
WICKLOW COUNTY COUNCIL

NOISE ACTION PLAN 2013

SUMMARY REPORT



**TRANSPORTATION & ROADS INFRASTRUCTURE DEPARTMENT,
WICKLOW COUNTY COUNCIL,
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County Wicklow lies on the eastern seaboard of Ireland immediately to the south of the Dublin Agglomeration and is bounded to the east by the Irish Sea and to the west and south by the predominantly rural counties of Kildare, Carlow and Wexford. County Wicklow covers a geographical area of 2,024 square kilometres with 66 kilometres of coastline. The larger population centres are concentrated along the eastern coastline with a pronounced concentration towards the north eastern corner of the county which is close to the major population centres in the Dublin Agglomeration.

The population of County Wicklow at the 2011 census was 136,640 which was an overall increase on 10,446 on the 2006 census population of 126,194. This equates to an overall population increase of 8.3% for the county over the period.

There are approximately 2,400 kilometres of public roads within the charge of Wicklow County Council. These consist of 92 kilometres of national roads, 422 kilometres of regional roads and 1,886 kilometres of local roads. There are two national routes, M11/N11 (54 Km) and N81 (38 Km) in the county.

The only railway network located in County Wicklow is the Dublin Connolly to Rosslare Europort Intercity Service which connects the county with other transport nodes located in Dublin and Dun Laoghaire to the north and Rosslare Europort to the south. In addition Iarnród Éireann, operate the electricified DART rail service from Greystones and Bray to the centre of Dublin city and beyond.

The Wicklow County Council Noise Action Plan 2013 has been prepared in accordance with the requirements of the SI 140 of 2006, also known as the Environmental Noise Regulations. These regulations give effect to the European Union Environmental Noise Directive 2002/49/EC (END), relating to the assessment and management of Environmental Noise.

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The aim of the END is

“to define a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise”.

The objective of the Noise Action Plans is

“preventing and reducing environmental noise where necessary and particularly where exposure levels can induce harmful effects on human health and preserving environmental noise quality where it is good.”

Therefore, the key requirements of the END can be set out in three stages as follows:

- 0 Undertake strategic noise mapping to determine exposure to environmental noise.
- 1 Ensure information on environmental noise and its effects is made available to the public.
- 2 Adopt action plans, based upon the noise-mapping results, with the objective of preventing and reducing environmental noise where necessary and to preserve environmental noise quality where it is good.

Therefore, the action plans must reduce the existing noise climate where necessary and protect the future noise climate. The Noise Action Plan is therefore designed with the twin aims of:

- 1) Avoiding significant adverse health impacts from noise.
- 2) Preserving environmental noise quality where good.

The Wicklow County Council Noise Action Plan 2013 has been prepared by Wicklow County Council and has focused on the impact of major roads within County Wicklow. The actions detailed herein have been drawn up to assess noise exposure in priority areas, as indicated by strategic noise mapping located on the identified routes within County Wicklow. The methods used in production of strategic noise maps are outlined and the summary results are presented.

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The results have been analysed and recommendations made to limit population exposure to environmental noise pollution.

The Authority responsible is Wicklow County Council. They will adopt a strategic approach to managing environmental noise pollution and will aim to assess and prioritise the limitation of environmental noise levels where they are potentially harmful and protect “quiet areas”. Wicklow County Council will take cognisance of acoustical planning in the planning process to endeavour to ensure that future developments include provisions to protect the population from the harmful effects of environmental noise in the interests of residential amenity and public health.

The Wicklow County Council Noise Action Plan 2013 applies, as per the Noise Regulations 2006, to the areas adjacent to roads in County Wicklow, which experience traffic volumes in excess 3 million vehicles a year. Strategic Noise Maps have been prepared for all roads deemed to fall within the threshold of 3 million vehicles a year (approx 8,250 AADT) in County Wicklow which equates to 103 kilometres of roads or under 5% of the total length of roads in County Wicklow.

These 103 kilometres of major roads can be further broken down into 65 kilometres of National roads and 38 kilometres of Regional roads. The National roads consist of the entire M11/N11 (54 kilometres) and the N81 north of the junction with the R759 (11 kilometres). The 38 kilometres of Regional roads are all located in the east of the county and in the vicinity of the major residential towns on the eastern coastline especially towards the northeast of the county. Strategic Noise Maps prepared for major railways have identified 1.6 kilometres of rail network falling within the remit of the regulations. However as the majority of the railway line affected is within the Dublin Agglomeration the assessment of environmental noise was included within that area by Iarnród Éireann.

