Edinburgh Agglomeration

Noise Action Plan





NOISE ACTION PLAN





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1. Introduction

The European Parliament and Council Directive for Assessment and Management of Environmental Noise 2002/49/EC, more commonly referred to as the 'European Noise Directive' hereinafter referred to as END was adopted in 2004 and requires Member States to bring about measures "intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise".

The existence of the legislation and the work to produce and deliver the strategic noise maps and associated action plans reflects that noise can have a significant effect on the quality of life for communities and individuals. As such this work delivers a number of benefits for communities and individuals, the perception of Scotland as a place to visit and do business; we live in well designed, sustainable places where we are able to access the amenities and services we need. This helps support the Government's purpose of delivering sustainable economic growth.

The Directive was transposed into Scottish legislation with the Environmental Noise (Scotland) Regulations 2006. These regulations set out two key tasks for managing environmental noise:

- Production of strategic noise maps for major roads, rail, airports and industry; and
- Development of Noise Action Plans (NAPs) to manage noise.

The city of Edinburgh and parts of neighbouring Local Authorities falls within the definition of 'agglomeration' as given in the END. (The Directive defines 'agglomerations' as urbanised areas with a population exceeding 100,000). It is a requirement of the Directive that noise exposure levels are mapped and managed within agglomeration boundaries and that certain information is made available to the public.

Edinburgh is one of four agglomerations in Scotland (together with Dundee, Glasgow and Aberdeen). This action plan for Edinburgh is therefore intended to form part of the Scottish Government's response to the requirements of the Environmental Noise Directive.

The Scottish Government is committed to understanding and managing environmental impacts. The Scottish Government acknowledge that noise can be distressing; affects our quality of life; and can impact on our health and environment. Attitudes to noise are changing and it has been suggested that people are becoming less tolerant of their noise environment. The assessment of noise and noise annoyance is a complex process and different noise sources affect

people in different ways. Whilst the WHO (2011)¹ concluded that there is sufficient evidence from large-scale epidemiological studies linking the population's exposure to environmental noise with adverse health effects at specific health end points, others suggest such effects may occur only in a susceptible minority of the population. The issue of health effects and noise is an ongoing area of research. Recent research suggests that annoyance and sleep disturbance may be the most significant impacts of noise.

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¹WHO defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. See WHO (2011) Burden of disease from environmental noise: Quantification of healthy life years lost in Europe. http://www.euro.who.int/__data/assets/pdf_file/0008/136466/e94888.pdf

2. Scope of the Noise Action Plan

2.1 What it includes

This Edinburgh Agglomeration Noise Action Plan is one of a suite of Noise Action Plans. The Scottish Noise Action Plans describe how the Scottish Government and its partners will deliver their obligations under the Environmental Noise Directive (END). Other areas for which Noise Action Plans are being developed are;

- The Aberdeen Agglomeration Noise Action Plan
- The Dundee Agglomeration Noise Action Plan
- The Glasgow Agglomeration Noise Action Plan
- The Transportation Noise Action Plan
- The Aberdeen Airport Noise Action Plan
- The Dundee Airport Noise Action Plan
- The Edinburgh Airport Noise Action Plan
- The Glasgow Airport Noise Action Plan

2.2 Definition of 'Environmental Noise'

For the purposes of the Directive, the definition of 'environmental noise is given as "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.



It should be noted that the END does not apply to noise that is caused by the person exposed to the noise, noise from domestic activities, noise created by neighbours, noise at work places, or noise inside means of transport or due to military activities in military areas.

2.3 Industrial noise

No attempt has been made to address industrial noise as part of the action planning process other than what is set out below. This is because this type of noise is, as previously explained in the Glasgow and Edinburgh Action Plans for the first round of noise mapping, at present adequately provided for in the Scottish legislative framework for the control of noise from industrial sources. Industrial noise for Part A process is controlled through The Pollution Prevention and Control (Scotland) Regulations 2000 (the PPC Regulations). These regulations designate the Scottish Environment Protection Agency (SEPA) as the 'Regulator' responsible for enforcing the regime. As part of its role as regulator, SEPA produces guidance for use in enforcing the PPC Regulations. SEPA has produced guidance on the control of noise at PPC installations, which will be used when considering

applications for, and inspections of PPC installations. For non Part A processes the control of noise is exercised by the relevant local authority under the Statutory Nuisance regime under the Environmental Protection Act 1990.

