategy Intervention RC1: Local road improvements			Discussion of impacts
	SEA Objectives	Rating	This measure will create
	1. To avoid impacts on the integrity of European Conservation Sites	_	additional road capacity at
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	locations where there is
Flora &	2. To support the overall goal of the National Biodiversity Plan.	-1	excessive demand and
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		congestion. The additional road
	Dublin Area.	-1	space will improve accessibility
T 1	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	-1	and QoL (for road users).
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	-1	However, as this measure requires new development (i.e.
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+1	road construction), negative impacts will arise for
Population	disadvantaged within the GDA.  7. To increase accessibility to quality public, cultural and community		biodiversity, landscape, water,
	services, in particular, for those who are physically, economically or	+1	cultural heritage and waste. This measure will also create
	socially disadvantaged within the GDA.  8. To contribute to improvements to transport-related aspects of quality		additional road space will can
	of life for residents, workers and visitors to the GDA.	+1	be expected to be 'filled' by
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	-1	additional car usage, thereby resulting in negative impacts re
Health	10. To minimise safety risks to human health arising from transport related activity.	0	air quality, climate change and greenhouse gases.
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the	1	
	objective is to support the aims and objectives of the Water Framework Directive (WFD)	-1	
Water	13. To minimise impacts to surfacewater systems and resources.	-1	
	14. To minimise impacts to groundwater systems and resources.	-1	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
			-
	17. To minimise the risk of flooding.	-1	-
	18. To reduce negative air quality impacts arising from transport-related emissions.	-1	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	-1	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	-1	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	-1	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	-1	
0 01	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	-1	
	24. To protect public assets and infrastructure.	0	
Material			
assets	25. To reduce the fossil fuel demand by the transport sector.	0	-
	26. To assist with the reuse and regeneration of brownfield sites.	-1	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	-1	

Table A.39 Themes & Measures environmental assessment table

	stervention		Discussion of impacts
KC2: New I	local road links	D-11	This measure will area.
	SEA Objectives	Rating	
D: - 1!!	1. To avoid impacts on the integrity of European Conservation Sites (SACs and SPAs) and nationally designated sites (NHAs).	0	additional road links to new
Biodiversity	2. To support the overall goal of the National Biodiversity Plan.	1	development locations. It also
Flora &		-1	proposes to facilitate public
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	-2	transport and soft-modes of
	Dublin Area.		transport. This measure
	4. To avoid or, where infeasible, minimise impacts on designated and	-2	proposes significantly greater
Landscape	protected landscapes and conservation areas.		additional road space and usage
	5. To minimise impacts on undesignated landscape resources	-2	compared to RC1. Significantly
	(townscapes, seascapes, riverscapes, general landscapes).		negative impacts are expected
	6. To increase accessibility to economic and employment opportunities,	+1	for biodiversity, landscape,
	in particular for those who are physically, economically or socially	+1	water, cultural heritage and
Population	disadvantaged within the GDA.		
	7. To increase accessibility to quality public, cultural and community	+1	waste. This measure will also
	services, in particular, for those who are physically, economically or	+1	create additional road space
	socially disadvantaged within the GDA.  8. To contribute to improvements to transport related aspects of quality.		will can be expected to be
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	'filled' by additional car usage,
	9. To support the objectives of the Environmental Noise Directive in		thereby resulting in significant
Human	relation to transport-related noise.	-1	negative impacts re air quality,
Health	10. To minimise safety risks to human health arising from transport		climate change and greenhouse
Health		0	gases.
	related activity.  11. To support health improvements and benefits from transport-related		9.000
	activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the		
	objective is to support the aims and objectives of the Water Framework	-1	
	Directive (WFD)		
	13. To minimise impacts to surfacewater systems and resources.	-1	
Water	14. To minimise impacts to groundwater systems and resources.	-1	
	15. To minimise impacts to coastal systems and resources.	-1	
	16. To minimise impacts to transitional systems and resources.	-1	
	17. To minimise the risk of flooding.	-1	
	18. To reduce negative air quality impacts arising from transport-related	-2	
	emissions.	-2	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	-2	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	-2	
	from transport-related activities.	_	
	21. To minimise negative impacts on important and vulnerable soils	-2	
	resources used for agricultural purposes.		
Soils &	22. To reduce consumption of construction material and generation of	-1	
geology	construction waste as part of transport infrastructure projects.	_	
	23. To avoid or, where infeasible, minimise impacts to protected and	-2	
	designated geological and geomorphological sites.		
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	-2	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	2	
Heritage	cultural, architectural and archaeological resources.	-2	

Table A.40 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
KC4: Wide	ning 'strategic' roads	1	
	SEA Objectives	Rating	
	1. To avoid impacts on the integrity of European Conservation Sites	0	additional road space (i.e. road
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		widening) along strategic roads.
Flora &	2. To support the overall goal of the National Biodiversity Plan.	-1	Significantly negative impacts
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	-2	are expected for biodiversity,
	Dublin Area.	_	landscape, water, cultural
	4. To avoid or, where infeasible, minimise impacts on designated and	-2	heritage and waste. This
Landscape	protected landscapes and conservation areas.	_	measure will also create
Zarrascape	5. To minimise impacts on undesignated landscape resources	-2	additional road space which can
	(townscapes, seascapes, riverscapes, general landscapes).	_	_
	6. To increase accessibility to economic and employment opportunities,		be expected to be 'filled' by
	in particular for those who are physically, economically or socially	+2	additional car usage, thereby
Population	disadvantaged within the GDA.		resulting in significant negative
r op manor	7. To increase accessibility to quality public, cultural and community		impacts on air quality, climate
	services, in particular, for those who are physically, economically or	+2	change and greenhouse gases.
	socially disadvantaged within the GDA.		A key assumption in this
	8. To contribute to improvements to transport-related aspects of quality	+2	assessment is that the new road
	of life for residents, workers and visitors to the GDA.	12	infrastructure will not impact
	9. To support the objectives of the Environmental Noise Directive in	-1	-
Human	relation to transport-related noise.		on designated sites, such as
Health	10. To minimise safety risks to human health arising from transport	0	SACs – it is not possible to
	related activity.	U	determine this at this point in
	11. To support health improvements and benefits from transport-related	0	the environmental assessment.
	activities.	U	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	-1	
	objective is to support the aims and objectives of the Water Framework	-1	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	-1	
	14. To minimise impacts to groundwater systems and resources.	-1	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	-
	17. To minimise the risk of flooding.	-1	-
		-1	-
	18. To reduce negative air quality impacts arising from transport-related	-2	
<b>.</b> .	emissions.		
Air	19. To ensure compliance with the Air Framework Directive and	_	
	associated daughter Directives (and the transposing Regulations in	-2	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	-2	
	from transport-related activities.		-
	21. To minimise negative impacts on important and vulnerable soils	-2	
C :1 4	resources used for agricultural purposes.		
Soils &	22. To reduce consumption of construction material and generation of	-1	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	-2	
	designated geological and geomorphological sites.		-
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	-2	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	_	1
Heritage	cultural, architectural and archaeological resources.	-2	
Hernage	cantara, arcinecturar and arcinecological resources.		

Table A.41 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts
RC5: New 1	main roads and bypasses	T	
	SEA Objectives	Rating	This measure will create
	1. To avoid impacts on the integrity of European Conservation Sites	0	additional strategic road links
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		and bypasses. Significantly
Flora &	2. To support the overall goal of the National Biodiversity Plan.	-2	negative impacts are expected
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	-3	for biodiversity, air, noise,
	Dublin Area.		landscape, water, cultural
	4. To avoid or, where infeasible, minimise impacts on designated and	-3	heritage and waste. This
Landscape	protected landscapes and conservation areas.  5. To minimise impacts on undesignated landscape resources		measure will also create
	(townscapes, seascapes, riverscapes, general landscapes).	-3	significant additional road
	6. To increase accessibility to economic and employment opportunities,		space which can be expected to
	in particular for those who are physically, economically or socially	+2	be 'filled' by additional car
	disadvantaged within the GDA.		usage, thereby resulting in
Population	7. To increase accessibility to quality public, cultural and community		significant negative impacts on
	services, in particular, for those who are physically, economically or	+2	air quality, climate change and
	socially disadvantaged within the GDA.		greenhouse gases. A key
	8. To contribute to improvements to transport-related aspects of quality	. 2	assumption in this assessment is
	of life for residents, workers and visitors to the GDA.	+2	that the new road infrastructure
	9. To support the objectives of the Environmental Noise Directive in	-2	
Human	relation to transport-related noise.	-2	will not impact on designated
Health	10. To minimise safety risks to human health arising from transport	0	sites, such as SACs – it is not
	related activity.	U	possible to determine this at this
	11. To support health improvements and benefits from transport-related	0	point in the environmental
	activities.	Ü	assessment.
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework		
	Directive (WFD)	1	
Water	13. To minimise impacts to surfacewater systems and resources.	-1	
	14. To minimise impacts to groundwater systems and resources.	-1	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	-1	
	18. To reduce negative air quality impacts arising from transport-related	-2	
	emissions.	-2	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	-2	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	-2	
	from transport-related activities.		
	21. To minimise negative impacts on important and vulnerable soils	-2	
Soils &	resources used for agricultural purposes.		
geology	22. To reduce consumption of construction material and generation of	-1	
geology	construction waste as part of transport infrastructure projects.  23. To avoid or, where infeasible, minimise impacts to protected and		
	designated geological and geomorphological sites.	-3	
	24. To protect public assets and infrastructure.	0	1
Material			-
assets	25. To reduce the fossil fuel demand by the transport sector.	-2	
0.1: 1	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	-3	
Heritage	cultural, architectural and archaeological resources.		

Table A.42 Themes & Measures environmental assessment table

Strategy In		Discussion of impacts	
RC6: New 1	River/Canal crossings		
	SEA Objectives	Rating	This measure proposes
	1. To avoid impacts on the integrity of European Conservation Sites	0	additional crosses of
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	U	canals/rivers/bays etc so as to
Flora &	2. To support the overall goal of the National Biodiversity Plan.	-1	relieve pressure and congestion
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	-2	at existing crossing points. This
	Dublin Area.	-2	will have negative effects
	4. To avoid or, where infeasible, minimise impacts on designated and	-2	associated with new
Landscape	protected landscapes and conservation areas.	-2	infrastructure (biodiversity,
Eurascape	5. To minimise impacts on undesignated landscape resources	-2	
	(townscapes, seascapes, riverscapes, general landscapes).	_	landscape, water, cultural
	6. To increase accessibility to economic and employment opportunities,		heritage). Due to the fact that it
	in particular for those who are physically, economically or socially	+1	is assumed that the bridges will
Population	disadvantaged within the GDA.		be designed for vehicles, whilst
- of	7. To increase accessibility to quality public, cultural and community		also accommodating walking
	services, in particular, for those who are physically, economically or	+1	and cycling it will also increase
	socially disadvantaged within the GDA.		car-based traffic, resulting in
	8. To contribute to improvements to transport-related aspects of quality	+1	greater air pollution,
	of life for residents, workers and visitors to the GDA.	. –	greenhouse gas production and
	9. To support the objectives of the Environmental Noise Directive in	-1	fossil fuel consumption.
Human	relation to transport-related noise.		Positive impacts will occur due
Health	10. To minimise safety risks to human health arising from transport	0	-
	related activity.		to the increased accessibility
	11. To support health improvements and benefits from transport-related	0	and the improvement of QoL
	activities.		for residents, workers and
	12. To support the forthcoming River Basin Management Plans (RBMP)		visitors to the GDA.
	and Programme of Measures (POM). Where these are not available, the	-1	
	objective is to support the aims and objectives of the Water Framework		
	Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	-2	
	14. To minimise impacts to groundwater systems and resources.	-1	
	15. To minimise impacts to coastal systems and resources.	-1	
	16. To minimise impacts to transitional systems and resources.	-1	
	17. To minimise the risk of flooding.	-1	
-	18. To reduce negative air quality impacts arising from transport-related	-	
	emissions.	-1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	-1	
	Ireland).		
Climanto	20. To contribute to the reduction of greenhouse gas emissions arising	1	
Climate	from transport-related activities.	-1	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	U	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	U	
	23. To avoid or, where infeasible, minimise impacts to protected and	-2	
	designated geological and geomorphological sites.	-2	
16	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	-1	1
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	1
Cultural	27. To avoid or, where infeasible, minimise impacts to designated		1
Heritage	cultural, architectural and archaeological resources.	-2	
- 101111160	,	l .	

