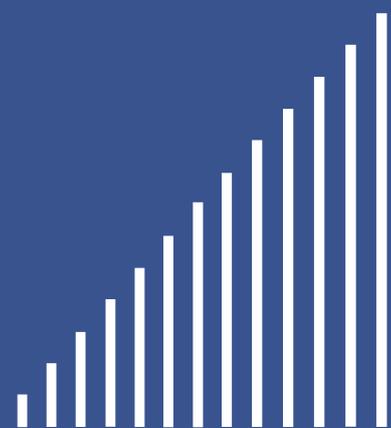


Traffic Noise in Rural Areas:

personal experiences of people affected



“There was a time when we’d have a birthday picnic there for my daughter. It’s water, it’s dead still and you could hear the plop of the fish. Well you’ve got no chance of that now. It should be tranquillity at its best. But all that’s gone.”



The Noise Association

transport for quality of life

Traffic Noise in Rural Areas: personal experiences of people affected

Report from Transport for Quality of Life to The Noise Association
based on case study interviews and survey research
funded by Esmee Fairbairn Foundation

Note on authorship

This report has been prepared by Ian Taylor, Carey Newson, Jillian Anable and Lynn Sloman of Transport for Quality of Life.

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We are grateful to all the interviewees for their time and information. We would also like to extend our thanks to the many other individuals who contacted us with detailed information about their experiences of rural traffic noise from around the UK, of which we have only been able to use a small proportion here.

Executive summary

Traffic increase in the UK - and the increased noise it brings with it - is now predominantly in rural areas. Road noise has been identified through previous 'tranquillity mapping' exercises as one of the major causes of loss of tranquillity.

This report for The Noise Association seeks to put this quantitative mapping into a human perspective. Through interviews in five case study locations we have tried to demonstrate how people in rural areas are actually experiencing road noise. It is a qualitative social study rather than a technical study and tries to see noise at the personal level of those experiencing it. In this respect it seeks to provide insights not available from the many numerical assessments of noise annoyance that relate noise models and habitation patterns to standardised annoyance graphs.

The research deliberately looks at individuals who *are* experiencing traffic noise and should not therefore be taken as a quantitatively representative analysis of experience of road noise across the countryside as a whole. The results should, however, be considered as an indicator of the level and type of disruption that traffic noise can cause to people who live, work or take recreation in areas of the country with comparable circumstances to those studied.

The case study locations for the research were:

- M40 Chilterns area
- Dumfries and Galloway minor roads near A74(M) and A75
- M65 Blackburn greenbelt
- A34 at East Ilsley, North Wessex Downs area
- A590 within Lake District National Park

An additional postal survey was included with a magazine mail-out to members of Friends of the Lake District resident in Cumbria.

Overall findings

The research found levels of severe noise disturbance in some villages that do not align with general perceptions and expectations of rural situations:

"It is a relief to go out for the day or in the afternoon to get away from it. I try and go out as much as possible now."

Although traffic noise levels are less further from roads, many reports emerged of significant disturbance in the open countryside, at some distance from the source of the noise. These experiences were associated with a sense of frustration at loss of enjoyment of otherwise attractive places, to the extent that some were no longer felt to be worth visiting:

"You could go up there and it was quite quiet, but because the amount of traffic has increased so much it's noisier; I just don't do it any more, which is sad, 'cos it's a lovely fell."

Both of these types of disturbance were found to fall largely outside existing procedures for assessment of road noise.

Summary conclusions

- Even in lightly populated rural areas disturbance from traffic noise has become problematic, in places severe
- Traffic noise causes disturbance at distance from roads
- Noise-affected scenic locations are deliberately avoided by some people, visited less by others, and are felt to be a degraded experience for a proportion of those that do visit
- Current approaches to assessment of road noise nuisance are inadequate for country areas
- Some villages heavily affected by traffic noise are nevertheless judged ineligible for amelioration measures
- Rural traffic noise problems are not restricted to major roads
- Increased traffic volume has led to more noise nuisance in country areas
- Increased traffic speed has increased rural noise disturbance
- Noise disturbance has risen as a result of an increase in particularly noisy types of traffic: HGVs and other large vehicles, motorcycles, 'hot-rod' cars, off-road vehicles

Recommendations

1. Recognise the impacts of road noise on rural areas

The solution lies in recognising the worth to society of *lack of noise* and how intrusion of noise fundamentally changes the experience of countryside amongst those living or seeking recreation there. Present noise policy is merely overseeing cumulative worsening of noise intrusion throughout the countryside. Noise policy should be more ambitious: it should aim to 'clean up' the countryside polluted by road noise, just as its rivers and estuaries have been successfully cleaned in recent decades.

2. Set targets for traffic noise reduction throughout the countryside

Recognition is required that noise from roads in the countryside is already at unacceptable levels. These noise levels reduce the value of the countryside as a shared resource for the whole of society. Actions are needed to reverse the present trajectory towards ever fewer tranquil areas. Decision-makers should set in place policies to reduce rural traffic noise.

