



LONGFORD COUNTY COUNCIL
NOISE ACTION PLAN

Version FINAL
November 2013

EXECUTIVE SUMMARY

The Draft Noise Action Plan has been prepared in accordance with the requirements of EU Directive 2002/49/EC (known as the Environmental Noise Directive or END), which was transposed into Irish Law by the Environmental Noise Regulations 2006, SI No. 140 of 2006.

The aim of the directive is to provide for the implementation of an EC common approach to avoid, prevent or reduce, on a prioritised basis the harmful effects due to exposure to environmental noise.

Environmental noise is unwanted or harmful outdoor sound created by human activities, including noise emitted by means of transport (road traffic, rail traffic, air traffic and noise in agglomerations over a specified size). Types of noise not included in the Regulations are noise from domestic activities, noise created by neighbours, noise at workplaces etc.

The Environmental Noise Regulations assigned responsibility to Local Authorities to put in place noise action plans in 2007 (Phase I). Longford Co. Co. did not put in place a Noise Action Plan at that time as the relevant thresholds (sections of road with 6 million vehicles per year) were not exceeded on Longford.

For Phase II of the regulations the thresholds are reduced and Action Planning Authorities (Local Authorities) are required to make strategic noise maps where the following thresholds are exceeded;

- Major Roads (roads with > 3 million vehicles per annum)
- Major Railroads (railways with > 30,000 trains per annum)
- Major Airports (airports with >50,000 movements per annum)
- Agglomerations with > 100,000 inhabitants

The following sections of road in County Longford were deemed to be above the threshold for roads;

- N4 from the Co. Boundary with Westmeath to the Co. Boundary with Leitrim
- N63 from the Co. Boundary with Roscommon to its junction with the N4 at Lisnamuck, east of Longford Town
- R198 from its junction with the N63 in Longford Town to Cahanagh Cross.
- UP-03017 Richmond Street in Longford Town (from Longford Arms to Annaly Park, previously the N5)

The National Roads Authority (NRA) as the Noise Mapping Body for major National Roads has prepared strategic noise maps for the National Roads in County Longford that were deemed by virtue of traffic count data available to the NRA to have more than 3 million vehicles per annum. The NRA on behalf of Local Authorities also prepared strategic noise maps for the regional roads above the threshold.

The strategic noise mapping was produced by computer analysis. The results are theoretical and predict the anticipated noise levels in the areas surrounding the roads. By including Geodirectory data in the analysis an estimation of the population exposed to environmental noise generated by roads was also determined.

The purpose of the Longford County Council Draft Noise Action Plan 2013 is to endeavour to manage the existing noise environment and protect the future noise environment within the action planning area. Management of the existing noise environment may be achieved by prioritising areas for which further assessment and possible noise mitigation may be required. Protection of the future noise environment may be achieved during the planning process by measures such as, land use planning, development planning, noise mitigation measures and traffic planning.

LONGFORD NOISE ACTION PLAN POLICY STATEMENT

Longford County Council will seek to address environmental noise from major roads, as defined in the Environmental Noise Regulations, in the county, will endeavour to maintain satisfactory noise environments where they exist and will have regard to the protection and improvement of the noise environment in the planning process (within the confines of the 2000 planning and development act) to endeavour that future developments include provisions to protect the population from the effects of environmental noise in the interests of residential amenity and public health.

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1. Introduction

1.1 Purpose of the Environmental Noise Directive (END)

In 2002 the European Union issued a Directive (2002/49/EC) relating to the assessment and management of environmental noise pollution. Also known as the Environmental Noise Directive, hereafter referred to as the END, the Directive's main aim is to put in place a European-wide system for identifying sources of environmental noise pollution, informing the public about relevant noise data and then taking the necessary steps to avoid, prevent or reduce noise exposure.

Statutory Instrument No. 140 of 2006, also known as The Environmental Noise Regulations, was brought into effect by The Minister for the Environment, Heritage and Local Government, for the purpose of giving effect to European Council Directive 2002/49/EC relating to the assessment and management of environmental noise. The Regulations were brought into force in accordance with the powers conferred on The Minister by sections 6, 53 and 106 of the Environmental Protection Agency Act 1992 (No. 7 of 1992), as amended by Part 2 of the Protection of the Environment Act 2003 (No. 27 of 2003).

1.2 Purpose of the Environmental Noise Regulations

END was transposed into Irish Law by the Environmental Noise Regulations 2006, SI No. 140 of 2006. The regulations provide for the implementation of a common approach within the European community intended to avoid, prevent or reduce on a prioritized basis the harmful effects, including annoyance, due to exposure to environmental noise.

For the purposes of the Directive and Regulations, environmental noise is unwanted or harmful outdoor sound created by human activities, including noise emitted by means of transport, road traffic, rail traffic, air traffic and noise in agglomerations over a specified size. Types of noise not included in the regulations are noise that is caused by the exposed person, noise from domestic activities, noise created by neighbours, noise at workplaces or noise inside means of transport or due to military activities in military areas.

1.3 Timetable for reporting to the European Commission

The regulations specify the process to be followed in addressing environmental noise from transport sources, implemented over two phases:

Phase One:- Noise mapping bodies were required to submit strategic noise maps before 30th July 2007 for the following;

- Major roads with > 6 million vehicles per annum
- Major railroads with > 60,000 trains per annum
- Major airports with > 50,000 movements per annum
- Agglomerations with >25,000 inhabitants

Phase one noise action plans were submitted by authorities who came under these limitations. These plans were reported to the European Commission in January 2009. Longford County Council did not require a Phase one Noise Action Plan as the thresholds were not exceeded in their functional area.

Phase Two:- Phase two provides for noise mapping bodies to make strategic noise maps for the following;

- Major roads with > 3million vehicles per annum

- Major railroads with > 3,000 trains per annum
- Major airports with > 50,000 movements per annum
- Agglomerations with >10000 inhabitants

The revised/amended/new action plan, under phase two, was required to be submitted to the EPA by 18th July 2013. The EPA will submit a summary of the Noise Action Plan to the European Commission by 18th January 2014.

1.4 Roles and Responsibilities of Designated Bodies

1.4.1 National Authorities

The Regulations designate the Environmental Protection Agency (EPA) as the national authority responsible for overseeing the implementation of the Regulations. The EPA is required to provide advice and guidance to the relevant noise mapping bodies and action planning authorities. The EPA is responsible for reporting to the European Commission the information relating to strategic noise mapping and action planning in accordance with Article 10(2) of the Directive.

1.4.2 Noise Mapping Bodies

Noise Mapping Bodies and Action Planning Authorities were assigned responsibility under the regulations to draw up noise maps and prepare action plans for noise from the following noise sources:

- Major roads (defined in the regulations as roads with > 3 million vehicles per annum).
- Major railways (defined as > 30,000 trains per annum)
- Major airports with > 50,000 movements per annum
- Agglomerations with > 100,000 inhabitants.

The NRA, as the noise mapping body for major national roads, has prepared noise maps for the sections of the national roads, and also for the local roads (on behalf of Longford County Council) in county Longford, that were adjudged by vehicle count data to have more than three million vehicles per annum. This Noise Action Plan has been prepared by Longford County Council to address environmental noise from major roads with more than three million vehicles per annum. The action planning area covers the following sections of road;

- N4 from the County Boundary with Westmeath to the County Boundary with Leitrim
- N63 from the County Boundary with Roscommon to its junction with the N4 at Lisnamuck, east of Longford Town
- R198 from its junction with the N63 in Longford Town to Cahanagh Cross.
- UP-03017 Richmond Street in Longford Town (from Longford Arms to Annaly Park)

1.4.3 Action-Planning Authorities

Longford County Council under Article 7 (d) of the Environmental Noise Regulations 2006 is the designated Action Planning Authority for the purpose of this plan.

| | |
|----------------------------------|--|
| Action Planning Authority | Longford County Council, Great Water Street, Longford, Co. Longford. Tel: 043 33 46231 Email: environ@longfordcoco.ie |
|----------------------------------|--|

2. Existing Noise Management Legislation and Guidance

2.1 National Legislation and Guidance

2.1.1 Environmental Protection Agency Act 1992

In Ireland, the principal law relating to noise is Sections 106, 107, and 108 of Part VI of the Environmental Protection Agency (EPA) Act 1992.