Table A.43 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
SS3: Build 1	residential 'Home Zones'		
	SEA Objectives	Rating	This measure will result in the
	1. To avoid impacts on the integrity of European Conservation Sites	0	designing of residential streets
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		in which the road space is
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	shared between drivers and
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	other road users with the wider
	Dublin Area.	U	needs of residents in mind. This
	4. To avoid or, where infeasible, minimise impacts on designated and	0	will result in a positive effect on
Landscape	protected landscapes and conservation areas.	0	the QoL of residents, workers
Larrascape	5. To minimise impacts on undesignated landscape resources	+2	and visitors to the GDA and
	(townscapes, seascapes, riverscapes, general landscapes).		
	6. To increase accessibility to economic and employment opportunities,	_	will result in an increase in
	in particular for those who are physically, economically or socially	0	cycling and walking. Overall,
Population	disadvantaged within the GDA.		due to less car movements in
1	7. To increase accessibility to quality public, cultural and community	_	residential areas, there will be
	services, in particular, for those who are physically, economically or	0	positive impacts on landscape,
	socially disadvantaged within the GDA.		noise and air.
	8. To contribute to improvements to transport-related aspects of quality	+1	
	of life for residents, workers and visitors to the GDA.		
	9. To support the objectives of the Environmental Noise Directive in	+1	
Human	relation to transport-related noise.		
Health	10. To minimise safety risks to human health arising from transport	+1	
	related activity.		
	11. To support health improvements and benefits from transport-related	+1	
	activities.		
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework		
	Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	. 1	
	emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
Cl: ·	20. To contribute to the reduction of greenhouse gas emissions arising	0	
Climate	from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	U	
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated		
Heritage	cultural, architectural and archaeological resources.	0	
Ticiimge	Canarai, arcinecturar and arcinecological resources.		

Table A.44 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
SS6: Pedest	rian areas in town centres		
	SEA Objectives	Rating	This measure aims to provide
	1. To avoid impacts on the integrity of European Conservation Sites	0	pedestrianisation and shared
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		spaces in commercial and local
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	centres. This will have a
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	positive effect on designated,
	Dublin Area.	U	undesignated and protected
	4. To avoid or, where infeasible, minimise impacts on designated and	+2	townscapes and conservation
Landscape	protected landscapes and conservation areas.	12	areas due to the reduction of
Lanascape	5. To minimise impacts on undesignated landscape resources	+2	
	(townscapes, seascapes, riverscapes, general landscapes).	12	traffic and its polluting effects.
	6. To increase accessibility to economic and employment opportunities,		The reduction in the number of
	in particular for those who are physically, economically or socially	0	vehicles in the key centres will
Population	disadvantaged within the GDA.		also result in a reduction in the
r op anation	7. To increase accessibility to quality public, cultural and community		amount of noise pollution
	services, in particular, for those who are physically, economically or	0	generated. There will also be
	socially disadvantaged within the GDA.		positive effects on health as
	8. To contribute to improvements to transport-related aspects of quality	0	some transport users will
	of life for residents, workers and visitors to the GDA.		switch from private transport to
	9. To support the objectives of the Environmental Noise Directive in	+2	travel by foot and by bicycle
Human	relation to transport-related noise.		
Health	10. To minimise safety risks to human health arising from transport	+1 +1	within the key centres and will
	related activity.		reduce the number of accidents
	11. To support health improvements and benefits from transport-related		within key centres. The
	activities.		reduction in the amount of
	12. To support the forthcoming River Basin Management Plans (RBMP)	0	commuters travelling into key
	and Programme of Measures (POM). Where these are not available, the		centres in private vehicles will
	objective is to support the aims and objectives of the Water Framework	Ü	result in positive effects on the
	Directive (WFD)		air quality and climate.
Water	13. To minimise impacts to surfacewater systems and resources.	0	Similarly this measure will
	14. To minimise impacts to groundwater systems and resources.	0	result in a reduction in the fossil
	15. To minimise impacts to coastal systems and resources.	0	fuel demand, as more people
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	switch to bicycle, pedestrian
	18. To reduce negative air quality impacts arising from transport-related	0	and public transport. This
	emissions.	+2	measure will also reduce
Air	19. To ensure compliance with the Air Framework Directive and		impacts to cultural, and
7111	associated daughter Directives (and the transposing Regulations in	+1	architectural within key centres.
	Ireland).	' 1	It will also allow for sites which
	20. To contribute to the reduction of greenhouse gas emissions arising		are currently used for car-
Climate	from transport-related activities.	+1	parking to be reused and
	21. To minimise negative impacts on important and vulnerable soils		regenerated.
	resources used for agricultural purposes.	0	regenerateur
Soils &	22. To reduce consumption of construction material and generation of		
geology	construction waste as part of transport infrastructure projects.	0	
0000003	23. To avoid or, where infeasible, minimise impacts to protected and		
	designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	
Material			
assets	25. To reduce the fossil fuel demand by the transport sector.	+1	
	26. To assist with the reuse and regeneration of brownfield sites.	+1	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	+1	
Heritage	cultural, architectural and archaeological resources.		

Table A.45 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts
SS7: Look a	fter streets better	n .:	mi
	SEA Objectives	Rating	This measure, which will focus
	1. To avoid impacts on the integrity of European Conservation Sites	0	on making improvements to
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	and maintaining streetscapes,
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	will result in a moderate
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	positive effect on undesignated
	Dublin Area.		landscape resources, especially
	4. To avoid or, where infeasible, minimise impacts on designated and	0	streetscapes. This measure will
Landscape	protected landscapes and conservation areas.		also result in better conditions
•	5. To minimise impacts on undesignated landscape resources	+2	for cycling and walking and
	(townscapes, seascapes, riverscapes, general landscapes).		will thus have a minor positive
	6. To increase accessibility to economic and employment opportunities,	0	effect on the QoL and lead to
	in particular for those who are physically, economically or socially	0	
Population	disadvantaged within the GDA.  7. To increase accessibility to quality public, cultural and community		higher levels of exercise (cycling
		0	and walking) and health
	services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	U	improvements. The improving
	8. To contribute to improvements to transport-related aspects of quality		and maintaining streetscapes
	of life for residents, workers and visitors to the GDA.	+1	includes repairing road surfaces
	9. To support the objectives of the Environmental Noise Directive in		and removal of obstructing
Human	relation to transport-related noise.	0	signage. This will improve the
Health	10. To minimise safety risks to human health arising from transport		safety conditions, especially for
	related activity.	+1	cyclists, and thus will have a
	11. To support health improvements and benefits from transport-related		minor positive effect regarding
	activities.	+1	the minimisation of safety risks
	12. To support the forthcoming River Basin Management Plans (RBMP)		to human health.
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework	0	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related		
	emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
C1: 1	20. To contribute to the reduction of greenhouse gas emissions arising	0	
Climate	from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	U	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	U	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	0	
Maton: -1	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	

Table A.46 Themes & Measures environmental assessment table

Strategy In FM1: Tax v	tervention alue of land, not property		Discussion of impacts
	SEA Objectives	Rating	This measure will result in a
	1. To avoid impacts on the integrity of European Conservation Sites	_	maximisation of the use of land,
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	higher densities where land
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	values are higher, e.g. close to
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	_	public transport. This measure
	Dublin Area.	0	will lead to better use of land
	4. To avoid or, where infeasible, minimise impacts on designated and	0	through the use of higher
Landscape	protected landscapes and conservation areas.	U	densities. This will minimise
Zarrascupe	5. To minimise impacts on undesignated landscape resources	+1	land utilisation and therefore
	(townscapes, seascapes, riverscapes, general landscapes).	' 1	
	6. To increase accessibility to economic and employment opportunities,		have a minor positive effect on
	in particular for those who are physically, economically or socially	+1	the minimisation of impacts on
Population	disadvantaged within the GDA.		undesignated landscape
1	7. To increase accessibility to quality public, cultural and community		resources. By discouraging
	services, in particular, for those who are physically, economically or	+1	unsustainable development of
	socially disadvantaged within the GDA.		land it may result in minor
	8. To contribute to improvements to transport-related aspects of quality	0	positive impacts on noise, air
	of life for residents, workers and visitors to the GDA.		and climate. Overall, this
	9. To support the objectives of the Environmental Noise Directive in	+1	measure will result in better
Human	relation to transport-related noise.		land use which in turn will
Health	10. To minimise safety risks to human health arising from transport	0	facilitate greater access to
	related activity.		transport and thus have a minor
	11. To support health improvements and benefits from transport-related	0	-
	activities.		positive effect on accessibility to
	12. To support the forthcoming River Basin Management Plans (RBMP)		economic and employment
	and Programme of Measures (POM). Where these are not available, the	0	opportunities, and quality
	objective is to support the aims and objectives of the Water Framework Directive (WFD)		public, cultural and community
	13. To minimise impacts to surfacewater systems and resources.	0	services. It will also afford
Water			protection of public assets and
	14. To minimise impacts to groundwater systems and resources.	0	infrastructure, i.e. encouraging
	15. To minimise impacts to coastal systems and resources.	0	development adjacent to public
	16. To minimise impacts to transitional systems and resources.	0	transport nodes and therefore
	17. To minimise the risk of flooding.	0	have a minor positive effect on
	18. To reduce negative air quality impacts arising from transport-related	+1	public assets and infrastructure.
	emissions.	+1	There will also be a moderate
Air	19. To ensure compliance with the Air Framework Directive and		positive effect due to it being
	associated daughter Directives (and the transposing Regulations in	+1	=
	Ireland).		able to directly promote and
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+1	encourage the reuse and
	from transport-related activities.	' -	regeneration of brownfield
	21. To minimise negative impacts on important and vulnerable soils	0	sites.
	resources used for agricultural purposes.	Ŭ	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		-
Material	24. To protect public assets and infrastructure.	+1	
assets	25. To reduce the fossil fuel demand by the transport sector.	0	
	26. To assist with the reuse and regeneration of brownfield sites.	+2	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	1
	cultural, architectural and archaeological resources.	0	1