3. Reduce traffic speeds in country areas

The quickest way to achieve a large reduction in road noise in the countryside is to cut speed limits.

4. Restrictions on noisy vehicles

The rapid growth of heavy goods vehicles and other commercial vehicles on rural roads demands consideration of where these vehicles are or are not appropriate. Enforceable controls are required for particularly noisy motorbikes and cars.

5. Recognise the deficiencies of road appraisal for rural areas

Appraisal guidance for road schemes should make it clear that noise disturbance generally extends beyond 300m in country areas and should be explicitly included in the assessment process.

6. Re-assess the approach to noise mitigation measures

The 'Noise Severity Index' should be amended so that it has a fairer application to small communities and extended to include disturbance that occurs at lower noise levels. The overall budget for physical noise mitigation measures should be increased. However, mitigation measures considered for trunk roads and motorways should not, as at present, be restricted to constructional solutions but should include minimal cost measures such as reducing speed limits to 50 mph from the current 70mph on dual carriageway roads close to settlements. Local authorities should rebalance their assessment of noise problems on roads under their control to lower the threshold for application of reduced speed limits and weight restrictions where noise is an issue.

7. Invest in 'smart' tourism

Visiting and taking recreation in scenic country areas is liable to become a self-destructive activity if it is reliant on private vehicles. National Parks and other areas that attract high numbers of visitors and their cars require public transport access options (scheduled and demand-responsive) of sufficient quality to permit restrictions on private car movements, with the aim of concentrating a large proportion of car destinations at places that can act as public transport hubs near the boundary of the area in question.

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F) Survey of Friends of the Lake District membership

G) How noise nuisance is assessed

To go to the appendices, click on the coloured hot-links above or on the hot-links coloured **green** in the texts of the report.

Introduction: traffic, noise and tranquil countryside

The 'tranquillity maps' of The Campaign to Protect Rural England (CPRE), have raised awareness that only a comparatively small – and decreasing – proportion of England's countryside can now be regarded as 'tranquil'. These maps show that roads are one of the major causes of loss of tranquillity. More recently, the European Noise Directive has recognised the potential noise impact of roads in rural areas and put in place a minimum requirement that country-wide maps of noise levels should be drawn up for all major roads carrying over six million vehicles per year.ⁱⁱ

Traffic increase in the UK – and the increased noise it brings with it – is now predominantly in rural areas. For 2007 – 2008, traffic increased on rural minor roads, rural A-roads and motorways whilst it decreased in urban areas.ⁱⁱⁱ For the decade of the Government's Transport Ten Year Plan 2000 – 2010, a traffic increase of 29% was forecast for inter-urban trunk roads.^{iv} Moreover, this overall rise in traffic tends to be considerably exceeded where roads have been enlarged or new roads have been built. For example, upon construction of the Newbury bypass, within one year traffic had increased 47%, 24,700 extra vehicles per day on the corridor comprising the old road and the new road.^v Present indications are that rural areas are likely to experience the largest number of major road projects.

The value of tranquil countryside was assessed in a Government (DEFRA) survey that found 'tranquillity' was rated as the most important feature of the countryside that 'makes it a place where you want to spend time' (58% of responses). Perhaps surprisingly, scenery, the next most important feature, rated significantly lower (at 46%). Noise came high up in answers to a question about features that '*prevent* [original emphasis] the countryside being a place where you want to spend time,' with 'too busy/ noisy' coming second highest¹ out of the specific issues considered.^{vi}

This report for The Noise Association seeks to put these quantitative mapping and polling assessments into a human perspective. Through interviews in five case study locations we have tried to demonstrate how people in rural areas are actually experiencing road noise. Because, necessarily, the case study interviews were set up through contacts with local communities, the focus is on people living in the countryside, rather than visitors to the countryside. The research does, however, consider how traffic noise impinges on the interviewees' use of the surrounding countryside as well as the influence of traffic noise on their home (or work) environment. The intention of the research is to translate traffic noise measurements, surveys and mapping exercises into what that noise *means* to people – the impacts on what they *choose to do* in the countryside and on how they *feel* about being there.

One of the questions behind the present research is whether the official appraisal processes for assessing noise impacts from proposed road schemes might be failing to capture how traffic noise is actually experienced, particularly in

¹ 'Environmental Problems/ Pollution' came top.

the open countryside. One instance was described in an evaluation of the environmental impacts of the Newbury Bypass.^{vii} This recorded that the Inspector to the Public Inquiry into the road partly based his decision on his view that “there is evidence to show that traffic noise does not prevent recreational areas from being used and therefore I am not convinced that the PR [the bypass] would cause footpaths and public areas to lose their attraction.”^{viii} The evidence in question was not presented or referenced. Yet the evaluation of the environmental impacts of the bypass records that ‘one local resident who used to go for walks with his dog in the vicinity of the National Trust property no longer goes there because of the noise.’ The present study seeks to explore whether this sort of disjunction is indicative of a more widespread mismatch between public experience of noise in the countryside and official predictions and measures of noise.