S106: The Minister for the Environment has power under Section 106 of this Act, after consulting with other concerned Ministers and the EPA, to make regulations for the purpose of the prevention or limitation of any noise which may give rise to a nuisance or disamenity, constitute a danger to health or damage property. However, no such regulations have been introduced to date.

S107: Local Authorities have powers under Section 107(1) to serve a notice on any person in charge of premises, processes or works, other than an activity which is licensable under IPC, when they consider that it is necessary to do so in order to prevent or limit noise. The EPA has the same power in relation to an activity licensable by it.

S108: The (Noise) Regulations 1994 (S.I. 179) which implemented Section 108 of the EPA Act 1992, were designed to simplify and strengthen the procedures for dealing with noise nuisance. A Local Authority, the EPA or any other affected person may complain to the District Court under Section 108(1) of the EPA Act, where any noise is so loud, so continuous, so repeated, of such duration or pitch or occurring at such times as to give reasonable cause or annoyance to a person in any premises in the neighbourhood, or to a person lawfully using any public place.

2.1.2 IPPC and Waste Licensing

Noise conditions are routinely imposed as part of an IPPC licence. The relevant guidance is set out in the EPA publication *Guidance Note for Noise; License Applications, Surveys and Assessments in relation to scheduled activities* published by EPA in 2012. This document contains suggested noise limits of 55 dB(A) L_Ar,T for daytime and 45dB(A) L_Aeq,T for night-time; with said limits to be applied to “sensitive locations”. Whilst these limits have a very specific application, they have appeared in many different contexts and often form the basis for conditions in planning permissions. Similar noise conditions are also imposed on waste-licensed facilities.

2.1.3 Waste Permitting

Longford County Council may impose noise conditions on waste permitted facilities where noise is considered to be a potential issue. These conditions are similar to the EPA waste licence conditions.

2.1.4 Wind Energy Planning Guidelines

With specific regard to wind energy developments, this DEHLG document suggests a “lower fixed limit of 45dB(A) or a maximum increase of 5dB(A) above background noise at nearby noise sensitive locations”. The latter requirement may be relaxed in areas with low background levels. A fixed limit of 43dB(A) at night-time is deemed appropriate, as there is no requirement to protect external amenity.

2.1.5 Quarries and Ancillary Activities

Section 261 of the Planning and Development Act, 2000, introduced a new system of one-off registration for all quarries. Only those quarries for which planning permission was obtained in the 5-year period before S261 became operational were excluded. The Department of the Environment published guidelines for Planning Authorities for quarries and ancillary activities in April 2004, including recommended noise conditions for inclusion as part of registration or where a full planning permission was required. Depending on the complexity of the quarrying operation, noise conditions were included as part of the registration process and as part of the planning process for quarry extension applications.

2.1.6 The Roads Act 1993

Section 77 of the Roads Act 1993 enables the Minister for the Environment, following consultation with the Environmental Protection Agency, to introduce regulations requiring Road Authorities or the National Roads Authority as the case may be, to carry out works to mitigate adverse effects caused by increased road traffic noise following the construction of new roads or the improvement of existing roads. The section was commenced with effect from 1 August 1993 by the Roads Act 1993 (Commencement) Order 1993 (S.I. No. 197 of 1993). No regulations have been made under it.

2.1.7 National Roads Authority Guidelines

The National Roads Authority has published the document *Guidelines for the Treatment of Noise and Vibration in National Road Schemes*, which sets out the procedure to be followed in respect of “the planning and design of national road schemes”. The Authority proposed an operational design goal of 60dB L_{den} (free field residential façade criterion). This means that for any new road scheme the Environmental Impact Statement (EIS) must take this target into account with regard to any existing sensitive residential property likely to be affected by the road scheme.

The guidelines present an approach to mitigating the adverse effects of road construction in so far as possible through the use of measures such as alignment changes, barrier construction e.g. earth mounds, and the use of low noise road surfaces. The responsibility for considering noise mitigation policy relating to any proposed new sensitive properties in the vicinity of the road scheme lies with the relevant Planning Authority.

2.1.8 Building Regulations

The current Irish Building Regulations call for certain constructions to offer “reasonable resistance” to both airborne and impact sound. In the absence of any form of objective criterion, reference is often made to the guidance values put forward in the “Similar Construction” method described in their *Technical Guidance Document E*. It is a recommendation of the EPA Action Planning guidance that for buildings constructed in the vicinity of noise sources it would be appropriate for specific façade noise insulation values, based upon a target internal noise level, to be a stated requirement of the construction, potentially with a pre-completion sound insulation test required prior to habitation. This would help to ensure that the design targets of the construction are met in practice.

2.2 Regional and Local Legislation and Guidance

2.2.1 Regional Planning Guidelines for the Midland Region 2010 - 2022

The *Regional Planning Guidelines for the Midland Region 2010 – 2022*, provides Strategic Goals in Section 5 which seek to secure for the Midland Region, including an integrated transport and access infrastructure; to tackle infrastructure deficits in telecommunications; to improve energy efficiency; and, to put in place a framework that would meet the service infrastructural requirements of the region for the present and into the future.

2.2.2 Longford County Development Plan 2009 - 2015

As included in the Longford County Development Plan 2009 - 2015, Longford County Council will seek to ensure that new developments do not cause an unacceptable increase in the noise and pollution levels affecting surrounding properties. In considering planning applications for residential development in areas adjoining major roads, the Council will have regard to any Noise Maps and Noise Action Plans relating to the site location in accordance with the EU Directive on Assessment and Management of Environmental Noise as implemented by the Environmental Noise Regulations (Department of Environment, Heritage and Local Government, 2006).

2.3 Existing Noise Limit Values

At present there is no existing legislation that limits noise levels to a particular value. To address the lack of legislative measures and unify the approach taken by Action Planning Authorities the EPA have issued guideline noise levels for the onset of assessment of noise exposure and prioritising areas for noise mitigation measures. The proposed onset of assessment levels relating to road traffic noise are given below.

| | Lden | Lnight |
|--|-----------------------|-------------------------|
| Onset levels for noise mitigation measures | 70dB L _{den} | 57dB L _{night} |
| Onset levels for measures to preserve the existing noise situation | 55dB L _{den} | 45dB L _{night} |

These levels reflect an annual average 24 hour period.

These values were decided upon after a review of guidance values issued in other countries e.g. the UK and the NRA guidelines for treatment of noise. These values can be seen as indicative criteria in the decision-making process. Combined with the graphical results of noise mapping, consideration of the number of people exposed and the type of property the guidelines provide a useful framework for assessing noise impact.

2.4 Quiet Areas and Noise Sensitive Areas

Quiet Areas.

A quiet area in open countryside is defined as an area delimited by the action planning authority following consultation with the agency and approval by the minister, that is undisturbed by noise from traffic, industry or recreational activities. At present, there are no such areas identified in County Longford for which noise mapping has been carried out and as such quiet areas are not relevant to this plan.

Noise Sensitive Areas.

Current national guidance documents list types of premises/areas considered “noise sensitive” premises as any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or other area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels (EPA 2003)

3. Description of Action Plan Area

3.1 Description of County Longford

Longford is an inland county covering an area of 1,091 sq. kilometres. The county is predominately rural. Most of the county is flat with the main elevated land located in the northern section of the county. Land use in the county is predominantly agricultural with large areas of bog land located in the lowland areas around central Longford. Residential dwellings although concentrated around the towns and villages are also dispersed along the road network. Commercial and industrial developments are concentrated at the main towns and villages of the county.

3.2 Population Data

Longford county has a population of 39,000 persons (2011 census), an increase of 13.4% on the 2006 census. Of this population approximately 13,401 live in the urban areas of Longford Town and its surrounds.

