



SEA of the Longford Town Local Transport Plan Environmental Report

Longford Country Council

Final report for consultation

Prepared by LUC

July 2023

Version	Status	Prepared	Checked	Approved	Date
1	Draft Environmental Report (for client review)	M Mc Ginley R Myerscough M Andrew	N James	N James	25.04.2023
2	Final Environmental Report for public consultation	M Mc Ginley	N James	N James	03.07.2023



Land Use Consultants Limited

Registered in England. Registered number 2549296. Registered office: 250 Waterloo Road, London SE1 8RD. Printed on 100% recycled paper

SEA of the Longford Town Local Transport Plan

Contents

Chapter 1 **9**

Introduction

Introduction	9
Description of the Longford Town Local Transport Plan	10
Strategic Environmental Assessment	16
Appropriate Assessment	19
Structure of the Environmental Report	21

Chapter 2 **23**

SEA methodology

SEA guidance documents	23
Stages in SEA process	24
Difficulties encountered and data limitations	45

Chapter 3 **46**

Relationship with other plans and programmes

Introduction	46
Key international plans, programmes and environmental protection objectives	48
Key national plans, programmes and environmental protection objectives	50
Key regional and local plans, programmes and environmental protection objectives	55

Chapter 4 **64**

Environmental baseline information

Contents

Introduction	64
Key environmental issues and likely evolution without the Longford Town LTP	65

Chapter 5 **78**

SEA findings of the Longford Town Local Transport Plan

Introduction	78
SEA findings of the reasonable alternative	78
SEA findings of the Vision, principles and objectives of the Longford Town LTP	82
SEA findings of the strategies of the Longford Town LTP	93
Summary of the SEA findings for the Longford Town Local Transport Plan	105
Duration of effects	108
Secondary, cumulative and synergistic effects	110

Chapter 6 **114**

Mitigation and recommendations

Introduction	114
Mitigation and recommendations	114

Chapter 7 **122**

Monitoring Programme

Introduction	122
Indicators and targets	122
Monitoring Programme	123

Chapter 8 **131**

Conclusion and next steps

Contents

Appendix A **133**

Detail of transport schemes

Pedestrian / walking schemes	133
Cycle schemes	134
Quiet street schemes	135
Bicycle parking schemes	135
Permeability schemes	136
Public transport schemes	136
Traffic management schemes	136
Car parking schemes	137

Appendix B **138**

Plans and programmes

International – relevant policy and legislation	138
European – relevant policy and legislation	146
European – relevant plans and programmes	150
National – relevant policy and legislation	154
National – relevant plans	161
Local – relevant plans	164

Appendix C **169**

Environmental baseline information

Biodiversity, flora and fauna	169
Population and human health	176
Climatic factors	193
Air	202
Soil	205
Water	211
Cultural heritage including architectural and archaeological heritage	215
Landscape	219

Contents

Material assets	224
-----------------	-----

Appendix D **231**

SEA matrices

Reasonable alternative	231
Vision	235
Principles	238
Objectives	256
Strategies in the Draft Longford Town Local Transport Plan	271

Appendix E **302**

Consultation responses

Geological Survey Ireland	302
Environmental Protection Agency	307

References **313**

Table of Tables

Table 2.1: SEA topic and corresponding EPOs	32
Table 2.2: SEA scoring of effects	39
Table 5.1: Summary of SEA effects of the alternative Abbeycartron Access Strategy	80
Table 5.2: Summary of likely sustainability effects of the Vision, principles and objectives of the Longford Town LTP	83
Table 5.3: Summary of likely sustainability effects of the strategies and associated schemes of the Longford Town LTP	94

Contents

Table 5.4: Summary of the SEA findings for the Longford Town Local Transport Plan	106
Table C.1: Population change in County Longford	177
Table C.2: Travel times between key services and facilities	187
Table D.1: Summary of SEA effects of the alternative access strategy for Abbeycartron	231
Table D.2: Summary of SEA effects of the Vision	235
Table D.3: Summary of SEA effects for the Principles of the Longford Town LTP	239
Table D.4: Summary of SEA effects for the Objectives of the Longford Town LTP	257
Table D.5: Summary of SEA effects of the Pedestrian Strategy	272
Table D.6: Summary of SEA effects of the Cycle Strategy	276
Table D.7: Summary of SEA effects of the Permeability Strategy	281
Table D.8: Summary of SEA effects of the Public Transport Strategy	285
Table D.9: Summary of SEA effects of the Traffic Management Strategy	289
Table D.10: Summary of SEA effects of the Car Parking Strategy	292
Table D.11: Summary of SEA effects of the Feasibility and Value for Money Strategy	296
Table D.12: Summary of SEA effects of the Abbeycartron Access Strategy	297

Table of Figures

Figure 1.1: Location	15
Figure 1.2: Links between the SEA, AA and plan preparation process	20
Figure 3.1: Policy context for the Longford Town Local Transport Plan	47
Figure C.1: Biodiversity sites	173
Figure C.2: Ancient and long established woodland sites	174
Figure C.3: Population of Longford Town LTP Electoral Divisions	179
Figure C.4: Percentage of persons with 'very good' and 'good' health	181
Figure C.5: Health of residents in Longford Town (2016 Census)	182
Figure C.6: Affluence and deprivation in Longford	192
Figure C.7: Bedrock geology	207
Figure C.8: Geological sites	208
Figure C.9: Soil types	209

Contents

Figure C.10: Vacant and derelict sites 210

Figure C.11: Watercourses, waterbodies and Source Protection Zones 214

Figure C.12: Heritage assets 218

Figure C.13: Landscape Character Types 223

Figure C.14: Transport network 230

Chapter 1

Introduction

Introduction

1.1 Longford County Council commissioned LUC to undertake the Strategic Environmental Assessment (SEA) of the Longford Town Local Transport Plan (LTP).

1.2 The Strategic Environmental Assessment (SEA) process is a requirement of the SEA Directive 2001/42/EC [See reference 1] which requires that an environmental assessment is carried out of certain plans and programmes – in this case the Longford Town LTP – which are likely to have significant effects on the environment.

1.3 The purpose of this Environmental Report is to:

- inform the development of the Longford Town LTP;
- identify, describe and evaluate the likely significant effects (both positive and negative) of implementing the Longford Town LTP and reasonable alternatives to the Longford Town LTP; and,
- provide an early opportunity for the statutory and non-statutory consultees to offer views on any aspect of this Environmental Report and accompanying Draft Longford Town LTP, through consultation.

Description of the Longford Town Local Transport Plan

Context for the Longford Town Local Transport Plan

1.4 County Longford is located in the Midlands of Ireland within the administrative boundary of the Eastern and Midland Regional Assembly. It is bordered by County Westmeath (south and east), Leitrim (north-west), Roscommon (west), and Cavan (north-east). Longford Town is in the centre of the county and is the principal town of the county, with established employment areas and substantial administrative and retail functions. The plan area is shown in **Figure 1.1**.

1.5 Given its Midlands location, County Longford is strategically positioned as a portal to the Northern and Western Region, with the county well served by transport links in the form of the Dublin to Sligo rail line, and several strategic roads which traverse the county, including the N4 and N5, both of which are components of the Trans-European Transport Networks (TEN-T) Comprehensive Network. This high degree of accessibility has helped retain and enhance a range of enterprises within the County, as well as attract new businesses and industries to the locality.

1.6 Longford Town has a compact and walkable centre with a distinct layout, built heritage and strong identity. The industrial, administrative, transportation and military history of the town is reflected in this identity through the Camlin River, Royal Canal, Connolly Barracks and St. Mel's College and Cathedral.

Background to the Longford Town Local Transport Plan

1.7 The current Longford County Development Plan (CDP) [See reference 2] came into effect on 30th November 2021. The CDP sets out the statutory framework for land-use planning and sustainable development for the six-year period between 2021 and 2027. County Policy Objective 4.9 of the CDP states that the Council will prepare and implement a Local Area Plan (LAP) for Longford Town within two years from the adoption of the Longford CDP 2021-2027. The LAP will be informed by a LTP to be prepared for Longford Town.

1.8 The LTP for Longford Town aims to establish a strategic framework for the future development of transport infrastructure within Longford Town and its environs. The function of the LTP is to enhance accessibility and sustainable mobility within Longford Town centre, by improving links between the core and surrounding areas through the further integration of public transport, walking and cycling facilities.

Scope and content of the Longford Town Local Transport Plan

1.9 The LTP for Longford Town establishes a strategic framework for the future development of transport infrastructure within Longford Town and its environs. The function of the LTP is to enhance accessibility and sustainable mobility within Longford Town centre, by improving links between the core and surrounding areas through the further integration of public transport, walking and cycling facilities. The Draft Longford Town LTP does not contain any policies.

1.10 The Vision for the Longford LTP is ***“to ensure that Longford is an attractive place to live, work and visit through the appropriate integration***

of transport and land use, with a primary focus on ease of access for all by sustainable transport" (p.48).

1.11 The Vision for Longford Town is supported by nine principles and eight objectives that guide the strategies set out in the document. The principles of the Draft Longford Town LTP are:

- **Integrated transport planning, land use, and urban design:** Adopt an approach where transport decisions are also focused on enhancing the image, liveability, safety and cohesion of Longford.
- **People first:** Prioritise pedestrians, cyclists and public transport before private vehicles to create a balanced transport system and great places.
- **Maintaining and enhancing connectivity:** Maintain and enhance the capacity of the strategic rail, road and bus network, where possible.
- **Safe streets:** Ensure streets are safe for all users by reducing speeds, providing safe crossings and dedicated infrastructure.
- **Value for money:** Ensure proposals are assessed on their cost and ease of implementation in order to prioritise best value for money.
- **Vibrant and great for business:** Design streets to enhance businesses in Longford and maximise street life both day and night.
- **Efficient:** Reallocate street space as efficiently as possible to optimise other functions such as cycling, public transport, footpaths, outdoor dining and furniture.
- **Future focused and equitable:** Design streets which are flexible and adaptive to change and able to accommodate all ages, abilities, genders and incomes.
- **Evidence-based decision making:** Address traffic issues by reducing unnecessary trips and improving the attraction of alternative modes.

Guided by the principles above, the LTP identifies eight objectives to form an integrated strategy for the town that promotes positive outcomes from a movement and place perspective.

- Permeability: Improve permeability between neighbourhoods, enhancing attractiveness and promoting connectivity.
- Active travel: Improve walking and cycling connections and routes to increase physical activity.
- Public transport: Encourage the use of public transport and reduce the environmental impact of transportation.
- Integration of land use and transport: Integration of existing and future land use and transport networks.
- Parking: Utilise existing on-street parking zones along certain streets to improve the public realm, support travel by sustainable modes and provide other functions such as wider footpaths, cycle parking, outdoor dining areas, new trees/planting, etc.
- Safety: Improve and enhance safety for all, especially for vulnerable road users.
- Traffic management: Reduce through traffic through interventions.
- Feasibility and value for money: Provide good value for money.

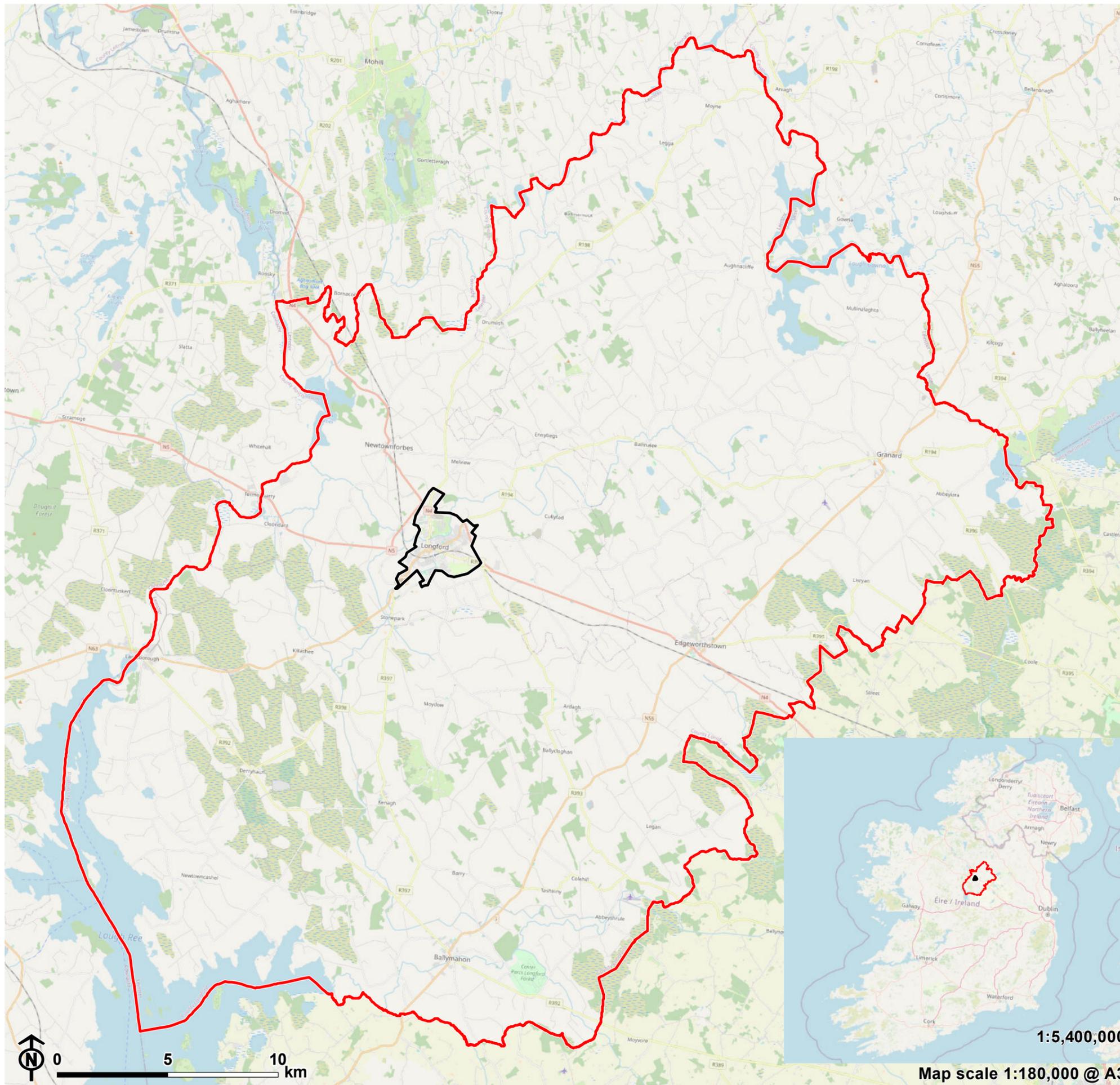
1.12 Based on the Vision, principles and objectives above, the Draft Longford Town LTP sets out a number of focused transport strategies that provide detail about proposed interventions. These include strategies for walking, cycling, permeability, public transport, traffic management, car parking, feasibility and value for money, and an access strategy for Abbeycarton. The LTP also sets out maps of proposed schemes in relation to each of the transport strategies, an assessment of the proposed schemes, and a plan for implementation of the LTP. The detail of these schemes is outlined in **Appendix A**.

Stage of the Longford Town Local Transport Plan

1.13 Arup is currently preparing the Draft Longford Town LTP on behalf of Longford County Council. It is anticipated that the Draft LTP will be published for public consultation by the Council in July 2023. The submissions and observations received during the public consultation period will be reviewed and considered by the Council during the finalisation of the LTP. Depending on the scale and nature of changes to the Draft LTP, a revised version of the LTP may be published for public consultation. It is expected that the LTP will be adopted in autumn 2023.

Figure 1.1: Location

- Longford County
- Longford Town LTP Study Area



Strategic Environmental Assessment

1.14 The Strategic Environmental Assessment (SEA) process is a requirement of the SEA Directive 2001/42/EC [See reference 3] which requires that an environmental assessment is carried out of certain plans and programmes (P/P), including land-use plans, which are likely to have significant effects on the environment. The purpose of SEA, as defined in Article 1 of the SEA Directive is *'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans...with a view to promoting sustainable development'*.

1.15 In Ireland, the SEA Directive has been transposed into national legislation through:

- S.I. No. 435 of 2004 (European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 [See reference 4], as amended by S.I. No. 200 of 2011 (European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011) [See reference 5] (i.e. the SEA Regulations).
- S.I. No. 436 of 2004 (Planning and Development (Strategic Environmental Assessment) Regulations 2004 [See reference 6], as amended by S.I. No. 201 of 2011 (Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011) [See reference 7].

1.16 The objective of this SEA is to ensure that the environmental effects of the proposed Plan are identified during their development, providing the opportunity for negative environmental effects to be avoided, mitigated or compensated and for positive environmental effects to be enhanced, where opportunities arise. In this way, environmental considerations can be integrated into the preparation of the Draft Longford Town LTP.

Requirements of the SEA Regulations

1.17 This Environmental Report complies with the requirements of the SEA Directive as implemented in Ireland through the SEA Regulations. The relevant sections of this report that are considered to meet the SEA Regulations requirements are signposted below.

Schedule 2

1.18 The SEA Regulations require the responsible authority to prepare, or secure the preparation of, an 'Environmental Report'. The Environmental Report must identify, describe and evaluate the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives, taking into account the objectives and geographical scope of the plan or programme (Article 12). The information required by Schedule 2 of the SEA Regulations is set out below, indicating which part(s) of this Environmental Report provide that information:

- a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes.
 - Covered in Chapter 1, Chapter 3 and Appendix B.
- b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.
 - Covered in Chapter 4 and Appendix C.
- c) The environmental characteristics of areas likely to be significantly affected.
 - Covered in Chapter 4 and Appendix C.
- d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or the Habitats Directive.

Chapter 1 Introduction

- Covered in Chapter 4 and Appendix C.
- e) The environmental protection objectives established at international, European Union or national level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.
 - Covered in Chapter 3 and Appendix B.
- f) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.)
 - Covered in Chapter 5.
- g) The measures envisaged to prevent, reduce and as fully possible offset any significant adverse effects on the environment of implementing the plan or programme.
 - Covered in Chapter 6.
- h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.
 - Covered in Chapter 2.
- i) A description of measures envisaged concerning monitoring of the significant environmental effects of implementation of the plan or programme.
 - Covered in Chapter 7.
- j) A non-technical summary of the information provided under the above headings.
 - A standalone Non-Technical Summary accompanies this Environmental Report.

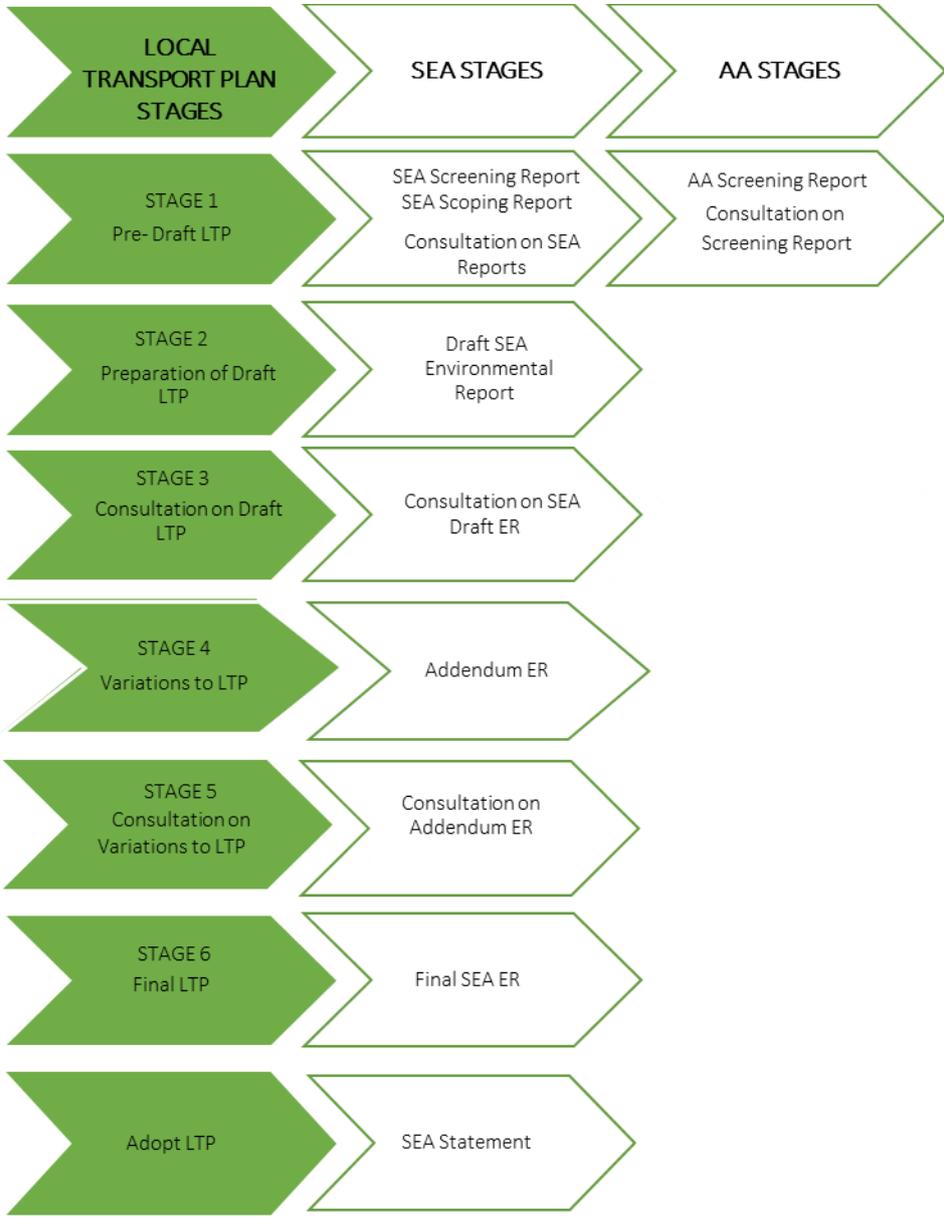
Appropriate Assessment

1.19 SEA does not stand alone in environmental assessments of plans and programmes, including the Longford Town LTP. There is a high level of overlap between the SEA process and the Appropriate Assessment (AA) process, in particular relating to biodiversity, human health, water, etc (see **Figure 1.2**).

1.20 Article 6(3) of the EU Habitats Directive [See reference 8] is transposed for certain plans in Ireland by S.I. No. 477/2011 (European Communities (Birds and Nature Habitats) Regulations, 2011 [See reference 9], as amended by S.I. No. 293 of 2021) [See reference 10], and Part XAB of the Planning and Development Act 2000, as amended [See reference 11]. All plans and projects that, either individually or in combination with other plans, are likely to have a significant effect on any site in the Natura 2000 network (i.e., those designated as Special Areas of Conservation or Special Protection Areas, collectively referred to as 'European sites'), require an AA to determine whether these effects will adversely affect the integrity of these sites. If the effects are deemed to be significant, potentially significant, or uncertain then the plan or project must undergo Stage 2 AA.

1.21 Screening for Appropriate Assessment of the Draft Longford Town LTP was prepared in February but updated in July 2023 to reflect the most recent version of the LTP. Due to the similar nature and geographical extent of the Longford Town LTP and the County Longford Active Travel Strategy, a combined Screening Report of both plans was prepared. It was determined that an AA is not required as the plans establish the strategic framework for future development and as such will not directly result in the provision of development in Longford. The Longford Town LTP proposes schemes through its strategies which will inform the forthcoming Local Area Plan for the town and will not directly result in development. Therefore, it is concluded that there will be no Likely Significant Effects and as such an AA is not required. However, the process of AA remains applicable at the project level for any new transport project proposed and at the plan level for the making of land use plans, such as masterplans.

Figure 1.2: Links between the SEA, AA and plan preparation process



Structure of the Environmental Report

1.22 This Environmental Report is structured to be compliant with the reporting requirements of the SEA Regulations. This chapter has introduced the SEA process for the Draft Longford Town LTP. The remainder of this report is structured into the following sections:

- **Chapter 2 SEA methodology** – describes the method used in carrying out the SEA, the approach to assessing reasonable alternatives and describes any difficulties encountered and data limitations.
- **Chapter 3 Relationship with other plans and programmes** - describes the review of plans, programmes and environmental protection objectives of relevance to the SEA of the Draft Longford Town LTP (this is supported by more detailed information in **Appendix B**).
- **Chapter 4 Environmental baseline information** - identifies key environmental issues / problems and describes the expected evolution of the environment without the Longford Town LTP (this is supported by more detailed information in **Appendix C**).
- **Chapters 5 SEA findings** – sets out the findings from the SEA of the Draft Longford Town LTP and reasonable alternatives.
- **Chapter 6 Mitigation and enhancement** – describes the mitigation measures that have been considered and incorporated to avoid or mitigate any potential (significant) adverse impacts.
- **Chapter 7 Monitoring** – sets out the measures envisaged to monitor the Draft Longford Town LTP.
- **Chapter 8 Conclusion and next steps** – summarises the key findings from the SEA and the next stage in the SEA process.

1.23 The Environmental Report is supported by the following appendices:

- **Appendix A** outlines the details of the eight schemes proposed in the Draft Longford Town LTP.

Chapter 1 Introduction

- **Appendix B** details the review of relevant plans, programmes, and environmental protection objectives.
- **Appendix C** details the environmental baseline.
- **Appendix D** presents the detailed SEA matrices.
- **Appendix E** details the consultation responses received on the Screening Report and Scoping Report.

1.24 A separate **Non-Technical Executive Summary** accompanies this Environmental Report and provides a non-technical summary of the information contained in this report.

Chapter 2

SEA methodology

2.1 This chapter describes the approach that has been undertaken during the SEA of the Draft Longford Town LTP. In addition to complying with legal requirements, the approach is based on current best practice and guidance.

SEA guidance documents

2.2 The following principal sources of guidance have been used during the overall SEA process and during the preparation of this Environmental Report:

- Strategic Environmental Assessment (SEA) Pack. 2022. Environmental Protection Agency [\[See reference 12\]](#).
- SEA Spatial Information Sources Inventory. 2022. Environmental Protection Agency [\[See reference 13\]](#).
- Good Practice Guidance on SEA Screening. 2021. Environmental Protection Agency [\[See reference 14\]](#).
- Good Practice Guidance on Cumulative Effect Assessment in SEA. 2020. Environmental Protection Agency [\[See reference 15\]](#).
- Guidance on SEA Statements and Monitoring. 2020. Environmental Protection Agency [\[See reference 16\]](#).
- Second Review of SEA Effectiveness in Ireland. 2020. Environmental Protection Agency [\[See reference 17\]](#).
- Integrating Climate Change into Strategic Environmental Assessment in Ireland - A Guidance Note. 2019. Environmental Protection Agency [\[See reference 18\]](#).
- GISEA Manual – Improving the Evidence Base in SEA. 2017. Environmental Protection Agency [\[See reference 19\]](#).

- Developing and Assessing Alternatives in Strategic Environmental Assessment – Good Practice Guidance. 2015. Environmental Protection Agency [See reference 20].
- Integrating Biodiversity Impact Assessment: Streamlining AA, SEA and EIA Processes – Practitioner’s Manual. STRIVE Report Series No. 106. 2013. Environmental Protection Agency [See reference 21].
- SEA Process Checklist - Consultation Draft. 2013. Environmental Protection Agency [See reference 22].
- Implementation of SEA Directive (2001/42/EC). Assessment of Certain Plans and Programmes on the Environment. Guidelines for Regional Planning Authorities. November 2004. Department of Environment, Heritage and Local Government [See reference 23].
- Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland. Synthesis Report. 2003. Environmental Protection Agency [See reference 24].

2.3 The SEA has also had regard to the findings of the EPA's 2012 [See reference 25] and 2020 [See reference 26] reviews of SEA effectiveness in Ireland.

Stages in SEA process

2.4 The SEA of the Longford Town LTP comprises the following principal stages:

- **Screening (completed):** Determine whether the Draft Longford Town LTP is likely to result in significant environmental effects.
- **Scoping (completed):** Consultation with the Environmental Authorities on the scope and level of detail to be considered in the assessment; and finalisation of the Scoping Report taking into account the submissions and observations received from the Environmental Authorities.

- **Draft Environmental Report (current stage):** An assessment of the likely significant impacts on the environment as a result of implementation of the Draft Longford Town LTP.
- **Consultation (next stage)** on the Draft Environmental Report.
- **Stage 5: Addendum Environmental Report:** Evaluation of the submissions and observations made on the draft Environmental Report. A screening assessment of the alterations to the LTP, where proposed, will be undertaken to determine their likely significant effects. If likely significant effects are identified, an Addendum Environmental Report will be prepared.
- **Stage 6: Consultation on the Addendum Environmental Report.**
- **Stage 7: Final Environmental Report:** Preparation of a Final Environmental Report that is consistent with the finalised Longford Town LTP.
- **Stage 8: SEA Statement:** Identifying how environmental considerations and consultation responses have been integrated into the final Longford Town LTP.

Stage 1: Screening

2.5 In deciding whether the Longford Town LTP is likely to have significant environmental effects, regard was had to the criteria set out in Annex II of the SEA Directive, as also set out in Schedule 1 of the SEA Regulations. The Screening process comprised three principal steps – applicability, screening and determination:

- **Step 1: Applicability:** The first step in the Screening process was to determine if the Longford Town LTP falls within the scope of the SEA Directive. The Longford Town LTP does fall within the scope of the SEA Directive (and therefore proceeded to Step 2: Screening) as it:
 - is being prepared by Longford County Council;

- is required to be prepared by administrative provisions, i.e. through policy objectives in the RSES and Longford CDP; and
- would fall under the ‘transport’ category covered by the SEA Directive and transposing legislation and will set the framework for the future consent of development projects listed in the EIA Directive.
- **Step 2: Screening:** The next stage in the Screening assessment was to determine the characteristics of the LTP and to identify whether the LTP may give rise to significant effects. The following bullet points outline the factors that were considered in making this judgement:
 - The Longford Town LTP details a multi-modal framework to inform future transport infrastructure planning, investment and delivery in Longford Town. The LTP identifies strategies for the delivery of pedestrian and permeability improvements; cycle routes; public transport; car parking; bicycle parking; traffic management; and the delivery of transport infrastructure at Abbeycartron.
 - The Longford Town LTP is being prepared to fulfil Regional Policy Objective (RPO) 8.6 of the Regional Spatial and Economic Strategy for the Eastern and Midlands Region 2019-2031 which requires a LTP for Longford Town to be prepared. The preparation of the LTP also fulfils County Policy Objective (CPO) 4.9 of the adopted Longford County Development Plan which states that the Council will prepare and implement a LTP to inform the LAP for Longford Town.
 - The effects of the Longford Town LTP are expected to generally be long-term, although any built development projects will also have shorter term construction impacts. ‘Strategies’ that would not result in built development, such as those relating to provision of additional bus services will have reversible impacts, but proposals resulting in built development will be permanent.
 - Developing an accessible and inclusive transport network in Longford Town is likely to result in positive, long-term cumulative effects at a county level.
 - The LTP covers Longford Town. However, there is the potential for the wider county to be affected and or other local authority areas,

particularly on routes heavily utilised by those passing through Longford to and from other areas.

- The implementation of the Longford Town LTP is likely to result in an overall reduced risk to human health and the environment from reduced transport-related greenhouse gas emissions, increase in active modes of travel, and increase in the safety of the road network. However, improvements to the road network will inevitably result in risks to human health and the environment, for example through air pollution, noise disturbance or fuel spillage.
- The draft determination on the need for SEA of the Longford Town LTP, based on the review against the environmental significance criteria as set out in Annex II of the SEA Directive, is that SEA is required.
- Prior to finalising the determination on the need for SEA and in accordance with Article 9(5) of the SEA Regulations, the Environmental Authorities were notified of the draft determination that an SEA should be undertaken as part of the preparation of the Longford Town LTP, in recognition of the likely significant effects on the environment. One response was received from Geological Survey Ireland (see **Appendix E**).
- **Step 3: Determination:** The final determination on the need for SEA of the Longford Town LTP, based on the review against the environmental significance criteria as set out in Annex II of the SEA Directive and consultation feedback from Geological Survey Ireland and the Environmental Protection Agency, is that **SEA is required** as the purpose of the Longford Town LTP is to set a multi-modal framework to inform future transport infrastructure planning, investment and delivery in Longford Town. This will result in both positive and negative effects which could combine to result in cumulative effects. The LTP will also inform other plans, most notably the Longford Town LAP, however, this will be subject to a separate SEA and AA.

2.6 The finalised Screening Report (June 2023) which takes into account the submissions received from the Environmental Authorities (see **Appendix E**) is available on the Council's website.

Stage 2: Scoping

2.7 The Scoping Report, prepared in February 2023, provided information for consideration in respect of the requisite content of the SEA. The main stages in carrying out scoping are as follows:

- Identifying plans, programmes, and environmental objectives of relevance to the LTP.
- Scoping of SEA Topics **[See reference 27]** relevant to the LTP.
- Identifying geographic, temporal and transboundary scope of the LTP.
- Collecting baseline information.
- Identifying sustainability issues and problems.
- Developing the Environmental Protection Objectives (EPO) Framework comprising environmental objectives, indicators and targets to allow the evaluation of impacts on the environment.
- Consulting on the scope of the SEA.

2.8 In accordance with Article 11 of the SEA Regulations, the competent authority preparing the LTP, in this case Longford County Council, is required to consult with Environmental Authorities on the scope and level of detail of the information to be included in the Environmental Report. The report was issued to Environmental Authorities and neighbouring local authorities for their consideration for a four-week period from 13th February to 13th March 2023. Two consultation responses were received from Geological Survey Ireland and the Environmental Protection Agency which are detailed in **Appendix E**. The responses were reviewed and appropriate amendments made to the detail contained in the finalised Scoping Report (June 2023) which is available on the Council's website.

Stage 3: Draft Environmental Report

2.9 The SEA Regulations require an Environmental Report to be prepared, in line with the completed Scoping Report. This Environmental Report contains the findings of the assessment of the likely significant effects on the environment resulting from implementation of the Draft Longford Town LTP. It reflects the requirements of the SEA Directive and the transposed SEA Regulations by providing the following information:

- An outline of the contents of the LTP and its relationship with other relevant plans and programmes.
- The environmental characteristics of the study area, including any problems and issues identified and their likely evolution without the LTP.
- Key environmental policy objectives set at the international, national and local levels that are relevant to the LTP.
- The EPO Framework and the criteria used to make judgements about the effects of the LTP.
- The likely significant effects of the LTP and reasonable alternative options appraised against each of the Environmental Protection Objectives (EPOs) in the EPO Framework, taking into account mitigation (which may take the form of policy safeguards in national policy or other regulatory mechanisms).
- Any difficulties encountered during the assessment process, including data limitations.
- How consultation comments have been taken into account, including those received during Screening and Scoping.
- Proposed monitoring framework for significant effects identified (including uncertain effects where these could become significant).
- Appendices, including the consultation responses tables, and SEA matrices.

2.10 This Environmental Report clearly sets out the SEA conclusions for the Draft Longford Town LTP, highlighting any likely significant effects, and makes recommendations for mitigating potential negative effects identified. The assessment of significant effects includes likely secondary, cumulative, synergistic, short-medium-long term, permanent, temporary, positive and negative effects, as well as the interrelationships between each SEA topic, as set out in Schedule 2 of the SEA Regulations. The Environmental Report is accompanied by a Non-Technical Summary document.

Review of relevant plans and programmes

2.11 The SEA Regulations require the Environmental Report to describe the relationship of the Draft Longford Town LTP with other relevant plans and programmes. The Longford Town LTP should also be consistent with environmental protection legislation and should support attainment of environmental objectives that have been established at the international and national levels.

2.12 A review was therefore undertaken of plans and programmes at the international, national, regional and local levels that were considered to be relevant to the scope of the Draft Longford Town LTP. The full review is presented in **Appendix B**. A summary of the most relevant plans and programmes is outlined in **Chapter 3** of this Environmental Report.

Collecting baseline information and identifying key environmental issues

2.13 To fulfil the requirements of Schedule 2 of the SEA Regulations, **Appendix C** and **Chapter 4** of this Environmental Report present a description of the state of the environment at present; identify the key issues / problems currently being faced in the study area; and describe the expected evolution of the environment without the Longford Town LTP. The environmental baseline is presented by SEA topic area.

Developing an Environmental Protection Objective Framework

2.14 The relevant environmental objectives identified by the review of plans and programmes together with the key environmental issues identified by the collection and review of baseline information, helped to inform the development of a set of environmental objectives (the 'Environmental Protection Objective (EPO) Framework') against which the effects of the Longford Town LTP have been assessed.

2.15 Development of the EPO Framework is not a requirement of the SEA Regulations, but it is a recognised way in which the likely environmental effects of the Longford Town LTP can be transparently and consistently described, analysed and compared. The EPO Framework is set out below; each primary bullet point constitutes an EPO objective and the sub-bullet points set out further guidance to help guide the appraisal of each objective. The EPO Framework is structured to encompass each SEA topic, however, some topics are covered in more than one EPO.

2.16 Table 2.1 details each SEA topic and the corresponding Environmental Protection Objective(s). It is considered that the objectives selected adequately reflect the requirements of Schedule 2 of the SEA Regulations.

Table 2.1: SEA topic and corresponding EPOs

SEA topic	Environmental Protection Objective
Biodiversity, flora and fauna	EPO 1: Biodiversity, flora and fauna EPO 2: Population and human health
Population and human health	EPO 2: Population and human health EPO 3: Air quality and climate change mitigation EPO 4: Flood risk and climate change adaptation EPO 5: Soil EPO 6: Water
Climatic factors	EPO 3: Air quality and climate change mitigation EPO 4: Flood risk and climate change adaptation
Air	EPO 3: Air quality and climate change mitigation
Soil	EPO 5: Soil
Water	EPO 6: Water
Cultural heritage, including architectural and archaeological heritage	EPO 7: Cultural heritage, including architectural and archaeological heritage
Landscape	EPO 8: Landscape
Material assets	EPO 9: Material assets EPO 2: Population and human health

EPO Framework

EPO 1: Biodiversity, flora and fauna

- Conserve and enhance Longford's biodiversity including designated sites, habitats and protected species.
 - Does the LTP conserve and enhance designated and undesignated ecological assets, including promoting habitat connectivity; avoiding fragmentation; and adverse impacts on habitats and species from transport-related changes to air quality, water quality and quantity, noise levels and light levels?
 - Does the LTP maintain and enhance the nature network of ecological assets and green/blue spaces, taking into account the impacts of climate change?

EPO 2: Population and human health

- Create a healthy living environment, encourage healthy lifestyles and improve safety.
 - Does the LTP protect physical and mental health and wellbeing by preventing, avoiding and mitigating adverse health effects associated with air, noise, vibration, and light pollution from transport infrastructure?
 - Does the LTP promote healthy lifestyles by encouraging and facilitating active travel, such as walking and cycling?
 - Does the LTP improve road user safety and reduce the risk of accidents, such as through traffic calming measures or improved crossings?
 - Does the LTP facilitate access to key services, facilities and employment areas for all, including ensuring easily accessible and affordable public transport, particularly in more deprived areas?
 - Does the LTP minimise journey times for commuting?

- Does the LTP improve access to open spaces and recreational facilities to improve physical and mental health?

EPO 3: Air quality and climate change mitigation

- Improve air quality and minimise greenhouse gas emissions by reducing concentrations of harmful atmospheric pollutants and avoiding their emission.
 - Does the LTP reduce the need to travel by petrol or diesel vehicles?
 - Does the LTP improve air quality by minimising pollutant emissions from the transport sector?
 - Does the LTP help to address road congestion and its impact on air quality?
 - Does the LTP encourage a modal shift to sustainable modes of transport by supporting maintenance and expansion of public and active transport networks?
 - Does the LTP support the provision of facilities for electric vehicle charging?
 - Does the LTP encourage the use of sustainable construction methods and materials in the development of transport infrastructure, with a focus on reducing the embodied carbon in new transport infrastructure?

EPO 4: Flood risk and climate change adaptation

- Reduce the risk and effects of flooding, both now and in the future.
 - Does the LTP direct transport away from areas at highest risk of flooding and avoid inappropriate transport-related development in areas at risk of flooding, taking into account the effects of climate change and mitigate residual risks without increasing flood risk elsewhere?

Chapter 2 SEA methodology

- Does the LTP increase the resilience of transport systems to the effects of climate change, via flood resilient design?
- Does the LTP promote the use of SuDS, where appropriate?
- Does the LTP encourage the creation, management and enhancement of a coherent green and blue infrastructure (GBI) network?

EPO 5: Soil

- Conserve and enhance Longford's soil resources and geological sites.
 - Does the LTP avoid the loss of best and most versatile agricultural land?
 - Does the LTP conserve designated and undesignated geological assets?
 - Does the LTP direct new transport development to brownfield / previously developed land in preference to greenfield land, where appropriate?

EPO 6: Water

- Preserve and enhance the quality and quantity of waterbodies and groundwater.
 - Does the LTP maintain or improve the quality of waterbodies and groundwater by avoiding adverse impacts from pollution / changes to drainage?
 - Does the LTP minimise and mitigate runoff from new transport and active travel infrastructure?
 - Does the LTP minimise inappropriate development in groundwater Source Protection Areas?

EPO 7: Cultural heritage including architectural and archaeological heritage

- Conserve and enhance the significant qualities, fabric, setting and accessibility of Longford's historic environment.
 - Does the LTP conserve designated and undesignated heritage assets, including their setting and their contribution to wider local character and distinctiveness, avoiding adverse effects on their significance from direct loss, damage, or detracting from their setting?
 - Does the LTP improve access to heritage assets and areas of historical and cultural interest?
 - Does the LTP support heritage-led regeneration of Longford Town?

EPO 8: Landscape

- Conserve and enhance Longford's landscape and townscape, ensuring transport and related development does not detract from the quality of views and local distinctiveness.
 - Does the LTP adversely impact, protect or enhance the townscape and visual amenity of Longford Town?
 - Does the LTP improve access to valued landscapes, townscapes and viewpoints, including by sustainable and active travel modes to reduce the impact of road traffic?
 - Does the LTP encourage the retention and planting of green infrastructure along transport corridors to protect landscape character and create a sense of place?

EPO 9: Material assets

- Use resources intelligently, optimising reuse and recovery of materials, minimising impacts on the transport network.

- Does the LTP optimise existing infrastructure and provide new infrastructure sufficient to meet demand?
- Does the LTP reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes?

Identifying and appraising reasonable alternatives

2.17 One of the critical roles of the SEA is to facilitate an evaluation of the likely environmental consequences of a range of reasonable alternatives to the proposals in the Longford Town LTP. The reason for assessing alternatives is to determine if the significant adverse effects of the Longford Town LTP can be reduced or avoided. Therefore, the SEA must appraise not only the proposed strategies for transport and travel for inclusion in the plan but also ‘reasonable alternatives’ to these. This implies that alternatives that are not reasonable do not need to be subject to appraisal.

2.18 In order to be considered reasonable, the alternatives appraised by the SEA should meet the following criteria:

- take into account the geographical scope, hierarchy and objectives of the LTP – **be realistic**;
- Be based on socio-economic and environmental evidence – **be justified**;
- Be capable of being delivered within the LTP's timeframe and resources – **be implementable**; and
- Be technically and institutionally feasible – **be viable**.

2.19 One of the reasonable alternatives considered was the ‘do-nothing’ scenario i.e. no change to existing transport infrastructure or transport services in Longford Town. However, this was discounted as a reasonable alternative as both the Regional Spatial and Economic Strategy for the Eastern and Midlands Region (RSES) 2019-2031 [See reference 28] (Regional Policy Objective 8.6) and Longford County Development Plan 2021-2027 [See reference 29]

Chapter 2 SEA methodology

(County Policy Objective 4.9) (see **Chapter 3**) both require the preparation of a Local Transport Plan for the town.

2.20 Therefore, the reasonable alternative considered in the Environmental Report is the:

- Alternative access strategy for Abbeycartron based on the previous Local Area Plan layout.

2.21 The SEA findings are not the only factors taken into account when determining a preferred approach to take forward in the LTP. Indeed, there will often be an equal number of positive or negative effects identified by the SEA for each option, such that it is not possible to rank them based on sustainability performance in order to select a preferred option. Factors such as public opinion, deliverability and conformity with national legislation will also be taken into account when selecting the preferred approach for the Longford Town LTP.

2.22 Further information on the assessment of alternatives is detailed in **Chapter 5**.

Appraisal methodology

2.23 The Draft Longford Town LTP and reasonable alternatives have been appraised against the objectives in the EPO Framework set out above. The findings from the SEA are presented in SEA matrices in **Appendix D**, which include colour coded symbols showing the score of each component of the LTP against each of the SEA objectives along with a concise justification for the score given. The use of colour coding in the matrices allows for likely significant effects (both positive and negative) to be easily identified, as shown in **Table 2.2**.

Table 2.2: SEA scoring of effects

SEA effect	Description of effect
++	Significant positive effect likely
++/-	Mixed significant positive and minor negative effects likely
+	Minor positive effect likely
+/-	Mixed minor effects likely
++/--	Mixed significant effects likely
-	Minor negative effect likely
--/+	Mixed significant negative and minor positive effects likely
--	Significant negative effect likely
0	No or negligible effect likely
?	Likely effect uncertain
N/A	Assessment criterion not applicable

2.24 The dividing line between environmental scores is often quite small. Where significant effects are distinguished from more minor effects this is because, using the appraisal questions and criteria and applying professional judgement, the effect of the option in relation to achievement of the EPO will be of such magnitude that it will have a noticeable and measurable effect compared with other factors that may influence the achievement of that objective.

2.25 Minor effects are still identified as these assist with the identification of cumulative and synergistic effects, can help identify opportunities for enhancements (e.g. enhancing a minor positive to make it significant) and also better enable the Council to make a more informed decision over the sustainability performance of options.

2.26 Where a potential positive or negative effect is uncertain, a question mark has been added to the relevant effect (e.g., +? or -?) and the effect is colour coded as per the potential positive, negligible or negative effect (e.g., green, white, pink, etc.). Schedule 2 of SEA Regulations identifies criteria for determining the likely significance of effects on the environment (see below) which has guided the approach to scoring in the assessment.

2.27 The prediction and evaluation of effects of options in the Longford Town LTP relies heavily on the EPO Framework – every option will be appraised for their likely impacts in relation to achievement of the EPO objectives. In line with the SEA Regulations, the following characteristics of effects will be predicted and evaluated.

Probability

2.28 There is an inherent degree of uncertainty in carrying out SEA work. Should it be adopted, the Longford Town LTP would likely be in force for several years. Over this time period, currently unforeseen changes are likely to occur. These circumstances are impossible to predict. Uncertainties are dealt with in SEA by adopting a precautionary approach, where the worst-case scenario is assumed unless reliable evidence suggests otherwise. This is to ensure that any potentially negative effects are identified, and appropriate consideration is given to how the Longford Town LTP could help avoid or mitigate the worst effects if such scenarios were to arise. However, it is accepted that the likelihood of many such worst-case scenarios occurring is low, particularly aspects of the Longford Town LTP would help to avoid or mitigate negative impacts.

2.29 The assessment of the Longford Town LTP indicates where particular uncertainties exist in relation to the effects identified:

- Low probability – not likely to have an effect.
- Medium probability.
- High probability – highly likely to have an effect.

Duration

2.30 The temporal scope of the SEA covers the Longford Town LTP period from 2023 to 2029. For the purpose of the SEA:

- Short term covers the period up to 2024;
- Medium term covers the period up to 2026; and
- Long term covers the period up to 2029 and beyond.

2.31 Effects can occur over multiple terms, such as arising in the short-term and residing in the long-term.

Frequency

2.32 All effects of the Longford Town LTP are considered to occur once, unless indicated otherwise. Where effects are continual, defined by a number of occurrences or intermittent, this will be specified.

Reversibility

2.33 The assessment considers whether effects are reversible or irreversible (i.e. the receptor can return to the baseline condition) without significant intervention.

The cumulative nature of effects

2.34 The SEA provides an appraisal of all options in the Longford Town LTP. Each element of the Longford Town LTP will not be adopted in isolation and therefore an evaluation of cumulative and synergistic effects will be undertaken. Cumulative and synergistic effects are defined as follows:

- Cumulative effects arise, for instance, where several developments each have insignificant effects but together have a significant effect, or where several individual effects have a combined effect; and
- Synergistic effects interact to produce a total effect greater than the sum of individual effects, so that the nature of the final impact is different to the nature of the individual impacts.

The transboundary nature of effects

2.35 The geographical extent of effects will be experienced predominantly within the Longford Town and its environs (**Figure 1.1** illustrates the geographical extent of the Longford Town LTP). However, where effects would be likely beyond the plan area boundary, this will be specified. For example, in the wider County Longford area or in adjacent counties.

The risks to human health or the environment

2.36 The assessment identifies whether the impact of the effect would present a risk for people and the environment.

The magnitude and spatial extent of the effects

2.37 The SEA assesses the geographical area and the size of the population likely to be affected by an effect:

- Magnitude
 - High – high proportion of the receptor affected.
 - Medium.
 - Low – low proportion of the receptor affected.
- Spatial extent

- Local – effects in Longford Town and its environs.
- County – effects in County Longford.
- Transboundary – effects in adjacent counties.

The value and vulnerability of the area likely to be affected

2.38 Effects may impact the value or condition of an existing area due to:

- special natural characteristics or cultural heritage;
- exceeded environmental quality standards or limit value; or
- intensive land-use.

Effects on areas or landscapes with recognised national, European Union or international protection status

2.39 The SEA evaluates whether effects are likely to impact on areas with national, European Union or International protection status.

2.40 Chapter 5 presents summaries of the findings for each component of the Longford Town LTP. Drawing on the findings from the assessment, narrative text is provided in Chapter 5 which sets out the potential cumulative, synergistic and in-combination effects likely to arise from the Longford Town LTP.

Monitoring

2.41 An Environmental Monitoring Programme is required to monitor the likely significant effects of implementing the Longford Town LTP. The Environmental Monitoring Programme focusses on the significant effects identified during the assessment phase. The Environmental Monitoring Programme is presented in

Chapter 7 and has been developed in line with the EPA's Guidance on SEA Statements and Monitoring.

Stage 4: Consultation

Public consultation will be carried out on the Draft Longford Town Local Transport Plan (July 2023) and the accompanying Draft Environmental Report and Non-Technical Summary for a four-week period from July 2023.

2.42 The Draft Environmental Report and associated Non-Technical Summary will be published on Longford County Council's website for consultation during this period.

Stage 5: Addendum Environmental Report

2.43 The submissions and observations received during the public consultation period will be reviewed and considered during the finalisation of the Longford Town LTP. A screening assessment of the alterations to the LTP, where proposed, will be undertaken to determine their likely significant effects. If likely significant effects are identified, an Addendum Environmental Report will be prepared. If there are no further alterations to the LTP, a Final Environmental Report will be prepared and made available on the Council's website.

Stage 6: Consultation on the Addendum Environmental Report

2.44 Public consultation will be carried out on the Addendum ER and revised LTP for a four-week period in late summer 2023, if necessary.

Stage 7: Final Environmental Report

2.45 A Final Environmental Report and accompanying Non-Technical Summary will be prepared that is consistent with the finalised LTP and will be made available on the Council's website in autumn 2023.

Stage 8: SEA Statement

2.46 An SEA Statement will be prepared identifying how each of the requirements in articles 16 and 17 of the SEA Regulations have been met during the SEA process. The finalised SEA Statement will be published after the Council adopts the LTP.

Difficulties encountered and data limitations

2.47 Schedule 2 of the SEA Regulations states that the Environmental Report should identify any difficulties encountered during the assessment process. The main difficulties and data gaps encountered were as follows:

- Although preliminary results from the 2022 Census have been released, the full 2022 Census data will not be available until the end of 2023. Therefore, reference is made to the 2016 Census data, where more up-to-date data is not available. As more up-to-date data is released from the 2022 Census, this will be used to inform the SEA as appropriate. This Environmental Report was updated in June 2023 to take account of the 30 May 2023 statistical release.

2.48 No other specific data limitations or difficulties were encountered during the SEA process.

Chapter 3

Relationship with other plans and programmes

Introduction

3.1 The Longford Town LTP is greatly influenced by other plans / programmes and by broader environmental objectives. The LTP must conform to environmental protection legislation and the environmental objectives established at international, European and national levels, as well as contributing to the goals of a wide range of other plans and programmes.

Schedule 2 of the SEA Regulations requires, among other things:

- *“an outline of the contents and main objectives of the plan or programme...and relationship with other relevant plans or programmes”;*
and
- *the environmental protection objectives, established at international, European Union or national level, which are relevant to the plan or programme...and the way those objectives and any environmental considerations have been taken into account during its preparation”.*

3.2 A review of the key international, European and national legislation and plans of relevance to the Longford Town LTP is detailed in **Appendix B**. It should be noted that this Environmental Report has been prepared to be proportionate to the scale and nature of the proposed changes that may result from the implementation of the plan. It is not intended to be a register of all legislation / plans, but rather an examination of the key environmental protection objectives relevant to the Longford Town LTP. A summary of the most relevant plans is provided in the subsequent paragraphs.

Chapter 3 Relationship with other plans and programmes

3.3 Figure 3.1 illustrates the links and inter-relationships between the Longford Town LTP and other key relevant international, national, regional and local plans.

Figure 3.1: Policy context for the Longford Town Local Transport Plan



Key international plans, programmes and environmental protection objectives

3.4 United Nations Paris Climate Change Agreement (2015) [See reference 30] is the international agreement to keep global temperature rise this century well below 2 degrees Celsius above pre-industrial levels. Ireland signed up to the Paris Agreement in 2016. Achieving the goals of the agreement will require an intensive programme of decarbonisation across nations, including within the transport sector, as one of the largest contributors to carbon emissions. The Longford Town LTP supports these goals through measures to encourage modal shift to sustainable modes of travel.

3.5 The 2030 Agenda for Sustainable Development (2015) [See reference 31], adopted by all United Nations Member States, provides a shared blueprint for peace and prosperity for people and the planet and includes 17 Sustainable Development Goals (SDGs), designed to achieve a better and more sustainable future for all. Relevant to the Longford Town LTP are:

- SDG 3: Good Health and Wellbeing
- SDG 7: Affordable and Clean Energy
- SDG 9: Industry, Innovation and Infrastructure
- SDG 11: Sustainable Cities and Communities
- SDG 12: Responsible Consumption and Production
- SDG 13: Climate Action.

3.6 At the international level, **Directive 2001/42/EC** [See reference 32] on the assessment of the effects of certain plans and programmes on the environment (the 'SEA Directive') and **Directive 92/43/EEC** [See reference 33] on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive') are particularly significant as they require SEA and Appropriate Assessment (AA) to be undertaken of certain plans / programmes. These processes should be undertaken iteratively and integrated into the development

Chapter 3 Relationship with other plans and programmes

of the LTP in order to ensure that any potential negative environmental effects (including on European-level nature conservation designations) are identified and can be mitigated. There are also several other directives that focus on protecting and conserving the natural environment which are relevant to the Longford Town LTP. These include the **Air Quality Directive [See reference 34]**, the **Water Framework Directive [See reference 35]**, and the **Birds Directive [See reference 36]**.

3.7 The European Green Deal [See reference 37] was published by the European Commission in 2019 and is a roadmap for making the European Union's (EU) economy environmentally sustainable. It outlines the actions and targets needed to make Europe the first climate-neutral continent by 2050. As an intermediate step towards climate neutrality, the EU has raised its 2030 climate ambition committing to cutting emissions by at least 55% by 2030 which is known as the **Fit for 55 package [See reference 38]**. The EU is working on the revision of its climate, energy and transport-related legislation under the Fit for 55 package in order to align current laws with the 2030 and 2050 ambitions.

3.8 The European Commission subsequently launched its **Sustainable and Smart Mobility Strategy [See reference 39]** in 2020. It aims to put the EU on the path to creating a sustainable, smart and resilient mobility system and bring about the fundamental changes needed to achieve the objectives of the Green Deal. The strategy is structured around three key objectives – making the European transport system sustainable, smart and resilient. It highlights the importance of making mobility available and affordable for all, that rural and remote regions must remain connected, and that European transport must offer good social conditions to its workers and provide attractive jobs. The strategy sets out a four-year action plan structured around 10 key flagship areas for action. Of particular relevance to the Longford Town LTP are the following flagship aims of the Strategy:

- Flagship 3: Making interurban and urban mobility more sustainable and healthy.
- Flagship 6: Making connected and automated multi-modal mobility a reality.
- Flagship 9: Making mobility fair and just for all.

- Flagship 10: Enhancing transport safety and security.

Key national plans, programmes and environmental protection objectives

Project Ireland 2040

3.9 The **Project Ireland 2040 - National Planning Framework (NPF)** [See reference 40] is the national planning framework to guide development and investment in Ireland up to 2040. It is accompanied by the **Project Ireland 2040 – National Development Plan (NDP) 2021-2030** [See reference 41] which sets out investment priorities. The two documents combine to form Project Ireland 2040. The National Strategic Outcomes (NSOs) of relevance to the Longford Town LTP are:

- NSO1: Compact growth.
- NSO 2: Enhanced regional accessibility.
- NSO 3: Strengthened rural economies and communities.
- NSO 4: Sustainable mobility.
- NSO 8: Transition to a low carbon and climate resilient society.

3.10 Growth of the Eastern and Midland Region is a clear priority in both the NPF and NDP, with growth in population (to around 2.85 million) and employment (to 1.34 million) targeted. The NPF recognises the strategic importance of the Midlands stating that:

“...its central location in Ireland can be leveraged to enable significant strategic investment to a greater extent than at present, supported by a sustainable pattern of population growth, with a focus on strategic national employment and infrastructure development, quality of life and strengthening the urban cores of the county towns and other principal settlements” (p.33).

3.11 Placemaking, sustainable mobility, prioritising alternative forms of transport to car and developing comprehensive walking and cycling are key objectives identified in the documents which are relevant to the Longford Town LTP.