As a qualitative study, it is not possible to say what proportion of people living in or visiting the countryside share similar experiences to those documented in this report. However, the opinion survey and tranquillity maps cited above, indicate that, to some degree at least, the issues raised in this report are probably experienced by many people. In addition to the case study interviews, the opportunity arose to circulate a questionnaire to Cumbria members of Friends of the Lake District, and although this is a self-selected group that would be expected to show heightened awareness, the results provide some insight into the overall level of concern.

Context: official assessment procedures for road noise disturbance

Some salient features of traffic noise assessment procedures are briefly outlined below, as relevant background to the observations of case study interviewees. A more extended review of official noise appraisal procedures is presented [as an appendix to this report](#).

For a *proposed* road scheme, procedures to assess the likely noise impacts are laid out in The Highways Agency's *Design Manual for Roads and Bridges*^x and in The Department for Transport's *Wehtag* guidance^x as part of its "New Approach to Appraisal". The prescribed methodology for quantitative assessment has two features that are particularly relevant to this report:

- a) it is limited to impacts on occupied buildings;
- b) it only considers a band of 300m to either side of the road.

In addition, the noise section of the *Wehtag* guidance explicitly excludes 'quiet or tranquil areas' from its quantitative assessment on the grounds that 'tranquillity' is part of a qualitative assessment in the landscape section of *Wehtag*.² However, the definition of tranquillity in the landscape section of *Wehtag* does not explicitly mention noise, and to judge from examples from actual road projects, noise appears to receive little attention in this section.

A further issue appears to be that this treatment of noise means that tranquillity is considered as just one part of a whole set of landscape factors, and the issue is effectively 'submerged'. A 'large negative' impact on tranquillity would not, on its own, register in the final 'Appraisal Summary Table' even if noise was considered a very major intrusion. It also appears that, because 300 metres is viewed as a 'cut off' for noise appraisal, the impacts on tranquil areas which are more distant from the road scheme, but still within earshot, tend to be routinely ignored.

Some rather different issues for rural areas arise from the methodology applied by the Highways Agency to judge whether noise mitigation measures are required for *existing* roads. The approach uses the same method as for appraisal of new roads to quantitatively estimate the degree of disturbance at properties near the road. However, the resulting number is then turned into a 'Noise Severity Index' which is calculated per unit width of frontage onto the road. This means that a dispersed settlement with a long frontage to the road may have very noisy properties but never achieve a high enough severity score to be a candidate for mitigation. This effect is exacerbated because the definition of 'frontage' includes a shoulder length of 0.75 - 1km either side of a settlement's actual frontage onto the road. So even if a settlement is densely built and all its properties experience very high noise levels, if it is small, it cannot achieve a high score for noise mitigation purposes.

These quantitative noise disturbance assessments do not consider night-time noise or additional levels of noise disturbance occurring under particular weather conditions.

² There is also a view that 300m is the physical limit to which noise measurements using the normal measurement methodology give meaningful readings. The technical literature debates whether other measures of noise can apply beyond this, but in practice they are not put to used to gauge noise disturbance.

Methodology

Project aims

This research set out to make a detailed examination of how traffic noise is experienced in parts of the countryside that are, to differing degrees, subject to road noise. It attempts to be a qualitative social study rather than a technical study and tries to see noise at the personal level of those experiencing it. In this respect it seeks to provide a complementary and contrasting perspective to the many numerical assessments of noise annoyance that relate noise models and habitation patterns to standardised annoyance graphs. In addition, this study aims, to some degree at least, to look at areas not reached by those standard quantitative assessments.

Selection of locations for case study interviews

Appropriate candidate areas for case studies were initially sought through exploratory email and written communication to organisations and individuals that have knowledge of rural areas and/ or knowledge of noise issues. The final case study selection was informed by a preference to cover, as far as possible, a range of types of road, different sorts of rural area, and the different regions and nations of Britain. In practice, the project team was aware that to achieve the study within reasonable timescales and budgets it was necessary to work through existing local networks that could act as local contact points for potential interviewees. The local organisations that assisted with the chosen case studies included local groups of national conservation and environmental organisations (Campaign to Protect Rural England and Friends of the Earth), a local parish council, and autonomous local groups associated with particular scenic areas (Friends of the Lake District and the M40 Chilterns Environmental Group). We are grateful to all these groups and individuals for their assistance. It must therefore be emphasised that this study was not designed to achieve a quantitatively representative poll of experience of road noise across the countryside as a whole. The research deliberately looks at individuals who are experiencing traffic noise. The results should, however, be taken as an indicator of the level and type of disruption that traffic noise can cause to people who live, work or take recreation in areas of the country with comparable circumstances to those studied.

In the process of investigating potential case study locations, views and information were received for areas that were not selected for further study, including two exploratory interviews. Some of this material, identified as such, is reported under the relevant issues arising from the case studies.