Table A.47 Themes & Measures environmental assessment table

Strategy In FM3: Increa	tervention ase taxes on motoring	Discussion of impacts	
	SEA Objectives	Rating	An increase in Vehicle
	1. To avoid impacts on the integrity of European Conservation Sites	_	Registration Tax and Road Tax
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	will lead to a reduction in car
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	ownership, especially cars with
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		1 1 1
	Dublin Area.	0	higher CO2 emissions (if VRT is directly linked to CO2
T 1	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	emissions) and a modal shift
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	from cars to public transport. While this will result in minor
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	-2	positive effects on air quality, greenhouse gas emissions fossil
Population	disadvantaged within the GDA.	_	fuel use and support the
•	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	-2	Environmental Noise Directive, it will conversely have moderate negative effects for
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	-1	those who are physically,
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	+1	economically or socially disadvantaged and rely on
Health	10. To minimise safety risks to human health arising from transport related activity.	0	private vehicles, and cause some hardship for those who
	11. To support health improvements and benefits from transport-related	0	use private vehicles to commut
	activities.  12. To support the forthcoming River Basin Management Plans (RBMP)		to and from employment or use
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	their vehicles for employment purposes.
TA7 - 1	13. To minimise impacts to surfacewater systems and resources.	0	-
Water	14. To minimise impacts to groundwater systems and resources.	0	-
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+1	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+1	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
0 0)	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	1
Material	25. To reduce the fossil fuel demand by the transport sector.		-
assets		+1	-
C 1: 1	26. To assist with the reuse and regeneration of brownfield sites.	0	-
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.48 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts
FM4: Fuel o	or carbon taxes	1	
	SEA Objectives	Rating	The positive effects of a fuel tax
	1. To avoid impacts on the integrity of European Conservation Sites	0	will include the reduction in the
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	use of private vehicles for short
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	trips, and thus encourage more
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	walking and cycling, with their
	Dublin Area.		associated health benefits. It
	4. To avoid or, where infeasible, minimise impacts on designated and	+1	may be expected to also lead to
Landscape	protected landscapes and conservation areas.  5. To minimise impacts on undesignated landscape resources		moderate positive effects for
	(townscapes, seascapes, riverscapes, general landscapes).	+1	landscape, air quality, support
	6. To increase accessibility to economic and employment opportunities,		the objectives of the
	in particular for those who are physically, economically or socially	-2	Environmental Noise Directive,
	disadvantaged within the GDA.		reduce greenhouse gas
Population	7. To increase accessibility to quality public, cultural and community		emissions and reduce fossil fuel
	services, in particular, for those who are physically, economically or	-2	demand. However, it will also
	socially disadvantaged within the GDA.		
	8. To contribute to improvements to transport-related aspects of quality	4	result in barriers to accessibility,
	of life for residents, workers and visitors to the GDA.	+1	particularly for those who are
	9. To support the objectives of the Environmental Noise Directive in	. 2	physically, economically or
Human	relation to transport-related noise.	+2	socially disadvantaged and will
Health	10. To minimise safety risks to human health arising from transport	0	significantly affect those who
	related activity.	U	use private vehicles for
	11. To support health improvements and benefits from transport-related	+1	accessing economic and
	activities.	71	employment opportunities, and
	12. To support the forthcoming River Basin Management Plans (RBMP)		public, cultural and community
	and Programme of Measures (POM). Where these are not available, the	0	facilities. Overall an increase in
	objective is to support the aims and objectives of the Water Framework		fuel taxes will have a minor
	Directive (WFD)		positive effect on QoL due to
Water	13. To minimise impacts to surfacewater systems and resources.	0	the reduction in use of private
	14. To minimise impacts to groundwater systems and resources.	0	vehicles and the resulting faster
	15. To minimise impacts to coastal systems and resources.	0	trips. The overall effect will
	16. To minimise impacts to transitional systems and resources.	0	depend very much on the scale
	17. To minimise the risk of flooding.	0	or magnitude of the fuel tax.
	18. To reduce negative air quality impacts arising from transport-related	. 0	of magnitude of the fact tax.
	emissions.	+2	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+2	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+2	
Cililate	from transport-related activities.	TZ	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	Ü	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	Ŭ	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	+2	
uoocto	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.	0	

Table A.49 Themes & Measures environmental assessment table

Strategy In IG1: Better	tervention located Government developments and facilities	Discussion of impacts	
- SI. Seller	SEA Objectives	Rating	The strategic locating of Health
	To avoid impacts on the integrity of European Conservation Sites	_	Facilities, Education Facilities
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	and Industrial/Employment
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	Facilities will lead to a
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		1
	Dublin Area.	0	reduction in the need to travel and will increase accessibility.
I am do samo	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	There will be moderate positive
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	effects, particularly for those who are physically,
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+2	economically and socially disadvantaged due to the
Population	disadvantaged within the GDA.		increased accessibility to
- ·I	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or	+2	necessary facilities. There will also be a minor positive effect
	socially disadvantaged within the GDA.		on the QoL due to easier access
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	to facilities strategically located and served by adequate public
Human	<ol><li>To support the objectives of the Environmental Noise Directive in relation to transport-related noise.</li></ol>	+1	transport systems. The
Health	10. To minimise safety risks to human health arising from transport related activity.	0	reduction in the need to travel as a result of this measure will also support the objectives of the Environmental Noise
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP)		Directive. The reduction in the
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	need to travel by private vehicles will also lead to a
	13. To minimise impacts to surfacewater systems and resources.	0	reduction in greenhouse gas
Water	To minimise impacts to standerwater systems and resources.  14. To minimise impacts to groundwater systems and resources.	0	emissions as people attracted to
			the facilities will be adequately
	15. To minimise impacts to coastal systems and resources.	0	provided with public transpor
	16. To minimise impacts to transitional systems and resources.	0	cycling and walking options.
	17. To minimise the risk of flooding.	0	For similar reasons there will b
	18. To reduce negative air quality impacts arising from transport-related emissions.	+1	a reduction in the negative air quality impacts arising from
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+1	transport-related emissions, ensure compliance with Air
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+1	Framework Directive, and a reduction in fossil fuel demand
	21. To minimise negative impacts on important and vulnerable soils	0	as more people switch to publi
	resources used for agricultural purposes.	0	transport. The location and
Soils &	22. To reduce consumption of construction material and generation of	0	design of these facilities will
geology	construction waste as part of transport infrastructure projects.	0	also provide minor positive
-	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	effects for the reuse and
	24. To protect public assets and infrastructure.	0	regeneration of brownfield
Material			sites.
assets	25. To reduce the fossil fuel demand by the transport sector.	+1	
Cultural	26. To assist with the reuse and regeneration of brownfield sites.	+1	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.50 Themes & Measures environmental assessment table

Strategy In PM2: More	tervention 'mixed use' development	Discussion of impacts	
- 1.12. 111010	SEA Objectives	Rating	This measure focuses on
	To avoid impacts on the integrity of European Conservation Sites	_	locating development closer to
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	places of work, education, retail
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	and leisure, and will reduce the
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		<b>1</b>
	Dublin Area.	0	need to travel and the distances travelled. This will have a
ī 1	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	minor positive effect on
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	+1	undesignated landscape resources. There will also be
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+2	moderately significant positive effects due to the increased
Population	disadvantaged within the GDA.		accessibility to economic and
1 op alation	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or	+2	employment opportunities, and quality public, cultural and
	socially disadvantaged within the GDA.		community services. Due to the
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+2	fact that this measure will lead to shorter and less frequent
Human	<ol><li>To support the objectives of the Environmental Noise Directive in relation to transport-related noise.</li></ol>	+1	trips there will be a moderate
Health	10. To minimise safety risks to human health arising from transport related activity.	0	positive effect on QoL. The shorter trips which would resul
	11. To support health improvements and benefits from transport-related activities.	+1	from the implementation of thi measure will result in greater
	12. To support the forthcoming River Basin Management Plans (RBMP)		utilisation of softer modes of
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework	0	transport, especially walking and cycling, and thus have a
	Directive (WFD)	0	minor positive effect on health.
Water	13. To minimise impacts to surfacewater systems and resources.	0	As a result of reduced need to
	14. To minimise impacts to groundwater systems and resources.	0	travel there will also be
	15. To minimise impacts to coastal systems and resources.	0	moderate positive effects for air
	16. To minimise impacts to transitional systems and resources.	0	quality, reduction in
	17. To minimise the risk of flooding.	0	greenhouse gas emissions and a
	18. To reduce negative air quality impacts arising from transport-related emissions.	+2	reduction in the fossil fuel
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+2	demand. It will also lead to a minor positive effect on the reuse and regeneration of
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+2	brownfield sites and supporting the Environmental Noise
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	Directive.
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
Беогоду	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		-
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	+2	
	26. To assist with the reuse and regeneration of brownfield sites.	+1	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

 Table A.51
 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
PM3: Mixed	d housing types in schemes	1	
	SEA Objectives	Rating	An increase in the variety of
	1. To avoid impacts on the integrity of European Conservation Sites	0	housing will lead to reduced
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		need to relocate in the event of
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	household size increasing or
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	decreasing. It will facilitate
	Dublin Area.	Ŭ	people living closer to their
	4. To avoid or, where infeasible, minimise impacts on designated and	0	places of education,
Landscape	protected landscapes and conservation areas.		employment, etc. Therefore
1	5. To minimise impacts on undesignated landscape resources	0	there will be positive effects on
	(townscapes, seascapes, riverscapes, general landscapes).		the accessibility to economic
	6. To increase accessibility to economic and employment opportunities,	4	-
	in particular for those who are physically, economically or socially	+1	and employment opportunities
Population	disadvantaged within the GDA.		and quality public, cultural and
•	7. To increase accessibility to quality public, cultural and community	. 1	community services as well as
	services, in particular, for those who are physically, economically or	+1	supporting the objectives of the
	socially disadvantaged within the GDA.		Environmental Noise Directive,
	8. To contribute to improvements to transport-related aspects of quality	+2	reducing greenhouse gas
	of life for residents, workers and visitors to the GDA.		emissions and reducing the
I Ivano on	9. To support the objectives of the Environmental Noise Directive in	+1	fossil fuel demand. This
Human Health	relation to transport-related noise.  10. To minimise safety risks to human health arising from transport		measure will reduce the
Health	,	0	number of times households
	related activity.  11. To support health improvements and benefits from transport-related		must relocate outside of their
	activities.	0	existing communities for
	12. To support the forthcoming River Basin Management Plans (RBMP)		•
	and Programme of Measures (POM). Where these are not available, the		accommodation purposes, and
	objective is to support the aims and objectives of the Water Framework	0	overall will facilitate the
	Directive (WFD)		development of stronger and
	13. To minimise impacts to surfacewater systems and resources.	0	more diverse communities.
Water	14. To minimise impacts to groundwater systems and resources.	0	Overall, it will reduce the need
			to travel. Therefore it will have
	15. To minimise impacts to coastal systems and resources.	0	a moderate positive effect on
	16. To minimise impacts to transitional systems and resources.	0	the QoL, especially for
	17. To minimise the risk of flooding.	0	residents.
	18. To reduce negative air quality impacts arising from transport-related	+1	
	emissions.	1.1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+1	
Chinate	from transport-related activities.	, -	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.		
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	+1	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.	0	

 Table A.52
 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts
PM4: More	accessible housing estates		
	SEA Objectives	Rating	The provision of direct walking
	1. To avoid impacts on the integrity of European Conservation Sites	0	and cycling networks will have
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	positive effects on the
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	accessibility of economic and
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	employment opportunities, and
	Dublin Area.		quality public, cultural and
	4. To avoid or, where infeasible, minimise impacts on designated and	+1	community serves, especially
Landscape	protected landscapes and conservation areas.		for persons who are
•	5. To minimise impacts on undesignated landscape resources	+1	economically or socially
	(townscapes, seascapes, riverscapes, general landscapes).		disadvantaged. It will also
	6. To increase accessibility to economic and employment opportunities,	+1	increase the QoL due to the ease
	in particular for those who are physically, economically or socially	+1	of access to facilities and
Population	disadvantaged within the GDA.  7. To increase accessibility to quality public, cultural and community		
	services, in particular, for those who are physically, economically or	+1	stimulate higher levels of
	socially disadvantaged within the GDA.	71	physical exercise (walking and
	8. To contribute to improvements to transport-related aspects of quality		cycling) and therefore have a
	of life for residents, workers and visitors to the GDA.	+1	minor positive effect on the
	9. To support the objectives of the Environmental Noise Directive in		health improvement and benefi
Human	relation to transport-related noise.	+1	objective. This measure will also
Health	10. To minimise safety risks to human health arising from transport		minimise safety risks to human
	related activity.	+1	health, especially to that of
	11. To support health improvements and benefits from transport-related		walkers and cyclists. The
	activities.	+1	provision of cycling and
	12. To support the forthcoming River Basin Management Plans (RBMP)		walking networks will also
	and Programme of Measures (POM). Where these are not available, the	0	reduce the need to travel by
	objective is to support the aims and objectives of the Water Framework	0	private vehicle, especially for
	Directive (WFD)		short trips, and will therefore
Water	13. To minimise impacts to surfacewater systems and resources.	0	have minor positive effects on
	14. To minimise impacts to groundwater systems and resources.	0	landscape, the objectives of the
	15. To minimise impacts to coastal systems and resources.	0	Environmental Noise Directive,
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	on the air quality, on the
	18. To reduce negative air quality impacts arising from transport-related	0	reduction of greenhouse gas
	emissions.	+1	emissions and the reduction of
Air	19. To ensure compliance with the Air Framework Directive and		the fossil fuel demand.
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
	20. To contribute to the reduction of greenhouse gas emissions arising		
Climate	from transport-related activities.	+1	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	U	
361	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	+1	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	1
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	