In view of this and following consultation with SEPA and the local authorities it was agreed that industrial noise sources and/or areas would not be included in the action planning process other than at the request of the regulatory authority.

2.4 Strategic Noise Mapping and Action Planning

Strategic noise maps² for END Round 2 (for 2012) were produced on behalf of the Scottish Government and for the agglomerations by AECOM consultants. The selection criteria for the determination of which noise sources should be mapped is outlined in Table 1.

Utilising the latest available data, population exposure levels derived from the maps were submitted by the Scottish Government to Europe on the 20 December 2012. Noise maps were produced by a computer based prediction methodology and can be found on the Scottish Noise Mapping website at www.scottishnoisemapping.org.

Stage of END	Round 1 of END	Round 2 of END
Major roads	> 6,000,000 vehicle passages per year	> 3,000,000 vehicle passages per year
Railways	> 60,000 train passages per year	> 30,000 train passages per year
Agglomerations	> 250,000 population	> 100,000 population
Airports*	> 50,000 air traffic movements per year and airports within agglomerations	> 50,000 air traffic movements per year and airports within agglomerations

Table 1 – Differences between Round 1 and Round 2 of the END with respect to transportation. Note that Airport transportation noise is covered in a specific Airports Noise Action Plan. Round 2 will cover corridors across the <u>Scottish Trunk Road Network</u>³, <u>Rail Network</u>⁴ and local authority networks⁵

² END required competent authorities to draw up "strategic noise maps" for major roads, railways, airports and agglomerations, using harmonised noise indicators L_{den} (day-evening-night equivalent level) and L_{night} (night equivalent level).

³ Scotland's trunk road network covers a distance of 3,500 kilometres with 1,900 bridges and 3,700 other structures.

⁴ Scotland's rail network comprises 2,729 kilometres of railway - 23% electrified - with 344 stations leased by First ScotRail and 4 others operated by Network Rail (Glasgow Central and Edinburgh Waverley), GNER (Dunbar), or a private company (Prestwick International Airport). Two thirds of rail passenger journeys were supported by the west of Scotland commuter network, and one third were elsewhere in Scotland.

⁵ Local authorities manage and maintain local roads, which comprise approximately 94% of Scotland's roads (around 56,000km).

2.5 Edinburgh Agglomeration Population Exposure

Based on the results of the noise mapping process, Tables 2a and 2b show the estimated number of people exposed to noise for both END Round 1 and 2.

	L _{den} (dB)			L _{night} (dB)			
	> = 55	> = 65	> = 75	> = 50	> = 60	> = 70	
END Round 1	220,300	111,600	2,400	172,100	53,000	200	
END Round 2	216,500	82,500	0	167,800	18,200	0	

Table 2a – Population exposure from roads within the Edinburgh agglomeration as mapped for END

	L _{den} (dB)			L _{night} (dB)				
	> = 55	> = 65	> = 75	> = 50	> = 70			
END Round 1	44,600	16,900	1,900	35,900	12,200	600		
END Round 2	41,200	14,600	4,100	31,400	11,300	2,000		

Table 2b – Population exposure from rail within Edinburgh agglomeration as mapped for END

The changes in population exposure are a consequence of improved road traffic data becoming available for round two mapping. In general there is a decrease in noise levels across the city.

With regards rail noise levels; Network Rail has demonstrated that improvements to track maintenance have achieved a significant reduction in noise associated with the operational railway in Great Britain. These findings have directly informed the second round of noise mapping. A 4 dB reduction in the Acoustic Track Quality (ATQ) correction has been implemented to reflect this in the second round mapping.

As the published noise contours give a strategic level representation of the modelled noise climate for the areas mapped in Scotland, the resulting Action Plans are also strategic in nature, and complying with the requirements of END Annex 5. The noise maps cannot be used to determine the noise level at any specific property. With this point in mind, it is essential to note the following points:

- A noise map is analogous to a weather map in that it maps strategic noise levels in terms of coloured contour bands at 5dB noise contour bands.
- The strategic noise levels show annual average noise levels.
- The noise contours are not receptor-specific levels experienced on the ground. Rather, the noise levels are calculated on the basis of a 10m grid at a height of 4m above ground level. They do not represent levels at ground, or typical human ear level.