To address the lack of legislative measures and unify the approach taken by Action Planning Authorities the EPA have issued guidelines for the assessment of noise exposure and prioritising areas for noise mitigation measures. The proposed onset of assessment levels relating to road traffic noise mitigation measures are 70dB L_{den} and 57dB L_{night} .

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The estimated population exposed to noise levels greater than 70dB L_{den} for major roads within the Action Plan Area equates to 977 people. This compares to a figure of 15 people in the First Round Noise Action Plan.

The estimated population exposed to noise levels greater than 57dB L_{night} for major roads within the Action Plan Area is estimated to be of the order of 5,831. In the First Round Noise action plan the figure identified was 1,334 people. However there is no direct correlation for a noise level of 57 dB as it falls within the 55 to 59dB noise band. The fact that the calculations are based on a variety of factors and are logarithmically calculated means that simple iteration of the 55-59 dB noise bands is unlikely to produce an accurate figure for noise above the 57dB level. The approach taken similar to the First Round Noise Action Plan is to simply assume that all noise in the 55 - 59dB noise band exceeds the threshold of 57dB. This approach means that the estimated figure of 5,831 should be considered to be a very conservative estimate.

Although the Second Round Noise Action Plan figures above indicate a significant increase in the numbers affected since the First Round Noise Action Plan, it is only reasonable to assume that the change in thresholds is the primary contributor to the changes to the exposure figures. It is not possible however to conclude that there has been no increase or otherwise of environmental noise. The extent of major road increased from approximately 24.3kms to 103kms as a result of the decrease in traffic volumes requiring assessment.

The mitigation measures applied will be to either reduce excessive sound levels or to preserve low noise levels where they exist. The most significant major road in County Wicklow is the M11/N11 which links the major towns along the eastern coastline of the county. Enhancements to this road have been ongoing since the late 1960's when the first section of dual carriageway was constructed. In the intervening years the road has undergone continuous up-grading to the point that the last remaining 15 kilometre single carriageway section will be decommissioned in late 2015 by the Rathnew to Arklow Road Improvement Scheme which has just commenced construction. While early improvement schemes on the M11/N11 did not envisage the volumes of traffic now experienced along the route, sections of the M11/N11 completed in recent years, have to varying extents, as part of the Environmental Assessment considered the effects of noise for the relevant schemes and included some noise mitigation measures as part of the schemes. The

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schemes were designed to the relevant national road design guidelines in place at the time the schemes were designed to minimise impact on existing residential amenity. The following is a non exhaustive list of road schemes with some level of noise assessment and/or mitigation measures included as part of the scheme.

Scheme Name	Year Completed	Length
<i>N11 Rathnew to Arklow</i>	<i>At Construction</i>	<i>15km</i>
<i>Wicklow Port Access and Town Relief Road</i>	<i>2011</i>	<i>7km</i>
N11 Kilpedder Interchange (Junction 11)	2008	2km
<i>R774 Greystones Southern Access Road</i>	<i>2006</i>	<i>6km</i>
N11 (M11) Newtownmountkennedy to Ballynabarny (N11 Ashford and Rathnew By-Pass)	2006	13km
<i>N11 Kilmacanoge to Glen of the Downs</i>	<i>2003</i>	<i>5km</i>

Reduced speed limits in the centres of urban population on the N11, N81 and the major non national roads while primarily designed to improve road safety for motorists and pedestrians in high conflict locations have to some extent resulted in a reduction of traffic noise due to the reduction in traffic speeds.

The N11 Rathnew to Arklow Road Improvement Scheme which is currently at construction has included for the implementation of appropriate noise mitigation measures as identified in the Environmental Impact Assessment for the scheme where deemed necessary.

The N11 Kilmacanoge to Glen of the Downs Road Improvement Scheme when it was originally constructed in 2002 used a Stone Mastic Asphalt (SMA) surfacing course as opposed to the more durable and traditional Hot Rolled Asphalt (HRA) surfacing course to reduce road noise in Kilmacanoge village and in the Glen of the Downs. This material has been moderately successful

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in reducing noise but the road surface is starting to deteriorate rapidly with the formation of potholes, while older sections of Hot Rolled Asphalt pavement have not deteriorated at a similar rate.

