

Noise Strategy Strategic Environmental Assessment: Environmental Report

July 2009



City of Westminster

Consulting on the Draft Westminster Noise Strategy, 2009 Environmental Report

Westminster City Council invites comments and feedback on this Environmental Report of the draft Westminster Noise Strategy, 2009. We would be grateful if any comments and questions about this Environmental Report or the draft Noise Strategy could be posted or e-mailed to the address below by 11 September 2009.

Draft Noise Strategy Consultation

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Draft Westminster Noise Strategy Environmental Report

Non Technical Summary

The Environmental Report

1. This is the Strategic Environmental Assessment (SEA) of the draft Westminster Noise Strategy. The purpose of the SEA is to ensure the environmental impacts of the Westminster Noise Strategy are considered and potential adverse impacts on the environment are avoided or mitigated. This report should be read with the draft Westminster Noise Strategy, 2009.
2. This Environmental Report complies with the requirements set out in the Environmental Assessment of Plans and Programmes Regulations 2004 and incorporates the comments received from English Heritage and Natural England when a scoping report was produced for consultation in October, 2008.

The draft Westminster Noise Strategy and its relationship with Plans and Programmes

3. The draft Westminster Noise strategy has the following main objectives and four policies from which flow a series of action points:

Objectives:

- Reducing average noise levels in the city
- Reducing noise incidents in the city
- Minimising the impact of noise on noise sensitive developments¹
- Protecting and enhancing tranquil areas and positive sounds.

Policies:

Noise Policy 1: Noise conscious city planning and management

Noise Policy 2: Reducing transport and servicing noise and impacts

Noise Policy 3: Integrated noise management and enforcement

Noise Policy 4: Tranquil areas and positive sounds

See the draft Westminster Noise Strategy, 2009 for full text of policies

4. The following key plans and programmes provide context for the strategy:
 - National Noise Strategy – not yet published
 - National Noise Maps and Noise Action Plans (emerging/ in preparation)
 - National Planning Policy Guidance Note 24: Noise and Planning (PPG24)
 - [National] Planning Policy Guidance Note 15: Planning and the Historic Environment (PPG15)

¹ Government Planning Guidance, PPG 24, 'Planning and Noise' requires protection of noise sensitive developments, the Westminster UDP defines these as all residential properties; educational establishments; hotels; theatres; hospitals; concert halls; broadcasting and recording studios.

- [National] Planning Policy Guidance Note 16: Archaeology and Planning (PPG16)
- [Regional] Souder City: Ambient Noise Strategy, GLA, 2004
- [Regional] London Plan, 2004 Consolidated by Changes in 2008
- [Local] Westminster City Plan, 2006 – 2016
- Westminster Unitary Development Plan, 2007 (UDP 2007)
- Local Development Framework (LDF) Core Strategy and City Management Plan Development Plan Documents
- Westminster Local Implementation Plan, 2005/6 – 2010/11
- [Local] Statement of Licensing Policy, 2008
- Westminster Housing Strategy, 2007-2012
- Westminster Open Space Strategy Supplementary Planning Document, 2007
- [Local] Tree Strategy Supplementary Planning Document (in preparation)

5. The following key national and international documents are particularly relevant to the strategy (a full list is provided):

- Kyoto protocol to the United Nations Framework Convention on Climate Change (1997)
- The Johannesburg Declaration on Sustainable Development, 2002
- World Health Organisation Guidelines on Community Noise, 1999
- Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise
- European Commission's 5th Action Plan on the Environment
- European Commission's 6th Action Plan on the Environment
- Securing the Future - UK Government sustainable development strategy, 2005
- [National] Planning Policy Guidance Note 24: Noise and Planning (PPG24)
- [National] Planning Policy Guidance Note 15: Planning and the Historic Environment (PPG15)

Key Environmental Characteristics and Issues

6. Westminster is a densely developed urban environment situated at the heart of London, the European Union's largest city. The diverse built form and range of activities as well as the volumes of transport and pedestrian movement make Westminster unique; the city's noise environment reflects this. Westminster is significantly louder than other parts of London, with average noise levels well above average levels in England and Wales. As with most urban areas, noise levels exceed the World Health Organisation Guideline Levels.
7. Noise pollution is a significant problem affecting the city and most relevant to the draft Westminster Noise Strategy. Some of the other significant environmental issues affecting the city are:

- Need to protect and improve health and wellbeing
 - Carbon emissions and climate change
 - Biodiversity deficiency
 - Poor air quality
 - Effects of road (motor vehicle) transport and congestion
 - Waste production and disposal
 - Protecting the historic environment
 - Protecting open spaces
8. Without implementation of the draft Westminster Noise Strategy there is likely to be a worsening of noise pollution and the related impacts on human health.

SEA Assessment Framework

9. The objectives and policies contained in the draft Westminster Noise Strategy have been developed based on:
- research carried out on the city's sound environment
 - comments from a panel of experts established to provide advice on the strategy
 - the results of consultation with the public on the Noise Issues and Options Report, 2008 which set out possibilities for the scope and content of the draft Westminster Noise strategy.
10. To help undertake the assessment consistently nine objectives have been identified to assess any significant effects of the draft Westminster Noise Strategy. These are:

- 1 To promote and improve health and well-being.
- 2 To reduce greenhouse gas emissions and support climate change adaptation.
- 3 To protect, enhance and create environments that encourage and support biodiversity.
- 4 To improve air quality.
- 5 To reduce the impact of noise.
- 6 To reduce the need to travel and use of private motorised vehicular transport as well as encouraging walking, cycling and use of public transport.
- 7 To reduce waste production and increase recycling and recovery of all waste.
- 8 To protect and enhance the historic environment and architectural, archaeological and cultural heritage.
- 9 To protect, enhance and seek opportunities to increase open space throughout the borough.

11. These nine SEA objectives have been developed with reference to:

- The environmental protection objectives established at an international and national level listed above.
- Specific environmental issues and problems in Westminster.
- The specific environmental issues mentioned in the SEA legislation which include:
 - (a) biodiversity;
 - (b) population;
 - (c) human health;
 - (d) fauna;
 - (e) flora;
 - (f) soil;
 - (g) water;
 - (h) air;
 - (i) climatic factors;
 - (j) material assets;
 - (k) cultural heritage, including architectural and archaeological heritage;
 - (l) landscape.

12. The draft Westminster Noise Strategy objectives and each of the emerging policies tested using this SEA objective framework and consideration was given to whether the effect was positive or negative and the duration of the effect (for example, temporary, short term and nature of the effect (for example, cumulative, synergistic).

SEA Results

13. This assessment framework was used to make modifications to the policy to try and avoid negative effects and maximise any positive effects. Based on this assessment framework the draft Westminster Noise Strategy is likely to have a significant positive effect on the health and wellbeing of Westminster's population by reducing noise and its impacts. This directly addresses the likely changes to the environment without implementation of the draft Westminster Noise Strategy which is a worsening of the city's noise environment and a related negative impact on the health and wellbeing of the city's population. However, it is important to note in many instances these positive effects are largely medium to longer term and cumulative effects. Positive effects are particularly likely in relation to biodiversity and the quality of open spaces which are valued for their tranquillity.

14. It is proposed that the monitoring focuses primarily assessing noise related impacts of the draft Westminster Noise Strategy. In addition a comprehensive assessment looking at the actual effects on the policy in relation to the nine objectives outlined above should be undertaken in 2013 to inform any review of the strategy.

Contents

1 Introduction	9
Strategic Environmental Assessment (SEA)	9
Stages of the SEA	9
Content of the Environmental Report	9
Consultation on the Scope of this Environmental Report	10
2 The draft Westminster Noise Strategy and its relationship with other relevant plans and programmes.....	11
3 Relevant Environmental Protection Objectives.....	12
4 Current Environmental Characteristics and Issues	14
Likely changes to the environment without the Westminster Noise Strategy	17
5 The SEA Framework	18
Assessment of the Draft Westminster Noise Strategy	20
6 SEA Results and Conclusions	22
Likely significant effects of the draft Westminster Noise Strategy	22
Alternative approaches considered	23
Mitigation of significant adverse effects	24
Proposed monitoring approach	24
7 Next steps	26
Appendix 1 Detailed list of relevant plans and programmes.....	27
Appendix 2 Baseline data on Westminster’s environment.....	30
Appendix 3 SEA assessment tables	36