Case study interview format

The interview pro-forma was designed to start with open questions to allow interviewees to describe their general views about the road in question (negative, positive or both) and to put their views of traffic noise within the range of other issues (if any) that they associate with the road. Thereafter, the questions focussed on traffic noise issues, moving from broad open questions to probes

about particular types of problem. Interviews were undertaken face-to-face wherever possible, but some phone interviews were undertaken at a later date with individuals who were unavailable at the time of the site visits. With the exception of phone interviews, all interviews were recorded, in addition to written notation at the time. The interviews have been anonymised, with the exception of some of those interviewees associated with the local organisations who acted as contact points.

The case studies in summary

This section presents each case study's setting and its most striking findings in brief summary. The overall themes that emerge in relation to rural traffic noise are discussed in more detail in the following section, where illustrative quotes are also presented.

Case study	Road type	Daily traffic	Road history	Landscape designation
1: M40 Chilterns area	motorway 6-lane	90,000 (2005)	widened to 6 lanes late 1980's; opened to Birmingham 1991	Chilterns Area of Outstanding Natural Beauty
2: Dumfries and Galloway minor roads near A74(M) and A75	minor roads	no data available	A74 nearby upgraded to motorway status A74(M) in 1990's	none
3: M65 Blackburn greenbelt	motorway 4-lane	60,500 (2007)	opened 1997	green belt, countryside area, West Pennine Moors
4: A34 at East Ilsley, North Wessex Downs area	trunk A-road dual carriageway 4-lane	58,100 (2005)	Newbury bypass opened 1998, the last section of the A34 to be dualled; underpass of M4 Chieveley Junction (J13) opened 2004	North Wessex Downs Area of Outstanding Natural Beauty
5: A590 within Lake District National Park	trunk A-road single & dual carriageway (4-lane)	17,200 (2007)	widening, dualling, straightening since 1960's; dualled bypass of High Newton/ Ayside opened April 2008	Lake District National Park

Case Study 1: M40 Chilterns area

This case study looks at traffic noise in the vicinity of the M40, one of the major motorways radiating out from London, where it passes through the scenic countryside of the Chilterns. The amount of noise disturbance in the settlements hereabouts has been such that residents have formed an active campaign group to seek amelioration measures.

Key findings:

- Despite the rural location, residents' descriptions of noise disturbance are as severe as might be anticipated in a noisy urban environment.
- Reports of the impacts include sleep disturbance, exacerbation of one person's ill health, an unpleasant impression on visitors, difficulty selling houses and reduced property prices.

-
- Changes of behaviour in response to the traffic noise include: limiting use of gardens, or only using parts of gardens, not teaching classes outside in the school grounds, not visiting or walking in countryside near the road, avoiding a nature reserve near the road, giving up outside sports, enduring over-heated houses rather than opening windows, sleeping with ear plugs, playing music to mask the noise, installing triple glazing to a bedroom, building screening structures, going away to stay with friends, deciding to move away from the area.
 - Nevertheless, these settlements do not meet the official criteria for noise mitigation measures.
 - Traffic noise is perceived to have increased markedly over time with increased volumes of cars and heavy goods vehicles.

Case Study 2: Dumfries and Galloway minor roads near A74(M) and A75

This case study considers some minor roads through small villages in Dumfries and Galloway. Although relatively distant from major conurbations, the A74(M) motorway crosses the Scottish border close by. The A75 carrying traffic to the ferry-head at Stranraer is also close.

Key findings:

- Traffic noise is a major source of distress to residents near minor roads in this area as a result of high volumes of heavy goods vehicle traffic, both from local truck destinations and from 'rat-running' between the motorway and the A-road.
- Reported impacts of the noise include: disturbed sleep, affects on 'wellbeing', negative affects on house prices and saleability.
- Residents have had to change their behaviour in response to the noise, including: living and sleeping in the back rooms, turning the TV up high, going out during the daytime, not using the front garden, using the back garden less, giving up hosting visitors, deciding to move away.
- However, residents have been told their roads do not meet the Council's criteria for weight restrictions or speed restrictions.

Case Study 3: M65 Blackburn greenbelt

The M65 passing the south side of Blackburn is a relatively recent section of motorway, passing through the hilly farmland of the town's greenbelt. Partly due to environmental concerns at the time of construction, the road received somewhat more landscaping than earlier projects. Traffic increase on the road has been dramatic, far exceeding the highest official forecasts. Most interviewees were situated further from the road than those for the M40 case study.



M65 north of Tockholes, Lancashire, showing footpath diversion alongside motorway to cross at minor road bridge from which the picture is taken.

Key findings:

- Even households one mile from the road reported significant noise disturbance at home.
- Residents' responses to the traffic noise included: getting up and shutting the bedroom window when the noise starts, avoiding scenic woodland, canalside and farmland walks where the noise is unpleasant, preferentially using parts of the garden screened from the road by the house, moving indoors when the traffic is noisy.
- Interviewees felt that traffic noise had worsened considerably over time.