3.3 Transport Infrastructure in County Longford

3.3.1 Road Network

County Longford has approximately 1585km of roads that consist of approximately:

- National Primary Route 48 km- N4, N5, N55, N63
- National Secondary Route 56 km – N55, N63
- Regional Routes 151 km
- Local Routes 1331 km

3.3.2 Rail Network

Longford is served by the Dublin (Connolly) to Sligo Line with stations at Longford and Edgeworthstown.

3.3.3 Bus Transport

There are 4 categories of bus transport currently operating in county Longford:

- Bus Éireann expressway long distance services
- Bus Éireann School Bus services operated on behalf of the Department of Education
- Private bus/coach services
- Community Bus Routes operated under Rural Transport Initiative(s) (RTI)

3.4 Extent of Action Planning Area

In accordance with phase II of the Environmental Noise Regulations 2006 a Noise Action Plan is required for;

-“ places near a major road which has more than 3 million vehicle passages per year”

In county Longford the following section of roadway were adjudged, by virtue of pre existing traffic count data, as being within this category

- N4 from the County Boundary with Westmeath to the County Boundary with Leitrim
- N63 from the County Boundary with Roscommon to its junction with the N4 at Lisnamuck, east of Longford Town
- R198 from its junction with the N63 in Longford Town to Cahanagh Cross.
- UP-03017 Richmond Street in Longford Town (from Longford Arms to Annaly Park)

The N4 in County Longford is primarily rural. It by-passes the towns of Longford and Edgeworthstown and runs through the village of Newtownforbes. Traffic volumes on the N4 in County Longford vary. From the county boundary with Westmeath to Longford Town the AADT is between 10,000 and 14,000. Between Longford Town and Newtownforbes traffic volumes are approximately 10,000. From Newtownforbes to the County Boundary with Leitrim the traffic volume varies between 10,000 and 8,000. Parts of the N4 will lie at a traffic threshold that are lower than threshold stated in the Environmental Noise Regulations 2006. Land use along the rural sections of the N4 is primarily agricultural with rural housing. Where the N4 passes through or close to towns and villages land use changes to a mixture of commercial, industrial and residential.

The N63 in County Longford is also a primarily rural road. However it does include many of the main streets in Longford Town. It also runs through the villages of Killashee and Lanesboro. The AADT of N63 varies according to location on the route. From its junction with the N4 at Lisnamuck to its junction with the R397 west of Longford Town AADT is generally in excess of 10,000. West of the junction with the R397 traffic volumes drop off significantly to less than 5000. Traffic volumes increase again at Lanesboro where the N63 joins the R392. At Lanesboro the AADT is estimated at approximately 8,000. As such, the majority of the N63 (approx 13km of 19km total) will lie outside the threshold stated in the Environmental Noise Regulations 2006. Land use along the rural sections of the N63 is primarily agricultural with rural housing. In Longford Town and the villages of Killashee and Lanesboro, land use changes to a mixture of commercial, industrial and residential.

The R198 is a main regional route in County Longford connecting Longford Town to County Cavan. The section of R198 included in this report is extends from the centre of Longford Town to the crossroads junction at the townland of Cahanagh, approx 2.5Km north of its junction with the N4. The majority of the section in this report is in an urban type setting with extensive housing development on both sides of the road.

Richmond Street in Longford Town was previously the N5 but since the opening of the N5 Longford Town By-Pass this road has been reclassified to an Urban road (UP-03017). Traffic volumes on this section of road have decreased significantly since the opening of the N5 Longford Town By-Pass. Development along this section of roadway is primarily commercial.

A table of most recent traffic count data is given in Appendix V of this document.

4. Results of Noise Mapping

4.1 Preparation of the Noise Map

The noise maps were prepared by the NRA and are published on the NRA website. They are now available on the Longford County Council website and can be accessed via the following link;

Lden:-

http://www.longfordcoco.ie/uploadedFiles/LongfordCoCo/Our_Departments/Environment/Documents/Draft_Noise_Action_Plan/Longford%20Lden%20NRA.pdf

Lnight:-

http://www.longfordcoco.ie/uploadedFiles/LongfordCoCo/Our_Departments/Environment/Documents/Draft_Noise_Action_Plan/Longford%20Lnight%20NRA.pdf

The noise maps were prepared by producing a series of exposure contours. The strategic noise maps for the routes affected in County Longford are attached in Appendix IV. These maps are plotted in terms of L_{den} and L_{night} and are displayed in 5dB contour bands. Each map shows colour-coded contours of different noise bands, identifying areas that are relatively louder or quieter. The noise indicator contours shown on the noise maps are **Lden** and **Lnight**. These are defined as follows (more detailed definitions can be found in Appendix I):

Lday:

The A weighted average sound level over the 12 hour day period of 0700-1900 h.

Levening:

The A weighted average sound level over the 4 hour evening period of 1900-2300 h.

Lnight:

The A-weighted average sound level over the 8 hour night period of 2300-0700 h.

Lden:

The day, evening, night rating level. L_{den} is a logarithmic composite of the **Lday**, **Levening**, and **Lnight** levels but with a 5 dB(A) weighting added to the **Levening** value and a 10 dB(A) weighting added to the **Lnight** value.

The noise levels reflect an annual average 24-hour period. The **Lden** contours shown on the maps range from 50dB to 75dB in 5 contour bands. The **Lnight** contours range from 50 dB to 70dB in 5 contour bands. Areas with noise levels of less than 55dB L_{den} and less than 45dB L_{night} are not mapped because these levels are below the threshold for inclusion under the legislation.

4.2 Exposure Statistics

Population exposure in each noise contour band was generated by cross referencing GeoDirectory locations with population data to create a set of population figures for each county in Ireland. A summary report was provided to each Local Authority to assist in the preparation of the action plans. The estimated population exposure results for Longford are shown in the table in section 4.3, below.

4.3 Presentation of Results

The results of the noise map analysis supplied by the NRA for the Action Plan Area is as follows:

| Decibel Level Contour | Total Residences | Total Area (km2) | Estimated Population |
|------------------------------|-------------------------|-------------------------|-----------------------------|
| 55 – 60 | 596 | 11 | 1146 |
| 60 – 65 | 400 | 5 | 739 |
| 65 – 70 | 452 | 2 | 784 |
| 70 – 75 | 127 | 1 | 166 |
| 75 - 99 | 0 | 0 | 0 |

Table 4.1: L_{den} Population Distribution.

| Decibel Level Contour | Total Residences | Total Area (km2) | Estimated Population |
|------------------------------|-------------------------|-------------------------|-----------------------------|
| 50 – 55 | 1091 | 9 | 787 |
| 55 – 60 | | | 839 |
| 60 – 65 | 196 | 2 | 266 |
| 65 - 70 | | | 2 |
| > 70 | 0 | 0 | 0 |

Table 4.2 L_{night} Population Distribution.

The results in the tables above indicate that there is a population of one hundred and sixty six in the County of Longford exposed to noise levels in excess of proposed onset levels for assessment of noise mitigation measures based on L_{den} levels.

The data used in delineating the L_{night} noise zones is based on bands of 5 dB, banding of zones by this method indicates that a population of two hundred and sixty eight are exposed to excess of 60 dB. While the next band range is from 55 dB to 60 dB indicates that a population of eight hundred and thirty nine are exposed to noise levels in this range.

4.4 Limitations of Results/Maps

The data used to generate the noise maps was obtained from computer modelling rather than from actual noise measurement. This approach is in accordance with the Noise Regulations. This noise mapping method does make it difficult to quantify the reduction in noise levels achieved by specific mitigation measures implemented at a local level. Without “before” and “after” noise monitoring results, improvements cannot be quantified. Data obtained from computer modelling is somewhat limited in that it provides a single annual average noise level and does not identify changing noise profiles over time.

The strategic noise maps are based on averaged data sets that best describe the defining parameters of the noise model. While these predictive models are extremely complex, they only provide estimates of the likely noise levels resulting from these conditions. It is possible that, in some cases, factors outside the scope of the predictive model could influence the levels of environmental noise.