 Table A.53
 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
PM6: Make	developers improve transport		
	SEA Objectives	Rating	Evaluating impacts and
	1. To avoid impacts on the integrity of European Conservation Sites	0	securing developer
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	O	contributions in order to ensure
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	sustainable modes of transport
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	in all new developments will
	Dublin Area.	U	have a positive effect. It will
	4. To avoid or, where infeasible, minimise impacts on designated and	+1	facilitate improvements in
Landscape	protected landscapes and conservation areas.	+1	accessibility, especially via
Lariuscape	5. To minimise impacts on undesignated landscape resources	+1	
	(townscapes, seascapes, riverscapes, general landscapes).	⊤1	public transport. It will also
	6. To increase accessibility to economic and employment opportunities,		contribute to the QoL for
	in particular for those who are physically, economically or socially	+1	residents, workers and visitors
Population	disadvantaged within the GDA.		to the GDA and will thus have a
ropulation	7. To increase accessibility to quality public, cultural and community		minor positive effect on this
	services, in particular, for those who are physically, economically or	+1	objective. The mitigation of
	socially disadvantaged within the GDA.		adverse transport impacts and
	8. To contribute to improvements to transport-related aspects of quality	+1	the associated increase in use of
	of life for residents, workers and visitors to the GDA.	11	public transport, which this
	9. To support the objectives of the Environmental Noise Directive in	0	measure will result in, will lead
Human	relation to transport-related noise.	U	
Health	10. To minimise safety risks to human health arising from transport	0	to minor positive effects on
	related activity.	Ü	landscape, the air quality and
	11. To support health improvements and benefits from transport-related	0	on the reduction of greenhouse
	activities.	U	gases and the fossil fuel
	12. To support the forthcoming River Basin Management Plans (RBMP)		demand.
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework	O	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	U	
	emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and		
7111	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).	71	
	20. To contribute to the reduction of greenhouse gas emissions arising		
Climate	from transport-related activities.	+1	
	21. To minimise negative impacts on important and vulnerable soils		
	resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of		
geology	construction waste as part of transport infrastructure projects.	0	
geology	23. To avoid or, where infeasible, minimise impacts to protected and		
	designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	
Material			
assets	25. To reduce the fossil fuel demand by the transport sector.	+1	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.	_	

Table A.54 Themes & Measures environmental assessment table

Strategy Intervention PM9: Offices, shops etc near stations			Discussion of impacts
	SEA Objectives	Rating	This measure, which focuses on
	1. To avoid impacts on the integrity of European Conservation Sites	_	encouraging and directing high
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	density trip intensive
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	developments towards
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		1 -
	Dublin Area.	0	locations that are easily accessed via public transport,
T 1	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	will reduce the impacts felt by
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	+1	undesignated landscape resources. It will also allow for
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+2	easier access to the facilities and thus enhance the accessibility o
Population	disadvantaged within the GDA.		physically, economically and
1	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or	+2	socially disadvantaged communities within the GDA
	socially disadvantaged within the GDA.		and overall improve the QoL of
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+2	residents, workers and visitors to the GDA and therefore have
Human	<ol><li>To support the objectives of the Environmental Noise Directive in relation to transport-related noise.</li></ol>	+1	moderate positive effects on
Health	10. To minimise safety risks to human health arising from transport related activity.	0	these objectives. The concentration of services and
	11. To support health improvements and benefits from transport-related activities.	0	facilities at locations served by public transport will also lead
	12. To support the forthcoming River Basin Management Plans (RBMP)		-
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework	0	to a reduction in the need to travel by private vehicles, and thus lead to an improvement
	Directive (WFD)		air quality, a reduction in
Water	13. To minimise impacts to surfacewater systems and resources.	0	greenhouse gas emissions and
	14. To minimise impacts to groundwater systems and resources.	0	fossil fuel demand and support
	15. To minimise impacts to coastal systems and resources.	0	the objectives of the
	16. To minimise impacts to transitional systems and resources.	0	Environmental Noise Directive
	17. To minimise the risk of flooding.	0	Due to a policy of high density
	18. To reduce negative air quality impacts arising from transport-related emissions.	+2	there will be positive impacts
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+2	on the reuse and regeneration o brownfield sites and the protection of public assets and
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+2	infrastructure.
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.  23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
Material	24. To protect public assets and infrastructure.	+2	
assets	25. To reduce the fossil fuel demand by the transport sector.	+2	
	26. To assist with the reuse and regeneration of brownfield sites.	+1	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

 Table A.55
 Themes & Measures environmental assessment table

Strategy Intervention PM10: Homes close to public transport			Discussion of impacts
	SEA Objectives	Rating	By concentrating denser
	1. To avoid impacts on the integrity of European Conservation Sites	_	residential development in
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	areas accessible by public
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	transport it will provide for
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		
	Dublin Area.	0	easier access to services/facilities, especially for
T 1	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	those who are physically,
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	economically or socially disadvantaged and will have a
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	+2	moderate positive effect on these objectives as well as
Population	disadvantaged within the GDA.		enhancing the QoL. The
- of	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or	+2	increased accessibility of these residential developments will
	socially disadvantaged within the GDA.		lead to a reduction in the need
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+2	to travel by private vehicle and thus have moderate positive
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	+1	effects on the air quality and the
Health	10. To minimise safety risks to human health arising from transport related activity.	0	reduction of greenhouse gas emissions. This measure will
	11. To support health improvements and benefits from transport-related activities.	0	result in a significant modal shift to public transport,
	12. To support the forthcoming River Basin Management Plans (RBMP)		walking and cycling and will
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework	0	therefore reduce the fossil fuel demand and support the
	Directive (WFD)		objectives of the Environmental
Water	13. To minimise impacts to surfacewater systems and resources.	0	Noise Directive. A policy of
	14. To minimise impacts to groundwater systems and resources.	0	higher residential densities in
	15. To minimise impacts to coastal systems and resources.	0	the areas where public transpor
	16. To minimise impacts to transitional systems and resources.	0	_
	17. To minimise the risk of flooding.	0	is readily available will also
	18. To reduce negative air quality impacts arising from transport-related emissions.	+2	protect public assets and infrastructure and encourage
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+2	the reuse and regeneration of brownfield sites.
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+2	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
5-0106y	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		1
Material	24. To protect public assets and infrastructure.	+2	
assets	25. To reduce the fossil fuel demand by the transport sector.	+2	
	26. To assist with the reuse and regeneration of brownfield sites.	+1	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.56 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts	
SC6: Persor	nal journey planning	ъ.		
	SEA Objectives	Rating	Individualised travel planning	
	1. To avoid impacts on the integrity of European Conservation Sites	0	and marketing measures have	
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	the potential to shift private	
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	vehicle users to more	
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	sustainable modes of transport.	
	Dublin Area.		It has the potential to inform	
	4. To avoid or, where infeasible, minimise impacts on designated and	0	people of their wider transport	
Landscape	protected landscapes and conservation areas.  5. To minimise impacts on undesignated landscape resources		choices which may lead to	
	(townscapes, seascapes, riverscapes, general landscapes).	0	easier means of transport and	
	6. To increase accessibility to economic and employment opportunities,		hence have a minor positive	
	in particular for those who are physically, economically or socially	+1	effect on accessibility to	
	disadvantaged within the GDA.	'1	economic and employment	
Population	7. To increase accessibility to quality public, cultural and community		opportunities, quality public,	
	services, in particular, for those who are physically, economically or	+1	cultural and community	
	socially disadvantaged within the GDA.	1.1		
	8. To contribute to improvements to transport-related aspects of quality		facilities and QoL. It will result	
	of life for residents, workers and visitors to the GDA.	+1	in increased numbers of people	
	9. To support the objectives of the Environmental Noise Directive in	0	walking and cycling and will	
Human	relation to transport-related noise.	0	thus have positive health	
Health	10. To minimise safety risks to human health arising from transport	0	benefits. A switch from private	
	related activity.	U	vehicles to public transport,	
	11. To support health improvements and benefits from transport-related	+1	walking and cycling will also	
	activities.	71	lead to minor positive effects	
	12. To support the forthcoming River Basin Management Plans (RBMP)		associated with improvements	
	and Programme of Measures (POM). Where these are not available, the	0	in air quality as well as	
	objective is to support the aims and objectives of the Water Framework		reductions in greenhouse gas	
	Directive (WFD)	_	emissions and fossil fuel	
Water	13. To minimise impacts to surfacewater systems and resources.	0	demand.	
	14. To minimise impacts to groundwater systems and resources.	0		
	15. To minimise impacts to coastal systems and resources.	0		
	16. To minimise impacts to transitional systems and resources.	0		
	17. To minimise the risk of flooding.	0		
	18. To reduce negative air quality impacts arising from transport-related	. 1		
	emissions.	+1		
Air	19. To ensure compliance with the Air Framework Directive and			
	associated daughter Directives (and the transposing Regulations in	+1		
	Ireland).			
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+1		
	from transport-related activities.	, -		
	21. To minimise negative impacts on important and vulnerable soils	0		
6 11 4	resources used for agricultural purposes.			
Soils &	22. To reduce consumption of construction material and generation of	0		
geology	construction waste as part of transport infrastructure projects.			
	23. To avoid or, where infeasible, minimise impacts to protected and	0		
	designated geological and geomorphological sites.	0	-	
Material	24. To protect public assets and infrastructure.	0		
assets	25. To reduce the fossil fuel demand by the transport sector.	+1		
	26. To assist with the reuse and regeneration of brownfield sites.	0		
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0		
Heritage	cultural, architectural and archaeological resources.	~		