Initial analysis of the noise maps for road and rail sources, using the Prioritisation Matrix (see Section 5), provides a focus for deriving actions to reduce noise by identifying Candidate Noise Management Area (CNMA) (as described in Section 5). The CNMAs may subsequently progress into a Noise Management Area (NMA) status (as described in Section 5). During the time period between 2013 and 2018, the NMAs will be a primary consideration when formulating environmental noise management actions/policy following the actions listed in this Edinburgh Noise Action Plan (in line with PAN 1/2011).

The prioritisation process follows the Technical Guidance published by the Scottish Government during END Round 1⁶.

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⁶ http://www.scottishnoisemapping.org/public/action-planning_END_1.aspx

3. Context – Legislation and Policy

The END was transposed into the Environmental Noise (Scotland) Regulations 2006 (see Section 1 of this Action Plan). The definitions used as part of the noise mapping process are evident in the Scottish regulations. A useful summary of the regulatory framework is available in the Scottish Governments Draft Guidance on Noise Action Planning⁷.

The action planning process for the first round of noise mapping resulted in the publication of a new planning advice note in Scotland (PAN 1/2011⁸ and the accompanying TAN). This planning advice note aims to ensure that Noise Management Areas (NMA) and Quiet Areas (QAs) (see Section 5) are now an acknowledged part of the baseline for management of environmental noise and should be included as a material planning consideration.

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http://www.scotland.gov.uk/Publications/2007/08/24141743/0

http://www.scotland.gov.uk/Publications/2011/02/28153945/0

4. Governance of Noise Action Planning

4.1 Competent Authority

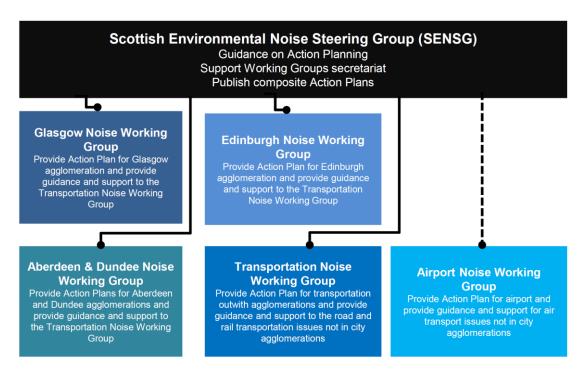
The Scottish Government is the Competent Authority for END in Scotland.

4.2 Scottish Environmental Noise Steering Group (SENSG)

Delivery of the END Directive objectives in Scotland has been achieved through extensive partnership working. Scottish Government has assumed responsibility for co-ordination of the noise mapping and action planning exercises but this has been heavily supported by individual working groups dealing with each of the agglomerations, major airports and other transport systems. These working groups have benefited from a multi disciplinary membership including Local Authorities, other agencies and key partners.

The Scottish Environmental Noise Steering Group (SENSG) comprises representation from organisations with varying responsibility for environmental noise, namely the Scottish Government, AECOM, Local Authorities, SEPA, Transport Scotland and airport operators. SENSG provides a forum for discussion on progression of the Noise Action Planning progression, with the governance arrangement shown in Figure 1.

Figure 1: END Governance Arrangements in Scotland



4.3 Edinburgh Agglomeration Noise Working Group

Production of the Edinburgh Noise Action Plan was overseen by the Edinburgh Noise Working Group (under the auspice of SENSG) and comprised The City of Edinburgh Council (chair), Midlothian Council, East Lothian Council and AECOM. The principle objective of the Edinburgh Noise Working Group was to comply with END and the Scottish Regulations in order to 'produce an Edinburgh Noise Action Plan containing clear tangible actions via collaboration and partnering'.

5. **Identification of Management Areas**

5.1 **Need to identify Management Areas**

Production of the strategic noise maps is only the first step in the process of the management of environmental noise. The Directive is clear that Member States should aim to "avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise". In Scotland, specific steps have been taken in order to use the noise maps as a basis for identifying and focusing on those areas where people are most likely to be annoyed by noise. These are referred to as Noise Management Areas (NMAs). It is such areas that are largely intended to form the basis of associated Action Plans. The process of agreeing NMAs involves various steps including provisional assignment as a Candidate Noise Management Area (CNMA).