3.12 The NDP outlines a €165 billion capital investment plan for the decade, of which €35 billion is allocated for transport which will enable the development of a range of active travel and bus and rail infrastructure over the coming years to facilitate the transition to sustainable mobility and meet our climate goals.

National Sustainable Mobility Policy and Sustainable Mobility Policy Action Plan 2022-2025

3.13 The **National Sustainable Mobility Policy** [See reference 42] was published in April 2022 and sets out a strategic framework to 2030 for active travel (walking and cycling) and public transport to help Ireland meet its climate obligations. It aims to deliver:

- at least 500,000 additional daily active travel and public transport journeys by 2030; and
- a 10% reduction in the number of kilometres driven by fossil fuelled cars.

3.14 The policy is accompanied by the **Sustainable Mobility Policy Action Plan 2022-2025** [See reference 43] which contains actions to improve and expand sustainable mobility options across the country, from demand management and behavioural change measures to managing daily travel more efficiently and reducing the number of journeys taken by private car. It aims to make it easier for people to choose walking, cycling and public transport daily instead of a petrol or diesel car. This Policy and Action Plan builds on and replaces the active travel and public transport policy documents: Smarter Travel: A Sustainable Transport Future and the National Cycle Policy Framework.

Strategy for the Future Development of National and Regional Greenways

3.15 The **Strategy for the Future Development of National and Regional Greenways** (2018) [See reference 44] recognises the benefits that can arise from further development of greenways in Ireland: as a tourism product, for local communities economic benefit, and for physical activity and a contributor to health and wellbeing. It aims to assist in the strategic development of nationally and regionally significant greenways in appropriate locations constructed to an appropriate standard in order to deliver a high-quality experience. It also aims to increase the number and geographical spread of greenways in Ireland.

Climate Action Plan 2023

3.16 The **Climate Action Plan 2023** [See reference 45] charts a course to reduce greenhouse gas emissions to meet our commitments to a 51% reduction in emissions by 2030 and to reach net zero no later than 2050. There are numerous actions in the Climate Action Plan, classified into several topic areas: governance, a just transition, citizen engagement, the public sector, carbon prices, electricity, industry, the built environment, transport, agriculture, land use / land use change / forestry, the marine environment, the circular economy, and international climate action. Ten actions are identified to achieve a just transition in the Midlands region which includes County Longford. Those of relevance to Longford Town include:

- Supporting regeneration, repurposing and sustainable development of walking and cycling tracks and trails, and waterways.
- Supporting the decarbonisation of public and private local rural bus routes.
- Supporting the installation of publicly available fast and high-powered charge point infrastructure.

Our Rural Future 2021-2025

3.17 Our Rural Future 2021-2025 [See reference 46] is the national rural development policy. It recognises that people living in rural areas should have access to good quality public services that enable them to continue to live sustainably in rural communities and help them to maintain a good quality of life. Transport services are very important for people who live and work in rural Ireland. Improvement and further integration of rural public transport services will enable people to continue to live in rural area and to access work, education and social activities, while development of active travel amenities will bring economic and social benefits to communities.

Road Safety Strategy 2021-2030

3.18 Underpinning the Road Safety Strategy 2021-2030 [See reference 47] is Ireland's long-term goal of achieving Vision Zero (zero road deaths or serious injuries) by 2050. Vision Zero was formally adopted in the Programme for Government in 2020 and underpins the EU Road Safety Policy Framework (2021-2030) [See reference 48] and the UN's Second Decade of Action for Road Safety (2021-2030) [See reference 49]. To ensure this long-term goal is achieved, the Road Safety Strategy sets a target to reduce road deaths and serious injuries by 50% by 2030.

3.19 Seven Safe System priority intervention areas have been identified including safe and healthy modes of travel to promote and protect road users engaging in public transport or active travel. It involves the promotion of safer public transport modes and the promotion and provision of safe road environments for otherwise healthy active modes. This includes walking and cycling where the risks of death and serious injury are higher than for protected, in-vehicle road users. The Strategy's actions under safe and healthy modes of travel align with objectives of the Longford Town LTP to maintain and improve our existing sustainable mobility system while also providing a safe space for all road users.

Healthy Ireland: A Framework for Improved Health and Well-being 2013-2025

3.20 Healthy Ireland Framework [See reference 50] was launched in 2013 as a strategic framework to improve the health and well-being of the nation. The Framework and associated **Healthy Ireland Strategic Action Plan 2021-2025 [See reference 51]** support the development of places which encourage active travel (walking and cycling) in urban areas.

National Physical Activity Plan for Ireland

3.21 The National Physical Activity Plan [See reference 52] for Ireland was published in 2016 following a commitment in the Healthy Ireland Framework. The key target of the plan is to increase the number of people taking regular exercise by 1% a year over ten years by making exercise a normal part of everyday life and giving people more opportunities to be active.

Other relevant national plans

3.22 Other national plans and strategies of relevance to the Longford Town LTP include:

- the **Draft River Basin Management Plan for Ireland 2022-2027 (RBMP)** which sets out a programme of measures, to protect and where necessary restore bodies of water in Ireland, building on progress under the previous plan.
- the **National Landscape Strategy for Ireland 2015-2025 [See reference 53]** which reinforces the importance of all landscapes, not just exceptional or scenic landscapes, and the need to positively manage landscape change.

- **Ireland's 4th National Biodiversity Action Plan** (Draft for Public Consultation) [See reference 54] sets out objectives and actions for the conservation and restoration of biodiversity in Ireland. The Draft Plan sets the national biodiversity agenda for the period 2023-2027 and aims to deliver the transformative changes required to the ways in which we value and protect nature.
- **Heritage Ireland 2030** [See reference 55] sets out the values, principles, strategic priorities to guide and inform the heritage sector over the next decade.
- **Cleaning Our Air: Public consultation to inform the development of a National Clean Air Strategy** [See reference 56] aims to inform the development of a National Clean Air Strategy in order to address the challenges and impacts of air pollution. It provides a background to the national, EU and international approaches to improving air quality and seeks to set out the main sectoral issues in relation to air quality which are of relevance, and for which further actions could be considered in the strategy.

Key regional and local plans, programmes and environmental protection objectives

Regional Spatial and Economic Strategy for the Eastern and Midlands Region 2019-2031

3.23 The Regional Spatial and Economic Strategy for the Eastern and Midlands Region (RSES) 2019-2031 [See reference 57] sets out the framework to direct future growth in the Eastern and Midlands Region over a decade. Longford falls under the jurisdiction of the Eastern and Midlands Region RSES. One of the strategy's key regional strategic outcomes is to

Chapter 3 Relationship with other plans and programmes

integrate transport and land use. The aim is to promote best use of transport infrastructure, existing and planned, and promote sustainable and active modes of travel to ensure the proper integration of transportation and land use planning.

3.24 The RSES recognises that County Longford is strategically located as a portal to the northwest on the Dublin to Sligo rail corridor, also serving the key towns of Mullingar and Maynooth. Longford Town is identified as a ‘Gateway Region Key Town’ as it is strategically located on the N4/M4 motorway and the Dublin to Sligo rail line, acting as a portal to the northern and western region and providing a supporting role to the ‘Regional Growth Centre’ of Athlone.

3.25 The RSES identifies the following Regional Policy Objectives (RPOs) of relevance for Longford Town:

- RPO 4.59: To enhance accessibility and sustainable mobility within the town centre by improving links between the core and surrounding areas through the further integration of public transport, walking and cycling facilities.
- RPO 4.63: Support Longford Town as a strategic portal to the northwest and south in recognition of its location at the junction of the N55; M4/N4 Dublin/Sligo and N5; due to its proximity to the regional growth centre of Athlone; and support its role as a strategic employment centre.
- RPO 6.19: Support the local strategies that are already in place to link the River Shannon Blueway, The Royal and Grand Canal Greenways and the proposed Barrow Blueway right across the Midlands, incorporating the towns of Longford, Athlone, Mullingar, Tullamore and Portarlington.
- RPO 8.6: Prepare a Local Transport Plan for Longford Town. Such LTPs will include transport priorities for each settlement in terms of public transport infrastructure and services; cycle investment; improvements to the pedestrian environment; and road enhancements.

Longford County Development Plan 2021-2027

3.26 The **Longford County Development Plan 2021-2027** [See reference 58] sets out the planning policies and objectives for the sustainable development of the county.

County Policy Objective 4.9 states that the Council will prepare and implement a Local Area Plan (LAP) for Longford Town to align with the policy objectives of the NPF, Eastern and Midlands RSES and Longford County Development Plan 2021-2027, within two years from the adoption of the Longford County Development Plan 2021-2027. Any such LAP will be informed by a LTP to be prepared for Longford Town. Accordingly, a LAP and separate LTP is to be prepared for Longford Town.

3.27 Other key County Policy Objectives specific to transport and travel include:

- Encouraging a general shift towards increased use of public transport in the county (CPO 5.5).
- Improving transport connectivity and establishing integrated transport nodes (CPO 5.7).
- Reducing the need to travel by private vehicle (CPO 5.3).
- Encouraging and facilitating walking and cycling, putting the pedestrian first in residential and urban areas (CPO 5.4).
- Providing high quality road access on routes of economic importance whilst ensuring road safety (CPO 5.12).
- Supporting and facilitating the development of infrastructure to increase the usage of electric vehicles (CPO 5.62).
- Promoting place-making in towns and villages to improve quality of life (CPO 5.6; CPO 5.8).

- Relieving traffic congestion particularly in town centres by means of traffic calming and traffic management (CPO 5.26).

Longford Town Local Area Plan

3.28 The function of a Local Area Plan (LAP) is to set out policies and objectives for the proper planning and sustainable development of a specific area which should be consistent with the provisions of the NPF, Eastern and Midland RSES and the Longford County Development Plan. As the population of Longford Town is over 5,000 people, a LAP is required for the area.

3.29 The current **Longford Town and Environs Local Area Plan [See reference 59]** sets out a strategy and framework for the development of the town up to 2022. It outlines the policies and objectives relating to residential, industrial and commercial development in the town as well as more detailed objectives and standards for development control. Longford County Council is currently preparing the next iteration of the Longford Town Local Area Plan covering the period 2023 to 2029. The emerging Longford Town LTP will inform the Longford Town Local Area Plan, as recommended in the RSES for the Eastern and Midlands Region. The **Longford Town Local Area Plan** will be a statutory document that sets out an overall strategy for the proper planning and sustainable development of Longford Town over a six-year horizon (2023-2029) and will have a strong focus on the integration of land-use and transportation. The Longford Town Local Area Plan will consist of a written statement containing a broad set of aims and objectives for the town, in addition to detailed policies and guidance for the sustainable development of social, physical and environmental infrastructure within Longford Town. The Longford Town Local Area Plan will include maps detailing specific land-use zonings within the town, which will be informed by the Longford Town Zonings that were updated and included in the recently adopted Longford County Development Plan 2021-2027 Volume 2 – Appendix 1 Land Zonings [See reference 60].

A detailed review of the key international, European, national, regional and local plans / programmes of relevance to the Longford Town LTP is detailed in **Appendix B**.

Implications of the policy review for the Longford Town Local Transport Plan

3.30 The following paragraphs detail the implications of the policy review for the Longford Town LTP for each SEA topic.

Biodiversity, flora and fauna

3.31 In order to align with international, national, regional and local policies, the Longford Town LTP should seek to protect and enhance ecological features and biodiversity and encourage habitat restoration or creation as part of transport and travel proposals. The Longford Town LTP should seek to ensure that environmental pollution from travel infrastructure is minimised in order to protect land, water and air quality.

The SEA has responded to this through the inclusion of Environmental Protection Objectives relating to the protection and enhancement of biodiversity, air pollution, water quality and contaminated land.

Population and human health

3.32 In order to align with international, national, regional and local policies, the Longford Town LTP should seek to encourage healthy and active lifestyles;

create fair, safe and inclusive communities; and to improve the sustainable transport network within Longford Town.

The SEA has responded to this through the inclusion of Environmental Protection Objectives relating to health and wellbeing, social inclusion and sustainable transport.

Climatic factors

3.33 In order to align with international, national, regional and local policies, the Longford Town LTP should seek to ensure that new transport infrastructure is designed to be resilient to climate change impacts. The Longford Town LTP should seek to reduce transport-related greenhouse gas emissions by:

- reducing the need to travel by diesel and petrol vehicles;
- accelerating a shift from private car to active transport (walking and cycling);
- supporting the delivery of electric vehicle charging infrastructure to encourage the use of electric vehicles.

3.34 The Longford Town LTP should also seek to reduce carbon emissions from the construction of new/upgraded transport infrastructure by encouraging the use of sustainable construction methods and materials.

The SEA has responded to this through the inclusion of Environmental Protection Objectives relating to the mitigation of climate change, adaptation to climate change, sustainable construction, flooding and sustainable transport.

Air

3.35 In order to align with international, national, regional and local policies, the Longford Town LTP should seek to reduce air pollutant emissions from road and rail.

The SEA has responded to this through the inclusion of Environmental Protection Objectives relating to protecting and improving air quality.

Soil

3.36 In order to align with international, national, regional and local policies, the Longford Town LTP should seek to minimise adverse impacts on the soil environment from transport development.

The SEA has responded to this through the inclusion of Environmental Protection Objectives relating to the protection and enhancement of soil resources and geological assets.

Water

3.37 In order to align with international, national, regional and local policies, the Longford Town LTP should seek to minimise adverse impacts on the water environment from transport development.

The SEA has responded to this through the inclusion of Environmental Protection Objectives relating to the protection and enhancement of water quality and quantity.

Cultural heritage including architectural and archaeological heritage

3.38 In order to align with international, national, regional and local policies, the Longford Town LTP should seek to protect heritage and cultural assets (both designated and undesignated), and local character and distinctiveness; and to improve access to heritage assets.

The SEA has responded to this through the inclusion of Environmental Protection Objectives relating to the conservation of the historic environment and the character of landscapes and townscapes, and the improvement of access to heritage assets.

Landscape

3.39 In order to align with international, national, regional and local policies, the Longford Town LTP should seek to protect and enhance designated and valued landscapes, and to ensure that new transport development is sympathetic to local character and history including the surrounding built environment and landscape setting.

The SEA has responded to this through the inclusion of Environmental Protection Objectives relating to the protection of the character and visual amenity of landscapes / townscapes.

Material assets

3.40 In order to align with international, national, regional and local policies, the Longford Town LTP should seek to develop an integrated transport and active travel network; to prevent loss or sterilisation of minerals from transport infrastructure development; and to ensure the effective management of waste and the efficient use of resources during the construction of transport infrastructure.

The SEA has responded to this through the inclusion of Environmental Protection Objectives relating to the efficient use of land and natural resources.

Chapter 4

Environmental baseline information

Introduction

4.1 Baseline information provides the context for assessing the sustainability of the proposals in the Longford Town LTP. It also provides the basis for identifying trends, predicting the likely effects of the document and monitoring its outcomes. The requirements for baseline data vary widely, but it must be relevant to environmental issues, be sensitive to change and should ideally relate to records which are sufficient to identify trends.

Schedule 2 of the SEA Regulations requires information to be provided on:

"The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme, or modification to a plan or programme.

The environmental characteristics of areas likely to be significantly affected.

Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or the Habitats Directive."

4.2 To fulfil the requirements of Schedule 2, this chapter, supported by **Appendix C**, sets out a description of the state of the environment at present (detailed in **Appendix C** by SEA topic area); a discussion of the key issues / problems currently being faced in the study area; a description of the expected

evolution of the environment without the LTP; and the corresponding Environmental Protection Objectives in the EPO Framework.

4.3 It is key that the current state of the environment is described using the most up-to-date environmental data, information and reports. Where updates of significant environmental data and associated reports become available, this new information has been incorporated into the baseline of the Environmental Report.

Key environmental issues and likely evolution without the Longford Town LTP

Biodiversity, flora and fauna

4.4 Longford contains many areas of high ecological value including the Royal Canal pNHA in Longford Town. Development proposed in the Longford Town LTP has the potential to put pressure on these sites including through disturbance and damage from recreational use, air pollution, and loss of functionally linked habitat. Although designated sites represent the most valued habitats, the overall ecological network is important for biodiversity as a whole. Fragmentation and erosion of habitats and the ecological network in the town is an ongoing threat to biodiversity.

4.5 If the Longford Town LTP was not implemented, it is considered that adequate protection would be afforded to Longford's habitats and species through policies in the Longford County Development Plan (most notably through the policies in Chapter 12: Natural Heritage and the Environment, and in particular policies CPO 12.1- CPO 12.85) as well as through the statutory protection of certain habitats and species. However, without the Longford Town LTP it is possible that transport infrastructure could be sited inappropriately and

adversely impact biodiversity sites, even if indirectly. The Longford Town LTP provides an opportunity to ensure that biodiversity is protected and enhanced through the transport and active travel system by:

- Locating active travel/transport infrastructure away from the most sensitive locations.
- Providing for new green and blue infrastructure which supports habitat creation and connections.
- Providing for habitat enhancement measures as part of active travel developments.
- Ensuring that active travel projects do not adversely affect the current condition of biodiversity sites but, where possible, contribute to their improvement.
- There may also be indirect benefits for species from improved air quality due to the reduction in road traffic and congestion.

4.6 The corresponding Environmental Protection Objective is:

- **1: Biodiversity, flora and fauna** - Conserve and enhance Longford's biodiversity including designated sites, habitats and protected species.
 - Does the LTP conserve and enhance designated and undesignated ecological assets, including promoting habitat connectivity; avoiding fragmentation; and adverse impacts on habitats and species from transport-related changes to air quality, water quality and quantity, noise levels and light levels?
 - Does the LTP maintain and enhance the nature network of ecological assets and green/blue spaces, taking into account the impacts of climate change?

Population and human health

4.7 Population growth and demographic change will place additional demand on the transport network (as well as on housing availability, education, health and

Chapter 4 Environmental baseline information

social care facilities, etc.). The Longford Town LTP offers an opportunity to deliver an integrated and accessible transport system that improves access to services and facilities for all of Longford's population. As the older population of Longford is predicted to grow, the Longford Town LTP offers an opportunity to consider age friendly design, including design for dementia, and potential for increasing access to health services in development of transport proposals to better an older population.

4.8 High levels of car dependency amongst the population of Longford and HGV traffic travelling through the town contribute towards traffic congestion and a decline in air quality, particularly during peak commuter times. There is potential for the Longford Town LTP to reduce air and/or noise pollution by supporting a modal shift to active travel and public transport within the town, thereby improving the health and wellbeing of the population of Longford.

4.9 The most densely populated areas in Longford Town are generally in the centre, south and eastern parts of the town. These areas tend to coincide with higher levels of relative deprivation and unemployment, along with lower levels of educational attainment. The Longford Town LTP seeks to improve active travel infrastructure throughout the town and to key employment and education locations, thus removing one of the barriers to employment for many social groups.

4.10 Lack of safe and accessible cycling and walking networks discourage active travel in the town. In the 2016 Census, Longford Town recorded the highest number of people in Ireland who stated that their health was 'bad' or 'very bad' (2.9%) [See reference 61]. The LTP has an important role to play in improving health of the residents of Longford Town through improving access to services and facilities (including health facilities), encouraging active travel modes such as walking and cycling, reducing transport-related air and noise pollution, and reducing spatial connectivity inequalities that impact health.

4.11 In the absence of the Longford Town LTP, the policies in the Longford County Development Plan would apply, however, without the Longford Town

LTP, these sustainability issues would be less well addressed, and the opportunities identified above may not be fully exploited.

4.12 The corresponding Environmental Protection Objective is:

- **2: Population and human health** - Create a healthy living environment, encourage healthy lifestyles and improve safety.
 - Does the LTP protect physical and mental health and wellbeing by preventing, avoiding and mitigating adverse health effects associated with air, noise, vibration, and light pollution from transport infrastructure?
 - Does the LTP promote healthy lifestyles by encouraging and facilitating active travel, such as walking and cycling?
 - Does the LTP improve road user safety and reduce the risk of accidents, such as through traffic calming measures or improved crossings?
 - Does the LTP facilitate access to key services, facilities and employment areas for all, including ensuring easily accessible and affordable public transport, particularly in more deprived areas?
 - Does the LTP minimise journey times for commuting?
 - Does the LTP improve access to open spaces and recreational facilities to improve physical and mental health?

Climatic factors

4.13 There is a need to significantly reduce the Longford's greenhouse gas emissions to help meet international and national greenhouse gas reduction targets. The effects of climate change in Longford are likely to result in extreme weather events (e.g., intense rainfall and flooding, prolonged high temperatures and drought) becoming more common and more intense. Climate change is therefore likely to affect habitats and species and how people live, work and play. In the absence of the Longford Town LTP, the actions outlined in the

Chapter 4 Environmental baseline information

Climate Change Adaptation Strategy and the policies of the Longford County Development Plan will apply which seek to respond to the Climate Emergency by reducing energy demand and greenhouse gas emissions, including transport-related emissions; improving energy efficiency of buildings; maintaining and enhancing green infrastructure; and supporting low carbon and renewable energy generation (Climate Change policies CPO3.1 -CPO3.19). The Longford Town LTP provides an opportunity to adapt and mitigate to climatic factors by promoting sustainable development of transport infrastructure, for example by locating transport infrastructure in sustainable locations that would not be significantly impacted by flooding (or likely to increase flooding elsewhere) and ensuring it is designed to be flood resilient; reducing the need to travel by private car; creating and enhancing green and blue infrastructure networks; incorporating Sustainable urban Drainage Systems (SuDS) as part of new transport and active travel schemes; identifying suitable locations for new public EV charging infrastructure; and through low carbon design of new transport infrastructure and the use of renewable energy for electricity in electric vehicles.

4.14 The corresponding Environmental Protection Objectives are:

- **3: Air quality and climate change mitigation** - Improve air quality and minimise greenhouse gas emissions by reducing concentrations of harmful atmospheric pollutants and avoiding their emission.
 - Does the LTP reduce the need to travel by petrol or diesel vehicles?
 - Does the LTP improve air quality by minimising pollutant emissions from the transport sector?
 - Does the LTP help to address road congestion and its impact on air quality?
 - Does the LTP encourage a modal shift to sustainable modes of transport by supporting maintenance and expansion of public and active transport networks?
 - Does the LTP support the provision of facilities for electric vehicle charging?

Chapter 4 Environmental baseline information

- Does the LTP encourage the use of sustainable construction methods and materials in the development of transport infrastructure, with a focus on reducing the embodied carbon in new transport infrastructure?
- **4: Flood risk and climate change adaptation** - Reduce the risk and effects of flooding, both now and in the future.
 - Does the LTP direct transport away from areas at highest risk of flooding and avoid inappropriate transport-related development in areas at risk of flooding, taking into account the effects of climate change and mitigate residual risks without increasing flood risk elsewhere?
 - Does the LTP increase the resilience of transport systems to the effects of climate change, via flood resilient design?
 - Does the LTP promote the use of SuDS, where appropriate?
 - Does the LTP encourage the creation, management and enhancement of a coherent green and blue infrastructure (GBI) network?

Air

4.15 In the absence of the Longford Town LTP, the legally binding ceilings for emissions of air pollutants would continue to apply set by the EU Air Quality Directive [See reference 62], as well as the policies in the Longford County Development Plan which support the preservation of ‘best ambient air quality’ in the county, the promotion of alternative and sustainable transport methods to maintain good air quality, and the retention and planting of green infrastructure as a means of air purification and filtering (Air Quality policies CPO12.104 - CPO12.108). However, the Longford Town LTP provides an opportunity to improve air quality and reduce emissions by minimising traffic growth, supporting a modal shift towards public transport, walking and cycling, and providing electric vehicle charging infrastructure to support the uptake of electric vehicles in preference to petrol/diesel vehicles.

4.16 Without targeted action through the Longford Town LTP, it is likely that traffic congestion and high levels of car dependency will continue to increase in the town centre and may worsen with the rising population, exacerbating air quality issues, particularly at commuter times.

4.17 The corresponding Environmental Protection Objective is:

- **3: Air quality and climate change mitigation** - Improve air quality and minimise greenhouse gas emissions by reducing concentrations of harmful atmospheric pollutants and avoiding their emission.
 - Does the LTP reduce the need to travel by petrol or diesel vehicles?
 - Does the LTP improve air quality by minimising pollutant emissions from the transport sector?
 - Does the LTP help to address road congestion and its impact on air quality?
 - Does the LTP encourage a modal shift to sustainable modes of transport by supporting maintenance and expansion of public and active transport networks?
 - Does the LTP support the provision of facilities for electric vehicle charging?
 - Does the LTP encourage the use of sustainable construction methods and materials in the development of transport infrastructure, with a focus on reducing the embodied carbon in new transport infrastructure?

Soil

4.18 There are several vacant sites in Longford, however, the extent of infill / brownfield land and vacant and derelict buildings is likely to be reduced in the future as the regeneration of Longford Town progresses. The town contains one Geological Site, St. Mel's Cathedral, which should not be lost or compromised as new development occurs. There are several notable construction projects

that are either planned, programmed or underway in Longford, which will require significant amounts of mineral resources in the future, including the N4/M4 Mullingar to Longford (Roosky) Upgrade which will pass Longford Town and the Royal Canal Way.

4.19 In the absence of the Longford Town LTP, the policies in the Longford County Development Plan would apply. These support the protection of Geological Sites, the reuse of brownfield land, the remediation of contaminated land, and the protection of high-quality agricultural soils (Soil Protection policies CP012.115-CPO12.124). However, the Longford Town LTP provides an opportunity to ensure that transport development and active travel infrastructure is located and designed to take into account the sensitivities of the soil environment and geological sites of value. Furthermore, the Longford Town LTP will support the regeneration of Longford Town's infill/brownfield land by outlining the sustainable transport elements of the regeneration programme.

4.20 The corresponding Environmental Protection Objective is:

- **5: Soil** - Conserve and enhance Longford's soil resources and geological sites.
 - Does the LTP avoid the loss of best and most versatile agricultural land?
 - Does the LTP conserve designated and undesignated geological assets?
 - Does the LTP direct new transport development to brownfield / previously developed land in preference to greenfield land, where appropriate?

Water

4.21 The River Camlin is failing to meet the WFD objective of 'good' ecological and chemical status. Without the Longford Town LTP, it is possible that transport developments and active travel interventions could be located in areas

that could lead to further water quality issues and risks to the natural environment. The water environment has the potential to be both directly and indirectly affected by the Longford Town LTP, with transport and active travel development potentially contributing to the pollution of nearby watercourses and groundwater and adversely affecting drainage of surface water. However, existing safeguards, such as the Water Framework Regulations, would help to reduce the potential for this to occur. Policies in the County Development Plan also seek to protect and enhance water quality (Water Quality and Groundwater Protection Policies CPO12.92 – CPO12.103). The Longford Town LTP provides an opportunity to ensure that transport and active travel development is located and designed to take into account the sensitivities of the water environment. Without the Longford Town LTP, these sustainability issues would be less well addressed, and the opportunities may not be fully exploited.

4.22 The corresponding Environmental Protection Objective is:

- **6: Water** - Preserve and enhance the quality and quantity of waterbodies and groundwater.
 - Does the LTP maintain or improve the quality of waterbodies and groundwater by avoiding adverse impacts from pollution / changes to drainage?
 - Does the LTP minimise and mitigate runoff from new transport and active travel infrastructure?
 - Does the LTP minimise inappropriate development in groundwater Source Protection Areas?

Cultural heritage including architectural and archaeological heritage

4.23 There are many heritage assets and areas of historical and cultural interest in Longford that could be adversely affected by poorly located or designed transport development or active travel interventions. The increasing occurrence of extreme weather events means that all cultural asset structures, particularly

Chapter 4 Environmental baseline information

those in a ruinous or dilapidated condition, are susceptible to the effects of climate change. Air pollution can also contribute to the degradation of heritage assets. Increasing transport levels from the projected population increase can have a range of direct and indirect effects on heritage assets including effects from noise and air pollution from busy traffic in close proximity to culturally significant areas which may make them less appealing to visit or decrease their visual amenity.

4.24 In the absence of the Longford Town LTP, the statutory protection of important heritage assets, such as the protection of RPS and ACA designations through the Planning and Development Act and the National Monuments Acts would continue to apply, as well as the policies in the Longford County Development Plan (Built and Cultural Heritage Policies CPO 11.1 - 11.57) which support the conservation and enhancement of heritage assets and their settings and the promotion of access to and understanding of heritage assets in Longford.

4.25 However, the Longford Town LTP provides opportunities to protect these assets (including their settings) from inappropriate transport and active travel development. It is likely that the maintenance and management of existing transport infrastructure, and the delivery of any new transport infrastructure, would be required to consider the potential effects on any nearby heritage assets and historic areas, and to incorporate elements that help to enhance their setting. A key element of the regeneration of Longford Town will be the creation of enhanced accessibility and sustainable mobility within the town. Improving the public transport and active travel connectivity of Longford Town, as proposed in the Longford Town LTP, could help enhance the accessibility of historic areas and heritage assets for people from all backgrounds, including local people and tourists. This would help to promote the importance of these assets and areas and could subsequently lead to new investment, such as through an increase in the number of visitors, that would help to preserve heritage assets and areas for future generations to enjoy. Furthermore, the Longford Town LTP provides an opportunity to reduce the need to travel by diesel and petrol vehicles; to accelerate a shift from private car to active and public transport; and to decarbonise road vehicles, all of which will reduce

greenhouse gas emissions and traffic congestion, thereby helping to reduce degradation of heritage assets and improve their settings.

4.26 The corresponding Environmental Protection Objective is:

- **7: Cultural heritage including architectural and archaeological heritage** - Conserve and enhance the significant qualities, fabric, setting and accessibility of Longford's historic environment.
 - Does the LTP conserve designated and undesignated heritage assets, including their setting and their contribution to wider local character and distinctiveness, avoiding adverse effects on their significance from direct loss, damage, or detracting from their setting?
 - Does the LTP improve access to heritage assets and areas of historical and cultural interest?
 - Does the LTP support heritage-led regeneration of Longford Town?

Landscape

4.27 Major new development projects, including those relating to transport infrastructure, renewable and non-renewable energy development, and regeneration and public realm enhancements have the potential to influence both positive and negative landscape / townscape change. In the absence of the Longford Town LDP, the policies in the Longford County Development Plan will apply which seek to conserve and enhance the uniqueness of each LCT; preserve important views; support public realm improvements; encourage the redevelopment of infill / brownfield land in preference to greenfield sites; support the regeneration of key strategic sites in Longford Town; and develop the green and blue infrastructure network (Landscape Character policies CPO14.1 – CPO14.37; Regeneration policies CPO6.62 – 6.85; and Green Infrastructure policies CPO13.1 – CPO13.35).

4.28 The Longford Town LTP offers an opportunity to ensure that the variation in landscape character is taken into account in the design and siting of transport

developments and active travel interventions, and that opportunities for the protection and enhancement of the landscape are maximised. The LTP provides an opportunity to improve urban and rural connectivity and therefore deliver improved access to valued landscapes, townscapes and viewpoints, including by sustainable and active travel modes to reduce the impact of road traffic. The LTP provides an opportunity to reduce petrol and diesel vehicles on the roads which would help to minimise the adverse effects that busy roads can have on landscape and townscape character, including through noise, air and light pollution. Furthermore, the LTP provides an opportunity to promote the creation and enhancement of active travel corridors which would benefit visual amenity value in Longford Town. Without the LTP, the sustainability issues would be less well addressed, and the opportunities may not be fully exploited.

4.29 The corresponding Environmental Protection Objective is:

- **8: Landscape** - Conserve and enhance Longford's landscape and townscape, ensuring transport and related development does not detract from the quality of views and local distinctiveness.
 - Does the LTP adversely impact, protect or enhance the townscape and visual amenity of Longford Town?
 - Does the LTP improve access to valued landscapes, townscapes and viewpoints, including by sustainable and active travel modes to reduce the impact of road traffic?
 - Does the LTP encourage the retention and planting of green infrastructure along transport corridors to protect landscape character and create a sense of place?

Material assets

4.30 Longford Town experiences high levels of car dependency and ownership with low levels of public transport usage, poor train frequencies, limited bus services and connectivity, fragmented and poor cycling facilities, and traffic/parking issues along Main Street.

4.31 In the absence of the Longford Town LTP, the policies in the Longford County Development Plan would apply (Transport policies CPO5.1 – CPO5.80). These support measures to reduce dependency on cars; improve traffic and travel management; develop active travel networks; support a modal shift from private car use to walking, cycling and public transport; and to direct new development to sustainable locations which limits the need to travel and offer a choice of transport modes. However, without targeted action at the local level, it is anticipated that car dependency will continue to increase with the rising population. The Longford Town LTP provides an opportunity to develop an accessible and inclusive transport network that supports the needs of the population of Longford Town by:

- Reducing dependency on cars in favour of increased walking, cycling and public transport use.
- Supporting a modal shift from private car use to public transport and active travel.
- Reducing road accidents and creating a sense of safety for all transport network users.

4.32 The corresponding Environmental Protection Objective is:

- **9: Material assets** - Use resources intelligently, optimising reuse and recovery of materials, minimising impacts on the transport network.
 - Does the LTP optimise existing infrastructure and provide new infrastructure sufficient to meet demand?
 - Does the LTP reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes?

Chapter 5

SEA findings of the Longford Town Local Transport Plan

Introduction

5.1 This chapter presents a summary of the SEA findings for the appraisal of the Draft Longford Town LTP's Vision, nine principles, eight objectives, eight strategies for transport development and its reasonable alternative, all of which were assessed against the EPO Framework presented in **Chapter 2**. This chapter also outlines the potential secondary, cumulative, synergistic, short-medium-long term, direct and indirect effects which are likely from the implementation of the Longford Town LTP. The detailed SEA matrices for the proposed plan and reasonable alternative are presented in **Appendix D**.

SEA findings of the reasonable alternative

5.2 As outlined in Chapter 2, reasonable alternative scenarios must meet the following considerations:

- Take into account the geographical scope, hierarchy and objectives of the LTP – **be realistic**
- Be based on socio-economic and environmental evidence – **be reasonable**
- Be capable of being delivered within the LTP's timeframe and resources – **be implementable**
- Be technically and institutionally feasible – **be viable**

5.3 One of the reasonable alternatives considered was the ‘do-nothing’ scenario i.e. no change to existing transport infrastructure or transport services in Longford Town. However, this was discounted as a reasonable alternative as both the Regional Spatial and Economic Strategy for the Eastern and Midlands Region (RSES) 2019-2031 [See reference 63] (Regional Policy Objective 8.6) and Longford County Development Plan 2021-2027 [See reference 64] (County Policy Objective 4.9) (see **Chapter 3**) require the preparation of a Local Transport Plan for the town.

5.4 Therefore, the reasonable alternative considered in the Environmental Report is the:

- Alternative access strategy for Abbeycartron based on the previous Local Area Plan layout.

Alternative Access Strategy for Abbeycartron

5.5 The proposed development lands at Abbeycartron are zoned for residential use with a small area for education zoned in the northwest part of the site. In order to facilitate access to these lands, an alternative Access Strategy based on the previous Local Area Plan layout was considered which provides access for all modes of transport through the site.

5.6 The alternative Access Strategy includes a number of new roads through the lands, creating links at Battery Road roundabout/Druid Glen in the northwest, Great Water Street across the River Camlin in the southwest, and two links at Ballinalee Road/Tempelmichael Industrial Estate in the east. This would create a number of new road crossings across the River Camlin. The scheme also includes new pedestrian/cycle routes along the River Camlin and between Abbeycartron Lane and the Mall, and additional permeability routes throughout the site.

5.7 The results of the appraisal findings for this reasonable alternative are provided in **Table 5.1**.

Table 5.1: Summary of SEA effects of the alternative Abbeycartron Access Strategy

Environmental Protection Objective	Alternative Abbeycartron Access Strategy
1. Biodiversity, flora and fauna	+/-?
2. Population and human health	++/--
3. Air quality / climate change mitigation	--/+
4. Flood risk / climate change adaptation	--?
5. Soil	--
6. Water	--?
7. Cultural heritage	-?
8. Landscape	--/+?
9. Material assets	++/--

5.8 A mixed effect (significant positive / significant negative) is identified for **EPO 2: Population and human health** for the alternative Abbeycartron Access Strategy. The scheme proposes new pedestrian/cycle links along the River Camlin ensuring good links with the surrounding area and providing additional permeability routes to connect with the Mall. New roads throughout the scheme will also incorporate cycle infrastructure. These interventions are likely to encourage walking and cycling for new and existing residents of Abbeycartron and improve access to services, facilities and employment opportunities for sustainable travel modes. This will encourage healthy lifestyles by promoting active travel. However, a significant negative effect is also identified for this EPO as the new access roads which provide four new access points will make the area extremely permeable for vehicles which is likely to increase residents' exposure to noise/air/vibration/light pollution related to the increased volume of traffic in the area. This will be mitigated to some extent by the proposed active

travel elements of the strategy, and the close proximity of zoned education facilities, however it is likely that new residents will still rely on the use of private vehicles for some journeys as they are located on the periphery of Longford Town.

5.9 An uncertain significant negative effect is identified for **EPO 4: Flood risk and climate change adaptation**. The alternative Access Strategy would propose a number of new roads traversing the site, including three new road river crossings across the River Camlin. The River Camlin has a high probability of fluvial flood events and this scale of development on greenfield land would have the potential to exacerbate flood risk with the introduction of more impermeable surfaces within the plan area.

5.10 An uncertain mixed effect (minor positive / significant negative) is identified for **EPO 8: Landscape** in relation to the alternative Abbeycartron Access Strategy. The impact on Longford's existing landscape and townscape would depend largely on the detailed design of the alternative Access Strategy and its associated residential development, therefore the effects would be uncertain. However, due to the scale of the transport element of the proposal, it is likely that the scheme would have an adverse effect on the landscape of Longford Town's rural edge. The Access Strategy would provide new pedestrian and cycle links which would improve urban and rural connectivity, as well as enhancing access to valued landscapes and viewpoints including to the River Camlin and the Mall. However, the additional volume of traffic at connections points on Battery Road, Great Water Street and Templemichael/Ballinalee Road, associated with the new road and new population, would have the potential to increase adverse effects on the character of these areas, including through noise, air and light pollution.

5.11 The effects for **EPO 1: Biodiversity, flora and fauna**, **EPO 5: Soil**, **EPO 6: Water**, **EPO 7: Cultural heritage including architectural and archaeological heritage**, and **EPO 9: Material assets** were assessed to be the same as the preferred approach Abbeycartron Access Strategy.

Conclusion on why the preferred approach was chosen in light of reasonable alternative

5.12 Table D.11 provides a summary of the SEA effects for the reasonable alternative. Longford County Council took into account the SEA findings when deciding on the preferred approach for the Draft Longford Town LTP. The preferred approach was chosen in preference to the reasonable alternative as it would result in the most positive effects against the SEA topics. However, the SEA findings were not the only factors considered when determining a preferred approach to take forward in the proposed LTP. Factors such as public opinion, deliverability and conformity with legislation were also considered when selecting the preferred approach for the proposed LTP. Taking all of these factors into consideration, Longford County Council rejected the reasonable alternative appraised during the SEA process as a preferred approach.

SEA findings of the Vision, principles and objectives of the Longford Town LTP

5.13 The results of the appraisal findings for the Vision, principles and objectives set out in the Longford Town LTP are described in this section with a summary of the SEA effects identified outlined in **Table 5.2** overleaf.

Table 5.2: Summary of likely sustainability effects of the Vision, principles and objectives of the Longford Town LTP

	1: Biodiversity, flora and fauna	2: Population and human health	3: Air quality and climate change mitigation	4: Flood risk and climate change adaptation	5: Soil	6: Water	7: Cultural heritage	8: Landscape	9: Material assets
Vision	+/-?	++	++	+/-?	+/-?	+/-?	+/-?	+/-?	++
Principle 1: Integrated transport planning, land use and urban design	+/-?	++	++	+/-?	+/-?	+/-?	+/-?	++/-?	++
Principle 2: People first	+/-?	++	++	?	?	?	+	+	++
Principle 3: Maintaining and enhancing connectivity	+/-?	+/-	+/-	?	?	?	+/-?	+/-?	++
Principle 4: Safe streets	+	++	+	0	0	0	+	+	+
Principle 5: Value for money	0	0	0	0	0	0	0	0	+?
Principle 6: Vibrant and great for business	+	++	++	?	?	?	+	++	+
Principle 7: Efficient	+	++	++	+	+	+	+	++	+
Principle 8: Future focused and equitable	+	++	++	+	?	+	+	+	+
Principle 9: Evidence-based decision making	+	++	++	?	?	?	+	+	++
Objective A: Permeability	+/-?	++	++	?	?	?	+	+	++
Objective B: Active travel	+/-?	++	++	?	?	?	+	+	++
Objective C: Public transport	+/-?	++/-	++/-	?	?	?	+	+	++
Objective D: Integration of land use and transport	+/-?	++	++	+/-?	+/-?	+/-?	+/-?	+/-?	++
Objective E: Parking	+	++	++	+	+	+	+	++	+
Objective F: Safety	+	++	+	0	0	0	+	+	+
Objective G: Traffic Management	+	++	++	0	0	0	+	+	++
Objective H: Feasibility and value for money	0	0	0	0	0	0	0	0	+?

EPO 1: Biodiversity, fauna and flora

5.14 Uncertain mixed effects (minor positive / minor negative) are identified for the Vision, Principles 1-3 and Objectives A-D. It is expected that there may be indirect benefits for species from improved air quality due to enhanced options for sustainable travel (i.e. walking, cycling, public transport, improved permeability and better connectivity). However, there may also be adverse effects on species and habitats due to new transport infrastructure and land use change, for example, from the development of new footpaths or cycling connections.

5.15 For Principles 4 and 6-9 and Objectives E-G, **minor positive effects** are identified for this EPO as they also support the prioritisation of other modes of travel such as walking and cycling above private vehicle use which will result in indirect benefits for species from improved air quality. *Principle 7: Efficient* and *Objective E: Parking* support the reallocation of on-street parking for other uses including new trees/planting, which will contribute to the network of functionally linked habitats in Longford Town.

5.16 Negligible effects are identified for *Principle 5: Value for Money* and *Objective H: Feasibility and Value for Money* of the LTP as these focus on the cost effectiveness of proposed transport interventions.

EPO 2: Population and human health

5.17 Significant positive effects are identified for the Vision, Principles 1, 2, 4, and 6-9, and Objectives A, B, D-G. These measures are expected to promote healthy lifestyles by encouraging walking and cycling as modes of active travel by implementing new active travel infrastructure and improving connectivity. Measures are expected to support the modal shift away from private vehicle use, thereby reducing residents' exposure to noise/air/vibration/light pollution associated with traffic. *Principle 2: People First* and *Objective A: Permeability*

are expected to help address the spatial connectivity inequality that currently exists in Longford Town by connecting previously disconnected areas and areas with relatively high levels of deprivation to local services and facilities, creating a more cohesive and integrated town that is easier to navigate by active travel. This will be particularly beneficial for people on low incomes to access services and facilities. Similarly, *Principle 4: Safe Streets* and *Objective F: Safety* seek to improve road user safety and reduce the risk of accidents through traffic calming measures and improved crossings, reducing the risk of accidents and protecting vulnerable road users including pedestrians, cyclists, elderly people, young children, disabled people and pregnant people, which is likely to help promote active travel for short journeys throughout Longford Town. *Principle 6: Vibrant and great for business* and *Principle 8: Future focused and equitable* aim to design streets which accommodates all ages, abilities, genders and incomes and enhances businesses in Longford Town which will promote social cohesion and will improve access to local services, facilities, open spaces and employment opportunities.

5.18 For *Principle 3: Maintaining and enhancing connectivity* and *Objective C: Public Transport*, **mixed effects** are identified. This principle and objective are likely to contribute to the positive effects set out above by facilitating improved access by public transport and reducing dependence on private vehicle use. However, as transport energy use remains dominated by fossil fuels, the release of greenhouse gases from modes of public transport, most notably rail transport, is still likely. Therefore, a mixed effect (significant positive / minor negative) is identified for Objective C while a mixed effect (minor positive / minor negative) is identified for Principle 3 as this principle also supports maintaining and enhancing the road network.

5.19 Negligible effects are identified for *Principle 5: Value for Money* and *Objective H: Feasibility and Value for Money* as these are not expected to affect population and health outcomes.

EPO 3: Air quality and climate change mitigation

5.20 Significant positive effects are identified for the Vision, Principles 1, 2 and 6-9, and Objectives A, B, D, E and G. These interventions directly support the modal shift away from petrol / diesel private vehicle use to active travel and public transport. For several of these Principles and Objectives, this will be achieved by delivering more attractive and accessible sustainable travel opportunities, such as walking and cycling, and better connectivity within Longford Town. Additionally, reducing the demand for car use by improving the street environment (*Principle 6: Vibrant and great for business*), ensuring accessibility and equality (*Principle 8: Future focused and equitable*), re-allocating street space away from parking (*Principle 7: Efficient and Objective E: Parking*), improving traffic circulation and reducing through-traffic (*Objective G: Traffic management*) is likely to significantly reduce traffic in the town centre and the use of private vehicles for unnecessary journeys.

5.21 For *Principle 4: Safe Streets* and *Objective F: Safety*, **minor positive effects** are identified for this EPO. Improving road safety, particularly for vulnerable road users will encourage alternative travel modes such as walking and cycling. This may also help discourage private car journeys by implementing reduced speeds and improving infrastructure for crossing and pedestrian safety. The overall effect will be a reduction in the dependence on petrol / diesel private vehicles, thus lowering transport-related emissions and Longford's contribution to climate change.

5.22 For *Principle 3: Maintaining and enhancing connectivity* and *Objective C: Public transport* **mixed effects** are identified for EPO 3. This principle and objective are likely to contribute to the positive effects set out above by facilitating improved access by public transport and reducing dependence on private vehicle use. However, as transport energy use remains dominated by fossil fuels, the release of greenhouse gases from modes of public transport, most notably rail transport, is still likely. Therefore, a mixed effect (significant positive / minor negative) is identified for Objective C while a mixed effect

(minor positive / minor negative) is identified for Principle 3 as this principle also supports maintaining and enhancing the road network.

5.23 Negligible effects are identified for *Principle 5: Value for Money* and *Objective H: Feasibility and Value for Money* as these focus on the feasibility and value for money that projects can deliver and are not expected to affect air quality and climate change mitigation objectives.

EPO 4: Flood risk and climate change adaptation

5.24 Uncertain minor positive effects are identified for *Principle 7: Efficient*, *Principle 8: Future focused and equitable* and *Objective E: Parking* for EPO 4. Principle 8 aims to adapt streets that are flexible and adaptable to change which may include being designed to adapt to surface water or ground water flooding (e.g. through flood resilient design). Principle 7 and Objective E encourage the reallocation of on-street parking for other uses including trees/planting which will deliver positive effects for flood risk and climate change adaptation. This will enhance green infrastructure along selected streets and has the potential to include SuDS.

5.25 Uncertain mixed effects (minor positive / minor negative) are identified for the Vision, *Principle 1: Integrated transport planning, land use and urban design* and *Objective D: Integration of land use and transport*. These interventions support the appropriate integration of transport and land use, which may include locating transport infrastructure in sustainable locations that take into account flood risk, delivering green and blue infrastructure as part of new transport projects, and incorporating Sustainable urban Drainage Systems (SuDS) as part of new transport and active travel schemes. However, depending on the design and location of infrastructure, there may be potential adverse effects in relation to flooding. Therefore, the effects are uncertain.

5.26 Uncertain effects are identified for Principles 2, 3, 6 and 9, and Objectives A-C. These interventions seek to encourage the use of active travel or public transport but do not identify the location of proposed new infrastructure. Therefore, it is uncertain whether the proposals may be in areas at high risk of flooding, or on high quality agricultural land, or whether they will affect the quality of waterbodies / groundwater. The effects will depend on the location and design of permeability interventions.

5.27 Negligible effects are identified for the remaining principles and objectives as they are unlikely to affect areas at risk of flooding.

EPO 5: Soil

5.28 Minor positive effects are identified for *Principle 7: Efficient* and *Objective E: Parking*. The reallocation of on-street car parking for other uses including trees and planting is likely to benefit the soil environment.

5.29 For the Vision, *Principle 1: Integrated transport planning, land use and urban design* and *Objective D: Integration of land use and transport*, **uncertain mixed effects (minor positive / minor negative)** are identified in relation to EPO 5. These interventions are supportive of the appropriate integration of transport and land use, which may include locating transport infrastructure in sustainable locations that take into account the sensitivities of the soil environment. They will potentially encourage the development of brownfield / previously developed land within the built-up area of Longford Town. However, depending on the locations and design of transport infrastructure, there may be adverse effects on the soil environment. Therefore, effects are uncertain.

5.30 For Principles 2-3, 6, and 8-9 and Objectives A-C, **uncertain effects** are identified for EPO 5: Soil. These interventions seek to encourage the use of active travel or public transport but do not identify the location of proposed new infrastructure. Effects on the soil environment will depend on the location of transport interventions. **Negligible effects** are identified for the remaining

objectives and principles as they are unlikely to affect the conservation and enhancement of Longford's soil resources.

EPO 6: Water

5.31 Minor positive effects are identified for *Principle 7: Efficient, Principle 8: Future focused and equitable* and *Objective E: Parking*. Principle 7 and Objective E support the reallocation of on-street car parking for other uses including trees and planting which is likely to benefit the water environment. Principle 8 aims to adapt streets that are flexible and adaptable to change which may include being designed to adapt to surface water or ground water flooding.

5.32 For the Vision and *Objective D: Integration of land use and transport*, **uncertain mixed effects (minor positive / minor negative)** are identified for EPO 6. These support the appropriate integration of transport and land use, which may include locating transport infrastructure in sustainable locations that take into account the sensitivities of the water environment. However, depending on the design and location of new transport infrastructure, there may be adverse effects on the water environment. Therefore, the effects are uncertain.

5.33 For Principles 2-3, 6 and 9 and Objectives A-C, **uncertain effects** are identified in relation to EPO 6. These interventions seek to encourage the use of active travel or public transport but do not identify the location of proposed new infrastructure. Effects on the water environment will depend on the location and design of transport interventions.

5.34 For the remaining principles and objectives (Principles 4-5 and Objectives F-H), **negligible effects** are identified for EPO 6. These interventions are unlikely to affect the water quality of waterbodies within the plan area.

EPO 7: Cultural heritage including architectural and archaeological heritage

5.35 Minor positive effects are identified for the Vision and the majority of the Principles and Objectives of the Longford Town LTP in relation to EPO 7. A key element of the regeneration of Longford Town will be the creation of enhanced accessibility and sustainable mobility within the town. Sustainable transport interventions will have a positive effect on the accessibility of heritage assets within Longford Town. Additionally, indirect positive effects are likely due to the reduced need to travel by diesel and petrol vehicles which will minimise greenhouse gas emissions and congestion, thereby helping to reduce degradation of heritage assets and improve their settings. Additionally, improved street environments (e.g. *Principle 6: Vibrant and great for business*, *Principle 7: Efficient* and *Objective E: Parking*) will encourage street life and improve access to heritage assets for local people and tourists. The minor positive effects for the Vision, *Principle 1: Integrated transport planning, land use and urban design*, *Objective D: Integration of land use and transport*, and *Principle 3: Maintaining and enhancing connectivity* are combined with minor negative effects as, depending on the design and location of the proposals, there may be adverse effects on the historic environment due to new transport infrastructure development and land use change.

5.36 Negligible effects are identified for *Principle 5: Value for Money* and *Objective H: Feasibility and Value for Money* as these focus on the feasibility and value for money that projects can deliver.

EPO 8: Landscape

5.37 Significant positive effects are identified for *Principle 1: Integrated transport planning, land use and urban design*, *Principle 6: Vibrant and great for business*, *Principle 7: Efficient*, *Objective A: Permeability* and *Objective E: Parking*. Principle 1 supports good urban design that focuses on image, liveability, safety and cohesion of Longford Town. A focus on urban design is

likely to help promote retention and planting of green infrastructure alongside transport interventions, although this is uncertain, and help create a sense of place. Additionally, improved liveability and cohesion has the potential to offer improved urban and rural connectivity and better access to valued landscapes, townscapes and viewpoints by sustainable and active travel modes. Similarly, the other principles and objectives support good urban design such as improved street design and reallocation of car parking space in favour of trees/planting. The minor positive effect for *Principle 1: Integrated transport planning, land use and urban design* is combined with a minor negative effect as there may be adverse effects on the landscape due to new transport infrastructure development and land use change.

5.38 For the Vision and the majority of remaining principles/objectives, **minor positive effects** are identified in relation to EPO 8: Landscape. These interventions will support the modal shift away from private vehicle use and thereby help minimise the adverse effects that busy roads can have on landscape and townscape character, including through noise, air and light pollution. Additionally, improved sustainable transport connectivity will enhance urban and rural connectivity for active travel modes and ensure better access to valued landscapes, townscapes and viewpoints. The minor positive effects for the Vision, *Objective D: Integration of land use and transport*, and *Principle 3: Maintaining and enhancing connectivity* are combined with minor negative effects as, depending on the design and location of the proposals, there may be adverse effects on the landscape due to new transport infrastructure development and land use change.

5.39 Negligible effects are identified for *Principle 5: Value for Money* and *Objective H: Feasibility and Value for Money* as these measures focus on the feasibility and value for money that projects can deliver and are not expected to influence landscape or townscape character.

EPO 9: Material assets

5.40 Positive effects are identified for all of the Vision, Principles and Objectives set out in the Longford Town LTP. Each sets out a priority that will contribute to the development of a suitable and sustainable transport system that will meet the needs of the population of Longford Town. For the Vision and several of the principles and objectives, this includes the implementation of infrastructure and measures that support sustainable and active travel modes such as walking and cycling, reducing dependency on petrol / diesel vehicles and reducing energy demand from the transport sector. Additionally, these measures are likely to mitigate additional pressure on the road network as the population of Longford continues to grow.

5.41 As such, **significant positive effects** are identified for the Vision, Principles 1-3 and 9, and Objectives A-D and G. These measures are considered to offer direct effects that will enhance the transport network in Longford Town by creating an integrated system, and prioritising walking, cycling and public transport. **Minor positive effects** are identified for the remaining principles and objectives as these will also contribute to the creation of an overall more sustainable transport system.

5.42 Uncertain minor positive effects are also identified for *Principle 5: Value for Money* and *Objective H: Feasibility and Value for Money* as these focus on delivering value for money for transport proposals. As such, it is likely they will optimise the re-use of existing infrastructure and intelligent use of resources, although this is uncertain.

SEA findings of the strategies of the Longford Town LTP

5.43 The assessment examined the likely effects of the strategies and associated schemes on each SEA objective which are summarised in the following paragraphs.

5.44 The assessment examined the likely effects of the strategies and associated schemes on each EPO. These are summarised in the following paragraphs. The results of the appraisal findings are set out in **Table 5.3**.

Table 5.3: Summary of likely sustainability effects of the strategies and associated schemes of the Longford Town LTP

	1: Biodiversity, flora and fauna	2: Population and human health	3: Air quality and climate change mitigation	4: Flood risk and climate change adaptation	5: Soil	6: Water	7: Cultural heritage	8: Landscape	9: Material assets
Pedestrian Strategy	+/-?	++	++	+	+	+/-?	+	+	++
Cycling Strategy	--/+?	++	++	--?	+	-?	+	+	++
Permeability Strategy	+/-?	++	++	--?	+	-?	+	+	++
Public Transport Strategy	+	++/-	++/-	0	+	0	+	+	++
Traffic Management Strategy	+	++	++	0	+	0	+	+	+
Car Parking Strategy	+	++/-?	++/-?	0	+	0	+	+	+
Feasibility and Value for Money	0	0	0	0	0	0	0	0	++
Abbeycartron Access Strategy	+/-?	++/-	--/+	-?	--	--?	-?	+/-?	++/--

EPO 1: Biodiversity, fauna and flora

5.45 Uncertain mixed effects (minor positive / minor negative) are identified for the Pedestrian Strategy, the Permeability Strategy and the Abbeycartron Access Strategy. The Pedestrian and Permeability strategies have the potential to result in indirect benefits for species due a reduction in road traffic from people using new / improved pedestrian links which will result in less pollution deposition and less disturbance as well as potentially less direct road kill. New footpaths and links may incorporate habitat enhancement measures as part of their delivery, thereby potentially contribution the network of functionally linked habitats in Longford Town, although this is uncertain. There may be increased recreational pressures on the Royal Canal pNHA as F9, F11, PY7, PY10, and PY11 will improve access to the pNHA. Additionally, there may be species disturbance from the installation of lighting along the pedestrian routes.

5.46 For the Cycling Strategy, **uncertain mixed effects (significant negative / minor positive)** are identified in relation to EPO 1 for similar reasons as the Pedestrian and Permeability Strategies. However, a significant negative effect is identified as the Cycling Strategy aims to enhance the Royal Canal Greenway terminus as a destination for cyclists and walkers. This is likely to increase recreational pressure on the pNHA and may have adverse effects on biodiversity including disturbance to species, loss of habitat and habitat damage.

5.47 Uncertain mixed effects (minor positive / minor negative) are also expected for the Abbeycartron Access Strategy. There are no biodiversity sites in close proximity to the site, however, there may still be some adverse effects to habitats and species that exist on the rural land that is currently in agricultural use at the edge of Longford Town from development, associated travel and increased active travel in the area. Adverse effects may be minimised through retention of existing habitats and the incorporation of habitat enhancement measures through the delivery of the Strategy. Additionally, there may be both positive and negative indirect effects associated with the local air quality as the

strategy proposes a new road which will introduce greater transport-related emissions, but also introduces a number of active travel routes which would reduce the need to travel by petrol/diesel vehicles.