The results of the noise mapping process display noise levels attributed only to a single source i.e. traffic noise. While this is by far the most predominant source of environmental noise, the maps may not always be fully representative of the noise situation.

In relation to the assessment of quiet areas in open country the maps become inapplicable. By definition these areas are undisturbed by noise from traffic, industry or recreational activity. As such, they will not be located in the vicinity of major roadways and will lie outside even the lowest contour bands of the noise maps. In addition, the identification of quiet areas within a built up environment becomes difficult when the mapping results for the area are attributed to a single major road passing through the development. Areas identified by the noise maps as being 'quiet' may be subject to traffic noise from smaller roads within the built up area that do not qualify as major roads. These areas may in fact experience levels of environmental noise that are higher than indicated due to traffic flows that are outside the scope of the mapping process. Nonetheless, the mitigation of noise levels from the major source will still be of benefit to these areas and will at least provide relatively perceived benefits regardless of absolute levels.

4.5 Traffic Count Data

For National Roads, the noise mapping is produced from the NRA's National Transport Model with a base year of 2011. Where some sections of the National road network fell below the thresholds, the NRA for continuity purposes mapped these sections for continuity purposes (eg N63 from Lanesboro to Knockanboy)

With respect to regional and local roads, Longford County Council provided "model-ready" data to the NRA.

Additional traffic counts have been carried out as part of route improvement schemes. A table giving traffic count data from all sources (excluding NRA Traffic Model) is attached in Appendix VI of this document. This indicates that some of the roads included in the Noise Mapping are below the thresholds given in the Environmental Noise Regulations.

Counts will have to be repeated periodically to ascertain if volumes are increasing or decreasing.

5. Mitigation and Protection Measures

5.1 Sources of Road Noise

The level of environmental noise generated by a particular road is dependent on a range of factors including the number and type of vehicles, the speed of the vehicles, the road surface and the incline. The extent to which the noise travels from the road is affected mainly by the following parameters: distance, weather, the presence of acoustic barriers, buildings, road width, road incline, nature of the topography and whether the ground is acoustically absorbent or reflective.

The most significant factor in terms of noise generation is the noise produced by the vehicle. Vehicle noise arises from three sources:

- Propulsion noise (engine, exhaust and intake systems).
- Tyre/road contact noise.
- Aerodynamic noise.

Engine noise is the dominant source at lower speeds (under 30kph for passenger cars/under 50kph for lorries), tyre/road noise dominates above that and aerodynamic noise becomes louder as a function of the vehicle speed (ref. European federation for transport and environment). Vehicle noise limits are set in EU legislation and address propulsion noise for new vehicles. Current limits are shown in Appendix VI. Noise emissions are determined by means of a vehicle drive-by test, which measures the noise emitted as the vehicle drives by at 50kph and accelerates in front of the microphone position. The current drive by test does not include provision for evaluating noise performance in typical urban stop-start traffic situations at lower speeds, where engine noise is the dominant source. Another failing is that the test parameters are set in such a way that vehicles can be designed to pass the test but are considerably louder when driven on the road. A new type of vehicle test has recently been introduced which corrects for these limitations.

The EU noise limits are a valuable tool for ensuring that noise emissions are minimized for new vehicles. However they only apply to new vehicles. As vehicles age, the level of noise produced by the engine increases with wear and tear on the parts but there is presently no requirement in Ireland to assess noise emissions from older vehicles. Another practical limitation to the noise emission limits is that while a newly purchased vehicle may comply with its emission limit, modifications to or removal of the vehicle silencer will result in an excessively noisy vehicle. Installation of a sports exhaust on a vehicle is not illegal at present and is a major contributor to nuisance noise from road vehicles.

Tyre rolling noise emissions have increased over time, predominantly due to the trend towards wider and heavier tyres. Tyre/road contact begins to dominate the noise emission above 30km/h for passenger cars and above 50km/h for lorries. For this reason, it was deemed necessary to regulate tyre/road noise separately at EU level. The rolling noise emissions of tyres are regulated under the following EU regulations.

Type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended there for - Regulation No 661/2009

Under the framework of Directive 2007/46/EC this regulations establishes new maximum permissible rolling noise limits for tyres available on the market across Europe. This noise limits replace the previous limits set out within Directive 2001/43/EC. The new Regulation requires tyres to comply with

Longford County Council Noise Action Plan 2013

more stringent limits on rolling noise emissions. Compliance with these new noise limits is mandated from 1st November 2012 for new types of tyre, from 1st November 2013 for new types of vehicle and from 1st November 2016 for all new tyres and vehicles. The new rolling noise limits are between 3 and 4 dB(A) lower than the previous limits.

Labelling of tyres with respect to fuel efficiency and other essential parameters – Regulation 1222/2009

In support of Regulation 661/2009 this Regulation establishes a framework for the provision of harmonised information on tyre parameters through labelling, allowing end-users to make informed choice when purchasing tyres.

As from 1 November 2012 the EU Energy labels for tyres must be available at point of sale and show information on fuel consumption, wet grip and rolling noise levels

In December 2011, the European Commission published a proposal for a Regulation on sound levels of motor vehicles. The proposal, if adopted by the parliament and council will replace the existing vehicle noise directive (70/157/EEC). With adoption of the new law, tighter noise emission limits for cars, vans, lorries and buses will be adopted and noise method testing will be updated.

5.2 Measures to Reduce Noise from Major Roads

5.2.1 Existing Developments

There are a limited number of approaches that can be taken to reduce noise from major roads for *existing* dwellings:

- For major roads in close proximity to residential areas, relocation of the roads away from the residential areas will serve to reduce the noise levels. The N5 Longford Town By-Pass is an example of such a scheme. This scheme has reduced traffic volumes in Longford Town Centre and will have improved the noise environment. It is important to note however that Environmental noise, while it is a consideration in such schemes, and is assessed in accordance with the NRA “guidelines for the treatment of noise and vibration in national road schemes”, it is not the driving force for these schemes.
- Where areas are identified by further assessment as requiring possible mitigation, it may be possible to install noise barriers. These may be in the form of earthen bunds or solid fences/walls or landscaping of areas.
- Traffic calming measures can be employed where the major road passes through a built-up area to reduce vehicle speeds and thereby noise levels.
- For road resurfacing projects the use of alternative surfacing materials may provide reductions in noise levels.
- The promotion of sustainable means of transport, cycling, walking and public transport can facilitate reductions in traffic volumes and road noise emissions.
- Improved noise insulation may improve noise levels within buildings.

5.2.2 Future Developments

The measures available for the protection of future developments from exposure to noise from major roads include acoustical planning measures in land use zoning and development layout, design and specifications, such as: locating residential developments away from major roads; using the lands around major roads feeding into towns for commercial/industrial development; incorporating noise issues into the design of housing developments by locating the access roads and green areas on the major road side of the development, thus increasing the separation distance between the houses and the roads; using a higher standard of insulation for new dwellings adjacent to major roads and also using higher standards of insulation for the exposed façades of new dwellings. These are acoustical measures although not all are within the control of the planning authority.

Longford County Council will endeavour to protect the future noise climate by the early incorporation of noise action planning into the planning and operational stages of future developments. In accordance with EN V 2 of Section 6.1 of Longford County Development Plan 2009-2015, the Council will seek to ensure that new development does not cause an unacceptable increase in the noise and pollution levels affecting surrounding properties. In considering planning applications for residential development in areas adjoining major roads, the Council will have regard to any Noise Maps and Noise Action Plans relating to the site location in accordance with the EU Directive on Assessment and Management of Environmental Noise as implemented by the Environmental Noise Regulations (Department of Environment, Heritage and Local Government, 2006).

Public transport improvements, fall under the control of other agencies such as the transport providers. However, as Roads Authority and as a key player in the development arena with a remit for the promotion of sustainable development, Longford County Council has the potential to influence the decisions of other relevant public transport infrastructure. The Council acknowledges the importance of the provision of a high quality public transport service provision.