Case Study 4: A34 at East Ilsley, North Wessex Downs area

This case study focuses on the Berkshire village of East Ilsley, which is set in rolling chalk downland scenery, adjacent to the A34 trunk road. Over the last decade, the A34 has become a faster North-South link with the construction of the dual carriageway Newbury bypass and separation of A34 through-traffic from the junction with the M4 five miles to the South. Traffic noise has become such an issue that it was listed as a priority within the 2003 parish plan, which described it as “a major blight”.

Key findings:

- Reported effects of the road noise include sleep disturbance and a strong influence on house prices.
- Residents make various changes and adopt strategies to try to avoid the noise, including: not going for walks on footpaths near the road, not using the village green picnic area, limiting the way they use their gardens, putting on the radio or music, keeping bedroom windows shut even in summer, taking children to facilities in other towns rather than use the village green playground.
- Even so, East Ilsley only achieves a relatively low score on the ‘noise severity index’ and consequently lies a long way down the official priority list for noise mitigation measures.
- Traffic noise is felt to have got markedly worse, a trend attributed to an increased traffic volume extended over longer periods, coupled with more heavy vehicles and generally higher speeds.

Case Study 5: A590 within Lake District National Park

The A590 trunk road runs from Barrow in Furness to the M6 and for its central portion runs through outlying fells in the southernmost part of the Lake District National Park. The road carries a relatively high proportion of heavy goods vehicles and large amounts of tourist traffic during summer. Over the years the road has been dualled in sections and re-routed around settlements, including

those that are the main focus of this case study. A separate section of this report deals with findings from a Cumbria-wide survey of members of Friends of the Lake District.

Key findings:

- This part of rural England is famous for its scenery, yet traffic noise is causing a significant level of disturbance both at residential locations and in the wider countryside.
- Reported effects of the noise include disturbance of sleep and negative impacts on guests at Bed and Breakfast establishments.
- As a result of traffic noise, interviewees experience a deterioration in the quality of their experience of the countryside across a wide corridor, in some instances 1 - 2 miles from the road or more.
- Various otherwise attractive and scenic places that are subject to traffic noise are visited less or completely avoided by some people.
- At home, strategies to try to cope with the noise include only using quieter portions of gardens, turning up the TV or radio, sleeping with windows shut even in hot weather.
- The noise is perceived to be much worse than it used to be, and this is attributed to higher traffic volumes and higher traffic speeds.
- A village adjacent to newly built dual carriageway appears to be experiencing significantly more noise disturbance than before the new road.



A590 passing between Backbarrow (left) and Brow Edge (right), Cumbria.

Issues arising from the case studies

This section describes the overall themes that arose from the case study interviews, with illustrative quotes identified by case study location and interviewee. Views and information that emerged from preliminary investigation of other possible case study locations are marked as additional material. The issues arising are summarised in the box below then treated in more detail.

This overview cannot capture the full range of experiences communicated to us through the case study interviews. Although the interviews concentrated on traffic noise, it should be noted that concerns about noise were bound up with associated expressions of concern about road safety, community severance, footpath diversion and the visual impact of the roads in question. These and other particular issues that arose from individual case studies are summarised as prefaces to the interview-by-interview records for each case study in the appendices.

Summary of issues arising

- Traffic noise is severe in some country areas
- Traffic noise causes disturbance at distance from roads
- Some people consciously avoid noise-affected scenic locations; some of those that do visit have a degraded experience
- Some villages judged ineligible for amelioration measures are nevertheless heavily affected by traffic noise
- Noise disturbance has risen with increase in traffic volume
- Rural traffic noise problems are not restricted to major roads
- High traffic speeds and noisier types of traffic cause more disturbance
- Traffic noise disturbance varies with physical and seasonal factors
- Affected residents make lifestyle changes to try to escape traffic noise disturbance
- Traffic noise affects some providers of tourist facilities
- Individual sensitivity to noise varies with behaviour and attitude

1. Traffic noise is severe in some country areas

Parts of the countryside are now subject to levels of traffic noise that create significant unpleasantness for people living, working or taking leisure there. This applies to a range of circumstances from 'deep rural' (Lake District) through to peri-urban (Blackburn fringes). It affects both residents of villages adjacent to major roads, as expressed by the M40 and A34 interviewees below, as well as people further afield.

“You hear it before you get up. Actually it is a relief to go out for the day or in the afternoon to get away from it. I try and go out as much as possible now but my eyesight is getting worse and I don’t know how much longer I can drive so that would be disastrous for me, really.”

(Dumfries and Galloway minor roads Interviewee B)

“It’s really upsetting in the summer when it’s a nice day. We like gardening and you can’t have a conversation. You literally have to shout – I’m talking about being just a couple of metres apart. You have to shout at each other or else you can’t hear.”

(M40 Interviewee G)

“I found it an unpleasant experience playing cricket where you couldn’t hear people in the team giving instructions on the cricket field and you had to do it all visually. That is really intrusive, it’s a leisure activity where you’re trying to relax and you’ve got this constant roar.”