5.48 For the Public Transport Strategy, the Traffic Management Strategy and the Car Parking Strategy, **uncertain minor positive effects** are identified for EPO 1 as the schemes propose interventions along existing roads and street space, which are less likely to have adverse effects on habitats and species. Measures may incorporate habitat creation or enhancement measures such as street planting, although this is uncertain. However, these measures are also likely to result in indirect benefits for species from improved air quality due to the reduction in road traffic and congestion associated with the measures to support modal shift away from private vehicle use in Longford Town, such as the introduction of new bus routes, improved circulation from traffic calming measures, and reduced on-street parking.

5.49 A **negligible effect** is identified for the Feasibility and Value for Money Strategy as this strategy will not necessarily determine the impacts of traffic interventions on habitats and species.

EPO 2: Population and human health

5.50 The Pedestrian Strategy, the Cycling Strategy, the Permeability Strategy and the Traffic Management Strategy are all likely to result in **significant positive effects** in relation to EPO 2: Population and human health. The pedestrian, cycling and permeability schemes will promote healthy lifestyles by encouraging active modes of travel, and will improve the accessibility, safety and attractiveness of these modes within Longford Town. The multi-criteria analysis presented in the Longford Town LTP identified a number of specific routes that offered significant advantage by forming part of key route or desire line, or a key route to a school, or offering significant improvements in terms of safety. By promoting these active forms of travel, these strategies will likely help facilitate the modal shift away from private vehicle use and reduce residents' exposure to associated pollution, protecting physical and mental wellbeing.

These strategies will also address the spatial connectivity inequality that currently exists in Longford Town by connecting previously disconnected areas and areas with relatively high levels of deprivation to local services and facilities, creating a cohesive and integrated town that is easier to navigate by active travel which will be particularly beneficial for less mobile people, including elderly people, infants and young children, disabled people and pregnant women, to access services and facilities. Improving active travel infrastructure in the areas with high levels of relative deprivation and unemployment, and lower levels of educational attainment, will help to reduce spatial connectivity inequalities that impact employment and education attainment.

5.51 For the Public Transport Strategy and Car Parking Strategy, **mixed effects (significant positive / minor negative)** are identified for EPO 2. The schemes included in the Public Transport Strategy would help improve access and connectivity to services, facilities and employment areas for Longford Town, and help reduce reliance on private vehicles, thereby reducing residents' exposure to associated pollution. PT1, PT4 and PT6 offer particular benefit in enabling the interchange with other transport modes, which includes provision of a new local bus route (PT6) that will enhance access to local services and employment opportunities within Longford Town by sustainable modes. However, as transport energy use remains dominated by fossil fuels, the release of greenhouse gases from modes of public transport, most notably from rail transport, is still likely and therefore a minor negative effect is expected to be combined with a significant positive effect. The schemes in the Car Parking Strategy include the rationalisation of on-street parking along Main Street, Dublin Street (CP1) and Geraldine's Terrace (CP4) to facilitate cycling infrastructure. Other improvements such as changes to the parking regime (e.g. limiting stays to a maximum of two hours), improved pedestrian access to existing car parks and enhanced wayfinding aim to improve access to existing car parks within Longford Town. A significant positive effect is therefore identified as improving street space to create more space to pedestrian/cycling helps facilitate the modal shift away from private vehicle use. Additionally, the removal of on-street parking in key town centre locations is likely to reduce car use for unnecessary journeys into town. There may be some short-term inconvenience as existing private vehicle users adjust their travel behaviours. These interventions help support the modal shift away from private car use and

towards sustainable and active modes of travel, promoting healthy lifestyles. Additionally, the schemes aim to improve traffic circulation within the town and existing car parks, reducing congestion in these areas and therefore people's exposure to associated air, noise and light pollution in these areas. However, a minor negative effect is also identified for the Car Parking Strategy as the continued use and improvement of some existing parking facilities may encourage private vehicle use for some journeys.

5.52 For the Abbeycartron Access Strategy, a **mixed effect (significant positive / minor negative)** is identified for EPO 2. The scheme proposes new pedestrian/cycle links along the River Camlin ensuring good links with the surrounding area and providing additional permeability routes to connect with the Mall. The scheme includes a new road between Battery Road roundabout and Abbeycartron Lane, providing access to Battery Road at two points which reduces the overall volume of vehicles that utilise any one entrance, thereby minimising traffic congestion and pollution. A new road is also proposed across the Camlin to link to the Templemichael Industrial Estate. The new roads will also incorporate designated footpaths and cycle infrastructure. These interventions are likely to encourage walking and cycling for new and existing residents of Abbeycartron and improve access to services, facilities and employment opportunities for sustainable travel modes. This will encourage healthy lifestyles by promoting active travel. However, a minor negative effect is also identified for this EPO as the new access roads that will accommodate significant residential development are likely to increase residents' exposure to noise/air/vibration/light pollution related to the increased volume of traffic in the area. This will be mitigated to some extent by the proposed active travel elements of the strategy, and the close proximity of zoned education facilities, however it is likely that new residents will still rely on private vehicles for some journeys as they are located on the periphery of Longford Town.

5.53 A **negligible effect** is identified for the Feasibility and Value for Money Strategy as this will not necessarily determine the impacts of traffic interventions on population and human health.

EPO 3: Air quality and climate change mitigation

5.54 The Pedestrian Strategy, the Cycling Strategy, the Permeability Strategy, and the Traffic Management Strategy are all likely to experience **significant positive effects** in relation to air quality and climate change. These strategies and their associated schemes are likely to help facilitate the modal shift away from dependence on petrol / diesel private vehicles by increasing the attractiveness and accessibility of active travel and public transport, particularly for shorter journeys, thus lowering transport-related emissions and Longford's contribution to climate change. The Traffic Management Strategy is expected to improve traffic circulation, reduce congestion and reduce through-traffic.

5.55 For the Public Transport Strategy and Car Parking Strategy, **mixed effects (significant positive / minor negative)** are identified for EPO 3. Several of the interventions proposed in the Public Transport Strategy will offer significant benefit to the accessibility and attractiveness of public transport. As such, visitors and residents are likely to be less dependent on private vehicles, particularly where a new local bus route is offered for shorter journeys. This is likely to reduce dependence on petrol / diesel private vehicles and thus lower transport-related emissions and Longford's contribution to climate change. However, a minor negative effect is combined with a significant positive effect as transport energy use remains dominated by fossil fuels and the release of greenhouse gases from modes of public transport, most notably from rail transport, is still likely. The Car Parking Strategy supports the rationalisation of on-street parking on key roads in the town centre, supporting alternative modes of travel such as walking and cycling infrastructure (CP1 and CP4). This is likely to help encourage active travel modes within the town and will curb the convenience of parking to reduce unnecessary car journeys, thus reducing transport-related emissions. Similarly, reducing the maximum stay times in key existing car parks will likely reduce car use for longer stays in the town centre. However, a minor negative effect is also identified as the continued use and improvement of existing car parking facilities within Longford Town is likely to encourage private vehicle use for some journeys, thereby increasing transport-related emissions in the town.

5.56 The Abbeycartron Access Strategy is expected to result in a **mixed effect (minor positive / significant negative)** for EPO 3. The proposal includes a road between the roundabout on Battery Road and Abbeycartron Lane, a road connection to the Templemichael Industrial Estate, and a road connection south of Abbeycartron Lane. Traffic volumes and transport-related emissions at these points are expected to increase as the Access Strategy is supporting the development of a significant amount of zoned residential development and education facilities. While the Access Strategy incorporates sustainable transport infrastructure, including cycle infrastructure and new connections between Abbeycartron Lane and the Mall, there is still likely to be high volumes of traffic as the development is located on the settlement edge. As such a significant negative effect is expected as the scheme is likely to increase transport-related emissions along Battery Road and Abbeycartron Lane. At the same time, new pedestrian and cycle links will help support the modal shift away from private vehicle use and reduce unnecessary car journeys thus lowering transport-related emissions and Longford's contribution to climate change.

5.57 A **negligible effect** is identified for the Feasibility and Value for Money Strategy as this will not necessarily determine the impacts of traffic interventions on air quality and climate change mitigation.

EPO 4: Flood risk and climate change adaptation

5.58 A **minor positive effect** is identified for the Pedestrian Strategy. The majority of pedestrian schemes largely avoid the areas of highest flood risk in Longford Town. The Pedestrian Strategy requires improvements to existing footpaths to include upgrading their surface and improving drainage. This is likely to help reduce the risk and effects of flooding within Longford Town, particularly along pedestrian routes.

5.59 **Uncertain significant negative effects** are identified for the Cycling Strategy and the Permeability Strategy. A number of interventions in the

associated schemes are located in areas within Longford Town that are at the highest risk of flooding (e.g. new cycle routes and permeability routes which will require new infrastructure). Whilst primarily located along existing road routes, the development of new infrastructure and new connections could be at risk of flooding (e.g. C24 along the River Camlin).

5.60 The Abbeycartron Access Strategy is expected to have an **uncertain minor negative effect** for EPO 4. The redevelopment area is located in close proximity of the River Camlin, which has a high probability of river flood events, and some new links cross the river. Additionally, without appropriate mitigation, new development on greenfield land, including new transport infrastructure, has the potential to exacerbate flood risk with the introduction of more impermeable surfaces within Longford Town.

5.61 Negligible effects are identified for the remaining strategies: the Public Transport Strategy, Traffic Management Strategy, the Car Parking Strategy and the Feasibility and Value for Money Strategy. The interventions proposed in these schemes are unlikely to affect the flood risk or climate adaptation of Longford Town.

EPO 5: Soil

5.62 Minor positive effects are identified for the Pedestrian Strategy, the Cycling Strategy, the Permeability Strategy, the Public Transport Strategy, the Traffic Management Strategy and the Car Parking strategy for EPO 5. For the Pedestrian, Cycling and Public Transport strategies, interventions are expected to improve access to St. Mel's Cathedral Geological Site, via upgraded pedestrian routes, new cycle links and a new bus route with nearby bus stops. These schemes are also likely to have indirect positive effects on the regeneration of Longford's Town and the development of infill/brownfield land by supporting the sustainable transport elements of Longford Town's regeneration programme. For these reasons, minor positive effects are also identified for the Permeability, Traffic Management and Parking strategies.

5.63 The Abbeycartron Access Strategy is expected to have a **significant negative effect** in relation to EPO 5: Soil. The proposed scheme is located on greenfield land at the edge of the existing built-up area of Longford Town. The development of transport infrastructure to support the zoned development will result in the loss of this greenfield land.

5.64 A **negligible effect** is identified for the Feasibility and Value for Money Strategy as these measures are not expected to affect the soil resource of the plan area.

EPO 6: Water

5.65 An **uncertain mixed effect (minor positive / minor negative)** is identified for the Pedestrian Strategy. The Pedestrian Strategy requires improvements to existing footpaths to include upgrading their surface and improving drainage. This is likely to positively affect the drainage of surface water from pedestrian routes. However, the development of new/upgraded footpaths over/near waterbodies, such as the River Camlin and Royal Canal, may have adverse effects on the quality of water bodies and groundwater.

5.66 For these reasons, **adverse effects** are identified for the Cycling Strategy, the Permeability Strategy and the Abbeycartron Access Strategy in relation to EPO 6. These schemes include interventions that are located next to or traversing waterbodies within Longford Town, including the River Camlin and the Royal Canal. New roads and/or pedestrian and cycling infrastructure, such as river crossings, may have adverse effects on the quality of water bodies and groundwater during their construction.

5.67 For the remaining strategies, **negligible effects** are identified for EPO 6 as the Public Transport, Traffic Management, Car Parking and Feasibility and Value for Money strategies are not expected to deliver schemes that will affect the water quality of waterbodies in Longford Town.

EPO 7: Cultural heritage including architectural and archaeological heritage

5.68 For all of the strategies except the Feasibility and Value for Money and the Abbeycartron Access Strategy, **uncertain minor positive effects** are identified in relation to EPO 7. In most cases, the proposed schemes will improve sustainable access to historic assets and areas of Longford Town by improved walking links, cycling routes, and new public transport. A key element of the regeneration of Longford Town is the creation of enhanced accessibility and sustainability mobility through the town. Indirect positive effects are also likely as reducing greenhouse gas emissions and congestion in these areas will minimise the degradation of heritage assets and improve their settings.

5.69 For the Abbeycartron Access Strategy, an **uncertain minor negative effect** is identified. The development site is located in close proximity to the Battery Road Architectural Conservation Area (ACA) and therefore the development of new infrastructure in this area, and the associated increase in traffic expected in this area, has the potential to have adversely affect the setting of the ACA and the listed features in the area, although this will depend on the design of traffic interventions.

5.70 A **negligible effect** is identified for the Feasibility and Value for Money Strategy as it is not expected to deliver schemes that will affect the historic environment of Longford Town.

EPO 8: Landscape

5.71 Uncertain minor positive effects are identified for EPO 8: Landscape for all the strategies and associated schemes, with the exception of the Feasibility and Value for Money Strategy and the Abbeycartron Access Strategy. The proposed strategies set out a number of improvements that will enhance active travel and public transport access throughout Longford Town's built-up area, which is likely to enhance the townscape of the town by improving access to

valued landscapes, townscapes and viewpoints, and reducing the adverse impacts that busy roads can have on the character of the town, including through noise, air and light pollution. The proposed schemes will also improve urban and rural connectivity between Longford Town and the surrounding landscape. Effects are uncertain as they will depend on the detailed design of interventions.

5.72 For the Abbeycartron Access Strategy, an overall **uncertain mixed effect (minor positive / minor negative)** is identified for this EPO. The impact on Longford's existing landscape and townscape will depend largely on the detailed design of the Access Strategy and its associated residential development, therefore the effects are uncertain, however, due to the scale of the proposed Access Strategy, it is likely that the scheme will have an adverse effect on the landscape of Longford Town's rural edge. The Access Strategy provides new pedestrian and cycle links which will improve urban and rural connectivity, as well as improving access to valued landscapes and viewpoints including to the River Camlin and the Mall. However, the additional volume of traffic along Battery Road, associated with the new road and new population, has the potential to increase adverse effects on the townscape character of Battery Road, including through noise, air and light pollution.

5.73 A **negligible effect** is identified for the Feasibility and Value for Money Strategy as it is not expected to deliver schemes that will affect the landscape / townscape of Longford Town.

EPO 9: Material assets

5.74 Significant positive effects are identified for the Pedestrian Strategy, the Cycling Strategy, the Permeability Strategy and the Public Transport Strategy as these strategies and their associated schemes are considered to offer significant advantage to the transport offer in Longford Town, with particular benefits in terms of improving sustainable transport options. These measures are likely to help meet the needs of the growing population of Longford Town and help facilitate the modal shift away from private vehicle use, reducing

pressure on the local road network and supporting a reduction in energy demand from the transport sector. For similar reasons, **minor positive effects** are also identified for the Traffic Management Strategy and the Car Parking Strategy, although these are not considered to be of the same scale.

5.75 A significant **positive effect** is also identified for the Feasibility and Value for Money Strategy. This strategy focuses on ease of implementation, value for money and costs, ensuring future developments are feasibility and implementable. The Strategy supports Rapid Build Infrastructure which are schemes that utilise cost-effective measures to deliver walking and cycling infrastructure quicker than traditional (full build) construction methods. This will encourage intelligent use of resources and optimise the re-use of existing infrastructure.

5.76 An **overall mixed effect (significant positive / significant negative)** is identified for the Abbeycartron Access Strategy. The Abbeycartron Access Strategy will provide essential transport infrastructure to support the zoned residential development of the area. This will provide road, cycle and walking infrastructure for the growing population of Longford Town in a key redevelopment area. The inclusion of high-quality pedestrian and cycle infrastructure, and new permeability routes will help support the modal shift away from private vehicles for new and existing residents, supporting a reduction in energy demand from the transport sector. However, supporting the Access Strategy will require development of new infrastructure, such as construction of new roads, which will require the significant use of resources.

Summary of the SEA findings for the Longford Town Local Transport Plan

5.77 Table 5.4 overleaf provides a summary of the SEA effects for the Longford Town LTP for each SEA topic.

Table 5.4: Summary of the SEA findings for the Longford Town Local Transport Plan

	1: Biodiversity, flora and fauna	2: Population and human health	3: Air quality and climate change mitigation	4: Flood risk and climate change adaptation	5: Soil	6: Water	7: Cultural heritage	8: Landscape	9: Material assets
Vision	+/-?	++	++	+/-?	+/-?	+/-?	+/-?	+/-?	++
Principle 1: Integrated transport planning, land use and urban design	+/-?	++	++	+/-?	+/-?	+/-?	+/-?	++/-?	++
Principle 2: People first	+/-?	++	++	?	?	?	+	+	++
Principle 3: Maintaining and enhancing connectivity	+/-?	+/-	+/-	?	?	?	+/-?	+/-?	++
Principle 4: Safe streets	+	++	+	0	0	0	+	+	+
Principle 5: Value for money	0	0	0	0	0	0	0	0	+
Principle 6: Vibrant and great for business	+	++	++	?	?	?	+	++	+
Principle 7: Efficient	+	++	++	+	+	+	+	++	+
Principle 8: Future focused and equitable	+	++	++	+	?	+	+	+	+
Principle 9: Evidence-based decision making	+	++	++	?	?	?	+	+	++
Objective A: Permeability	+/-?	++	++	?	?	?	+	+	++
Objective B: Active travel	+/-?	++	++	?	?	?	+	+	++
Objective C: Public transport	+/-?	++/-	++/-	?	?	?	+	+	++
Objective D: Integration of land use and transport	+/-?	++	++	+/-?	+/-?	+/-?	+/-?	+/-?	++
Objective E: Parking	+	++	++	+	+	+	+	++	+
Objective F: Safety	+	++	+	0	0	0	+	+	+
Objective G: Traffic Management	+	++	++	0	0	0	+	+	++
Objective H: Feasibility and value for money	0	0	0	0	0	0	0	0	+
Pedestrian Strategy	+/-?	++	++	+	+	+/-?	+	+	++

Chapter 5 SEA findings of the Longford Town Local Transport Plan

	1: Biodiversity, flora and fauna	2: Population and human health	3: Air quality and climate change mitigation	4: Flood risk and climate change adaptation	5: Soil	6: Water	7: Cultural heritage	8: Landscape	9: Material assets
Cycling Strategy	--/+?	++	++	--?	+	-?	+?	+?	++
Permeability Strategy	+/-?	++	++	--?	+	-?	+?	+?	++
Public Transport Strategy	+?	++/-	++/-	0	+	0	+?	+?	++
Traffic Management Strategy	+?	++	++	0	+	0	+?	+?	+
Car Parking Strategy	+?	++/-?	++/-?	0	+	0	+?	+?	+
Feasibility and Value for Money	0	0	0	0	0	0	0	0	++
Abbeycartron Access Strategy	+/-?	++/-	--/+	-?	--	--?	-?	+/-?	++/--

Duration of effects

5.78 The Longford Town LTP sets out a strategic framework for the future development of transport infrastructure within Longford Town and its environs from 2023 to 2029. Effects may be experienced in the short-term (defined in this SEA as up to 2024), medium term (defined in this SEA as up to 2026) or long-term effects (defined as over the whole plan period and beyond). The implementation of the 'strategies' will be prioritised in order of best value for money. Chapter 8 of the Longford Town identifies both 'high' and 'low' priority schemes and their timeframe for implementation. The high priority schemes will be delivered in the short-term, while the low priority schemes will be implemented once the high priority schemes have been completed, which, depending on the type of scheme, may be implemented in either the short, medium or long term.

- 14 pedestrian crossing proposals are identified as high priority which are likely to be implemented in the short-term (W8-W15, W19, W26-W30) while nine pedestrian crossing proposals are low priority schemes (W1-W4, W6, W7, W20-W22) which are likely to be implemented in the short/medium term due to their ease of implementation.
- Eight footpath improvement schemes are identified as high priority, three of which will be delivered in the short-term (F10, F11, F13) and five in the medium term (F9, F4, F5, F12, F1). Six footpath improvement schemes are identified as low priority which are likely to be implemented in the medium term (F2, F3, F6-F8, F14).
- All 23 cycle route schemes (11 high priority [C1-C5, C7, C13, C16, C18, C19, C21] and 12 low priority [C6, C8-C12, C14-C15, C17, C-20, C22]) will be delivered in the medium term, with the exception of route C6 from Battery Road to Ballinalee Road Connector which will be delivered in the long term as it relies on the development of the Abbeycartron Access Strategy.

Chapter 5 SEA findings of the Longford Town Local Transport Plan

- All 15 bicycle parking schemes (eight high priority and seven low priority) are easily implemented at low cost and therefore will be delivered in the short-term.
- Seven walking and cycling permeability schemes are identified as high priority, four will be delivered in the short term (PY7, PY4, PY1, PY3) and three in the medium term (PY9, PY17, PY16). Of the six low priority permeability schemes, two will be delivered in the short term (PY15, PY2) while the remaining four will be delivered in the medium term (PY8, PY10, PY11, PY19).
- Three public transport schemes (PT1, PT4, PT5) are identified as high priority schemes, with PT1 and PT5 being delivered in the short term, and PT4 being delivered in the medium term. PT2, PT3 and PT6 are all classed as low priority schemes which will be implemented in the medium term.
- Two traffic management schemes, TM1 and TM2, are identified as high priority which will be delivered in the medium term. TM3-TM8 are classed as low priority schemes, however, these will be implemented in the short term due to their low cost for implementation, with the exception of TM3 which will be delivered in the medium term.
- Seven car parking schemes are identified as high priority which will be implemented in the short term (CP2, CP3, CP5-CP9). CP1 and CP10 are identified as low priority and deliverable in the medium term, while CP4 is likely to be delivered in the short term.

5.79 The effects of these schemes in the short-term are mostly related to the initial impacts from implementing the schemes and developing new transport infrastructure. Depending on the scheme, such works could have negative effects on biodiversity, health, wellbeing and amenity of local communities (possible closure of paths, diversion of traffic, removal of car parking spaces, noise generation from construction), the soil and water environments, and the landscape. However, these impacts are temporary in nature and some may be minimised through good design and adherence to the policies in the Longford County Development Plan.

5.80 Many of the schemes proposed in the Longford Town LTP are likely to be implemented in the short to medium term. Therefore, permanent positive effects on air quality from lower transport-related emissions are expected to be experienced in the short term with continuing effects in the medium to long term. The effects on residents' health from improved air quality and greater levels of physical activity from active travel are likely to be experienced in the short term with positive effects continuing in the medium to long term. Similarly, positive effects may be experienced in the short to long term as a result of reduced death and injury from the implementation of the schemes relating to improving crossings, traffic management and improved footpaths. Levels of deprivation in the town are likely to improve in the short to medium term as schemes are developed which connect previously disconnected areas and areas with relatively high levels of deprivation to local services and facilities, with permanent positive effects in the long-term.

5.81 There may be medium to long-term, permanent positive effects for the historic environment and landscape from the enhanced accessibility and sustainability mobility through the town. Improving and developing new active travel infrastructure, enhancing traffic management systems, and delivering new public transport schemes is likely to encourage indigenous and inward investment, which will contribute towards the regeneration of Longford Town. These effects are also likely to be experienced in the medium to long term.

Secondary, cumulative and synergistic effects

5.82 As specified in the SEA Regulations, there is a requirement to consider secondary, cumulative, synergistic, and indirect effects of the implementation of the Longford Town LTP. Secondary (or indirect) effects are effects that are not a direct result of a proposal but occur away from the original effect or as a result of a complex pathway. Cumulative effects occur where two or more insignificant effects combine to form a significant effect. Synergistic effects occur as the result of interactions between individual effects producing a total effect greater

than the sum of each of the individual effects. Secondary, cumulative or synergistic effects may be either positive or negative.

5.83 The secondary, cumulative and synergistic effects of the strategies and schemes of the Longford Town LTP are summarised in the following paragraphs.

- **1. Biodiversity, flora and fauna:** It is anticipated that there will be a cumulative mix of beneficial and adverse effects on biodiversity from implementation of the LTP. For example, development of transport infrastructure could lead to direct loss of habitat or both direct and indirect disturbance on species and habitats. However, elements of the LTP such as the schemes relating to reallocating car parking spaces for other uses including for trees/planting and improving public realm could provide opportunities for planting and biodiversity enhancement / net gain. The clear focus within the LTP on improving air quality and reducing traffic volumes / encourage uptake of active travel modes would also likely result in less pollution deposition and less disturbance as well as potentially less direct road kill. There is also a potential for sites designated for nature conservation to benefit from less pollutant deposition and less disturbance.
- **2. Population and human health:** It is anticipated that the LTP will have a cumulative beneficial effect on health, wellbeing and equalities by providing greater access to services and employment opportunities, as well as greater opportunities for active travel. There is also a clear emphasis on reducing traffic congestion and vehicle speeds while improving pedestrian crossings throughout the town, thus improving safety for all road users. Improvements to air quality and a reduction in noise levels will also benefit health and wellbeing. Improving active travel infrastructure to schools and areas of employment may also result in beneficial synergistic effects on the level of deprivation in the town. Similarly, improving connectivity to open spaces and recreational areas (e.g. the Mall) may also result in positive synergistic effects on levels of engagement in physical activity. Improving and developing new active travel infrastructure, enhancing traffic management systems, and delivering new public transport schemes is likely to encourage indigenous and inward investment, which will contribute towards the regeneration of

Longford Town, thereby resulting in positive secondary effects to social cohesion and the local economy.

- **3. Air pollution and climate change mitigation:** It is considered that the LTP will have an overall cumulative beneficial effect on air quality and climate change mitigation. This beneficial effect will be derived from a clear focus on reducing traffic in the town and enabling a switch to public transport or more active modes of travel which will reduce transport-related emissions and improve air quality.
- **4. Flood risk and climate change adaptation:** It is considered that the LTP could have cumulative mixed beneficial and adverse effects in terms of flooding. Development of infrastructure could lead to an increase in impermeable area and contribute to increased flood risk by increasing runoff. However, opportunities may be provided for increasing permeable areas such as through the development of green infrastructure or the implementation of SuDS as part of transport proposals.
- **5. Soil:** It is anticipated that there will be a cumulative mix of beneficial and adverse effects on soil, agricultural resources, geology, and brownfield land from implementation of the LTP. For example, the development of transport infrastructure could lead to loss of soil and agricultural resources through encroachment (e.g. at Abbeycartron), while opportunities may also be provided to improve access to geological sites (e.g. many interventions proposed will improve access to St. Mel's Cathedral Geological Site). There may also be beneficial secondary effects on the soil environment as the development of a cohesive and integrated sustainable transport network will encourage the redevelopment of infill/brownfield land which will support Longford Town's regeneration programme.
- **6. Water:** It is anticipated that there will be a cumulative mix of beneficial and adverse effects on the water environment. Development of infrastructure could lead to an increase in adverse effects on the quality of water bodies and groundwater, particularly in relation to the construction of proposals which are located along or traverse waterbodies. However, opportunities may be provided to incorporate green infrastructure as part of transport proposals which will have beneficial effects for the water environment.

- **7. Cultural heritage including architectural and archaeological heritage:** There is potential for both positive and negative, direct and indirect cumulative impacts on nationally and locally designated heritage assets, and their unique settings. This is in addition to cumulative effects on undesignated and unknown assets, which are also important. However, well-designed transport infrastructure could present opportunities to enhance the quality of visual amenity of heritage assets by managing public access to or from the historic features and through the historic areas of Longford Town.
- **8. Landscapes and townscapes:** There is potential for both positive and negative, direct and indirect cumulative impacts on landscapes and townscapes, including their settings. For example, adverse effects could be derived from the development of transport infrastructure introducing new features in the landscape. However, transport proposals present opportunities for positive placemaking by reducing traffic volumes and congestion and improving opportunities for active travel which will generate activity and vitality in the town, helping to define the character of different areas. Increased connectivity by active travel and public transport could result in more people being able to access and explore Longford's unique landscape and townscape, with additional cumulative benefits for health and wellbeing.
- **9. Material assets:** It is anticipated that the LTP will have a cumulative beneficial effect on material assets as the measures outlined in the LTP will help create a more sustainable transport system, reducing energy demand from the transport sector and helping to meet the needs of Longford Town's growing population.

Chapter 6

Mitigation and recommendations

Introduction

6.1 This chapter outlines a number of ways in which potential adverse effects of the Longford Town LTP could be avoided or minimised. It also sets out recommendations for strengthening the mitigation outlined in the proposed LTP.

Mitigation and recommendations

6.2 The proposals in the Longford Town LTP (in a similar way to other plans and projects from any sector) will have to demonstrate compliance with various legislation, policies, plans and programmes, including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate.

6.3 The following paragraphs set out potential effects in relation to each SEA topic and the County Policy Objectives (CPOs) included in the Longford County Development Plan [See reference 65] which are likely to provide mitigation measures for adverse effects, or enhancement of positive effects.

Biodiversity, flora and fauna

6.4 There may be adverse effects on habitats and species from the measures included in the Longford Town LTP in relation to species disturbance from new infrastructure and increased recreational pressures at designated sites. Mitigation at project-level is likely to be provided by adherence to the following policies of the Longford County Development Plan:

Chapter 6 Mitigation and recommendations

- Development management standards (DMS) 16.201 – 16.203 set out the criteria that the Council will consider when assessing development proposals in relation to natural heritage.
- CPO 12.10 sets out the requirement for the clear demonstration of no significant effects from the appropriate level of assessment for development on/adjacent to designated sites, including pNHA (i.e. the Royal Canal pNHA). CPO 12.17 requires Ecological Impact Assessment (EclA) for development which may impact protected species and non-designated habitats of biodiversity value.
- CPO 12.19 – 12.23 provide measures for the protection of non-designated sites, including the requirement for the appropriate level of ecological assessment for proposals. Non-designated sites include locally important landscapes or landscape features which form part of a network of habitats essential for wildlife.
- CPO 12.57 – 12.71 provide measures to protect biodiversity and for nature conservation. For example, CPO 12.63 requires mitigation measures in cases where it is evident that biodiversity is likely to be affected. Measures could be establishment of wildlife areas/corridors/parks, tree planting, wildflower meadows/marshes and other areas.
- CPO 12.72 – 12.81 provide particular protection for trees, woodlands and hedgerows.
- CPO 12.113 aims to control lighting in urban and rural areas to minimise impacts on habitats and species.

Recommendations

- Measures included within the Longford Town LTP should support the retention and planting of green infrastructure, where appropriate, as part of transport infrastructure developments which will support habitat creation.

Population and human health

6.5 There may be adverse effects for population and human health where transport infrastructure is likely to increase exposure to noise/air/vibration/light pollution from petrol / diesel vehicles in particular areas, or where measures will potentially continue to promote private vehicle use. Mitigation at project-level is likely to be provided by the following CPOs of the Longford CDP:

- CPO 7.1 – CPO 7.8 support healthy placemaking including supporting public health policy, ensuring all levels of disability are catered for, and cycling and walking are promoted. These measures are likely to enhance the positive effects of the Longford Town LTP.
- CPO 12.109 – CPO 12.114 provide mitigation measures for noise and light pollution.

Recommendations

- Measures within the Longford Town TLP should take account of accessibility needs for all, including those with reduced mobility or disability.

Air quality and climate change mitigation

6.6 There may be adverse effects on air quality and climate change from some of the measures included in the Longford Town LTP. Mitigation at project-level is likely to be provided by the following policies of the Longford CDP:

- CPO 12.104 – 12.108 provide measures for improving air quality in County Longford.
- CPO 12.91 assesses new development in terms of its potential impact on existing adjacent developments, existing land uses and/or the surrounding landscape to mitigate adverse effects on the amenities of the area.

6.7 Mitigation is also provided in the Longford CDP through the proposed climate actions that will be undertaken by Longford County Council:

- A5.1 – A5.5 requires the installation of EV charging points.
- A5.9 prioritises public transport providers with the lowest CO₂ emissions across the fleet.

Recommendations

- The Longford Town LTP should support the uptake of electric vehicle usage (i.e. through electric vehicle charging points) and support the transition to an electric fleet of public buses.
- Measures included within the Longford Town LTP should support the retention and planting of green infrastructure, where appropriate, as part of transport infrastructure developments which will improve air quality along transport routes.

Flood risk and climate change adaptation

6.8 There may be adverse effects in relation to flooding where interventions are located in areas within Longford Town with higher risk of flooding. Measures for new transport and active travel infrastructure should support flood resilient design, the incorporation of Sustainable urban Drainage Systems (SuDS) and green infrastructure.

6.9 Mitigation at project-level is likely to be provided by the following policies of the Longford CDP:

- CPO 5.106 – 5.120 set out standards for flood risk management in County Longford.

Recommendations

- Measures within the Longford Town LTP should support flood resilient design of new transport and active travel infrastructure, including incorporation of Sustainable urban Drainage Systems (SuDS) and planting of green infrastructure.
- Measures included within the Longford Town LTP should support the retention and planting of green infrastructure, where appropriate, as part of transport infrastructure developments which will enhance the setting and visual amenity of the landscape and historic environment and will support drainage of surface water.

Soil

6.10 There may be adverse effects on soil resource from measures within the Longford Town LTP. Mitigation is likely to be provided by the following policies of the Longford CDP:

- CPO 12.115 – CPO 12.123 provide measures for soil protection.

Recommendations

- Measures included within the Longford Town LTP should support the retention and planting of green infrastructure, where appropriate, as part of transport infrastructure developments which will support soil quality.

Water

6.11 There may be adverse effects on the water quality of water bodies within Longford Town from some of the measures included in the Longford Town LTP. Mitigation is likely to be provided by the following policies of the Longford CDP:

- CPO 12.92 – 12.103 provide water protection measures for water quality and groundwater.

Recommendations

- Measures included within the Longford Town LTP should support the retention and planting of green infrastructure, where appropriate, as part of transport infrastructure developments which will support the water environment.

Cultural heritage including architectural and archaeological heritage

6.12 Measures within the Longford Town LTP may result in adverse effects in relation to the historic environment of Longford Town. Mitigation at project-level is likely to be provided by the following policies of the Longford CDP:

- DMS 16.190 – 16.200 set out development management criteria that Council's will consider development proposals against, in relation to Protected Structures, Architectural Conservation Areas and Archaeology.
- CPO 6.31 – 6.34 support heritage-led urban regeneration which are likely to enhance the positive effects of the Longford Town LTP on the historic environment.
- CPO 11.1 – 11.13 provide measures to protect and enhance architectural heritage.
- CPO 11.14 – 11.26 provide protection measures for structures included on the Record of Protected Structures (RPS).
- CPO 11.27 – 11.30 provide protection measures for the Architectural Conservation Areas (ACAs) within Longford.
- CPO 11.31 – 11.35 support the protection and enhancement of historic gardens, demesnes or designed landscapes.
- CPO 11.47 – 11.57 provide protection for known and unknown archaeological heritage in Longford.

Recommendations

- Measures included within the Longford Town LTP should support the retention and planting of green infrastructure, where appropriate, as part of transport infrastructure developments which will enhance the setting of heritage assets.

Landscape

6.13 There may be adverse effects on landscape and townscape character and setting from transport interventions proposed in the Longford Town LTP. Mitigation is likely to be provided by the following policies of the Longford County Development Plan:

- DMS 16.204 requires landscape and visual impact assessments to be prepared by suitably qualified professionals for planning applications for development which may have significant impact on landscape character areas of medium or high sensitivity.
- CPO 13.1 – 13.8 sets out measures that protect green infrastructure and CPO 13.9 – 13.14 set out measures for the ongoing development and improvement of green infrastructure within Longford Town.
- CPO 14.1 – 14.8 provide measures for the protection and enhancement of landscape character within Longford, including the requirement for landscape and visual impact assessment for some development.

Recommendations

- Measures included within the Longford Town LTP should support the retention and planting of green infrastructure, where appropriate, as part of transport infrastructure developments which will enhance the setting and visual amenity of the townscape of Longford Town.

Material assets

6.14 There may be adverse effects associated with the use of resources for new transport development and active travel infrastructure. Policies and development management criteria throughout the Longford CDP are likely to provide mitigation in relation to the sustainable use of land, natural resources, energy and waste management.

Recommendations

- Any form of transport and active travel development should be undertaken as sustainably as possible, using sustainable design and construction processes and making use of processes such as circular economy and waste hierarchy principles.

6.15 Despite mitigation measures, some residual uncertain adverse effects remain which will require monitoring.

Chapter 7

Monitoring Programme

Introduction

7.1 This chapter presents the Monitoring Programme for monitoring the significant environmental effects of implementing the proposed Longford Town LTP.

7.2 Article 17 of the SEA Regulations requires that the competent authority (in this case Longford County Council) monitors the significant environmental effects of implementing the Longford Town LTP in order to identify, at an early stage, any unforeseen adverse effects due to the implementation of the proposed Plan and to take remedial action. Monitoring can also demonstrate the positive effects facilitated by the LTP. Reference has been made to the EPA's Guidance on Strategic Environmental Assessment Statements and Monitoring [See reference 66] in devising the monitoring programme.

7.3 The occurrence of significant adverse environmental effects not predicted and mitigated by this assessment, which are directly attributable to the implementation of the Longford Town LTP, would necessitate consideration of these effects in the context of the plan and potential remediation action(s) and/or review of part(s) of the LTP.

Indicators and targets

7.4 Monitoring is based around indicators and targets which allow quantitative measures of trends and progress over time relating to the Environmental Protection Objectives identified in Chapter 2 and used in the evaluation. Given the position of the LTP in the land use planning hierarchy below the Longford

Chapter 7 Monitoring Programme

County Development Plan, the measures that are proposed in the Monitoring Programme for the Longford Town LTP are derived and modified, where necessary, from the Environmental Report of the Longford County Development Plan [See reference 67]. Monitoring indicators and targets are also derived from Chapter 9 of the Longford Town LTP which sets out the projected modal split in commuting journeys to work and school/college, with increases in the share of sustainable modes.

7.5 Monitoring is an ongoing process, and the programme allows for flexibility and the further refinement of indicators and targets. The Monitoring Programme may be updated to deal with specific environmental issues – including unforeseen effects – as they arise.

7.6 Sources for indicators may include existing monitoring databases (including those maintained by planning authorities and national/regional government departments and agencies) and the output of lower-tier environmental assessment and decision making (including a review of project approvals granted and associated documents and the output of any EIA monitoring programmes).

7.7 The following paragraphs outline the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the plan, if unmitigated.

Monitoring Programme

EPO 1: Biodiversity, fauna and flora

■ Indicators:

- Changes in condition of European sites (improvement or deterioration).
- Number and extent of sites designated for nature conservation and their quality.

Chapter 7 Monitoring Programme

- Number of biodiversity enhancement schemes implemented through LTP schemes.

■ **Targets:**

- Increase in percentage of European sites in 'good' or 'improving' condition.
- Increase in number and extent of sites designated for nature conservation.
- Increase in transport-related proposals incorporating biodiversity enhancement measures.

■ **Sources:**

- Longford Biodiversity Action Plan 2019-2024 (and subsequent iterations as relevant).
- DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years).
- DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 3 years).
- Consultations with the National Parks and Wildlife Service.

EPO 2: Population and human health

■ **Indicators:**

- Number of road fatalities and injury collisions in the town.
- Proportion of people commuting to work and school/college by sustainable modes of transport compared to the 2016 CSO figures.
- Proportion of people commuting to work and school/college by private vehicle compared to the 2016 CSO figures.
- Proportion of people reporting they are in 'very good' or 'good' health above the 2016 CSO figures.

Chapter 7 Monitoring Programme

- Length (km) of new and improved footpaths, cycle routes and permeability routes in the town.
- Longford Town's position within the Pobal HP Deprivation Index compared to the 2016 deprivation scores.
- Green infrastructure measures implemented through LTP schemes.
- Public transport patronage.
- Journey time reliability for public transport.
- **Targets:**
 - Reduction in the number of road traffic accidents that result in people being killed or injured.
 - Increase in proportion of people commuting to work by walking (target of 22% by 2042), cycling (target of 11% by 2042), bus (target of 9% by 2042), rail (target of 3% by 2042).
 - Increase in proportion of people commuting to school/college by walking (target of 39% by 2042), cycling (target of 10% by 2042), and bus (target of 18% by 2042).
 - Reduction in proportion of people commuting by private vehicle to work (51% by 2042) and school/college (32% by 2042).
 - Increase in length (km) of new and improved footpaths, cycle routes and permeability routes in the town.
 - Longford Town's position within the Pobal HP Deprivation Index above the 2016 deprivation scores, with a reduction in the number of the areas classed as 'extremely disadvantaged', 'very disadvantaged' and 'disadvantaged'.
 - Implementation of green infrastructure in schemes proposed in LTP.
 - Increase in public transport patronage.
 - Improved journey time reliability for public transport.
- **Sources:**

- Health Information and Quality Authority Road Fatalities and Injury Collision Statistics.
- Pobal HP Deprivation Index.
- CSO data.
- Local authority data relating to number of transport schemes proposed.

EPO 3: Air quality and climate change mitigation

■ Indicators:

- Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74%
- NO_x, SO_x, PM₁₀ and PM_{2.5} as part of Ambient Air Quality Monitoring.
- Proportion of people commuting to work and school/college by sustainable modes of transport compared to the 2016 CSO figures.
- Proportion of people commuting to work and school/college by private vehicle compared to the 2016 CSO figures.

■ Targets:

- Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels.
- Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter.
- Increase in proportion of people commuting to work by walking (target of 22% by 2042), cycling (target of 11% by 2042), bus (target of 9% by 2042), rail (target of 3% by 2042).
- Increase in proportion of people commuting to school/college by walking (target of 39% by 2042), cycling (target of 10% by 2042), and bus (target of 18% by 2042).

- Reduction in proportion of people commuting by private vehicle to work (51% by 2042) and school/college (32% by 2042).

■ Sources:

- CSO data.
- Data from the National Travel Survey.
- EPA Air Quality Monitoring.
- EPA Annual National Greenhouse Gas Emissions Inventory reporting.
- Climate Action Regional Office.

EPO 4: Flood risk and climate change adaptation

■ Indicators:

- Area of built development in areas at risk of flooding.
- Green infrastructure measures implemented through LTP schemes.

■ Targets:

- No new built development in areas at risk of flooding.
- Implementation of green infrastructure in schemes proposed in LTP.

■ Sources:

- Environmental Protection Agency (EPA).
- Internal monitoring of grants of permission.

EPO 5: Soil

■ Indicators:

- Area of new development on infill, brownfield and contaminated land compared to greenfield.

Chapter 7 Monitoring Programme

- Land use change.
- **Targets:**
 - Increase in proportion of new built development on infill, brownfield and contaminated land.
 - Reduction in development on greenfield land.
 - Achieve the 40% target for growth on infill land as per the National Planning Framework.
- **Sources:**
 - Environmental Protection Agency (EPA), Geoportal.
 - European CORINE Land Cover (updated every six years).
 - Internal monitoring of grants of permission.

EPO 6: Water

- **Indicators:**
 - Status of water bodies.
- **Targets:**
 - No deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good' ecological and chemical status.
 - Implementation of the objectives of Ireland's Third Cycle Draft River Basin Management Plan (RBMP) 2022-2027 **[See reference 68]** by 2027 (and subsequent iterations as relevant).
- **Sources:**
 - EPA Monitoring Programme for WFD compliance
 - Internal monitoring of likely significant environmental effects of grants of permission.

EPO 8: Landscape

■ Indicators:

- Number of transport developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations.

■ Targets:

- No transport developments permitted which result in significant avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations.

■ Sources:

- Internal monitoring of grants of permission.

EPO 9: Material assets

■ Indicators:

- Length (km) of new and improved footpaths, cycle routes and permeability routes in the town.
- Length (km) of new roads in the town.
- Number of electric vehicle charging points in Longford Town.
- Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74%

■ Targets:

- Increase in length (km) of new and improved footpaths, cycle routes and permeability routes in the town.
- Reduction in length (km) of new roads in the town.
- Increase in the number of electric vehicle charging points in Longford Town.

Chapter 7 Monitoring Programme

- Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels.
- **Sources:**
 - Internal monitoring of grants of permission.

Chapter 8

Conclusion and next steps

8.1 The Draft Longford Town LTP and its reasonable alternatives have been subject to a detailed appraisal against the SEA Environmental Protection Objectives which were developed at the Scoping stage of the SEA process.

8.2 Significant positive effects are expected for the Vision and many of the principles, objectives, strategies and associated schemes of the Longford Town LTP.

8.3 Significant positive effects are identified for **EPO 2: Population and human health** for elements of the LTP that are expected to promote healthy lifestyles by improving opportunities for active travel; reducing residents' exposure to pollution from traffic by helping facilitate the modal shift away from private vehicle use; improving access to services and facilities by sustainable modes; and addressing spatial inequalities by creating a more cohesive and integrated town. Significant positive effects are also identified for the majority of aspects of the Longford Town LTP for **EPO 3: Air quality and climate change mitigation**. In many cases, interventions are expected to support the modal shift away from vehicles in favour of more sustainable modes. This will reduce dependency on petrol / diesel private vehicles thus lowering transport-related emissions and Longford's contribution to climate change. Significant positive effects are also identified for the majority of proposals in relation to **EPO 9: Material assets** as the measures outlined in the LTP will help create a more sustainable transport system, reducing energy demand from the transport sector and helping meet the needs of Longford Town's growing population. Several principles and objectives are also expected to result in significant positive effects for **EPO 8: Landscape** as these measures are expected to contribute to improving urban design and helping to create a sense of place.

8.4 Unmitigated significant negative effects are identified for several strategies and their associated schemes. For the Cycling Strategy, a potential significant

Chapter 8 Conclusion and next steps

negative effect for **EPO 1: Biodiversity, flora and fauna** is associated with the likely increased recreational pressures at the Royal Canal pNHA. Potential significant negative effects are identified for **EPO 4: Flood risk and climate change adaptation** for the Cycling Strategy and Permeability Strategy where schemes are located in areas of Longford Town with higher risks of flooding. A potential significant negative effect is identified for **EPO 5: Soil** for the Abbeycartron Access Strategy as the development of the scheme will result in significant loss of greenfield land.

8.5 Many of the adverse effects will be mitigated through good design and adherence to policies in the Longford County Development Plan, however, it is possible that some adverse effects may not be mitigated (e.g. the loss of agricultural land from the development at Abbeycartron).

8.6 A Monitoring Programme is proposed to monitor the significant environmental effects of implementing the Longford Town LTP in order to identify, at an early stage, any unforeseen adverse effects due to the implementation of the proposed LTP and to take remedial action.

The Draft Longford Town LTP and this accompanying SEA Environmental Report and Non-Technical Summary will be published for public consultation from July 2023 for a four-week period.

8.7 Following this consultation, the responses will be reviewed and addressed as appropriate. The findings of the SEA and the outcome of the consultation will be taken into account by Longford County Council as it prepares the next iteration of the LTP. The SEA will be updated to reflect that version of the LTP and further consideration will be given to potential mitigation measures as well as the approach to monitoring the likely significant effects of the LTP.

LUC

July 2023

Appendix A

Detail of transport schemes

Pedestrian / walking schemes

- F1 - New footpath on Viewmount.
- F2 - New footpath on Connaught Road.
- F3 - New footpath on Little Water Street.
- F4 - New footpath on R198 (from Church to Cinema).
- F5 - New footpath on R198 Cloonbalt.
- F6 - New footpath on Lisbrack Road.
- F7 - New footpath on Abbeycarton Lane.
- F8 - Footpath improvements at Longford Industrial Estate.
- F9 - Improvements to pedestrian footbridge at train station.
- F10 - Improvements to Garvey's Close pedestrian access.
- F11 - Improvements to Bog Lane pedestrian access.
- F12 - Widening of footpaths on Geraldines Terrace.
- F13 - Improvements to Grafton Court pedestrian access.
- F14 - Footpath improvements at N4 Cloonbalt/Lisnamuck.
- F15 - Footpath improvements at Teffia Park.
- F16 - Footpath improvements at Athlone Road.
- F17 - Footpath improvements at N63 Templemichael Estate.
- F18 - Footpath improvements at N4 Axis Centre / Battery Road.
- F19 - New footpath on Demense Lane.

Appendix A Detail of transport schemes

- F20 - Footpath improvements at Deanscurragh.
- F21 - Footpath improvements at New Street.
- Improvements to crossing facilities at 30 locations (W1-W30).

Cycle schemes

- C1 - Main St Cycle Route (From Bridge Street to Train Station).
- C2 - The Mall (from Little Water Street via the Mall and connection Ballinalee Road via new bridge crossing).
- C3 - N63 (from Templemichael Terrace to Main Street).
- C4 - Battery Road (R198) and Church Street.
- C5 - Dublin Road.
- C6 - Battery Road to Balinalee Road Connector.
- C7 - Park Road (From Train Station to Farnagh Hill).
- C8 - Ardnacassa/Oaklands Avenue Connector.
- C9 - N63 (Longford Industrial estate to Main Street).
- C10 - Glenn Riada Cycling Connection.
- C11 - Great Water Street / St. Mel's Road.
- C12 - Demesne Lane / Battery Court / Little Water Street new connection and bridge.
- C13 - N63 (from Templemichael Terrace to N4 roundabout).
- C14 - Connaught Road (N5).
- C15 - Park Rd / Prospect Woods.
- C16 - Templemichael Terrace.
- C17 - Abbeycartron Lane.
- C18 - Templemichael Cycleway.

Appendix A Detail of transport schemes

- C19 - St. Joseph's Road to Dublin Road (via Convent/Bus depot).
- C20 - Ardnacassa.
- C21 - R198 Cloonbalt.
- C22 - N4 Parallel Route (southern side).
- C23 - Lisbrack Road.
- C24 - River Camlin East Bank Route (to N4).

Quiet street schemes

- Q1 - St. Michael's Road (between N5 and N63).
- Q2 - Amaly Park (between N5 and N63).
- Q3 - College Park (between N63 and Templemichael Terrace).
- Q4 - Templemichael Industrial Estate.
- Q5 - Deanscurragh (between N63 and Dublin Road).
- Q6 - Springlawn (between Ardnacassa Ave and Dublin Road).
- Q7 - Dún Darrach (between Dublin Road and Ardnacassa).
- Q8 - Royal Canal Avenue / Park Villas / Teffia Park.
- Q9 - Glack / McEoin Park (between Teffia Park and Farnagh Hill).
- Q10 - Mastertech Business Park to Royal Canal.

Bicycle parking schemes

- Three improved bicycle parking at Albert Reynolds Peace Park, Longford Shopping Centre (Tesco) and train station (BP1-BP3).
- 15 new bicycle parking locations in various locations around Longford Town (BP4-BP18).

Permeability schemes

- 23 walking and cycling permeability schemes in various locations around Longford Town (PY1-PY23).

Public transport schemes

- PT1 - General improvements to Train Station (Including pedestrian access, and cycle parking).
- PT2 - Train Station Accessibility Study (to east).
- PT3 - Bus Stop upgrade programme (Across the study area).
- PT4 - Bus Route & Frequency Study (in conjunction with 'Connecting Ireland').
- PT5 - Bus stop improvements at Longford station.
- PT6 - New local bus route and bus stops.

Traffic management schemes

- TM1 - St Mel's Road One-Way system.
- TM2 - Longford Shopping Centre Main Street Entrance Vehicular Restriction.
- TM3 - Reorganisation of Market Square/Kilashee St One-way system.
- TM4 - St Michael's Road Quiet Street / Filtered Permeability.
- TM5 - Annaly Park Quiet Street / Filtered Permeability.
- TM6 - College Park Quiet Street / Filtered Permeability.
- TM7 - Deanscurragh Quiet Street / Filtered Permeability.
- TM8 - Teffia Park Quiet Street / Filtered Permeability.

Car parking schemes

- CP1 - Rationalisation of Main St and Dublin St parking (to facilitate cycle infrastructure).
- CP2 - Recommend Locations for Park and Stride schemes.
- CP3 - Wayfinding strategy.
- CP4 - Rationalisation of On-Street Car Parking along Geraldine's Terrace.
- CP5 - Improve pedestrian access to Annaly car park from Main Street.
- CP6 - Change parking regime at Annaly car park to max. 2hr stay.
- CP7 - Change parking regime at Ballymahon car park to max. 2hr stay.
- CP8 - Improve pedestrian access to car park (via Bog Lane) from Main Street.
- CP9 - Change parking regimes at car park to max. 2hr stay.
- CP10 - New one-way system at Longford Shopping centre car park.

Appendix B

Plans and programmes

International – relevant policy and legislation

2030 Agenda for Sustainable Development (2015)

B.1 The 2030 Agenda [See reference lxix] is a plan of action for people, planet and prosperity. It seeks to strengthen universal peace in larger freedom and eradicate poverty in all its forms and dimensions. It sets out the 17 Sustainable Development Goals and 169 targets; a collection of interlinked global goals designed to be a blueprint to achieve a better and more sustainable future for all. They were developed as the future global development framework to succeed the Millennium Development Goals which ended in 2015 and are intended to be achieved by the year 2030.

- The EPO Framework should include objectives to **promote sustainable development**.

UN Paris Climate Change Agreement (2015)

B.2 The main aim of the Paris Agreement [See reference lxx] centres on keeping global temperature rise this century below 2°C above preindustrial levels. Frameworks are to be put in place to help achieve these goals.

- The EPO Framework should include objectives to **adapt and mitigate climate change**.

IPCC's Sixth Assessment Report on Climate Change

B.3 To limit and/or reduce all greenhouse gas emissions which contribute to climate change [See reference lxxi].

- The EPO Framework should include objectives to **support reduction in emissions of greenhouse gases.**

The Cancun Agreement (2010)

B.4 Shared vision [See reference lxxii] to keep global temperature rise to below two degrees Celsius, with objectives to be reviewed as to whether it needs to be strengthened in future on the basis of the best scientific knowledge available.

- The EPO Framework should include objectives **support the reduction in greenhouse gas emissions and mitigation to climate change.**

Johannesburg Declaration on Sustainable Development (2002)

B.5 Commitment to building a humane, equitable and caring global society aware of the need for human dignity for all [See reference lxxiii]. Areas of focus include:

- Sustainable consumption and production patterns.
- Accelerate shift towards sustainable consumption and production – 10-year framework of programmed of action.
- Reverse trend in loss of natural resources.
- Renewable energy and energy efficiency.
- Urgently and substantially increase Global share of renewable energy.

- Significantly reduce the rate of biodiversity loss by 2010
- The EPO Framework should include objectives to **enhance the natural environment and promote renewable energy and energy/resource efficiency.**

Florence (European Landscape) Convention (2000)

B.6 The European Landscape Convention [[See reference lxxiv](#)] is part of the Council of Europe's work on natural and cultural heritage, spatial planning and the environment. The Convention states that:

- The landscape contributes to the formation of local cultures and that it is a basic component of the European natural and cultural heritage, contributing to human well-being and consolidation of the European identity; and
- That developments in agriculture, forestry, industrial and mineral production techniques and in regional planning, town planning, transport, infrastructure, tourism and recreation and, at a more general level, changes in the world economy are in many cases accelerating the transformation of landscapes.

B.7 The aims of this Convention are to promote landscape protection, management and planning and to organise European co-operation on landscape issues.

- The EPO Framework should include objectives to **protect, manage and enhance the landscape.**

World Health Organisation (WHO) Air Quality Guidelines (1999) and Guidelines for Europe (1987)

B.8 A comprehensive set of guidelines for air quality [See reference lxxv]. Develops consistent rules for assessing 28 chemical air contaminants. Its primary aim is to provide a basis for protecting public health from adverse effects of air pollution and for eliminating, or reducing to a minimum, those contaminants of air that are known or likely to be hazardous to human health and wellbeing. The guidelines are intended to provide background information and guidance to governments in making risk management decisions, particularly in setting standards, but their use is not restricted to this.

- The EPO Framework should include objectives to **protect air quality**.

Aarhus Convention (1998)

B.9 Established a number of rights of the public with regard to the environment [See reference lxxvi]. Local authorities should provide for:

- The right of everyone to receive environmental information.
- The right to participate from an early stage in environmental decision making.
- The right to challenge in a court of law public decisions that have been made without respecting the two rights above or environmental law in general.
- Ensure that **the public are involved and consulted** at all relevant stages of SEA production.

Kyoto Protocol to the UNFCCC (1997)

B.10 The Kyoto Protocol [\[See reference lxxvii\]](#) to the UNFCCC established the first policy that actively aims to reduce greenhouse gas emissions by industrialised countries.

- The EPO Framework should include objectives to **reduce greenhouse gas emissions and promote sustainable development.**

UN Convention on Biological Diversity (1992)

B.11 The Convention on Biological Diversity [\[See reference lxxviii\]](#) is a multilateral treaty dedicated to promoting sustainable development signed by 150 government leaders at the 1992 Rio Earth Summit. The convention has three main goals: the conservation of biological diversity (or biodiversity); the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources. Its objective is to develop national strategies for the conservation and sustainable use of biological diversity, and it is often seen as the key document regarding sustainable development.

- The SEA should reflect objectives **protecting biodiversity and sustainable use of its components.**

European Convention on the Protection of the Archaeological Heritage (Valletta) (1992)

B.12 Revision of the 1985 Granada Convention. Protection of the archaeological heritage, including any physical evidence of the human past that can be investigated archaeologically both on land and underwater [\[See reference lxxix\]](#).

- The EPO Framework should include objectives **to protect archaeological heritage.**

Grenada Convention for the Protection of the Architectural Heritage of Europe (1985)

B.13 The main purpose of the Convention [See reference lxxx] is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co-operation among the Parties.

- The EPO Framework should include objectives to **protect archaeological heritage**.

Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979)

B.14 The Convention [See reference lxxxi] is an intergovernmental treaty under the United Nations Environment Programme. The aim is for contracting parties to work together to conserve terrestrial, marine and avian migratory species and their habitats (on a global scale) by providing strict protection for endangered migratory species. The overarching objectives set for the Parties are:

- Promote, co-operate in and support research relating to migratory species
- Endeavour to provide immediate protection for migratory species included in Appendix I
- Endeavour to conclude Agreements covering the conservation and management of migratory species included in Appendix II
- The EPO Framework should include objectives to **protect and enhance biodiversity**.