5.3 Addressing the results of the Noise Mapping

5.3.1 Assessing and prioritising the results of noise mapping

As previously discussed there are no statutory limits in relation to environmental noise exposure. For road traffic, the environmental noise levels at which assessment is recommended by the EPA are;

- 70 dB, Lden
- 57 dB, Lnight

For the preservation of quiet areas, the environmental noise levels at which assessment is recommended by the EPA are;

- 55 dB, Lden
- 45 dB, Lnight

Decision matrices have been developed which enable the authority to focus resources on areas in most need of improvement. These matrices are based on the following considerations;

- The noise levels calculated by the noise mapping
- The type of location (town centre, residential, commercial, ...)
- The noise source (in the case of Longford – road related only)

Noise level calculated by the noise mapping.

The score under this variable is assigned based on the calculated Lden and Lnight noise levels for the location.

Type of location.

The score is assigned based on the type of land use in the area and on the receptor. A higher score is assigned to open countryside on the basis of the expectation that residences in open countryside will have lower ambient noise levels than commercial areas and town centres. A higher score is also assigned to noise sensitive locations because of the requirement for low noise levels for them to function effectively, e.g. schools, churches, funeral homes, nursing homes,

Noise Source.

For County Longford the noise source will be the same for all locations, i.e., major roads.

An example of a decision matrix is given below.

| Prioritisation Matrix | | | | |
|--|-------------------------|--------------------|----------------------|-------------|
| <i>Based on Mapped Exposure levels in the assessment area.</i> | | | | |
| Location | | | | |
| Decision Selection Criteria | | Score Range (Lden) | Score Range (Lnight) | Sub - Total |
| Noise Band | 45 - 49 | 4 | 5 | |
| | 50 - 54 | 3 | 4 | |
| | 54 - 59 | 2 | 2 | |
| | 60 - 64 | 1 | 3 | |
| | 65 - 69 | 2 | 4 | |
| | 70 - 74 | 3 | 5 | |
| | 75 - 79 | 4 | 6 | |
| | > 80 | 5 | 7 | |
| Type of Location | Town Centre | 1 | 1 | |
| | Commercial | 1 | 2 | |
| | Residential | 2 | 3 | |
| | Noise Sensitive | 3 | 3 | |
| | Open Countryside | 3 | 3 | |
| | Recreational open space | 2 | 2 | |
| | Air | | | |
| Industry | | | | |
| Rail | | | | |
| Road | | 3 | 4 | |
| | | Total Score | | |

Longford County Council will develop a decision matrix in accordance with the above method. An assessment score will be set to indicate where threshold levels have been exceeded and that the location should be included in the shortlist for further assessment. Once the shortlist of locations has been identified these will then be mapped to identify if there are any clusters. The short listing will enable Longford County Council to prioritise actions and the existence of clusters may further influence the prioritisation.

5.3.2 Preservation of noise levels in Quiet Areas

Quiet Areas.

A quiet area in open countryside is defined as an area delimited by the action planning authority following consultation with the agency and approval by the minister, that is undisturbed by noise from traffic, industry or recreational activities. At present, there are no such areas identified in County Longford for which noise mapping has been carried out and as such quiet areas are not relevant to this plan.

Noise Sensitive Areas.

Current national guidance documents list types of premises/areas considered “noise sensitive” premises as any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or other area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels (EPA 2003).

In the decision matrix example given in the previous section, noise sensitive locations are given a high priority to reflect their requirements in respect of noise levels. All noise sensitive locations identified in the action planning area will be tested with the developed matrix to establish their priority in the shortlist of locations.

Noise sensitive locations will also be assessed to identify if protective measures need to be taken to preserve the quiet environment at these locations.

6. Going forward – Plans of Action

The aim of the Action Plan is to “prevent and reduce environmental noise where necessary and particularly where exposure levels can induce harmful effects on human health and to preserving environmental noise quality where it is good”. The Action Plan will endeavour to manage the existing noise environment and protect the future noise environment within the action planning area.

Management of the existing noise environment may be achieved by prioritising areas for which further assessment and possible noise mitigation may be required. Protection of the future noise environment may be achieved by acoustical planning, which further incorporates noise into the planning process via measures such as land-use planning, development planning, sound insulation measures, traffic planning and control of environmental noise sources

In this regard Longford County Council aims to undertake the following actions within the action planning area:

Year 1

The results of the strategic noise mapping provide information on the assessed noise levels at properties within the assessment area, along with an estimate of the number of inhabitants. These resultant datasets may then be used in combination with the recommended onset of assessment noise levels to develop a noise scoring decision matrix. This decision matrix is used to draw up a short list of potential areas for action, both above the onset level where mitigation measures are deemed appropriate, and below the onset level for the preservation of Quiet Areas. Longford County Council shall use such a decision matrix to assess the properties within the Action Plan Area to determine a shortlist of properties that may require attention. Additionally the exposure statistics and populations affected shall be confirmed by cross referencing the noise contour maps with up to date geo directory databases.

Year 2

Prior to the review of potential noise mitigation measures, and any subsequent commitment of budget to undertake any necessary actions, Longford County Council aim to confirm that the noise levels indicated by the strategic noise maps are being experienced by the population within the study area. Additionally traffic counts shall be undertaken to verify traffic volumes in the study area.

Year 3

Once the extent of the existing noise impact has been confirmed for the locations under review, the potential noise mitigations measures will be investigated, and a cost benefit analysis undertaken for each with the aim of developing a selection matrix which leads towards a recommendation for action.

Year 4

Following on from Year 3 a priority of actions shall be agreed to form a list of beneficial, achievable actions for noise mitigations. Each action shall be designed budgeted and programmed by the relevant department for consideration within their future work plans.

Year 5

Longford County Council shall undertake a review in year 5 of the current action plan and prepare for revised Action Plan. Traffic counts shall be progressed to identify if additional areas need to be included in subsequent noise action plans.

Review of Noise Action Plan progress

This is the first noise action plan prepared by Longford County Council. No action plan was required under phase I of the Environmental Noise Regulations.

Longford County Council's Environment Department will oversee the implementation of the Noise Action Plan. The progress of the plan will be reviewed on an annual basis. All outcomes from the Plan shall be reviewed in year 5 and shall feed into the process for subsequent plans. Specific mitigation measures, if any, may be implemented and reviewed by the relevant section of the Local Authority.

7. Long-Term Strategy

The Local Authority as the Planning Authority can have a significant influence on the control of exposure to environmental noise and shall play a key role in the improvement of amenity. The appropriate use of the planning system can be used to help avoid or minimise the adverse impacts of noise without placing unreasonable restrictions on development.

In order to successfully use the planning process to help avoid or minimise noise exposure in a consistent manner it is considered appropriate for guidance on noise exposure levels to be considered within the proposal and design stage of planning applications.

Longford County Council identifies the planning system as a key instrument going forward to help avoid or minimize the adverse impacts of environmental noise. Early intervention in the planning process is important to identify the noise impact of future developments. Planning permission can be used in a positive manner to preserve areas below or within the protection thresholds.

Longford County Council will consider utilising the planning process where necessary:

- To integrate Noise Action Plans into the County Development Plan.

- To ensure relevant guidelines relating to noise pollution and mitigation are considered during the planning process.

- To ensure future developments are designed and constructed so as to avoid or minimise noise exposure.

- To ensure compliance with current and future policy and guidelines relating to environmental noise.

8. Financial Information

Financial provisions have not been made available at national level to fund any noise assessment measures, mitigation measures or additional noise mapping requirements resulting from implementation of this action plan. Longford County Council is committed to implementing the provisions of this Noise Action Plan in as far as it is practical within existing financial and staff resources. As part of the actions contained within the Plan, any proposed noise mitigation measures shall require detailed estimates prior to formal approval along with a cost benefit analysis to determine the effectiveness of the proposal.

9. Public Consultation

9.1 General

The Regulations require the Action Planning Authorities to consult the public when drawing up and revising Action Plans. The public must be consulted about the proposals in the draft action plan and given early and effective opportunities to participate in the preparation and review of the plan. The results of the public consultation must be taken into account in finalising the plan. The public must be informed of the decisions taken. Reasonable time must be provided for each stage of public participation.