The Directive is also clear that Member States should aim to identify and preserve its Quiet Areas. Hence a similar process is followed whereby noise mapping can be used to identify Candidate Quiet Areas with a subsequent process leading to agreement of actual Quiet Areas.

5.2 Process of Identification of Noise Management and Quiet Areas -**Prioritisation Matrix**

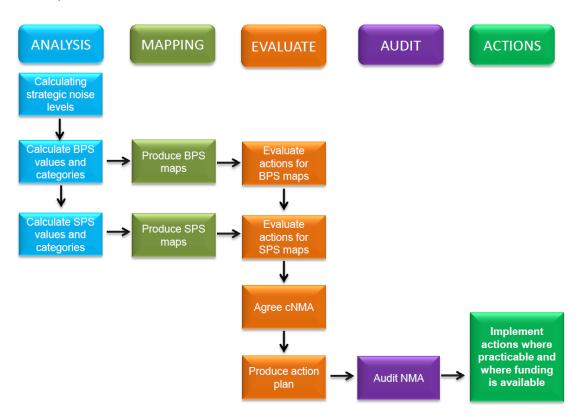
There are no noise limits values or noise thresholds in place in Scotland as it is recognised that analysing the noise contours alone will not necessarily identify areas suffering from the greatest noise impact. In order to gain a better understanding of the potential noise impacts it is helpful to identify those areas where high population density comes together with high levels of noise. The means of achieving this has emerged using a specially developed prioritisation matrix which operates by assigning a numerical value to buildings and road/rail segments within the relevant areas.9

The objective of the prioritisation matrix is to identify areas where people living within these areas are most likely to be annoyed by noise from either road or railway traffic noise sources. The identification of such areas has been based on a scoring system which takes into account the number of people potentially affected, and the annoyance response to the particular noise source under consideration (either rail or road).

 $^{^{9}}$ It is important to note that at this stage in the Action Planning process it has been decided by the Scottish Government Working Groups, through consultation with SEPA and the relevant local authorities, that an industrial noise source or an area affected by industrial noise should not be included in the prioritisation matrix and that any prioritisation, or noise intervention, of such industrial areas/sources should be at the request of the regulatory authority.

From initial analysis of the noise maps, the prioritisation process is a method of determining 'Candidate Noise Management Areas' (CNMAs) and thereafter 'Noise Management Areas' (NMAs). Figure 2 outlines the step-by-step journey of the prioritisation process.

Figure 2 Step by step stages of the Prioritisation Process. BPS = Building Prioritisation Score; SPS = Source Prioritisation Score (see below for more detail).



A prioritisation matrix is generated from a computer based model, where each building is assigned a Building Prioritisation Score (BPS), which takes into account the predicted road and rail noise levels, in conjunction with the number of people potentially affected and the annoyance response of that exposed population relative to the transportation noise source in question. A Source Prioritisation Score (SPS) is then determined by first segmenting the road or rail corridors into 100m sections. Each road/rail segment is then given a unique ID and for each building with a noise level greater than or equal to L_{den} 55dB the ID of the road/rail segment that is closest to it is assigned to that building. The logarithmic sum of BPS values for all buildings with the same nearest road/rail segment ID is then assigned to the relevant road segment to give the Source Prioritisation Score for that road/rail segment.

All SPS values are ranked, where the top 1% of SPSs (normally distributed) corresponded to the mean SPS plus two standard deviations to identify the highest

three 1% bands of the SPS scores across the road and railway network. These are subsequently referred to as Candidate Noise Management Areas (CNMAs). Determination of a CNMA is simply a means of highlighting that a geographical area should be considered further in terms of a potential need for noise management. It may be that following further analysis, the area will be disregarded entirely or extended or reduced. Ultimately, the decision about whether or not a CNMA is eventually assigned full Noise Management Area (NMA) status is dependent on a series of steps during which various assessments and considerations are taken into account. These are outlined in separate Technical Guidance¹⁰.

The areas with CNMA status within the Edinburgh agglomeration are shown in Appendix 1. The CNMA to NMA review process will, amongst other steps, verify the noise model findings and assumptions in comparison to physical features which are evident on the transport network. The assigning of Noise Management Areas and subsequent appraisal, planning, and prioritisation of potential mitigation measures in the NMAs form a core part of the Action Planning Process.