Bern Convention on European Wildlife and Natural Habitats (1979)

B.15 The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) [See reference lxxxii] was adopted in Bern, Switzerland in 1979, and came into force in 1982. The principal aims of the Convention are to ensure conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species) listed in Appendix III. To this end the Convention imposes legal obligations on contracting parties, protecting over 500 wild plant species and more than 1,000 wild animal species.

- The EPO Framework should include objectives to **protect and enhance biodiversity**.

Geneva Convention on Long-range Transboundary Air Pollution (1979)

B.16 The 1979 Convention on Long-Range Transboundary Air Pollution [See reference lxxxiii] was the first multilateral agreement addressing transboundary pollution. It created a regional framework applicable to Europe, north America, Russia and former Eastern Bloc countries for reducing transboundary air pollution and better understanding air pollution science.

- The EPO Framework should include objectives to **protect air quality**.

UNESCO World Heritage Convention (1972)

B.17 The 1972 World Heritage Convention [See reference lxxxiv] links together in a single document the concepts of nature conservation and the preservation

of cultural properties. The Convention recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two.

B.18 The Convention defines the kind of natural or cultural sites which can be considered for inscription on the World Heritage List. It also sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them. By signing the Convention, each country pledged to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage.

- The EPO Framework should include objectives relating to the **conservation and enhancement of cultural heritage and natural heritage.**

Ramsar Convention – Convention on Wetlands of International Importance (1971)

B.19 To promote the conservation and wise use of all wetlands through local, regional and national actions and international co-operation, as a contribution towards achieving sustainable development throughout the world [**See reference lxxxv**].

- The EPO Framework should include objectives which aim to **promote conservation and wise use of wetland areas.**

European – relevant policy and legislation

SEA Directive 2001

B.20 Provide for a high level of protection of the environment and contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development [See reference lxxxvi].

- Requirements of the SEA Directive will be met.

European Climate Law (2021)

B.21 The European Climate Law [See reference lxxxvii] writes into law the goal set out in the European Green Deal for Europe to become climate neutral by 2050. The law also sets the intermediate target of reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.

- The EPO Framework should include objectives to **reducing GHG emissions and enhancing renewable energy production and energy efficiency.**

Air Quality Directive (2008)

B.22 Directive 2008/50/EC [See reference lxxxviii] on ambient air quality and cleaner air for Europe. Avoid, prevent and reduce harmful effects of ambient noise pollution on human health and the environment.

- The EPO Framework should include objectives to **maintain and enhance air quality.**

Renewable Energy Directive (2009, as amended in 2018)

B.23 Directive EU 2009/28/EC (as amended by 2018/2001) [[See reference lxxxix](#)] on the promotion of the use of energy from renewable sources.

B.24 The Renewable Energy Directive establishes an overall policy for the production and promotion of energy from renewable sources in the EU. It requires the EU to fulfil at least 32% of its total energy needs with renewable energy by 2030 and builds on the already achieved progress.

Effort Sharing Regulation (2018)

B.25 Regulation (EU) 2018/842 [[See reference xc](#)] on binding annual greenhouse gas emissions reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013. The Effort Sharing Regulation establishes emissions reduction targets for the EU and for Member States for sectors not included in the EU ETS (such as transport, buildings, agriculture, waste).

National Emission Reduction Commitments Directive (2016)

B.26 The NEC Directive 2016/2284/EU [[See reference xci](#)] sets 2020 and 2030 emission reduction commitments for five main air pollutants (NO_x, NMVOCs, SO₂, NH₃ and PM_{2.5} as well as carbon monoxide (CO)): Ceilings from 2020-2029 - SO₂ (65%); NO_x (49%); NMVOCs (25%); NH₃ (1%); and PM_{2.5} (18%). It also mandates the development of a National Air Pollution Control Programme (NAPCP) for each Member State.

- The EPO Framework should include objectives relating to **energy efficiency and emissions reduction**.

Birds Directive (2009)

B.27 Directive 2009/147/EC [See reference xcii] is a codified version of Directive 79/409/EEC as amended. The preservation, maintenance, and re-establishment of biotopes and habitats shall include the following measures:

- Creation of protected areas.
 - Upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones.
 - Re-establishment of destroyed biotopes.
 - Creation of biotopes.
- The EPO Framework should include objectives relating to the **protection and enhancement of habitats for protected bird species**.

Habitats Directive (1992)

B.28 Directive 92/43/EEC [See reference xciii] on the conservation of natural habitats and of wild fauna and flora. Promote the maintenance of biodiversity taking account of economic, social, cultural and regional requirements. Conservation of natural habitats and maintain landscape features of importance to wildlife and fauna.

- The EPO Framework should include objectives to **protect and maintain the natural environment and important landscape features**.

Water Framework Directive (2000)

B.29 Directive 2000/60/EC [See reference xciv] establishing a framework for community action in the field of water policy. Protection of inland surface waters, transitional waters, coastal waters and groundwater.

- The EPO Framework should include objectives to **protect and minimise the impact on water quality.**

Floods Directive (2007)

B.30 Directive 2007/60/EC [See reference xcv] on the assessment and management of flood risks. Establish a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods.

- The EPO Framework should include objectives that relate to **flood management and reduction of risk.**

Drinking Water Directive (1998)

B.31 Directive 98/83/EC [See reference xcvi] on the quality of water intended for human consumption. Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.

- The EPO Framework should include objectives to **protect and enhance water quality.**

European – relevant plans and programmes

EU Eighth Environmental Action Programme (2020)

B.32 The 8th Environment Action Programme [See reference xcvi] will guide European environmental policy until 2030. It aims to accelerate the transition to a climate-neutral, resource-efficient and regenerative economy. It recognises that human wellbeing and prosperity depend on the healthy ecosystems within which we operate. The EAP has six priority objectives:

- achieving the 2030 greenhouse gas emission reduction target and climate neutrality by 2050;
 - enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change;
 - advancing towards a regenerative growth model, decoupling economic growth from resource use and environmental degradation, and accelerating the transition to a circular economy;
 - pursuing a zero-pollution ambition, including for air, water and soil and protecting the health and well-being of Europeans;
 - protecting, preserving and restoring biodiversity, and enhancing natural capital (notably air, water, soil, and forest, freshwater, wetland and marine ecosystems); and
 - reducing environmental and climate pressures related to production and consumption (particularly in the areas of energy, industrial development, buildings and infrastructure, mobility and the food system).
- The EPO Framework should include objectives to **protect and enhance the natural environment and promote energy efficiency.**

2030 Climate Target Plan (2020)

B.33 This assessment shows how all sectors of the economy and society can contribute to the EU's ambition of reducing greenhouse gases for the next 10 years and sets out policy actions required to achieve this [See reference xcvi].

Its objectives include:

- Set a more ambitious and cost-effective path to achieving climate neutrality by 2050.
- Stimulate the creation of green jobs and continue the EU's track record of cutting greenhouse gas emissions whilst growing its economy.
- Encourage international partners to increase their ambition to limit the rise in global temperature to 1.5°C and avoid the most severe consequences of climate change.
- The EPO Framework should include objectives to **reduce greenhouse gas emissions**.

2050 Long-Term Strategy (2020)

B.34 The EU aims to be climate-neutral by 2050 – an economy with net-zero greenhouse gas emissions. This objective is at the heart of the European Green Deal and in line with the EU's commitment to global climate action under the Paris Agreement [See reference xcix]. EU Member States are required to develop national long-term strategies on how they plan to achieve the greenhouse gas emissions reductions needed to meet their commitments under the Paris Agreement and EU objectives.

- The EPO Framework should include objectives to **reduce greenhouse gas emissions**.

Fit for 55 Package (2021) and European Green Deal (2019)

B.35 The Fit for 55 Package [See reference c], published as part of the European Green Deal in 2021 [See reference ci], sets out a suite of legislative initiatives across various sections, including energy, transport and buildings, which are intended to keep Europe on track to deliver on its climate targets.

B.36 The European Green Deal provides an action plan to:

- Boost the efficient use of resources by moving to a clean, circular economy;
- Restore biodiversity and cut pollution.

B.37 The Deal aims to ensure:

- No net emissions of greenhouse gases by 2050;
 - Economic growth decoupled from resource use; and
 - No person and no place left behind.
- The EPO Framework should include objectives to **promote efficient use of resources and protect and enhance the natural environment.**

EU Biodiversity Strategy for 2030 (2020)

B.38 The European Commission has adopted an ambitious new strategy to halt the loss of biodiversity and ecosystem services in the EU by 2030 [See reference cii]. The six targets cover:

- Full implementation of EU nature legislation to protect biodiversity
- Better protection for ecosystems, and more use of green infrastructure
- More sustainable agriculture and forestry

Appendix B Plans and programmes

- Better management of fish stocks
- Tighter controls on invasive alien species
- A bigger EU contribution to averting global biodiversity loss.
- The EPO Framework should include objectives **to value, protect and enhance biodiversity.**

European Spatial Development Perspective (1999)

B.39 Economic and social cohesion across the community. Conservation of natural resources and cultural heritage. Balanced competitiveness between different tiers of government **[See reference ciii]**.

- The EPO Framework should include objectives to **conserve natural resources and cultural heritage.**

National – relevant policy and legislation

European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I No. 435 of 2004) and European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011) (S.I. No. 200 of 2011)

B.40 These Regulations carry into effect in Ireland Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment insofar as the Directive relates to plans and programmes in all of the sectors listed in article 3(2) of the Directive except land-use planning **[See reference civ] [See reference cv]**.

- They concern the consideration of the likely significant effects on the environment of such plans and programmes.
- They prescribe procedures and contents of environmental reporting, monitoring and assessment in relation to all plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications and tourism.
- Aims to set the framework for future development consent of projects listed in Annexes I and II to the Environmental Impact Assessment Directive.
- Considers transboundary environmental effects in specified cases.

- Requirements of the SEA Regulations will be met.

The Wildlife Act 1976 and Wildlife (Amendment) Act 2000

B.41 The main objectives of the Wildlife (Amendment) Act, 2000 [See reference cvi] are to:

- provide a mechanism to give statutory protection to NHAs;
- provide for statutory protection for important geological and geomorphological sites, including fossil sites by designation as NHAs;
- improve some existing measures, and introduce new ones, to enhance the conservation of wildlife species and their habitats;
- enhance a number of existing controls in respect of hunting, which are designed to serve the interests of wildlife conservation;
- broaden the scope of the Wildlife Acts to include most species, including the majority of fish and aquatic invertebrate species which were excluded from the 1976 Act;
- introduce new provisions to enable regulation of the business of commercial shoot operators;
- ensure or strengthen compliance with international agreements and, in particular, enable Ireland to ratify the Convention on International Trade in Endangered Species (CITES) and the African-Eurasian Migratory Waterbirds Agreement (AEWA);
- increase substantially the level of fines for contravention of the Wildlife Acts and to allow for the imposition of prison sentences;
- provide mechanisms to allow the Minister to act independently of forestry legislation, for example, in relation to the acquisition of land by agreement;

Appendix B Plans and programmes

- strengthen the provisions relating to the cutting of hedgerows during the critical bird-nesting period and include a requirement that hedgerows may only be cut during that period by public bodies, including local authorities, for reasons of public health or safety;
 - strengthen the protective regime for Special Areas of Conservation (SACs) by removing any doubt that protection will in all cases apply from the time of notification of proposed sites;
 - and give specific statutory recognition to the Minister's responsibilities in regard to promoting the conservation of biological diversity, in light of Ireland's commitment to the UN Convention on Biological Diversity.
- The EPO Framework should include objectives relating to the **protection of wildlife.**

European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011 as amended)

B.42 The European Communities (Birds and Natural Habitats Regulations 2011 (S. I. No. 477 of 2011) [See reference cvii] transpose the Habitats Directive and the Birds Directive. Previously, the Birds and Habitats Directives had been transposed into Irish law through inter alia the Wildlife Act 1976 and the European Communities (Natural Habitats) Regulations, 1997. However, two judgments of the Court of Justice of the EU (CJEU) – notably cases C-418/04 and C-183/05 - found that Ireland had not adequately transposed the two Directives. Therefore, the 2011 Regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats)(Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in CJEU judgments.

- The EPO Framework should include objectives relating to the **protection of birds and natural habitats.**

Climate Action and Low Carbon Development (Amendment) Act 2021

B.43 The Act [See reference cviii] commits the Government to transition to a climate resilient, biodiversity rich and climate neutral economy by 2050 and to thereby promote climate justice. The Act set targets for Ireland to deliver up to 80% of electricity from renewables and to reduce greenhouse gas emissions by 51% by 2030 and reach net-zero no later than 2050. The Act also introduces the following requirements:

- To make certain changes to the Climate Change Advisory Council.
- To provide for carbon budgets and a sectoral emissions ceiling to apply to different sectors of the economy.
- To provide for reporting by Ministers of the Government to a joint committee of the Houses of the Oireachtas.
- To provide for local authority climate action plans.
- To amend the Climate Action and Low Carbon Development Act 2015.
- To provide that local authorities shall, when making development plans, take account of their climate action plans and, for that purpose to amend the Planning and Development Act 2000.
- To extend the purposes for which moneys may be paid out of the Climate Action Fund and, for that purpose to amend the National Oil Reserves Agency Act 2007.
- The EPO Framework should include objectives relating to climate action including **reducing greenhouse gas emissions and supporting renewable and low carbon development.**

National Sustainable Mobility Policy (2022)

B.44 The Policy [See reference cix] sets out a strategic framework to 2030 for active travel (walking and cycling) and public transport journeys to help Ireland meet its climate obligations. It is accompanied by an action plan to 2025 which contains actions to improve and expand sustainable mobility options across the country by providing safe, green, accessible and efficient alternatives to car journeys. It also includes demand management and behavioural change measures to manage daily travel demand more efficiently and to reduce the journeys taken by private car.

- The EPO Framework should include objectives **relating to the reduction in greenhouse gas emissions and encouraging a modal shift to sustainable modes of transport.**

Town Centre First Policy (2022)

B.45 The Town Centre First Policy [See reference cx] seeks to target resources towards towns. It sets out a range of actions which collectively will create the framework required to help build sustainable vibrant town centres. The Town Centre First Policy supports providing *"a mix of housing typologies and tenures to cater for diverse communities in terms of age, income and mobility"*. Investment programmes, including the Croí Cónaithe Fund and Urban Regeneration and Development Fund, support a proactive approach to rejuvenating towns and villages in Ireland.

- The EPO Framework should include objectives **reflecting the objectives of the Town Centre First Policy.**

Project Ireland 2040 National Planning Framework (2018)

B.46 National Planning Framework [See reference cxi] guides high-level strategic planning and development for the country over the next 20+ years.

The key objectives of the Framework are to:

- Guide the future development of Ireland, taking into account a projected 1 million increase in our population, the need to create 660,000 additional jobs to achieve full employment and a need for 550,000 more homes by 2040;
- Enable people to live closer to where they work, moving away from the current unsustainable trends of increased commuting;
- Regenerate rural Ireland by promoting environmentally sustainable growth patterns;
- Plan for and implement a better distribution of regional growth, in terms of jobs and prosperity;
- Transform settlements of all sizes through imaginative urban regeneration and bring life / jobs back into cities, towns and villages;
- Co-ordinate delivery of infrastructure and services in tandem with growth, through joined-up NPF/National Investment Plan and consistent sectoral plans, which will help to manage this growth and tackle congestion and quality of life issues in Dublin and elsewhere.

B.47 The EPO Framework should include objectives to **sustainably guide development**.

Programme for Government: Our Shared Future (2020)

B.48 The Programme for Government [See reference cxii] sets out actions over the next five years with an objective to positively contribute towards a wider global response to the post-COVID recovery is shaped and become an exemplar in decarbonising of the economy.

- The EPO Framework should include objectives **reflecting the objectives of the Programme for Government.**

National Adaptation Framework (2018) and Sectoral Adaptation Plans (various years)

B.49 National Adaptation Framework [See reference cxiii] was published in 2018 and it sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts.

B.50 Building on the measures outlined in the National Adaptation Framework, the Government has prepared 12 Sectoral Adaptation Plans, including one for Transport Infrastructure.

- The EPO Framework should include objectives relating to **climate adaptation.**

National – relevant plans

Climate Action Plan 2023

B.51 The **Climate Action Plan 2023** [See reference cxiv] charts a course to reduce greenhouse gas emissions to meet our commitments to a 51% reduction in emissions by 2030 and to reach net zero no later than 2050. There are numerous actions in the Climate Action Plan, classified into several topic areas: governance, a just transition, citizen engagement, the public sector, carbon prices, electricity, industry, the built environment, transport, agriculture, land use / land use change / forestry, the marine environment, the circular economy, and international climate action.

- The EPO Framework should include objectives relating to **mitigation of and adaptation to climate change**.

Ireland's fourth Draft National Biodiversity Action Plan (2022)

B.52 The draft Biodiversity Action Plan [See reference cxv] sets out objectives and actions for the conservation and restoration of biodiversity in Ireland. The Draft Plan sets the national biodiversity agenda for the period 2023-2027 and aims to deliver the transformative changes required to the ways in which we value and protect nature.

- The EPO Framework should include objectives relating to the **protection and restoration of biodiversity**.

Draft River Basin Management Plan for Ireland (RBMP) 2022-2027 (2022)

B.53 The Draft RBMP [See reference cxvi] sets out a programme of measures, to protect and where necessary restore bodies of water in Ireland, building on progress under the previous plan. It sets out the environmental improvements to be delivered during a river basin planning cycle, including water quality objectives and a programme of measures to achieve those objectives. The Draft Plan is currently undergoing consultation.

- The EPO Framework should include objectives to **protect and minimise the impact on water quality.**

National Clean Air Strategy (in preparation) and Cleaning our Air: Public Consultation to inform the development of a National Clean Air Strategy

B.54 This consultation document [See reference cxvii] aims to inform the development of a national clean air strategy in order to address the challenges and impacts of air pollution. It provides a background to the national, EU and international approaches to improving air quality and seeks to set out the main sectoral issues in relation to air quality which are of relevance, and for which further actions could be considered in a national clean air strategy. The main issues are identified, based on the overall importance of the emission sources, the consequential public exposure to air pollution, and the resulting health and environment impacts.

- The EPO Framework should include objectives to **maintain and enhance air quality.**

National Landscape Strategy 2015-2020 (2015)

B.55 The National Landscape Strategy [See reference cxviii] was introduced in 2020 and it is used to ensure compliance with the European Landscape Convention and to establish principles for protecting and enhancing it while positively managing its change. It is a high-level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions. The key objectives of the Strategy include:

- implement the European Landscape Convention by integrating landscape into our approach to sustainable development;
 - establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape;
 - provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of our landscape;
 - ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible.
- The EPO Framework should include objectives relating to **landscape management and protection**.

Heritage Ireland 2030 (2021)

B.56 Heritage Ireland 2030 [See reference cxix] is Ireland's new national heritage plan. It sets out values, principles, strategic priorities to guide and inform the heritage sector over the next decade.

- The EPO Framework should include objectives to **protect cultural and natural heritage assets**.

Local – relevant plans

The Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Region 2019-2031

B.57 The RSES [See reference cxx] sets out the framework to direct future growth in the Eastern and Midlands Region over a decade. Its aim is *“to create a sustainable and competitive Region that supports the health and wellbeing of our people and places, from urban to rural, with access to quality housing, travel and employment for all”* (p.6). It is underpinned by three principles, which are:

1. Healthy placemaking: to promote people’s quality of life through the creation of healthy and attractive places to live, work, visit, invest and study in.
1. Climate action: the need to enhance climate resilience and to accelerate a transition to a low carbon society recognising the role of natural capital and ecosystem services in achieving this; and
2. Economic opportunity: to create the right conditions and opportunities for the Region to realise sustainable economic growth and quality jobs that ensure a good living standard for all.

- The EPO Framework should include objectives that **align with the RSES for the Eastern and Midlands Region**.

Longford County Development Plan (CDP) 2021-2027

B.58 The Longford CDP [See reference cxxi] sets out the planning policies and objective for the sustainable development of the County. With relation to transport policy, many of the strategic objectives align with national and regional policy. Some key objectives for transport and travel include:

- Encourage a general shift towards increased use of public transport in the County;
 - Improve transport connectivity and establish integrated transport nodes;
 - Reduce the need to travel by private vehicle;
 - Encourage and facilitate walking and cycling, putting the pedestrian first in residential and urban areas;
 - Provide high quality road access on routes of economic importance whilst ensuring road safety;
 - Support and facilitate the development of infrastructure to increase the usage of electric vehicles;
 - Promoting place-making in towns and villages to improve quality of life; and
 - Relieving traffic congestion particularly in town centres by means of traffic calming and traffic management.
- The EPO Framework should include objectives that **align with the Longford CDP.**

Longford Local Economic and Community Plan (LECP) 2016-2022

B.59 The LECP [See reference cxxii] sets out, for a six year period, the objectives and actions needed to promote and support both the economic and community development of the Local Authority area. The vision for the County Longford in the plan is for a *‘regenerated economically sustainable County which values equality of opportunity, excellent quality of life, collaborative community and rural development, sense of place and where the wellbeing of all residents and future generations is central to everything we do’*. Longford Council and the Longford Local Community Development Committee (LCDC) are currently preparing for the Longford Local Economic and Community Plan (LECP) 2023-2029.

- The EPO Framework should include objectives that **align with the Longford LECP**.

Active Travel Strategy for County Longford (in preparation)

B.60 An Active Travel Strategy for County Longford is currently in preparation. The aim of the Active Travel Strategy is to establish a strategic framework for the future development of active travel in County Longford and to support Longford County Council’s ambition to *“establish Longford as a pioneering county for active travel”* by *“making active travel an attractive and realistic choice for short journeys”*.

- The EPO Framework should include objectives to **encourage a modal shift to sustainable modes of transport**.

Camlin Quarter Urban Design Framework (2019)

B.61 The Camlin Quarter Urban Design Framework [See reference cxxiii] provides a guide to the enhancements and development of the Camlin Quarter as a *'connected, competitive, creative and caring environment in the historical heartland of Longford Town'*. It sets out the vision, context and considerations, key objectives and urban design response for the regeneration of the area which has been identified by the County Longford Development Plan as a strategic regeneration site.

- The EPO Framework should include objectives that **align with the Camlin Quarter Urban Design Framework.**

Longford Climate Adaptation Strategy 2019

B.62 This Strategy [See reference cxxiv] sets out the main challenges for Ireland and for Longford in relation to climate change. It sets out the adaptation goals, objectives and actions for the County and a number of actions to meet these objectives.

- The EPO Framework should include objectives relating to **climate adaptation.**

County Longford Tourism Strategy 2017-2022

B.63 The Tourism Strategy [See reference cxxv] has the aim of creating increased linkages and targeted integration of key tourism opportunities within County Longford. This includes the development and improvement of the walking and cycling network in the County, the enhancement of Greenways, Blueways and Peatways and other recreational routes, trails and connections.

- The EPO Framework should include objectives that **align with the County Longford Tourism Strategy**.

Longford Noise Action Plan 2018 – 2023 (2018)

B.64 The Longford Noise Action Plan [See reference cxxvi] has been prepared in accordance with the requirements of the EU Directive 2002/49/EC – Environmental Noise Directive, transposed into Irish Law by the Environmental Noise Regulations. The plan has been prepared to address environmental noise from major roads within County Longford. It sets out related legislation and guidance, a description of the area and noise mapping, mitigation and protection measures, and a plan of key actions.

- The EPO Framework should include objectives relating to **preventing and reducing noise pollution**.

Appendix C

Environmental baseline information

Due to the potential for effects from the implementation of the Longford Town LTP to extend beyond the Longford Town boundary, a description of the baseline information relevant to both Longford Town and County is provided in the subsequent paragraphs in relation to all SEA topics.

Biodiversity, flora and fauna

Current baseline information

C.1 Figure C.1 illustrates the location and extent of biodiversity sites in Longford. There is a large diversity of species and habitats within County Longford, many of which have been designated because of their importance at European and national level. Longford's varied landscape of upland areas, low-lying peatland and lakes support a range of biodiversity, wildlife and habitats.

C.2 Lough Ree is the third largest lake in Ireland and is situated in an ice-deepened depression in Carboniferous limestone on the River Shannon system between Lanesborough and Athlone. It is designated as both a Special Area of Conservation (SAC) and Special Protection Area (SPA). It is one of the most important sites in the midlands for wintering waterfowl, with nationally important populations of Little Grebe, Whooper Swan, Golden Plover, Common Tern, and Lapwing. There are currently seven other SACs in County Longford [See reference cxxvii]:

- SAC 002341 **Ardagullion Bog SAC.**
- SAC 002346 **Brown Bog SAC.**

Appendix C Environmental baseline information

- SAC 002348 **Clooneen Bog SAC.**
- SAC 000448 **Fortwilliam Turlough SAC.**
- SAC 001818 **Lough Forbes Complex SAC.**
- SAC 002202 **Mount Jessop Bog SAC.**
- SAC 002201 **Derragh Bog SAC.**

C.3 There are currently three other SPAs in County Longford. These designations are typically wetlands, bogs, and lakes [\[See reference cxxviii\]](#):

- SPA 004101 **Ballykenny-Fishertown Bog SPA.**
- SPA 004061 **Lough Kinale & Derragh Lough SPA.**
- SPA 004045 **Glen Lough SPA.**

C.4 Other relevant European sites connected to the county via hydrological links include:

- UK9020071 **Upper Lough Erne SPA.**
- UK0016614 **Upper Lough Erne SAC.**
- SPA 004151 **Donegal Bay SPA.**
- SAC 002241 **Lough Derg-North East Shore SAC.**
- SPA 004058 **Lough Derg (Shannon) SPA.**
- SPA 002165 **Lower River Shannon SPA.**
- SPA 004077 **River Shannon and River Fergus Estuaries SPA.**

C.5 Further detail regarding the qualifying features and key sensitivities of European designated sites and others within 15km of the study area (and those that are hydrologically linked to the study area) is provided in the Screening for Appropriate Assessment of the County Longford ATS and Longford Town LTP (February 2023).

C.6 County Longford contains six Natural Heritage Areas, all of which are designated as raised boglands **[See reference cxxix]**:

- 000422 **Aghnamona Bog NHA** (peatlands).
- 000691 **Rinn River NHA** (peatlands).
- 000985 **Lough Kinale and Derragh Lough NHA** (peatlands and birds).
- 001423 **Cloonagheeher Bog NHA** (peatlands).
- 001448 **Forthill Bog NHA** (peatlands).
- 001450 **Mount Jessop Bog NHA** (peatlands).

C.7 In addition to these, there are currently 17 proposed NHAs (pNHA) that are awaiting designation to NHA status. These non-statutory designations are primarily bogs and lakes **[See reference cxxx]**:

- 000440 **Lough Ree pNHA.**
- 000442 **Brown Bog pNHA.**
- 000445 **Clooneen Bog pNHA.**
- 000447 **Derrymore Bog pNHA.**
- 000448 **Fortwilliam Turlough pNHA.**
- 001818 **Lough Forbes pNHA.**
- 002069 **Ardgullion Bog pNHA.**
- 001822 **Carrickglass Demesne pNHA.**
- 001821 **Cordara Turlough pNHA.**
- 001444 **Derry Lough pNHA.**
- 001687 **Glen Lough pNHA.**
- 00449 **Lough Bannow pNHA.**
- 001819 **Lough Bawn pNHA.**
- 000992 **Lough Gowna pNHA.**

Appendix C Environmental baseline information

- 001449 **Lough Naback pNHA.**
- 001443 **Lough Slawn pNHA.**
- 002103 **Royal Canal pNHA.**

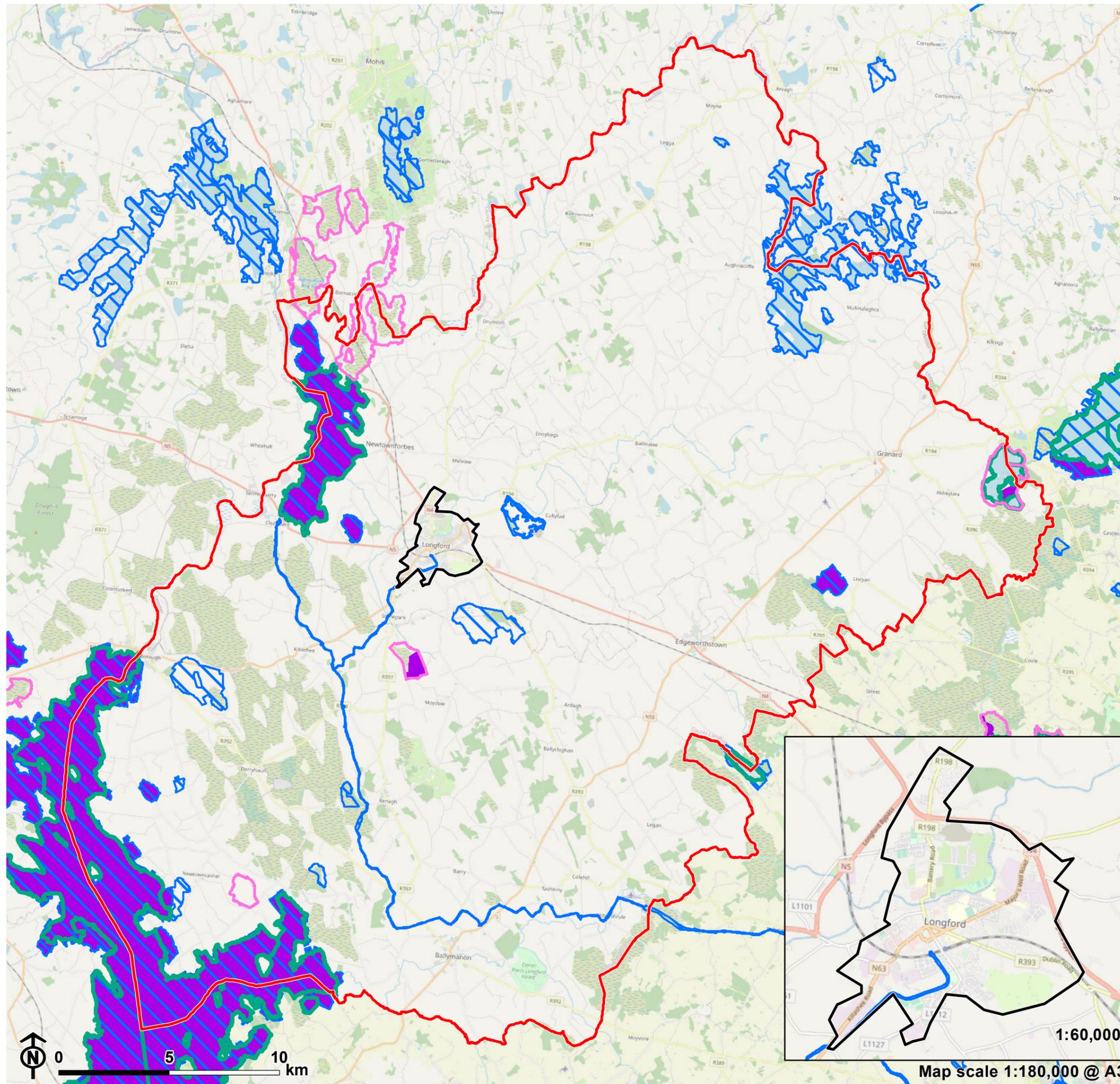
C.8 Within Longford Town there is one pNHA, the Royal Canal. The Royal Canal pNHA begins approximately 200m from Longford train station and follows the canal south towards Ballymacormick. The pNHA forms a link between Longford and Dublin, connecting designated and undesignated sites across the country. There are no other protected sites within Longford Town.

C.9 There are 13 ancient and long-established woodland sites in the county, the largest being Clonguish Woods (Castle Forbes) and Annagh Wood (Castle Forbes) (long-established woodland; evidence not ancient) [See reference cxxxix]. All ancient and long-established woodland sites in County Longford are illustrated in **Figure C.2**. There are no ancient and long-established woodland sites in Longford Town.

C.10 There are no National Parks or National Nature Reserves in County Longford.

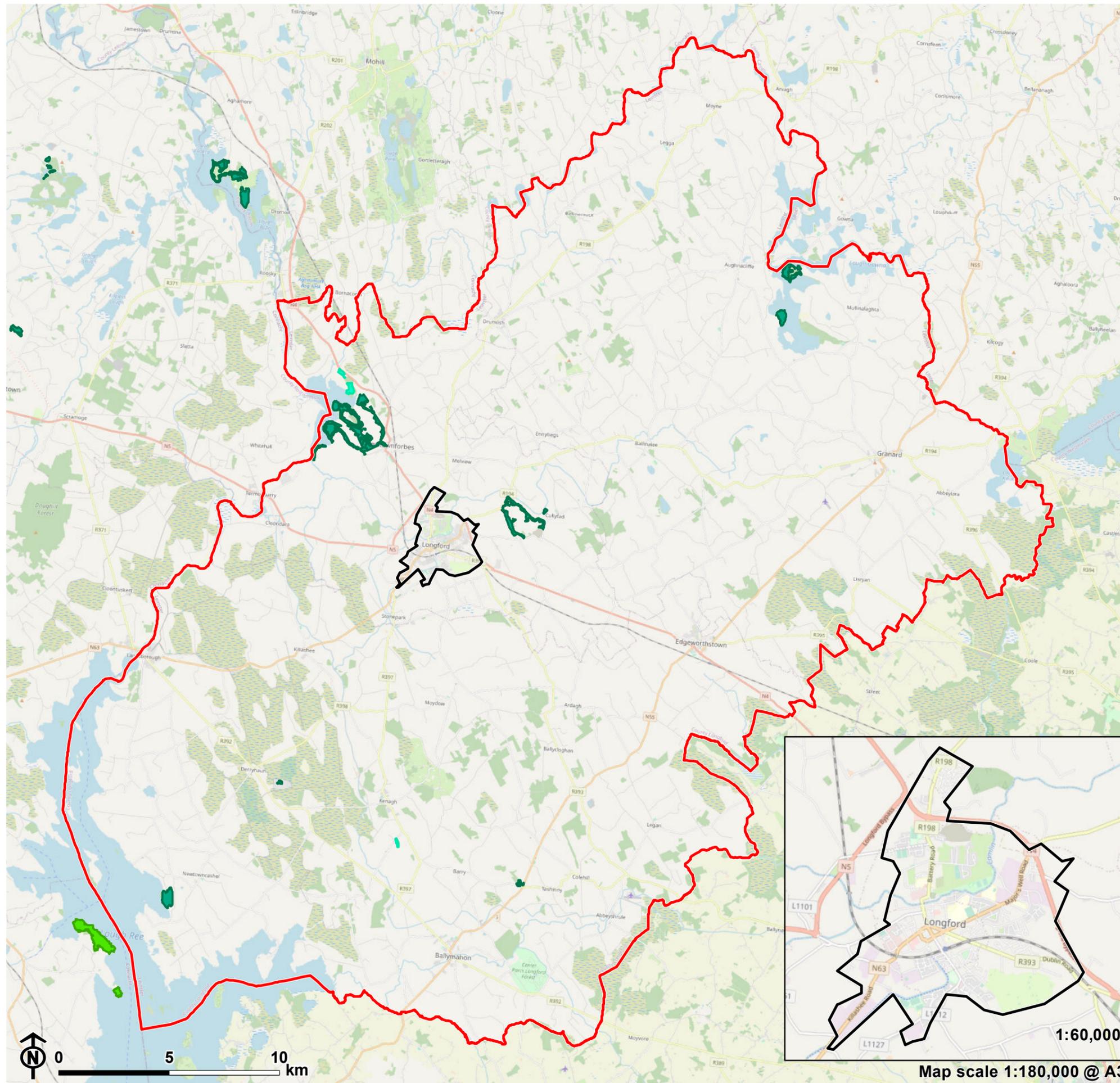
C.11 Beyond the boundaries of designated sites, there are further areas that provide important habitats for flora and fauna, including vulnerable species. A wetland field survey undertaken in 2019 identified 18 wetland sites deemed to be of 'county conservation value' (Ballin Lough and Kileen Bog) or of 'high local conservation value' (Lough Sallagh; Black Lough; Kileen Lough; Currygrane Lough; and Kileen Pond North-Ballin Lough) [See reference cxxxix]. The network of hedgerows across the county provides valuable links for the movement and dispersal of species. The Longford Hedgerow Study [See reference cxxxix] identified 9,903 km of hedgerows in County Longford. Longford Town also contains areas of woodland, trees, hedgerows, rivers, streams and other landscape features that form part of the ecological network.

Figure C.1: Biodiversity Sites



- Longford County
- Longford Town LTP Study Area
- Natural Heritage Area (NHA)
- Special Protection Area (SPA)
- Proposed Natural Heritage Area (pNHA)
- Special Area of Conservation (SAC)

Figure C.2: Ancient and long established woodland sites



- Longford County
- Longford Town LTP Study Area
- Ancient and long established woodland sites**
- Possible ancient woodland
- Ancient woodland
- Long-established woodland

Projected baseline information

C.12 At national level, assessment of Ireland’s biodiversity shows that a significant portion of the country’s biodiversity is in a vulnerable state. Without substantial change to existing trends there is unlikely to be significant increase in the pressures on biodiversity in coming decades from agricultural practices, forestry and fisheries, natural system modifications, mining and quarrying, climate change, pollution and invasive and problematic species [See reference [cxxxiv](#)]. It is difficult to predict future changes in the baseline for biodiversity, flora and fauna. However, previous trends have shown that development can have both direct and indirect effects (e.g. lighting, noise, etc.) and adverse and beneficial impacts on biodiversity, flora and fauna. Development can cause loss and damage to habitats, but innovative design and the creation of green corridors can help offset such impacts and even enhance biodiversity at local level.

C.13 Within Longford, the proposed Mid Shannon Wilderness Park will include Lough Ree, the rivers Shannon, Inny and Camlin, the Royal Canal, Newcastle Wood and other forests and the future rehabilitated Bord na Móna bogs. The project aims to strengthen the integration of tourism and natural heritage, and to reconcile tourism development with conservation of biodiversity. It is also proposed to create a dedicated Lough Ree Biosphere Reserve, due to rich natural heritage of the lake, raised bogs and wetlands. The proposed Biosphere Reserve project is a collaboration between the relevant local authorities including Longford County Council, Bord na Móna and the National Parks and Wildlife Services, Waterways Ireland and Fáilte Ireland. Whilst encouraging recreation and tourism in the area, the Wilderness Park also aims to enhance local biodiversity through management of rehabilitated bogs and maintenance of biodiversity corridors across much of the south of County Longford. The Mid Shannon Wilderness Park Plan [See reference [cxxxv](#)] suggests that the park will form biodiversity and recreational connections across much of the south-west of County Longford, all the way to Longford Town via the Royal Canal.

C.14 The Royal Canal reflects the county’s transport past and has received significant resources for blueway/greenway development at a national level.

The Royal Canal Greenway project is planned to be the longest greenway in Ireland (144km in length). There is potential the blueway/greenway to be utilised as a wildlife corridor to prevent fragmentation of habitats and allow migration of species under climate change pressure.

Population and human health

Although preliminary results from the 2022 Census have been released, the full 2022 Census data will not be available until the end of 2023. Therefore, reference is made to the 2016 Census data, where more up-to-date data is not available.

Population

Current baseline information

C.15 County Longford is the fourth smallest county in area and the second smallest county in terms of population in Ireland. According to preliminary results from the 2022 Census, the population of County Longford is 46,634 [See reference cxxxvi]. The population is relatively well distributed across each Municipal District (MD) in the county with 16,046 people within Longford MD; 10,674 people within Granard MD; and 14,153 people within Ballymahon MD, with relatively higher concentrations around the larger towns of Longford Town, Ballymahon, Granard, Lanesborough and Edgeworthstown.

C.16 Overall, the population distribution within County Longford has remained relatively consistent over time [See reference cxxxvii]. According to the 2016 Census, 34.2% of the population were living in urban settlements in Longford whilst 65.85% were living in smaller towns and villages, as well as in the rural remainder of the county.

County Longford has seen a significant increase in population in recent years. The county saw the highest population growth in Ireland between 2016 Census and 2022 Census (+14.4%), above the national average (+8.1%).

C.17 Table C.1 sets out the population change in County Longford since Census 1996. Since 2006, Longford’s population has increased at a rate greater than the national average [See reference cxxxviii].

Table C.1: Population change in County Longford

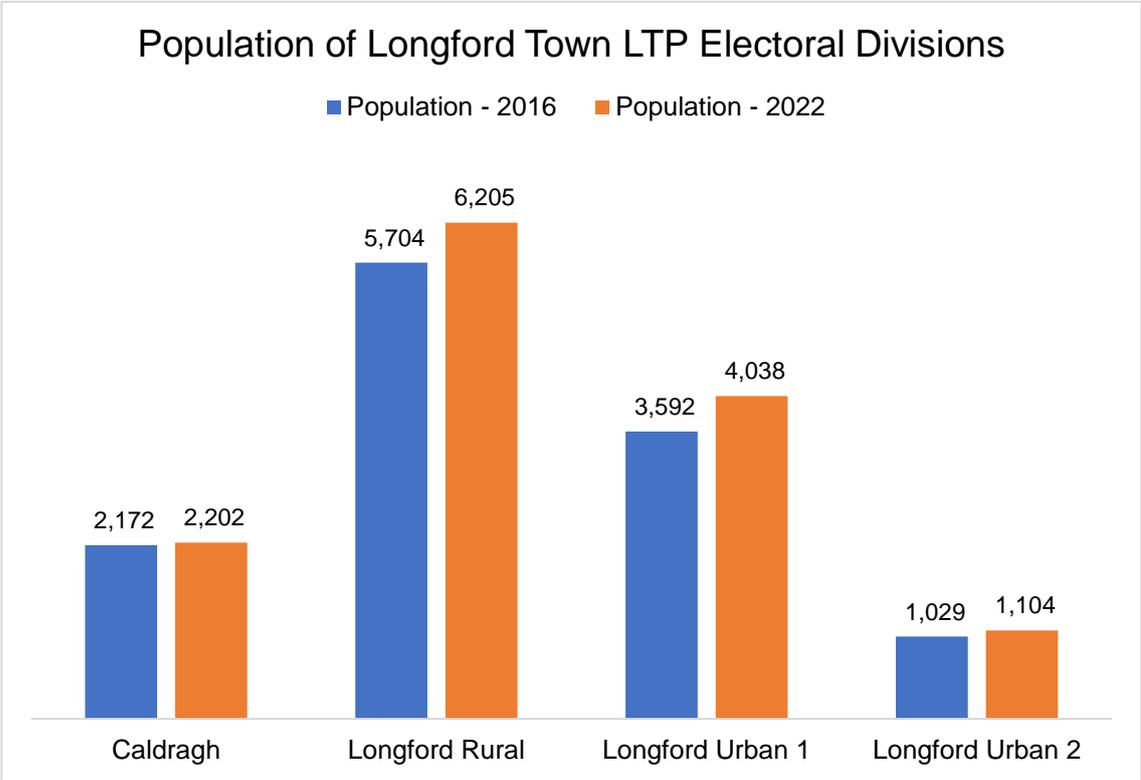
Census year	Population of Longford	Percentage change since previous Census – Longford (%)	Percentage change since previous Census – Ireland (%)
1996	30,166	-0.4	+2.8
2002	31,068	+3.0	+8.0
2006	34,391	+10.7	+8.2
2011	39,000	+13.4	+8.2
2016	40,873	+4.8	+3.8
2022	46,634	+14.4	+8.1

C.18 Longford Town is the largest settlement in County Longford in terms of population, economic activity, level of infrastructure and service and connectivity. The Longford Town LTP study area comprises the following Electoral Divisions (EDs) in the 2022 Census – Longford Urban 1, Longford Urban 2, Longford Rural and Caldragh. The population of these EDs in 2022 was 13,549 people, compared to 12,497 people in the 2016 Census. However, it should be noted that the EDs cover a larger area than the Longford Town LTP area, therefore population estimates are likely to be higher than within the actual LTP area.

C.19 As illustrated in **Figure C.3**, the population for each ED in the LTP study area has increased since the 2016 Census. The highest percentage increase has been in the Longford Urban 1 area with a 12.4% increase in population since the previous census, followed by Longford Rural at 8.8%, Longford Urban 2 at 7.3% and Caldragh with a 1.4% increase in population. The most densely populated areas being:

- Annaly Park / St. Michael's Road.
- Ardnacassa.
- McEoin Park.
- Park Road and adjoining estates.
- Templemichael.

Figure C.3: Population of Longford Town LTP Electoral Divisions



C.20 The average age in County Longford (38.8 years) is the same as the national average (according to Census 2022), while the average age in Longford Town is even lower at 35.2 years, which is generally reflective of the slightly younger age profile within the broader Eastern and Midlands Region [See reference cxxxix]. In County Longford, approximately 62.5% of the population are of working age (i.e. 15 to 64 years). The county has a large youth demographic, with approximately 25% of the population within the 0-19 years age group. 14.2% of the population are over 65 years which is above the national average of 13.4%.

Projected baseline information

C.21 The Implementation Roadmap for the National Planning Framework [See reference cxli] predicted that County Longford would grow to 45,500 by 2026 and to 47,000 people by 2031 (based on population projection estimates from 2016 Census) [See reference cxlii]. The preliminary 2022 Census figures demonstrate that the county has already reached these figures with 46,638 inhabitants as of 2022 [See reference cxliii].

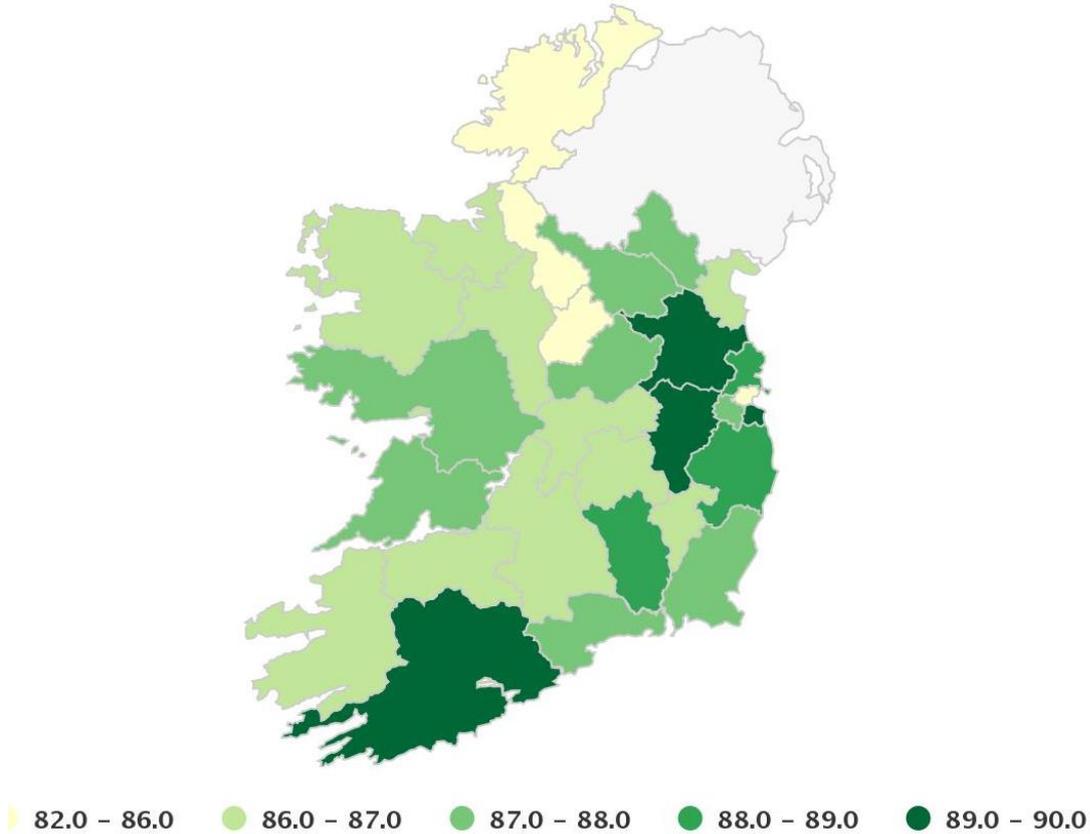
C.22 The statistics from the 2016 Census indicate a strong current working age population within Longford, with a substantial young population which is significant in terms of sustaining future economic activity in the county. In line with national trends, the older population in Longford is projected to grow significantly, placing additional pressures on housing and social care services, as well as public transport services.

Health

Current baseline information

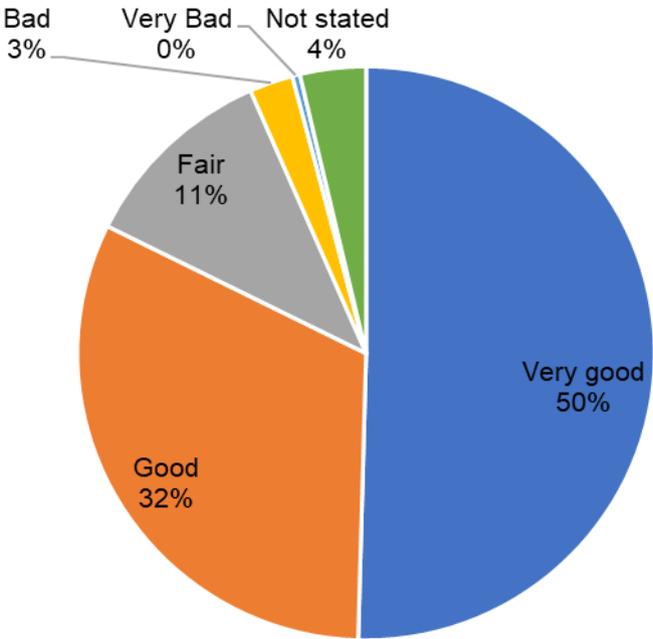
C.23 Based on 2016 Census data, 85.3% of Longford's population recorded that they were either in 'very good' or 'good' health. This is lower than the national average of 87%, and of the surrounding counties of Westmeath (87.3%), Cavan (87.4%), Roscommon (86.6%) and Leitrim (85.8%). Behind Dublin City and Cork City, County Longford had the lowest population in Ireland who stated that their health was 'very good' or 'good' (see **Figure C.4**) [See reference cxliiii].

Figure C.4: Percentage of persons with ‘very good’ and ‘good’ health



C.24 In the 2016 Census, Longford Town recorded the lowest number of people in ‘very good’ health (5,048 people; 50.4%) and the highest number of people in Ireland who stated that their health was ‘bad’ (245 people; 2.4%) or ‘very bad’ (43 people; 0.4%) [See reference cxliv] (see **Figure C.5**). There is often a strong correlation between people reporting poor health and less affluent areas [See reference cxlv].

Figure C.5: Health of residents in Longford Town (2016 Census)



C.25 A recent report from the World Health Organisation (WHO) estimated that by 2025, obesity prevalence would increase in 44 out of 53 countries in the WHO European region. Of these, Ireland is estimated to have the highest prevalence of obesity, with 43% of the population projected to be obese by 2025. Being overweight or obese carries numerous health risks, including increased likelihood of type 2 diabetes, cancer, heart and liver disease, stroke and related mental health conditions. It is estimated this health issue places a cost of at least €1.13 billion on the HSE every year [See reference cxlvi]. A breakdown of the proportion of the population of Longford who are overweight or obese is not available, however, it is assumed that the county experiences rates of obesity in line with the national average.

C.26 Only 31% of Irish adults report to undertake at least 150 minutes of moderate physical activity per week, while only 19% of primary aged children and 12% of post-primary aged children report to take part in at least 60 minutes

Appendix C Environmental baseline information

of moderate exercise per day [See reference cxlvii]. A breakdown of the proportion of the population of Longford who are inactive is not available, however, it is assumed that the county experiences rates of inactivity in line with the national average.

C.27 Ireland has one of the highest rates of mental health illness in Europe with 18.5% of the population recorded as having a mental health illness such as anxiety, depression, bipolar disorder, or alcohol / drug use [See reference cxlviii]. A breakdown of the proportion of the population of Longford who experience mental health issues is not available, however, it is assumed that rates of mental health issues in the county are in line with the national average.

C.28 The COVID-19 pandemic highlighted health inequalities nationally, including the differences in people's health and well-being that result from the conditions in which they are born, grow, live, work and age. For example, the pandemic has impacted social and community networks, showing that lack of social contact has a detrimental impact on mental health (causing or facilitating anxiety and depression). It also had a negative impact on individual lifestyle factors such as lack of exercise and unhealthy diet, causing other health issues.

C.29 Active travel helps to improve physical fitness and health, as well as mental health and wellbeing. As well as the health benefits from active travel, when more people walk or cycle and fewer journeys involve the car, community vibrancy, sociability, and cohesion are improved. Mental Health Ireland report that 39% of people exercise to improve their mental health and wellbeing [See reference cxlix]. A recent report by the Royal College of Surgeons in Ireland found that a lack of safe, active travel routes was a key factor in obesity and levels of inactivity, particularly in children [See reference cl].

C.30 Baseline information for air quality in Longford is fully considered in the section on **Air** in this appendix. Longford generally experiences good air quality. However, increased vehicle usage, burning of fossil fuels including peat for domestic purposes, and emissions from industry and agricultural practices are a threat to air quality in the county. The most pronounced areas in relation to air pollution are built-up urban areas and major transport routes, including along

the Dublin to Sligo rail line and the four national roads (N4, N5, N55 and N63). Air pollution is associated with a number of adverse health impacts and is recognised as a contributing factor in the onset of heart disease, lung cancer, stroke, and both chronic and acute respiratory diseases, including asthma [See reference cli]. It is estimated that there are approximately 1,300 premature deaths annually in Ireland due to poor air quality from fine particulate matter [See reference clii]. Pollution particularly affects the most vulnerable in society such as children, the elderly, and those with existing heart and lung conditions. There is also often a strong correlation between poor air quality areas and less affluent areas.

C.31 Noise is a common problem arising from transport, and studies have shown it can have major negative direct and indirect effects on health and well-being, on quality of life, and on wildlife. Exposure to noise can increase stress levels, disrupt communications and disturb sleep. There is scope for noise emissions from transport to be reduced by reducing the number of cars on the road, supporting a modal-shift to active travel, and developing green infrastructure along transport corridors.

C.32 Provisional road collision statistics show that the number of road deaths in Ireland in 2021 were at a record low, since recording began in 1959, however, this may also be partly due to the restrictions on personal mobility during the COVID-19 pandemic. There were three road deaths in Longford in 2021 and zero in 2020 [See reference cliii].

Projected baseline information

C.33 Given that the county, particularly Longford Town, has performed poorly for perception of personal health against neighbouring local authority areas, it is likely to continue to do so without intervention. However, the ‘strategies’ identified in the Longford Town LTP to reduce car dependency by creating a network of accessible and safe active travel routes in the town will have a positive effect on the health and wellbeing of the population of Longford as more people engage in physical activity which will improve their physical and mental health.

C.34 There is a direct relationship between air quality levels, traffic and congestion and health issues. The predicted growth of Longford's population as outlined in the Longford County Development Plan [See reference cliv] will inevitably result in an increase in road-based traffic and congestion which will adversely affect the air quality in the county, particularly in Longford Town. In the 2016 Census, Longford Town recorded the highest number of people in Ireland who stated that their health was 'bad' or 'very bad' (2.9%) [See reference clv] and these health issues may be exacerbated by the predicted increase in transport-related emissions. Conversely, increasing the provision of active travel routes and electric vehicle charging infrastructure in Longford is likely to reduce transport-related emissions, thereby improving air quality and the health and wellbeing of Longford's population.

C.35 Ireland's Government Road Safety Strategy 2021-2030 [See reference clvi] aims to reduce the number of deaths and serious injuries on Irish roads by 50% over the next 10 years. Key interventions include improving the quality of roads, reducing speeds to safe levels, promoting and protecting road users engaging in public or active transport, and improving road user standards. The Longford Town LTP will implement some of these measures by implementing traffic calming / traffic management measures and by reducing dependency on cars in favour of increased walking, cycling and public transport use.

Access to services, facilities, and open spaces

Current baseline information

C.36 Good and equitable accessibility to services, facilities and open spaces is vital to the health and well-being of a community. Services and facilities include hospitals and GPs, recreational resources, food retailers, employment and education centres, and other aspects of social infrastructure such as community centres and places of worship.

C.37 The most recently available census data, the 2016 Census, shows that there is a high proportion of residents in County Longford commuting to other areas for employment, averaging commuting distances of approximately 20km. The majority of commuting trips are by car at 61% and 70% in the county and town, respectively. The number of commuting trips by car nationally is 66%, which demonstrates the above average level of car dependency in Longford Town [See reference clvii]. Walking is the only other significant mode of transport used to travel to work and school, with 19% of people walking to work and 30% of students walking to school. Only 1% of people use public transport to travel to work in Longford Town, while 12% of students use public transport to go to school. Cycling has a particularly low level of usage in the town, accounting for only 2% of journeys to work and 1% of journeys to school.

C.38 As detailed in the section on **Material assets**, there are several constraints to the existing active travel network in Longford which impede active travel to key services and facilities, including:

- Lack of safe crossings and facilities (especially at roundabouts and on Longford Main Street).
- Fragmentation and variable quality of the cycle network.
- Lack of permeability between key areas in the town and to key destinations (e.g. schools, train station, etc.).
- Lack of footpaths, or only on one side, particularly around the edges of Longford Town.
- Limited cycling facilities in Longford Town (Main Street / Earls Street).
- Physical barriers to the active travel network from the rail and national road infrastructure, and waterways.

C.39 Similarly, the section **Material assets** in this appendix, identifies the following constraints to the public transport network which may account for the low level of use by residents in Longford Town to access services and facilities:

- Only two train stations within the county at Longford Town and Edgeworthstown.