(M40 Interviewee C)

“It affects my whole perception of where we live I suppose. I mean only a few miles away, West Ilsley, it feels a lot more rural than we are just because we’re by this busy road. Even though we’re surrounded by just as much open countryside. It has a very different feel because of the road thundering past.”

(A34 Interviewee C)

“The noise never goes away. Sleeping with the windows closed you hear it all the time even though the house is double glazed. If I have to have the windows open it tends to take longer to go off to sleep because you lie there listening to the noise, which goes on until the early hours. I put the duvet over my head to go off. If the windows are open you need the TV or radio louder in order to hear – I have to adjust the volume. It bothers you anytime when you’re at home. We often say ‘oh, it’s busy down there today’”.

(A590, Interviewee E)

“What I find upsetting is that if you go walking – you go up Brow Edge – you’re very aware of the road noise, it goes right up to the valley top.”

(A590, Interviewee B)

“It’s made quite an impact on us really, it was very, very peaceful before. When it first opened it wasn’t very busy. It was a number of years before all of a sudden we thought ‘there’s never a minute when we can’t see or hear traffic now.’”

(M65, Interviewee G)

2. Traffic noise causes disturbance at distance from roads

The distance to which traffic noise creates disturbance can be much greater than considered in the standard appraisal of potential road schemes.

“Milnethorpe bridge to Sandside is an absolutely marvellous walk, but you can see and hear the road. You can still hear the A590, 2 ½ miles away.”

(A590, Interviewee G)

“Even if you can’t see a road you can be up in the hills in some quite isolated locations and hear traffic. I get out there for peace and quiet and solitude. I went up to Finsthwaite, mixed woodlands. You couldn’t see the road and it was a beautiful day, but you could hear the traffic all the time in the background, even at what I’d consider a quiet time of year.”

(A590, Interviewee JM)

“You can hear it in Bouth – a mile from the road. You can hear it across the Mosses, it’s a good mile and a half before you lose the road noise. You go up the to the top of Bigland [¾ mile to 1 mile due south of the A590], and up the top there is absolutely fantastic, you’ve got superb views right across the valley and all of the central lakeland fells, fabulous views up there, but you can hear the road.”

(A590, Interviewee B)

“You walk past the corner [of the house] and it hits you, when it is noisy, almost like a physical blow, because you don’t expect it. If we sit out in the summer we always sit just behind the house so that we don’t hear it. There are better places to sit from the point of view of what you are looking at, but we tend to sit behind the house so that we don’t hear the noise.”

(M65, Interviewee B, one kilometre from the road)

“When this route was chosen you wouldn’t have considered that there would be any impact on us. It would have influenced my enthusiasm for the motorway to know that I was actually going to be affected to the extent that I am. I think it’s disingenuous of planners to put corridors of noise around things – I don’t believe for one minute that anyone would have told me I was going to hear the motorway as I do.”

(M65, Interviewee TD, one mile from the road, with higher land between)

“We walked down the valley and as we were walking up the hill to Bennett End [two miles from the road] we commented that you could still hear it quite loud at that stage”.

(M40, Interviewee D)

“This is a house we bought for the rest of our lives. [...] We’ve had to change our plans completely because I don’t want to stay here, [...] not to have the constant drone of traffic. [...] It’s just changed our quality of life [...] we don’t want to sell the house because it’s in a beautiful spot.”

(M40, Interviewee I, 1½ miles from the road)

A correspondent contacted in the course of case study selection drew attention to the proportion of Scotland’s highest mountains affected by traffic noise:

“I did do a tally of the quarter of all Munros which are fairly directly exposed

to main road traffic noise. Upgrading of A roads in the Highlands has greatly increased vehicle speeds, as well as volumes - the noise off the unimproved A82 north of Tarbet is vastly less obtrusive than the Luss-Tarbet racetrack. Main culprits among roads upgraded since the 70s are: A9 through Drumochter and Strath Spey; A82 Loch Lomond (notably affecting Ben Lomond - water bounces the sound waves nicely); A82 Loch Lochy; A86 Loch Laggan; A832 Garve-Achnasheen-Gairloch; A835 Garve-Ullapool.”

[emphasis added]
(additional material: Scotland hillwalker via email)

3. Some people consciously avoid noise-affected scenic locations; some of those that do visit have a degraded experience

Some people avoid visiting some of Britain's most scenic places because traffic noise detracts so much from the experience. Of those who choose to visit nevertheless, some find the experience to be noticeably degraded by noise.

“I used to go walking in the Stanworth woods a lot, with the dog. It’s a lovely walk, especially when the bluebells are out, but we don’t very often do it because it is really bad, noisy. I wouldn’t take people down there now.”

(M65, Interviewee Mrs D)

“There’s an enormous amount of noise in the vicinity of the canal. It’s not a place where you can happily engage in conversation, it’s an oppressive noise around you for a fair band either side of that bridge. There was a time when we used to take the bicycles to the far side and we’d have a birthday picnic there for my daughter at Withnell Fold. It’s water, it’s dead still and you could hear the plop of the fish – well you’ve got no chance of that now. It should be tranquillity at its best. But all that’s gone.”