9.2 Public Consultation Process

The Draft Noise Action Plan was made available for public display in the offices of Longford County Council on the 1st August 2013 and remained on display until the 24th September 2013.

An advertisement was placed in the Longford Leader, published on the 7th August and dated Friday 9th August 2013, publicising the Consultation phase. In the advertisement the draft plan was available for inspection from the 8th August 2013 to the 5th September 2013 and the public were invited to make written submissions up to and including the 19th September 2013, a period of 6 weeks).

9.3 Consultation with Statutory and Other Bodies

The following bodies were written to and their comments on the Draft Noise Action Plan were sought;

1. Department of Transport Tourism & Sport
2. Department of the Environment, Community & Local Government
3. National Roads Authority
4. Environmental Protection Agency
5. Roscommon County Council
6. Leitrim County Council
7. Cavan County Council
8. Westmeath County Council
9. Iarnrod Eireann
10. Elected Members of Longford County Council (Co meeting 24th July 2013)

9.4 Outcome of Consultation with Statutory and Other Bodies

Two written submissions were received during the public consultation period. There were as follows;

- National Roads Authority (received 21st August 2013)
- Iarnrod Eireann (received 30th August 2013)

These submissions are included in appendix ___ of this Noise Action Plan.

A brief summary of the actions taken on foot of the submissions is given below.

National Roads Authority. – This submission commented on the Draft Noise Action Plan and suggested corrections and revisions to the text to reflect the role of the NRA in the Noise Plan process. These have been incorporated into the text of the final Noise Action Plan.

Iarnrod Eireann – This submission suggested extending the noise action plan to cover railways in county Longford. However, as there are no railways in County Longford for which the traffic is above the thresholds set out in the Environmental Noise Regulations, the railways in County Longford will not be included in this Noise Action Plan.

Furthermore the submission requests that Longford County Council adopt certain measures in relation to applications for planning permissions adjacent to railways. As there are no railways in County Longford included in the Noise Action Plan these are not considered appropriate to the Noise Action Plan.

Appendix I
Glossary of Acoustic and Technical Terms

Glossary

Acoustical Planning: Controlling future noise by planned measures such as land-use planning, systems engineering for traffic, traffic planning, abatement by sound-insulation measures and control of noise sources.

Agglomeration: A dense urbanized area having a population greater than 100,000 persons (population greater than 250,000 for the first round of the Environmental Noise Regulations 2006).

Decibel (dB): A unit of measurement of sound. When measuring environmental noise, an “A” weighting network is used (called dB(A)) which filters the frequency of the sound to mimic human hearing, which is most sensitive to frequencies between 500Hz and 5,000Hz. The decibel scale is logarithmic. If two noise sources emit the same sound level e.g. 80dB(A), the combined sound level from the two sources is 83dB(A) and not 160dB(A). The human perception of “loudness” is that a 10dB increase in sound level is perceived as being twice as loud. A 3dB increase, which is a doubling of the sound level, is perceived as a barely perceptible change in loudness. A decibel level of zero represents absolute silence. A level of 140dB(A) would cause ear pain.

The table below gives examples of the relationship between the subjective valuation of noise and the actual objective levels (taken from the END Briefing note of the 07/02/08):

| Noise Level dB (A) | Description |
|--------------------|---|
| 120 | Threshold of Pain |
| 95 | Pneumatic drill (at 7m distance) |
| 83 | Heavy diesel lorry (40km/h at 7m distance) |
| 81 | Modern twin-engine jet (at take-off at 152m distance) |
| 70 | Passenger car (60km/h at 7m distance) |
| 60 | Office environment |
| 50 | Ordinary conversation |
| 40 | Library |
| 35 | Quiet bedroom |
| 0 | Threshold of hearing |

Daytime: Between the hours of 7am and 7pm.

dB(Lin)max peak: Instantaneous Maximum Peak sound pressure measured in decibels on a sound level meter, without the use of a frequency weighting system - used to measure air overpressure levels from blasting.

Evening time: Between the hours of 7pm and 11pm.

Environmental Noise: Shall mean unwanted or harmful outdoor sound created by human activities, including noise emitted by means of transport, road traffic, rail traffic, air traffic, and from sites of industrial activity such as integrated pollution prevention and control licensed industries.

Hertz: Unit of frequency of sound.

IPPC Licence: Integrated Pollution Prevention and Control Licence (obtained from EPA).

Lden: (day-evening-night noise rating indicator) shall mean the noise indicator for overall annoyance. This comprises of adding the average value for the 12 hour day time period with the average value of the 4 hour evening period plus a 5 decibel weighting or penalty, and the average value for the 8 hour night time period with a 10 decibel weighting or penalty.

Lday: (day-noise indicator) shall mean the noise indicator for annoyance during the day period. This is the average value in decibels for the daytime period

Levening: (evening-noise indicator) shall mean the noise indicator for annoyance during the evening period. This is the average value in decibels for the evening time period.

Lnight: (night-time noise indicator) shall mean the noise indicator for sleep disturbance. This is the average value in decibels for the night-time period

Major road: a national or regional road with more than 3 million vehicles per annum (more than 6 million vehicles per annum for the first round of the Environmental Noise Regulations 2006).

Major railway: A railway line, which has more than 30,000 train passages per year (more than 60,000 train passages per year for the first round of the Environmental Noise Regulations 2006).

Major Airport: A civil airport, which has more than 50,000 movements per year, excluding those movements purely for training purposes on light aircraft; in this context, a movement means a single take-off or landing of an aircraft.

Night time: Between the hours of 11pm and 7am

Noise annoyance: Noise annoyance is defined by the World Health Organisation (WHO) as 'a feeling of displeasure evoked by noise'. Ref UK DOT, Transport analysis guidance, Noise, TAG unit 3.3.2 November 2006.

Peak Particle Velocity (ppv): Peak particle velocity is a measure of vibration magnitude, which is the maximum rate of change of ground displacement with time, usually measured in mm/sec.

Appendix II
Bibliography and References

Bibliography and References

SI 140 of 2006, Environmental Noise Regulations 2006.

Directive 2002/49/EC relating to the assessment and management of environmental noise.

EPA Guidance Note for Noise Action Planning, EPA July 2009.

Central Statistics Office. National Census Data 1996 – 2011. www.cso.ie

Central Statistics Office. Population classified by area, April 2012.

NRA Guidelines for the Treatment of Noise and Vibration in National Road Schemes (2004)

Longford County Council County Development Plan 2009 - 2015.