Appendix C Environmental baseline information

- Infrequent local bus services.
- Scheduling issues between transport modes.
- Longer bus journey times compared to car journeys.
- The accessibility of the train stations by walking and cycling is an issue.

C.40 Travel times to key services and facilities in the town are detailed in **Table C.2**. The national average journey times by car (61%), walking (58%) and cycling (71%) are less than 15 minutes [See reference clviii]. As illustrated in **Table C.2** journey times to key services and facilities by car and bike generally take less than 15 minutes, in line with the national average. However, access to many services and facilities in the Longford Town by walking will generally take longer than the national average journey time.

Table C.2: Travel times between key services and facilities

From	To	Distance	Walking (travel time)	Cycling (travel time)	Car (travel time)	Public transport
Train/Bus Station	Main Street	600m	6 mins	2 mins	1 min	-
Axis Retail Centre	Main Street	~2km	23 mins	9 mins	8 mins	-
Longford Business and Technology Park	Main Street	~1.6km	20 mins	8 mins	5 mins	-
Royal Canal	Main Street	~450m	6 mins	2 mins	3 mins	-
McEoin Park	Main Street	~1.4km	18 mins	7 min	5 mins	-
Pearse Park GAA	Main Street	~1.4km	17 mins	5 mins	4 mins	-

Appendix C Environmental baseline information

From	To	Distance	Walking (travel time)	Cycling (travel time)	Car (travel time)	Public transport
Longford Rugby Club	Main Street	~1.6km	20 mins	7 mins	4 mins	-
Longford Slashers GAA	Main Street	~1.9km	23 mins	6 mins	5 mins	-
Abbeycarton	Main Street	~1.3km	16 mins	5 mins	3 mins	-
Adrnacassa Ave	Main Street	~1.4km	17 mins	6 mins	6 mins	-
Cartronageeragh Business Park	Main Street	~2.1km	27 mins	7 mins	6 mins	-
Coonbalt Wood	Main Street	~2.4km	30 mins	9 mins	5 mins	-
Longford	Athlone	~40km	-	-	45 mins	49 mins (bus)
Longford	Dublin (Connolly Station)	~120km	-	-	1 hr 40 mins	1 hr 50 mins (train) 2 hrs (bus)

C.41 County Longford is also served by a network of greenways, blueways, peatways, cycle routes and walking trails. Existing blueways include scenic routes along the River Shannon and Royal Canal, connecting Longford with neighbouring counties. There are a number of greenways in the county including the Royal Canal, as well as several Public Rights of Way, including The Mall Walk. The Royal Canal is classed both as a greenway and Public Right of Way.

C.42 There are a number of recreational areas within Longford Town, including the Albert Reynolds Peace Park (the Mall) containing the Mall Walking Trail; the Leisure complex; the Royal Canal Greenway; County Longford Golf Club; the former Longford greyhound racing stadium; Pearse Park GAA stadium;

Longford Rugby Club grounds, Tennis club, bowling centre as well as other residential amenity areas and open spaces with the town.

Projected baseline information

C.43 Development pressures could lead to loss of some existing open space and sports/recreation facilities, whilst projected population increases are likely to increase demand for such facilities. Access to key services and facilities could become more challenging as the population in Longford continues to grow and age.

C.44 There are several transport projects in the pipeline which will improve access to key services, facilities and opens spaces in Longford Town, most notably:

- N4/M4 Mullingar to Longford (Roosky) upgrade – The portion of road which will be upgraded passes through the settlements of Edgeworthstown, Longford and Newtownforbes [\[See reference clix\]](#).
- The Royal Canal Way – The 16.5km Cloondara Greenway forms part of the extended Royal Canal Quay which provides an off-road trackway between Longford to Killashee and along the Royal Canal towards Cloondara Harbour. This will provide a multi-purpose active transport route that connects to the ongoing improvements to the Royal Canal Way, which extends to Dublin.
- National Cycle Network – Connecting Longford Town to Roscommon in the south-west and Sligo in the north.
- ‘Longford Connected’ and the ‘Camlin Quarter Regeneration Project’ aim to deliver urban realm improvements and improve the environmental quality, walkability and liveability of the town and enhance the existing townscape. The Camlin Quarter Regeneration Project includes Connolly Barracks, Church Street, Great Water Street, Little Water Street and the Albert Reynolds Peace Park.
- Interurban cycle and walking connections in Longford Town.

C.45 The ‘strategies’ in the Longford LTP will have a positive effect on improving the health and wellbeing of the population of Longford by encouraging active travel choices; improving access to health and welfare services; and improving access to open spaces.

Affluence and deprivation

Current baseline information

C.46 The Pobal HP deprivation Index provides a method of measuring the relative affluence or disadvantage of a particular geographical area using data compiled from various censuses. It is a recognised resource for identifying affluence and disadvantage, by providing local analysis of relevant metrics such as unemployment, educational attainment and population change.

C.47 According to the Pobal HP Deprivation Index, County Longford is the eighth most deprived region in the country and generally experiences varied levels of deprivation (see **Figure C.6**). Most areas in the county are categorised as ‘marginally above average’ or ‘marginally below average’. However, the most disadvantaged and affluent areas are within Longford Town. Areas of the town described as ‘affluent’ are areas in the north of the town off Battery Road. McEoin Park in the south of Longford Town experiences the highest level of disadvantage, described as ‘extremely disadvantaged’. The remaining town is considered ‘marginally below average’, ‘disadvantaged’ or ‘very disadvantaged’ [\[See reference clx\]](#).

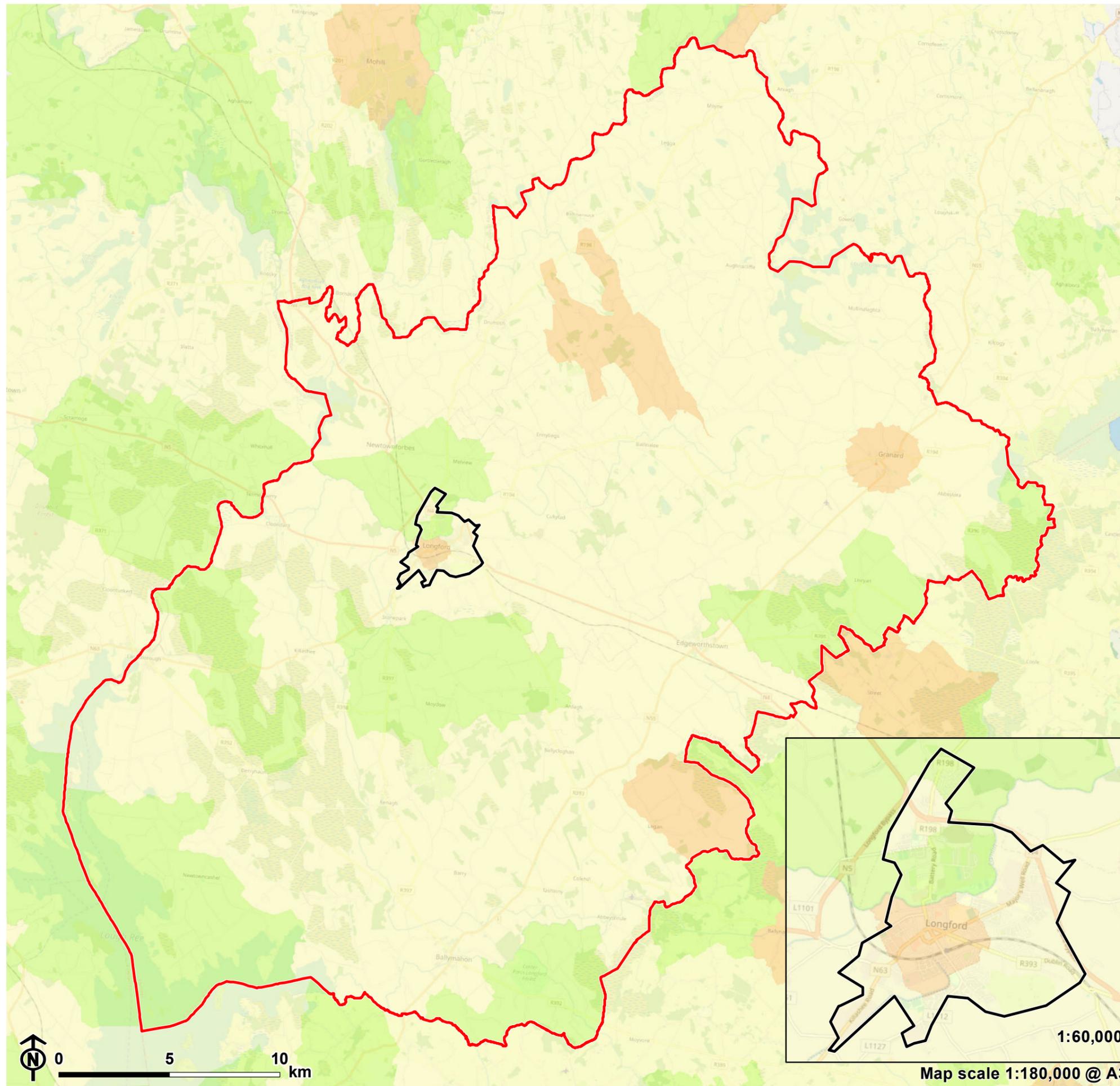
Projected baseline information

C.48 The Longford County Development Plan supports the economic, social and physical regeneration of deprived areas in the county. Areas such as the Ardnacassa area, McEoin Park and other areas suffering from social and economic deprivation in the town are identified as areas which will be prioritised

Appendix C Environmental baseline information

for regeneration in the Longford County Development Plan. Therefore, levels of deprivation may improve as a result of targeted regeneration plans for the town. Similarly, the Longford Town LTP seeks to improve active travel infrastructure throughout the town and to key employment and education locations, thus removing one of the barriers to future employment for many social groups.

Figure C.6: Affluence and deprivation in Longford



- Longford County
- Longford Town LTP Study Area
- Pobal HP Deprivation Index**
- Marginally above average
- Marginally below average
- Disadvantaged

Climatic factors

As climate change affects most SEA topics, this chapter should be read in conjunction with the other SEA topic chapters.

Climate change predictions

Current baseline information

C.49 Climate change presents a global risk, with a range of different impacts that are likely to be felt within Longford across numerous receptors. The Intergovernmental Panel on Climate Change (IPCC) special report on global warming outlines that, under emissions in line with current pledges under the Paris Agreement, **global warming is expected to surpass 1.5°C**, even if these pledges are supplemented with very challenging increases in the scale and ambition of mitigation after 2030. This increased action would need to achieve net zero CO₂ emissions in less than 15 years [See reference clxi]. In light of IPCC work, the Government of Ireland declared a Climate Emergency in May 2019 [See reference clxii]. In December 2019, the Cathaoirleach and Chief Executive of County Longford signed the Climate Action Charter, demonstrating Longford County Council's commitment to providing local leadership on climate action [See reference clxiii] and prepared a Climate Change Adaptation Strategy [See reference clxiv]. The objectives of the Strategy of most relevance to the Longford Town LTP are to:

- Incorporate climate action awareness and response throughout council policy.
- Ensure / increase the resilience of infrastructural assets and inform investment decisions.

Appendix C Environmental baseline information

- Maintain the integrity of public infrastructure against negative climate change impacts and increase the design resilience of planned developments into the future.
- Promote a combined climate action response to infrastructure provision.
- Integrate climate action considerations into land use planning policy and influence positive behaviour.
- Manage the risk of flooding through a variety of responses and to mitigate the risk and impact of flooding.
- Provide for enhancement of the natural environment to work positively towards climate action, to promote effective biodiversity management and enhance protection of natural habitats and landscapes and protect heritage and cultural infrastructure.
- Support climate action initiatives in line with local economic and community plan (LECP) actions.
- Build capacity and resilience within communities.

C.50 The Strategy outlines next steps including setting out short, medium and long-term actions to deliver the above objectives. Carbon neutrality and increasing Longford's resilience to climate change therefore needs to be fully woven into the Longford Town LTP and form a key part of the SEA.

C.51 Ireland has experienced a general trend towards warmer average temperatures in recent years with temperatures increasing by 0.9°C during the period 1900 to 2019. Fifteen of the top twenty warmest years on record have occurred since 1990. In Ireland, 2019 was the ninth consecutive year with temperatures above normal. There has also been a significant reduction in average annual levels of spring and summer rainfall with a substantial increase in the frequency of heavy precipitation events in winter and autumn [[See reference clxv](#)].

C.52 The following statistics, derived from the nearest Met Éireann weather station at Mullingar, approximately 43km from Longford Town, indicate that

Appendix C Environmental baseline information

Longford, in line with the national trend, has also been experiencing increases in average daily temperatures and rainfall [\[See reference clxvi\]](#):

- The mean temperature between 1960 and 1990 is recorded at 8.8°C and between 1979 and 2008 at 9.3°C (representing a 0.7°C increase over the period 1960-2008).
- The average rainfall 1960-1990 was recorded as 934.3mm and 1979-2008 941.3mm (representing a 7mm increase over the period 1960-2008).

C.53 Recent significant weather events in Longford include [\[See reference clxvii\]](#):

- Extreme flooding events in 2009, 2011 and 2015 around Longford Town, Newtoncashel and Cloondara and threatened areas around Ballymahon and Lanesborough. Local spot flooding in rural areas was also a significant problem.
- Significant snow events in 2018 and severe winters in 2009/10 and 2010/11.
- Prolonged dry and hot spell in 2022 (warmest year on record), causing damage to transport infrastructure and increased woodland / peatland fires (similar dry spells recorded in 2018, 2006 and 1996).
- Storm events in years (e.g. Storm Ophelia in 2017) causing major disruption due to fallen trees and powerlines.

Projected baseline information

C.54 In general, climate change projections are indicating a greater chance of hotter, drier summers and warmer, wetter winters in Ireland. Ireland's climate is changing in line with global trends and by the middle of the century (2041-2060), annual temperatures are projected to increase between 1-1.2°C and 1.3-1.6°C, depending on the emissions trajectory. Projections indicate a substantial increase in the frequency of heavy precipitation events in winter and autumn, an increase of approximately 20%. Sea levels and the number of intense storms

are also projected to increase [See reference clxviii]. Climate change has the potential for diverse and wide-ranging impacts, as detailed overleaf.

Risks

- The number of incidents of food poisoning, heat stress and heat related deaths may increase in summer.
- Domestic energy use may increase during summer months as refrigeration and air conditioning demand increases.
- Wetter winters and more intense rainfall events throughout the year may result in a higher risk of flooding from rivers.
- More intense rainstorms may in some locations result in the amount of surface water runoff exceeding the capacity of drainage systems, consequently leading to more frequent and severe localised flash flooding.
- More frequent storms and floods may cause increased damage to property and infrastructure, resulting in significant economic costs.
- Periods of drought in summer could lead to soil shrinking and subsidence, causing damage to buildings and transport networks. Drought may also impact negatively on agriculture, industry and biodiversity.
- Warmer and drier summers are likely to affect the quantity and quality of water supply, which will need careful management.
- The changing climate will impact on the behaviour and distribution of species and may encourage the spread of invasive species, pests and diseases.

Opportunities

- Milder winters should reduce the costs of heating homes and other buildings, helping to alleviate fuel poverty and reducing the number of winter deaths from cold.

- Domestic energy use may decrease in winter due to higher temperatures.
- Warmer and drier summers may benefit the recreation and tourism economy.
- Ireland's agriculture and forestry may be able to increase production with warmer weather and longer growing seasons.

Greenhouse gas emissions

Current baseline information

C.55 Longford County Council identified Longford Town as a decarbonisation zone, in line with Action 165 of the Climate Action Plan 2019, which requires every local authority to identify a pilot decarbonisation zone to test the scale and scope of decarbonising society and the economy [\[See reference clxix\]](#).

C.56 Ireland's Climate Action Plan 2023 [\[See reference clxx\]](#) sets out decisive action to reduce overall greenhouse gas (GHG) emissions and to put Ireland on a more sustainable path. The rate of emissions reductions in Ireland was modest until 2008 and since 2011 emissions have trended upwards again, with an overall peak in 2018 (60.9 million tonnes of carbon dioxide equivalent (MT CO₂eq). GHG emissions are failing to fall consistently each year. In 2021, Ireland's provisional GHG emissions are estimated to be 61.53MT CO₂eq which is 4.7% higher than emissions in 2020, likely due to some sectors recovering from the COVID-19 pandemic, and higher than the 2018 figure of 60.9MT CO₂eq [\[See reference clxxi\]](#). Agriculture is the largest source of emissions in Ireland, representing 33.3% of the nation's total emissions in 2021. The transport (15.7%) and energy (primarily power generation) (14.4%) sectors represent the second and third largest share of emissions.

The transport sector has been the fastest growing sector of GHG emissions over the past three decades, with a 112% increase between 1990 and 2021.

C.57 Despite the impacts of COVID-19, GHG emissions in Ireland only decreased 3.6% in 2020. However, 2021 saw GHG emissions rise again by 4.7% as some sectors recovered.

Projected baseline information

C.58 Ireland is committed to reaching a legally binding target of net-zero emissions no later than 2050, and a reduction of 51% (compared to 2018 levels) by 2030 under the Climate Action and Low Carbon Development (Amendment) Act 2021 [See reference clxxii]. The latest EPA GHG projections [See reference clxxiii] show that currently implemented measures will achieve a reduction of 10% on 2025 levels by 2030, significantly short of the 30% reduction target. GHG emissions are failing to fall consistently each year with the provisional 2021 figure higher than the previous year and higher than the 2018 peak figure (since 2011). GHG emissions in Longford are likely to follow the national trend, although the implementation of the Longford Town LTP is likely to have a positive effect on transport-related emission generation as it seeks to reduce dependency on cars (and their associated transport emissions) and support a modal shift from private car use to public transport and active travel.

Road travel and associated energy consumption

Current baseline information

C.59 Longford is well served by transport links in the form of the Dublin to Sligo rail line, and several strategic roads which traverse the county, including the N4 and N5, both of which are components of the Trans-European Transport Networks (TEN-T) Comprehensive Network. The most recently available census data, the 2016 Census, shows that there is a high proportion of residents in County Longford commuting to other areas for work, averaging commuting distances of approximately 20km. Conversely, Longford Town experiences a high level of inbound commuters. The majority of commuting trips are by car at 61% and 70% in the county and town, respectively. The number of commuting trips by car nationally is 66%, which demonstrates the above average level of car dependency in Longford Town [See reference clxxiv]. The 2022 Census results will not be available until April 2023, and it is likely that COVID-19 has significantly impacted commuter numbers in recent years.

C.60 According to the Energy in Ireland 2021 Report [See reference clxxv], the significant restrictions on personal mobility during 2020 had a direct effect on transport energy use, especially on private car use. However, private car energy use still dominates and accounts for 42% of transport energy use in 2020.

Transport energy use remains dominated by fossil fuels, which accounted for over 95% of transport energy use in 2020.

C.61 Renewable energy made up just 4.5% of transport energy use in 2020, up from 3.6% in 2019, however, electricity remains a very small share of transport energy use at just 0.2% in 2020. There continues to be a clear shift from petrol

to diesel private cars, and in 2020, petrol accounted for 28% and diesel for 72% of all private cars.

C.62 An independent report commissioned by the Society of the Irish Motor Industry identified that there are currently 1,900 electric vehicle (EV) charging points in the country across 800 sites, of which there are 19 in County Longford [See reference clxxvi]. There are five electric charging points in Longford Town at Market Square, Bridge Street, Richmond Street, Camlin Service Station, Dublin Road and Irish Rail, Earl Street. A report issued by the Northern and Western Regional Assembly in 2022 highlights that Longford is one of the counties with the lowest number of EV charging points in Ireland, with only Leitrim having fewer EV charging points [See reference clxxvii].

Projected baseline information

C.63 The majority of commuting trips in the county and town are by private car and this trend is likely to continue without significant intervention.

C.64 In terms of transport energy use, there has been very little decarbonisation of the transport fuel mix to date, with transport CO₂ emissions remaining tightly coupled to energy use which is dominated by fossil fuels and accounted for over 95% of transport energy use in 2020. In 2019, transport CO₂ emissions were the same as they had been in 2005. If this trend continues, Ireland will miss its target to reduce greenhouse gas emissions by 51% by 2030 and reach net-zero no later than 2050.

C.65 Ireland proposes to have 1 million electric vehicles on the road by 2030, which will require 100,000 public chargers. As stated above, there are 1,900 charging points currently which falls far short of the number needed to support the increase in electric vehicles. Without targeted intervention, Longford will remain as one of the lowest counties for EV infrastructure which will adversely affect the take-up of electric vehicles in the county, resulting in a continued reliance on petrol and diesel vehicles.

Flooding and heat events

Current baseline information

C.66 Flood risk in the county is implicitly linked to climate change considering the changes predicted in weather patterns which could lead to more frequent flooding in Longford. Longford is affected by flooding from several sources: fluvial, surface water, ordinary watercourses, sewer and groundwater. Flooding has been an issue in the county over recent years, with extreme flooding events in 2009, 2011 and 2015 around Longford Town, Newtoncashel and Cloondara and threatened areas around Ballymahon and Lanesborough. Local spot flooding in rural areas was also a significant problem [See reference clxxviii].

C.67 Longford Town has a history of flooding as the town is drained by the River Camlin and a number of tributaries. Significant areas of flood risk are identified along the River Camlin and downstream to the west of the town where there are various areas of raised ground. There are existing flooding issues with the Dublin-Sligo rail line immediately west of Longford Town which are likely to be exacerbated by increased rainfall [See reference clxxix].

C.68 Longford has experienced several prolonged hot and dry spells, particularly in the summers of 2022 (hottest on record), 2018, 2006 and 1996, which caused damage to buildings, transport infrastructure and increased woodland and peatland fires. The warmer and drier summers also affected the quantity and quality of water supply, negatively impacting agriculture, industry and biodiversity. Flooding and extreme heat events also negatively impacted more vulnerable members of the county, including young children, older people, people with health issues, people with physical mobility issues, etc.

Projected baseline information

C.69 As outlined in the 'Climate change predictions' section of this chapter, the climate in Longford is changing, resulting in an increase in prolonged dry spells, intense rainfall events and more frequent storms and floods, leading to adverse effects on people's health and wellbeing and increased damage to property and infrastructure resulting in significant economic costs.

Air

Current baseline information

C.70 Emissions from home heating, agriculture, transport and energy generation all contribute to poorer air quality throughout the year. By European standards, Ireland's ambient air quality is relatively good and ambient air quality limit values are respected. The EPA's Air Quality in Ireland 2021 Report [See reference clxxx] found that there were no exceedances of air pollutants above the EU annual limit values. However, the pollutants of most concern are those whose main source is traffic (particulate matter (PM) and nitrogen dioxide (NO₂)). These pollutants exceed the World Health Organisation's (WHO) Air Quality Guidelines (AQGs) for health and in 2021 Ireland did not meet the WHO AQGs for health. The health implications associated with poor air quality are outlined in the **Population and human health** section of this appendix.

C.71 In addition to their potential negative effects on human health, emissions of NO₂ and PM can affect ecosystems. It is likely that the strongest effect of emissions of nitrogen oxides across Ireland is through their contribution to total nitrogen deposition. All plants need nitrogen to grow but if too much nitrogen is present, it becomes a pollutant and can result in biodiversity change. Nitrogen deposition can also increase the risk from abiotic factors (e.g. drought and frost) or cause acidification of soils. As well as these effects of nitrogen deposition, direct effects can occur on habitats and species where there is high exposure

Appendix C Environmental baseline information

(e.g. habitats adjacent to national roads, and habitats in and around urban centres). Particulates (i.e. PM₁₀, PM_{2.5}) are essentially dust emissions that can settle on vegetation and affect animal respiration.

C.72 Longford Town was designated as a smokeless fuel zone as of 1st September 2020, where the marketing, sale, distribution and burning of specified fuels is prohibited [See reference clxxxix]. From October 2022, the Solid Fuel Regulations 2022 [See reference clxxxii] apply nationwide which restricts the commercial sale of smoky fuels, including smoky coal, turf and wet wood, aiming to prevent harmful pollution from domestic burning of solid fuels. However, people with turbary rights will be unaffected by these regulations and will be able to continue to use turf as a source of fuel for domestic purposes.

C.73 County Longford currently enjoys a high air quality standard, with the Air Quality Index for Health (AQIH) rating air quality in the county as 'Good'. However, increased vehicle usage, burning of fossil fuels including peat for domestic purposes, and emissions from industry and agricultural practices are a threat to air quality in the county. The closure of the peat-generated ESB power station at Lanesborough at the end of 2020 has had a significant positive effect in terms of reducing air pollution in the county. The most pronounced areas in relation to air pollution are built-up urban areas and major transport routes, including along the Dublin to Sligo rail line and the four national roads (N4, N5, N55 and N63). The air quality index for Longford Town is calculated on an hourly basis. The monitoring site is located on the Dublin Road, less than a mile from Longford Town Centre. The AQIH rating for air quality in the town is 'Good'. However, there is a decline in air quality during peak commuter times and in the winter (from emissions from fires and stoves) [See reference clxxxiii]. In December 2022, freezing weather conditions saw a significant spike in air pollution with the monitoring site on Dublin Road recording the highest level of air pollution in the country [See reference clxxxiv]. Further details on the transport network are detailed in the **Material assets** section of this appendix.

Projected baseline information

C.74 The introduction of the Solid Fuel Regulations 2022 is likely to reduce air pollution from domestic burning of solid fuels, however, the extent of the positive effect is limited as people with turbary rights are able to continue to burn turf as a source of fuel for domestic purposes.

C.75 There is a direct relationship between air quality levels and traffic growth. The predicted growth of Longford's population as outlined in the Longford County Development Plan [See reference clxxxv] will inevitably result in an increase in road-based traffic and congestion which will adversely affect the air quality in the county, particularly in Longford Town. Conversely, increasing the provision of active travel routes and electric vehicle charging infrastructure in Longford is likely to reduce transport-related emissions.

C.76 There are likely to be lasting changes to people's travel habits as a result of the COVID-19 pandemic, as well as improvements in technology and infrastructure. Evidence suggests that office-based staff are working remotely/at home more often thereby reducing the need to travel to offices and transport-related emissions [See reference clxxxvi].

C.77 There is a possibility that air quality may worsen in the long-term as a result of climate change, due to a greater likelihood of prolonged periods of still, dry days, and to-date this relationship has been difficult to predict.

C.78 Overall, future changes in air quality are difficult to predict.

Soil

Geology, soils and previously developed land

Current baseline information

C.79 County Longford has a range of Geological Sites, many of which fall within existing pNHAs and SACs where ecological interest is founded upon the underlying geodiversity. The north of the county has some of the oldest rock comprising sandstones and shales from the Ordovician period. Most of the remaining bedrock geology of the county, including Longford Town, comprises limestone, as illustrated in **Figure C.7**. There are 15 Geological Sites in County Longford with a concentration of these in the north-east and south-east parts of the county and there is one Geological Site within Longford Town, St Mel's Cathedral (see **Figure C.8**). St. Mel's Cathedral is a landmark building in Longford Town for its excellent display of rock used as building material, both in the original edifice and in its restoration following a fire in 2009.

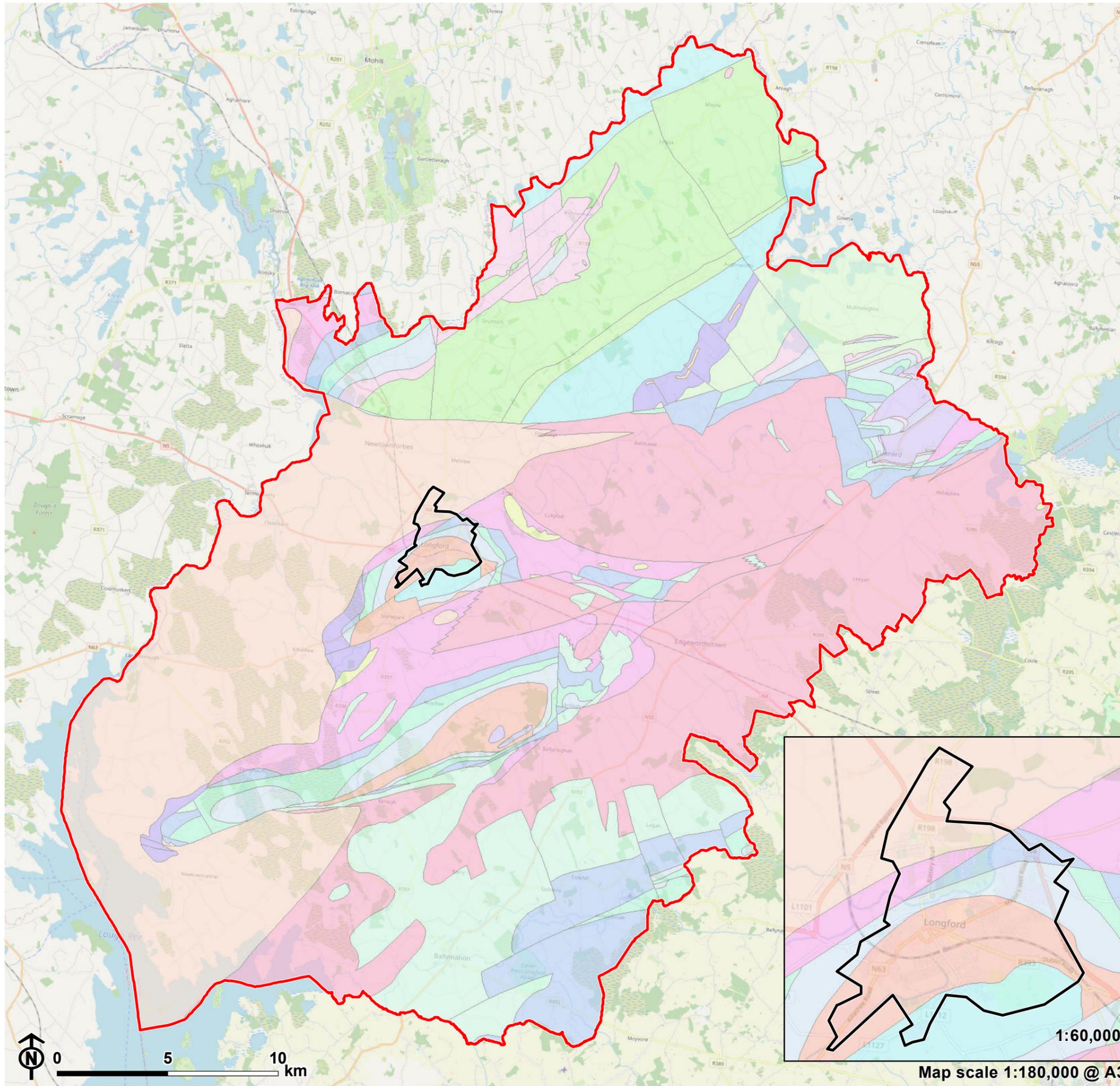
C.80 **Figure C.9** illustrates the main types of landcover. According to the CORINE land cover data, the most dominant land cover types in the county are pastures [**See reference clxxxvii**] and peatbogs. Luvisols soils [**See reference clxxxviii**] and peat-based soils are the two most dominant soil types in the county. However, the majority of Longford Town comprises 'continuous urban fabric', which is assigned to areas that have greater than 80% of land surface covered by impermeable features such as buildings, roads, etc [**See reference clxxxix**].

C.81 There are currently 35 sites listed on the Derelict Sites Register in Longford Town, the largest of which is on Little Water Street, and two sites listed on the Vacant Sites Register at Little Water Street and Richmond Street (see **Figure C.10**).

Appendix C Environmental baseline information

C.82 There are several notable construction projects that are either planned, programmed or underway in Longford, which will require significant amounts of mineral resources in the future, including the N4/M4 Mullingar to Longford (Roosky) Upgrade which will pass Longford Town and the Royal Canal Way.

Figure C.7: Bedrock Geology



- Longford County
- Longford Town LTP Study Area
- Bedrock Geology**
- Aghaward Formation
- Argillaceous Limestones (Visean)
- Arva Granodiorite
- Ballysteen Formation
- Basal clastics
- Carrickateane Formation
- Corn Hill Formation
- Coronea Formation
- Fearnaght Formation
- Finnalaghta Formation
- Glen Lodge Formation
- Lough Avaghon Formation
- Lucan Formation
- Meath Formation
- Moathill Formation
- Mudbank limestone
- Pollareagh Member
- Red Island Formation
- Slieve Glah Formation
- Visean Limestones (undifferentiated)
- Waulsortian Limestones
- in Coronea Formation
- in Dartry Limestone Formation
- in Glen Lodge Formation

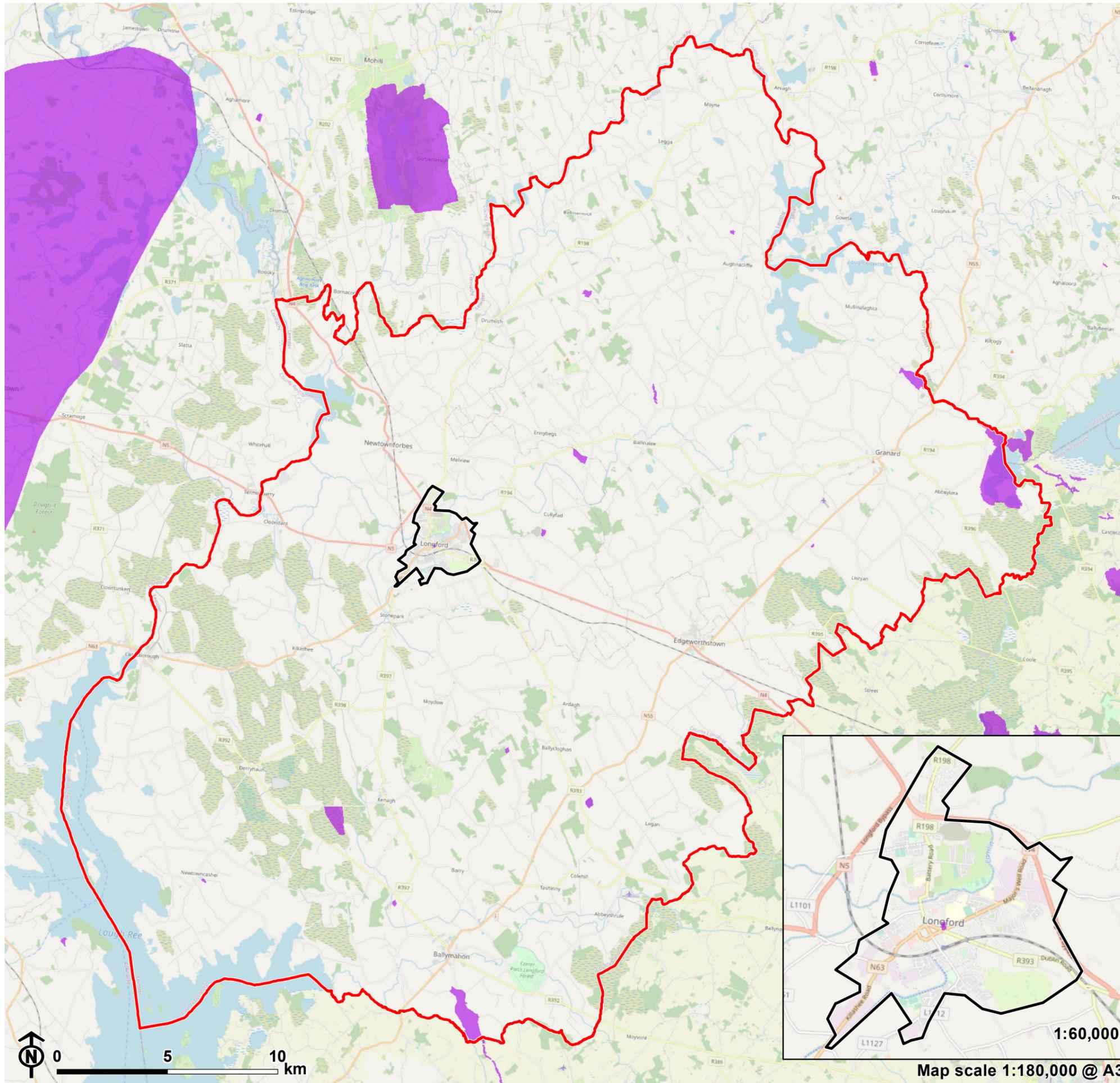
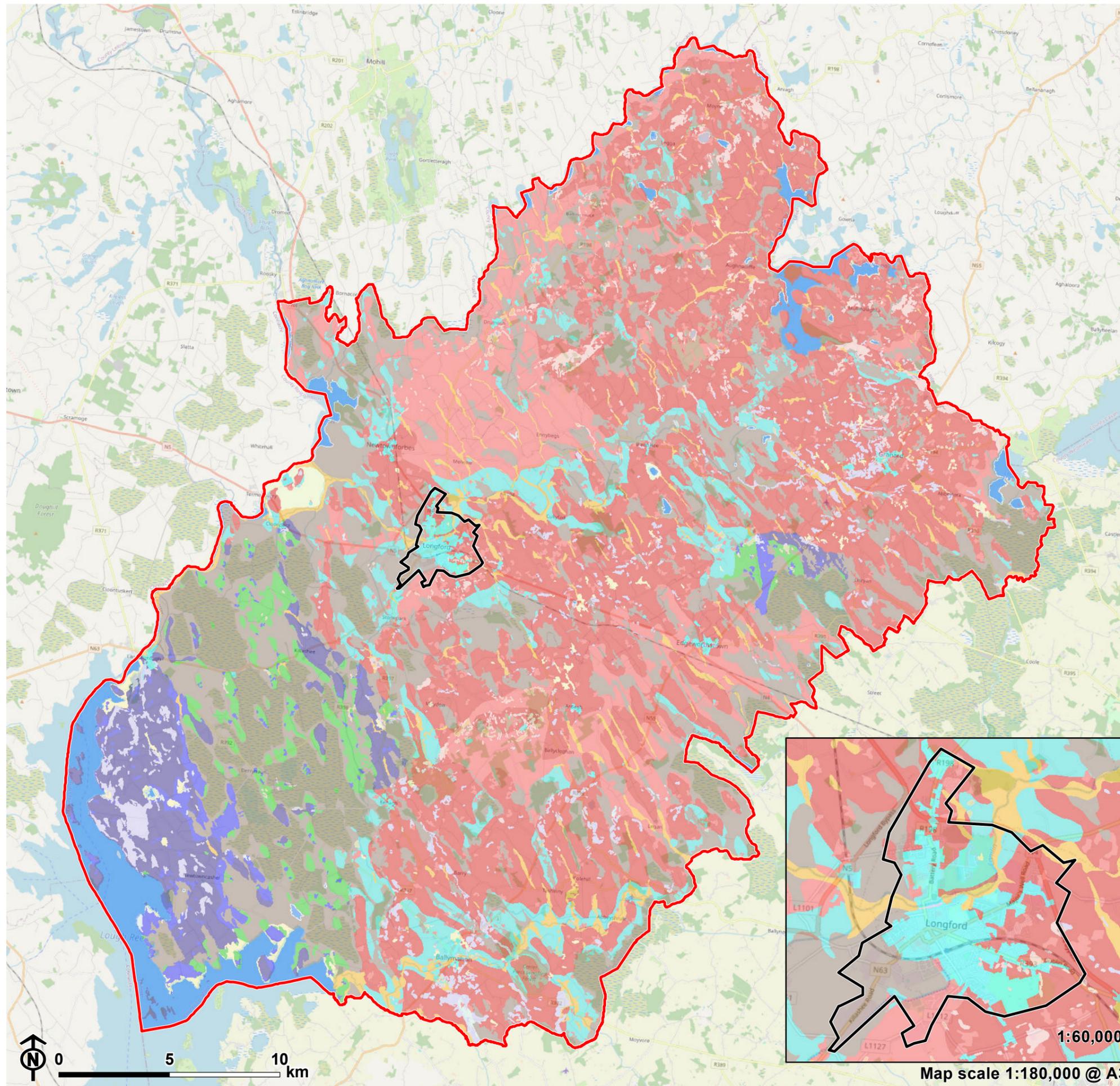


Figure C.8: Geological Sites

- Longford County
- Longford Town LTP Study Area
- Geological Heritage Site

Map scale 1:180,000 @ A3

Figure C.9: Soil Type

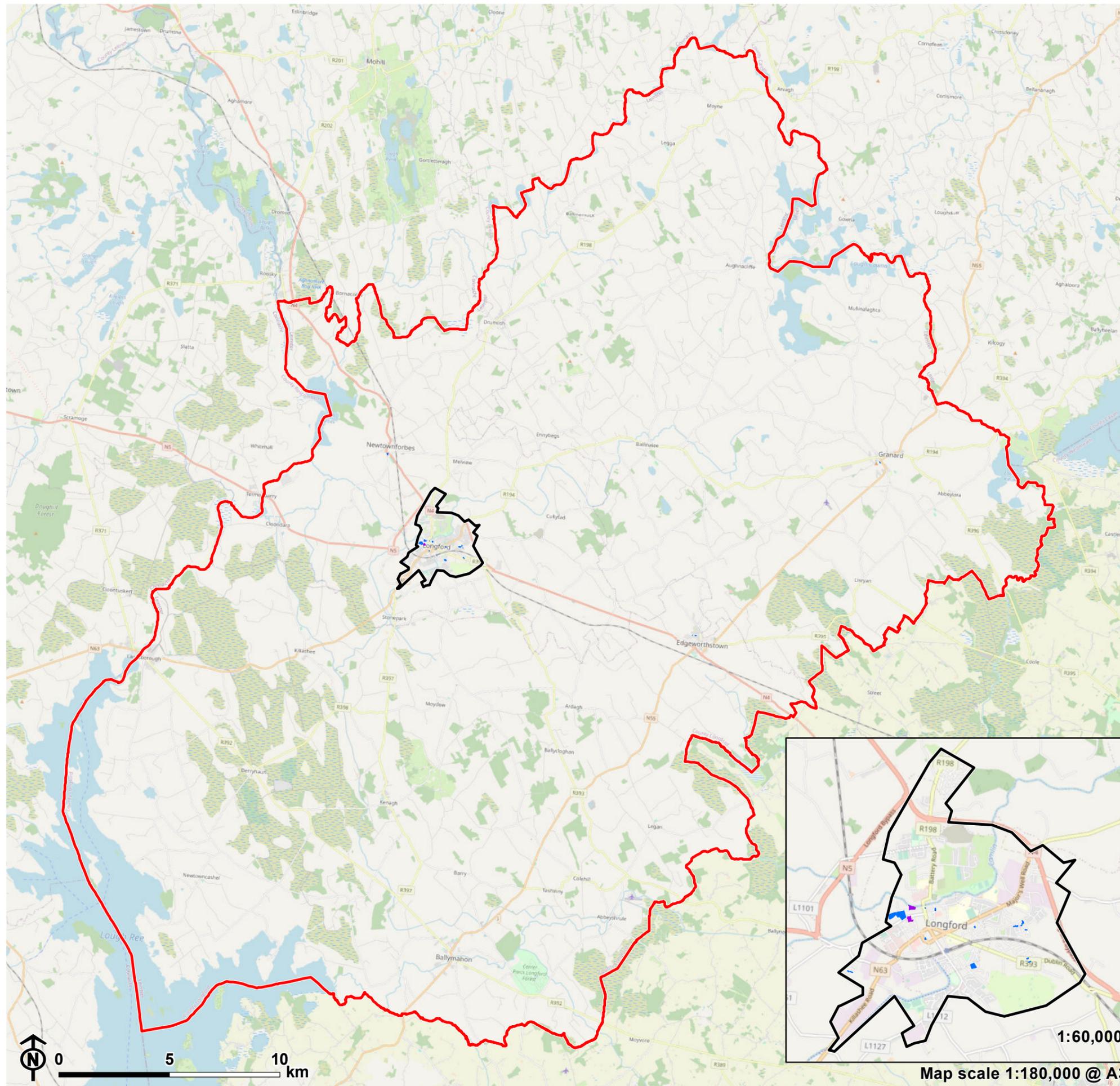


- Longford County
- Longford Town LTP Study Area
- Soil Type**
- AlluvMIN - Mineral alluvium
- AminDW - Acid Brown Earths / Brown Podzolics
- AminPD - Surface water Gleys / Ground water Gleys Acidic
- AminPDPT - Peaty Gleys Acidic
- AminSP - Surface water Gleys / Ground water Gleys Shallow
- AminSRPT - Podzols Peaty
- AminSW - Lithosols / Regosols
- BktPt - Blanket peat
- BminDW - Grey Brown Podzolics / Brown Earths Basic
- BminPD - Surface water Gleys / Ground water Gleys Basic
- BminPDPT - Peaty Gleys Basic Parent Materials Basic
- BminSP - Surface water Gleys / Ground water Gleys Shallow
- BminSPPT - Peaty Gleys Shallow
- BminSRPT - Lithosols Peats
- BminSW - Renzinas / Lithosols
- Cut - Raised Bog cutaway/cutover
- FenPT - Fen peat
- Lac
- Made
- Water

Map scale 1:180,000 @ A3

Figure C.10: Vacant and Derelict Sites

- Longford County
- Longford Town LTP Study Area
- Derelict Sites
- Vacant Sites



Projected baseline information

C.83 The Longford County Development Plan [See reference cxc] promotes urban ‘compact growth’ regeneration of Longford Town. It seeks to bring redundant, underutilised and derelict land and buildings back into active use in preference to the continued sprawl of urban development into the countryside. This will reduce the need for greenfield development; support the urban fabric; and re use existing resources. This approach will have a significant positive effect on protecting valuable soil resources in the future.

C.84 New development, recreational and environmental pressures, such as extreme weather and flooding, present the greatest risk to Geological Sites.

C.85 Soils in Ireland have degraded significantly over the last two decades due to erosion by wind and rain, compaction of soil from new development, organic matter decline, and climate change. These trends are likely to continue.

Water

Current baseline information

C.86 The River Shannon forms the western boundary of County Longford, running through Lough Forbes in the west and Lough Ree in the south, which forms much of the county’s southern boundary. In the north, Lough Gowna and Lough Gahmna sit on the border with County Cavan. Lough Kinale and Derragh Lough is located in the north east of the county and River Inny marks much of the eastern boundary of the county. Within County Longford, the River Camlin rises near Granard and flows through Clonbroney, Ballinalee, Killoe and Longford Town before its two distributaries enter the River Shannon. The Royal Canal is a 145km canal linking Dublin and the River Shannon. It passes north to south through County Longford joining the River Shannon at Cloondara in the

west. A spur of the Royal Canal originates in Longford Town, exiting south out of the town (see **Figure C.11**).

C.87 The EU Water Framework Directive (WFD) sets out the protection and enhancement of the country's water sources and aims to improve water quality. County Longford is primarily located within the Shannon (International) River Basin District (RBD), with a small portion in the north of the county draining to the North Western RBD. RBDs are further identified by 'catchments' and 'sub-catchments'. County Longford covers a number of river catchments:

- Erne (catchment code 36);
- Upper Shannon (code 26C);
- Upper Shannon (code 26E);
- Upper Shannon (code 26F).

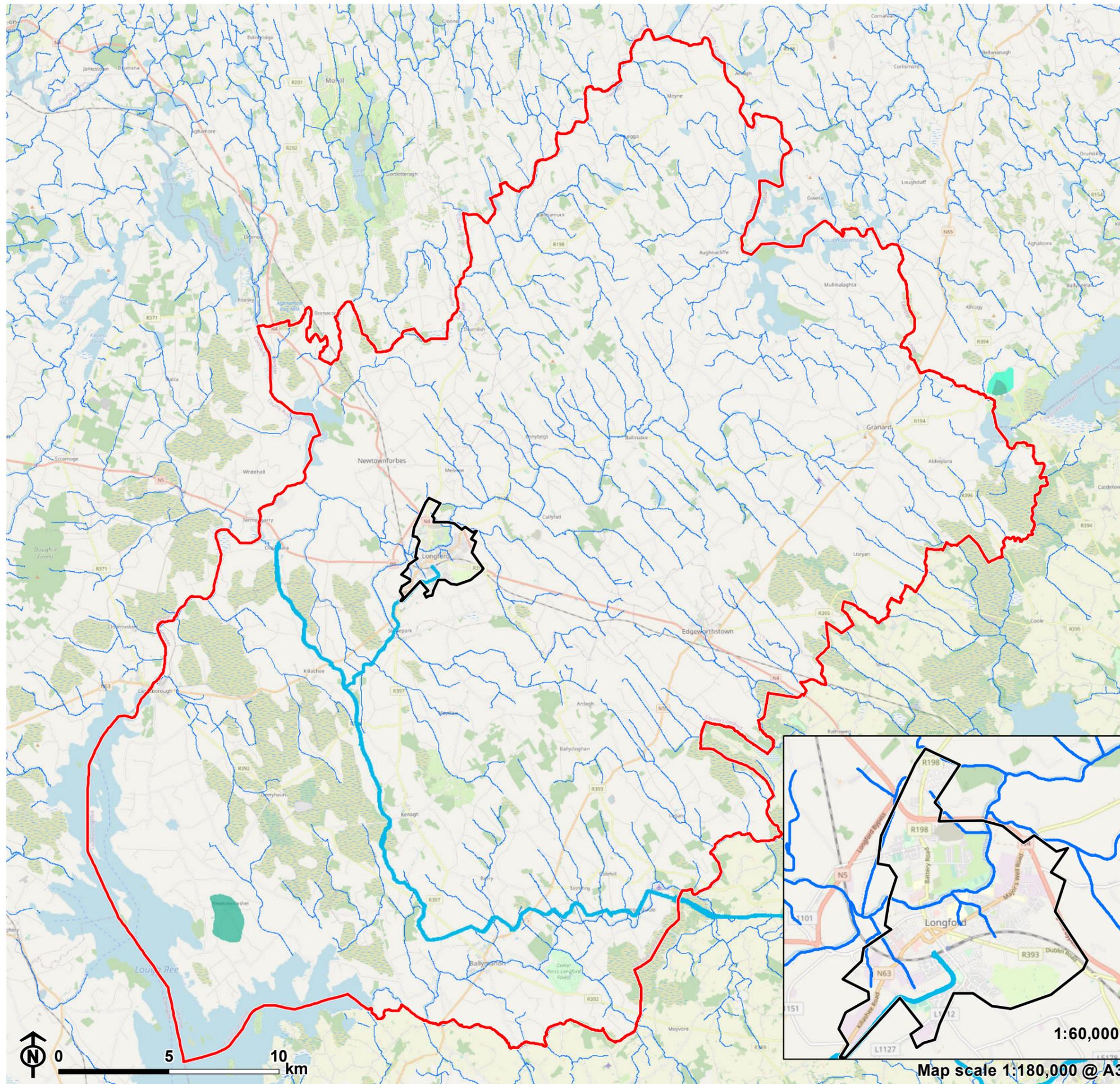
C.88 In 2022, the EPA published a report 'Water Quality in Ireland 2016-2021' [\[See reference cxci\]](#) which provides an assessment of the ecological health of Ireland's water resources. The assessment found that there has been an overall decline in surface water quality, including in Ireland's rivers and lakes, since the previous assessment in 2013-2018. Ireland's Third Cycle Draft River Basin Management Plan (RBMP) 2022-2027 [\[See reference cxcii\]](#) outlines measures required to improve water quality and achieve a 'good' ecological status by 2027. Within County Longford, the RBMP has identified two 'Areas Prioritised for Action' for improvement in water quality, namely Lough Forbes and the River Camlin which runs through the north of Longford Town from east to west. Excessive amounts of nutrients and total ammonia are the main issues that are causing the River Camlin to fail in its achievement of WFD objectives. These nutrients are mainly from urban wastewater diffuse pollution, industry and agricultural lands in the catchment [\[See reference cxciij\]](#).

C.89 Source Protection Areas are defined around large and public potable groundwater abstraction sites. These provide additional protection by constraining the proximity of an activity that can impact the quality of drinking water. **Figure C.11** illustrates the Source Protection Areas and main watercourses within Longford.

Appendix C Environmental baseline information

C.90 Three types of bedrock aquifers are located in across the LTP plan area. A 'locally important aquifer' (bedrock which is moderately productive only in local zones) covers most of the town. A 'poor aquifer' (generally unproductive except for local zones) covers areas south of the town at Glebe and Farnagh, and a 'regionally important aquifer' (karsitified (conduit)) is located over the northern portion of the town (i.e. Lisbrack and Cloobalt). The groundwater vulnerabilities of the Longford Town vary across the area. There are areas of moderate, high and extreme vulnerability across the plan area including small areas of 'rock at or near surface'. Any groundwater-surface interactions that might occur would be greatest in these areas **[See reference cxciiv]**.

Figure C.11: Watercourses and Source Protection Zones



- Longford County
- Longford Town LTP Study Area
- Canal
- River
- Public Supply Source Protection Areas**
 - Inner Protection Area
 - Outer Protection Area

Projected baseline information

C.91 Under predicted climate change scenarios, more frequent drought conditions are expected in Ireland, along with increased demand on water resources. Future developments will create additional demand for water abstraction from surface and groundwater sources in Longford.

C.92 Water quality in Ireland's rivers and lakes is continuing to decline, with Ireland's surface water quality poorer now than in the previous assessment period 2013-2018. This trajectory is likely to continue without the implementation of the measures outlined in the Draft River Basin Management Plan (RBMP) 2022-2027 [See reference cxcv]. Similarly, without targeted intervention, it is likely that water quality in the River Camlin will continue to deteriorate. However, the Agricultural Sustainability Support and Advisory Programme (ASSAP) advisors are currently working with the Council, landowners and other stakeholders to develop actions to improve the water quality of the river [See reference cxcvi]. It is predicted that through the implementation of these actions the river's water quality will improve in line with WFD objectives. However, water quality is influenced by a wide range of internal and external factors including climate change, geology and soils, population change and pollution from human activities such as industry and agricultural practices. Future development, particularly in areas close to water bodies, may present a challenge in improving water quality.

Cultural heritage including architectural and archaeological heritage

Current baseline information

C.93 Longford has a range of unique heritage assets that contribute to the character of the county. Some of the most significant visible monuments include

Appendix C Environmental baseline information

the portal tomb at Aughnacliffe, ringforts, standing stones, an Iron age timber roadway (toghers) at the Corlea Trackway Visitor Centre, and the linear earthworks that make up the Black Pigs Dyke in north Longford. The locations of Longford's heritage assets are shown in **Figure C.12**.

C.94 The Record of Protected Structure (RPS) is a live register of assets that the local authority considers to be of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical perspective. There are 531 Protected Structures within County Longford [See reference cxcvii] of which 154 are located within Longford Town, including Sean Connolly Barracks, St Mel's Cathedral and St. Mel's College. Of the 154 Protected Structures in Longford Town, 125 of these are also listed on the National Inventory of Architectural Heritage [See reference cxcviii]. Within Longford Town there are also 20 areas identified as 'zones of notification' around the protected monuments.

C.95 Architectural Conservation Areas (ACA) are places, areas, or groups of structures or townscape that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical perspective. There are two ACAs within the county:

- Ardagh Town; and
- Battery Road, Longford Town.

C.96 As stated above, Longford Town contains one ACA along Battery Road. Battery Road is located in the northern portion of the town and the ACA encompasses an area stretching from the existing roundabout at Lisbrack Road in the north, down to and including Church Street in the south. The ACA is centred along the main vehicular carriageway, Battery Road. The characteristics of the ACA for which it is designated include the large plot sizes and distinct spatial quality, the architectural styles of the houses, distinct landscaping, historic boundary walls and nineteenth century footpath.

C.97 There are also over 1,700 archaeological sites and monuments identified and recorded in the Record of Monuments and Places (RMP), with numerous

Appendix C Environmental baseline information

sites in Longford Town listed on the RMP for their archaeological significance. Of these, there are 380 monuments which are also included on the Register of Historic Monuments (RHM) [See reference cxcix]. Other key archaeological and heritage assets within the county include:

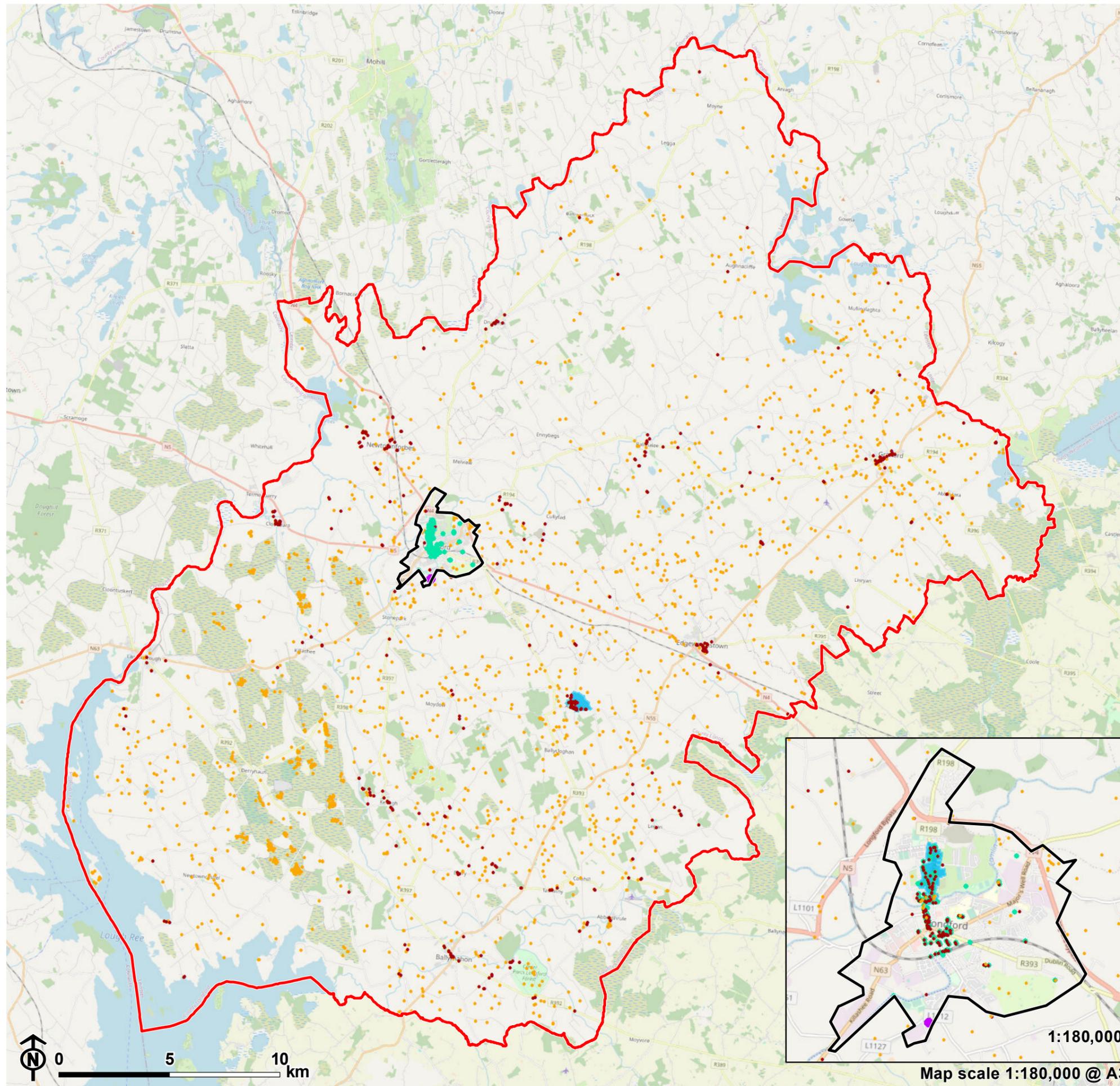
- Six National Monuments in State ownership or guardianship.
- 10 monuments protected under Preservation Orders, of which two are in Longford Town, namely the church and ecclesiastical enclosure in Aghafad.
- 57 monuments of Archaeological, Historical and Cultural Interest.