Strategic Environmental Assessment Process of the Westminster Noise Strategy

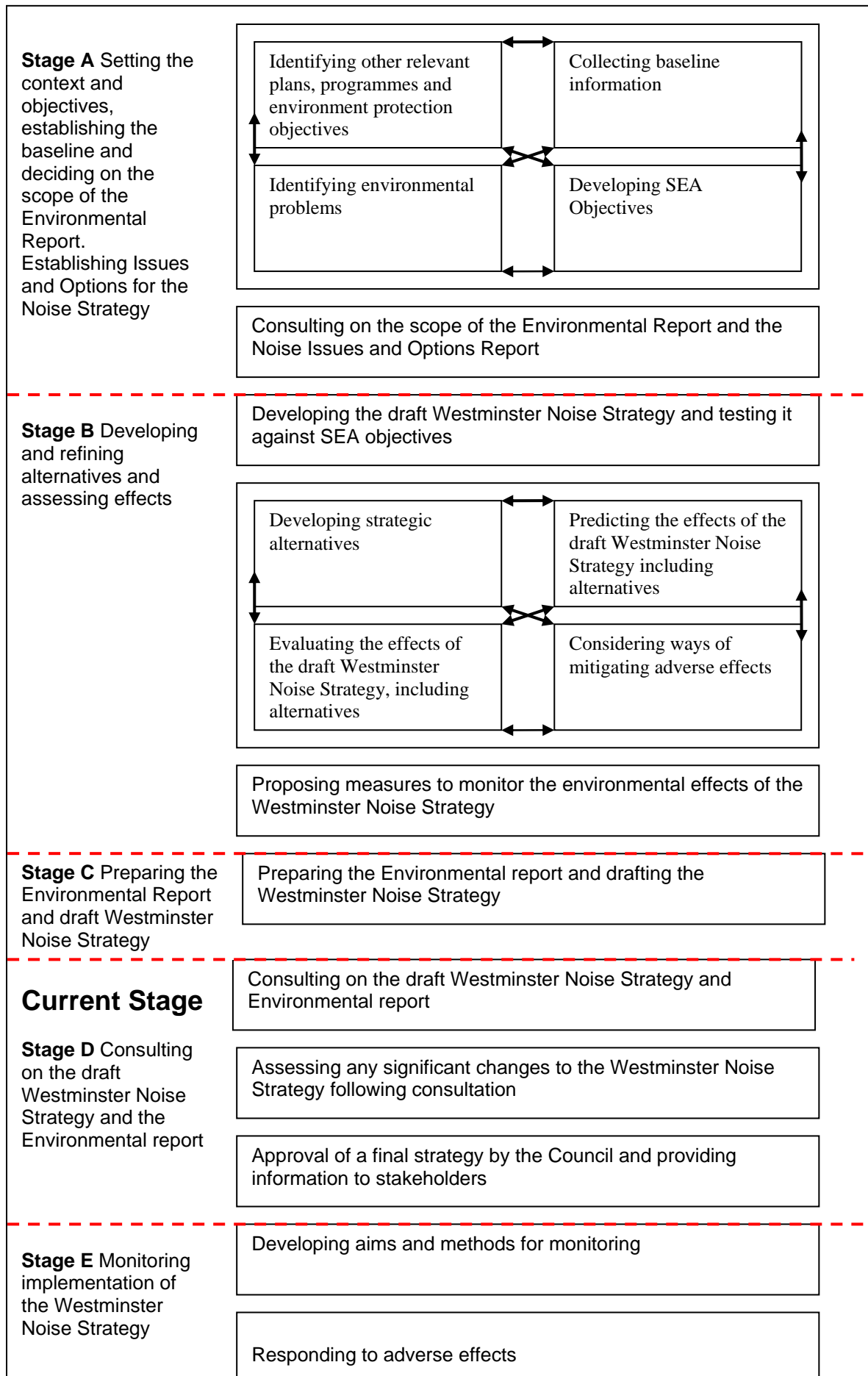


FIGURE 1: MAIN STAGES OF THE SEA PROCESS

1 Introduction

Strategic Environmental Assessment (SEA)

- 1.1 This Environmental Report has been drafted to accord with the Environmental Assessment of Plans and Programmes Regulations 2004 which set out *when* a Strategic Environmental Assessment (SEA) of a plan or programme is required and the *process* for undertaking it. The purpose of the SEA is to ensure the environmental impacts of the Westminster Noise Strategy are considered and potential adverse impacts on the environment are avoided or mitigated. This report should be read with the draft Westminster Noise Strategy, 2009.

Stages of the SEA

- 1.2 There are five stages of the SEA process² which are integrated with the preparation of the Noise Strategy itself (as illustrated in Figure 1). We are in consultation on the Environmental Report of the draft Westminster Noise Strategy and the strategy itself (stage D of Figure 1). This Environmental Report identifies, describes and evaluates the likely *significant* effects of the Westminster Noise Strategy, on the environment. It also outlines the reasons for selecting a particular policy approach instead of other reasonable alternatives, and records any measures that have been incorporated to mitigate any adverse environmental effects of the Westminster Noise Strategy.

Content of the Environmental Report

- 1.3 This report covers the following matters in line with the required content for environmental reports defined in legislation. A non technical summary is also provided.
- A description of the main objectives of the Draft Westminster Noise Strategy and its relationship with other relevant plans and programmes (section 2 and Appendix 1).

² These stages are defined in government guidance: A Practical Guide to the Strategic Environmental Assessment Directive, ODPM (2005)

- The international and national environmental protection objectives of particular relevance to the draft Westminster Noise Strategy (section 3).
- A description of the current state of the environment, key environmental problems and the likely evolution of these without implementation. This section covers the key environmental characteristics of the City of Westminster which is the area in which the draft Westminster Noise Strategy will be applied (section 4 and Appendix 2).
- Details of the environmental objective-based framework used to undertake this SEA (section 5).
- The results and conclusions of the SEA and the proposed monitoring framework (section 6 and Appendix 3).

Consultation on the Scope of this Environmental Report

- 1.4 In October 2008, as required by legislation, the statutory consultees: Environment Agency, English Heritage and Natural England were invited to consult on the scope of this environmental report. Although not required by the legislation, the report was also made available to the public for comment.
- 1.5 A response on the scoping report was received from Natural England and the English Heritage (no other parties commented). Natural England indicated that they had no detailed comments to make other than to indicate that they supported references to biodiversity and open spaces and recognised of the benefits of providing relatively tranquil spaces. English Heritage supported inclusion of a specific objective on the historic environment and suggested inclusions of Planning Policy Guidance 15 Planning and the Historic Environment, and Planning Policy Guidance 16 Archaeology and Planning under relevant plans and programmes (under Appendix 2). English Heritage also suggested incorporation of information on scheduled monuments and archaeological interest areas (in section 4). These comments have all been incorporated into the relevant sections of this Environmental Report.

2 The draft Westminster Noise Strategy and its relationship with other relevant plans, programmes

2.1 The main aim of the Westminster Noise Strategy is to contribute to improving the health and wellbeing of Westminster's residents, workers and visitors by reducing noise pollution and enhancing the city's sound environment. The draft includes four key objectives:

- *Reducing noise levels*
- *Reducing noise incidents*
- *Minimising the impact of noise on noise sensitive developments³*
- *Protecting and creating tranquil areas and positive sounds.*

2.2 There are four Noise Policies designed to help achieve these objectives and a brief summary of each follows:

Noise Policy 1: Noise conscious city planning and management

Noise emissions and noise impacts of new developments (including plant, equipment and machinery) will be minimised and the rear of properties will be protected from noise wherever technically possible. A healthy sound environment for noise sensitive uses will be provided and the impact of noise generating uses minimised.

Noise Policy 2: Reducing transport and servicing noise and impacts

The council will actively seek to reduce noise impacts from air traffic, trains, the Underground and buses and will ensure that noise from any changes to the transport network will be minimised.

Noise Policy 3: Integrated noise management and enforcement

A timely and coordinated approach to enforcement action will be taken by developing joined up approaches to enforcement action and providing a rapid 24 hour response to noise problems.

Noise Policy 4: Tranquil areas and positive sounds

Existing tranquil spaces suitable for additional protection and enhancement will be identified. Positive features of the city's sound environment will be promoted and new features encouraged.

2.3 The strategy also includes a series of short, medium and long-term actions that have been developed to bring about improvements in the council's operations and to facilitate lobbying and engagement with external organisations.

³ Government Planning Guidance, PPG 24, 'Planning and Noise' requires protection of noise sensitive developments, the Westminster UDP defines these as all residential properties; educational establishments; hotels; theatres; hospitals; concert halls; broadcasting and recording studios.

2.4 The relationship of the Westminster Noise Strategy with key relevant plans and programmes is illustrated in Figure 2 and set out in detail in Appendix 2.

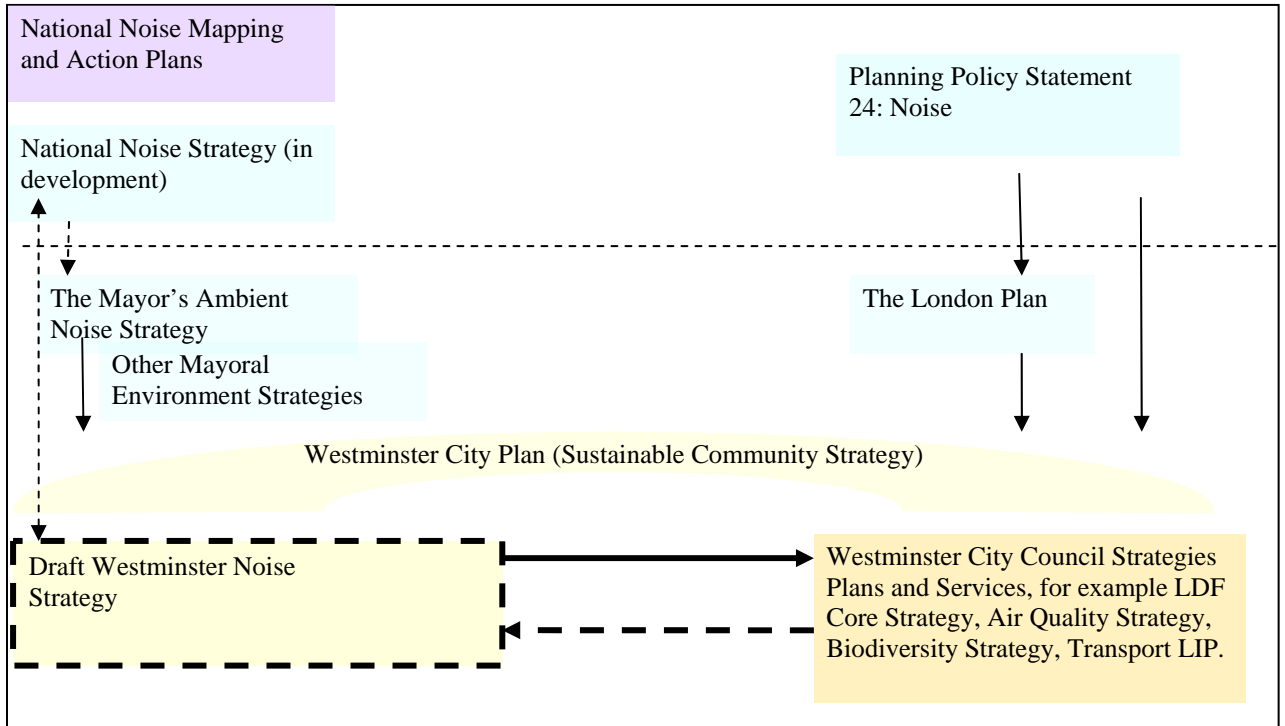


FIGURE 2: RELATOPNSHIP OF DRAFT WESTMINSTER NOISE STRATEGY WITH OTHER PLANS AND PROGRAMMES

3 Relevant Environmental Protection Objectives

3.1 The national and international environmental protection objectives listed in Table A below are particularly relevant to the noise strategy. The Environmental Report for the Westminster Noise Strategy will show how relevant national European Community and international environmental protection objectives listed below have been taken into account in preparing the draft Westminster Noise Strategy.