Table A.57 Themes & Measures environmental assessment table

Strategy Intervention SC8: Develop Car clubs			Discussion of impacts	
SC8: Devel	•	D		
	SEA Objectives	Rating	The provision of car clubs	
	1. To avoid impacts on the integrity of European Conservation Sites	0	would have minor positive	
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	effects with regards to	
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	accessibility, especially for those	
fauna	3. To minimise impacts on locally-important biodiversity in the Greater Dublin Area.	0	who are physically,	
	To avoid or, where infeasible, minimise impacts on designated and		economically or socially	
	protected landscapes and conservation areas.	+1	disadvantaged. They would	
Landscape	To minimise impacts on undesignated landscape resources		provide a flexible, cheap	
	(townscapes, seascapes, riverscapes, general landscapes).	+1	alternative to private car	
	6. To increase accessibility to economic and employment opportunities,		ownership. Some journeys may	
	in particular for those who are physically, economically or socially	+1	be made shorter/improved	
D 1.0	disadvantaged within the GDA.		through the use of car club cars	
Population	7. To increase accessibility to quality public, cultural and community		and therefore there will be a	
	services, in particular, for those who are physically, economically or	+1	minor positive effect on the QoL	
	socially disadvantaged within the GDA.		objective. This measure will	
	8. To contribute to improvements to transport-related aspects of quality	+1	reduce the number of cars and	
	of life for residents, workers and visitors to the GDA.	71	the demand for space for car	
	9. To support the objectives of the Environmental Noise Directive in	+1	parking and is likely to have	
Human	relation to transport-related noise.	1.1		
Health	10. To minimise safety risks to human health arising from transport	0	minor positive impacts on	
	related activity.		landscape, the support of the	
	11. To support health improvements and benefits from transport-related	0	objectives of the Environmental	
	activities.		Noise Directive, air quality,	
	12. To support the forthcoming River Basin Management Plans (RBMP)		greenhouse gas emissions and	
	and Programme of Measures (POM). Where these are not available, the	0	the fossil fuel demand.	
	objective is to support the aims and objectives of the Water Framework Directive (WFD)			
	13. To minimise impacts to surfacewater systems and resources.	0		
Water	To minimise impacts to standerwater systems and resources.  14. To minimise impacts to groundwater systems and resources.	0		
	15. To minimise impacts to coastal systems and resources.	0		
	16. To minimise impacts to transitional systems and resources.	0		
	17. To minimise the risk of flooding.	0		
	18. To reduce negative air quality impacts arising from transport-related	+1		
	emissions.			
Air	19. To ensure compliance with the Air Framework Directive and	4		
	associated daughter Directives (and the transposing Regulations in	+1		
	Ireland).  20. To contribute to the reduction of greenhouse gas emissions arising		_	
Climate	from transport-related activities.	+1		
	21. To minimise negative impacts on important and vulnerable soils			
	resources used for agricultural purposes.	0		
Soils &	22. To reduce consumption of construction material and generation of			
geology	construction waste as part of transport infrastructure projects.	0		
0-0-0)	23. To avoid or, where infeasible, minimise impacts to protected and	-	-	
	designated geological and geomorphological sites.	0		
	24. To protect public assets and infrastructure.	0		
Material	25. To reduce the fossil fuel demand by the transport sector.	+1	•	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	1	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	1	
	cultural, architectural and archaeological resources.	0		
Heritage	cuntural, architectural and archaeological resources.			

Table A.58 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts	
SC10: On-li	ne working etc.			
	SEA Objectives	Rating	This measure, which aims to	
	1. To avoid impacts on the integrity of European Conservation Sites	0	reduce the need to travel for	
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		purposes such as employment,	
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	education, retail, etc., will result	
fauna	3. To minimise impacts on locally-important biodiversity in the Greater Dublin Area.	0	in a greater QoL and will	
	4. To avoid or, where infeasible, minimise impacts on designated and		reduce the amount of transport	
Landacana	protected landscapes and conservation areas.	0	necessary, thus having a minor	
Landscape	5. To minimise impacts on undesignated landscape resources	0	positive effect and reducing the amount of air pollutants	
	(townscapes, seascapes, riverscapes, general landscapes).		associated with transport,	
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	0	reducing greenhouse gas	
	disadvantaged within the GDA.	U	emissions and reducing the	
Population	7. To increase accessibility to quality public, cultural and community		fossil fuel demand.	
	services, in particular, for those who are physically, economically or	0	103311 fuel demand.	
	socially disadvantaged within the GDA.			
	8. To contribute to improvements to transport-related aspects of quality	. 2		
	of life for residents, workers and visitors to the GDA.	+2		
	9. To support the objectives of the Environmental Noise Directive in	0		
Human	relation to transport-related noise.	U		
Health	10. To minimise safety risks to human health arising from transport	0		
	related activity.	Ů		
	11. To support health improvements and benefits from transport-related	0		
	activities.			
	12. To support the forthcoming River Basin Management Plans (RBMP)			
	and Programme of Measures (POM). Where these are not available, the	0		
	objective is to support the aims and objectives of the Water Framework Directive (WFD)			
	13. To minimise impacts to surfacewater systems and resources.	0		
Water	14. To minimise impacts to groundwater systems and resources.	0		
	15. To minimise impacts to coastal systems and resources.	0		
	16. To minimise impacts to transitional systems and resources.	0		
	17. To minimise the risk of flooding.	0		
	18. To reduce negative air quality impacts arising from transport-related emissions.	+1		
Air	19. To ensure compliance with the Air Framework Directive and			
	associated daughter Directives (and the transposing Regulations in	+1		
	Ireland).			
Climata	20. To contribute to the reduction of greenhouse gas emissions arising	.1		
Climate	from transport-related activities.	+1		
	21. To minimise negative impacts on important and vulnerable soils	0		
	resources used for agricultural purposes.	· ·		
Soils &	22. To reduce consumption of construction material and generation of	0		
geology	construction waste as part of transport infrastructure projects.			
	23. To avoid or, where infeasible, minimise impacts to protected and	0		
	designated geological and geomorphological sites.	0		
Material	24. To protect public assets and infrastructure.	0		
assets	25. To reduce the fossil fuel demand by the transport sector.	+1		
	26. To assist with the reuse and regeneration of brownfield sites.	0		
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0		
Heritage	cultural, architectural and archaeological resources.			

Table A.59 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
SC11: Mobi	lity management planning		
	SEA Objectives	Rating	This measure seeks to promote
	1. To avoid impacts on the integrity of European Conservation Sites	0	sustainable transport planning
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	U	across the GDA, via the various
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	businesses, institutions and
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	sites. This will increase the
	Dublin Area.	U	accessibility to economic and
	4. To avoid or, where infeasible, minimise impacts on designated and	0	employment opportunities, and
Landscape	protected landscapes and conservation areas.	U	to quality, public, cultural and
Euroscupe	5. To minimise impacts on undesignated landscape resources	0	community services. This will
	(townscapes, seascapes, riverscapes, general landscapes).	Ü	,
	6. To increase accessibility to economic and employment opportunities,		be a moderate positive effect,
	in particular for those who are physically, economically or socially	+2	especially for those who are
Population	disadvantaged within the GDA.		physically, economically or
- or	7. To increase accessibility to quality public, cultural and community		socially disadvantaged. It will
	services, in particular, for those who are physically, economically or	+2	also reduce the amount of car-
	socially disadvantaged within the GDA.		based transport through the
	8. To contribute to improvements to transport-related aspects of quality	+2	promotion of public transport
	of life for residents, workers and visitors to the GDA.	. –	options. This measure is also
	9. To support the objectives of the Environmental Noise Directive in	+1	expected to lead to increased
Human	relation to transport-related noise.		levels of cycling and walking
Health	10. To minimise safety risks to human health arising from transport	0	, ,
	related activity.		and will thus have a minor
	11. To support health improvements and benefits from transport-related	+1	positive effect on health. The
	activities.		anticipated modal shift away
	12. To support the forthcoming River Basin Management Plans (RBMP)		from car-based transport will
	and Programme of Measures (POM). Where these are not available, the	0	have minor positive effects on
	objective is to support the aims and objectives of the Water Framework		air quality, noise, reduction in
	Directive (WFD)	0	greenhouse gas emissions and
Water	13. To minimise impacts to surfacewater systems and resources.	0	the reduction in fossil fuel
	14. To minimise impacts to groundwater systems and resources.	0	demand.
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	. 1	
	emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+1	
Cilitate	from transport-related activities.	71	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	U	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	U	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	J	
M-1	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	+1	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	1
Cultural	27. To avoid or, where infeasible, minimise impacts to designated		1
Heritage	cultural, architectural and archaeological resources.	0	
80	,	l	

Table A.60 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
SC12: Prom	notion of sustainable travel		
	SEA Objectives	Rating	
	1. To avoid impacts on the integrity of European Conservation Sites	0	focused on various educational
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		and marketing-based objectives.
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	Key areas will be on improving
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	driver behaviour; general
	Dublin Area.		education and awareness of
	4. To avoid or, where infeasible, minimise impacts on designated and	0	more sustainable forms of travel
Landscape	protected landscapes and conservation areas.		and transport; and greater
1	5. To minimise impacts on undesignated landscape resources	0	promotion of the cycling,
	(townscapes, seascapes, riverscapes, general landscapes).		walking and public transport.
	6. To increase accessibility to economic and employment opportunities,	4	0 1
	in particular for those who are physically, economically or socially	+1	This measure will result in
Population	disadvantaged within the GDA.		minor benefits for accessibility
-	7. To increase accessibility to quality public, cultural and community	. 1	(principally for populations
	services, in particular, for those who are physically, economically or	+1	who are economically deprived)
	socially disadvantaged within the GDA.		and a more pleasing transport
	8. To contribute to improvements to transport-related aspects of quality	+1	journey experience (QoL).
	of life for residents, workers and visitors to the GDA.		However, although some shift
Lluman	9. To support the objectives of the Environmental Noise Directive in	0	towards non-car modes of
Human Health	relation to transport-related noise.		transport are likely, it is not
Health	10. To minimise safety risks to human health arising from transport	0	expected that this will be
	related activity.  11. To support health improvements and benefits from transport-related		sufficient to result in positive
	activities.	+1	benefits for noise, air quality
	12. To support the forthcoming River Basin Management Plans (RBMP)		etc.
	and Programme of Measures (POM). Where these are not available, the	_	etc.
	objective is to support the aims and objectives of the Water Framework	0	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
vvater	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	0	
Air	emissions.		
All	19. To ensure compliance with the Air Framework Directive and	0	
	associated daughter Directives (and the transposing Regulations in Ireland).	U	
	20. To contribute to the reduction of greenhouse gas emissions arising		
Climate	from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils		
	resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of	_	
geology	construction waste as part of transport infrastructure projects.	0	
0 07	23. To avoid or, where infeasible, minimise impacts to protected and	-	
	designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural		U	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	
Heritage	cultural, architectural and archaeological resources.		

Table A.61 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts	
WS5: Impro	ove pedestrian facilities			
	SEA Objectives	Rating	Improvements to the walking	
	1. To avoid impacts on the integrity of European Conservation Sites	0	network will facilitate increased	
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		levels of walking and will	
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	improve the overall accessibility	
fauna	3. To minimise impacts on locally-important biodiversity in the Greater Dublin Area.	0	of economic and employment	
	4. To avoid or, where infeasible, minimise impacts on designated and		opportunities and quality	
Landscape	protected landscapes and conservation areas.	+1	public, cultural and community services. It will also have minor	
Lunascape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	+1	positive effect on the QoL of	
	6. To increase accessibility to economic and employment opportunities,		residents, workers and visitors	
	in particular for those who are physically, economically or socially	+1	in the GDA, as well as health	
	disadvantaged within the GDA.	, ,	improvements and benefits	
Population	7. To increase accessibility to quality public, cultural and community		associated with increased	
	services, in particular, for those who are physically, economically or	+1	exercise levels. An increase in	
	socially disadvantaged within the GDA.			
	8. To contribute to improvements to transport-related aspects of quality		walking, facilitated by an	
	of life for residents, workers and visitors to the GDA.	+1	improved walking network,	
	9. To support the objectives of the Environmental Noise Directive in	0	will also have positive effect on	
Human	relation to transport-related noise.	0	the landscape, air quality and,	
Health	10. To minimise safety risks to human health arising from transport	0	as private vehicle users switch	
	related activity.	U	to walking for shorter trips, will	
	11. To support health improvements and benefits from transport-related	+1	reduce both greenhouse gas	
	activities.	+1	emissions and reduce the fossil	
	12. To support the forthcoming River Basin Management Plans (RBMP)		fuel demand.	
	and Programme of Measures (POM). Where these are not available, the	0		
	objective is to support the aims and objectives of the Water Framework			
	Directive (WFD)			
Water	13. To minimise impacts to surfacewater systems and resources.	0		
	14. To minimise impacts to groundwater systems and resources.	0		
	15. To minimise impacts to coastal systems and resources.	0		
	16. To minimise impacts to transitional systems and resources.	0		
	17. To minimise the risk of flooding.	0		
	18. To reduce negative air quality impacts arising from transport-related			
	emissions.	+1		
Air	19. To ensure compliance with the Air Framework Directive and			
	associated daughter Directives (and the transposing Regulations in	+1		
	Ireland).			
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+1		
Climate	from transport-related activities.	+1		
	21. To minimise negative impacts on important and vulnerable soils	0		
	resources used for agricultural purposes.	U		
Soils &	22. To reduce consumption of construction material and generation of	0		
geology	construction waste as part of transport infrastructure projects.	Ů		
	23. To avoid or, where infeasible, minimise impacts to protected and	0		
	designated geological and geomorphological sites.			
Material	24. To protect public assets and infrastructure.	0		
Material assets	25. To reduce the fossil fuel demand by the transport sector.	+1		
ussels	26. To assist with the reuse and regeneration of brownfield sites.	0		
		<del>                                     </del>	1	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0		