It is estimated that within the Edinburgh agglomeration a minimum of 12,000 people are housed within the road CNMA approximate areas and a minimum of 3,900 people are housed within the rail CNMA approximate areas.

5.3 Identification of Candidate Quiet Areas

The END recognises the importance of the preservation of existing quiet areas.



Access to quiet areas and peaceful soundscapes is generally known to bring about a range of benefits to human health and well being. 11 12 'Quiet Areas' are not specifically defined in the Directive, rather they are recognised as areas to be determined by the Member State and which are subject to noise falling beneath a limit value set by the Member State.

With that in mind, a study by the Transport and Research Laboratory $(TRL)^{13}$ was used as a basis for identification of 'Quiet Areas' in Scotland. It was decided by SENSG that Quiet Areas should be defined as areas which are a minimum of 9 hectares and in which at least 75% of the area is subject to noise levels not exceeding < 55 dB L_{day} . In addition, for the second round of mapping SENSG

http://www.scottishnoisemapping.org/downloads/guidance/Technical Guidance CNMA2NMA.pdf

¹¹ Aircraft and road traffic noise and children's cognition and health: A cross sectional study. Lancet, 365, p1942-1949: Stansfeld, S.A., Berglund, B., Clark,C., Lopez-Barrio, I., Fischer, P., Öhrström, E., Haines, M.M., Head, J., Hygge, S.,van Kamp, I., & Berry, B.F. (2005)

¹² Soundscapes in city parks and suburban green parks. In: Proceedings of Euronoise 2006 : Tampere, Finland, Nilsson ME, Berglund B (2006).

Research into quiet areas. Recommendations for identification: Defra. 2006. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=14839

decided that any local authority within an agglomeration boundary can, with good and justifiable reasons, request that an area be classified as a Quiet Area.

In addition to identifying candidate noise management areas (described above), the strategic noise mapping exercise can also be used to identify Candidate Quiet Areas (CQAs). As with the CNMA process, there are a series of steps to be taken to determine which of the CQAs will fully progress to actual Quiet Area status. This is covered in separate Technical Guidance¹⁴. The areas with CQA status within the Edinburgh agglomeration are shown in Appendix 2.

5.4 Action Planning

The Directive requires that action plans are produced for each of the qualifying agglomerations, major airports and major transport systems. The content of the Action Plans are however for member states to determine but based on some minimum requirements as set out in Annex 5 of the Directive. This action plan document provides the basic outline of how we intend to manage noise and preserve quiet areas. On that basis, action plans are largely focused on taking forward the candidate noise management areas and quiet areas identified by the strategic noise mapping and prioritisation exercises described previously.

Scotland's Greenspace Map http://www.greenspacescotland.org.uk/scotlands-greenspace-map.aspx is a world first; no other country has mapped its greenspace in this way. This interactive map provides information about the type and extent of greenspace in urban Scotland (i.e. towns and cities with a population of over 3000). It was compiled in 2011 from greenspace data provided by the 32 Scottish Councils. Although Greenspace Map does not directly use the term quiet does embrace the concept of passive recreation and breathing spaces which are defined as an oasis of calm amongst city bustle. Defining Quiet Areas as part of the Action Planning process can be seen as an extension of that work.

The preliminary actions to be undertaken as part the action planning process are set out in Table 3 below.

Preliminary Actions	Anticipated Completion Date
Assess all CNMA's as set out in the previously published guidance ¹⁰	20th April 2014
Assess all CQA's as set out in the previously published guidance ¹⁴	20th April 2014

Table 3 – Preliminary actions as part of planning process

¹⁴ http://www.scottishnoisemapping.org/downloads/guidance/Technical Guidance for Quiet Areas.pdf

5.5 Edinburgh Agglomeration noise actions up to 2012

A number noise management measures and outcomes have been achieved in Scotland since the first Edinburgh NAP was published, as detailed in Table 4.

Edinburgh Agglomeration

Options

A review of current research on road surface reduction techniques. This research commissioned by the Scottish Government comments on applicability for Scotland The report can be found <a href="https://example.com/here.c

We have updated planning advice to local authorities see PAN 1/2011

We have pressed the European Commission(through Defra) for quieter vehicle requirements e.g. quieter tyres and quieter vehicles

A review of Air Quality Guidance to take account of noise is due to commence this year.