Table A: National and International Environmental protection objectives

National and International Environmental legislation, programme or policy
<p>Kyoto protocol to the United Nations Framework Convention on Climate Change (1997) is the first ever international treaty to set legally binding greenhouse gas emissions reduction targets on developed countries that have ratified it. Developed countries agreed to targets that will reduce their overall emissions of a basket of six greenhouse gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride) by 5.2 per cent below 1990 levels over the period 2008-2012.</p>
<p>The Johannesburg Declaration on Sustainable Development 2002 builds on previous declarations and commits nations of the world to sustainable development, with a particular focus on “the worldwide conditions that pose severe threats to the sustainable development of our people”.</p>
<p>World Health Organisation Guidelines on Community Noise, 1999. These guidelines are not statutory but are based on rigorous research identifying the lowest noise levels considered to affect health and wellbeing.</p>
<p>Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise requires the UK to produce maps of environmental noise across England and action plans to reduce noise where necessary and maintain environmental noise quality where it is good. The directive does not set any specific noise levels or values to be used in the action plans. This directive has been transposed into the Environmental Noise (England) Regulations 2006.</p>
<p>European Commission’s 5th Action Plan on the Environment proposed the following for night noise exposure outside homes:</p> <ul style="list-style-type: none"> • To phase out exposure above 65 dB LAeq; • To ensure that at no point in time a level of 85 dB LAeq is exceeded; • To aim to ensure that the proportions of the population exposed to average levels between 55 and 65 dB LAeq should not increase; and • That exposure in quiet areas should not increase beyond 55 dB LAeq.
<p>European Commission’s 6th Action Plan on the Environment does not contain specific exposure levels but advocates a substantial reduction in the number of people regularly affected by long-term average noise levels.</p>
<p>Securing the Future - UK Government sustainable development strategy, 2005 is defined by five guiding principles: (1) living within environmental limits; (2) ensuring a strong, healthy and just society; (3) achieving a sustainable economy; (4) promoting good governance; (5) using sound science responsibly. These principles form the policy basis for the five priority actions for the UK: (1) Sustainable consumption and production; (2) Climate change and energy; (3) Natural resource protection and enhancement; (4) sustainable communities.</p>
<p>[National] Planning Policy Guidance Note 24: Noise and Planning (PPG24) PPG24 provides guidance to local planning authorities on how to minimise the adverse impact of noise without placing unreasonable restrictions on development or adding unduly to the costs and administrative burdens of business. PPG 24 also identifies measures to control the source of noise or to limit exposure to it, e.g. using quieter machinery, containing or screening sources, or receptors; layout - e.g. distance, screening by other buildings, administrative - e.g. limiting source operating time, restricting. It also sets out Noise Exposure Categories – thresholds giving an indication as to whether development should be permitted or refused.</p>
<p>[National] Planning Policy Guidance Note 15: Planning and the Historic Environment (PPG15) Planning Policy Guidance 15 (PPG15) provides a full statement of Government policies for the identification and protection of historic buildings, conservation areas and other elements of the historic environment. It explains the role played by the planning system in their protection.</p>

4 Current Environmental Characteristics and Issues

4.1 Westminster is a densely developed urban environment situated at the heart of London, Europe's largest city. The diverse built form and range of activities as well as the volumes of transport and pedestrian movement make Westminster unique; the city's noise environment reflects this. Westminster is significantly louder than other parts of London, with average noise levels are significantly higher than the average level in England and Wales.

4.2 The Westminster Noise Survey 2008, found from 23.00-07.00 hours Westminster had average noise levels of 55.7dB , while average daytime levels (07.00-19.00 hrs) were 62.0dB. Noise levels in Westminster exceed those set by the World Health Organisation⁴, which states:

*to protect the majority of people from being seriously annoyed during the day-time, the sound pressure level on balconies, terraces and outdoor living areas should not exceed 55 dB L_{Aeq} for a steady continuous noise... at night, sound pressure levels at the outside façades of the living spaces should not exceed 45dB L_{Aeq} and 60dB L_{Amax} .*⁵

4.3 As well as impacts on hearing, noise can have effects on other aspects of physical and psychological health. There is evidence that environmental noise can have an effect on quality of life and children's health; it also contributes to cardiovascular disease and causes sleep disturbance and annoyance. The annoyance created by noise does not necessarily lead to more serious mental health issues but people with existing mental health issues may be particularly vulnerable to noise. Although a causal relationship between noise and mental illness has not been proven there is evidence to suggest annoyance can create "minor psychological problems such as tension, irritability and difficulty concentrating"⁶.

4.4 Noise and the impacts of noise on human health is a central consideration for the draft Westminster Noise Strategy. In addition the strategy has the potential to influence a number of other environmental issues as set out in Table B below.

⁴ Westminster Noise Survey, 2003 and Westminster Noise Survey 2008.

⁵ World Health Organisation published 'Guidelines for Community Noise, in 1999

⁶ London Health Commission (2003) Noise and Health Making the Link p8.

Table B Significant Environmental Issues affecting Westminster

Issue	Information about the environmental problem
Health	<p>Life expectancy in Westminster is 78.9 years; this is the 53rd Highest life expectancy in the country. 78.9 years compared to 76.5 years for London and 76.9 for England. The main causes of death include circulatory diseases.</p> <p>The breakdown of emergency hospital admissions revealed the following causes: 9.6% respiratory diseases; 8.7% circulatory diseases; 8.5% digestive system diseases.</p> <p>There are high levels of mental illness in Westminster, 60% higher than England as a whole.</p>
Carbon Emissions and Climate Change	<p>Westminster's emissions are 6.8% of the total carbon emissions for London, 0.6% of the UK total. The proportion of carbon emissions from commercial activity is very high; Westminster accounts for 11.8% of the sector total in the UK.</p> <p>Westminster is particularly vulnerable to the following impacts of climate change:</p> <ul style="list-style-type: none"> • Higher temperatures: London's Urban Heat Island effect is now well documented, adding up to 5-6°C to summer night-time temperatures. Westminster, with a dense urban environment in the heart of London, is one of the worst-affected boroughs. • The green expanses of the Royal Parks reduce this effect, but only in the immediate vicinity. • Prolonged periods of high temperatures also result in shrinkage of clay soils, leading to increased subsidence of buildings and structures. • Increase in heavy precipitation events is likely and the density of development and prevalence of non-porous surfaces makes Westminster particularly vulnerable to heavy rainfall events and resulting surface flooding. • As with much of the south-east, hotter and drier summer conditions will put a considerable strain on water resources.
Biodiversity Deficiency	<p>Despite its intensely urban aspect, Westminster has a diverse ecology. Parkland and water's edge habitats total approximately 3 ha; they accommodate wildlife and have a role in ameliorating pollution. There are 33 sites of importance for nature conservation. Species of European or National biodiversity importance include Bats, Black Red Start, Peregrine Falcon and all wild birds. However, 17.1% of the city is considered deficient in biodiversity.</p>
Poor Air Quality	<p>Concentrations of two of the regulated pollutants, nitrogen dioxide and particulates regularly exceed the Air Quality Standards. The whole of Westminster was declared an Air Quality Management Area in 1999 for NO₂ and PM₁₀.</p> <ul style="list-style-type: none"> • In 2010 the annual average NO₂ concentrations are predicted to exceed the air quality objective of 40µg/m³ over most of the city, with concentrations of over 60µg/m³ predicted along several of the busiest roads. • In 2010, the annual average PM₁₀ concentration is predicted to exceed the air quality objective of 40µg/m³ at several of the busiest junctions in the city. It is therefore an issue that needs to be addressed in the SEA. • Source apportionment has been carried out to determine the contribution of different sources of emissions at typical receptors in and around Westminster. For NO_x, the main contributors to ground level concentrations are road vehicles, commercial gas and rail emissions. Of the traffic contribution, cars, rigid HGVs and taxis contribute significantly while buses have a major impact at some locations, particularly Oxford Street. • For PM₁₀, the major contributors are background sources, i.e. sources outside London, and road traffic. Vehicle exhaust emissions and brake and tyre wear contribute significantly to the contribution from the roads. Of the vehicle exhaust contribution, cars, motorcycles and taxis make up more than half. Approximately half of the brake and tyre wear contribution is from cars. (CERC Source Apportionment in Westminster June 2008)

Issue	Information about the environmental problem
Effects of Road (motor vehicle) transport and congestion	The day time population of Westminster expands to over 1 million bringing significant pedestrian flows and high volumes of road vehicle movements. There is excellent access to public transport in much of the city, but 13.2% of residents drive to work. Motor vehicles contribute to air pollution, noise pollution and have effects on climate change.
Waste Production and Disposal	Westminster City Council deal with nearly 250,000 tonnes of waste on an annual basis. There are no waste disposal sites in the city due to the immense pressure on land. Unlike other boroughs, whose household waste usually accounts for 80% of all waste collected: <ul style="list-style-type: none"> • 60% of waste in Westminster is collected from commercial sources • 10% of waste is from street cleansing • 30% is from household waste • Recycling levels of municipal waste are improving but could be higher, currently at 9.8 %.
Protecting the historic environment	Westminster's historic environment is unique and represents an important environmental conservation issue. Westminster has more listed buildings than any other Local Planning Authority with over 11,000 listed buildings and structures, all of which are of special architectural or historic merit and as such there is a strong presumption against unauthorised demolition, alteration, or extension. In addition <ul style="list-style-type: none"> • Westminster has 85 London Squares and 21 English Heritage listed parks and gardens (including five Royal Parks). • Over 75% of Westminster is covered by its 55 Conservation Areas. • Westminster Abbey and the Houses of Parliament are World Heritage sites. • There are four scheduled monuments in the city. • There are five areas of archaeological interest in the city and much of Westminster's archaeological heritage is of national importance, including the area around the Houses of Parliament.
Protecting open spaces	<ul style="list-style-type: none"> • 70% of the land area is built up and the buildings form a total vertical surface area that far exceeds the 438 hectares of parkland. • The five Royal Parks in the central area of the city comprise the majority of the parkland but there are also 90ha of small parks and squares, and a number of hard civic spaces. • Open Space deficiency is a particular problem in some parts of Westminster; 32% of built up areas of the city are considered to be deficient in open space and 52% of the City is deficient in outdoor children's play space.