Table A.62 Themes & Measures environmental assessment table

Strategy In	tervention		Discussion of impacts
CY8: Impro	ve / extend cycle routes		
	SEA Objectives	Rating	This measure seeks to improve
	1. To avoid impacts on the integrity of European Conservation Sites	0	the provision of cycle networks.
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	O	An improved cycle network
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	will result in improved access to
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	economic and employment
	Dublin Area.	U	opportunities, and quality
	4. To avoid or, where infeasible, minimise impacts on designated and	0	public, cultural and community
Landscape	protected landscapes and conservation areas.	O	services. This measure, which
	5. To minimise impacts on undesignated landscape resources	0	will lead to increased levels of
	(townscapes, seascapes, riverscapes, general landscapes).		cycling, will have minor
	6. To increase accessibility to economic and employment opportunities,	4	•
	in particular for those who are physically, economically or socially	+1	positive effects on the QoL and
Population	disadvantaged within the GDA.		will lead to health
•	7. To increase accessibility to quality public, cultural and community	. 1	improvements and benefits due
	services, in particular, for those who are physically, economically or	+1	to the increased levels of
	socially disadvantaged within the GDA.		physical exercise. The reduction
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	in private vehicle use for the
	9. To support the objectives of the Environmental Noise Directive in  9. To support the objectives of the Environmental Noise Directive in		purpose of short journeys will
Human	relation to transport-related noise.	0	also have positive effects on air
Health	10. To minimise safety risks to human health arising from transport		quality and reduce greenhouse
riculti	related activity.	0	gas emissions and reduce the
	11. To support health improvements and benefits from transport-related		fossil fuel demand.
	activities.	+1	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework	0	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related		
	emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
<i>C</i> 1: 1	20. To contribute to the reduction of greenhouse gas emissions arising	. 1	
Climate	from transport-related activities.	+1	
-	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	O	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	O	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	,	
Matorial	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	+1	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
			1
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	

 Table A.63
 Themes & Measures environmental assessment table

Strategy In CY9: Provi	atervention de secure cycle parking		Discussion of impacts
	SEA Objectives	Rating	This measure focuses on the
	1. To avoid impacts on the integrity of European Conservation Sites	_	provision of secure cycle
Biodiversity	(0.0 100) 1 1 1 1 1 1 1 0 0 0 0 0	0	parking facilities. The increased
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	security of bicycle parking
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	facilities will allow for increased
	Dublin Area.	U	levels of cycling which in turn
	4. To avoid or, where infeasible, minimise impacts on designated and	0	will lead to a minor positive
Landscape	protected landscapes and conservation areas.		effect on the QoL of residents,
	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	workers and visitors to the
			GDA as well as resulting in
	<ol><li>To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially</li></ol>	0	health improvements and
	disadvantaged within the GDA.	0	benefits. Due to the increased
Population	7. To increase accessibility to quality public, cultural and community		availability of secure cycle
	services, in particular, for those who are physically, economically or	0	parking facilities more people
	socially disadvantaged within the GDA.		will chose to cycle rather than
	8. To contribute to improvements to transport-related aspects of quality		-
	of life for residents, workers and visitors to the GDA.	+1	drive, especially for shorter
	9. To support the objectives of the Environmental Noise Directive in	0	trips.
Human	relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport	0	
	related activity.	U	
	11. To support health improvements and benefits from transport-related	+1	
	activities.	71	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework		
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	0	
	emissions.	U	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	0	
	from transport-related activities.		
	21. To minimise negative impacts on important and vulnerable soils	0	
C - :1 - 0	resources used for agricultural purposes.		-
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		_
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.  24. To protect public assets and infrastructure.	0	4
Material		0	-
assets	25. To reduce the fossil fuel demand by the transport sector.	0	-
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.		

Table A.64 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
CY10: On-s	treet bicycle rental	1	
	SEA Objectives	Rating	This measure, which aims to
	1. To avoid impacts on the integrity of European Conservation Sites	0	provide cycle rental schemes
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		throughout the GDA at strategic
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	locations, will result in minor
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	positive effects on accessibility
	Dublin Area.	Ü	to economic and employment
	4. To avoid or, where infeasible, minimise impacts on designated and	0	opportunities, and quality
Landscape	protected landscapes and conservation areas.		public, cultural and community
1	5. To minimise impacts on undesignated landscape resources	0	services. It will also lead to
	(townscapes, seascapes, riverscapes, general landscapes).		minor positive effects for QoL
	6. To increase accessibility to economic and employment opportunities,	. 1	and support health
	in particular for those who are physically, economically or socially	+1	
Population	disadvantaged within the GDA.		improvements and benefits.
	7. To increase accessibility to quality public, cultural and community	. 1	However, this measure will
	services, in particular, for those who are physically, economically or	+1	result in an increase in the
	socially disadvantaged within the GDA.  8. To contribute to improvements to transport related aspects of quality.		number of accidents associated
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	with cycling, especially by users
	9. To support the objectives of the Environmental Noise Directive in  9. To support the objectives of the Environmental Noise Directive in		who are unfamiliar with or are
Human	relation to transport-related noise.	0	not trained for cycling in a city
Health	10. To minimise safety risks to human health arising from transport		environment.
	related activity.	-1	
	11. To support health improvements and benefits from transport-related		
	activities.	+1	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework	U	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related		
	emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	0	
	Ireland).		
Climata	20. To contribute to the reduction of greenhouse gas emissions arising	0	
Climate	from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	U	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	J	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	0	
433013	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.	0	

Table A.65 Themes & Measures environmental assessment table

Strategy Intervention			Discussion of impacts
FS4: More r	non-road carriage of freight		
	SEA Objectives	Rating	This measure is based on the
	1. To avoid impacts on the integrity of European Conservation Sites	0	transfer of freight from the
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	U	roads to rail/light rail and
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	waterwaterways. The use of
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	-2	waterways for the shipment of
	Dublin Area.	-2	freight will result in moderate
	4. To avoid or, where infeasible, minimise impacts on designated and	0	negative effect on biodiversity
Landscape	protected landscapes and conservation areas.	Ů	within the water-based habitats
1	5. To minimise impacts on undesignated landscape resources	0	as well as having a moderate
	(townscapes, seascapes, riverscapes, general landscapes).		negative effect on the
	6. To increase accessibility to economic and employment opportunities,	0	surfacewater systems and the
	in particular for those who are physically, economically or socially	0	_
Population	disadvantaged within the GDA.  7. To increase accessibility to quality public, cultural and community		objectives of RBMP, POM and
	services, in particular, for those who are physically, economically or	0	the WFD. It will also have a
	socially disadvantaged within the GDA.		minor negative effect on the
	8. To contribute to improvements to transport-related aspects of quality		coastal and transitional water
	of life for residents, workers and visitors to the GDA.	+1	systems. However, a minor
	9. To support the objectives of the Environmental Noise Directive in		positive effect will be perceived
Human	relation to transport-related noise.	+1	by the residents, workers and
Health	10. To minimise safety risks to human health arising from transport	0	visitors to the GDA as road
	related activity.	0	freight would be reduced due to
	11. To support health improvements and benefits from transport-related	0	the use of the alternative modes.
	activities.	0	The reduced congestion on
	12. To support the forthcoming River Basin Management Plans (RBMP)		town and city streets will result
	and Programme of Measures (POM). Where these are not available, the	-2	in an increase in the QoL. It will
	objective is to support the aims and objectives of the Water Framework		also reduce the amount of noise
	Directive (WFD)		perceived on the streets of the
Water	13. To minimise impacts to surfacewater systems and resources.	-2	city and town as the noisy
	14. To minimise impacts to groundwater systems and resources.	0	freight vehicles are removed.
	15. To minimise impacts to coastal systems and resources.	-1	Minor positive effects will also
	16. To minimise impacts to transitional systems and resources.	-1	be seen with regards to air
	17. To minimise the risk of flooding.	0	quality, reduced greenhouse
	18. To reduce negative air quality impacts arising from transport-related		
	emissions.	+1	gas emissions and reduced
Air	19. To ensure compliance with the Air Framework Directive and		fossil fuel demand.
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+1	
Cilliate	from transport-related activities.	71	
	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	Ů	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	+1	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	1
Heritage	cultural, architectural and archaeological resources.	U	

Table A.66 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
FS5: Strateg	gic freight network	•	
	SEA Objectives	Rating	This measure will designate a
	1. To avoid impacts on the integrity of European Conservation Sites	0	strategic freight network linking
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		sources of materials,
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	manufacturing and
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	-1	warehousing locations with
	Dublin Area.		ports, airports and inter-
	4. To avoid or, where infeasible, minimise impacts on designated and	0	regional/international
Landscape	protected landscapes and conservation areas.		motorways. It will improve
	5. To minimise impacts on undesignated landscape resources	+1	lorry access and journey times
	(townscapes, seascapes, riverscapes, general landscapes).		to and from these routes and at
	6. To increase accessibility to economic and employment opportunities,	_	
	in particular for those who are physically, economically or socially	+1	ports/airport. Other elements
Population	disadvantaged within the GDA.		include freight-specific lanes
	7. To increase accessibility to quality public, cultural and community	. 1	and local widening to maximise
	services, in particular, for those who are physically, economically or	+1	freight road-capacity. This
	socially disadvantaged within the GDA.		measure will improve
	8. To contribute to improvements to transport-related aspects of quality	+1	accessibility, QoL, reduce
	of life for residents, workers and visitors to the GDA.		accident risks and promote
T.T	9. To support the objectives of the Environmental Noise Directive in	+1	health benefits through
Human	relation to transport-related noise.		diverting freight-based traffic to
Health	10. To minimise safety risks to human health arising from transport	+1	the strategic freight network.
	related activity.		This will reduce HGV and
	11. To support health improvements and benefits from transport-related	+1	
	activities.		associated traffic on the public
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the		road network, improving
	objective is to support the aims and objectives of the Water Framework	0	overall journey times and
	Directive (WFD)		making this environment more
	13. To minimise impacts to surfacewater systems and resources.	-1	attractive to the shorter modes
Water			of transport. Localised
	14. To minimise impacts to groundwater systems and resources.	0	improvements in air quality and
	15. To minimise impacts to coastal systems and resources.	0	noise are anticipated where
	16. To minimise impacts to transitional systems and resources.	0	freight traffic is diverted away
	17. To minimise the risk of flooding.	0	from, especially residential
	18. To reduce negative air quality impacts arising from transport-related	+1	areas. However, there will be
	emissions.	11	minor negative impacts
Air	19. To ensure compliance with the Air Framework Directive and		(biodiversity, water, cultural
	associated daughter Directives (and the transposing Regulations in	0	heritage etc.) from the
	Ireland).		_
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	0	construction of the distribution
	from transport-related activities.	Ŭ	centres.
	21. To minimise negative impacts on important and vulnerable soils	-1	
	resources used for agricultural purposes.		
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	-	-
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	+1	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	1	1
Heritage	cultural, architectural and archaeological resources.	-1	