C.98 Archaeological structures may appear on both the RMP and the RPS. There are two specific archaeological sites of specific importance within the county. These are:

- Corlea Bog Trackway – the visitor centre on the site conserves an Iron Age bog road which was built in the year 148 BC across surrounding bogland.
- Granard: Norman Motte – the visitor centre celebrates Ireland’s highest Norman motte built in 1199.

C.99 Longford Town is identified as a historic town in need of regeneration in the Eastern and Midlands RSES and Longford County Development Plan 2021-2027, partly due to the high number of prominently located vacant or derelict historic building stock.

Figure C.12: Heritage Assets



- Longford County
- Longford Town LTP Study Area
- Conservation Area
- Record of Protected Structure
- National Monument
- National Inventory of Architectural Heritage
- Monuments with Preservation Order

Projected baseline information

C.100 As identified above, Longford Town is identified as a historic town in need of regeneration in the Eastern and Midlands RSES and Longford County Development Plan 2021-2027. Without targeted action, it is likely that the condition of historic buildings will deteriorate, with more historic buildings falling into disrepair and potentially become derelict. The Council is committed to working with stakeholders in the promotion of heritage-led regeneration which is likely to result in the regeneration of prominently located vacant or derelict historic building stock in the future [See reference cc]. Many opportunities exist for the sensitive and adaptive reuse of Protected Structures, historic building stock and industrial structures in the town. Examples of heritage-led regeneration plans are the Connolly Barracks and the Camlin Quarter area in Longford Town.

C.101 The historic environment can be considered a finite resource. It cannot be replaced and is susceptible to decline over time as historic features experience degradation and decay. However, cultural heritage as a whole can evolve and change, and features which are not currently considered a valued part of the historic environment may become so in the future, either due to their uniqueness, past use or historic and cultural significance.

C.102 At a local level within County Longford and Longford Town, new development, infrastructure and environmental pressures such as extreme weather and flooding present risks to cultural heritage assets.

Landscape

Current baseline information

C.103 Longford has a rich and diverse landscape. A Landscape Character Assessment (LCA) [See reference cci] is contained within the Longford County

Appendix C Environmental baseline information

Development Plan. The LCA identifies seven broad Landscape Character Types (LCT) within the county, as set out below. **Figure C.13** illustrates the location of each LCT in the county.

- **Unit 1 – Northern Drumlin Lakeland** (low to medium with some high sensitivity in the vicinity of the lakes and designated scenic routes).
- **Unit 2 – Northern Upland** (medium to high sensitivity).
- **Unit 3- Shannon Basin/Lough Ree** (medium sensitivity along the southern-eastern border to high sensitivity along the shores of the lake, islands, the riverbanks and in the vicinity of the aquifer).
- **Unit 4 – Central Corridor** (generally low sensitivity. Potential areas of medium to high sensitivity in the vicinity of protected woodlands, riverbanks and in the vicinity of the aquifer).
- **Unit 5 – Inny Basin** (generally low sensitivity. Potential areas of medium to high in the vicinity of protected woodlands and riverbanks).
- **Unit 6 – Peatlands** (visual sensitivity generally low as their flat nature allows development to be accommodated with minimum screening needed to achieve integration into its surrounds. An exception to this designation is the vicinity of the Royal Canal where sensitivity is high. In environmental terms, sensitivity is medium to high due to the limited capacity of the receiving environment).
- **Unit 7 – Open agricultural** (visual sensitivity generally low to medium. Exception in the vicinity of the Royal Canal, the River Inny, in Upland Areas with designated scenic views and in proximity to the heritage village of Ardagh where sensitivity is high).

C.104 Longford Town and its environs are located within **Unit 4 – Central Corridor** LCT. Longford Town is the dominant settlement in the county in terms of population, economic activity, level of service, infrastructure and connectivity. The urban network is strongest in this area of the county with a defined hierarchical system dominated by the settlements of Longford, Edgeworthstown and Newtownforbes which are situated along the main transport routes. The road network is dense in this area of the county due to the relatively flat topography. Agriculture is well developed in the wider LCT surrounding

Appendix C Environmental baseline information

Longford Town and the main industrial centre of the county is located at Longford Town with major installations at Lisnamuck/Templemichael, Townsparks, Ballymacormack and the Athlone Road. There is a high capacity for the absorption of additional development in this LCT compared to other areas of the county due to the existing strong urban network [See reference [ccii](#)]. In response to this the Longford CDP zoned the land in the town into the following categories:

- Town core uses including retail, residential, commercial and other uses.
- Residential development (e.g. potential sites may range from small gap infill, unused or derelict land, sites within an established residential area.)
- Residential development with the provision of necessary social and physical infrastructure (new residential development in an area).
- Strategic residential reserve (longer-term housing requirements).
- Industrial/workshop, warehouse and commercial, and/or business development (e.g. offices).
- Recreational open space and ancillary structures.
- Educational, health, social, cultural, religious and community facilities.
- Area of constrained land use (management and sustainable use of flood risk areas).

C.105 Longford Town is identified as a town in need of regeneration in the Eastern and Midlands RSES and Longford County Development Plan 2021-2027. Several strategic sites are designated as regeneration areas in the Longford CDP including:

- Connolly Barracks / Northern Quarter.
- Market Square.
- Ballymahon Street.
- Longford Shopping Centre.
- Little Water Street.

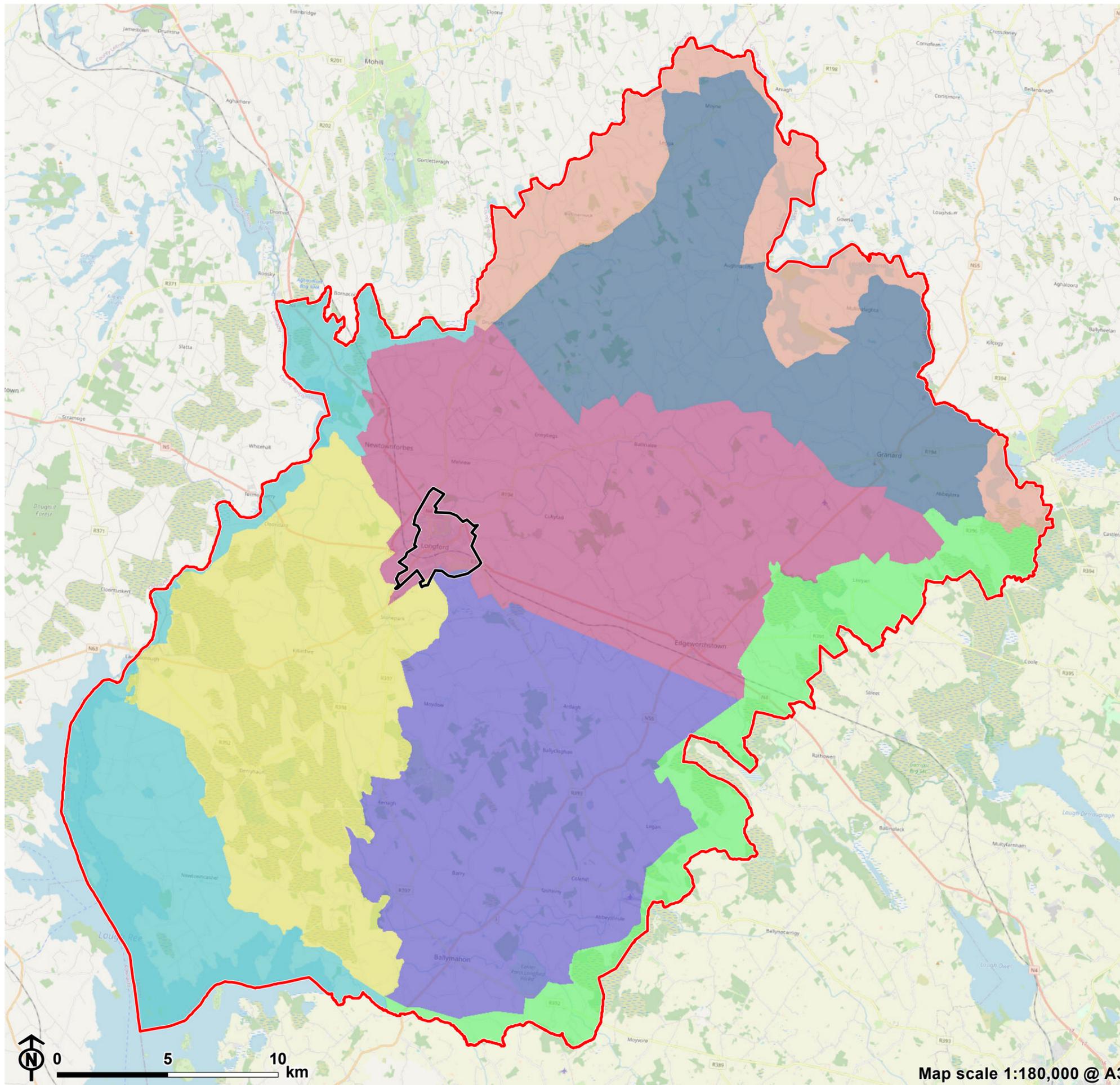
Appendix C Environmental baseline information

- Athlone Road Commercial/Industrial Area.
- The Mall and Camlin Village.

C.106 These areas contain lands that detract from the overall area in which they are situated, either by way of heightened levels of vacancy (commercial, industrial, residential) or through poor maintenance and/or dereliction, or a mix of these attributes. These areas are prominently located and have a significant visual impact that affects the overall image and investment potential of Longford Town [\[See reference cciii\]](#).

C.107 Longford has many vantage points offering attractive views from upland areas, along river valleys and boglands. The Longford CDP identifies two types of views: 1) Full (uninterrupted) and 2) Intermittent (broken or sporadic). A 'full (uninterrupted) protected view' is identified passing through Longford Town, along the N63 to Lanesborough [\[See reference cciv\]](#).

**Figure C.13: Landscape
Character Types**



- Longford County
- Longford Town LTP Study Area
- Landscape Character Type**
- Central Corridor
- Inny Basin
- Northern Drumlin Lakeland
- Northern Upland
- Open Agricultural
- Peatlands
- Shannon Basin/Lough Ree

Map scale 1:180,000 @ A3

Projected baseline information

C.108 Major transport infrastructure, renewable / non-renewable energy developments (e.g. large-scale windfarms and the extension to the Ballymahon Gas Pipeline), and regeneration projects are likely to be key drivers for landscape change in the county. The development of the following projects is likely to influence the townscape of Longford Town:

- N4/M4 Mullingar to Longford (Roosky) upgrade – The portion of road which will be upgraded passes through the settlements of Edgeworthstown, Longford Town and Newtownforbes in County Longford [See reference ccv].
- The Royal Canal Way – The 16.5km Cloondara Greenway forms part of the extended Royal Canal Quay which provides an off-road trackway between Longford to Killashee and along the Royal Canal towards Cloondara Harbour. This will provide a multi-purpose active transport route that connects to the ongoing improvements to the Royal Canal Way, which extends to Dublin.
- ‘Longford Connected’ and the ‘Camlin Quarter Regeneration Project’ aim to deliver urban realm improvements and improve the environmental quality, walkability and liveability of the town and enhance the existing townscape. The Camlin Quarter Regeneration Project includes Connolly Barracks, Church Street, Great Water Street, Little Water Street and the Albert Reynolds Peace Park.

Material assets

This section should be read in conjunction with ‘Road travel and associated energy consumption’ in the **Climatic factors** section of this Appendix.

Transport infrastructure

Current baseline information

C.109 The transport network in County Longford is shown in **Figure C.14**.

Road network

C.110 County Longford is traversed by four national road:

- N4 Dublin to Sligo (passing through Edgeworthstown and Longford Town).
- N5 Longford Town to Westport/Castlebar.
- N63 starts in Longford Town, passing Lanesborough and continuing in the direction of Galway until it merges with the M18 in Annagh Cross.
- N55 from Cavan to Athlone takes a north-south route through the east of the county, passing through Granard, Edgeworthstown and Ballymahon.

C.111 There are also nine regional routes connecting these as well as a network of country roads.

C.112 Longford Town is strategically positioned at the meeting of two of Ireland's National Primary Routes, the N4 and N5, and the National Secondary Routes, the N55 and N63.

Public transport network

C.113 The Dublin – Sligo rail line traverses the county from east to west alongside the N4. The rail line serves Longford Town and Edgeworthstown stations. During the working week there are ten trains in each direction. Journey times are approximately 2 hours to Dublin and 1 hr 25 mins to Sligo. According

Appendix C Environmental baseline information

to the National Transport Authority Heavy Rail Census Report in 2019 [See reference ccvi], passenger volumes at Longford and Edgeworthstown are both at a little under 1,000 passengers in each direction, with slightly more passengers travelling through Edgeworthstown than Longford.

C.114 There are also a number of bus and coach which connect through County Longford. These services are operated by Expressway, Bus Éireann, TFI, Local Link and M4 Direct:

- Expressway Services:
 - 22: Dublin – Ballina
 - 23: Dublin – Sligo
- Bus Éireann Routes:
 - 65: Galway – Athlone – Cavan – Monaghan
 - 73: Waterford – Athlone – Longford
 - 111A: Cavan – Granard – Delvin
 - 425 Galway – Mountbellew – Roscommon – Longford
 - 463: Longford – Carrigallen
 - 466: Athlone – Ballymahon - Longford
 - 467: Longford – Lanesborough – Roscommon
- Transport for Ireland Service:
 - 975: Cavan – Crossdoney - Drumlish - Longford
- M4 Direct Service
 - 842: Ballymahon - Edgeworthstown – Dublin

C.115 Within the county, local connections are provided by on-demand bus services Local Link however the frequencies of current services are limited [See reference ccvii].

C.116 The Draft Longford LTP identifies the following constraints associated with public transport in the town:

- Only two train stations within the County at Longford Town and Edgeworthstown.
- Infrequent local bus services.
- Scheduling issues between transport modes.
- Longer bus journey times compared to car journeys.
- The accessibility of the train stations by walking and cycling is an issue.

Walking, wheeling and cycling network

C.117 The active travel network in County Longford comprises footpaths, Greenways and cycle paths. With relatively compact town centres, including in Longford Town, distances are walkable. However, the pedestrian network generally will cover the town centre area but disappears at the edge of the settlement, which disconnects settlements from each other [\[See reference ccviii\]](#).

C.118 The Royal Canal Greenway is one of the most popular active travel routes and connects Longford Town and Cloondara. The Greenway provides a high-quality travel with segregated facilities for active modes of travel.

C.119 The existing cycle network in the county is largely similar to the walking network and includes the Royal Canal Greenway and the Peatland Trails. Moreover, there are some signed on-road cycle routes across the county which require cyclists to share the road with motorised vehicles. There are a number of segregated cycling projects under construction within Longford Town, however, these provide only limited improvements to the accessibility of key destinations within the town [\[See reference ccix\]](#).

C.120 The Draft Longford LTP identifies the following constraints associated with active travel in Longford Town:

Appendix C Environmental baseline information

- Lack of safe crossings and facilities (especially at roundabouts and on Longford Main Street).
- Fragmentation and variable quality of the cycle network.
- Lack of permeability between key areas in the town and to key destinations (e.g. schools, train station, etc.).
- Lack of footpaths, or only on one side, particularly around the edges of Longford Town.
- Limited cycling facilities in Longford Town (Main Street / Earls Street).
- Physical barriers to the active travel network from the rail and national road infrastructure, and waterways.

Projected baseline information

C.121 The predicted growth of Longford's population will increase pressure on Longford's transport systems, increasing congestion and road maintenance requirements. Further to this, effects of climate change are predicted to result in disruption to transport infrastructure and services in the future. Potential impacts include deterioration of road surfaces impacting local transport networks and businesses.

C.122 There are several transport projects in the pipeline which will significantly alter the transport network in Longford, most notably:

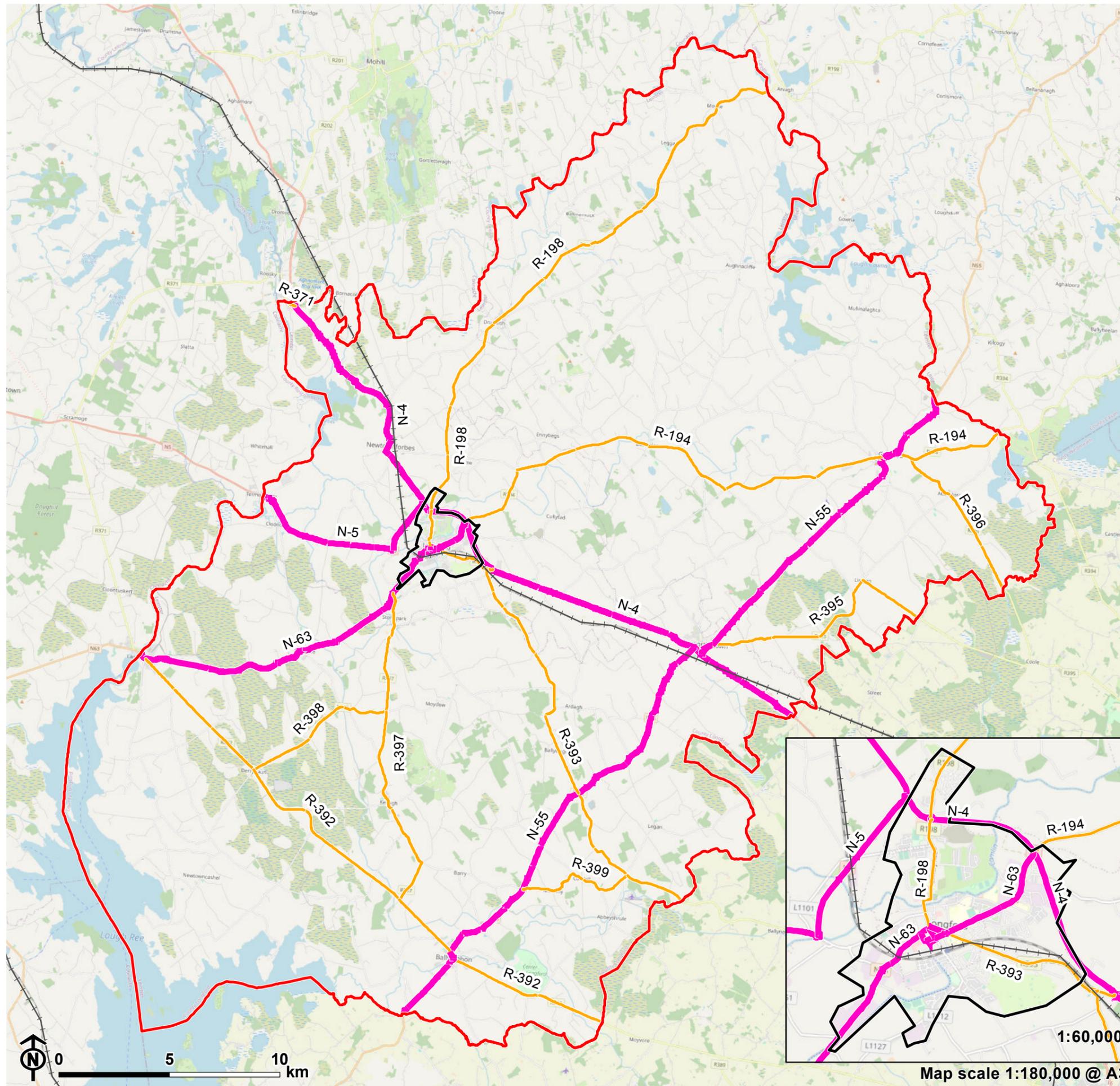
- N4/M4 Mullingar to Longford (Roosky) upgrade – The portion of road which will be upgraded passes through the settlements of Edgeworthstown, Longford Town and Newtownforbes [See reference ccx].
- The Royal Canal Way – The 16.5km Cloondara Greenway forms part of the extended Royal Canal Quay which provides an off-road trackway between Longford to Killashee and along the Royal Canal towards Cloondara Harbour. This will provide a multi-purpose active transport route

Appendix C Environmental baseline information

that connects to the ongoing improvements to the Royal Canal Way, which extends to Dublin.

- National Cycle Network – Connecting Longford Town to Roscommon in the south-west and Sligo in the north.
- ‘Longford Connected’ and the ‘Camlin Quarter Regeneration Project’ aim to deliver urban realm improvements and improve the environmental quality, walkability and liveability of the town.
- Interurban cycle and walking connections in Longford Town.

Figure C.14: Transport Networks



- Longford County
- Longford Town LTP Study Area
- Railway
- Road Network**
- National Road
- Regional Road

Appendix D

SEA matrices

Reasonable alternative

Alternative Access Strategy for Abbeycartron

D.1 The proposed development lands at Abbeycartron are zoned for residential use with a small area of education zoned in the northwest part of the lands. In order to facilitate access to these lands, an alternative Access Strategy was considered based on the previous Local Area Plan layout which provides access for all modes of transport through the site.

Table D.1: Summary of SEA effects of the alternative access strategy for Abbeycartron

Environmental Protection Objective	Alternative access strategy for Abbeycartron
1. Biodiversity, flora and fauna	+/-?
2. Population and human health	++/--
3. Air quality / climate change mitigation	--/+
4. Flood risk / climate change adaptation	--?
5. Soil	--
6. Water	--?
7. Cultural heritage	-?

Environmental Protection Objective	Alternative access strategy for Abbeycartron
8. Landscape	--/+?
9. Material assets	++/--

D.2 An uncertain mixed effect (minor positive / minor negative) is identified for the alternative Abbeycartron Access Strategy in relation to EPO 1:

Biodiversity, flora and fauna. There are no biodiversity sites in close proximity of the site, however, there may still be some adverse effects to habitats and species that exist on the rural land that is currently in agricultural use on the edge of Longford Town from new residential development, associated traffic, and an increase in active travel in the area. These adverse effects may be minimised through the incorporation of habitat enhancement measures as part of the delivery of the strategy, thereby contributing to the network of functionally linked habitats in Longford Town. There may be both positive and negative indirect effects for species in relation to air quality as the scheme proposes both a number of new roads which would adversely affect air quality through transport-related emissions, and a network of active travel routes which would reduce the need to travel by petrol / diesel vehicles thereby reducing the likelihood of air pollution.

D.3 A mixed effect (significant positive / significant negative) is identified for EPO 2: **Population and human health** for the alternative Abbeycartron Access Strategy. The scheme proposes new pedestrian/cycle links along the River Camlin ensuring good links with the surrounding area and providing additional permeability routes to connect with the Mall. New roads throughout the scheme will also incorporate cycle infrastructure. These interventions are likely to encourage walking and cycling for new and existing residents of Abbeycartron and improve access to services, facilities and employment opportunities for sustainable travel modes. This will encourage healthy lifestyles by promoting active travel. However, a significant negative effect is also identified for this EPO as the new access roads will make the area extremely permeable for vehicles which is likely to increase residents’ exposure to noise/air/vibration/light pollution related to the increased volume of traffic in the area. This will be mitigated to some extent by the proposed active travel elements of the strategy,

and the close proximity of zoned education facilities, however it is likely that new residents will still rely on the use of private vehicles for some journeys as they are located on the periphery of Longford Town.

D.4 An overall mixed effect (minor positive / significant negative) is identified in relation to **EPO 4: Air quality and climate change mitigation**. The proposal includes a number of roads which intersect the scheme, linking with Templemichael and Ballinalee Road, Great Water Street, Abbeycartron Lane and Druid Glen/the roundabout at the north of Battery Road. This will create a number of through-routes and new road links across the River Camlin, providing additional orbital vehicular permeability and likely resulting in a significant increase in traffic through the new development. As such, while the reasonable alternative Access Strategy incorporates sustainable transport infrastructure, including cycle infrastructure and new permeability routes, there is still likely to be high volumes of traffic as the development is located on the settlement edge and would provide opportunities for through-traffic. Traffic volumes and transport-related emissions at these connections are expected to increase as the Access Strategy is supporting the development of a significant amount of zoned residential development and education facilities. At the same time, new pedestrian and cycle links will help support the modal shift away from private vehicle use and reduce unnecessary car journeys thus lowering transport-related emissions and Longford's contribution to climate change.

D.5 An uncertain significant negative effect is identified for **EPO 4: Flood risk and climate change adaptation**. The Abbeycartron redevelopment area is located in close proximity to the River Camlin, which has a high probability of fluvial flood events, although not within the redevelopment area itself. Without appropriate mitigation, new development on greenfield land has the potential to exacerbate flood risk with the introduction of more impermeable surfaces within the plan area. This alternative Access Strategy proposes the development of a number of new roads on greenfield land, as well as new paths, which cross the River Camlin at three points. This is likely to introduce a significant amount of additional impermeable surfaces in an area at high risk of flooding, thereby potentially increase the severity and risk of flooding within the plan area.

D.6 A significant negative effect is identified for EPO **5: Soil** in relation to the alternative Abbeycartron Access Strategy. The proposed scheme is located on greenfield land at the edge of the existing built-up area of Longford Town. The development of transport infrastructure to support the zoned development will result in the loss of this greenfield land.

D.7 An uncertain significant negative effect is identified for EPO **6: Water**. The Abbeycartron redevelopment area is located in close proximity to the River Camlin and its tributaries and transport interventions within the proposed scheme, including three new road connections and a number of new walking/cycling routes, traverse the River Camlin. As such, development has the potential to adversely affect the quality of waterbodies although this is uncertain.

D.8 An uncertain minor negative effect is identified for EPO **7: Cultural heritage including architectural and archaeological heritage**. The Abbeycartron redevelopment area is located in close proximity to a small number of features listed on the Record of Protected Structures. However, the proposed Access Strategy will be located adjacent to the Battery Road Architectural Conservation Area. It is therefore possible that the proposed redevelopment and associated transport infrastructure/traffic of the alternative Access Strategy could have adverse effects on the setting of the Architectural Conservation Area although this will depend on the design of traffic interventions.

D.9 An uncertain mixed effect (minor positive / significant negative) is identified for EPO **8: Landscape** in relation to the alternative Abbeycartron Access Strategy. The impact on Longford's existing landscape and townscape will depend largely on the detailed design of the alternative Access Strategy and its associated residential development, therefore the effects are uncertain, however, due to the scale of the transport element of the proposal, it is likely that the scheme will have an adverse effect on the landscape of Longford Town's rural edge. The Access Strategy provides new pedestrian and cycle links which will improve urban and rural connectivity, as well as improving access to valued landscapes and viewpoints including to the River Camlin and the Mall. However, the additional volume of traffic at connections points on

Appendix D SEA matrices

Battery Road, Great Water Street and Templemichael/Ballinalee Road, associated with the new road and new population, has the potential to increase adverse effects on the character of these areas, including through noise, air and light pollution.

D.10 A mixed effect (significant positive / significant negative) is identified for **EPO 9: Material assets**. The alternative Abbeycartron Access Strategy would provide transport infrastructure to support the zoned residential development of the area. This will provide road, cycle and walking infrastructure for the growing population of Longford Town in a key redevelopment area. The inclusion of high-quality pedestrian and cycle infrastructure, and new permeability routes will help support the modal shift away from private vehicles for new and existing residents, supporting a reduction in energy demand from the transport sector. However, supporting the alternative Access Strategy will require development of significant new infrastructure, including the construction of a number of new roads, which will require significant use of resources.

Vision

D.11 The Vision of the Longford Town LTP is:

“To ensure that Longford is an attractive place to live, work and visit through appropriate integration of transport and land use, with a primary focus on ease of access for all by sustainable transport” (p.27).

Table D.2: Summary of SEA effects of the Vision

Environmental Protection Objective	Vision
1. Biodiversity, flora and fauna	+/-?
2. Population and human health	++

Appendix D SEA matrices

Environmental Protection Objective	Vision
3. Air quality / climate change mitigation	++
4. Flood risk / climate change adaptation	+/-?
5. Soil	+/-?
6. Water	+/-?
7. Cultural heritage	+/-?
8. Landscape	+/-?
9. Material assets	++

D.12 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 1: Biodiversity, flora and fauna** as there may be indirect benefits for species from improved air quality due to the focus on ease of access to sustainable transport. Furthermore, the Vision specifies the need for the appropriate integration of transport and land use, which may include locating transport infrastructure away from the most sensitive locations and providing for new green and blue infrastructure which supports habitat creation and connections. However, depending on the design and location of the transport infrastructure, there may be adverse effects on species and habitats due to new transport infrastructure development and land use change. Therefore, the effect is uncertain.

D.13 An overall significant positive effect is identified in relation to **EPO 2: Population and human health**. The Vision directly promotes the improvement of the town to become a more attractive place to live, work and visit. Its primary focus is to encourage ease of access for all by sustainable transport and is therefore likely to help mitigate adverse health effects associated with air and noise pollution by supporting a modal shift to active travel and public transport, thereby improving the health and wellbeing of the population of Longford. Additionally, the Vision aims to promote access for ‘all’ which would likely help facilitate improved access to services, facilities, and employment areas in Longford Town, including for those in more deprived areas of the town.

D.14 A significant positive effect is identified for **EPO 3: Air quality and climate change mitigation** as the Vision supports improved ease of access to sustainable transport for all which will reduce dependency on petrol / diesel private vehicles, thus lowering transport-related emissions and Longford's contribution to climate change.

D.15 Uncertain mixed effects (minor positive / minor negative) are identified in relation to **EPO 4: Flood risk and climate change**, **EPO 5: Soil** and **EPO 6: Water** as the Vision specifies the need for the appropriate integration of transport and land use, which may include locating transport infrastructure in sustainable locations that take into account the sensitivities of the soil and water environment, including avoiding areas impacted by flooding; delivering green and blue infrastructure as part of new transport projects; incorporating Sustainable urban Drainage Systems (SuDS) as part of new transport and active travel schemes; and supporting the regeneration of Longford Town's brownfield land. However, depending on the design and location of the transport infrastructure, there may be adverse effects on the soil and water environments due to new transport infrastructure. Therefore, the effects are uncertain.

D.16 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 7: Cultural heritage including architectural and archaeological heritage** as the Vision seeks to ensure that Longford is an attractive place to live, work and visit. A key element of the regeneration of Longford Town will be the creation of enhanced accessibility and sustainable mobility within the town and the primary focus of the Vision is ease of access for all by sustainable transport. This is likely to enhance the accessibility to historic areas and help improve the setting of historic assets. Additionally, support for sustainable transport modes reduces the need to travel by diesel and petrol vehicles which will reduce greenhouse gas emissions and congestion, thereby helping to avoid degradation of heritage assets and improve their settings. However, depending on the design and location of the transport infrastructure, there may be adverse effects on the historic environment due to new transport infrastructure. Therefore, the effect is uncertain.

D.17 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 8: Landscape** as improved sustainable transport opportunities will help

minimise the adverse effects of petrol and diesel vehicles on landscape and townscape character, including noise, air and light pollution. Additionally, improved sustainable transport opportunities offers improved urban and rural connectivity and better access to valued landscapes, townscapes and viewpoints by sustainable and active travel modes. However, depending on the design and location of the transport infrastructure, there may be adverse effects on the landscape due to new transport infrastructure. Therefore, the effect is uncertain.

D.18 A significant positive effect is identified for EPO **9: Material assets** as the Vision supports interventions that support the appropriate integration of transport and land use and the use of sustainable modes of transport. This will likely optimise existing infrastructure as well as providing new infrastructure to meet demands. The improved access to sustainable transport will reduce dependency on petrol / diesel private vehicles thus reducing the energy demand from the transport sector.

Principles

D.19 The Longford Town LTP is framed by a set of nine guiding principles which include aspects pertaining to quality, sustainability, safety, and reliance, all of which relate to the quality of life of residents and visitors.

Table D.3: Summary of SEA effects for the Principles of the Longford Town LTP

	Principles of the Longford Town LTP								
Environmental Protection Objective	1	2	3	4	5	6	7	8	9
1. Biodiversity, flora and fauna	+/-?	+/-?	+/-?	+	0	+	+	+	+
2. Population and human health	++	++	+/-	++	0	++	++	++	++
3. Air quality / climate change mitigation	++	++	+/-	+	0	++	++	++	++
4. Flood risk / climate change adaptation	+/-?	?	?	0	0	?	+	+	?
5. Soil	+/-?	?	?	0	0	?	+	?	?
6. Water	+/-?	?	?	0	0	?	+	+	?
7. Cultural heritage	+/-?	+	+/-?	+	0	+	+	+	+
8. Landscape	++/-?	+	+/-?	+	0	++	++	+	+
9. Material assets	++	++	+/-	+	+	+	+	+	++

Principle 1: Integrated transport planning, land use and urban design

D.20 This principle aims to adopt an approach where transport decisions are also focused on enhancing the image, liveability, safety and cohesion of Longford Town.

D.21 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 1: Biodiversity flora and fauna** as the principle does not detail the location or design of transport intervention. However, the focus on the image and liveability of the town can be considered supportive of interventions that promote high quality urban design, for example by incorporating street planting into the public realm. There may also be indirect benefits for species from improved air quality due to the reduction in road traffic and congestion from a more integrated transport system. However, there may also be adverse effects on species and habitats due to new transport infrastructure development and land use change.

D.22 A significant positive effect is identified for **EPO 2: Population and human health**. The principle aims to improve the image, liveability, safety and cohesion of Longford Town and therefore is likely to have positive effects for population and human health. Ensuring transport decisions are factoring in these considerations is likely to improve sustainable mobility options, improve access to local services and facilities and promote healthy lifestyles by encouraging active travel. Improved safety will reduce the risk of accidents and improved liveability is likely to support local people's health and wellbeing.

D.23 A significant positive effect is identified for **EPO 3: Air quality and climate change mitigation**. The principle supports integrated transport planning which is likely to help reduce the need to travel by petrol / diesel private vehicles as it supports a modal shift towards public transport, walking and cycling, thus

lowering transport-related emissions and Longford's contribution to climate change.

D.24 Uncertain mixed effects (minor positive / minor negative) are identified in relation to **EPO 4: Flood risk and climate change**, **EPO 5: Soil** and **EPO 6: Water** as the objective supports the appropriate integration of transport and land use, which may include locating transport infrastructure in sustainable locations that take into account the sensitivities of the soil and water environment, including avoiding areas impacted by flooding; delivering green and blue infrastructure as part of new transport projects; incorporating Sustainable urban Drainage Systems (SuDS) as part of new transport and active travel schemes; and supporting the regeneration of Longford Town's brownfield land. However, depending on the design and location of the transport infrastructure, there may be adverse effects on the soil and water environments due to new transport infrastructure. Therefore, the effects are uncertain.

D.25 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 7: Cultural heritage including architectural and archaeological heritage**. This principle aims to improve the liveability, safety, image and cohesion of the town which is likely to enhance the accessibility to historic areas and help improve the setting of historic assets. This will also support a modal shift away from cars and help minimise the adverse effects of petrol and diesel vehicles on landscape and townscape character, including noise, air and light pollution. However, there may also be adverse effects on the historic environment due to new transport infrastructure development and land use change.

D.26 An uncertain mixed effect (significant positive / minor negative) is expected for **EPO 8: Landscape**. A focus on urban design is likely to help promote retention and planting of green infrastructure alongside transport interventions, although this is uncertain, and help create a sense of place. Additionally, improved liveability and cohesion has the potential to offer improved urban and rural connectivity and better access to valued landscapes, townscapes and viewpoints by sustainable and active travel modes. However, there may also be adverse effects on the landscape due to new transport infrastructure development and land use change.

D.27 A significant positive effect is identified for **EPO 9: Material assets** as the principle focuses on ensuring that future transport infrastructure within Longford Town develops to be integrated and cohesive. It contributes to a future transport network that has been thought about alongside land use and urban design decisions. This is likely to help develop a sustainable and inclusive transport network that meets the needs of the population and reduces energy consumption from the transport sector within Longford Town.

Principle 2: People first

D.28 This principle prioritises pedestrians, cyclists and public transport before private vehicles to create a balanced transport system and great places.

D.29 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 1: Biodiversity flora and fauna**. There may be indirect benefits for species from improved air quality due to the focus on the prioritisation of walking, cycling and public transport above private vehicle. However, there may also be adverse effects on species and habitats due to new transport infrastructure development and land use change. Effects are uncertain as they will depend on the design and location of interventions.

D.30 A significant positive effect is identified in relation to **EPO 2: Population and human health**. The principle aims to prioritise pedestrians, cyclists and public transport before private vehicles to create a balanced transport system and great places. Improving active travel infrastructure will likely improve access to services, facilities and employment areas throughout Longford Town, reducing the need to travel by car and reducing residents' exposure to noise/air/vibration/light pollution associated with traffic as the principle will help support the modal shift away from private vehicles. The People First principle may also address the spatial connectivity inequality that currently exists in Longford Town by connecting previously disconnected areas and areas with relatively high levels of deprivation to local services and facilities, creating a cohesive and integrated town that is easier to navigate by active travel which will be particularly beneficial for people on low incomes and less mobile people,

Appendix D SEA matrices

including elderly people, infants and young children, disabled people and pregnant women, to access services and facilities.

D.31 A significant positive effect is identified for EPO 3: **Air quality and climate change mitigation** as the principle prioritises pedestrians, cyclists and public transport before private vehicles. This is likely to reduce dependency on petrol / diesel private vehicles thus lowering transport-related emissions and Longford's contribution to climate change.

D.32 Uncertain effects are identified for EPOs 4: **Flood risk and climate change adaptation**, 5: **Soil** and 6: **Water**. The objective does not identify the location of proposed transport infrastructure. Therefore, it is uncertain whether the active travel / public transport proposals may be in areas at high risk of flooding, or on high quality agricultural land, or whether they will affect the quality of waterbodies / groundwater. The effects will depend on the location and design of the interventions.

D.33 An uncertain minor positive effect is identified for EPO 7: **Cultural heritage including architectural and archaeological heritage** as it is likely that sustainable transport interventions, such as cycle and walking infrastructure, will have a positive effect on the accessibility of heritage assets within Longford Town. Prioritising active travel connectivity will help enhance the accessibility to historic areas and heritage assets for local people and tourists. Furthermore, the provision of new pedestrian / cycle routes reduces the need to travel by diesel and petrol vehicles which will reduce greenhouse gas emissions and congestion, thereby helping to reduce degradation of heritage assets and improve their settings. This effect is uncertain as it will depend on the design and location of interventions.

D.34 An uncertain minor positive effect is identified in relation to EPO 8: **Landscape** as improved walking, cycling and public transport opportunities will help minimise the adverse effects of petrol and diesel vehicles on landscape and townscape character, including noise, air and light pollution. Additionally, improved sustainable transport opportunities will enhance urban and rural connectivity and ensure there is better access to valued landscapes,

townscapes and viewpoints by sustainable and active travel modes. The effect is uncertain as it will depend on the location and design of transport interventions.

D.35 A significant positive effect is identified for **EPO 9: Material assets** as the prioritisation of walking, cycling and public transport in Longford Town will reduce energy demand from the transport sector. It will encourage additional infrastructure provision for sustainable transport modes and reduce dependence on the road network that is likely to increase with population growth.

Principle 3: Maintaining and enhancing connectivity

D.36 Principle three aims to maintain and enhance the connectivity of the strategic rail, road and bus network, where possible.

D.37 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 1: Biodiversity flora and fauna**. There may be indirect benefits for species from improved air quality due to the focus on the prioritisation of public transport above private vehicle. However, there may also be adverse effects on species and habitats due maintaining and enhancing the connectivity of the road network and potential land use change. Effects are uncertain as they will depend on the design and location of interventions.

D.38 A mixed effect (minor positive / minor negative) effect is identified for **EPO 2: Population and human health**. The principle aims to improve public transport connectivity which is likely to facilitate improved access to services, facilities and employment opportunities between neighbourhoods and reduce car dependence. The principle will also likely contribute to protecting physical and mental health and wellbeing by reducing private vehicle traffic within Longford Town and thus reducing residents' exposure to air and noise pollution. However, the principle also supports maintaining and enhancing the road

network and, as transport energy use remains dominated by fossil fuels, the release of greenhouse gases from private vehicles and public transport including from rail transport is still likely.

Recommendation: The Principles, Objectives and Public Transport Strategy should support the uptake of electric vehicle usage (i.e. through electric vehicle charging points) and support the transition to an electric fleet of public buses.

D.39 A mixed effect (minor positive / minor negative) effect is identified for EPO **3: Air quality and climate change mitigation**. This principle will help encourage a modal shift to public transport and will reduce dependency on petrol / diesel private vehicles thus lowering transport-related emissions and Longford's contribution to climate change. However, the principle also supports maintaining and enhancing the road network and, as transport energy use remains dominated by fossil fuels, the release of greenhouse gases from private vehicles and modes of public transport is still likely.

D.40 Uncertain effects are identified for EPOs **4: Flood risk and climate change adaptation, 5: Soil** and **6: Water**. The objective does not identify the location of proposed public transport interventions. Therefore, it is uncertain whether the proposals may be in areas at high risk of flooding, or on high quality agricultural land, or whether they will affect the quality of waterbodies / groundwater. The effects will depend on the location and design of the interventions.

D.41 An uncertain mixed effect (minor positive / minor negative) is identified for EPO **7: Cultural heritage including architectural and archaeological heritage**. A key element of the regeneration of Longford Town is the creation of enhanced accessibility and sustainability mobility through the town. Prioritising improved public transport will help enhance the accessibility to historic areas and heritage assets for local people and tourists. Furthermore, the accessibility of public transport reduces the need to travel by diesel and petrol private vehicles which will reduce greenhouse gas emissions and congestion, thereby

helping to minimise degradation of heritage assets and improve their settings. However, the principle also supports maintaining and enhancing the capacity of the strategic road network. Furthermore, there may also be adverse effects on the historic environment due to new transport infrastructure development and potential land use change.

D.42 An uncertain mixed effect (minor positive / minor negative) is identified in relation to EPO **8: Landscape**. Improved public transport connectivity will help reduce private car use and minimise the adverse effects that petrol and diesel private vehicles have on landscape and townscape character, including through noise, air and light pollution. Improvements to public transport will enhance urban and rural connectivity and ensure there is better access to valued landscapes, townscapes and viewpoints by sustainable modes. However, the principle also supports maintaining and enhancing the capacity of the strategic road network. Furthermore, there may also be adverse effects on the landscape due to new transport infrastructure development and potential land use change.

D.43 A significant positive effect is identified in relation to EPO **9: Material assets**. The maintenance and enhancement of Longford's strategic road, bus and rail network will contribute to the delivery of a transport system that is sufficient to meet demand and future need.

Principle 4: Safe streets

D.44 Principle four aims to ensure streets are safe for all users by reducing speeds, providing safe crossings and dedicated infrastructure.

D.45 An uncertain minor positive effect is identified for EPO **1: Biodiversity flora and fauna**. There may be indirect benefits for species due to the focus on the prioritisation of other modes of travel such as walking above private vehicle which will result in less pollution deposition and less disturbance as well as potentially less direct road kill.

D.46 A significant positive effect is identified for EPO 2: **Population and human health**. The Safe Streets Principle will improve road user safety and reduce the risk of accidents through traffic calming measures and improved crossings. Improved crossings will also likely help promote walking for shorter journeys throughout Longford Town, therefore reducing unnecessary car journeys and encouraging active modes of travel. The implementation of this principle will be most beneficial for vulnerable road users, such as pedestrians, cyclists, elderly people, infants and young children, disabled people and pregnant women.

D.47 A minor positive effect is identified for EPO 3: **Air quality and climate change mitigation**. Improving road safety, particularly for vulnerable road users is likely to encourage alternative travel modes such as walking and cycling. The principle is likely to help discourage unnecessary car journeys by implementing reduced speeds and improving infrastructure for crossing and pedestrian safety. This will reduce dependence on petrol / diesel private vehicles, thus lowering transport-related emissions and Longford's contribution to climate change.

D.48 Negligible effects are identified for EPOs 4: **Flood risk and climate change adaptation**, 5: **Soil** and 6: **Water**. The Safe Streets Principle seeks to improve safety for road users and reduce vehicle speeds which is unlikely to affect areas at risk of flooding, or the preservation / enhancement of soil resources or water quality.

D.49 A minor positive effect is identified for EPO 7: **Cultural heritage including architectural and archaeological heritage**. A key element of the regeneration of Longford Town is the creation of enhanced accessibility and sustainability mobility through the town. Improved road safety, such as upgraded crossings, will help enhance the accessibility to historic areas and heritage assets for local people and tourists. Furthermore, improved pedestrian safety encourages walking and reduces the need to travel by diesel and petrol vehicles which will reduce greenhouse gas emissions and congestion, thereby helping to reduce degradation of heritage assets and improve their settings.

D.50 A minor positive effect is identified for EPO **8: Landscape**. Improved pedestrian and cyclist safety will likely encourage active travel and will help minimise the adverse effects of petrol and diesel vehicles on landscape and townscape character, including noise, air and light pollution. Additionally, improved road safety opportunities will enhance urban and rural connectivity for active travel modes and ensure there is better access to valued landscapes, townscapes and viewpoints.

D.51 A minor positive effect is identified for EPO **9: Material assets**. Improved road safety, new and upgraded crossings and dedicated infrastructure is likely to help support the modal shift from private car to active travel modes such as walking and cycling. It is likely to help reduce road accidents and create a sense of safety for all transport network users.

Principle 5: Value for money

D.52 This principle aims to ensure proposals are assessed on their cost and ease of implementation in order to prioritise the best value for money.

D.53 Negligible effects are identified for EPO **1: Biodiversity, flora and fauna, 2: Population and human health, 3: Air quality and climate change mitigation, 4: Flood risk and climate change mitigation, 5: Soil, 6: Water, 7: Cultural heritage including architectural and archaeological heritage, and 8: Landscape** as the principle focuses on ensuring proposals are assessed on their cost and ease of implementation in order to prioritise best value for money which will not necessarily determine the impacts of interventions on each of these environmental factors.

D.54 An uncertain minor positive effect is identified for EPO **9: Material assets** as the focus of the principle, ensuring best value for money, is likely to help ensure that the LTP optimises the re-use of existing infrastructure and intelligent use of resources, although this is uncertain.

Principle 6: Vibrant and great for business

D.55 Principle six aims to design streets to enhance businesses in Longford and maximise street life both day and night.

D.56 A minor positive effect is identified for EPO 1: **Biodiversity flora and fauna**. There may be indirect benefits for species from improved air quality due to the focus on the prioritisation of other modes of travel such as walking above private vehicle.

D.57 A significant positive effect is identified for EPO 2: **Population and human health**. Improved streets that enhance local businesses and maximise street life are likely to improve access to local services, facilities and employment opportunities. It is also likely to improve social cohesion and support healthy lifestyles by encouraging active travel such as walking around the town. Improved street design will enhance access to open spaces in the town which is likely to help improve physical and mental health.

D.58 A significant positive effect is identified for EPO 3: **Air quality and climate change mitigation**. The most pronounced areas for traffic congestion are within Longford Town centre. Improving street design to maximise street life will encourage active travel modes, such as walking, and reduce the reliance on petrol / diesel private vehicles for unnecessary journeys within the town, therefore lowering transport-related emissions and Longford's contribution to climate change.

D.59 Uncertain effects are identified for EPOs 4: **Flood risk and climate change adaptation**, 5: **Soil** and 6: **Water**. The objective does not identify the location of proposed transport infrastructure. Therefore, it is uncertain whether the improved street design proposals may be in areas at high risk of flooding, or on high quality agricultural land, or whether they will affect the quality of waterbodies / groundwater. The effects will depend on the location and design of the interventions.

D.60 A minor positive effect is identified for **EPO 7: Cultural heritage including architectural and archaeological heritage** as improving street design will have a positive effect on the setting of heritage assets within Longford Town. Improving street design to support businesses and encourage street life will enhance the accessibility to historic areas and heritage assets for local people and tourists. Furthermore, encouraging walking and street life reduces the need to travel by diesel and petrol vehicles which will reduce greenhouse gas emissions and congestion, thereby helping to reduce degradation of heritage assets and improve their settings.

D.61 A significant positive effect is identified for **EPO 8: Landscape** as improving street design will have a positive effect on the landscape / townscape of Longford Town. Encouraging street life will likely help support the modal shift from private car use to active travel, such as walking. Therefore, this principle will help minimise the adverse effects of petrol and diesel vehicles on landscape and townscape character, including noise, air and light pollution. Additionally, improved street design offers improved urban connectivity for active travel modes and better access to valued townscapes and viewpoints.

D.62 A minor positive effect is identified for **EPO 9: Material assets** as improving the street design and encouraging street life within Longford Town will help offer a balanced transport system that supports walking and active travel modes over private car use. This will help support the modal shift and reduce growing car dependency with a growing population, ensuring that roads are designed to meet future needs.

Principle 7: Efficient

D.63 This principle aims to reallocate street space as efficiently as possible to optimise other functions such as cycling, public transport, footpaths, outdoor dining and furniture.

D.64 A minor positive effect is identified for **EPO 1: Biodiversity flora and fauna**. The principle supports the reallocation of on-street car parking for other

Appendix D SEA matrices

uses which may include new trees/planting, which will contribute to the network of functionally linked habitats in Longford Town. There may be indirect benefits for species from improved air quality due to the focus on the prioritisation of other modes of travel such as walking above private vehicle.

D.65 A significant positive effect is identified for **EPO 2: Population and human health**. Reduced on-street parking is likely to discourage unnecessary car journeys and support the modal shift away from car use. An improved public realm with new footpaths, cycle parking, outdoor dining areas and street greening is likely to help promote healthy lifestyles by encouraging active modes of transport such as walking and cycling. This is also likely to facilitate better access to services, facilities and employment opportunities by sustainable modes and reduce car dependence. The principle will also contribute to protecting physical and mental health and wellbeing by reducing residents' exposure to air and noise pollution from associated traffic along streets where parking has been reduced, and increase accessibility to public street space within the town.

D.66 A significant positive effect is identified for **EPO 3: Air quality and climate change mitigation** as the objective aims to re-allocate on-street parking space along streets within Longford Town. This is likely to discourage car use for unnecessary trips by reducing parking opportunities and contribute to the modal shift towards sustainable transport modes. An improved public realm, wider footpaths and cycle parking is likely to encourage walking and cycling in Longford Town and therefore will reduce dependency on petrol / diesel private vehicles, thus lowering transport-related emissions and Longford's contribution to climate change.

D.67 Minor positive effects are identified for **EPO 4: Flood risk and climate change adaptation**, **EPO 5: Soil**, and **EPO 6: Water** as the reallocation of on-street car parking for other uses including for trees and planting is likely to benefit the soil and water environments.

D.68 A minor positive effect is identified for **EPO 7: Cultural heritage including architectural and archaeological heritage**. A key element of the

regeneration of Longford Town will be enhanced accessibility and sustainability mobility within the town. The re-allocation of on-street car parking for an improved public realm is likely to enhance the accessibility of historic areas and heritage assets by sustainable travel modes, and improve the street experience for local people and visitors in historic areas. Additionally, reduced greenhouse gas emissions, traffic congestion and car-parking will help reduce degradation of heritage assets and improve their settings.

D.69 A significant positive effect is identified for this principle in relation to **EPO 8: Landscape**. The reallocation of car-parking space within Longford Town would reduce traffic and help minimise the adverse effects that busy roads can have on landscape and townscape character including through noise, light and air pollution. New footpaths, outdoor dining, street furniture and tree planting has the potential to enhance visual amenity value and create a sense of place within Longford Town. Additionally, improved street design offers improved urban connectivity for active travel modes and better access to valued townscapes and viewpoints.

D.70 A minor positive effect is identified for **EPO 9: Material assets**. This principle supports the efficient re-allocation of road space for other functions including footpaths, outdoor dining and furniture. This will help support the modal shift away from private vehicles and reduce growing car dependency with a growing population, ensuring that roads are designed to meet future needs.

Principle 8: Future focused and equitable

D.71 Principle eight aims to design streets which are flexible and adaptive to change and able to accommodate all ages, abilities, genders and incomes.

D.72 A minor positive effect is identified for **EPO 1: Biodiversity flora and fauna** as there may be indirect benefits for species from improved air quality due to the focus on the prioritisation of other modes of travel such as walking above private vehicle.

D.73 A significant positive effect is identified in relation to **EPO 2: Population and human health**. The principle supports street design that is inclusive of all ages, abilities, genders and incomes. This is likely to help improve access to local service and facilities, and encourage walking and a healthy living environment, particularly for vulnerable groups such as elderly people, infants and young children, disabled people and pregnant women. It is also likely to improve road safety and reduce the risk of accidents, particularly for those who face the most barriers to walking.

D.74 A minor positive effect is identified for **EPO 3: Air quality and climate change mitigation**. The improved street environment is likely to help promote walking and active travel, particularly for vulnerable groups in society. This is likely to reduce private car use for shorter and less necessary journeys, therefore lowering transport-related emissions and Longford's contribution to climate change.

D.75 Minor positive effects are identified for **EPO 4: Flood risk and climate change adaptation** and **6: Water** as the principle seeks to design streets which are flexible and adaptable to change which may include being designed to adapt to surface water or ground water flooding (e.g. through flood resilient designs of streets). Effects are uncertain as they will depend on the design and location of interventions.

D.76 An uncertain effect is identified for **EPO 5: Soil**. The principle supports designing streets which are flexible and adaptable which is unlikely to have a direct effect on conserving or enhancing the soil environment.

D.77 A minor positive effect is identified for **EPO 7: Cultural heritage including architectural and archaeological heritage**. A key element of the regeneration of Longford Town will be enhanced accessibility and sustainability mobility within the town. Improving accessibility to meet the needs for all groups is likely to enhance the accessibility of historic areas and heritage assets by sustainable travel modes, and improve the street experience for local people and visitors in historic areas. Additionally, reduced greenhouse gas emissions,

traffic congestion and car-parking will help reduce degradation of heritage assets and improve their settings.

D.78 A minor positive effect is identified for EPO 8: **Landscape**. Improved street design to meet the needs of all groups within Longford Town would reduce traffic and help minimise the adverse effects that busy roads can have on landscape and townscape character including through noise, light and air pollution. Additionally, new footpaths, outdoor dining and street furniture has the potential to benefit visual amenity value within Longford Town and create a sense of place. Additionally, improved street design offers improved urban connectivity for active travel modes and better access to valued townscapes and viewpoints.

D.79 A minor positive effect is identified for EPO 9: **Material assets**. This principle ensures that the future transport system and street design of Longford Town will meet the demands of Longford's future population, taking into consideration all ages, abilities, genders and incomes. This will ensure streets are created to meet the needs of all groups and will help provide an inclusive environment for all.

Principle 9: Evidence-based decision making

D.80 This principle aims to address traffic issues by reducing unnecessary trips and improving the attraction of alternative modes.

D.81 A minor positive effect is identified for EPO 1: **Biodiversity flora and fauna**. There may be indirect benefits for species from improved air quality due to the focus on the prioritisation of other modes of travel such as walking above private vehicle.

D.82 A significant positive effect is identified for EPO 2: **Population and human health** as the principle aims to reduce unnecessary trips by private vehicle and improve the attraction of alternative modes. This is likely to reduce car dependence and encourage healthy lifestyles via active travel modes, and

improve access to services, facilities and employment by walking and cycling. Additionally, minimising unnecessary car trips will reduce local peoples' exposure to air and noise pollution from traffic, better protecting their physical and mental wellbeing.

D.83 A significant positive effect is identified for this principle in relation to EPO **3: Air quality and climate change mitigation**. The principle directly supports the reduction of unnecessary trips by private vehicle, helping to reduce dependency on petrol / diesel private vehicles thus lowering transport-related emissions and Longford's contribution to climate change.

D.84 Uncertain effects are identified for EPOs **4: Flood risk and climate change adaptation**, **5: Soil** and **6: Water**. The principle seeks to reduce unnecessary trips and improve the attraction of alternative modes of travel. Therefore, it is uncertain whether the interventions proposed under this principle may be in areas at high risk of flooding, or on high quality agricultural land, or whether they will affect the quality of waterbodies / groundwater.