4.5 The issues identified above draw on the baseline information about Westminster's environment set out in Appendix 2. The baseline draws on the most up to date information available, but it should be noted that in some cases the data is some years older (for example in relation to road traffic data which relies on census material). This was also an issue in relation to noise data where the strategy is anticipated to have the most significant effects. In response to this the council commissioned research on the noise environment including the city wide Noise Measurement Survey in 2008 (to provide an update on the 2005 study). This was supplemented by a Noise Attitudes Survey, 2008. Further comment on data quality is provided in section 5 of this Environmental Report.

Likely Changes to the environment without the Westminster Noise Strategy

- 4.6 Pressure from building and transport development and population growth is very high in Westminster. The council receives an average of 10,000 planning applications per year. Both the working and residential populations of Westminster are forecast to increase substantially. Some predictions suggest Westminster's residential population could be as large as 350,000 by 2021, from a current total of approximately 250,000. The working population of Westminster is projected to grow from 570,000 jobs at present to up to 689,000 by 2021.
- 4.7 These growth scenarios will increase the pressure on Westminster's natural and historic built environment and the city's infrastructure as a whole; they also have noise implications. Changes in patterns, as well as volumes of transport including increases in motor vehicle and air traffic also have potential to contribute to noise generation. Intensification of work and leisure activities throughout the day and into the night is likely. All of these changes have noise generating potentials.
- 4.8 Without the implementation of the plan there might be a worsening of the noise pollution problems identified above and the health impacts of this. The council wants to reduce the adverse impacts of noise particularly on health. The Westminster Noise Strategy could play an important role in starting to narrow the gap from existing noise levels towards World Health Organisation guideline levels.

5 Methodology: SEA Objective-Based Framework

5.1 The objectives and policies contained in the draft Westminster Noise Strategy have been developed based on:

- research carried out on the city's sound environment
- comments from a panel of experts established to provide advice on the strategy
- the results of consultation with the public on the Noise Issues and Options Report, 2008 which set out possibilities for the scope and content of the draft Westminster Noise Strategy.

5.2 The assessment of the draft Westminster Noise Strategy that is set the out in section 6 of this Environmental Report has been undertaken using an assessment framework made up of nine environmental objectives. These are set out in Table C below.

Table C SEA Objectives

SEA objectives
1 To promote and improve health and well-being.
2 To reduce greenhouse gas emissions and support climate change adaptation.
3 To protect, enhance and create environments that encourage and supports biodiversity.
4 To improve air quality.
5 To reduce the impact of noise.
6 To reduce the need to travel and use of private motorised vehicular transport as well as encouraging walking, cycling and use of public transport.
7 To reduce waste production and increase recycling and recovery of all waste.
8 To protect and enhance the historic environment and architectural, archaeological and cultural heritage.
9 To protect, enhance and seek opportunities to increase open space throughout the borough.

5.3 These nine SEA objectives have been developed with reference to:

- The environmental protection objectives established at an international and national level set out in section 3 of this report.
- Specific environmental issues and problems in Westminster relevant to the development of the noise strategy as described in section 4 of this report.

5.4 The environmental issues highlighted in the SEA regulations as possible matters for Environmental Reports to assess impacts on have also been considered. Table D sets out information on the relationship between the

Westminster objectives (in so far as they have a bearing on the Noise Strategy) and the SEA regulations (Table D).

Table D Environmental issues highlighted in SEA regulations and relationship with Westminster’s SEA Objectives

Environmental Issues highlighted in SEA Regulations	Westminster’s Strategic Environmental Objectives
Population Human Health	This is covered in objective 1 of the assessment framework.
Fauna, Flora Biodiversity	This is covered in objective 3 of the assessment framework.
Soil	This is not covered in the assessment framework as the draft Westminster Noise Strategy will not have <i>significant</i> effects on soil quality.
Water	This is not covered as it is unlikely that the Westminster Noise Strategy will have significant effects on water or flooding.
Air	This is covered in objective 4
Climatic Factors	This is covered by objective 2.
Material Assets	This term is not clearly defined but is often understood to refer to natural resources. On this basis this is not covered as it is unlikely that the Westminster Noise Strategy will have significant effects on natural resources.
Cultural Heritage– architectural, archaeological	This is covered by objective 8 of the assessment framework.
Landscape	This is covered by objectives 8 and 9 of the assessment framework.

5.5 The SEA objectives have been assessed for their compatibility, in order to identify potential conflict between objectives. Each objective has the same weight and is given equal importance. The resulting matrix, set out in figure 3, shows no significant conflicts between the objectives identified.

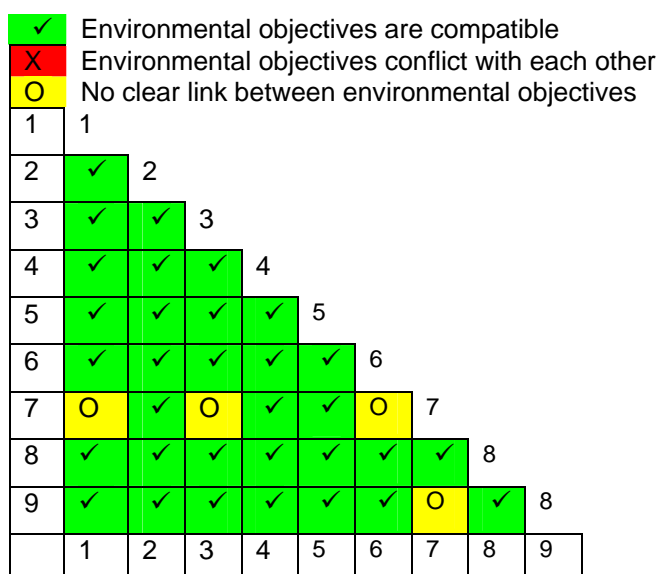


FIGURE 3 ASSESSMENT OF THE COMPATIBILITY BETWEEN THE ENVIRONMENTAL OBJECTIVES.

Assessment of the Draft Noise Strategy

- 5.6 The draft Westminster Noise Strategy objectives and each the emerging policies were tested as they were being developed against these nine SEA objectives and recorded in the tables included in Appendix 3. This was to ensure proper consideration was given to effects on the environment, i.e. whether it would significantly effect the current or baseline position described in the earlier sections of this Environmental Report. Consideration was also given to the nature of the effect, including its duration and any cumulative impacts. It is important to note the assessment was limited to those environmental issues upon which the Westminster Noise Strategy has the *potential* to have a significant environmental effect, whether positive or negative.
- 5.7 The assessment of whether the policy would have a significant effect was determined with reference to the outcomes of consultation on the Noise Strategy Issues and Options report (published in 2008), various studies undertaken in support of the draft Westminster Noise Strategy (including the Westminster Noise Attitudes Survey, 2008 and the Westminster Noise Measurement Survey, 2008) and other relevant plans and data (for example, the Westminster Open Space Strategy, 2007).
- 5.8 The assessment was undertaken by officers responsible for developing the draft Westminster Noise Strategy to ensure proper integration of environmental considerations. Training in SEA methodology was provided for these officers. The assessment has been reviewed by the council's SEA Officer to ensure a consistent and thorough approach. Table E outlines the main stages of this SEA and highlights key learning points and limitations encountered in undertaking the assessment.

Table E Developing the draft Westminster Noise Strategy Environmental Report

Key SEA Tasks	Observations (including any limitations)
The Scoping Report – Determining the Scope of the Environmental Report January – August 2008	
Collect baseline data and identifying environmental characteristics and problems/ issues	Baseline data collected on Westminster's environment and to aid description of the key environmental characteristics of the city and identification of specific environmental issues and problems. This drew from the Sustainability Appraisal of the council's LDF Core Strategy and updated this with recent noise and air quality studies. However, some key data is relatively old e.g. Census information. In addition some data sets needs enhancing to provide data at a more local level, such as carbon emissions data. These updates will be taken in updates to the baseline of the council's LDF Core Strategy which can be drawn upon in monitoring environmental impacts of the draft Westminster Noise Strategy.
Proposed 'outline' of the Westminster Noise Strategy developed and other relevant policies, plans and programme identified	This was supported by a Noise Issues and Options report was prepared to provide details on the likely scope of the Westminster Noise Strategy.
Identify key environmental protection objectives	Review of relevant national and international environmental protection objectives to consider in developing the draft Westminster Noise Strategy to inform the SEA framework.
Develop SEA Objectives framework	Develop SEA framework drawing on the baseline environmental data, relevant <i>policies, plans and programmes</i> and environmental protection objectives. This draws on the relevant objectives from the Sustainability Objective Framework adopted for assessing the Council's LDF Core Strategy.
Write and consult on the Scoping Report	The scoping report brought together SEA tasks to date. This was then subject to a five week consultation period with statutory consultees. This was consulted on alongside the Noise Issues and Options report October – November 2008. Both documents were also made available for public consultation.
Environmental Report (Developing and Assessing the Strategy) November 2008– July 2009	
Review comments on scoping report and amend approach as necessary	Comments received were limited to the English Heritage and Natural England which have been fully incorporated into this environmental report.
Assess emerging draft Westminster noise strategy objectives and policies	The assessment framework was used as the draft Westminster Noise Strategy was developed and has helped inform the final policies and objectives. A limited number of strategic alternative approaches were developed due to constraints in Westminster. However, alternatives were developed within constraints to ensure all <i>reasonable</i> alternatives were appraised and most environmental sustainable option recommended.
Write and publicly consult on this Environmental Report	This Environmental Report draws together the SEA tasks to date – including those at the scoping stage - and presents the results of the SEA of the draft Westminster Noise Strategy. Public consultation on both the draft Westminster Noise Strategy and the Environmental Report will be undertaken for a minimum of five weeks over Summer 2009.