We have asked Defra to carry out further annoyance research on a UK basis and this is now included in the research programme.

Noise barrier installation considered for developments alongside busy road/rail routes where appropriate

Promoting the use of [low carbon] electric cars and City Car Clubs

Inclusion of Noise Management Areas and Quiet Areas within local authority development control (planning) process

Table 4 – Examples of noise mitigation between 2006 and 2012

5.6 Edinburgh Agglomeration proposed noise actions between 2013 to 2018

Noise action options fall into three categories, as outlined in Table 5. The potential remedial actions will be the subject of a cost benefit analysis. Consideration will also be given to who would be responsible for any proposed actions and whether or not they are affordable or desirable.

Category	Options
1	Maintenance and improvement works
2	Network operational management of roads within agglomerations
3	Development Proposals and Policies

Table 5 – Remedial Actions

Edinburgh NAP objectives, actions (falling within the above categories), timescales and cross-linkages to other Noise Action Plans in Scotland are outlined in Table 6.

			Timescale							
No	Action	'12	'13	'14	'15	'16	'17	'18		
Obj	ective 1 - On a prioritised basis, by 2018 we aim to reduce the exposure to enviro	nmer	ntal n	oise	in NN	IAs				
1a	Develop and apply appropriate Appraisal and Test of Reasonableness tools through SENSG, including cost benefit analysis, to rank effective NMA interventions.		•	•						
1b	Where appropriate apply noise management interventions on a prioritised basis during existing maintenance and improvement programmes where reasonably practicable.		•		•	•	•	•		
1c	Engage with Transportation Working Group to assess trunk road and rail NMAs within agglomerations.	•	•	•	•	•	•	•		
	ective 2 - By 2018, we will incorporate environmental noise management within a uding transportation planning, design, construction and maintenance activities a				planı	ning _l	oroce	ss		
2a	Consider incorporating a commitment to mitigate environmental noise emissions into future annual service plans		•	•	•	•	•	•		
2b	Conduct before-and-after sample noise measurement, where possible, to (i) determine measured baseline at selected NMAs prior to mitigation construction and (ii) appraise noise mitigation approaches in terms of cost benefit and delivery of effective noise reduction.		•	•	•	•	•	•		
2c	Consideration to be given to post evaluation of completed mitigation measures specified within planning conditions where appropriate			•	•					

	ective 3 - By 2018, we will endeavour to demonstrate a practical contribution to n re proposals and policies	oise	redu	ction	via e	xistii	ng an	d
3a	Transport and travel policies and proposals to both take into account and facilitate noise management.	•	•	•	•	•	•	•
3b	Consider p promoting Intelligent Transport Systems to better manage road flows.		•	•	•	•	•	•
3c	Consider promoting uptake of low noise tyres where appropriate through SENSG		•	•				
3d	Support for an update to Noise Insulation Scotland Regulations (NISR) legislation			•	•			
	ective 4 - By 2018, we will promote channels of communication to stakeholders the ronment	hat e	ncou	rage	a lea	rning		
4a	Provide guidance, information and progress updates on the Edinburgh NAP actions to the Scottish Noise Mapping Website		•	•	•	•	•	•
4b	Consider in conjunction with SENSG the relationship between noise maps and local traffic models			•				

Table 6 – Transportation (within Edinburgh agglomeration) noise mitigation between 2012 and 2018

6. Description of Agglomeration – Edinburgh

6.1 Description of the Edinburgh Agglomeration

Edinburgh is the Capital city of Scotland with a population of approximately 477,000. It is a university city, the locus for much employment in the surrounding region and a tourist centre. It is estimated that the non-residential population of Edinburgh increases by 60,000 commuters and, during term time, by 10,000 students. It is further estimated that at the peak of the tourist season the population is increased by some 400,000 tourists.

The agglomeration area is approximately 261 km² with approximately 222,000 households. It has an airport which lies just outside the agglomeration boundary, a seaport at Leith, and two major rail stations in the city centre. The city is bounded by Green Belt.

The biggest local authority within the agglomeration is the City of Edinburgh Council. A small part of Midlothian Council and a small part of East Lothian Council also fall within the agglomeration boundary. For the purposes of Strategic Noise mapping the agglomeration includes a 2 km buffer. The Edinburgh agglomeration and buffer area are shown in Figure 3.