D.85 A minor positive effect is identified for EPO **7: Cultural heritage including architectural and archaeological heritage**. A key element of the regeneration of Longford Town is the creation of enhanced accessibility and sustainability mobility through the town. Prioritising active travel and reducing car dependence will help enhance the accessibility to historic areas and heritage assets for local people and tourists. Furthermore, the provision of new pedestrian/cycling routes reduces the need to travel by diesel and petrol vehicles which will reduce greenhouse gas emissions and congestion, thereby helping to minimise degradation of heritage assets and improve their settings.

D.86 A minor positive effect is identified for EPO **8: Landscape**. Reducing unnecessary car journeys within Longford Town would reduce traffic and help minimise the adverse effects that busy roads can have on landscape and townscape character including through noise, light and air pollution. Additionally, supporting a modal shift away from private vehicle use will enhance urban and rural connectivity and ensure there is better access to

valued landscapes, townscapes and viewpoints by sustainable transport modes.

D.87 A significant positive effect is identified for EPO 9: **Material assets** as the principle directly aims to address traffic issues and reduce the number of unnecessary trips by car within Longford Town. This will help reduce strain on the road network and reduce car dependence amongst a growing population, ensuring that the transport network is sufficient to meet growing demand.

Objectives

D.88 The Longford LTP principles are supported by eight objectives that build to form an integrated strategy plan for transport in Longford Town. The combined achievement of these objectives aims to have the desired effect of increasing the share of trips made by sustainable modes of transport such as walking, cycling and public transport.

Table D.4: Summary of SEA effects for the Objectives of the Longford Town LTP

	Objectives of the Longford Town LTP							
Environmental Protection Objective	A	B	C	D	E	F	G	H
1. Biodiversity, flora and fauna	+/-?	+/-?	+/-?	+/-?	+	+	+	0
2. Population and human health	++	++	++/-	++	++	++	++	0
3. Air quality / climate change mitigation	++	++	++/-	++	++	+	++	0
4. Flood risk / climate change adaptation	?	?	?	+/-?	+	0	0	0
5. Soil	?	?	?	+/-?	+	0	0	0
6. Water	?	?	?	+/-?	+	0	0	0
7. Cultural heritage	+?	+?	+?	+/-?	+	+	+	0
8. Landscape	+?	+?	+?	+/-?	++	+	+	0
9. Material assets	++	++	++	++	+	+	++	+

Objective A: Permeability

D.89 This objective aims to improve permeability between neighbourhoods which will enhance attractiveness and promote connectivity.

D.90 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 1: Biodiversity flora and fauna**. There may be indirect benefits for species from improved air quality due to improved permeability and better opportunities for walking and cycling between neighbourhoods. However, there may also be adverse effects on species and habitats due to new transport infrastructure development and land use change. The effect is uncertain as the objective does not detail the location or design of permeability interventions.

D.91 A significant positive effect is identified in relation to **EPO 2: Population and human health**. Improved permeability will likely improve access to services, facilities and employment areas throughout Longford Town, reducing the need to travel by car and reducing residents' exposure to noise/air/vibration/light pollution associated with traffic as the objective will help support the modal shift away from private vehicles. This objective will also encourage walking and cycling with better connections between neighbourhoods by opening up new routes, encouraging modes of travel that promote healthy lifestyles. The Permeability objective may also address the spatial connectivity inequality that currently exists in Longford Town by connecting previously disconnected areas and areas with relatively high levels of deprivation to local services and facilities, creating a cohesive and integrated town that is easier to navigate by active travel which will be particularly beneficial for people on low incomes and less mobile people, including elderly people, infants and young children, disabled people and pregnant women, to access services and facilities.

D.92 A significant positive effect is identified for **EPO 3: Air quality and climate change mitigation**. Improved permeability for active travel modes will likely encourage walking and cycling between neighbourhoods and will support the

modal shift away from private vehicles. This will reduce dependency on petrol / diesel private vehicles thus lowering transport-related emissions and Longford's contribution to climate change.

D.93 Uncertain effects are identified for EPOs **4: Flood risk and climate change adaptation, 5: Soil** and **6: Water**. The objective does not identify the location of proposed transport infrastructure. Therefore, it is uncertain whether the proposals may be in areas at high risk of flooding, or on high quality agricultural land, or whether they will affect the quality of waterbodies / groundwater. The effects will depend on the location and design of permeability interventions.

D.94 An uncertain minor positive effect is identified for EPO **7: Cultural heritage including architectural and archaeological heritage** as it is likely that new permeability routes will have a positive effect on the accessibility of heritage assets within Longford Town. Prioritising connectivity for walking and cycling will help enhance the accessibility to historic areas and heritage assets for local people and tourists. Furthermore, the provision of new routes between neighbourhoods reduces the need to travel by diesel and petrol vehicles which will reduce greenhouse gas emissions and congestion, thereby helping to minimise the degradation of heritage assets and improve their settings. This effect is uncertain as it will depend on the design and location of interventions.

D.95 An uncertain minor positive effect is identified for EPO **8: Landscape** as improved permeability between neighbourhoods will help reduce car dependence and help minimise the adverse effects of petrol and diesel vehicles on landscape and townscape character, including noise, air and light pollution. Additionally, improved permeability offers improved urban and rural connectivity and better access to valued landscapes, townscapes and viewpoints by sustainable modes.

D.96 A significant positive effect is identified for EPO **9: Material assets** as improved permeability for sustainable travel modes, such as walking and cycling, will help facilitate the modal shift away from private vehicle use and support a future transport system that is sufficient to meet growing demand.

Objective B: Active travel

D.97 Objective B aims to improve walking and cycling connections and routes to increase physical activity.

D.98 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 1: Biodiversity flora and fauna**. There may be indirect benefits for species from improved air quality due to improved opportunities for walking and cycling and a reduction in reliance on car journeys. However, there may also be adverse effects on species and habitats due to new transport infrastructure development and land use change. The effect is uncertain as effects will depend on the location or design of active travel interventions.

D.99 A significant positive effect is identified for this objective in relation to **EPO 2: Population and human health**. It promotes improved walking and cycling opportunities in Longford Town to improve physical activity. This is also likely to facilitate access to services, facilities and employment opportunities between neighbourhoods and reduce car dependence. The objective will also likely help protect physical and mental health and wellbeing by reducing car dependence and residents' exposure to air and noise pollution from associated traffic.

D.100 A significant positive effect is identified for **EPO 3: Air quality and climate change mitigation**. The objective specifically promotes walking and cycling opportunities which will likely reduce dependency on petrol / diesel private vehicles thus lowering transport-related emissions and Longford's contribution to climate change.

D.101 Uncertain effects are identified for **EPOs 4: Flood risk and climate change adaptation, 5: Soil and 6: Water**. The objective does not identify the location of proposed active travel infrastructure. Therefore, it is uncertain whether the proposals may be in areas at high risk of flooding, or on high quality agricultural land, or whether they will affect the quality of waterbodies / groundwater. The effects will depend on the location and design of active travel interventions.

D.102 An uncertain minor positive effect is identified for EPO 7: **Cultural heritage including architectural and archaeological heritage** as it is likely that new active travel interventions will have a positive effect on the accessibility of heritage assets within Longford Town. Prioritising connectivity for walking and cycling will help enhance the accessibility to historic areas and heritage assets for local people and tourists. Furthermore, the encouragement of active travel reduces the need to travel by diesel and petrol vehicles which will reduce greenhouse gas emissions and congestion, thereby helping to minimise the degradation of heritage assets and improve their settings. This effect is uncertain as it will depend on the design and location of interventions.

D.103 An uncertain minor positive effect is identified for EPO 8: **Landscape** as improved active travel opportunities will help reduce car dependence and help minimise the adverse effects of petrol and diesel vehicles on landscape and townscape character, including through noise, air and light pollution. Additionally, the expansion of the active travel network will improve urban and rural connectivity and ensure there is better access to valued landscapes, townscapes and viewpoints by sustainable modes.

D.104 A significant positive effect is identified for EPO 9: **Material assets** as improving the transport network to support active travel opportunities will help facilitate the modal shift away from private vehicle use and support a future transport system that is sufficient to meet growing demand.

Objective C: Public transport

D.105 Objective C aims to encourage the use of public transport and reduce the environmental impact of transportation.

D.106 An uncertain mixed effect (minor positive / minor negative) is identified for EPO 1: **Biodiversity flora and fauna**. There may be indirect benefits for species from improved air quality due to improved public transport opportunities and reduction in reliance on car journeys. However, there may also be adverse effects on species and habitats due to new transport infrastructure development

and land use change. The effect is uncertain as effects will depend on the location or design of public transport interventions.

D.107 A mixed effect (significant positive / minor negative) is identified for EPO **2: Population and human health**. The objective aims to improve public transport connectivity which is likely to facilitate improved access to services, facilities and employment opportunities between neighbourhoods and reduce car dependence, minimising commuting times for sustainable transport modes. The objective also will likely contribute to protecting physical and mental health and wellbeing by reducing car dependence and residents' exposure to air and noise pollution from associated traffic. However, as transport energy use remains dominated by fossil fuels, the release of greenhouse gases from modes of public transport, most notably from rail transport, is still likely.

Recommendation: The Principles, Objectives and Public Transport Strategy should support the uptake of electric vehicle usage (i.e. through electric vehicle charging points) and support the transition to an electric fleet of public buses.

D.108 A mixed effect (significant positive / minor negative) is identified for EPO **3: Air quality and climate change mitigation**. The objective will help encourage a modal shift to public transport and will reduce dependency on petrol / diesel private vehicles thus lowering transport-related emissions and Longford's contribution to climate change. Additionally, the objective has an overall aim of reducing the environmental impact of transportation generally. However, as transport energy use remains dominated by fossil fuels, the release of greenhouse gases from modes of public transport, most notably from rail transport, is still likely.

D.109 Uncertain effects are identified for EPOs **4: Flood risk and climate change adaptation**, **5: Soil** and **6: Water**. The objective seeks to encourage the use of public transport but does not identify the location of proposed public transport infrastructure. Therefore, it is uncertain whether the proposals may be in areas at high risk of flooding, or on high quality agricultural land, or whether

they will affect the quality of waterbodies / groundwater. The effects will depend on the location and design of permeability interventions.

D.110 An uncertain minor positive effect is identified for EPO 7: **Cultural heritage including architectural and archaeological heritage**. A key element of the regeneration of Longford Town is the creation of enhanced accessibility and sustainability mobility through the town. Prioritising improved public transport will help enhance the accessibility to historic areas and heritage assets for local people and tourists. Furthermore, the accessibility of public transport reduces the need to travel by diesel and petrol private vehicles which will reduce greenhouse gas emissions and congestion, thereby helping to minimise degradation of heritage assets and improve their settings. This effect is uncertain as it will depend on the design and location of public transport interventions.

D.111 An uncertain minor positive effect is identified for EPO 8: **Landscape**. Improved public transport connectivity will help reduce private car use and minimise the adverse effects that petrol and diesel private vehicles have on landscape and townscape character, including through noise, air and light pollution. Additionally, improvements to public transport will enhance urban and rural connectivity and ensure there is better access to valued landscapes, townscapes and viewpoints by sustainable modes. The effect is uncertain as it will depend on the design and location of public transport interventions.

D.112 A significant positive effect is identified for EPO 9: **Material assets** as the objective will deliver improved public transport infrastructure and services to help meet the demands of a growing population in Longford and will help facilitate the modal shift away from private vehicle use and support a reduction in the energy demand from the transport sector.

Objective D: Integration of land use and transport

D.113 Objective D aims to improve the integration of existing and future land use and transport networks.

D.114 An uncertain mixed effect (minor positive / minor negative) is identified for EPO 1: **Biodiversity flora and fauna**. There may be indirect benefits for species from improved air quality due to an integrated transport system and reduction in reliance on car journeys. However, there may also be adverse effects on species and habitats due to new transport infrastructure development and land use change. The effect is uncertain and will depend on the way in which land use and transport are integrated.

D.115 A significant positive effect is identified for EPO 2: **Population and human health**. The objective aims to ensure land use change and future transport networks are well integrated. This is likely to help ensure a future transport system that provides improved access to services, facilities and employment opportunities and reduced commuting times.

D.116 A significant positive effect is identified for EPO 3: **Air quality and climate change mitigation** as the objective focuses on developing a transport network that is well integrated with future land use. This is likely to reduce the need to travel by private vehicle and reduce unnecessary journeys by petrol / diesel private vehicles, thus lowering transport-related emissions and Longford's contribution to climate change.

D.117 Uncertain mixed effects (minor positive / minor negative) are identified in relation to EPO 4: **Flood risk and climate change**, EPO 5: **Soil** and EPO 6: **Water** as the objective supports the appropriate integration of transport and land use, which may include locating transport infrastructure in sustainable locations that take into account the sensitivities of the soil and water environment, including avoiding areas impacted by flooding; delivering green and blue infrastructure as part of new transport projects; incorporating

Sustainable urban Drainage Systems (SuDS) as part of new transport and active travel schemes; and supporting the regeneration of Longford Town's brownfield land. However, depending on the design and location of the transport infrastructure, there may be adverse effects on the soil and water environments due to new transport infrastructure. Therefore, the effects are uncertain.

D.118 An uncertain mixed effect (minor positive / minor negative) is identified for EPO 7: **Cultural heritage including architectural and archaeological heritage**. A key element of the regeneration of Longford Town will be the creation of enhanced accessibility and sustainable mobility within the town and this objective aims to carefully integrate transport planning with land use planning. This is likely to help enhance the accessibility to historic areas and help improve the setting of historic assets. However, there may also be adverse effects on the historic environment due to new transport infrastructure development and land use change.

D.119 An uncertain mixed effect (minor positive / minor negative) is identified for EPO 8: **Landscape** as the objective supports the integration of land use and transport planning to ensure a suitable transport system that is cohesive with the land use of the town. This will likely support a modal shift away from cars and help minimise the adverse effects of petrol and diesel vehicles on landscape and townscape character, including through noise, air and light pollution. However, there may also be adverse effects on the landscape due to new transport infrastructure development and land use change.

D.120 A significant positive effect is identified in relation to EPO 9: **Material assets**. The objective aims to ensure the development of a transport network that is cohesive with future land use in Longford Town. As such, it is likely to help support a transport network that will fit the future needs of Longford Town and is sufficient to meet future demands.

Objective E: Parking

D.121 This objective aims to utilise existing on-street parking zones along certain streets to improve the public realm and provide other functions such as wider footpaths, cycle parking, outdoor dining areas and new trees/planting, etc.

8.11 A minor positive effect is identified for EPO 1: **Biodiversity flora and fauna**. The objective supports the reallocation of on-street car parking to provide new trees/planting, which will contribute to the network of functionally linked habitats in Longford Town. There may also be indirect benefits for species from improved air quality due to a reduction in road traffic and congestion where car parking has been removed and reallocated for other uses, thereby reducing unnecessary car journeys.

D.122 A significant positive effect is identified for EPO 2: **Population and human health**. Reduced on-street parking is likely to discourage unnecessary car journeys and support the modal shift away from car use. An improved public realm with new footpaths, cycle parking, outdoor dining areas and street greening is likely to help promote healthy lifestyles by encouraging active modes of transport such as walking and cycling. This is also likely to facilitate better access to services, facilities and employment opportunities by sustainable modes and reduce car dependence. The objective will also contribute to protecting physical and mental health and wellbeing by reducing residents' exposure to air and noise pollution from associated traffic along streets where parking has been reduced, and increase accessibility to public street space within the town.

D.123 A significant positive effect is identified for EPO 3: **Air quality and climate change mitigation** as the objective aims to re-allocate on-street parking space along certain streets within Longford Town. This is likely to discourage car use for unnecessary trips by reducing parking opportunities and contribute to the modal shift towards sustainable transport modes. An improved public realm, wider footpaths and cycle parking is likely to encourage walking and cycling in Longford Town and therefore will reduce dependency on petrol /

diesel private vehicles, thus lowering transport-related emissions and Longford's contribution to climate change.

D.124 Minor positive effects are identified for **EPO 4: Flood risk and climate change adaptation**, **EPO 5: Soil**, and **EPO 6: Water** as the reallocation of on-street car parking for other uses including for trees and planting is likely to benefit the soil and water environments.

D.125 A minor positive effect is identified for **EPO 7: Cultural heritage including architectural and archaeological heritage**. A key element of the regeneration of Longford Town will be enhanced accessibility and sustainability mobility within the town. The re-allocation of on-street car parking for an improved public realm, new footpaths, cycle parking, street dining and new trees/planting is likely to enhance the accessibility of historic areas and heritage assets by sustainable travel modes and improve the street experience for local people and visitors, as well as the setting of heritage assets. Additionally, reduced greenhouse gas emissions, traffic congestion and car-parking will help minimise degradation of heritage assets and improve their settings.

D.126 A significant positive effect is identified for **EPO 8: Landscape** The reallocation of car-parking space within Longford Town would reduce traffic and help minimise the adverse effects that busy roads can have on landscape and townscape character including through noise, light and air pollution. Additionally, new footpaths, outdoor dining, street furniture and tree planting has the potential to enhance visual amenity value and create a sense of place within Longford Town.

D.127 A minor positive effect is identified for **EPO 9: Material assets**. This objective supports the efficient re-allocation of road space for other functions including footpaths, outdoor dining and furniture. This will help support the modal shift away from private vehicles and reduce growing car dependency with a growing population, ensuring that roads are designed to meet future needs.

Objective F: Safety

D.128 Objective F aims to improve and enhance safety for all, especially for vulnerable road users.

D.129 A minor positive effect is identified for EPO 1: **Biodiversity flora and fauna**. There may be indirect benefits for species from improved air quality due to the focus on the prioritisation of other modes of travel such as walking above private vehicle.

D.130 A significant positive effect is identified for EPO 2: **Population and human health**. This central aim of the objective is to improve and enhance road safety for all, reducing risk of accidents and protecting road users. This includes vulnerable road users, such as pedestrians, cyclists, elderly people, infants and young children, disabled people and pregnant women, which is likely to help promote active travel throughout Longford Town, therefore reducing unnecessary car journeys and encouraging healthy living via active modes of travel.

D.131 A minor positive effect is identified for EPO 3: **Air quality and climate change mitigation**. Improving road safety, particularly for vulnerable road users is likely to encourage alternative travel modes such as walking and cycling. Interventions that support vulnerable road users (e.g. improved crossings and cycle lanes) are likely to help discourage unnecessary car journeys and reduce dependence on petrol / diesel private vehicles, thus lowering transport-related emissions within Longford Town.

D.132 Negligible effects are identified for EPOs 4: **Flood risk and climate change adaptation**, 5: **Soil** and 6: **Water**. The objective seeks to improve safety for road users which is unlikely to affect areas at risk of flooding, or the preservation / enhancement of soil resources or water quality.

D.133 A minor positive effect is identified for EPO 7: **Cultural heritage including architectural and archaeological heritage**. A key element of the

regeneration of Longford Town is the creation of enhanced accessibility and sustainability mobility through the town. Improved road safety, such as upgraded crossings, will help enhance the accessibility to historic areas and heritage assets for local people and tourists. Furthermore, improved pedestrian/cyclist safety encourages active travel and reduces the need to travel by diesel and petrol vehicles which will reduce greenhouse gas emissions and congestion, thereby helping to minimise degradation of heritage assets and improve their settings.

D.134 An uncertain minor positive effect is identified for EPO **8: Landscape** as improved pedestrian and cyclist safety will likely encourage active travel and will help minimise the adverse effects of petrol and diesel vehicles on landscape and townscape character, including noise, air and light pollution. Additionally, enhanced road safety opportunities improve urban and rural connectivity for active travel modes and provide better access to valued landscapes, townscapes and viewpoints.

D.135 A minor positive effect is identified for EPO **9: Material assets**. Improved road safety, new and upgraded crossings and dedicated infrastructure is likely to help support the modal shift from private car to active travel modes such as walking and cycling. It is likely to help reduce road accidents and create a sense of safety for all transport network users.

Objective G: Traffic management

D.136 Objective G seeks to reduce through-traffic by providing interventions.

D.137 A minor positive effect is identified for EPO **1: Biodiversity flora and fauna** as there is potential for indirect positive impacts for species where through-traffic interventions have reduced air and noise pollution in certain areas.

D.138 A significant positive effect is identified in relation to EPO **2: Population and human health**. The objective aims to reduce through-traffic within Longford

Appendix D SEA matrices

Town which is likely to reduce residents' exposure to air and noise pollution from traffic, helping protect their physical and mental wellbeing. Additionally, reduced through-traffic will likely improve road user safety and reduce the risk of accidents within the town.

D.139 A significant positive effect is identified for EPO **3: Air quality and climate change mitigation**. The objective will reduce the presence of petrol / diesel private vehicles travelling through Longford Town, thus lowering transport-related emissions, particularly within the town centre. Interventions will likely reduce unnecessary car journeys and help encourage alternative modes of travel and will help reduce Longford's contribution to climate change.

D.140 Negligible effects are identified for EPOs **4: Flood risk and climate change adaptation**, **5: Soil** and **6: Water** as reducing through-traffic is unlikely to have an effect on the water or soil environments.

D.141 A minor positive effect is identified for EPO **7: Cultural heritage including architectural and archaeological heritage**. Reducing through-traffic through Longford Town will reduce greenhouse gas emissions and congestion, thereby helping to minimise the degradation of heritage assets within the town.

D.142 A minor positive effect is identified for EPO **8: Landscape** as providing interventions to reduce through-traffic through Longford Town will help minimise the adverse effects of petrol and diesel vehicles on landscape and townscape character, including noise, air and light pollution.

D.143 A significant positive effect is identified for EPO **9: Material assets** as the objective aims to provide interventions that reduce through-traffic in Longford Town. This is likely to ease traffic and congestion on the road network within the town and help develop a more balanced transport system within the town.

Objective H: Feasibility and value for money

D.144 This objective aims to potentially provide good value for money.

D.145 Negligible effects are identified for EPO 1: **Biodiversity, flora and fauna**, 2: **Population and human health**, 3: **Air quality and climate change mitigation**, 4: **Flood risk and climate change mitigation**, 5: **Soil**, 6: **Water**, 7: **Cultural heritage including architectural and archaeological heritage**, and 8: **Landscape** as the objective focuses on ensuring proposals are assessed on their cost in order to prioritise best value for money which will not necessarily determine the impacts of interventions on each of these environmental factors.

D.146 An uncertain minor positive effect is identified for EPO 9: **Material assets** as the objective aims to ensure that proposals are assessed as good value for money which is likely to optimise the re-use of existing infrastructure and intelligent use of resources, although this is uncertain.

Strategies in the Draft Longford Town Local Transport Plan

Pedestrian Strategy

D.147 The Pedestrian Strategy focuses on improving the connectivity and attractiveness of walking within Longford Town. Interventions set out in the strategy include the provision of new pedestrian crossings (W1-W30), new footpaths (F1-F7 and F19) and footpath upgrades (F8-F17 and F19-F21).

Table D.5: Summary of SEA effects of the Pedestrian Strategy

Environmental Protection Objective	Pedestrian Strategy
1. Biodiversity, flora and fauna	+/-?
2. Population and human health	++
3. Air quality / climate change mitigation	++
4. Flood risk / climate change adaptation	+
5. Soil	+
6. Water	+/-?
7. Cultural heritage	+?
8. Landscape	+?
9. Material assets	++

D.148 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 1: Biodiversity, flora and fauna**. The creation of new links between neighbourhoods may incorporate habitat enhancement measures as part of their delivery, thereby contributing to the network of functionally linked habitats in Longford Town, although this is uncertain. There may be indirect benefits for species from improved air quality due to a reduction in road traffic and congestion from people using new / improved pedestrian routes. There are no pedestrian interventions located along the Royal Canal pNHA so there is unlikely to be significant adverse effects to the pNHA, however, the development of improvements to the footpaths proposed under F9 and F11 will improve access to the areas near the pNHA which may result in increased recreational pressure on the pNHA. Furthermore, there may be species disturbance from the installation of lighting along the pedestrian routes.

D.149 A significant positive effect is identified for **EPO 2: Population and human health**. The Pedestrian Strategy aims to contribute to the national policy

Appendix D SEA matrices

goal of improving public health and enhancing social inclusion. According to multi-criteria analysis of the scheme, footpaths F4, F5, and F18 offer some benefit/improvement and F9-F12 offer significant benefit/improvement to the primary pedestrian network or a key desire line. Similarly, several footpaths (particularly F1, F4-F7 and F9) offer improvements to a key route to school while F1-F7, F9-F11 and F14 improve safety. Other schemes, for example F15-F21, offer some disadvantage in terms of safety when compared to other schemes. Overall, the improvements offered by several footpath interventions is likely to increase access along the primary pedestrian network/key desire lines, improve safety, and improve part of a key route to school, with some routes offering more advantage than others. For pedestrian crossings, W4, W6 W8-W13 and W26-30 are located along a major road or a key desire line which will improve connectivity to services and facilities by modes of active travel. Pedestrian crossings W9-W15, W19, W21 and W26-30 improve part of a key route to school. Additionally, pedestrian crossings W4, W6, W11-13, W19 and W27-30 offer significant improvements in terms of safety. Many of the proposed pedestrian connections (e.g., F2-F4, F9-F13, F15-F16, F20-F21) are located in 'disadvantaged' areas, according to the Pobal HP Deprivation Index, which will improve access to key employment and education locations by active travel, thus removing one of the barriers to employment for many social groups. Overall, it is likely that the Pedestrian Strategy will improve connectivity for walking in Longford Town. Improving the attractiveness and safety of walking as a mode of transport promotes healthy lifestyles and offers opportunities for people to engage in physical activity. Additionally, improving pedestrian access to local services, facilities, residential and employment areas will reduce dependence on petrol /diesel private vehicles for shorter journeys. Improved safety with better footpaths and upgraded crossings will reduce the risk of accidents. Furthermore, improving active travel infrastructure in the areas with high levels of relative deprivation and unemployment, and lower levels of educational attainment, will help to reduce spatial connectivity inequalities that impact employment and education attainment.

D.150 A significant positive effect is identified for EPO 3: **Air quality and climate change mitigation**. The Pedestrian Strategy aims to contribute to the national policy goal of reducing greenhouse gas emissions. As set out above in relation to EPO 2, several of the interventions proposed in the Pedestrian

Appendix D SEA matrices

Strategy will offer significant benefit to main pedestrian routes, routes to schools and pedestrian safety. As such, walking is likely to be more attractive as a mode of travel for shorter journeys. This is likely to reduce dependence on petrol / diesel vehicles and thus lower transport-related emissions and Longford's contribution to climate change.

D.151 The Pedestrian Strategy details a scheme of new footpaths and crossings within Longford Town. The areas of highest flood risk in Longford Town are largely avoided however some crossing interventions are located at areas of flood risk (W6, W13). The Pedestrian Strategy requires improvements to existing footpaths to include upgrading their surface and improving drainage. This is likely to help reduce the risk and effects of flooding within Longford Town, particularly along pedestrian routes. An overall minor positive effect is identified for **EPO 4: Flood risk and climate change adaptation**.

D.152 A minor positive effect is identified for **EPO 5: Soil** as the improvements at F12 (widening of Geraldine's Terrace) and upgraded crossing (W15) are likely to improve access to St. Mel's Cathedral Geological Site. In general, the proposals outlined in this strategy are likely to have an indirect positive effect on the regeneration of Longford Town's infill / brownfield land by supporting the sustainable transport elements of the regeneration programme.

D.153 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 7: Water**. The Pedestrian Strategy requires improvements to existing footpaths to include upgrading their surface and improving drainage. This is likely to positively affect the drainage of surface water from pedestrian routes. New and/or improved pedestrian routes F3, F4, F9 and F16 are located in close proximity to water bodies including the River Camlin and the Royal Canal. The development or upgrading of footpaths over/near waterbodies may have adverse effects on the quality of water bodies and groundwater.

D.154 An uncertain minor positive effect is identified for **EPO 7: Cultural heritage including architectural and archaeological heritage**. The Pedestrian Strategy aims to improve pedestrian access throughout Longford Town. This includes a number of new footpaths, footpath upgrades and new

crossings within Longford Town Centre (along Main Street, New Street and Battery Road where there a high proportion of buildings listed on the Record of Protected Structures). For example, F4 provides a new footpath from the St John's Church to the cinema outside Sean Connolly Barracks, improving pedestrian access to these historic assets. As such, the Pedestrian Strategy is likely to improve pedestrian access to historic areas of Longford Town. A key element of the regeneration of Longford Town is the creation of enhanced accessibility and sustainability mobility through the town. By encouraging walking over travel by petrol / diesel vehicles, indirect positive effects are also likely as reducing greenhouse gas emissions and congestion in these areas will help reduce the degradation of heritage assets and improve their settings.

D.155 An uncertain minor positive effect is identified for EPO **8: Landscape**. The Pedestrian Strategy sets out a number of improvements that will enhance pedestrian access throughout Longford Town's built-up area, which is likely to enhance the townscape of the town by improving access to valued landscapes, townscapes and viewpoints, and reducing the adverse impacts that busy roads can have on landscape and townscape character, including through noise, air and light pollution. However, the Pedestrian Strategy could be strengthened by encouraging the retention and planting of green infrastructure along pedestrian routes to protect landscape character and create a sense of place.

Recommendation: The objectives of the Pedestrian, Cycling and Permeability Strategies should support the retention and planting of green infrastructure, where appropriate, as part of active travel developments which will enhance the setting and visual amenity of the landscape and historic environment and will support habitat creation, drainage, and soil quality.

D.156 A significant positive effect is identified for EPO **9: Material assets** as the Pedestrian Strategy directly supports this objective. The Pedestrian Strategy will deliver suitable pedestrian infrastructure to help meet the needs of a growing population in Longford Town and will help facilitate the modal shift

away from private vehicle use, supporting a reduction in energy demand from the transport sector.

Cycle Strategy

D.157 The Cycling Strategy aims to promote cycling as a safe and convenient mode of transport within Longford Town. Interventions included within the strategy include new cycling infrastructure such as cycle routes (C1-C24), 'quiet streets' (Q1-Q10) and improved bicycle parking (BP1-BP18).

Table D.6: Summary of SEA effects of the Cycle Strategy

Environmental Protection Objective	Cycle Strategy
1. Biodiversity, flora and fauna	--/+?
2. Population and human health	++
3. Air quality / climate change mitigation	++
4. Flood risk / climate change adaptation	--?
5. Soil	+
6. Water	-?
7. Cultural heritage	+?
8. Landscape	+?
9. Material assets	++

D.158 An uncertain mixed effect (minor positive / significant negative) is identified for EPO 1: **Biodiversity, flora and fauna**. The creation of new cycle infrastructure may incorporate habitat enhancement measures as part of their delivery, thereby contributing to the network of functionally linked habitats in Longford Town, although this is uncertain. There may be indirect benefits for

species from improved air quality due to a reduction in road traffic and congestion from increased cycling opportunities. However, the development of new cycle routes may result in species disturbance (e.g. from the installation of lighting along cycle routes or from increased recreational pressure) and habitat damage. The Cycling Strategy aims to enhance the Royal Canal Greenway terminus as a destination for cyclists and walkers. This is likely to increase recreational pressure on the pNHA and may have adverse effects on biodiversity including disturbance to species and habitat damage. There may also be adverse effects from increased recreational pressure on the Royal Canal pNHA from the following proposals:

- Cycle route C15 Park Road / Prospect Woods (Secondary route)
- Quiet street Q8 Royal Canal Avenue / Park Villas / Teffia Park.

D.159 A significant positive effect is identified for EPO 2: **Population and human health**. The Cycling Strategy has the overall aim of reducing congestion, improving air quality, and enhancing the health and wellbeing of residents. Key objectives include improving connectivity of the cycle route and providing convenient cycle storage. The multi-criteria analysis of the Cycling Strategy identified that C1-C5, C9 and C19 all offer significant benefit as they are located along a major road or a key desire line which will improve connectivity to services and facilities by modes of active travel. Additionally, C3-C5 would result in significant improvement to a key school route. The majority of the schemes provide significant benefit in terms of safety.

D.160 All 'quiet street' proposals provide some or significant benefit in terms of linking routes on the primary cycle network together. Several quiet streets (particularly Q2-Q5 and Q8) provide an alternative to an unattractive/unsafe route. Q1 and Q2 offer some improvement to a key route to school. Additionally, implementing Q1-Q3 and Q5 could provide significant improvement by facilitating the removal of a through route for cars. The cycle parking scheme offers a number of bike storage areas located at key destinations (particularly BP2-BP3, BP9, BP11 and BP13). The majority of the interventions can be easily accessed from the proposed cycling network and BP2, BP3, BP9 and BP11 allow for interchange with other transport modes (train and bus links).

D.161 Overall, the Cycle Strategy creates a more integrated, convenient and attractive environment for cycling and is likely to encourage cycling as a mode of transport in Longford Town. This will promote healthy lifestyles by encouraging active travel, and reduce car dependence, helping mitigate residents' exposure to noise/air/vibration/light pollution from road-based traffic, and protecting physical and mental wellbeing. Additionally, these interventions are likely to help facilitate access to services, facilities and employment opportunities by sustainable modes. This includes a new cycle route (C7) providing connections between McEoin Park and the town centre. This will improve access to services, facilities and employment opportunities for the most deprived areas of Longford Town. Overall, a significant positive effect is identified for this EPO.

D.162 A significant positive effect is identified for EPO 3: **Air quality and climate change mitigation** for the Cycling Strategy and proposed schemes. Through the development of a safe and accessible cycling network, the Cycling Strategy aims to reduce traffic congestion and improve air quality. As set out above in relation to EPO 2, several of the interventions proposed in the Cycling Strategy will offer significant benefit to linking the main cycling routes to form a comprehensive network of cycling infrastructure, providing cycling routes to schools, and cyclist safety. As such, cycling is likely to be more attractive as a mode of travel for shorter journeys. This is likely to reduce dependence on petrol / diesel vehicles and thus lower transport-related emissions and Longford's contribution to climate change.

D.163 An uncertain significant negative effect is identified for EPO 4: **Flood risk and climate change adaptation**. The Cycling Strategy includes a number of cycling schemes located within areas of flood risk in Longford Town. Cycle routes C2, C24, C11, C16, C12, C14, C9 and C10 are all located along the River Camlin or in the west of the town which are at greater risk of flooding. Whilst primarily located along existing road routes, the development of new infrastructure and new connections could be at risk of flooding (e.g. C24 along the River Camlin).

Recommendation: The objectives of the Pedestrian, Cycling and Permeability Strategies should support flood resilient design of new active travel infrastructure.

D.164 A minor positive effect is identified for EPO 5: **Soil**. The cycle routes proposed at C3 and C11 are likely to improve access to St. Mel's Cathedral Geological Site. Furthermore, the proposals outlined in the scheme are likely to have an indirect positive effect on the regeneration of Longford Town's infill / brownfield land by supporting the sustainable transport elements of the regeneration programme.

D.165 An uncertain minor negative effect is identified for EPO 6: **Water**. The Cycling Strategy proposes the development or upgrading of cycling routes across Longford Town. C15 and C19 are located along the Royal Canal. C2, C6, C11, C12, C22, C24 traverse the River Camlin. There is potential for adverse effects on water quality associated with construction work at these routes, although this is uncertain.

D.166 An uncertain minor positive effect is identified for EPO 7: **Cultural heritage including architectural and archaeological heritage**. The Cycling Strategy introduces a number of new and improved cycle links, including through Battery Road Architectural Conservation Area (C4) and through Longford Town centre where there are a large number of structures listed on the Record of Protected Structures (e.g. C1, C3). For example, C2, C4 and C12 improve cycling access in and around Sean Connolly Barracks and routes C3, C5 and C11 provide cycle access to St. Mel's Cathedral. As such, the Cycling Strategy will help improve cycle access to historic areas and heritage assets within Longford Town. A key element of the regeneration of Longford Town is the creation of enhanced accessibility and sustainability mobility through the town. By encouraging cycling over travel by petrol / diesel vehicles, indirect positive effects are also likely as reducing greenhouse gas emissions and congestion in these areas will help reduce the degradation of heritage assets and improve their settings.

D.167 An uncertain minor positive effect is identified for EPO 8: **Landscape**. The Cycling Strategy seeks to enhance the Royal Canal Greenway terminus to make it an attractive destination for walkers and cyclists which will improve the townscape/landscape character in that area of Longford Town. Overall, the Cycling Strategy will improve urban and rural connectivity between Longford Town and the surrounding landscape. The proposed cycle schemes are very comprehensive and will provide improved access to valued landscapes, townscapes, and viewpoints by sustainable travel modes, thus reducing the adverse impacts that road traffic can have on landscape and townscape character, including through noise, air and light pollution. However, the Cycling Strategy could be strengthened by encouraging the retention and planting of green infrastructure along cycling routes to protect landscape character and create a sense of place.

Recommendation: The objectives of the Pedestrian and Cycling Strategies should support the retention and planting of green infrastructure, where appropriate, as part of active travel developments which will enhance the setting and visual amenity of the landscape and historic environment and will support habitat creation and species movement, drainage, and soil quality.

D.168 A significant positive effect is identified for EPO 9: **Material assets** as the Cycling Strategy directly supports this objective. The Cycling Strategy will deliver suitable cycling infrastructure to help meet the needs of a growing population in Longford and help facilitate the modal shift away from private vehicle use, supporting a reduction in energy demand from the transport sector.

Permeability Strategy

D.169 The Permeability Strategy aims to improve the connectivity of different areas of Longford Town, particularly for walking and cycling, to create a more cohesive and integrated town which links between neighbourhoods.

Appendix D SEA matrices

Interventions include 23 permeability opportunities (PY1-PY23) which link and connect key destinations such as residential areas, schools, commercial areas, parks and public transport hubs.

Table D.7: Summary of SEA effects of the Permeability Strategy

Environmental Protection Objective	Permeability Strategy
1. Biodiversity, flora and fauna	+/-?
2. Population and human health	++
3. Air quality / climate change mitigation	++
4. Flood risk / climate change adaptation	--?
5. Soil	+
6. Water	-?
7. Cultural heritage	+?
8. Landscape	+?
9. Material assets	++

D.170 An uncertain mixed effect (minor positive / minor negative) is identified for **EPO 1: Biodiversity, flora and fauna**. The creation of new links between neighbourhoods may incorporate habitat enhancement measures as part of their delivery, thereby contributing to the network of functionally linked habitats in town, although this is uncertain. There may be indirect benefits for species from improved air quality due to a reduction in road traffic and congestion from people using new permeable routes for walking/cycling. However, there may also be adverse effects from disturbance to species and habitat damage from increased recreational pressure along the Royal Canal pNHA and River Camlin from the following proposals:

- PY7 Royal Canal to Camlin Meadow
- PY10 Royal Canal to N63.

Appendix D SEA matrices

- PY11 Royal Canal to Mastertech Business Park.
- PY17 Ballinalee Road to the Mall Complex
- PY18 Abbeycartron to Templemichael
- PY2 Connaught Rd to Battery Ct

D.171 A significant positive effect is identified for EPO 2: **Population and human health**. The Permeability Strategy identifies a number of interventions that will improve connectivity between neighbourhoods and improve the convenience of local travel, particularly for walking and cycling. Key aims include improving permeability for active travel users, particularly for orbital journeys; linking of key land use areas (e.g. residential estates and commercial areas); planning links for future development; and improving the attractiveness of poorly designed existing connections.

D.172 In particular PY2, PY9, PY10 and PY17 have been identified as offering significant permeability improvements as they form part of the primary network or a key desire line. Additionally, PY1, PY2, PY4, PY7 provide significant benefit to key routes to schools. PY1, PY8, and PY9 have been identified as offering significant improvements in terms of safety. Many of the proposed permeability routes (e.g., PY5-PY8 and PY10-PY12) are located in ‘disadvantaged’ areas, according to the Pobal HP Deprivation Index, which will improve access to key employment and education locations by active travel, thus removing one of the barriers to employment for many social groups.

D.173 Overall, a significant positive effect is identified for the Permeability Strategy for this EPO as interventions are likely to encourage walking and cycling and reduce reliance on cars for shorter journeys. This will encourage healthy lifestyles by promoting active travel, improve access to services, facilities and employment opportunities, and reduce residents’ exposure to noise/air/vibration/light pollution associated with traffic as the interventions will help support the modal shift away from private vehicles. The Permeability Strategy also addresses the spatial connectivity inequality that currently exists in Longford Town by connecting previously disconnected areas and areas with relatively high levels of deprivation to local services and facilities, creating a

cohesive and integrated town that is easier to navigate by active travel which will be particularly beneficial for people on low incomes and less mobile people, including elderly people, infants and young children, disabled people and pregnant women, to access services and facilities.

D.174 A significant positive effect is identified for EPO 3: **Air quality and climate change mitigation**. As set out above in relation to EPO 2, several of the interventions proposed in the Permeability Strategy will offer significant benefit to improving travel between neighbourhoods by more sustainable modes of transport, particularly walking and cycling. As such, walking and cycling are likely to become more attractive for shorter journeys - particularly orbital journeys with previously poor connectivity. These interventions are likely to reduce dependence on petrol / diesel vehicles and thus lower transport-related emissions and Longford's contribution to climate change.

D.175 An uncertain significant negative effect is identified for EPO 4: **Flood risk and climate change adaptation**. The Permeability Strategy includes a number of interventions which will require the development of new infrastructure in areas of Longford Town at higher risk of flooding, particularly along the River Camlin and towards the west of the town. PY2, PY17, PY18 traverse the River Camlin. PY5 and PY6 are located in areas at risk of flooding towards the west of the town and PY21 connects with Cloonbolt via an area at higher risk of flooding.

Recommendation: The objectives of the Pedestrian, Cycling and Permeability Strategies should support flood resilient design of new active travel infrastructure.

D.176 A minor positive effect is identified for EPO 5: **Soil** as the interventions outlined in this strategy are likely to have an indirect positive effect on the regeneration of Longford Town's infill / brownfield land by supporting the sustainable transport elements of the regeneration programme.

D.177 An uncertain minor negative effect is identified for EPO **6: Water**. The Permeability Strategy proposes the creation of walking/cycling routes in Longford Town. PY7, PY10 and PY11 traverse the Royal Canal while PY2, PY17 and PY18 traverse the River Camlin. There is potential for adverse effects on the quality of water bodies and groundwater associated with the construction of permeability interventions, although this is uncertain.

D.178 An uncertain minor positive effect is identified for EPO **7: Cultural heritage including architectural and archaeological heritage**. The Permeability Strategy aims to improve connectivity for sustainable travel modes between neighbourhoods in Longford. This includes improved connections within the town centre. PY1 and PY2 improve connections in and around Sean Connolly Barracks and PY8 improves access to Longford Railway Station. However, the majority of permeability interventions are located in residential areas of Longford Town away from the main historic areas.

D.179 An uncertain minor positive effect is identified for EPO **8: Landscape**. The Permeability Strategy proposes a number of permeability routes that will improve connectivity with the surrounding rural area of Longford Town. These include PY13, PY18, and PY21-23. Additionally, permeability enhancements within the built-up area of the town will improve urban connectivity via sustainable travel modes. It will also contribute to the development of a more cohesive and connected townscape. However, the Permeability Strategy could be strengthened by encouraging the retention and planting of green infrastructure along permeability routes to protect landscape character and create a sense of place.

Recommendation: The objectives of the Pedestrian, Cycling and Permeability Strategies should support the retention and planting of green infrastructure, where appropriate, as part of active travel developments which will enhance the setting and visual amenity of the landscape and historic environment and will support habitat creation, drainage, and soil quality.

D.180 A significant positive effect is identified for EPO 9: **Material assets** as the Permeability Strategy directly supports this objective. The Permeability Strategy will deliver suitable walking and cycling infrastructure to help meet the needs of a growing population in Longford and help facilitate the modal shift away from private vehicle use, supporting a reduction in energy demand from the transport sector.

Public Transport Strategy

D.181 The Public Transport Strategy aims to improve the accessibility and attractiveness of public transport in Longford Town. The scheme includes general improvements to the train station (PT1), a train station accessibility study to the east (PT2), bus stop upgrades (PT3), a bus route and frequency study (PT4), bus stop improvements at Longford Station (PT5) and a proposed new local bus route (PT6). The strategy aims to ensure that interchange between public transport modes is smooth and public transport is an attractive travel option in Longford Town.

Table D.8: Summary of SEA effects of the Public Transport Strategy

Environmental Protection Objective	Public Transport Strategy
1. Biodiversity, flora and fauna	?+
2. Population and human health	++/-
3. Air quality / climate change mitigation	++/-
4. Flood risk / climate change adaptation	0
5. Soil	+
6. Water	0
7. Cultural heritage	++?

Environmental Protection Objective	Public Transport Strategy
8. Landscape	+?
9. Material assets	++

D.182 An uncertain minor positive effect is identified for EPO 1: **Biodiversity, flora and fauna**. There is unlikely to be any direct effects on biodiversity, flora and fauna from several of the proposals in the Public Transport Strategy (e.g. bus stop and train station improvements), however, there may be indirect benefits for species from improved air quality due to a reduction in road traffic and congestion from people being encouraged to use public transport.

D.183 A mixed effect (significant positive / minor negative) effect is identified for EPO 2: **Population and human health** as the Public Transport Strategy will introduce a number of interventions that will improve the attractiveness of public transport within Longford Town. PT1, PT4 and PT6 offer particular benefit in enabling the interchange with other transport modes. This includes provision of a new local bus route (PT6) that will enhance access to local services and employment opportunities within Longford Town by sustainable modes. This includes a proposed new bus stop at McEoin Park which will improve public transport accessibility to the most deprived areas of Longford Town. Improving the attractiveness and accessibility of public transport within Longford Town will help support the modal shift away from private vehicles thus reducing local people's exposure to transport-related pollution associated with private vehicle use, thereby helping protect physical and mental health and wellbeing. Additionally, the Public Transport Strategy will improve access to services, facilities and employment opportunities by sustainable travel modes, including for the most deprived areas of Longford Town. However, as transport energy use remains dominated by fossil fuels, the release of greenhouse gases from modes of public transport, most notably from rail transport, is still likely.

Recommendation: The Principles, Objectives and Public Transport Strategy should support the uptake of electric vehicle usage (i.e. through

electric vehicle charging points) and support the transition to an electric fleet of public buses.

D.184 A mixed effect (significant positive / minor negative) is identified for EPO **3: Air quality and climate change mitigation**. The Public Transport Strategy aims to contribute to the national policy goal of reducing greenhouse gas emissions. As set out above in relation to EPO 2, several of the interventions proposed in the Public Transport Strategy will offer significant benefit the accessibility and attractiveness of public transport. As such, visitors and residents are likely to be less dependent on private vehicles, particularly where a new local bus route is offered for shorter journeys. This is likely to reduce dependence on petrol / diesel vehicles and thus lower transport-related emissions and Longford's contribution to climate change. However, as transport energy use remains dominated by fossil fuels, the release of greenhouse gases from modes of public transport, most notably from rail transport, is still likely.

D.185 Negligible effects are identified for EPO **4: Flood risk and climate change adaptation** and EPO **6: Water** as the interventions proposed under the Public Transport Strategy are not located in areas at risk of flooding and are not likely to directly affect the quality of waterbodies or groundwater.

D.186 A minor positive effect is identified for EPO **5: Soil** as the new bus stop located on the new bus route (PT6) at St. Mel's Cathedral will improve access to the Geological Site. Additionally, the interventions outlined in this strategy are likely to have an indirect positive effect on the regeneration of Longford Town's infill / brownfield land by supporting the sustainable transport elements of the regeneration programme.

D.187 A minor positive effect is identified for EPO **7: Cultural heritage including architectural and archaeological heritage**. The new bus route will serve Battery Road and Longford Town Centre, where the majority of heritage assets are located in Longford Town (Battery Road Architectural Conservation Area and numerous Record of Protected Structures), improving sustainable access to historic areas of the town. Indirect positive effects are also likely as reducing greenhouse gas emissions and congestion in these areas will help

minimise the degradation of heritage assets and improve their settings. The Public Transport Strategy includes general improvements to the train station (PT1) including pedestrian access and cycle parking. This will improve access to and potentially the setting of the Railway Station (listed on the Record of Protected Structures) and surrounding heritage assets.

D.188 An uncertain minor positive effect is identified for EPO 8: **Landscape**. The Public Transport Strategy sets out a number of improvements that will enhance public transport access throughout Longford Town, which is likely to enhance the townscape of the town by improving access to valued landscapes, townscapes and viewpoints, and reducing the adverse impacts that busy roads can have on landscape and townscape character, including through noise, air and light pollution. However, the Public Transport Strategy could be strengthened by encouraging the retention and planting of green infrastructure along public transport routes to protect landscape character and create a sense of place.

Recommendation: The objectives of the Public Transport Strategy should support the retention and planting of green infrastructure, where appropriate, along public transport routes which will enhance the setting and visual amenity of the landscape and historic environment and will support habitat creation, drainage, and soil quality.

D.189 A significant positive effect is identified for EPO 9: **Material assets**. The Public Transport Strategy will deliver improved public transport infrastructure and an additional bus route to help meet the needs of a growing population in Longford and help facilitate the modal shift away from private vehicle use, supporting a reduction in energy demand from the transport sector.

Traffic Management Strategy

D.190 The Traffic Management Strategy aims to rationalise the vehicular movement in the town and improve circulation. The scheme includes:

- One-way system on St. Mel's Road (TM1).
- Vehicular restriction at Longford Shopping Centre Main St. entrance (TM2).
- Re-organisation of the Market Square/Kilashee St. one-way system (TM3).
- Filtered permeability/quiet streets on five roads (TM4 – TM8).

Table D.9: Summary of SEA effects of the Traffic Management Strategy

Environmental Protection Objective	Traffic Management Strategy
1. Biodiversity, flora and fauna	?+
2. Population and human health	++
3. Air quality / climate change mitigation	++
4. Flood risk / climate change adaptation	0
5. Soil	+
6. Water	0
7. Cultural heritage	+?
8. Landscape	+?
9. Material assets	+

D.191 An uncertain minor positive effect is identified for EPO 1: **Biodiversity, flora and fauna**. There is unlikely to be any direct effects on biodiversity, flora and fauna from the Traffic Management Strategy, however, there may be indirect benefits for species from improved air quality due to a reduction in road traffic and congestion from the implementation of traffic calming measures, such as one-way and quiet streets, and from the improved circulation of traffic in the town.

D.192 A significant positive effect is identified for EPO 2: **Population and human health**. The Traffic Management Strategy introduces a number of interventions such as one-way roads, quiet streets and filtered permeability. These aim to simplify traffic movements and reduce traffic volumes in residential areas. As set out in relation to the Cycling Strategy, the 'quiet street' interventions have been identified as offering significant benefit in terms of linking routes in the primary cycle network, providing alternatives to unsafe/unattractive routes for cycling, and facilitating through-routes for cars. TM2-TM8 have been identified as offering significant improvement in the provision of additional space/priority to active travel modes. All eight interventions have been identified as not causing unreasonable increases in traffic levels. Overall, a significant positive effect is identified for this EPO as the Traffic Management Strategy is expected to help reduce traffic and congestion within key areas of Longford Town, particularly residential areas. This will help reduce residents' exposure to pollution associated with private vehicles thus helping protect residents physical and mental health/wellbeing. Additionally, the re-allocation of road space in favour of active travel modes will help promote the modal shift towards walking/cycling and encourage healthy lifestyles.

D.193 A significant positive effect is identified for EPO 3: **Air quality and climate change mitigation**. As set out above, the Traffic Management Strategy aims to rationalise vehicular movement in the town centre to improve circulation. Additionally, road space will be re-allocated to support alternative modes of travel, such as walking and cycling. The scheme interventions will reduce the presence of petrol / diesel private vehicles travelling through Longford Town, thus lowering transport-related emissions, particularly within the town centre. Interventions will likely reduce unnecessary car journeys and help

encourage alternative modes of travel such as walking and cycling in the town centre, thus helping reduce Longford's contribution to climate change.

D.194 Negligible effects are identified for **EPO 4: Flood risk and climate change adaptation** and **EPO 6: Water** as the interventions proposed under the Traffic Management Strategy are not located in areas at risk of flooding and are not likely to directly affect the quality of waterbodies or groundwater.

D.195 A minor positive effect is identified for **EPO 5: Soil** as the interventions outlined in this strategy are likely to have an indirect positive effect on the regeneration of Longford Town's infill / brownfield land by supporting the sustainable transport elements of the regeneration programme.

D.196 A minor positive effect is identified for **EPO 7: Cultural heritage including architectural and archaeological heritage** in relation to the Traffic Management Strategy. The strategy aims to improve traffic flow within the town centre by introducing one-way systems and aims to divert a lot of through-traffic away from the town centre. The town core contains a number of structures listed on the Record of Protected Structures. Indirect positive effects are also likely as reducing greenhouse gas emissions and congestion in these areas will help reduce the degradation of heritage assets and improve their settings.

D.197 An uncertain minor positive effect is identified for **EPO 8: Landscape**. The Traffic Management Strategy aims to re-allocate some road space within the town centre in favour of walking/cycling facilities. However, improved traffic circulation and reduced through-traffic will help minimise the adverse effects of petrol and diesel vehicles on townscape character, including noise, air and light pollution. The effect is uncertain as it will depend on the final design of interventions.

D.198 A minor positive effect is identified for **EPO 9: Material assets**. The Traffic Management Strategy will help improve traffic circulation in Longford Town and re-allocate road space, supporting a more efficient transport network that will better meet the needs of Longford's growing population.

Car Parking Strategy

D.199 The Car Parking Strategy aims to re-allocate some on-street parking in the town, improve circulation and pedestrian access at existing car parking facilities, and amend car parking costs and durations. The scheme includes:

- Rationalisation of Main St. and Dublin St. to facilitate cycling (CP1).
- Recommend locations for park and stride schemes (CP2).
- Wayfinding strategy (CP3).
- Rationalisation of on-street parking along Geraldine’s Terrace (CP4).
- Improved pedestrian access to existing car parks (CP5 and CP8).
- Reduce maximum stay times at a number of car parks (P6, CP7 and CP9).
- New one-way system at Longford Shopping Centre car park (CP10).

Table D.10: Summary of SEA effects of the Car Parking Strategy

Environmental Protection Objective	Car Parking Strategy
1. Biodiversity, flora and fauna	+?
2. Population and human health	++/-?
3. Air quality / climate change mitigation	++/-?
4. Flood risk / climate change adaptation	0
5. Soil	+
6. Water	0
7. Cultural heritage	+?
8. Landscape	+?

Appendix D SEA matrices

Environmental Protection Objective	Car Parking Strategy
9. Material assets	+

D.200 An uncertain minor positive effect is identified for **EPO 1: Biodiversity, flora and fauna**. There is unlikely to be any direct effects on biodiversity, flora and fauna from the Car Parking Strategy, however, there may be indirect benefits for species from improved air quality due to a reduction in road traffic and congestion where car parking has been removed and reallocated for active travel modes, thereby reducing unnecessary car journeys.

D.201 An overall mixed effect (significant positive / minor negative) is identified for **EPO 2: Population and human health**. The Parking Strategy scheme includes the rationalisation of on-street parking along Main Street, Dublin Street (CP1) and Geraldine's Terrace (CP4) to facilitate cycling infrastructure. Other improvements such as changes to the parking regime (e.g. max two hour stays), improved pedestrian access to existing car parks and improved wayfinding aim to improve access to existing car parks within Longford Town. CP1, CP4 and CP10 (a new one-way system at Longford Shopping Centre car park) have been identified as having significant benefit to improving attractiveness and space allocation of trees. CP2, CP5 and CP8 are also likely to offer some improvements. Significant positive effects are therefore identified as improving street space to create more space to pedestrian/cycling helps facilitate the modal shift away from private vehicle use. Additionally, the removal of on-street parking in key town centre locations is likely to reduce car use for unnecessary journeys into town. There may be some short-term inconvenience as existing private vehicle users adjust their travel behaviours. These interventions help support the modal shift away from private car use and towards sustainable and active modes of travel, promoting healthy lifestyles. However, CP3, CP5, CP8 offer significant improvement to vehicular circulation or access to car parks and CP3, CP6, CP7 and CP9 have significant benefit for the operation of car parks. Reducing the maximum stay in town centre car parks to two hours will also help disincentivise unnecessary car journeys and support the modal shift to alternative travel nodes. Improved circulation of traffic within the town centre is likely to help reduce the negative effects of congestion within the town and reduce local people's exposure to air/noise/vibration/light pollution.

Appendix D SEA matrices

However, a minor negative effect is also identified for this EPO as continued use and improvement of existing car parking facilities within Longford Town is likely to encourage private vehicle use for some journeys.

D.202 An overall mixed effect (significant positive / minor negative) is identified for **EPO 3: Air quality and climate change mitigation**. As set out above, the Car Parking Strategy supports the rationalisation of on-street parking on key roads in the town centre, supporting alternative modes of travel such as walking and cycling infrastructure (CP1 and CP4). This is likely to help encourage active travel modes within the town, curb the convenience of parking to reduce unnecessary car journeys and thus reduce dependence on petrol / diesel vehicles thereby lowering transport-related emissions and Longford's contribution to climate change. Similarly, reducing the maximum stay times in key existing car parks will likely reduce car use for longer stays in the town centre. However, a minor negative effect is also identified for this EPO as continued use and improvement of existing car parking facilities within Longford Town is likely to encourage private vehicle use for some journeys, thus increasing transport-related emissions in the town.

D.203 Negligible effects are identified for **EPO 4: Flood risk and climate change adaptation** and **EPO 6: Water** as the interventions proposed under the Car Parking Strategy are not located in areas at risk of flooding and are not likely to directly affect the quality of waterbodies or groundwater.

D.204 A minor positive effect is identified for **EPO 5: Soil** as the interventions outlined in this strategy are likely to have an indirect positive effect on the regeneration of Longford Town's infill / brownfield land by supporting the sustainable transport elements of the regeneration programme.