6 SEA Results and Proposed Monitoring Framework

Likely Significant Effects of the Draft Westminster Noise Strategy

- 6.1 The SEA results are recorded in tables which are set out in full in Appendix 3. The SEA was used to inform changes to the draft Westminster Noise Strategy as it was being developed and to identify the need for any mitigation measures to address adverse effects.
- 6.2 An assessment of the draft Westminster Noise Strategy objectives against the SEA objectives revealed no significant conflicts between the two (Appendix 3, Table A1). The assessment suggests that a positive impacts likely in relation to noise (SEA objective 5), health (SEA objective 1) and open space (SEA objective 9). A cumulative positive impact was also identified in relation to biodiversity (SEA objective 3).
- 6.3 The assessment (Appendix 3, Tables 2-12) revealed the draft Westminster Noise Strategy policies are also likely to have a significant positive effect on health and wellbeing of Westminster's population (SEA objective 1) and on reducing noise and its impacts (SEA objective 5). This directly addresses the likely changes to the environment without implementation of the draft Westminster Noise Strategy identified in section 4, which is a worsening of the city's noise environment and a related negative impact on the health and wellbeing of the city's population (as highlighted in section 4 of this Environmental Report). However, it is important to note in many instances these effects are largely medium to longer term and cumulative in nature.
- 6.4 In the medium to longer term, implementation of the draft Westminster Noise Strategy is also likely to have a significant positive effect by enhancing the city's open spaces through improvements to the sound environment. The importance of the city's open spaces in providing a tranquil sound environment is highlighted in the Westminster Open Space Strategy, 2007. The longer term and cumulative impact of the policy may

also lead to significant positive effects on biodiversity (SEA objective 3). This is because the draft Westminster Noise Strategy seeks to improve the sound environment of the city's open spaces (many of which also provide a valuable habitat for wildlife) and encourages the introduction of 'natural sounds'.

- 6.5 No significant negative environmental effects have been identified in relation to the implementation of the final version of the draft Westminster Noise Strategy. Where negative effects were identified, these led to revisions to the strategy to avoid the negative effect. No significant temporary or synergistic issues were identified through the assessment.

Alternative Approaches Considered

- 6.6 The potential for significant environmental effects were noted in relation to the first version of Noise Policy 1 (Appendix 3, Table A3) which was in summary: *Noise emissions and noise impacts of new developments will be minimised and the rear of properties of properties will be protected from noise wherever technically possible. Separation of noise sensitive uses from noise generating uses will be applied.*
- 6.7 Even though this approach may lead to a more immediate short term positive effect on noise issues, it was considered that even in the circumstances where such separation was feasible it might not be desirable as it would mean a move away from a mixed use approach which is an important characteristic of Westminster and central areas of the city in particular. The impact of such a separation might be cumulative negative effects on environmental objectives concerned with reducing the need to travel (SEA objective 6) due to residents having to travel further for work or to access services and the indirect effects of this on climate change (SEA objective 2). In addition, adopting such a blanket zoning approach would radically alter the character of the city, and sacrifice broader socio-economic sustainability effects of a mixed use approach. There were also concerns that the emphasis in this policy approach on protecting the quieter rear of buildings might have detrimental impacts on integrity of historic buildings.

- 6.8 Based on this initial assessment, the approach was developed and a revised approach with a greater focus on limiting the impact of noise generating uses and providing a healthy sound environment, especially for noise sensitive occupants, was incorporated in the strategy. This revised approach also included supplementary text to clarify the need to respect the architectural and historic integrity of buildings. A similar clarification was included in relation to Noise Policy 4 on Tranquil Areas and Positive Sounds. This was to highlight the need to consider the character and function of the open space including its historic character (see Appendix, 3 Tables 10 and 11).
- 6.9 No further alternatives were identified, but in relation to each policy an assessment was made of the likely effect of not implementing the policy outlined in the draft Westminster Noise Strategy. In every case assessment revealed that not implementing the policy would lead to a deterioration of the current situation in relation to noise and in some instance loss of the positive effect associated on health and wellbeing and biodiversity.

Mitigation of Significant Adverse Effects

- 6.10 Mitigation of any significant adverse impacts was achieved through changes to the policy approach which would *avoid* the effect rather than developing specific measures in response to these negative effects as described in paragraph 6.6 to 6.9 above.

Proposed Monitoring Approach

- 6.11 The main focus of the monitoring approach will be on the noise effects of the strategy as identified in Table F below and integrated in the draft Westminster Noise Strategy itself. This is based on the most likely significant environmental effects and provides some useful proxy indicators for the relevant health and wellbeing effects anticipated. It should be noted that the focus is on general wellbeing, rather than specific health effects (i.e. population bothered by noise). The strategy has a five year lifespan and it is proposed that monitoring be undertaken annually.

Table F: Monitoring the Noise Strategy

Draft Noise Strategy Objective	Monitoring
Reducing average noise levels in the city	Measurements of (i) Gap between current average day-time noise levels at front of buildings (62 dB) and WHO guideline of 55 dB (ii) Average night- time noise levels at rear of buildings.
Reducing noise incidents in the city	Monitoring through questions in the (annual and / or quarterly) Westminster City Survey(s).
Minimising the impact of noise on noise sensitive developments	Reducing the number of residents bothered by noise progressively from current levels of 29% (as identified in the Westminster Noise Attitudes Survey 2008).
Protecting and enhancing tranquil areas and positive sounds	Ensuring the tranquillity scores for open spaces improve or do not fall. Ensuring Ambient Noise Levels (LAeq) improve or do not worsen (based Westminster Measurements and where appropriate the Westminster Open Space Survey 2008).

6.12 In addition, it is suggested the actual effects of implementation of the strategy against the baseline information related to the nine objectives used in this environmental report above should be re-assessed in 2013 to inform any review of the strategy. The assessment revealed that the significant effects are likely to manifest in the medium to long term or as a result of the cumulative effect of the policy approach. Undertaking reassessment of monitoring earlier than this will not allow sufficient time for the Westminster Noise Strategy to have an effect. However, building in this requirement for a more comprehensive review in 2013 will ensure that if there are any unforeseen adverse effects, any necessary remedial action can be taken to address these. It will also provide an opportunity for any further developments in the scope and accuracy of the baseline information on the environment to be properly considered.

6.13 It should also be noted that the Westminster Noise Strategy monitoring framework will be embedded in the council's Sustainability Appraisal monitoring framework for its LDF Core Strategy. The Sustainability Appraisal for the Core Strategy also includes the objectives used in this assessment.

7 Next steps

- 7.1 Following this consultation period, the council will use the framework identified, as amended by any comments received on this Environmental Report, to assess any significant changes to the draft Westminster Noise Strategy. The final Westminster Noise Strategy will then be approved later this year.

APPENDIX 1 DETAILED LIST OF RELEVANT PLANS AND PROGRAMMES

Plans & Programmes	Relationship with Westminster Noise Strategy
<p>National Noise Strategy – not yet published The Government has committed to developing a national noise strategy for ambient and neighbourhood noise. The strategy will cover ambient noise (specific details are not yet available) and will also look at ways to improve neighbourhood and neighbour noise management at national, regional and local level.</p>	<p>Once published this National Noise Strategy will provide the national framework for many of the actions in the Westminster Noise Strategy.</p>
<p>National Noise Maps and Noise Action Plans The Government has prepared strategic noise maps for major agglomerations along major roads, major railways and at major airports within their territories. These noise maps have been produced to meet the requirements of the Environmental Noise (England) Regulations 2006 and Directive 2002/49/EC – more commonly known as the Environmental Noise Directive (END). The maps are intended to inform the production of noise action plans, which are to be developed on a five year rolling programme.</p>	<p>The noise maps published are an important part of the evidence base for the Westminster Noise Strategy. The noise action plans also include measures for implementation at the local level that should be reflected where appropriate in the Westminster Noise Strategy.</p>
<p>National Planning Policy Guidance Note 24: Noise and Planning (PPG24) PPG24 provides guidance to local planning authorities on how to minimise the adverse impact of noise without placing unreasonable restrictions on development or adding unduly to the costs and administrative burdens of business’.</p>	<p>PPG24 sets out the national planning context for the Westminster Noise Strategy and while it is more particularly relevant to planning policy documents, it provides important context for any planning related actions that may arise from the Westminster Noise Strategy.</p>
<p>[National] Planning Policy Guidance Note 15: Planning and the Historic Environment (PPG15) Planning Policy Guidance 15 (PPG15) provides a full statement of Government policies for the identification and protection of historic buildings, conservation areas and other elements of the historic environment. It explains the role played by the planning system in their protection.</p>	<p>Westminster has a rich historic environment with over 11,000 listed buildings and structure and 75% of the city covered by conservation areas. This is relevant to the policies related to planning the built environment.</p>
<p>[National] Planning Policy Guidance Note 16: Archaeology and Planning (PPG16) Planning Policy Guidance 16 (PPG16) sets out the Secretary of State’s policy on archaeological remains on land, and how they should be preserved or recorded both in an urban setting and in the countryside.</p>	<p>Much of Westminster archaeological heritage is also of national importance. This includes the area around the Houses of Parliament and Westminster Abbey and the site of Lundenwec, the most important Lower Thames Valley settlement of the middle-saxon area. The national statement provide context for planning and transport related noise policies in these area of archaeological interest.</p>