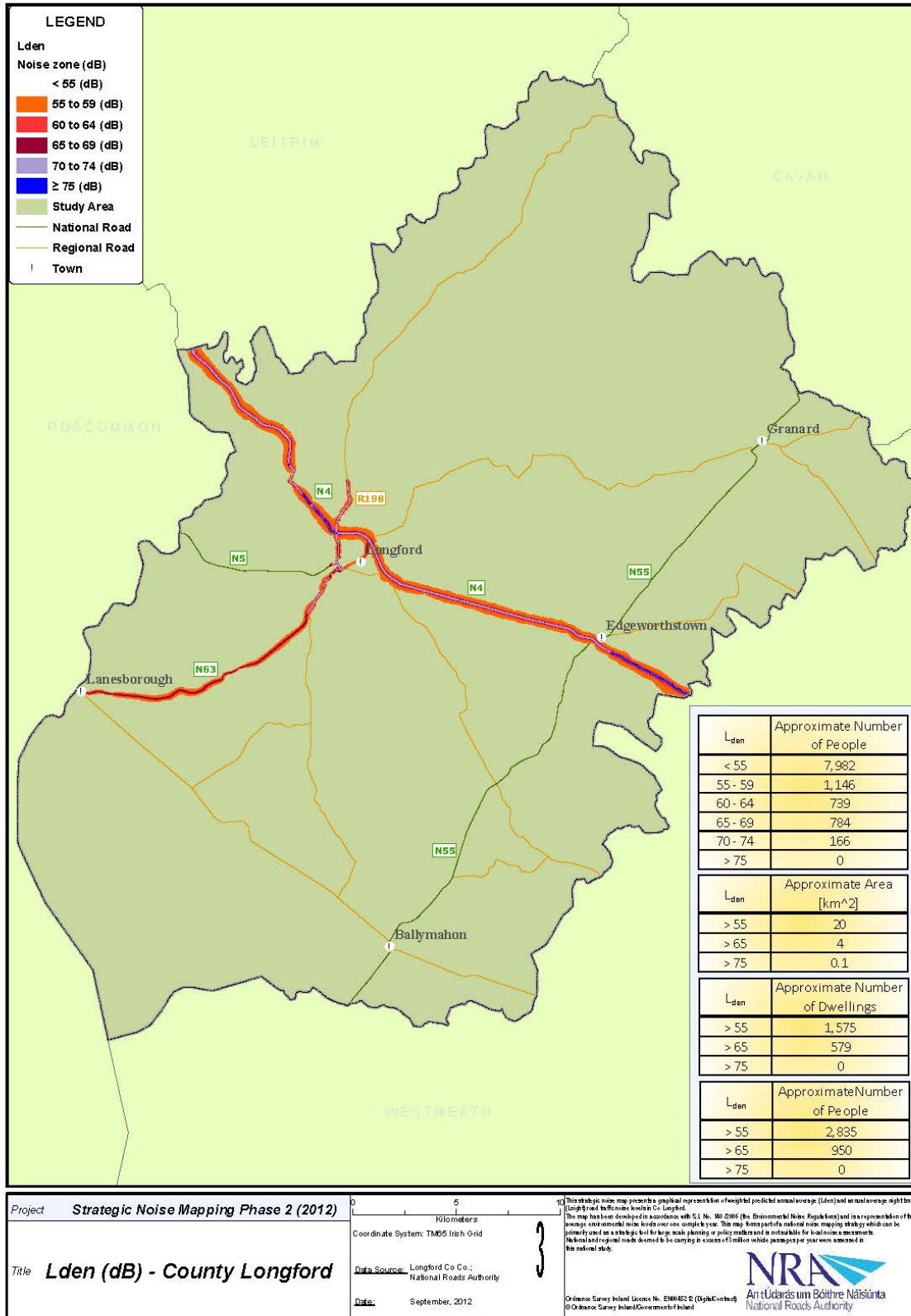
Appendix III

Strategic Noise Maps (Not To Scale)

County Longford L_{den} dB Bands

County Longford L_{Night} dB Bands

County Longford L_{den} dB Bands



Appendix IV
EU Noise Emission Limits for Road Vehicles

Overview of EU Environmental Legislation

H. Noise from Vehicles and Machinery

Existing noise control legislation can be divided into four categories. The noise emissions from **motor vehicles** are covered by two directives introducing sound level limits. Three directives limit noise emissions from **aeroplanes** by reference to the Convention on international Civil Aviation. Noise emission from **household appliances** has been the object of a framework directive on household appliances. The last sector, **construction equipment**, is based in the EEC conformity assessment procedure framework directive which led to the adoption of seven daughter directives on particular types of equipment.

Noise Control

H.1 Motor Vehicles, Motorcycles

Motor Vehicles

Directive 70/157/EEC introduces limits on the sound levels of noise for road vehicle and gives requirements for measuring sound levels and exhaust systems and silencers. Several amendments, the latest by Directive 96/20/EC, have reduced these permissible sound levels. Limit values for eight types of passenger and goods vehicles range from 74 dB(A) to 80 dB(A). It applies a system of optional harmonisation to the approval of motor vehicles and exhaust system. The Member States may not refuse to grant EEC or national type-approval to vehicles which meet the requirements of the directive.

Motorcycles

Directive 78/1015/EEC on motorcycles establishes limits for the permissible sound level of motorcycles and requirements for exhaust or intake silencer. It introduces a harmonised testing procedure before issuance of the sound level measurement certificate.

A system of optional harmonisation is applied to the checks carried out by the Member States which may not refuse to grant EEC or national type-approvals, although they are not required to adopt these standards for domestic producers. Limit values are given for three categories of motorcycles and range from 75 dB(A) to 80 dB(A). Members are required to respect the validity of each other's certificates.

In December 2011, the European Commission published a proposal for a Regulation on sound levels of motor vehicles. The proposal, if adopted by the parliament and council will replace the existing vehicle noise directive (70/157/EEC). With adoption of the new law, tighter noise emission limits for cars, vans, lorries and buses will be adopted and noise method testing will be updated.

Appendix V

Traffic Count Data for Roads in Co, Longford

The following table gives the most recent traffic count data available for the roads in County Longford which are considered in this Noise Action Plan.

This data was not necessarily used or may not have been made available to the NRA at the time of the preparation of the noise mapping for County Longford.

Table of Traffic Volumes

| Route No | Location | AADT | Source | Traffic Count Date |
|-----------------|--|-------------|---|---------------------------|
| N4 | Between Rooskey and Clonart North | 8019 | N4 Mullingar to Rooskey Route Corridor Selection Report | 2008 |
| N4 | Between Clonart North and Ballagh Bridge | 7963 | | |
| N4 | Between Ballagh Bridge and Newtownforbes | 9007 | | |
| N4 | Between Newtownforbes and L-5019 | 10,532 | | |
| N4 | Between L-5019 and Red Cow Rdbt | 10,129 | | |
| N4 | Between R198 and R194 | 13,394 | | |
| N4 | Between R194 and R393 | 10,885 | | |
| N4 | Between R393 and Lissardowlan | 14,716 | | |
| N4 | Near Lissardowlan | 14,485 | | |
| N4 | Near Ballynagoshen | 13,989 | | |
| N4 | West of Edgeworthstown | 13,989 | | |
| N4 | East of Edgeworthstown | 13,087 | | |
| N4 | Near Rathowen | 13,106 | | |
| | | | | |
| N63 | Ballinalee Road, south of N4 | 11,437 | N4 Mull. to Rooskey - RCSR | 2008 |
| N63 | South of Longford | 10,107 | | |
| N63 | At Barnacor | 3,173 | N63 Barnacor to Cloonfore Pavement Scheme | 2008 |
| N63 | At Lanesboro | 7,640 | NRA Traffic Flows 2004 | 2003 |
| | | | | |
| R198 | North of N4 (between N4 and L-10182) | 9,013 | N4 Mull. to Rooskey - RCSR | 2008 |
| R198 | Battery Road | 11,970 | | |
| | | | | |
| R194 | Between N4 and Carrickglass | 5,460 | N4 Mull. to Rooskey - RCSR | 2008 |
| N5 | West of Longford | 7,776 | | |
| N55 | South of Edgeworthstown | 4,127 | | |
| N55 | Between Edgeworthstown and R395 | 6,682 | | |
| | | | | |
| | | | | |
| | | | | |

Appendix VI

Submissions Received

National Roads Authority – dated 21st August 2013

Iarnrod Eireann – dated 30th August 2013

The Senior Executive Officer
Environmental Department
Longford County Council
Great Water Street
Longford

21 AUG 2013

RECEIVED

Teach Naomh Máirtín / Bóthar Waterloo / Baile Átha Cliath 4
St. Martin's House / Waterloo Road / Dublin 4
Tel: / Tel: + 353 1 660 2511 Facs: / Fax: + 353 1 668 0009

Dáta | Date

20 August 2013

Ár dTag. | Our Ref.

NRA13 88380

Bhur dTag. | Your Ref.

Re: Longford County Council – Draft Noise Action Plan

Dear Sir/Madam

Thank you for forwarding a draft copy of your proposed noise action plan. The NRA welcomes the opportunity to liaise with Longford County Council throughout the action planning phase. The points outlined below may need clarification.