The Wicklow County Council County Development Plan 2010-2016 recognized the increasing relevance of environmental noise in a planning context. A number of objective were included in various sections of the plan reflect the importance of planning for environmental noise. The complimentary “Wicklow County Council Wind Energy Strategy” outlines the assessment criteria used in considering applications for Wind Energy developments and noise is included as one of the assessment criteria.

Wicklow County Council has developed a detailed Programme of Works for the duration of the Noise Action Plan (2013 to 2018) and proposes to implement the programme subject to the availability of the requisite technical staff, expertise and financial resources.

<u>Current Year (2013)</u>
Submit the Draft Noise Action Plan 2013 to EPA for comments.
Review comments received from the EPA, revise Draft Noise Action Plan 2013 as necessary.
Advertise the Revised Draft Noise Action Plan 2013 in the local press and on the Wicklow County Council Website inviting emailed / written submissions or observations from the public.
Put the Revised Draft Noise Action Plan 2013 on public display.
Issue the Revised Draft Noise Action Plan 2013 to relevant Statutory Bodies for submissions or observations.
Review submissions or observations received through the consultation process and amend Revised Draft noise Action Plan 2013 as necessary to produce Final Noise Action Plan 2013.
Submit Final Noise Action Plan 2013 to the EPA by 18th. July 2013 to allow the EPA to report on the Action Plan to the EC in January 2014.
Upload Final Noise Action Plan 2013 onto the Wicklow County Council Website for public information.
Progress the construction and delivery of the Rathnew to Arklow Road Improvement Scheme during 2013.
Annual Briefing on Noise Action Plan to Transportation and Road Infrastructure Strategic Policy Committee in December 2013.
<u>Year One (2014)</u>
Superimposing the relevant Strategic Noise Maps (L_{den} and L_{night}) over detailed OSI background mapping and the Geodirectory to identify particular “hot spot” locations.
Use the Decision Support Matrix to identify and prioritise areas requiring further assessment and / or potential mitigation measures on a phased basis subject to funding availability.

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<u>Year Two (2015)</u>
Liaise with Wicklow County Council Planning Department as part of Preparation Process for next County Development Plan 2017- 2023 regarding strengthening the policy in relation to protecting against Environmental Noise Impacts.
Subject to funding commence on a prioritised basis the assessment of areas identified as requiring further assessment for mitigation measures.
Continue liaising with relevant stakeholders regarding sourcing finance to carry out further assessment and implementation of potential mitigation measures.
Identify prioritised potential mitigation measures post additional assessment and carry out a Cost Benefit Analysis to assess relative benefit from mitigation measures subject to funding.
Review the effectiveness of the Decision Support Matrix in identifying and prioritising areas requiring further assessment and / or potential mitigation measures.
Progress the construction and delivery of the Rathnew to Arklow Road Improvement Scheme towards completion in Q4 of 2015.
Annual Briefing on Noise Action Plan to Transportation and Road Infrastructure Strategic Policy Committee in December 2015.
<u>Year Three (2016)</u>
Continue liaising with Wicklow County Council Planning Department as part of Preparation Process for next County Development Plan 2017- 2023 regarding strengthening the policy in relation to protecting against Environmental Noise Impacts.
Subject to funding continue on a prioritised basis the assessment of areas identified as requiring further assessment for mitigation measures.
Continue liaising with relevant stakeholders regarding sourcing finance to carry out further assessment and implementation of potential mitigation measures.
Continue to identify prioritised potential mitigation measures post additional assessment and carry out a Cost Benefit Analysis to assess relative benefit from mitigation measures subject to funding.
Implement on a phased based over the balance of the plan period the implementation of required mitigation measures subject to available funding
Carry out a mid plan review to assess progress in implementation of Action Plan in Q3 of 2016. Report Findings to SPC and publish on Website.
Ensure financial provisions are in place to carry out relevant assessments in 2016 in order to produce new strategic noise maps in 2017 for assessment year 2016.
Assess the extent (in Q2 to Q4 of 2016) of the non national road network in County Wicklow which will be required to be strategically noise mapped in 2017 for assessment year 2016.
Carry out traffic counts at the locations assessed in 2011 (in Q2 to Q4 of 2016) to identify changes in traffic volumes.
Carry out additional traffic counts as necessary (in Q2 to Q4 of 2016) on roads considered for inclusion in 2017 noise mapping exercise.
Collate and quality check source data in Q4 of 2016 for inclusion in 2017 noise mapping exercise.
Conclude the construction and delivery of the Rathnew to Arklow Road Improvement Scheme in 2016 if not completed in 2015.
Annual Briefing on Noise Action Plan to Transportation and Road Infrastructure Strategic Policy Committee in December 2016.
<u>Year Four (2016)</u>
Ensure financial provisions are in place to produce new strategic noise maps in 2017 for assessment year 2016.
Subject to funding continue on a prioritised basis the assessment of areas identified as requiring further assessment for mitigation measures.
Continue liaising with relevant stakeholders regarding sourcing finance to carry out further assessment and implementation of potential mitigation measures.