Plans & Programmes	Relationship with Westminster Noise Strategy
<p>[Regional] Souder City: Ambient Noise Strategy, GLA, 2004 The Mayor's strategy focuses on ways to address 'ambient' or 'environmental noise', mainly from transport sources. Action includes better management of transport systems, better town planning and better design of buildings.</p>	<p>This provides the regional framework for the policies and actions of the Westminster Noise Strategy related to ambient noise.</p>
<p>[Regional] London Plan, 2004 Consolidated by Changes in 2008 The London Plan is the regional spatial development strategy. It sets the framework for spatial plans produced at the local level such as Westminster UDP and emerging LDF and also provides a framework for decisions on strategic planning applications. Policy 4A.20 relates to reducing noise and enhancing soundscapes.</p>	<p>This provides important context for any planning related actions that may arise from the Westminster Noise Strategy. The requirements for Westminster Planning documents to be in general conformity with the London Plan will need to be considered when drafting planning related policies and actions in the Westminster Noise Strategy.</p>
<p>[Local] Westminster City Plan, 2006 – 2016 This is the Council's Sustainable Community strategy and is the 'umbrella strategy' for other Council strategies and those of its partners. It sets out a vision for Westminster to be the best city to live, work and visit in the UK: a vibrant city with great quality of life, strong, united communities and excellent services, offering real opportunities for everyone to achieve a better future.</p>	<p>This provides useful context about local priorities for change and includes specific commitment to reduce noise, particularly from transport.</p>
<p>Westminster Unitary Development Plan, 2007 (UDP 2007) is the development plan for the borough and is used to assess planning applications. It will eventually be replaced by the Core Strategy and City Management Plan DPDs - which are currently in preparation and will form part of Local Development Framework (LDF). These documents will set out the overall spatial strategy for Westminster's future development and the detailed policies that will be used to assess applications.</p>	<p>The UDP contains specific noise policies as will the emerging LDF documents. The Westminster Noise Strategy will be used to inform the policy approach in the Core Strategy and City Management Plan and will have a shared evidence base.</p>
<p>Westminster Local Implementation Plan 2005/6 – 2010/11 sets out how the council will be implementing the Mayor of London's Transport Strategy within the City of Westminster. It encourages sustainable modes of travel and highlights the potential benefits of reduced noise. Sustainable modes of transport will have benefits in terms of reduced noise levels from traffic and transport.</p>	<p>This provides the wider local transport context for the Westminster Noise Strategy.</p>
<p>Statement of Licensing Policy, 2008 sets out the council's policies for licensing and includes specific noise measures.</p>	<p>This provides the licensing policy context for the Westminster Noise Strategy</p>
<p>Westminster Housing Strategy, 2007-2012 sets out the council's housing strategy. It has four guiding priorities which are: (1) increasing the supply of homes; (2) tackling high demand and improving housing advice; (3) improving neighbourhoods and quality of life; (4) developing our role as a strategic housing authority.</p>	<p>This provides the overall housing context and is relevant to neighbour noise related actions and proposals in the noise strategy.</p>

Plans & Programmes	Relationship with Westminster Noise Strategy
<p>The Open Space Strategy Supplementary Planning Document, 2007 is part of the LDF. It sets out a strategy for managing and enhancing the city's open spaces and also highlights areas of open space deficiency. It also highlights the specific value of open spaces for respite from noise.</p>	<p>This provides useful background to consideration of open spaces and the Westminster Noise Strategy will fulfil an action of the Open Space Strategy related to considering noise impacts on open spaces and appropriate policy responses.</p>
<p>The Tree Strategy Supplementary Planning Document (is in preparation) and is part of the LDF.</p>	<p>The relationship is not clear at this stage and will be updated in due course. However, it does have some relevance in that trees can have impact upon perception of noise levels (if not actual noise levels).</p>

APPENDIX 2 BASELINE DATA ON WESTMINSTER'S ENVIRONMENT

The following tables will be updated and developed as new data becomes available and in light of any consultation responses on this Environmental Report.

INDICATOR (Targets/ Objective/ Standard)	WESTMINSTER DATA	COMPARISON DATA TREND	SOURCE
HEALTH			
Life Expectancy	Life Expectancy:78.9 years	53 rd Highest life expectancy in the country. 78.9 years compared to 76.5 years for London and 76.9 for England.	Public Health Annual Report
Mortality	Death rate 4.5 deaths per 1000 population. Main causes of death circulatory diseases (35%men/36% women), cancers (30%men/26% women) and respiratory diseases (13%men/15% women).	Compared to 6.8/1,000 for London and 9.4/1000 in England.	PHAR 2006/7
Emergency Hospital Admissions	9.6% respiratory diseases 8.7% circulatory diseases. 8.5% digestive system diseases.		PHAR 2006/7
Prevalence of mental illness in Westminster	High levels of mental illness in Westminster, 60% higher than England as a whole. 31,944 neuroses (77% of total) 8,323 personality disorders (20%) 973 psychoses (2%).		PHAR 2006/7
CLIMATE CHANGE			
Greenhouse gas emissions from industrial and commercial sources	2003: 2562 tonnes 11.8% of London total for sector	2003: London 21737 tonnes UK 262,087 tonnes	http://www.defra.gov.uk/environment/statistics/globalatmos/globalghg.htm
Greenhouse gas emissions from domestic source	2003: 527 tonnes (2.8% of London total for sector)	2003: London 18935 tonnes UK 163,737 tonnes	http://www.defra.gov.uk/environment/statistics/globalatmos/globalghg.htm
Greenhouse gas emissions from Road Transport	2003: 363 tonnes (3.6% of London total for sector)	2003: London 10147 tonnes UK 128,606 tonnes	http://www.defra.gov.uk/environment/statistics/globalatmos/globalghg.htm
Total Greenhouse gas emissions	2003: 3451 tonnes (6.8 % of London total for all sectors)	2003: London 50842 tonnes UK 568,105 tonnes	http://www.defra.gov.uk/environment/statistics/globalatmos/globalghg.htm
Carbon emissions / capita	2003: 15.5 tonnes	2003: London 6.9 tonnes	http://www.defra.gov.uk/environment/statistics/globalatmos/globalghg.htm
Domestic carbon emissions / capita	2003: 2.4 tonnes	2003: London 2.6 tonnes UK 2.8 tonnes	http://www.defra.gov.uk/environment/statistics/globalatmos/globalghg.htm

INDICATOR (Targets/ Objective/ Standard)	WESTMINSTER DATA	COMPARISON DATA TREND	SOURCE
Predicted future climate characteristics		Future climate changes predicted for London: Warmer, wetter winters More intense downpours of rain Hotter drier summers, with more frequent and extreme high temp.	Climate Change and London transport System, summary report, 2005
Number of Planning Applications with sustainable design related conditions/ negotiated – water	2007/08 1 Sustainable urban drainage 2 Water conservation	No comparison/ trend data available	Westminster Sustainability Analysis Database
Number of Planning Applications with sustainable design related condition/ negotiated – renewable energy	2007/08 32 Renewable energy	No comparison/ trend data available	Westminster Sustainability Analysis Database
BIODIVERSITY			
Priority habitats	The BAP priority habitats include built environment, churchyards and cemeteries, parks and green spaces, private gardens, standing open water, tidal Thames, veteran trees and decaying wood.		
Sites of nature conservation importance	2007 5 – Met SINC 459.34ha 5 – Bor Grade 1 21.05ha 8 – Bor Grade 2 13.98 ha 15 – Local SINC's 25.49 ha		GiGL Update 2008
Areas of wildlife deficiency	Area (ha) 365 Percentage of borough: 17.1 %	Inner London Boroughs Area (ha) % Bor. H and F 440 27 K and C 139 11.5 City of Lon. 290 100 Camden 405 20.7 Lewisham 571 16.3 Southwark 698 24.3 Lambeth 859 32.1 Wandsworth 305 8.9	
Number of Planning Applications with sustainable design related condition/ negotiated – biodiversity	2007/08 19 Protection of trees from development 37 Biodiversity promotion 2 Protected species in SMINCs 2 Wildlife deficiency increased habitat	No comparison/ trend data available	Westminster Sustainability Analysis Database
AIR QUALITY			
Number of people (and %) living within an Air Quality Management Area	2008: 231,500 residents 100 % of residential population The whole city is an Air Quality Management Area		Air Quality Issues and Options Report, 2008

INDICATOR (Targets/ Objective/ Standard)	WESTMINSTER DATA	COMPARISON DATA TREND	SOURCE
NO ₂ Annual Mean Objective: 40µg/m ³ (European Standard)	2004: 110µg/m ³ Marylebone Road 46µg/m ³ Westminster Background Site		http://www.londonair.org.uk/london/reports/AirQualityInLondon2004.pdf
Number of hours each year with mean concentrations of NO ₂ above 200µg/m ³ (105ppb) Objective: 18 hours	2004: 529 Hours		http://www.londonair.org.uk/london/reports/AirQualityInLondon2004.pdf
Contribution to NO ₂ emissions from different source groups	45% Commercial gas 29% Major roads 15% Domestic gas 7% Rail 3% Minor roads 1% Other		Air Quality Issues and Options Report, 2008
PM ₁₀ Annual Mean Objective: less than 40µg/m ³ (European Standard)	2003: 43µg/m ³ Marylebone Road 25µg/m ³ Westminster background site		http://www.londonair.org.uk/london/reports/AirQualityInLondon2004.pdf
Number of times PM ₁₀ has exceeded 50 µg/m ³ Objective: less than 35 times a year (European Standard)	2008 99 times Marylebone Road 3 times Westminster background site		http://www.londonair.org.uk/london/reports/AirQualityInLondon2004.pdf
Contribution to PM ₁₀ emissions from different source groups	2008 32% Major Roads – Exhaust 37% Major Roads – Brakes and tyre 15% Minor Roads 15% Commercial Gas 4% Rail 4% Other 3% Domestic Gas		Air Quality Issues and Options Report, 2008
Number of moderate or poor air quality days	2005 58 days at Marylebone Rd. 8 days at Westminster Background Site	2000: 80 days at Marylebone Rd. no data for Westminster Background Site 2001: 50 days at Marylebone Rd. 8 days at Westminster Background Site 2002: 51 days at Marylebone Rd. 13 days at Westminster Background Site 2003: 97 days at Marylebone Rd. 32 days at Westminster Background Site 2004: 48 days at Marylebone Rd. 15 days at Westminster Background Site	http://www.londonair.org.uk/london/reports/AirQualityInLondon2004.pdf
NOISE			