Table A.67 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
FS6: Sustair	nable distribution and servicing strategy	1	
	SEA Objectives	Rating	This measure will restrict where
	1. To avoid impacts on the integrity of European Conservation Sites	0	and when lorries can enter city
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		and town centres by using
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	permits and enforcement of
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	-1	waiting/loading restrictions. It
	Dublin Area.	•	will also provide facilities to
	4. To avoid or, where infeasible, minimise impacts on designated and	0	transfer goods from HGVs to
Landscape	protected landscapes and conservation areas.		smaller environmentally-
1	5. To minimise impacts on undesignated landscape resources	+1	friendly vehicles at edge of
	(townscapes, seascapes, riverscapes, general landscapes).		urban areas for onward
	6. To increase accessibility to economic and employment opportunities,	. 1	transportation to town and city
	in particular for those who are physically, economically or socially	+1	-
Population	disadvantaged within the GDA.		centres. Minor positive effects
	7. To increase accessibility to quality public, cultural and community	. 1	are anticipated for local
	services, in particular, for those who are physically, economically or	+1	landscapes, noise and air
	socially disadvantaged within the GDA.  8. To contribute to improvements to transport-related aspects of quality		quality as there will be small
	of life for residents, workers and visitors to the GDA.	+1	delivery vehicles in the urban
	9. To support the objectives of the Environmental Noise Directive in		areas. This will also make the
Human	relation to transport-related noise.	+1	wider road-network a more
Health	10. To minimise safety risks to human health arising from transport		pleasant environment for
	related activity.	+1	cyclists and pedestrians. The
	11. To support health improvements and benefits from transport-related	4	environmentally-friendly
	activities.	+1	nature of the replacement
	12. To support the forthcoming River Basin Management Plans (RBMP)		vehicles will also result in
	and Programme of Measures (POM). Where these are not available, the	0	moderate benefits for air quality
	objective is to support the aims and objectives of the Water Framework	U	and additional minor benefits
	Directive (WFD)		for fossil fuel consumption and
Water	13. To minimise impacts to surfacewater systems and resources.	-1	greenhouse gas production.
	14. To minimise impacts to groundwater systems and resources.	0	However, there will be minor
	15. To minimise impacts to coastal systems and resources.	0	negative impacts (biodiversity,
	16. To minimise impacts to transitional systems and resources.	0	water, cultural heritage etc.)
	17. To minimise the risk of flooding.	0	from the construction of the
	18. To reduce negative air quality impacts arising from transport-related		
	emissions.	+2	distribution centres.
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+2	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+1	
Cililate	from transport-related activities.	71	
	21. To minimise negative impacts on important and vulnerable soils	-1	
	resources used for agricultural purposes.	1	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	Ŭ	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.		-
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	+1	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	-1	
Heritage	cultural, architectural and archaeological resources.	-1	

Table A.68 Themes & Measures environmental assessment table

Strategy In PS1: More of	tervention commuter car parking		Discussion of impacts
	SEA Objectives	Rating	This measure which focuses on
	1. To avoid impacts on the integrity of European Conservation Sites	_	providing on street and off-street
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	long stay parking as opposed to at-
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	workplace parking would be
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		expected to result in lower levels of
	Dublin Area.	0	private vehicle use. Commuters
T 1	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	+1	who travel to work by private car will be deterred from doing so due
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	+1	to the difficulty in finding car parking within a reasonable
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	0	distance of the place of employment. However, it is anticipated that all allocated spaces
Population	disadvantaged within the GDA.		will be used by those who must
	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or capilly disadvantaged within the CDA	0	travel to work by private vehicle and who are willing to pay or
	socially disadvantaged within the GDA.		whose employers are willing to pay
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+1	for the parking. Due to the fact that this measure is likely to lead to a
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	reduction in the amount of car trips
Health	10. To minimise safety risks to human health arising from transport related activity.	0	into urban centres it will facilitate an improvement of the QoL. There
	11. To support health improvements and benefits from transport-related activities.	+1	will be a minor positive effect on health as commuters who continue
	12. To support the forthcoming River Basin Management Plans (RBMP)		to travel to urban centres in private
	and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	vehicles will have to walk to their place of employment from where they park their cars. There will be
T47 .	13. To minimise impacts to surfacewater systems and resources.	0	minor positive impact on
Water	14. To minimise impacts to groundwater systems and resources.	0	landscapes where this measure is implemented due to reduced levels
	15. To minimise impacts to coastal systems and resources.	0	of traffic. While congestion may be
			reduced in the areas where this
	16. To minimise impacts to transitional systems and resources.	0	measure is used, it may create
	17. To minimise the risk of flooding.	0	additional congestion in areas
	$18. \ To \ reduce negative air quality impacts arising from transport-related emissions.$	0	where private car users try to avoic the measure. The impact of this
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	0	measure. The impact of this measure on noise, air quality, greenhouse gas emissions and fossi fuel demand is likely to be
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	negligible due to the fact that the majority of users of parking at worl
	21. To minimise negative impacts on important and vulnerable soils	0	will shift to on street and off-street
Soils &	resources used for agricultural purposes.  22. To reduce consumption of construction material and generation of		long stay parking.
geology	construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	1
Material	25. To reduce the fossil fuel demand by the transport sector.	0	+
assets			-
Cultural	26. To assist with the reuse and regeneration of brownfield sites.  27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.	0	

Table A.69 Themes & Measures environmental assessment table

Strategy In PS3: Contro	tervention ol on-street parking stays		Discussion of impacts
	SEA Objectives	Rating	This measure which aims to impose
	1. To avoid impacts on the integrity of European Conservation Sites	_	levies and charges on retail parking
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	will result in lower levels of private
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	vehicles for shopping purposes.
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		This measure will have a minor
	Dublin Area.	0	negative effect on the accessibility of
T 1	4. To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.	0	quality public, cultural and community services, and will
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	particularly affect those who are physically disadvantaged.
	6. To increase accessibility to economic and employment opportunities,		However, this measure will also
	in particular for those who are physically, economically or socially disadvantaged within the GDA.	0	lead to improved air quality, reduced greenhouse gas emissions
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or	-1	and reduced fossil fuel demand.
	socially disadvantaged within the GDA.	1	
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	0	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport	0	
	related activity.  11. To support health improvements and benefits from transport-related	0	
	activities.		
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
vvatei	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
		0	
	16. To minimise impacts to transitional systems and resources.		
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	+2	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+2	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+2	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.  23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	0	
Material	24. To protect public assets and infrastructure.	0	
assets	25. To reduce the fossil fuel demand by the transport sector.	+2	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.70 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
PS4: Park-a	nd-ride on bus		
	SEA Objectives	Rating	This measure which is based on the
	1. To avoid impacts on the integrity of European Conservation Sites	0	provision of bus-based park and
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	Ü	ride will result in a reduction in the
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	amount of private vehicle usage. It
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	-1	will have minor positive effects on
	Dublin Area.	-1	the accessibility of economic and
	4. To avoid or, where infeasible, minimise impacts on designated and	0	employment opportunities and public, cultural and community
Landscape	protected landscapes and conservation areas.	Ů	services. Due the reduced amount
1	5. To minimise impacts on undesignated landscape resources	-1	of private vehicle usage there will
	(townscapes, seascapes, riverscapes, general landscapes).		be minor positive effects for air
	6. To increase accessibility to economic and employment opportunities,	4	quality and a reduction in the
	in particular for those who are physically, economically or socially	+1	amount of greenhouse gas
Population	disadvantaged within the GDA.		emissions and a reduction in the
•	7. To increase accessibility to quality public, cultural and community	4	fossil fuel demand. It has been
	services, in particular, for those who are physically, economically or	+1	assumed that appropriate sites
	socially disadvantaged within the GDA.		would be available for park and
	8. To contribute to improvements to transport-related aspects of quality	+1	ride facilities without encroachment
	of life for residents, workers and visitors to the GDA.		into areas of environmental value.
Human	9. To support the objectives of the Environmental Noise Directive in	0	However, due to construction and
Health	relation to transport-related noise.		the permanent land-take necessary
пеанн	10. To minimise safety risks to human health arising from transport	0	for a park and ride facility there is a
	related activity.  11. To support health improvements and benefits from transport-related		potential for negative impacts on
	activities.	0	biodiversity, landscapes, water and
	12. To support the forthcoming River Basin Management Plans (RBMP)		cultural heritage, depending on the
	and Programme of Measures (POM). Where these are not available, the		location of park and ride sites and
	objective is to support the aims and objectives of the Water Framework	-1	any environmental mitigation
	Directive (WFD)		which can be implemented .
TA7 .	13. To minimise impacts to surfacewater systems and resources.	-1	
Water	14. To minimise impacts to groundwater systems and resources.	-1	
	15. To minimise impacts to coastal systems and resources.	-1	
	16. To minimise impacts to transitional systems and resources.	-1	
	17. To minimise the risk of flooding.	-1	
	18. To reduce negative air quality impacts arising from transport-related	+1	
	emissions.		
Air	19. To ensure compliance with the Air Framework Directive and	4	
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+1	
	from transport-related activities.		
	21. To minimise negative impacts on important and vulnerable soils	0	
Soils &	resources used for agricultural purposes.		
	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.  23. To avoid or, where infeasible, minimise impacts to protected and		1
	<u> </u>	0	
	designated geological and geomorphological sites.  24. To protect public assets and infrastructure.	0	1
Material			-
assets	25. To reduce the fossil fuel demand by the transport sector.	+1	-
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	-1	
Heritage	cultural, architectural and archaeological resources.		

Table A.71 Themes & Measures environmental assessment table

Strategy In	tervention		Discussion of impacts
	parking in developments		_
	SEA Objectives	Rating	This measure, which is based on the
	1. To avoid impacts on the integrity of European Conservation Sites	_	parking standards applied to new
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	developments, will reduce the
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	amount of private vehicle usage. It
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		will lead to minor positive effects on
	Dublin Area.	0	undesignated landscape resources,
	4. To avoid or, where infeasible, minimise impacts on designated and	0	especially townscapes, as parking
T 1	protected landscapes and conservation areas.	0	within these areas, and thus number
Landscape	5. To minimise impacts on undesignated landscape resources	. 1	of cars will be reduced. However,
	(townscapes, seascapes, riverscapes, general landscapes).	+1	this measure will also reduce the
	6. To increase accessibility to economic and employment opportunities,		accessibility of economic and
	in particular for those who are physically, economically or socially	-1	employment opportunities, and
Population	disadvantaged within the GDA.		quality public, cultural and
1 opulation	7. To increase accessibility to quality public, cultural and community		community services, through the
	services, in particular, for those who are physically, economically or	-1	reduction of parking provision. This measure while making things more
	socially disadvantaged within the GDA.		difficult for those who use private
	8. To contribute to improvements to transport-related aspects of quality	0	vehicles will increase the QoL for
	of life for residents, workers and visitors to the GDA.	U	those who walk, cycle or use public
	9. To support the objectives of the Environmental Noise Directive in	0	transport. For this reason its effect
Human	relation to transport-related noise.	Ü	on QoL is rated as 0. This measure
Health	10. To minimise safety risks to human health arising from transport	0	will encourage a modal shift to
	related activity.	U	softer modes of transport and will
	11. To support health improvements and benefits from transport-related	+1	have a positive effect on health due
	activities.	11	to the shift to walking and cycling.
	12. To support the forthcoming River Basin Management Plans (RBMP)		This measure will also have minor
	and Programme of Measures (POM). Where these are not available, the	0	positive effects for air quality and
	objective is to support the aims and objectives of the Water Framework		reduce the amount of greenhouse
	Directive (WFD)		gas emissions and reduce the fossil
Water	13. To minimise impacts to surfacewater systems and resources.	0	fuel demand.
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
-	18. To reduce negative air quality impacts arising from transport-related	4	
	emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+1	
	Ireland).		
Climata	20. To contribute to the reduction of greenhouse gas emissions arising	. 1	
Climate	from transport-related activities.	+1	
·	21. To minimise negative impacts on important and vulnerable soils	0	
	resources used for agricultural purposes.	U	
Soils &	22. To reduce consumption of construction material and generation of	0	
geology	construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and	0	
	designated geological and geomorphological sites.	U	
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	+1	1
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	1
Cultural	27. To avoid or, where infeasible, minimise impacts to designated		
Heritage	cultural, architectural and archaeological resources.	0	
- Ichiage	,	<u> </u>	