(M65, Interviewee TD)

“Noise does influence where I go. If I were taking you for a walk here, I deliberately wouldn’t go straight up the fellside here because it would have been noisy, and I wouldn’t have been giving you a country experience. We’ve got a lovely footpath here that goes up the top of the fell, it’s a nice steep path but if you go up between four and six o’clock when the road is particularly busy, you just hear the noise of the road, it’s really frustrating.”

(A590, Interviewee B)

“There are places that I go less often even though the butterflies and the flowers and the dragonflies are superb, particularly the nature reserves at Latterbarrow, Meathop Moss, Foulshaw Moss. If I go out I want to hear natural sounds. The traffic noise is an intrusion that you can’t get away from. It spoils it, it’s not what I want.[...] I was surprised at the noise when I was in the woods that rise above Newby Bridge. I remember thinking ‘oh that’s spoiled it here’. It’s not even dual carriageway there, just sheer volume of traffic.”

(A590, Interviewee H)

A correspondent from a potential case study area described an instance where a view had been improved by removal of an old road, but where noise from the new road built in its stead stopped him going there as often as before:

“In terms of what I do for leisure the M3 has had a very significant effect. When they built the road through Twyford Down they actually removed the previous bypass road below the Down [...] so that in terms of visual experience it is possible to have views from the ancient landscape of Iron Age fort of St Catherine’s Hill and along the Itchen Valley that Winchester had not had since the late 1930s when the former bypass was built. If one were deaf the walks around there would be truly wonderful, but except on the rare days when there is a very strong wind from the north west, it is impossible for a hearing person to enjoy the area any more. In the 14 years since the road was built I have been there on perhaps 20 occasions, whereas, before, I used to walk it perhaps once a fortnight. The noise utterly ruins the landscape.”
(additional material: Winchester resident via email)



M40 passing Stokenchurch.
Photo credit: M40 Chilterns
Environmental Group.

4. Some villages judged ineligible for amelioration measures are nevertheless heavily affected by traffic noise

Some rural settlements experience very high traffic noise levels, even to the degree of causing sleep disturbance, but are judged ineligible for amelioration measures. As described earlier, this can arise because the calculation of noise severity that the Highways Agency uses to prioritise noise mitigation expenditure on trunk roads averages out noise over a much longer section of road than that adjacent to the settlement itself. This issue applies to the M40 and A34 settlements studied. As non-trunk roads, the Dumfries and Galloway minor roads are under local authority management, but also appear to fail to meet mitigation criteria. This issue is discussed further in the sections on Background and The Case Studies in Summary.

“I get woken up by a truck that’s struggling to get up the hill, or quite often, horns blasting at each other at 4 o’clock in the morning”
(A34, Interviewee H)

“In the summer when it’s really hot, or when it’s really warm, we can’t have the windows open because the noise keeps us awake, [...] We can’t get to sleep. What happens is that the Heavy Goods Vehicles tend to prefer to drive at night, and if that’s their job I can understand it. But it means that this road is more busy with Heavy Goods Vehicles at night, as well as cars. And it is just so difficult to get to sleep.”
(M40, Interviewee G)

“They are coming up at 5 o’clock in the morning and this place [the factory] starts down here at 6 in the morning and it wakes me up and in fact when they leave the factory you hear the rumble because they have to turn as it comes to the road and there is a terrific loud rumble.”
(Dumfries and Galloway minor roads, Interviewee B)

5. Noise disturbance has risen with increase in traffic volume

Increasing traffic levels over the years have made noise problems much worse. The problem also varies markedly with variations in traffic levels, e.g. diurnal commuter peaks or summer tourist peaks.

“Since it’s been opened up to Birmingham it’s been considerably busier and considerably noisier [...] Now it’s 24 hours a day, 7 days a week, it never quietens because of all the heavy lorries. My wife describes it as a continuous train going by.”

(M40, Interviewee D)

“Nights used to be quieter, it used to be quiet on Sundays. Now it is just a continual noise, no matter what time of day or night, or weekend, Sundays seem to be just as busy.”

(M65, Interviewee G)

“We never heard it before, now we hear it all the time, and it’s permanent, it’s 24 hours a day, because that now is a main trunk road from the north to the south. People don’t go round London anymore, they go round the A34. So it’s now one of the busiest roads and one of the noisiest.”

(A34, Interviewee A)

Those currently experiencing traffic noise problems expect it to become worse on present trends:

“Things are only going to get worse. The road is only going to get busier.”

(A34, Interviewee H)

6. Rural traffic noise problems are not restricted to major roads

Some minor rural roads are subject to high levels of noise disturbance due to use by heavy vehicles. In the case of the Dumfries and Galloway villages this appears to arise from a combination of traffic-generating developments in locations only accessible by minor roads and rat-running between major roads. Noise disturbance on B-roads and minor roads from high volume of traffic and large vehicles also arose from the survey of Friends of the Lake District and is discussed further in that section.