INDICATOR (Targets/ Objective/ Standard)	WESTMINSTER DATA	COMPARISON DATA TREND	SOURCE
Average noise levels in Westminster Times 23:00 – 07:00 Guideline level: 45 dB L _{Aeq}	2008 55.7dB Laeq, T (front façade)		Westminster Noise Survey, 2008
Average noise levels in Westminster Times 07:00 – 19:00 Guideline level:55 dB L _{Aeq}	2008 62.0dB Laeq, T (front façade)		Westminster Noise Survey, 2008
% Residents surveyed being bothered by noise by noise sources types	Road traffic noise (37%) Building and construction (36%) Road works (30%) Neighbours (25%) Aircraft, including helicopters (21%) Recycling or waste collection (18%) Pubs, bars, nightclubs or restaurants (14%) Other outdoor events (not parks) (8%)		Westminster Noise Attitude Survey, 2008
Number of Planning applications with sustainable design related condition/ negotiated – Pollution	2007/08 15 Duct to take smells to high level 83 Noise issues 2 Measures to minimise/prevent light pollution 2 Contaminated land	No comparison/ trend data available	Westminster Sustainability Analysis Database
WASTE AND RECYCLING			
Amount of waste collected by Westminster City Council (not other operators)	200,000 tonnes		Westminster Annual Monitoring Report, 2006-07
Composition of municipal waste (%) 2006/07	60% Commercial waste 30% Household waste 10% Street Cleansing	Most other London Boroughs have 80% household waste.	Westminster Annual Monitoring Report, 2006-07
Disposal of municipal waste by method 2006/07	75% Energy Recovery 14% Landfill 10% Recycled 1% Composted		Westminster Annual Monitoring Report, 2006-07
Number of Planning Applications with sustainable design related condition/ negotiated – waste	2007/08 98 Waste storage facilities/recycling	No comparison/ trend data available	Westminster Sustainability Analysis Database
HISTORIC ENVIRONMENT			
Number of areas. archaeological sites of interest	There are five areas of archaeological interest in Westminster		WCC GIS Web map

INDICATOR (Targets/ Objective/ Standard)	WESTMINSTER DATA	COMPARISON DATA TREND	SOURCE																																																										
Number of listed buildings and structures	Over 11,000	London has 18,000 listed buildings or historic areas	WCC Facts & Figures publication 2002/3																																																										
Number of listed buildings and structures at risk	40 listed buildings at risk		www.english-heritage.org.uk																																																										
No. and extent of conservation areas	55 conservation areas (covering more than 75% of Westminster by area)	800 conservation areas in London	Westminster Unitary Development Plan, 2007																																																										
No. scheduled ancient monuments	The Chapter House and PVC chamber in the abbey cloisters Westminster Abbey The Jewel Tower Tudor wine cellar (King Henry VIII's)	165 Scheduled Monuments in total in Greater London	English Heritage County List of Scheduled Monuments: Greater London 1996																																																										
Number of strategic / protected views	16 Strategically Important Views	26 London Strategically Important Views	The London View Management Framework																																																										
OPEN SPACE																																																													
Publicly accessible open space per 1000 resident population.	1.86 ha of publicly accessible open space / 1000 resident pop.	Common standard of 1.6 ha / 1000 pop Lambeth 1.54 ha / 1000 Southwark 3.58 ha / 1000 Lewisham 1.6 ha / 1000	Open Space study, Land Use Consultants, July 05 And www.statistics.gov.uk																																																										
Total number of open spaces – including green space over 0.04 ha, hard civic space and linear open space	Westminster has a total of 182 Open Spaces including 10 civic spaces, which cover an area of 548 hectares, of which 489 hectares (89%) have public access and 59 hectares (85 in number) are private space, which equates to 4,853620m2.	K&C 1,871930m2 Camden 5,319390m2 City 190440m2	Open Space study, Land Use Consultants, July 05 And www.statistics.gov.uk																																																										
% population living within 1.2km (15minutes walk) of a District Park	76% of all housing units in Westminster are within 1.2km of a District Park.		WCC 1990 Land Use Survey + Respite data																																																										
SUSTAINABLE TRANSPORT																																																													
Mode of transport for journeys to work (%)	<table border="0"> <tr><td>Work at home</td><td>11.07</td></tr> <tr><td>Tube, light rail, tram</td><td>31.76</td></tr> <tr><td>Train</td><td>3.64</td></tr> <tr><td>Minibus/coach</td><td>12.37</td></tr> <tr><td>Motor two wheel</td><td>1.26</td></tr> <tr><td>Car / van (drive)</td><td>13.20</td></tr> <tr><td>Car / van (passenger)</td><td>1.23</td></tr> <tr><td>Taxi / mini cab</td><td>1.62</td></tr> <tr><td>Bicycle</td><td>2.79</td></tr> <tr><td>Walk</td><td>20.08</td></tr> <tr><td>Other</td><td>.97</td></tr> </table>	Work at home	11.07	Tube, light rail, tram	31.76	Train	3.64	Minibus/coach	12.37	Motor two wheel	1.26	Car / van (drive)	13.20	Car / van (passenger)	1.23	Taxi / mini cab	1.62	Bicycle	2.79	Walk	20.08	Other	.97	<table border="0"> <tr><td>London</td><td>England</td><td>%</td></tr> <tr><td>8.61</td><td>9.16</td><td></td></tr> <tr><td>18.84</td><td>3.16</td><td></td></tr> <tr><td>12.18</td><td>4.23</td><td></td></tr> <tr><td>11.12</td><td>7.51</td><td></td></tr> <tr><td>1.42</td><td>1.11</td><td></td></tr> <tr><td>33.5</td><td>5.92</td><td></td></tr> <tr><td>2.51</td><td>6.11</td><td></td></tr> <tr><td>.065</td><td>0.52</td><td></td></tr> <tr><td>2.33</td><td>2.83</td><td></td></tr> <tr><td>8.42</td><td>9.99</td><td></td></tr> <tr><td>0.42</td><td>0.46</td><td></td></tr> </table>	London	England	%	8.61	9.16		18.84	3.16		12.18	4.23		11.12	7.51		1.42	1.11		33.5	5.92		2.51	6.11		.065	0.52		2.33	2.83		8.42	9.99		0.42	0.46		ONS
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% of PT users in household with a car	44.77	London 64.48 England 69.00 %	ONS																																																										
% of PT users in household without a car	53.81	London 35.11 England 30.45 %	ONS																																																										

INDICATOR (Targets/ Objective/ Standard)	WESTMINSTER DATA	COMPARISON DATA TREND	SOURCE
Public transport accessibility levels	The majority of the Borough has an excellent rating, level 6b(40.01+). The north west and south of the Borough has slightly less public transport access which does correlate with the more deprived areas within the borough.		TfL Public Transport Accessibility Level Map of London, 2008
Private car ownership	Without car or van 51,452 With 1 car or van 32,108 With 2 or more 7,612	Westminster Ranking in Region London England and Wales Without car or van 4 4 With 1 car or van 32 374 With 2 or more 28 371	NSO
Average vehicle flow per hour	2004 7211 vehicles per hour	2003 Westminster 7256 vehicles per hour	CC traffic levels in Westminster: note to transport and infrastructure overview and scrutiny committee, Dec 04
Modal split for travelling to school (%)	2005 Westminster Walk or cycle 34 % Car 24 % Public transport 42 %	2003 % London England Walk or cycle 41 49 Car 36 38 Public transport 24 13	WCC School Travel Survey 2006

APPENDIX 3 SEA ASSESSMENT TABLES

SEA Objectives
1 To promote and improve health and well-being.
2 To reduce greenhouse gas emissions and support climate change adaptation.
3 To protect, enhance and create environments that encourage and supports biodiversity.
4 To improve air quality.
5 To reduce the impact of noise.
6 To reduce the need to travel and use of private motorised vehicular transport as well as encouraging walking, cycling and use of public transport.
7 To reduce waste production and increase recycling and recovery of all waste.
8 To protect and enhance the historic environment and architectural, archaeological and cultural heritage.
9 To protect, enhance and seek opportunities to increase open space throughout the borough.

TABLE A1: WESTMINSTER NOISE STRATEGY OBJECTIVES (1) Reducing average noise levels; (2) Reducing noise incidents; (3) Minimising the impact of noise on noise sensitive developments and (4) Protecting and enhancing tranquil areas and positive sounds. Comment on assessment: Application of these objectives go to the heart of the strategy and are likely to have positive impacts on noise, health and wellbeing and the quality of opens spaces. The cumulative effect on biodiversity is likely to be positive. Mitigation Measures in response to negative (-) effects: None required. Changes made as result of SEA: None required.	Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space
	S	+	=	=	=	=	+	=	=	=
M	+	=	=	=	=	+	=	=	=	+
L	+	=	=	=	=	+	=	=	=	+
C	+	=	+	=	=	+	=	=	=	+

Key: + significant positive impact
 = neutral/ no effect
 - Significant negative effect
 ? Effect unknown
 S – Significant effect within 5 years
 M – 10 Significant Effect within years
 Significant Effect L – 15 years+
 C = Cumulative Effect

TABLE A2: WITHOUT IMPLEMENTATION OF OBJECTIVES											
<p>(1) Reducing average noise levels; (2) Reducing noise incidents; (3) Minimising the impact of noise on noise sensitive developments and (4) Protecting and enhancing tranquil areas and positive sounds.</p> <p>Comment on assessment: Not applying these objectives could lead to adverse impacts on noise, health and wellbeing and the loss of shorter term positive impacts on these issues and on biodiversity.</p>	Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space	
	S	=	=	=	=	=	-	=	=	=	=
	M	=	=	=	=	=	-	=	=	=	=
	L	-	=	=	=	=	-	=	=	=	-
	C	-	=	=	=	=	-	=	=	=	-