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Continue to identify prioritised potential mitigation measures post additional assessment and carry out a Cost Benefit Analysis to assess relative benefit from mitigation measures subject to funding.
Implement on a phased basis over the balance of the plan period the implementation of required mitigation measures subject to available funding
Cooperate with relevant stakeholder agencies to produce new strategic noise maps in 2017 for 2016 assessment year
Publish New Strategic Noise Maps in 2017 for assessment year 2016 in Q4 of 2017 on Wicklow County Council website.
Commence collating and quality checking source data in Q4 of 2016 for inclusion in 2018 Noise Action Plan.
Annual Briefing on Noise Action Plan to Transportation and Road Infrastructure Strategic Policy Committee in December 2017.
<u>Year Five (2018)</u>
Carry out End of Plan Review to assess progress in implementation of Action Plan in Q1 of 2018. Include findings in Draft Noise Action Plan 2018.
Ensure financial provisions are in place to produce new Noise Action Plan 2018.
Prepare Draft Noise Action Plan 2018 (Round 3) in Q1.
Submit the Draft Noise Action Plan 2018 to EPA for comments.
Review comments received from the EPA, revise Draft Noise Action Plan 2018 as necessary.
Advertise the Revised Draft Noise Action Plan 2018 in the local press and on the Wicklow County Council Website inviting emailed / written submissions or observations from the public.
Put the Revised Draft Noise Action Plan 2018 on public display.
Issue the Revised Draft Noise Action Plan 2018 to relevant Statutory Bodies for submissions or observations.
Review submissions or observations received through the consultation process and amend Revised Draft noise Action Plan 2018 as necessary to produce Final Noise Action Plan 2018.
Submit Final Noise Action Plan 2018 to the EPA by 18th. July 2018 to allow the EPA to report on the Action Plan to the EC in January 2019.
Upload Final Noise Action Plan 2018 onto the Wicklow County Council Website for public information.
Progress the construction and delivery of the Rathnew to Arklow Road Improvement Scheme during 2013.
Annual Briefing on Noise Action Plan to Transportation and Road Infrastructure Strategic Policy Committee in December 2018.

The Programme of Works includes for the carrying out of reviews and briefings over the course of the action plan as well and an End of Programme review in the preparation of the next round of Environmental Noise Action Planning in 2018.

The provision of adequate finances to implement the requirements of the Regulations is one which is a challenge to all Local Authorities, not just Wicklow County Council in the current economic climate. A reduction the Regional and Local Road Grant Allocations from the Department of Transport, coupled with reduced income from the Councils own resources (e.g.

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Development Contribution Schemes etc.) has resulted in a need to prioritize on a much more focused basis the spending of financial resources on road maintenance and repairs.

The financing of works on the National Routes (M1/N11 and N81) is provided by grant allocations from the National Roads Authority. It is expected that the National Roads Authority will be involved with any mitigation measures on the national routes. 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.

A Draft of this Wicklow County Council Noise Action Plan 2013 was be put on public display at Wicklow County Council offices and made available in electronic format on the Wicklow County Council website. The Draft Wicklow County Council Noise Action Plan 2013 was also forwarded for review and comment to relevant stakeholders. The results of the stakeholder and public participation were taken into account when preparing the final document and the public will be informed of the decisions taken.

No Submissions were made from the public or other bodies consulted within the consultation period. One letter from an environmental consultancy firm (seeking to assist in implementing the Action Plan) and one telephone call from a member of the public living along the N11 (requesting action in relation to road noise) were received after the consultation period. Also after the consultation period an email was received from one of the bodies consulted (Dun Laoghaire Rathdown County Council) noting they had no comments, while a letter was also received from the National Roads Authority clarifying there role in the Noise Mapping process.

The Final Noise action Plan was amended to reflect these contributions.