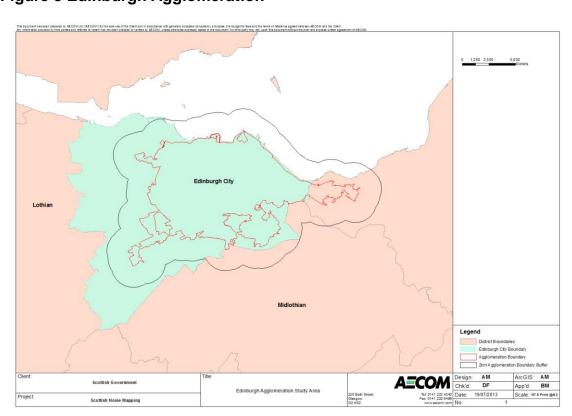


Figure 3 Edinburgh Agglomeration

Scottish Transport statistics (2011) show that there are approximately 1500km of roads and 400 bridges within the agglomeration. There are 165,800 licensed private and light goods vehicles in the city. The 2001 Census showed that 40% of households had no access to a car and the 2011 Census shows that 42% of these households had no access to a car in 2010, perhaps indicating that the previous trend of increasing car dependency may have been halted or even slightly reversed.

The most significant imminent changes to the noise climate in the Edinburgh agglomeration will be the development of the Edinburgh tram system, a new local development plan that includes new housing developments of 2,000 houses in the west of Edinburgh and 1,000 houses in south-east Edinburgh. The major housing developments planned for Edinburgh waterfront have been partly reallocated for business and industry. These changes all occur within the agglomeration. A further two housing developments are planned at Shawfair and Wallyford which lie just outside the boundary of the agglomeration but within the study area. The new developments amount to a population increase of approximately 55,000.

6.2 Policies

A new local development plan is currently being considered by the Council. It includes a section on Pollution, Water and Air Quality and extends to noise if a development is likely to have implications for health.

A new Local Transport Strategy is also being developed for 2014 – 2019 and will account for traffic noise to whatever extent necessary.

APPENDICES

1. Candidate Noise Management Areas

Edinbur	Edinburgh Road CNMA							
CNMA ID	Map Number	Address	Local Authority					
1	1	Calder Gardens, Sighthill/Gorgie, Edinburgh	City Of Edinburgh					
2	2	A71 At Westfield Road, Fountainbridge/Craiglockhart, Edinburgh	City Of Edinburgh					
3	2	A70 At Moat Street, Fountainbridge/Craiglockhart, Edinburgh	City Of Edinburgh					
4	2	A71 At Gorgie Road Near Robertson Avenue, Fountainbridge/Craiglockhart, Edinburgh	City Of Edinburgh					
5	2	A70 At Slateford Road, Fountainbridge/Craiglockhart, Edinburgh	City Of Edinburgh					
6	2 and 4	A71 At Gorgie Road Near Newton Street, Sighthill/Gorgie, Edinburgh	City Of Edinburgh					
7	3	A702 At Comiston Road, Meadows/Morningside, Edinburgh	City Of Edinburgh					
8	3	A702 At Morningside Road Near Steel'S Place, Meadows/Morningside, Edinburgh	City Of Edinburgh					
9	3	Woodburn Terrace And Canaan Lane, Meadows/Morningside, Edinburgh	City Of Edinburgh					
10	4	A8 At Roseburn Gardens, Roseburn Street, Corstorphine/Murrayfield, Edinburgh	City Of Edinburgh					
11	4	A70 At Orwell Place, West Park Place, Sighthill/Gorgie, Edinburgh	City Of Edinburgh					
12	4	Dundee Street, Fountainbridge/Craiglockhart, Edinburgh	City Of Edinburgh					
13	4	Grove Street, City Centre, Edinburgh	City Of Edinburgh					
14	4 and 5	Morrison Street, West Approach Road, City Centre, Edinburgh	City Of Edinburgh					