D.205 A minor positive effect is identified for **EPO 7: Cultural heritage including architectural and archaeological heritage**. The Parking Strategy aims to rationalise majority of parking along Main Street. Main Street has a significant proportion of the town's buildings that are listed on the Record of Protected Structures. This will accommodate cycling infrastructure and main heritage assets in the town centre accessible by sustainable transport modes. A

key element of the regeneration of Longford Town is the creation of enhanced accessibility and sustainability mobility through the town. From reducing parking in the town centre, indirect positive effects are also likely as reducing congestion and traffic flow in these areas will help reduce the degradation of heritage assets and improve their settings.

D.206 An uncertain minor positive effect is identified for EPO **8: Landscape**. The Parking Strategy aims to re-allocate some on-street parking space within the town centre in favour of walking/cycling facilities. It does not explicitly set out any measures to incorporate street planting into the scheme. However, the removal of parking along some routes such as Main Street is likely to reduce demand for parking and will help minimise the adverse effects of petrol and diesel vehicles on townscape character along these streets, including noise, air and light pollution. The effect is uncertain as it will depend on the final design of interventions.

D.207 A minor positive effect is identified for EPO **9: Material assets**. The Car Parking Strategy will reduce demand for on-street parking within the town centre and improve the public realm, supporting other functions such as walking and cycling. This will help deliver a more sustainable transport network that meets the needs of Longford's growing population.

Feasibility and Value for Money Strategy

D.208 The Feasibility and Value for Money Strategy recognises the need to prioritise lower cost and easily implemented measures that provide the most significant benefits for the town.

Table D.11: Summary of SEA effects of the Feasibility and Value for Money Strategy

Environmental Protection Objective	Feasibility and Value for Money Strategy
1. Biodiversity, flora and fauna	0
2. Population and human health	0
3. Air quality / climate change mitigation	0
4. Flood risk / climate change adaptation	0
5. Soil	0
6. Water	0
7. Cultural heritage	0
8. Landscape	0
9. Material assets	++

D.209 Negligible effects are identified for EPO 1: **Biodiversity, flora and fauna**, 2: **Population and human health**, 3: **Air quality and climate change mitigation**, 4: **Flood risk and climate change mitigation**, 5: **Soil**, 6: **Water**, 7: **Cultural heritage including architectural and archaeological heritage**, and 8: **Landscape** as the strategy focuses on the costs and feasibility of traffic interventions which will not necessarily determine the impacts of interventions on each of these environmental factors.

D.210 A significant positive effect is identified for EPO 9: **Material Assets**. The Strategy focuses on ease of implementation, value for money and costs. The Strategy supports Rapid Build Infrastructure which are schemes that utilise cost-effective measures to deliver walking and cycling infrastructure quicker than traditional (full build) construction methods. This will encourage intelligent use of resources and optimise the re-use of existing infrastructure.

Abbeycartron Access Strategy

D.211 The proposed development lands at Abbeycartron are zoned for residential use with a small area of education zoned in the northwest part of the lands. In order to facilitate access to these lands, an access strategy has been developed which provides access for all modes without the overprovision of new roads or new strategic vehicular through route.

D.212 The proposal includes a new road between the roundabout on Battery Road, and Abbeycartron Lane. This provides for access onto Battery Road at two points reducing the overall volume of vehicles that utilise any one entrance point. High quality pedestrian and cycle infrastructure are also proposed along this route.

D.213 This strategy provides a vehicular route across the Camlin River to Templemichael. New pedestrian/cycle routes are proposed along/across the Camlin River and between Abbeycartron Lane and the Mall which provide additional active travel access routes to the lands. Further permeability routes are proposed, with a central route through the site from Druid Glen to the Camlin River Ped/cycle route, and a second connection between Abbeycartron and the Mall. The strategy also identifies future indicative road proposals to serve the east of the Camlin.

Table D.12: Summary of SEA effects of the Abbeycartron Access Strategy

Environmental Protection Objective	Abbeycartron Access Strategy
1. Biodiversity, flora and fauna	+/-?
2. Population and human health	++/-
3. Air quality / climate change mitigation	--/+

Environmental Protection Objective	Abbeycartron Access Strategy
4. Flood risk / climate change adaptation	-?
5. Soil	--
6. Water	--?
7. Cultural heritage	-?
8. Landscape	+/-?
9. Material assets	++/--

D.214 An uncertain mixed effect (minor positive / minor negative) is identified for the Abbeycartron Access Strategy in relation to **EPO 1: Biodiversity, flora and fauna**. There are no biodiversity sites in close proximity of the site, however, there may still be some adverse effects to habitats and species that exist on the rural land that is currently in agricultural use on the edge of Longford Town from new residential development, associated traffic, and an increase in active travel in the area. These adverse effects may be minimised through the incorporation of habitat enhancement measures as part of the delivery of the strategy, thereby contributing to the network of functionally linked habitats in Longford Town. There may be both positive and negative indirect effects for species in relation to air quality as the strategy proposes both new roads which would adversely affect air quality through transport-related emissions, and a network of active travel routes which would reduce the need to travel by petrol / diesel vehicles thereby reducing the likelihood of air pollution.

D.215 A mixed effect (significant positive / minor negative) is identified for **EPO 2: Population and human health** for the Abbeycartron Access Strategy. The scheme proposes new pedestrian/cycle links along the River Camlin ensuring good links with the surrounding area and providing additional permeability routes to connect with the Mall. The scheme includes a new road between Battery Road roundabout and Abbeycartron Lane, providing access to Battery Road at two points, thereby reducing the overall volume of vehicles that utilise any one entrance, thereby reducing traffic congestion and pollution. A new road is also proposed across the Camlin to link to the Templemichael Industrial

Appendix D SEA matrices

Estate. The new roads will also incorporate designated footpaths and cycle infrastructure. These interventions are likely to encourage walking and cycling for new and existing residents of Abbeycartron and improve access to services, facilities and employment opportunities for sustainable travel modes. This will encourage healthy lifestyles by promoting active travel. However, a minor negative effect is also identified for this EPO as the new access roads that will accommodate significant residential development are likely to increase residents' exposure to noise/air/vibration/light pollution related to the increased volume of traffic in the area. This will be mitigated to some extent by the proposed active travel elements of the strategy, and the close proximity of zoned education facilities, however it is likely that new residents will still rely on private vehicles for some journeys as they are located on the periphery of Longford Town.

D.216 An overall mixed effect (minor positive / significant negative) is identified in relation to **EPO 4: Air quality and climate change mitigation**. The proposal includes a road between the roundabout on Battery Road and Abbeycartron Lane, a road connection to the Templemichael Industrial Estate, and a road connection south of Abbeycartron Lane. Traffic volumes and transport-related emissions at these points are expected to increase as the Access Strategy is supporting the development of a significant amount of zoned residential development and education facilities. While the Access Strategy incorporates sustainable transport infrastructure, including cycle infrastructure and new connections between Abbeycartron Lane and the Mall, there is still likely to be high volumes of traffic as the development is located on the settlement edge. As such a significant negative effect is expected as the scheme is likely to increase transport-related emissions along Battery Road and Abbeycartron Lane. At the same time, new pedestrian and cycle links will help support the modal shift away from private vehicle use and reduce unnecessary car journeys thus lowering transport-related emissions and Longford's contribution to climate change.

8.12 An uncertain minor negative effect is identified for **EPO 4: Flood risk and climate change adaptation**. The Abbeycartron redevelopment area is located in close proximity to the River Camlin, which has a high probability of river flood events, although not within the redevelopment area itself. Without appropriate

mitigation, new development on greenfield land has the potential to exacerbate flood risk with the introduction of more impermeable surfaces within the plan area. This Access Strategy proposes the development of a number of new roads on greenfield land, as well as new paths, some of which cross the River Camlin. This is likely to introduce impermeable surfaces in an area at high risk of flooding, thereby potentially increase the severity and risk of flooding within the plan area. As such, an uncertain minor negative effect is identified for this EPO.

D.217 A significant negative effect is identified for EPO **5: Soil** in relation to the Abbeycartron Access Strategy. The proposed scheme is located on greenfield land at the edge of the existing built-up area of Longford Town. The development of transport infrastructure to support the zoned development will result in the loss of this greenfield land.

D.218 An uncertain significant negative effect is identified for EPO **6: Water**. The Abbeycartron redevelopment area is located in close proximity to the River Camlin and its tributaries and transport interventions within the proposed scheme, including the road connection and a number of new pedestrian/cycle routes, will cross the River Camlin. As such, development has the potential to adversely affect the quality of waterbodies although this is uncertain.

D.219 An uncertain minor negative effect is identified for EPO **7: Cultural heritage including architectural and archaeological heritage**. The Abbeycartron redevelopment area is located in close proximity to a small number of features listed on the Record of Protected Structures. However, the proposed Access Strategy will be located adjacent to the Battery Road Architectural Conservation Area. It is therefore possible that the proposed redevelopment and associated transport infrastructure/traffic could have adverse effects on the setting of the Architectural Conservation Area although this will depend on the design of traffic interventions.

D.220 An uncertain mixed effect (minor positive / minor negative) is identified for EPO **8: Landscape** in relation to the Abbeycartron Access Strategy. The impact on Longford's existing landscape and townscape will depend largely on

Appendix D SEA matrices

the detailed design of the Access Strategy and its associated residential development, therefore the effects are uncertain, however, due to the scale of the proposed Access Strategy, it is likely that the scheme will have an adverse effect on the landscape of Longford Town's rural edge. The Access Strategy provides new pedestrian and cycle links which will improve urban and rural connectivity, as well as improving access to valued landscapes and viewpoints including to the River Camlin and the Mall. The additional volume of traffic along Battery Road, associated with the new road and new population, has the potential to increase adverse effects on the townscape character of Battery Road, including through noise, air and light pollution. However, the Access Strategy could be strengthened by encouraging the retention and planting of green infrastructure along transport routes to protect landscape character and create a sense of place.

Recommendation: The Access Strategy should support the retention and planting of green infrastructure, where appropriate, as part of transport infrastructure developments which will enhance the setting and visual amenity of the landscape and historic environment and will support habitat creation, drainage, and soil quality.

D.221 An overall mixed effect (significant positive / significant negative) is identified for EPO 9: **Material assets**. The Abbeycartron Access Strategy will provide essential transport infrastructure to support the zoned residential development of the area. This will provide road, cycle and walking infrastructure for the growing population of Longford Town in a key redevelopment area. The inclusion of high-quality pedestrian and cycle infrastructure, and new permeability routes will help support the modal shift away from private vehicles for new and existing residents, supporting a reduction in energy demand from the transport sector. However, supporting the Access Strategy will require development of new infrastructure, such as construction of new roads, which will require the significant use of resources.

Appendix E

Consultation responses

Screening and Scoping Report consultation responses

Geological Survey Ireland

Geoheritage

- The audit for Co. Longford was carried out in 2015. The full report details can be found here. Our records show that there is a CGS within the boundary of the Longford Town LTP Study Area.
- **St Mel's Cathedral**, Co. Longford (GR 213494, 275286), under IGH theme: IGH15 Economic Geology. The Cathedral is built mainly from Carboniferous Limestone rock from around 340 million years ago, and was constructed from 1840 onwards. Detailed history survives of the construction and local sources of stone and building materials at different times in the 1840s and 1850s, including Newtowncashel. Whilst many of the elements of great public interest are the religious iconography, artworks and artists involved, the geological elements are also very significant. In particular, the total replacement of 28 massive columns of limestone with stone quarried from Old Leighlin in Carlow is most Notable. Extensive restoration work was completed between 2010 and 2014. Link to Site Report: LD015.
- With the current plan, there are no envisaged impacts on the integrity of current CGSs by the proposed development. However, if the proposed development plan is altered, please contact GSI for further information and possible mitigation measures if applicable.

Groundwater

- Geological Survey Ireland's Groundwater and Geothermal Unit, provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems.
- Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our Map viewer which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers (karst features, tracer test database; turlough water levels (gwlevel.ie). Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.
- The Groundwater Data Viewer indicates aquifers classed as a 'Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones', a 'Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones, and a 'Regionally Important Aquifer - Karstified (conduit)' underlie the proposed LTP Study Area.
- The Groundwater Vulnerability map indicates the range of groundwater vulnerabilities within the area covered is variable. We would therefore recommend use of the Groundwater Viewer to identify areas of High to Extreme Vulnerability and 'Rock at or near surface' in your assessments, as any groundwater-surface water interactions that might occur would be greatest in these areas.
- GWClimate is a groundwater monitoring and modelling project that aims to investigate the impact of climate change on groundwater in Ireland. This is a follow on from a previous project (GWFlood) and the data may be useful in relation to Flood Risk Assessment (FRA) and management plans. Maps and data are available on the Map viewer.
- Geological Survey Ireland has completed Groundwater Protection Schemes (GWPSs) in partnership with Local Authorities, and there is now

national coverage of GWPS mapping. A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater. The Groundwater Protection Response overview and link to the main reports is here: <https://www.gsi.ie/en-ie/programmes-and-projects/groundwater/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx>

Geological mapping

- Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found here, in your future assessments.
- Please note we have recently launched QGIS compatible bedrock (100K) and Quaternary geology map data, with instructional manuals and videos. This makes our data more accessible to general public and external stakeholders.

Geotechnical database resources

- Geological Survey Ireland continues to populate and develop our national geotechnical database and viewer with site investigation data submitted voluntarily by industry. The current database holding is over 7500 reports with 134,000 boreholes; 31,000 of which are digitised which can be accessed through downloads from our Geotechnical Map Viewer. We would encourage the use of this database as part of any baseline geological assessment of the proposed development as it can provide invaluable baseline data for the region or vicinity of proposed development areas. This information may be beneficial and cost saving for any site-specific investigations that may be designed as part of the project.

Geohazards

- Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides, flooding and coastal erosion are the most prevalent of these hazards. We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.
- Geological Survey Ireland has information available on landslides in Ireland via the National Landslide Database and Landslide Susceptibility Map both of which are available for viewing on our dedicated Map Viewer. Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.
- Geological Survey Ireland also engaged in a national project on Groundwater Flooding. The data from this project may be useful in relation to Flood Risk Assessment (FRA) and management plans, and is described in more detail under 'Groundwater' above.

Natural resources (minerals/aggregates)

- Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our Minerals section of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our Map Viewer.
- We would recommend use of the Aggregate Potential Mapping viewer to identify areas of High to Very High source aggregate potential within the area. In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in any proposed transport infrastructure projects are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.

Geochemistry of soils, surface waters and sediments

- Geological Survey Ireland provides baseline geochemistry data for Ireland as part of the Tellus programme. Baseline geochemistry data can be used to assess the chemical status of soil and water at a regional scale and to support the assessment of existing or potential impacts of human activity on environmental chemical quality. Tellus is a national-scale mapping programme which provides multi-element data for shallow soil, stream sediment and stream water in Ireland. At present, mapping consists of the border, western and midland regions. Data is available at <https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx>.

Other comments

- Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out.

LUC response

The recommended data sources have been reviewed and used to update the baseline sections for **'Soil'** and **'Water'** in **Appendix C**, where relevant.

Environmental Protection Agency

SEA Determination

E.1 If a proposed SEA determination hasn't been made regarding the plan or programme, you should determine whether implementing the plan or programme would be likely to have significant effects on the environment.

E.2 The SEA Regulations, Schedule 2A (S.I. No. 436 of 2004, as amended) or Schedule 1 (S.I. No. 435 of 2004, as amended), as appropriate, set out the 'Criteria for determining whether a Plan is likely to have significant effects on the environment' to use to determine whether the plan or programme would be likely to have significant effects on the environment.

E.3 Guidance on the SEA process, including an SEA pack and checklist, is available on our website at: <https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/sea-resources-and-guidance/>

E.4 We recommend that you take the available guidance into account in making your SEA Screening Determination and incorporate the relevant recommendations as relevant and appropriate to the plan or programme.

SEA Screening Guidance

E.5 Our Good Practice Guidance for Strategic Environmental Assessment (SEA) Screening (EPA, 2021) provides specific stand-alone guidance to assist plan or programme makers and SEA practitioners. It focuses primarily on plans/programmes in the non-land use sector in Ireland and includes an elaboration of the steps needed for screening, the legislative landscape underpinning SEA screening, and step-by-step process and templates to assist in preparing the required documentation.

Strategic Environmental Assessment: Guidelines for Planning Authorities

E.6 The Strategic Environmental Assessment: Guidelines for Regional Assemblies and Planning Authorities (DHLGH, 2022) provides advice on carrying out SEA in the land-use planning sector for those plans listed in S.I. No.436 of 2004, as amended. These plans comprise regional, county and local plans, including Regional Spatial and Economic Strategies, County or City Development Plans, variations of Development Plans, Local Area Plans and Planning Schemes for Strategic Development Zones. The Guidelines replace previous guidance for Regional Authorities and Planning Authorities published in 2004.

Sustainable Development

E.7 In proposing and in implementing the plan or programme, you should ensure that the plan or programme is consistent with the need for proper planning and sustainable development. Adequate and appropriate critical service infrastructure should be in place, or required to be put in place, to service any development proposed and authorised during the lifetime of the plan or programme.

8.13 In considering the plan or programme, you should take into account the need to align with national commitments on climate change mitigation and adaptation, as well as incorporating any relevant recommendations in sectoral, regional and local climate adaptation plans.

8.14 You should also ensure that the plan or programme aligns with any key relevant higher-level plans and programmes and is consistent with the relevant objectives and policy commitments of the National Planning Framework and the relevant Regional Spatial and Economic Strategy.

State of the Environment Report – Ireland’s Environment 2020

8.15 In preparing the plan or programme and associated SEA screening, the recommendations, key issues and challenges described in our published State of the Environment Report Ireland’s Environment – An Integrated Assessment 2020 (EPA, 2020) should be considered, as relevant and appropriate to the plan or programme.

Available Guidance & Resources

8.16 Our website contains various SEA resources and guidance, including:

- SEA process guidance and checklists
- SEA Spatial Information Sources Inventory
- Topic specific SEA guidance (including Good practice note on Cumulative Effects Assessment (EPA, 2020), Guidance on SEA Statements and Monitoring (EPA, 2020), Integrating climatic factors into SEA (EPA, 2019), Developing and Assessing Alternatives in SEA (EPA, 2015), and Integrated Biodiversity Impact Assessment (EPA, 2012))

8.17 You can access these guidance notes and other resources at:

<https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/sea-topic-and-sector-specific-guidance/>

Environmental Sensitivity Mapping (ESM) WebTool

8.18 This tool is a decision support tool to assist SEA and planning processes in Ireland. It is available at www.enviromap.ie. The tool brings together over 100

datasets and allows users to create plan-specific environmental sensitivity maps. These maps can help planners examine environmental considerations, anticipate potential land-use conflicts, and help identify suitable development locations while also protecting the environment.

EPA SEA WebGIS Tool

8.19 Our SEA WebGIS Tool has been updated recently and is now publicly available at <https://gis.epa.ie/EPAMaps/SEA> It allows public authorities to produce an indicative report on key aspects of the environment in a specific geographic area It is intended to assist public authorities in SEA screening and scoping exercises.

EPA WFD Application

8.20 Our WFD Application provides access to water quality and catchment data from the national WFD monitoring programme. The Application can be accessed via the www.catchments.ie website.

Future amendments to the plan or programme

8.21 Where changes to the plan or programme are made prior to finalisation, or where modifications to the plan or programme are proposed following its adoption, these should be screened for potential for likely significant effects in accordance with the criteria set out in Schedule 2A (S.I. No. 436 of 2004, as amended) or Schedule 1 (S.I. No. 435 of 2004, as amended) of the SEA Regulations, as appropriate.

EPA AA GeoTool

8.22 Our AA GeoTool application has been developed in partnership with the National Parks and Wildlife Service. It allows users to select a location, specify a search area and gather available information for each European Site within the area. It is available at: <https://gis.epa.ie/EPAMaps/AAGeoTool>

Appropriate Assessment

8.23 You should ensure that the plan or programme complies with the requirements of the Habitats Directive where relevant. Where an Appropriate Assessment is required, the key findings and recommendations should be incorporated into the SEA and the plan or programme.

SEA Determination

8.24 As soon as practicable after making your determination as to whether SEA is required or not, you should make a copy of your decision, including, if appropriate, the reasons for not requiring an environmental assessment, available for public inspection in your offices and on your website. You should also send a copy of your determination to the relevant environmental authorities consulted.

LUC response

The suite of guidance documents from the EPA will be used during the overall SEA process and during preparation of the SEA reports.

Appendix E Consultation responses

The State of the Environment Report and the ESM Mapping Tool are principal sources of information used throughout the SEA to determine the baseline and key environmental issues for each SEA topic.

Screening for Appropriate Assessment is being undertaken in parallel with the SEA process. The findings will be incorporated in the SEA.

The Final Screening Report will be made available on Longford County Council's website for inspection.

References

- 1 [SEA Directive 2001/42/EC](#)
- 2 Longford County Council (2021) Longford CDP Volume I: Written Statement [online] Available at:
[https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/#:~:text=The%20County%20Development%20Plan%20is,Regulations%202001%20\(as%20amended\)](https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/#:~:text=The%20County%20Development%20Plan%20is,Regulations%202001%20(as%20amended))
- 3 [SEA Directive 2001/42/EC](#)
- 4 [S.I. No. 435 of 2004](#)
- 5 [S.I. No. 200 of 2011](#)
- 6 [S.I. No. 436 of 2004](#)
- 7 [S.I. No. 201 of 2011](#)
- 8 Directive 92/43/EEC of the European Parliament – the Habitats Directive. Available at :
https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm
- 9 S.I. No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011. Available at:
<https://www.irishstatutebook.ie/eli/2011/si/477/made/en/print>
- 10 S.I. No. 293 of 2021. European Union (Birds and Natural Habitats) (Amendment) Regulations 2021. Available at:
<https://www.irishstatutebook.ie/eli/2021/si/293/made/en/pdf>
- 11 Government of Ireland. Planning and Development Act, 2000. Available at:
<https://www.irishstatutebook.ie/eli/2000/act/30/enacted/en/html>
- 12 EPA (2022) Strategic Environmental Assessment (SEA) Pack. Available at: <https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/SEA-Pack-2022.pdf>

References

- 13 EPA (2022) SEA Spatial Information Sources Inventory. Available at: <https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/sea-spatial-information-sources-inventory-.php>
- 14 EPA (2021) Good Practice Guidance on SEA Screening. Available at: https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/SEA_Screening_GoodPractice_2021.pdf
- 15 EPA (2020) Good Practice Guidance on Cumulative Effect Assessment in SEA. Available at: <https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA-Good-Practice-Guidelines-SEA.pdf>
- 16 EPA (2020) Guidance on SEA Statements and Monitoring. Available at: https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA_Guidance_web.pdf
- 17 EPA (2020) Second Review of SEA Effectiveness in Ireland. Available at: https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA-RR-306_web.pdf
- 18 EPA (2019) Integrating Climate Change into Strategic Environmental Assessment in Ireland - A Guidance Note. Available at: <https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA-SEA-Climatic-Factors-Guidance-Note.pdf>
- 19 EPA (2017) GISEA Manual – Improving the Evidence Base in SEA. Available at: https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA-GISEA_web.pdf
- 20 EPA (2015) Developing and Assessing Alternatives in Strategic Environmental Assessment – Good Practice Guidance. Available at: <https://www.epa.ie/publications/monitoring-->

References

- [assessment/assessment/strategic-environmental-assessment/SEA-Alternatives-157-Published_web.pdf](#)
- 21** EPA (2013) Integrating Biodiversity Impact Assessment: Streamlining AA, SEA and EIA Processes – Practitioner’s Manual. Available at: <https://www.epa.ie/publications/research/biodiversity/Integrated-Biodiversity-Impact-Assessment---Streamlining-AA,-SEA-and-EIA-Processes---Practitioner's-Manual.pdf>
- 22** EPA (2013) SEA Process Checklist - Consultation Draft. Available at: <https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/SEA-Process-Checklist.pdf>
- 23** Department of Housing, Local Government and Heritage (2004) Implementation of SEA Directive (2001/42/EC). Assessment of Certain Plans and Programmes on the Environment. Guidelines for Regional Planning Authorities.
- 24** EPA (2003) Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland. Synthesis Report. Available at: https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA_development_methodology_SEA_synthesis_report.pdf
- 25** EPA (2012) SEA Effectiveness Review in Ireland. Available at: <https://www.epa.ie/publications/monitoring--assessment/assessment/sea-effectiveness-review-in-ireland---action-plan-2012-16.php>
- 26** EPA (2020) Second Review of SEA Effectiveness in Ireland. Available at: https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/EPA-RR-306_web.pdf
- 27** Biodiversity, Flora and Fauna; Population and Human Health; Climatic Factors; Air; Soil; Water; Cultural Heritage including Architectural and Archaeological Heritage; Landscape; Material Assets.
- 28** Eastern and Midland Regional Assembly (2019) Regional Spatial and Economic Strategy 2019-2031 [online] Available at:

References

- https://emra.ie/dubh/wp-content/uploads/2020/05/EMRA_RSES_1.4.5web.pdf
- 29** Longford County Council (2021) Longford County Development Plan 2021-2027 [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- 30** United Nations Climate Change (2015) The Paris Agreement
- 31** United Nations Department of Economic and Social Affairs (2015) The 2030 Agenda for Sustainable Development. [Online] Available at:
<https://sdgs.un.org/2030agenda>
- 32** Directive 2001/42/EC of the European Parliament <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32001L0042>
- 33** The Habitats Directive – European Commission. Available at:
https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm
- 34** Directive 2008/50/EC of the European Parliament - The Air Quality Directive. Available at: <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32008L0050>
- 35** Directive 2000/60/EC of the European Parliament - Water Framework Directive. Available at: https://ec.europa.eu/environment/water/water-framework/index_en.html
- 36** Directive 2009/147/EC of the European Parliament – Birds Directive <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009L0147>
- 37** European Commission (2019) The European Green Deal [online] Available at: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en#documents
- 38** European Council – Fit for 55 [online] Available at:
<https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/>

References

- 39 European Commission (2020) Sustainable and Smart Mobility Strategy – putting European transport on track for the future [online] Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0789>
- 40 Government of Ireland (2019) Project Ireland 2040 National Planning Framework [online] Available at: <https://npf.ie/wp-content/uploads/Project-Ireland-2040-NPF.pdf>
- 41 Government of Ireland (2021) National development Plan 2021-2030 (online) Available at: <https://www.gov.ie/en/publication/774e2-national-development-plan-2021-2030/>
- 42 Department of Transport (2022) National Sustainable Mobility Policy [online] Available at: <https://www.gov.ie/en/publication/848df-national-sustainable-mobility-policy/>
- 43 Department for Transport (2022) National Sustainability Mobility Policy Action Plan 2022-2025 [online] Available at: <https://www.gov.ie/en/publication/848df-national-sustainable-mobility-policy/#:~:text=It%20is%20accompanied%20by%20an,efficient%20alternatives%20to%20car%20journeys.>
- 44 Department for Transport, Tourism and Sport (2018) Strategy for the Future Development of National and Regional Greenways [online] Available at: <https://assets.gov.ie/10364/abd98a35c61e4de4ba00a341eb7e0d13.pdf>
- 45 Department of the Environment, Climate and Communications (2022) Climate Action Plan 2023 [online] Available at: <https://www.gov.ie/en/publication/7bd8c-climate-action-plan-2023/>
- 46 Government of Ireland (2021) Our Rural Future: Rural Development Policy 2021-2025 [pdf].
- 47 RSA (2021) Our Journey towards Vision Zero – Ireland’s Government Road Safety Strategy 2021-2030 [online] Available at: <https://www.rsa.ie/docs/default-source/road-safety/legislation/government->

References

- [_road_safety_strategy_2021_2030_13th_dec21_final.pdf?sfvrsn=cf289e63_3](#)
- 48** European Parliament (2021) EU Road Safety Policy Framework 2021-2030 – Recommendations on next steps towards ‘Vision Zero’ [online] Available at: https://www.europarl.europa.eu/doceo/document/TA-9-2021-0407_EN.html
- 49** WHO (2021) Decade of Action for Road Safety 2021-2030 [online] Available at: <https://www.who.int/teams/social-determinants-of-health/safety-and-mobility/decade-of-action-for-road-safety-2021-2030>
- 50** Healthy Ireland (2013) A Framework for Improved Health and Wellbeing 2013-2025 [online] Available at: <https://www.hse.ie/eng/services/publications/corporate/hienglish.pdf>
- 51** Healthy Ireland (2021) Healthy Ireland Strategic Action Plan 2021-2025 [online] Available at: <https://assets.gov.ie/134507/057dfa34-491f-4086-b16a-912cf1e3ad06.pdf>
- 52** Healthy Ireland (2016) Get Ireland Active! National Physical Activity Plan for Ireland [online] Available at: <https://assets.gov.ie/7563/23f51643fd1d4ad7abf529e58c8d8041.pdf>
- 53** Government of Ireland (2015) National Landscape Strategy for Ireland 2015 – 2025 (pdf) Available at: <https://assets.gov.ie/95852/388d4758-50c1-42bd-9adc-0bdfe1291765.pdf>
- 54** Department of Housing, Local Government and Heritage (2022) Ireland's 4th National Biodiversity Action Plan. Draft for Public Consultation (online) Available at: <https://www.gov.ie/en/consultation/1566c-public-consultation-on-irelands-4th-national-biodiversity-action-plan/>
- 55** Government of Ireland (2021) Heritage Ireland 2030 (online) Available at: <https://www.gov.ie/en/publication/778b8-heritage-ireland-2030/>
- 56** Government of Ireland (2017) Cleaning Our Air: Public Consultation to inform the development of a National Clean Air Strategy (pdf) Available at: <https://assets.gov.ie/94852/74f00e21-439b-4aa1-9ef8-88399d8b0458.pdf>

References

- 57** Eastern and Midland Regional Assembly (2019) Regional Spatial and Economic Strategy 2019-2031 [online] Available at:
https://emra.ie/dubh/wp-content/uploads/2020/05/EMRA_RSES_1.4.5web.pdf
- 58** Longford County Council (2021) Longford County Development Plan 2021-2027 [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- 59** Longford County Council (2016) Longford Town and Environs Local Area Plan 2016-2022 [online] Available at:
<https://www.longfordcoco.ie/services/planning/previous-plans-county-town-local-area-/development-plan-2015-2021/variation-no2/variation-no-2-final.pdf>
- 60** Longford County Council (2021) Longford County Development Plan 2021-2027 Volume 2 Appendix 1 – Land Zonings [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-2-appendices-compressed.pdf>
- 61** Census (2016) Census of Population 2016 – Profile 9 Health, Disability and Carers: General Health [online] Available at:
<https://www.cso.ie/en/releasesandpublications/ep/p-cp9hdc/p8hdc/p9qh/>
- 62** Directive 2008/50/EC of the European Parliament - The Air Quality Directive. Available at: <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32008L0050>
- 63** Eastern and Midland Regional Assembly (2019) Regional Spatial and Economic Strategy 2019-2031 [online] Available at:
https://emra.ie/dubh/wp-content/uploads/2020/05/EMRA_RSES_1.4.5web.pdf
- 64** Longford County Council (2021) Longford County Development Plan 2021-2027 [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>

References

- 65** Longford County Council (2021) Longford County Development Plan 2021-2027 [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- 66** EPA (2023) Guidance on Strategic Environmental Assessment Statements and Monitoring (online) Available at:
<https://www.epa.ie/publications/research/environmental-technologies/guidance-on-sea-statements-and-monitoring.php>
- 67** CAAS (2021) Environmental Report for Longford County Development Plan 2021-2027 (pdf) Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-4-environmental-and-flood-reports-compressed1.pdf>
- 68** Government of Ireland (2022) Third Cycle Draft River Basin Management Plan for Ireland 2022-2027 (online) Available at:
<https://www.gov.ie/en/consultation/2bda0-public-consultation-on-the-draft-river-basin-management-plan-for-ireland-2022-2027/>
- lxix** United Nations (2015) Transforming our world: the 2030 Agenda for Sustainable Development (pdf) Available at:
https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
- lxx** United Nations (2015) *Paris Climate Change Agreement* (pdf) Available at:
https://unfccc.int/sites/default/files/english_paris_agreement.pdf
- lxxi** IPCC (2022) Sixth Assessment Report on Climate Change (online) Available at: <https://www.ipcc.ch/report/ar6/wg2/>
- lxxii** United Nations (2010) The Cancun Agreement (online) Available at:
<https://unfccc.int/process/conferences/pastconferences/cancun-climate-change-conference-november-2010/statements-and-resources/Agreements>
- lxxiii** United Nations (2002) *Johannesburg Declaration of Sustainable Development* (online) Available at:

References

- https://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POI_PD.htm
- lxxiv** Council of Europe (2000) *Florence (European Landscape) Convention* (pdf) Available at: <https://rm.coe.int/1680080621>
- lxxv** WHO (1999) *Air quality guidelines for Europe: second edition* (pdf) Available at: https://www.euro.who.int/_data/assets/pdf_file/0005/74732/E71922.pdf
- lxxvi** United Nations (1998) *Aarhus Convention* (pdf) Available at: <https://unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf>
- lxxvii** United Nations (1997) *Kyoto Protocol* (pdf) Available at: <https://unfccc.int/resource/docs/convkp/kpeng.pdf>
- lxxviii** United Nations (1992) *UN Convention on Biological Diversity* (pdf) Available at: <https://www.cbd.int/doc/legal/cbd-en.pdf>
- lxxix** Council of Europe (1992) *European Convention on the Protection of the Archaeological Heritage (Valletta)* (pdf) Available at: <https://rm.coe.int/168007bd25>
- lxxx** Council of Europe (1985) *Grenada Convention for the Protection of the Architectural Heritage of Europe* (pdf) Available at: <https://rm.coe.int/168007a087>
- lxxxi** United Nations (1979) *Bonn Convention on the Conservation of Migratory Species of Wild Animals* (pdf) Available at: https://www.cms.int/sites/default/files/instrument/CMS-text.en_.PDF
- lxxxii** Council of Europe (1979) *Bern Convention on European Wildlife and Natural Habitats* (pdf) Available at: <https://rm.coe.int/1680078aff>
- lxxxiii** Council of Europe (1979) *Bern Convention on European Wildlife and Natural Habitats* (pdf) Available at: <https://rm.coe.int/1680078aff>
- lxxxiv** United Nations (1972) *UNESCO World Heritage Convention* (pdf) Available at: <https://whc.unesco.org/archive/convention-en.pdf>
- lxxxv** United Nations (1971) *Ramsar Convention – Convention on Wetlands of International Importance* (pdf) Available at:

References

- https://www.ramsar.org/sites/default/files/documents/library/current_convention_text_e.pdf
- lxxxvi** European Commission (2001) *SEA Directive* (online) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32001L0042>
- lxxxvii** European Commission (2021) *European Climate Law* (online) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32021R1119>
- lxxxviii** European Commission (2008) *The Air Quality Directive* (pdf) Available at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:152:0001:0044:EN:PDF>
- lxxxix** European Parliament (2018) *Renewable Energy Directive (recast)* (pdf) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L2001&from=fr>
- xc** European Parliament (2018) *Effort Sharing Regulation* (online) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32018R0842>
- xcii** European Parliament (2016) National Emissions reduction Commitments Directive (online) available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.344.01.0001.01.ENG&toc=OJ:L:2016:344:TOC
- xciii** European Commission (2009) *Birds Directive* (online) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0147>
- xciv** European Commission (1992) *Habitats Directive* (online) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31992L0043>
- xciv** European Commission (2000) *Water Framework Directive* (online) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060>

References

- xcv** European Commission (2007) *Floods Directive* (online) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32007L0060>
- xcvi** Council of Europe (1998) *Drinking Water Directive* (online) Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31998L0083>
- xcvii** European Commission (2020) *Eighth Environmental Action Programme* (pdf) Available at: <https://ec.europa.eu/environment/pdf/8EAP/2020/10/8EAP-draft.pdf>
- xcviii** European Commission (2020) *2030 Climate Target Plan* (online) Available at: https://ec.europa.eu/clima/policies/eu-climate-action/2030_ctp_en
- xcix** European Commission (2020) *2050 long-term strategy* (online) Available at: https://ec.europa.eu/clima/policies/strategies/2050_en#tab-0-0
- c** European Commission (2021) *Fit for 55 Package* (online) Available at: <https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/>
- ci** European Commission (2019) *European Green Deal* (pdf) Available at: https://ec.europa.eu/info/sites/default/files/european-green-deal-communication_en.pdf
- cii** European Commission (2020) *EU Biodiversity strategy for 2030* (pdf) Available at: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/eu-biodiversity-strategy-2030_en#the-business-case-for-biodiversity
- ciii** European Commission (1999) *European Spatial Development Perspective* (pdf) Available at: https://ec.europa.eu/regional_policy/sources/docoffic/official/reports/pdf/su_m_en.pdf
- civ** Irish Ministers (2004) *European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004* (online) Available at: <http://www.irishstatutebook.ie/eli/2004/si/435/made/en/print>

References

- cv** Irish Ministers (2011) *European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011* (online) Available at: <http://www.irishstatutebook.ie/eli/2011/si/200/made/en/print>
- cvi** Irish Ministers (2000) *The Wildlife Act 1976 and Wildlife (Amendment) Act 2000* (online) Available at: <http://www.irishstatutebook.ie/eli/2000/act/38/enacted/en/print>
- cvii** Irish Ministers (2011) *European Communities (Birds and Natural Habitats) Regulations 2011* (S.I. 477 of 2011 as amended) (online) Available at: <http://www.irishstatutebook.ie/eli/2011/si/477/made/en/print>
- cviii** Government of Ireland (2021) *Climate Action and Low Carbon Development (Amendment) Act 2021* (pdf) Available at: <https://www.irishstatutebook.ie/eli/2021/act/32/section/15/enacted/en/html>
- cix** Government of Ireland (2022) *National Sustainable Mobility Policy* (pdf) Available at: <https://www.gov.ie/en/publication/848df-national-sustainable-mobility-policy/#>
- cx** Department of Rural and Community Development (2022) *Town Centre First: A Policy Approach for Irish Towns* (online) Available at: <https://www.gov.ie/en/publication/473d3-town-centre-first-policy/>
- cxii** Government of Ireland (2018) *Project Ireland 2040 National Planning Framework* (pdf) Available at: <https://assets.gov.ie/100716/f6daba1e-cb06-4eeb-94a7-98fea655517e.pdf>
- cxiii** Government of Ireland (2020) *Programme for Government: Our Shared Future* (pdf) Available at: <https://assets.gov.ie/130911/fe93e24e-dfe0-40ff-9934-def2b44b7b52.pdf>
- cxiiii** Government of Ireland (2018) *National Adaptation Framework* (pdf) Available at: <https://assets.gov.ie/76430/d35c3843-29c7-419a-b48b-ad5db2bfb118.pdf>
- cxiv** Department of the Environment, Climate and Communications (2022) *Climate Action Plan 2023* [online] Available at: <https://www.gov.ie/en/publication/7bd8c-climate-action-plan-2023/>

References

- cxv** Department of Housing, Local Government and Heritage (2022) Ireland's 4th National Biodiversity Action Plan. Draft for Public Consultation (online) Available at: <https://www.gov.ie/en/consultation/1566c-public-consultation-on-irelands-4th-national-biodiversity-action-plan/>
- cxvi** Department for Housing, Local Government and Heritage (2022) Draft River Basin Management Plan for Ireland 2022-2027 [online] Available at: <https://www.gov.ie/pdf/?file=https://assets.gov.ie/199144/7f9320da-ff2e-4a7d-b238-2e179e3bd98a.pdf#page=null>
- cxvii** Government of Ireland (2017) *Cleaning Our Air: Public Consultation to inform the development of a National Clean Air Strategy* (pdf) available at: <https://assets.gov.ie/94852/74f00e21-439b-4aa1-9ef8-88399d8b0458.pdf>
- cxviii** Government of Ireland (2015) National Landscape Strategy for Ireland 2015 – 2025 (pdf) Available at: <https://assets.gov.ie/95852/388d4758-50c1-42bd-9adc-0bdf1291765.pdf>
- cxix** Government of Ireland (2021) Heritage Ireland 2030 (online) Available at: <https://www.gov.ie/en/publication/778b8-heritage-ireland-2030/>
- cxx** Eastern and Midland Regional Assembly (2019) Regional Spatial and Economic Strategy 2019-2031 [online] Available at: https://emra.ie/dubh/wp-content/uploads/2020/05/EMRA_RSES_1.4.5web.pdf
- cxxi** Longford County Council (2021) Longford County Development Plan [online] Available at: [https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/#:~:text=The%20County%20Development%20Plan%20is,Regulation%202001%20\(as%20amended\).](https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/#:~:text=The%20County%20Development%20Plan%20is,Regulation%202001%20(as%20amended).)
- cxxii** Economic Development and Enterprise SPC, Longford Local Community Development Committee and Longford County Council (2016) County Longford Economic and Community Plan 2016-2022 [online] Available at: https://www.longfordcoco.ie/uploadedfiles/longfordcoco/our_departments/community_enterprise/documents/local_economic_and_community_plan/county%20longford%20lecp%202016-2022.pdf

References

- cxxiii** Longford County Council (2019) Camlin Quarter Urban Design Framework [online] Available at: <https://www.longfordcoco.ie/services/regeneration/camlin-quarter-master-plan/camlin-quarter-urban-design-report.pdf>
- cxxiv** Longford County Council (2019) Climate Change Adaptation Strategy [online] Available at: <https://www.longfordcoco.ie/services/environment/climate-action/climate-change-adaptation-strategy.pdf>
- cxxv** Longford Tourism (2017) County Longford Tourism Strategy 2017-2022 [online] Available at: <https://www.longford.ie/en/visit/longford-tourism-strategy/longford-tourism-strategy.pdf>
- cxxvi** Longford County Council (2018) Longford Noise Action Plan 2018 – 2023 [online] Available at: <https://www.longfordcoco.ie/services/environment/air-noise-pollution-monitoring-control/noise-action-plan/noise-action-plan-2018-2023.pdf>
- cxxvii** National Parks and Wildlife Service. Protected Sites in Ireland [online]. Available at: <https://www.npws.ie/protected-sites>
- cxxviii** National Parks and Wildlife Service. Protected Sites in Ireland [online]. Available at: <https://www.npws.ie/protected-sites>
- cxxix** National Parks and Wildlife Service. Protected Sites in Ireland [online]. Available at: <https://www.npws.ie/protected-sites>
- cxxx** National Parks and Wildlife Service. Protected Sites in Ireland [online]. Available at: <https://www.npws.ie/protected-sites>
- cxxxii** Perrin, P.M. & Daly, O.H. (2010) A provisional inventory of ancient and long-established woodland in Ireland. Irish Wildlife Manuals, No. 46. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland. [online map] Available at: <https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=e6da11a2a9804664a428315bcd105260>
- cxxxiii** Foss, Gallagher and Crushell (2019) County Longford Wetlands Field Survey 2019 [online] Available at:

References

- <https://www.longfordlibrary.ie/heritage/projects/longford-wetlands-heritage-project/longford-wetlands-survey-2019-report.pdf>
- cxixiii** Foulkes, N. (2006) County Longford Hedgerow Survey Report. [online] Available at: <https://hedgelaying.ie/wp-content/uploads/2019/11/County-Longford-Hedgerow-Survey-Report.pdf>
- cxixiv** Department of Culture, Heritage and the Gaeltacht (2017) National Biodiversity Action Plan [online] Available at: <https://www.npws.ie/sites/default/files/publications/pdf/National%20Biodiversity%20Action%20Plan%20English.pdf>
- cxixv** Longford County Council (2013) Mid Shannon Wilderness Park. [online] Available at: <https://www.longfordcoco.ie/services/planning/previous-plans-county-town-local-area-/development-plan-2015-2021/annexes/annex-6-mid-shannon-wilderness-park-plan.pdf>
- cxixvi** Central Statistics Office (2022) Census of Population 2022 – Preliminary Results (online) Available at: <https://www.cso.ie/en/releasesandpublications/ep/p-cpr/censusofpopulation2022-preliminaryresults/geographicchanges/>
- cxixvii** Longford County Council (2021) Longford County Development Plan 2021-2027: Chapter 2 County Profile [online] Available at: <https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- cxixviii** Central Statistics Office (2022) Preliminary Actual and Percentage Change in Population from 1926 to 2022 [online] Available at: <https://data.cso.ie/>
- cxixix** Census (2016) Average Age of Population 2011-2016 [online] Available at: <https://data.cso.ie/>
- cxli** Government of Ireland (2018) Implementation Roadmap for the National Planning Framework [pdf] Available at: <https://npf.ie/wp-content/uploads/NPF-Implementation-Roadmap.pdf>

References

- cxli** Longford County Council (2021) Longford County Development Plan 2021-2027 [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- cxlii** Central Statistics Office (2022) Preliminary Actual and Percentage Change in Population from 1926 to 2022 [online] Available at: <https://data.cso.ie/>
- cxliii** Census (2016) Census of Population 2016 – Profile 9 Health, Disability and Carers: General Health [online] Available at:
<https://www.cso.ie/en/releasesandpublications/ep/p-cp9hdc/p8hdc/p9gh/>
- cxliv** Census (2016) Census of Population 2016 – Profile 9 Health, Disability and Carers: General Health [online] Available at:
<https://www.cso.ie/en/releasesandpublications/ep/p-cp9hdc/p8hdc/p9gh/>
- cxlv** Central Statistics Office (2022) Irish Health Survey 2022 (online) Available at: <https://www.gov.ie/en/publication/f9e67-healthy-ireland-survey-2022/>
- cxlvi** Study conducted by University College Cork:
<https://www.inmo.ie/Article/PrintArticle/10421>
- cxlvii** Healthy Ireland (2016) National Physical Activity Plan for Ireland (online) Available at:
<https://assets.gov.ie/7563/23f51643fd1d4ad7abf529e58c8d8041.pdf>
- cxlviii** Mental Health Ireland (2016) Health at a Glance Report (online) Available at: <https://www.mentalhealthireland.ie/research/>
- cxlix** Mental Health Ireland (2018) Mental Health Survey (online) Available at:
<https://www.mentalhealthireland.ie/research/>
- cl** <https://www.rcsi.com/impact/details/2022/09/green-spaces-and-safe-neighbourhoods-could-help-tackle-overweight-and-obesity#:~:text=A%20recent%20report%20from%20the,to%20be%20obese%20by%202025.>
- cli** EPA (2022) Air Quality in Ireland 2021. [online] Available at:
<https://indd.adobe.com/view/3ec6ff15-ca56-4ad3-ae9e-8046e32e833d>

References

- clii** European Environment Agency (2021) Air Quality in Europe 2021 [online] Available at: <https://www.eea.europa.eu/publications/air-quality-in-europe-2021/table-4>
- cliii** RSA (2022) 2021 Records Lowest Number of Road Fatalities since recording began in 1959 [online] Available at: <https://www.rsa.ie/news-events/news/details/2022/01/01/2021-records-lowest-number-of-road-fatalities-since-recording-began-in-1959>
- cliv** Longford County Council (2021) Longford County Development Plan 2021-2027 [online] Available at: <https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- clv** Census (2016) Census of Population 2016 – Profile 9 Health, Disability and Carers: General Health [online] Available at: <https://www.cso.ie/en/releasesandpublications/ep/p-cp9hdc/p8hdc/p9gh/>
- clvi** RSA (2021) Ireland’s Government Road Safety Strategy 2021-2030 [online] Available at: https://www.rsa.ie/docs/default-source/road-safety/legislation/government-road_safety_strategy_2021_2030_13th_dec21_final.pdf?sfvrsn=cf289e63_3
- clvii** Arup (2022) Draft Active Travel Strategy – Modal split based on 2016 Census. [unpublished]
- clviii** Central Statistics Office (2022) Travel Behaviour Trends 2021 (online) Available at: <https://www.cso.ie/en/releasesandpublications/ep/p-ntstb/travelbehaviourtrends2021/howwetravelled/c>
- clix** ROD-AECOM. N4 Mullingar and Longford (Roosky) Project Website [online] Available at: <https://n4mullingartolongford.ie/>
- clx** Pobal (2016) Pobal HP Deprivation Index - Deprivation by small area [online] Available at: <https://www.rte.ie/deprivation/>
- clxi** IPCC (2019) IPCC Special Report Global Warming of 1.5°C (online) Available at: <https://www.ipcc.ch/sr15/>

References

- clxii** BBC (2019) 'Climate change: Ireland declares a climate emergency' [online] Available at: <https://www.bbc.co.uk/news/world-europe-48221080>
- clxiii** Longford County Council (2019) Climate Change Adaptation Strategy [online] Available at: <https://www.longfordcoco.ie/services/environment/climate-action/climate-change-adaptation-strategy.pdf>
- clxiv** Longford County Council (2019) Climate Change Adaptation Strategy [online] Available at: <https://www.longfordcoco.ie/services/environment/climate-action/climate-change-adaptation-strategy.pdf>
- clxv** Department of the Environment, Climate and Communications (2022) Climate Action Plan 2023 [online] Available at: <https://www.gov.ie/en/publication/7bd8c-climate-action-plan-2023/>
- clxvi** Longford County Council (2019) Climate Change Adaptation Strategy [online] Available at: <https://www.longfordcoco.ie/services/environment/climate-action/climate-change-adaptation-strategy.pdf>
- clxvii** Longford County Council (2019) Climate Change Adaptation Strategy [online] Available at: <https://www.longfordcoco.ie/services/environment/climate-action/climate-change-adaptation-strategy.pdf>
- clxviii** EPA. What impact will climate change have on Ireland? [online] Available at: <https://www.epa.ie/environment-and-you/climate-change/what-impact-will-climate-change-have-for-ireland/>
- clxix** Dáil Éireann Debate (16th February 2022) Local Authorities [online] Available at: <https://www.oireachtas.ie/en/debates/question/2022-02-16/117/>
- clxx** Department of the Environment, Climate and Communications (2022) Climate Action Plan 2023 [online] Available at: <https://www.gov.ie/en/publication/7bd8c-climate-action-plan-2023/>

References

- clxxi** However, at this stage the 2021 figures are provisional and should be interpreted with caution.
- clxxii** Department of the Environment, Climate and Communications (2022) Climate Action Plan 2023 [online] Available at: <https://www.gov.ie/en/publication/7bd8c-climate-action-plan-2023/>
- clxxiii** EPA (2022) Ireland’s Greenhouse Gas Emissions Projections 2021 to 2040 (pdf) Available at: <https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/EPA-Ireland's-GHG-Projections-Report-2021-2040v2.pdf>
- clxxiv** Arup (2022) Draft Active Travel Strategy – Modal split based on 2016 Census. [unpublished]
- clxxv** Sustainable Energy Authority In Ireland (2022) Energy in Ireland 2021 Report (pdf) Available at: https://www.seai.ie/publications/Energy-in-Ireland-2021_Final.pdf
- clxxvi** Arup (2022) Independent Report to SIMI by Arup and Jim Power Economics: Reducing light fleet carbon emissions to achieve Irish Government targets (pdf) Available at: <https://www.simi.ie/assets/1/environment/reducing-light-fleet-carbon-emissions-to-achieve-government-targets.pdf>
- clxxvii** NWRA (2022) Regional EV Charge Point Analysis (pdf) Available at: <https://www.nwra.ie/wp-content/uploads/2022/11/regional-ev-charge-point-analysis-final-version-25102022.pdf>
- clxxviii** Longford County Council (2019) Climate Change Adaptation Strategy [online] Available at: <https://www.longfordcoco.ie/services/environment/climate-action/climate-change-adaptation-strategy.pdf>
- clxxix** CAAS Ltd. (2021) Strategic Flood Risk Assessment for the Longford County Development Plan 2021-2027 [online] Available at: <https://www.longfordcoco.ie/services/planning/longford-county->

References

- [development-plan-2021-2027/volume-4-environmental-and-flood-reports-compressed.pdf](#)
- clxxx** EPA (2022) Air Quality in Ireland 2021. [online] Available at: <https://indd.adobe.com/view/3ec6ff15-ca56-4ad3-ae9e-8046e32e833d>
- clxxx** Government of Ireland (2020) Low Smoke Zone Maps [online] Available at: <https://www.gov.ie/en/collection/77db4-low-smoke-zone-maps/>
- clxxxii** Air Pollution Act 1987 (Solid Fuels) Regulations 2022 (S.I. No. 529 of 2022)
- clxxxiii** EPA (2022) Air Quality [online] Available at: <https://www.epa.ie/environment-and-you/air/#d.en.51765>
- clxxxiv** Longford Leader (2022) Freezing conditions cause worrying spike in Longford's air pollution (online) Available at: <https://www.longfordleader.ie/news/home/997233/freezing-conditions-cause-worrying-spike-in-longford-air-pollution.html>
- clxxxv** Longford County Council (2021) Longford County Development Plan 2021-2027 [online] Available at: <https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- clxxxvi** Department for Transport (2021) National Investment Framework for Transport in Ireland Background Paper 14: Alternative Demand Scenarios [online] Available at: <https://web.archive.org/web/20210523030620/https://assets.gov.ie/129012/dbb1b875-0e56-44e7-83e8-053c3e021dde.pdf>
- clxxxvii** Agriculture is the predominant land use in County Longford with approximately 7,273 hectares of farmed land.
- clxxxviii** Luvisol soils are generally fertile, widely used for agriculture and associated with significant accumulation of clay.
- clxxxix** CORINE Land Cover classes definitions: <https://land.copernicus.eu/user-corner/technical-library/corine-land-cover-nomenclature-guidelines/html>

References

- cx c** Longford County Council (2021) Longford County Development Plan 2021-2027: Chapter 6 Regeneration [online] Available at: <https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- cx ci** EPA (2022) Water Quality in Ireland 2016-2021 Summary Report [online] Available at: <https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/water-quality-in-ireland-2016-2021/water-quality-2016-2021/water-quality-in-ireland-2016--2021-.php>
- cx cii** Government of Ireland (2022) Third Cycle Draft River Basin Management Plan for Ireland 2022-2027 (online) Available at: <https://www.gov.ie/en/consultation/2bda0-public-consultation-on-the-draft-river-basin-management-plan-for-ireland-2022-2027/>
- cx ciii** Local Authority Waters Programme (online) Priority Areas for Action (online search tool) Available at: https://www.catchments.ie/data/#/areaforaction?_k=6mk33c
- cx civ** Geological Survey Ireland Spatial Resources Map [online] Available at: <https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228>
- cx cv** Government of Ireland (2022) Third Cycle Draft River Basin Management Plan for Ireland 2022-2027 (online) Available at: <https://www.gov.ie/en/consultation/2bda0-public-consultation-on-the-draft-river-basin-management-plan-for-ireland-2022-2027/>
- cx cvi** Local Authority Waters Programme (online) Priority Areas for Action (online search tool) Available at: https://www.catchments.ie/data/#/areaforaction?_k=6mk33c
- cx cvii** Longford County Council (2021) Longford County Development Plan 2021-2027: Appendix 6 [online] Available at: <https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-2-appendices-compressed.pdf>
- cx cviii** Longford County Council (2022) Longford Town Local Area Plan 2023-2029 Pre-Draft Issues Paper [online] Available at:

References

- <https://www.longfordcoco.ie/services/planning/longford-local-area-plan-2023-2029/longford-lap-issues-paper.pdf>
- cxix** Longford County Council (2021) Longford County Development Plan 2021-2027: Chapter 11 [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- cc** Longford County Council (2021) Longford County Development Plan 2021-2027: Chapter 6 Regeneration [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- cci** Longford County Council (2021) Longford CDP Annex 4: Landscape Character Assessment [online] Available at:
https://www.longfordcoco.ie/uploadedfiles/longfordcoco/our_departments/planning/documents/draft_county_development_plan/annex%20%20land%20scape%20character%20assessment.pdf
- ccii** Longford County Council (2021) Longford County Development Plan 2021-2027: Chapter 14 [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- cciii** Longford County Council (2021) Longford County Development Plan 2021-2027: Chapter 14 [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- cciv** Longford County Council (2021) Longford County Development Plan 2021-2027: Appendix 9 [online] Available at:
<https://www.longfordcoco.ie/services/planning/longford-county-development-plan-2021-2027/volume-1-written-statement-compressed.pdf>
- ccv** ROD-AECOM. N4 Mullingar and Longford (Roosky) Project Website [online] Available at: <https://n4mullingartolongford.ie/>
- ccvi** National Transport Authority (2019) Heavy Rail Census Report 2019 (online) Available at: <https://www.nationaltransport.ie/publications/nta-heavy-rail-census-report-2019/>

References

ccvii Arup (2022) Draft Active Travel Strategy [unpublished].

ccviii Arup (2022) Draft Active Travel Strategy [unpublished].

ccix Arup (2022) Draft Active Travel Strategy [unpublished].

ccx ROD-AECOM. N4 Mullingar and Longford (Roosky) Project Website [online] Available at: <https://n4mullingartolongford.ie/>

Report produced by LUC

Report produced by LUC

Bristol

12th Floor, Colston Tower, Colston Street, Bristol BS1 4XE
0117 929 1997
bristol@landuse.co.uk

Cardiff

16A, 15th Floor, Brunel House, 2 Fitzalan Rd, Cardiff CF24 0EB
0292 032 9006
cardiff@landuse.co.uk

Edinburgh

Atholl Exchange, 6 Canning Street, Edinburgh EH3 8EG
0131 202 1616
edinburgh@landuse.co.uk

Glasgow

37 Otago Street, Glasgow G12 8JJ
0141 334 9595
glasgow@landuse.co.uk

London

250 Waterloo Road, London SE1 8RD
020 7383 5784
london@landuse.co.uk

Manchester

6th Floor, 55 King Street, Manchester M2 4LQ
0161 537 5960
manchester@landuse.co.uk

landuse.co.uk

Landscape Design / Strategic Planning & Assessment
Development Planning / Urban Design & Masterplanning
Environmental Impact Assessment / Landscape Planning & Assessment
Landscape Management / Ecology / Historic Environment / GIS & Visualisation