Table A.72 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
PS9: Limit o	commuter car parking	T	
	SEA Objectives	Rating	This measure aims to reduce the
	1. To avoid impacts on the integrity of European Conservation Sites	0	amount of private vehicle usage by
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).		limiting and restricting on street
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	long stay parking. This will reduce
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	0	the amount of private vehicle trips and shift commuters onto more
	Dublin Area.		sustainable modes of transport. A
	4. To avoid or, where infeasible, minimise impacts on designated and	0	reduction in commuter parking will
Landscape	protected landscapes and conservation areas.		have a minor negative effect on the
•	5. To minimise impacts on undesignated landscape resources	0	accessibility of economic and
	(townscapes, seascapes, riverscapes, general landscapes).		employment opportunities. While
	6. To increase accessibility to economic and employment opportunities,	-1	there will be minor negative effects
	in particular for those who are physically, economically or socially disadvantaged within the GDA.	-1	suffered by those who rely on cars,
Population	7. To increase accessibility to quality public, cultural and community		due to the restrictions on parking,
	services, in particular, for those who are physically, economically or	0	there will be minor positive effects
	socially disadvantaged within the GDA.		for the local residents. Therefore,
	8. To contribute to improvements to transport-related aspects of quality	_	this measure will result in a rating
	of life for residents, workers and visitors to the GDA.	0	of 0. As a consequence there will be
	9. To support the objectives of the Environmental Noise Directive in	0	a moderate positive effect on air
Human	relation to transport-related noise.	0	quality, a reduction in greenhouse gas emissions and a reduction in
Health	10. To minimise safety risks to human health arising from transport	0	fossil fuel demand due to the
	related activity.	U	significant shift from private
	11. To support health improvements and benefits from transport-related	0	vehicles to public transport, and
	activities.	U	other softer modes.
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework		
	Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related	+2	
	emissions.	12	
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in	+2	
	Ireland).		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+2	
	from transport-related activities.		
	21. To minimise negative impacts on important and vulnerable soils	0	
Soils &	resources used for agricultural purposes.  22. To reduce consumption of construction material and generation of		
geology	construction waste as part of transport infrastructure projects.	0	
Secrety	23. To avoid or, where infeasible, minimise impacts to protected and		
	designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	1
Material	25. To reduce the fossil fuel demand by the transport sector.	+2	
assets	26. To assist with the reuse and regeneration of brownfield sites.		1
Culture 1		0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.		

Table A.73 Themes & Measures environmental assessment table

Strategy In SI3: Physica	tervention al access improvements		Discussion of impacts
	SEA Objectives	Rating	The implementation of measures in
	1. To avoid impacts on the integrity of European Conservation Sites	_	order to improve the accessibility o
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	the transport system to mobility
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	impaired persons will result in
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		moderate positive effects with
	Dublin Area.	0	regards to access to economic and
T 1	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	employment opportunities, quality public, cultural and community
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	services and will also have a moderate positive effect on the QoI
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	+2	of residents, workers and visitors to the GDA, especially for mobility impaired people. It will also have a
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or socially disadvantaged within the GDA.	+2	moderate positive effect with regards to the minimisation of risks to human health, through the
	8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	+2	reduced chance of accidents.
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	0	
Health	10. To minimise safety risks to human health arising from transport related activity.	+2	
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
vater	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	0	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	0	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	0	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
_	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	0	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.74 Themes & Measures environmental assessment table

Strategy In			Discussion of impacts
SI4: Access	to community facilities		
	SEA Objectives	Rating	This measure aims to improve
	1. To avoid impacts on the integrity of European Conservation Sites	_	accessibility to key facilities. It will
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	result in major positive effects on
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	accessibility to economic and
fauna	3. To minimise impacts on locally-important biodiversity in the Greater		employment opportunities, and
	Dublin Area.	0	quality public, cultural and
	4. To avoid or, where infeasible, minimise impacts on designated and	_	community facilities. In turn it will
	protected landscapes and conservation areas.	0	also have a moderate positive effect
Landscape	5. To minimise impacts on undesignated landscape resources		on the QoL of residents, workers
	(townscapes, seascapes, riverscapes, general landscapes).	0	and visitors to the GDA. Enhanced
	6. To increase accessibility to economic and employment opportunities,		access by public transport will
	in particular for those who are physically, economically or socially	+3	reduce reliance on private vehicles
D 1.0	disadvantaged within the GDA.		and thus have a moderate effect on
Population	7. To increase accessibility to quality public, cultural and community		supporting the objectives of the
	services, in particular, for those who are physically, economically or	+3	Environmental Noise Directive. It
	socially disadvantaged within the GDA.		will lead to increased use of public
	8. To contribute to improvements to transport-related aspects of quality	. 0	transport as well as walking and
	of life for residents, workers and visitors to the GDA.	+2	cycling, and thus have a moderate
	9. To support the objectives of the Environmental Noise Directive in	. 2	positive effect on air quality,
Human	relation to transport-related noise.	+2	reduction of greenhouse gas emissions and a reduction of the
Health	10. To minimise safety risks to human health arising from transport	0	fossil fuel demand.
	related activity.	0	lossii idei deilialid.
	11. To support health improvements and benefits from transport-related	0	
	activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP)		
	and Programme of Measures (POM). Where these are not available, the	0	
	objective is to support the aims and objectives of the Water Framework	U	
	Directive (WFD)		
Water	13. To minimise impacts to surfacewater systems and resources.	0	
774401	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
		U	
	18. To reduce negative air quality impacts arising from transport-related	+2	
A i.u	emissions.		
Air	19. To ensure compliance with the Air Framework Directive and		
	associated daughter Directives (and the transposing Regulations in Ireland).	+2	
	•		
Climate	20. To contribute to the reduction of greenhouse gas emissions arising	+2	
	from transport-related activities.  21. To minimise negative impacts on important and vulnerable soils		
	resources used for agricultural purposes.	0	
Soils &	22. To reduce consumption of construction material and generation of		
geology		0	
geology	construction waste as part of transport infrastructure projects.		
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
	24. To protect public assets and infrastructure.	0	1
Material			
assets	25. To reduce the fossil fuel demand by the transport sector.	+2	
	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural	27. To avoid or, where infeasible, minimise impacts to designated	0	
Heritage	cultural, architectural and archaeological resources.	ı	1

Table A.75 Themes & Measures environmental assessment table

Strategy In TE1: 'Eco-fi	tervention riendly' vehicles		Discussion of impacts
	SEA Objectives	Rating	The roll-out of Eco-vehicles will see
	1. To avoid impacts on the integrity of European Conservation Sites	_	minor positive effects with regards
Biodiversity	(SACs and SPAs) and nationally designated sites (NHAs).	0	to noise, air quality and will reduce
Flora &	2. To support the overall goal of the National Biodiversity Plan.	0	carbon emissions and reduce the
fauna	3. To minimise impacts on locally-important biodiversity in the Greater	_	fossil fuel demand. However, these
	Dublin Area.	0	effects will be somewhat offset due
т 1	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	to the fact that the electricity used to fuel the Eco-vehicles will likely
Landscape	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	come from domestic electricity generation (mostly non-renewable
	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially disadvantaged within the GDA.	0	and greenhouse gas emitting).
Population	7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or	0	
	socially disadvantaged within the GDA.  8. To contribute to improvements to transport-related aspects of quality of life for residents, workers and visitors to the GDA.	0	
Human	9. To support the objectives of the Environmental Noise Directive in relation to transport-related noise.	+1	
Health	10. To minimise safety risks to human health arising from transport related activity.	0	
	11. To support health improvements and benefits from transport-related activities.	0	
	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
Water	13. To minimise impacts to surfacewater systems and resources.	0	
vvatei	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
		0	
	16. To minimise impacts to transitional systems and resources.		
	17. To minimise the risk of flooding.	0	
	18. To reduce negative air quality impacts arising from transport-related emissions.	+1	
Air	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+1	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+1	
	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
Soils & geology	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
361	24. To protect public assets and infrastructure.	0	
Material	25. To reduce the fossil fuel demand by the transport sector.	+1	
assets	26. To assist with the reuse and regeneration of brownfield sites.	0	1
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

Table A.76 Themes & Measures environmental assessment table

Strategy Intervention TE2: Low Emissions Zone controls			Discussion of impacts
	SEA Objectives	Rating	This measure which aims to
Biodiversity Flora & fauna	1. To avoid impacts on the integrity of European Conservation Sites	_	prohibit the most polluting vehicles
	(SACs and SPAs) and nationally designated sites (NHAs).	0	from travelling within particular
	2. To support the overall goal of the National Biodiversity Plan.	0	low emission zones will have major
	3. To minimise impacts on locally-important biodiversity in the Greater		positive effects on the air quality
	Dublin Area.	0	objectives. It will also have a minor
Landscape	<ol> <li>To avoid or, where infeasible, minimise impacts on designated and protected landscapes and conservation areas.</li> </ol>	0	positive impact on the reduction of greenhouse gas emissions and the reduction of the fossil fuel demand due to the fact that it will be necessary to shift to softer modes of transport in order to access the low emission zones.
	5. To minimise impacts on undesignated landscape resources (townscapes, seascapes, riverscapes, general landscapes).	0	
Population	6. To increase accessibility to economic and employment opportunities, in particular for those who are physically, economically or socially	0	
	disadvantaged within the GDA.  7. To increase accessibility to quality public, cultural and community services, in particular, for those who are physically, economically or	0	
Human Health	socially disadvantaged within the GDA.  8. To contribute to improvements to transport-related aspects of quality	0	
	of life for residents, workers and visitors to the GDA.  9. To support the objectives of the Environmental Noise Directive in	0	
	relation to transport-related noise.  10. To minimise safety risks to human health arising from transport		
	related activity.  11. To support health improvements and benefits from transport-related	0	
	activities.	0	
Water	12. To support the forthcoming River Basin Management Plans (RBMP) and Programme of Measures (POM). Where these are not available, the objective is to support the aims and objectives of the Water Framework Directive (WFD)	0	
	13. To minimise impacts to surfacewater systems and resources.	0	
	14. To minimise impacts to groundwater systems and resources.	0	
	15. To minimise impacts to coastal systems and resources.	0	
	16. To minimise impacts to transitional systems and resources.	0	
	17. To minimise the risk of flooding.	0	
Air	18. To reduce negative air quality impacts arising from transport-related emissions.	+2	
	19. To ensure compliance with the Air Framework Directive and associated daughter Directives (and the transposing Regulations in Ireland).	+2	
Climate	20. To contribute to the reduction of greenhouse gas emissions arising from transport-related activities.	+1	
Soils & geology	21. To minimise negative impacts on important and vulnerable soils resources used for agricultural purposes.	0	
	22. To reduce consumption of construction material and generation of construction waste as part of transport infrastructure projects.	0	
	23. To avoid or, where infeasible, minimise impacts to protected and designated geological and geomorphological sites.	0	
Material assets	24. To protect public assets and infrastructure.	0	
	25. To reduce the fossil fuel demand by the transport sector.		+
	<u> </u>	+1	-
Cultural	26. To assist with the reuse and regeneration of brownfield sites.	0	
Cultural Heritage	27. To avoid or, where infeasible, minimise impacts to designated cultural, architectural and archaeological resources.	0	

## **ERM's Dublin Office**

Suite 508, The Capel Building Mary;s Abbey, Dublin 7 T: +353 1 814 7700 F: +353 1 814 7777