Section 2.1.7 (Page 4)

It is stated:

"The Authority proposed an operational design goal of 60dB L_{den} free field value including reflections from the facade"

For consistency with the NRA Guidelines this should be reworded as *"The Authority proposed an operational design goal of 60dB L_{den} (free field residential facade criterion)"*

Section 4.1 (page 9)

The Longford draft NAP states that the strategic noise maps can be viewed on the NRA website. An accompanying link to the NRA site is also provided. The link is specifically for the Longford maps.

<http://www.nra.ie/Environment/NoiseMaps/NoiseMapRepository/file,18336,en.pdf>

<http://www.nra.ie/Environment/NoiseMaps/NoiseMapRepository/file,18337,en.pdf>

Perhaps it may be better if the Longford maps were available on the Longford County Council website.

Section 4.3 (page 10)

It is stated:

"The results of the noise map analysis supplied by the EPA for the Action Plan Area is as follows..."

Please replace "EPA" with "NRA" so that the sentence reads as:

"The results of the noise map analysis supplied by the NRA for the Action Plan Area is as follows..."

Section 4.5 (page 11)

It is stated:

"The noise mapping is produced on traffic count data available to the NRA such as data from permanent traffic count stations and the NRA publication "National Roads and Traffic Flows – 2004" which is based on manual counts collected from Local Authorities.

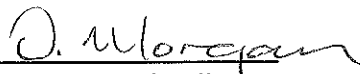
Additional traffic counts have been carried out as part of route improvement schemes. This data does not appear to have been used by the NRA or may not have been available to the NRA at the time of the noise mapping. A table giving traffic count data from all sources is attached in Appendix VI of this document. This indicates that some of the roads included in the Noise Mapping are below thresholds given in the Environmental Noise Regulations"

The NRA maintains a National Transport Model to support transport investment decisions, and facilitate good forecasts of traffic volumes on the road network for different future years, and economic conditions. The National Transport Model provides a comprehensive representation of base demand on the transport network, in addition to a series of future year transport forecasts. For the strategic noise mapping of all national roads, the Traffic Model was used to determine traffic quantities and composition on national roads in respect of the 2011 calendar year. Data provided in Appendix IV of the draft NPA relates to the years 2003 and 2008. In addition, primarily for continuity purposes, the NRA mapped some of the major roads that were below the specified threshold.

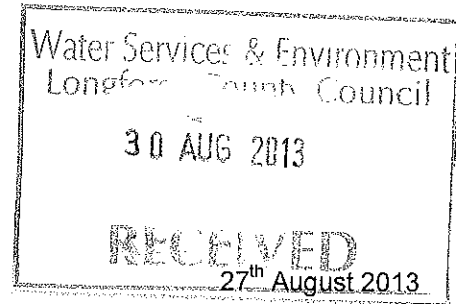
With respect to non-national roads, Longford County Council provided 'model-ready' data to the NRA under the centralised approach. Traffic quantities and composition of this 'model-ready' data was not reviewed by NRA prior to calculation.

Please contact me if you wish to discuss any issue in more detail.

Yours faithfully


Dr. Vincent O'Malley
Environmental Manager

Longford County Council
Great Water Street
Longford
County Longford



Attn.: Senior Executive Officer

Re.: Submission – Draft Noise Action Plan 2013

Dear Sir/Madam

I write further the referral of Longford County Council's draft Noise Action Plan 2013, as part of the public consultation phase.

As noted in Section 3.2.2 of the draft Noise Action Plan, Longford is served by heavy rail services on the Dublin to Sligo line, with stations at Longford and Edgeworthstown. In accordance with our statutory requirements under the Environmental Noise Regulations 2006 (SI No. 140 of 2006), Iarnród Éireann defined the extent of the Major Rail network which required the preparation of Strategic Noise Maps. No 'Major Rail', as defined by the Environmental Noise Regulations, occurs within the functional area of Longford County Council. The extent of Major Rail, together with associated Strategic Noise Maps for the Major Rail, was reported to the national authority (Environmental Protection Agency) as part of Iarnród Éireann's reporting requirements.

The draft Noise Action Plan refers to noise levels from road traffic only. Longford County Council has adopted noise levels of 70dB L_{den} and 57dB L_{night} as 'onset levels' above which noise mitigation measures is required for major roads. These onset noise levels are chosen by the Action Planning Authorities, in accordance with EPA guidance. There is no mention in the draft Noise Action Plan as to whether these onset levels will apply to the railway environment.

In Section 2.2.2 of the draft Noise Action Plan it is stated that Longford County Council will have regard to Strategic Noise Maps and the Noise Action Plan when considering planning applications for residential development in areas adjoining major roads. While it is acknowledged that no Major Rail occurs within County Longford, Iarnród Éireann believe that the Council should have similar regard to developments adjoining the railway corridor, to ensure continued protection of the public transport network.

Iarnród Éireann is seeking to ensure that Longford County Council's intent to integrate the Noise Action Plan into the Planning System allows for the efficient continuance of Iarnród Éireann's public transport

obligation. Any curtailment of rail public transport due to inappropriate future development will negatively impact sustainable transport and land-use planning policy and objectives. Such curtailment may result from complaints from new occupants of residential development where they perceive that the enjoyment of internal and external property is being impacted by operations along the pre-existing railway. Iarnród Éireann has already experienced instances where residents in a new development have complained about railway operations and attempted to prevent essential maintenance works from being carried out.

Iarnród Éireann suggests that planning permission for new residential development should not normally be granted where noise levels at that proposed development are predicted above the onset level resulting from existing practices (i.e. traffic on existing roads or railway operations on existing corridor). If such a policy were adopted by the Planning Authority for future development proposals, the transport network (roads and railway) would be adequately protected against inappropriate future development.

Iarnród Éireann believe that, for planning applications in areas adjoining the railway corridor, the Planning Authority should request applicants to submit quantified noise assessments which demonstrate that the noise level at proposed developments will not result in noise levels equalling or exceeding the onset noise levels prescribed in the Noise Action Plan. Such quantified noise assessments will protect the transport network and also the occupiers of the residential units proposed against environmental noise.

Elements of the quantified noise assessment should include the predicted noise levels

- a) within development with windows closed;
- b) within development with open windows; and
- c) exterior of development within private or communal gardens.

It is submitted that it is necessary to model the various scenarios detailed above, as noise complaints due to transport sources commonly arise as a result of temporary habitual changes within a residence. Noise from existing transport sources may be more noticeable or objectionable when windows are open for daytime and night time during summer periods or when gardens are used for recreational purposes during summer months (outdoor dining, outdoor relaxing, etc).


It is submitted that quantified noise assessment should be conducted for any proposed development within 150m of a railway corridor. This should be a requirement of the Noise Action Plan or a requirement of the Planning Authority in assessment of Planning Applications.

Iarnród Éireann wish to highlight that under Article 28 of the Planning and Development Regulations 2001 (as amended) CIÉ is a notifiable body for planning applications where a development might have

an impact on rail based transport. A system currently exists whereby Longford County Council refers planning applications for developments adjacent to the railway corridor to Iarnród Éireann. It is assumed that this referral system will continue in the future to allow Iarnród Éireann consider the planning applications and their potential impact on the railway. It is Iarnród Éireann's objective that railway operations are maintained in a safe and efficient environment. Therefore, Iarnród Éireann assess and comment upon planning applications prior to the Planning Authority reaching a decision. It is recommended that for planning application including development of residential units adjacent to the railway corridor, the Planning Authority should require the inclusion of a noise impact assessment as part of the planning submission documentation. Iarnród Éireann requests that no planning application should be permitted where noise levels at potentially new residential receptor could equal or exceed the onset threshold levels prescribed in the Noise Action Plan.

I trust this response is satisfactory to your request for observations to the draft Action Plan. Please do not hesitate to contact me if you require anything further.

Yours sincerely



William Pierce
Manager, Energy and Environmental Section

Cc: **Infrastructure Manager**, Old Railway Station, Grace Road, Athlone, Co. Westmeath;
Senior Track & Structures Engineer, Old Railway Station, Grace Road, Athlone, Co. Westmeath.