Edinbur	Edinburgh Road CNMA							
CNMA ID	Map Number	Address	Local Authority					
15	4 and 5	A702 At Semple Street, City Centre, Edinburgh	City Of Edinburgh					
16	4 and 5	A702 At Gilmore Place, Home Street,Lochrin Terrace, West Tollcross, City Centre, Edinburgh	City Of Edinburgh					
17	4 and 5	Lauriston Place At Glen Street, City Centre, Edinburgh	City Of Edinburgh					
18	4 and 5	East Fountainbridge, West Port At Lady Lawson Street, City Centre, Edinburgh	City Of Edinburgh					
19	5	Cockburn Street, High Street, City Centre, Edinburgh	City Of Edinburgh					
20	5	At West Nicolson Street, Southside/Newington, Edinburgh	City Of Edinburgh					
21	5	Drummond Street At Roxburgh Place, City Centre, Edinburgh	City Of Edinburgh					
22	5	West Preston Street At Blackwood Crescent, Southside/Newington, Edinburgh	City Of Edinburgh					
23	6	Deanhaugh Street, Raeburn Place, Inverleith, Edinburgh	City Of Edinburgh					
24	6	Rodney Street At Heriot Hill Terrace, City Centre, Edinburgh	City Of Edinburgh					
25	6	Broughton Road At Dunedin Street, Leith Walk, Edinburgh	City Of Edinburgh					
26	6 and 9	Bonnington Road At Bonnington Road Lane, Leith Walk, Edinburgh	City Of Edinburgh					
27	7	Abbeyhill, Abbeymount, City Centre, Edinburgh	City Of Edinburgh					
28	7	Easter Road At London Road, City Centre, Edinburgh	City Of Edinburgh					
29	7	Brunswick Road, Easter Road, Leith Walk, Edinburgh	City Of Edinburgh					
30	7	Meadowbank, London Road, Portobello Road, Craigentinny/Duddingston, Edinburgh	City Of Edinburgh					
31	8	Lower Granton Road, Trinity Road, Forth, Edinburgh	City Of Edinburgh					
32	9	A902 At Ferry Road, Forth, Edinburgh	City Of Edinburgh					

Edinburgh Road CNMA						
CNMA ID	Map Number	Address	Local Authority			
33	9	Lindsay Road At Portland Street, Leith, Edinburgh	City Of Edinburgh			
34	9	Ferry Road At Madeira Street, Leith Walk, Edinburgh	City Of Edinburgh			
35	9	Great Junction Street At Bangor Road, Leith, Edinburgh	City Of Edinburgh			
36	9	Commercial Street At Dock Street, Leith, Edinburgh	City Of Edinburgh			
37	9	Bernard Street At Timber Bush, Leith, Edinburgh	City Of Edinburgh			
38	9	Salamander Street At Elbe Street, Leith, Edinburgh	City Of Edinburgh			

Edinburgh Rail CNMA							
CNMA ID	Map Number	Local Authority					
1	1	Near Carrick Knowe Road, Stenhouse Drive, Murrayfield/Gorgie	City Of Edinburgh				
2	2	Near A71, Mcleod Street, Gorgie	City Of Edinburgh				
3	2	Near Easter Dalry Wynd, Haymarket Yards, Gorgie/City Centre	City Of Edinburgh				
4	3	Near Waverley Bridge, City Centre	City Of Edinburgh				
5	4	Near Restalrig Avenue, Portobello Road, Duddingston	City Of Edinburgh				
6	4	Near Fishwives' Causeway, Portobello Road, Duddingston	City Of Edinburgh				

2. Candidate Quiet Areas

ID	Map Number	Name	Source
1	1	Corstorphine Hill	Ancient Woodland and Local Nature Reserve
2	1	Inverleith Park	Parks
3	1	Royal Botanic Garderns	Parks
4	2	Lochend Park	Parks
5	2	Arthur's Seat Volcano, Holyrood Park and Duddingston Loch	SSSI, Parks
6	2	Jewel Park	Parks
7	3	Craiglockhart Dell	Ancient Woodland and Semi Natural Woodland
8	3	Easter Craiglockhart Hill	Local Nature Reserve
9	3	Hermitage of Braid / Blackford Hill	Local Nature Reserve
10	3	Mains Park	Parks
11	3	Galachlaw	Ancient Woodland
12	3	Burdiehouse Burn Valley Park	Local Nature Reserve and Parks

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ISBN: 978-1-78412-693-3 (web only)

Published by the Scottish Government, July 2014

The Scottish Government St Andrew's House Edinburgh EH1 3DG

Produced for the Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA DPPAS34084 (07/14)