TABLE A3 NOISE POLICY 1 VERSION 1: NOISE CONSCIOUS CITY PLANNING AND MANAGEMENT											
<p>Noise emissions and noise impacts of new developments (including plant, equipment and machinery) will be minimised and the rear of properties of properties will be protected from noise wherever technically possible. Separation of noise sensitive uses from noise generating uses will be applied.</p> <p>Comment on assessment: Although significant positive effects are likely in relation to noise the policy approach may discourage mixed use and compact character of some city locations and by extension the wider sustainability advantages associated with this. As a result the cumulative impacts might be increased need to travel leading also to indirect negative impacts on objectives related to climate change. Integration of noise minimising design features without careful application could lead to a negative effect on the historic environment e.g. forcing equipment to the front rather than quieter rears of building. The approach may however, lead to a positive impact on open spaces by improving the sound environment of these (as issue raised in consultation on the Westminster Open Space Noise Strategy, 2007). Changes made as a result of SEA: Amend the policy to focus on protection of sensitive uses while not advocating the inflexible zoning approach and highlight historic environment considerations. Mitigation Measures in response to negative (-): Amend policy approach (see Final Version below).</p>	Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space	
	S	=	=	=	=	=	+	=	=	=	=
	M	=	=	=	=	=	+	=	=	=	=
	L	=	=	=	=	=	+	=	=	=	=
	C	+	-	=	=	=	+	-	=	-	+

TABLE A4: CHOSEN NOISE POLICY FINAL VERSION: NOISE CONSCIOUS CITY PLANNING AND MANAGEMENT

Noise emissions and noise impacts of new developments (including plant, equipment and machinery) will be minimised and the rear of properties of properties will be protected from noise wherever technically possible. A healthy sound environment for noise sensitive uses will be provided and the impact of noise generating uses minimised.

Changes made as a result of SEA: The policy was changed to focus on protection (rather than complete separation) of sensitive uses and limiting noisy uses in residential areas. Include reference in the supporting text to the careful balancing necessary in relation to the historic fabric of buildings. **Comment on assessment:** Significant positive effects are likely in relation to noise and related health and wellbeing matters. The approach may also lead to a positive impact on open spaces by improving the sound environment of these (as an issue raised in consultation on the Westminster Open Space Strategy, 2007). Changes made as a result of **Mitigation Measures in response to negative (-) effects:** None identified.

Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space
S	+	=	=	=	=	=	=	=	=
M	+	=	=	=	+	=	=	=	=
L	+	=	=	=	+	=	=	=	=
C	+	=	=	=	+	=	=	=	+

TABLE A5: WITHOUT NOISE POLICY 1B: NOISE CONSCIOUS CITY PLANNING AND MANAGEMENT

Comment on assessment: Without the implementation of the policy it is like that noise pollution and impacts will see no improvement in the short term and will continue to decline over the medium to long term. The cumulative impact is also likely to be negative in terms of the impact on noise, health and wellbeing.

Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space
S	=	=	=	=	=	=	=	=	=
M	=	=	=	=	-	=	=	=	=
L	-	=	=	=	-	=	=	=	=
C	-	=	=	=	-	=	=	=	=

Key: + significant positive impact = neutral/ no effect - Significant negative effect ? Effect unknown S – Significant effect within 5 years M – 10 Significant Effect within years Significant Effect L – 15 years+ C = Cumulative Effect

TABLE A6: NOISE POLICY 2: REDUCING TRANSPORT AND SERVICING NOISE AND IMPACTS

The council will encourage sustainable modes of travel actively seek to reduce noise impacts from air traffic, trains, the Underground and buses and will ensure that noise from any changes to the transport network will be minimised.

Comment on assessment: The policy approach encourages more sustainable modes of travel which leads to significant positive impacts on policies related to reducing the need to travel/ encouraging sustainable modes. The cumulative impact of this would be to reduce air pollutants and carbon emissions. While there might be noise improvement in the short to medium term arguably this would not be significant and would be limited to reducing noise impacts rather than noise itself, hence it is categorised as neutral. However, the long term and cumulative impact is likely to be positive in terms of reducing noise and its related impacts on health and wellbeing. The cumulative impact might also be to improve the sound environment within the city's open spaces and improve biodiversity. Consideration was given to how the policy might bring about more positive effects in the shorter to medium term on noise (and indirectly effects on health). However, effecting change of this magnitude would require at least a 50% reduction in traffic noise (based on advice from Noise Strategy Expert Panel). **Changes made as result of SEA:** None as costs and scale of change necessary would be massive and beyond the control of this strategy. **Mitigation Measures in response to negative (-) effects:** None required

Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space
S	=	=	=	=	=	+	=	=	=
M	=	=	=	=	=	+	=	=	=
L	+	=	=	=	+	+	=	=	=
C	+	+	+	+	+	+	=	=	+

TABLE A7: WITHOUT IMPLEMENTATION OF NOISE POLICY 2: REDUCING TRANSPORT AND SERVICING NOISE AND IMPACTS

Comment on assessment: Without the implementation of the policy it is likely the noise environment and the associated health and wellbeing impacts will worsen. This might also lead to significant negative impacts on the quality of experience in open spaces and on biodiversity in the city.

Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space
S	=	=	=	=	=	=	=	=	=
M	=	=	=	=	=	=	=	=	=
L	-	=	=	=	-	=	=	=	=
C	-	=	-	=	-	=	=	=	-

TABLE A8: NOISE POLICY 3: INTEGRATED NOISE MANAGEMENT AND ENFORCEMENT									
A timely and coordinated approach to enforcement action will be taken by developing joined up approaches to enforcement action and providing a rapid 24 hour response to noise problems.									
Comment on assessment: The policy approach identified is likely to have a positive impact on the environment and on health and wellbeing. Significant positive impacts on open spaces are also likely in the longer term in relation to particular open spaces and across the city's open spaces as result of the cumulative effect of application of this policy. Changes made as result of SEA: None required. Mitigation Measures in response to negative (-) effects: None required.									
Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space
S	+	=	=	=	=	=	=	=	=
M	+	=	=	=	=	=	=	=	=
L	+	=	=	=	=	=	=	=	+
C	+	=	=	=	+	=	=	=	+

TABLE A9: WITHOUT NOISE POLICY 3: INTEGRATED NOISE MANAGEMENT AND ENFORCEMENT									
A timely and coordinated approach to enforcement action will be taken by developing joined up approaches to enforcement action and providing a rapid 24 hour response to noise problems.									
Comment on assessment: Not applying the policy could lead to negative impacts on the noise environment i.e. a worsening of noise pollution with significant negative effects on health and wellbeing likely to occur as a result.									
Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space
S	-	=	=	=	-	=	=	=	=
M	-	=	=	=	-	=	=	=	=
L	-	=	=	=	-	=	=	=	=
C	-	=	=	=	-	=	=	=	=

Key: + significant positive impact = neutral/ no effect - Significant negative effect ? Effect unknown S – Significant effect within 5 years M – 10 Significant Effect within years Significant Effect L – 15 years+ C = Cumulative Effect

TABLE A10: NOISE POLICY 4 VERSION 1: TRANQUIL AREAS AND POSITIVE SOUNDS
 Existing tranquil spaces suitable for additional protection and enhancement will be identified. Positive features of the city’s sound environment will be promoted and new features encouraged.

Comment on assessment: Consultation on the Westminster Open Space Strategy, 2007 highlighted that the city’s open spaces are particularly valued for the relative tranquillity they provide. Improving the sound environment in these spaces may also have positive effects on biodiversity in the medium and long term as the approach may reduce adverse impacts of pollution on wildlife and the emphasis in the policy on natural sounds could lead to increased biodiversity. However, there is a risk that measures may lead to adverse effects on the historic character of some of the city’s open spaces.

Changes made as result of SEA: Include clarification in the supporting text that recognises the need to consider the historic character of the open space in implementing the policy.

Mitigation Measures in response to negative (-) effects: See below

Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space
S	=	=	=	=	+	=	=	=	+
M	+	=	+	=	+	=	=	=	+
L	+	=	+	=	+	=	=	=	+
C	+	=	+	=	+	=	=	-	+

TABLE A11: NOISE POLICY 4 FINAL VERSION: TRANQUIL AREAS AND POSITIVE SOUNDS
 Existing tranquil spaces suitable for additional protection and enhancement will be identified. Positive features of the city’s sound environment will be promoted and new features encouraged.

Comment on assessment: Consultation on the Westminster Open Space Strategy, 2007 highlighted that the city’s open spaces are particularly valued for the relative tranquillity they provide. Improving the sound environment in these spaces may also have positive effects on biodiversity in the medium and long term as the approach may reduce adverse impacts of pollution on wildlife and the emphasis in the policy on natural sounds could lead to increased biodiversity. **Changes as a result of SEA:** Include reference to ensuring measures to protect and enhance the sound environment will depend on the function and character of the open space including its historic value. **Mitigation Measures in response to negative (-) effects:** Adverse effects identified in version 1 policy above mitigated by changes to policy and supporting text.

Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space
S	=	=	=	=	+	=	=	=	=
M	+	=	+	=	+	=	=	=	+
L	+	=	+	=	+	=	=	=	+
C	+	=	+	=	+	=	=	=	+

TABLE A12 WITHOUT IMPLEMENTATION OF NOISE POLICY 4: TRANQUIL AREAS AND POSITIVE SOUNDS

Existing tranquil spaces suitable for additional protection and enhancement will be identified. Positive features of the city's sound environment will be promoted and new features encouraged.

Comment on assessment: Not implementing this policy could lead to negative effects on noise, health and wellbeing and the loss of positive effects on biodiversity in the longer term and increased risk of a negative cumulative effect on biodiversity.

Duration of effect	1 Health and wellbeing	2 Climate change	3 Biodiversity	4 Air quality	5 Noise	6 Reduce travel	7 Reduce waste	8 Cultural heritage	9 Open space
S	=	=	=	=	•	=	=	=	=
M	=	=	=	=	•	=	=	=	=
L	=	=	•	=	•	=	=	=	•
C	=	=	•	=	•	=	=	=	•

Key: + significant positive impact = neutral/ no effect • Significant negative effect ? Effect unknown S – Significant effect within 5 years M – 10 Significant Effect within years Significant Effect L – 15 years+ C = Cumulative Effect