“From 8.30 usually in the morning and probably before, the transit of wagons up to the quarry is all day long really weekdays, and transit of wagons back, full ones. They make noise, not as much, but still a lot of background noise. The emptiest ones are the noisiest because they are great big empty chambers and the noise from that is phenomenal to be quite honest. I live in a cul-de-sac off that road. For the people that live adjacent to that road itself, it must be appalling”.

(Dumfries and Galloway minor roads, Interviewee D)

“It’s a relief when it reaches evening when you get the odd one coming down and weekends it’s a blessing. I just sigh a huge sigh of relief.”

(Dumfries and Galloway minor roads, Interviewee B)



Truck on minor road near the village of Eaglesfield, Dumfries and Galloway.

7. High traffic speeds and noisier types of traffic cause more disturbance

Type and speed of traffic are significant: fast traffic is noisier; motorbikes, noisy 'hot-rod' cars, HGVs, (& emergency vehicle sirens) stand out as particularly disturbing.

"The speed that the traffic goes along that road is colossal. I think that a lot of this noise is due to speed."

(A590, Interviewee F)

"It does seem that there's a massive amount of trucks on the road, more, a great deal more than there used to be and that they're heavier than they used to be, as well, so maybe that's impacted the amount of noise, because they're having to work the engines harder to get them up the hill."

(A34, Interviewee H)

8. Traffic noise disturbance varies with physical and seasonal factors

The degree that noise is experienced as a problem varies according to a set of climatic and physical variables: wind direction and wind speed, wet road surface, trees, intervening topographic highs, physical situations at higher levels than the road. Traffic noise in the summer can be particularly problematic as people want to use their gardens or walk in the countryside and need to open windows. Some people reported sleep disturbance under these conditions. Conversely for those with deciduous woodland between them and the road, trees in full-leaf can help reduce noise during summertime.

"What is difficult to comprehend is that under the worst conditions, which is usually when the road has been wet and the wind is in the west-south-west, the noise does feel as if it's absolutely on top of you. It's like great waves of thundering noise. And yet other times it can be completely still because the wind's from the east and the surface is dry."

(M40, Interviewee A)

"You can't go and sit and chill out in the garden with this sort of roar going on in the background."

(A34, Interviewee D)

"In our garden it is intolerable. We sit in the garden to try and subdue it, but it doesn't. So it is a rural environment and it is like living in a city, it's ludicrous really. My back garden is adjacent to fields and you can hear it. In fact, it is so noisy that if you are conversing you stop conversing until the vehicle has gone by and then you start again. So I don't use my front garden, or only at weekends. And the front is where you are getting the sunshine and nice and pleasant, but I don't sit there. And I moved here thinking it is a quiet road. It's mad."

(Dumfries and Galloway minor roads, Interviewee D)

“[With the windows shut] we don’t bear the noise in the house because we have double glazing, but if you have the windows open when it’s nice weather during summer it can be quite intrusive. You end up with a permanent background hum. You put up with it. We don’t open the window at night because at 6.30 it becomes really intrusive and can wake you up.”
(A590, Interviewee D)

9. Affected residents make lifestyle changes to try to escape traffic noise disturbance

People take a range of actions to avoid the noise or to try to lessen its impact: e.g. using a part of the garden screened by the house, if such a spot exists; avoiding local walking routes or recreational areas affected by the noise. Some people are trying to move house to get away from the road noise and people reported effects on house prices and trying to sell property.

“It’s a pleasant area [the village’s ‘Millenium Green’ picnic area] and it’s got benches, but because of the noise it’s not pleasant to sit there with the traffic just trundling past [...]. So it’s not the best location for a nice green area to be in, so we’ve never used it. We may walk the dog around it but that’s as far as it goes.”
(A34, Interviewee B)

“Once the road started to go up to Birmingham the noise was so great that you couldn’t hear line calls, you couldn’t hear whether somebody the other side of the net was saying it was in or out, it was a real pain, there was no fun in playing tennis with the noise and these damn trucks rumbling by, so we gave up playing tennis.”
(M40, Interviewee A)

“We have a patio at the front of the house – it’s a panoramic view from the front – but even on a nice day if we want to be quiet we go round the back where the house shelters it from the noise.”
(A590, Interviewee C)

“I’ve put my house up for sale because I have had enough of it. [Even though] it is a massive house; a lovely bungalow. I put it up twice. I put it on last year for [...]4 months, and took it off and put it on a week ago at a much lower price. [...] A couple of viewers say ‘oh, you are not too near the road’ – that’s the B road – and then they will say ‘oh, what’s that?’ It is a heavy goods vehicle, banging away, an empty one with these big chambers that they tip stuff in. I am not quite sure I will ever sell it.”
(Dumfries and Galloway minor roads, Interviewee D)

10. Traffic noise affects some providers of tourist facilities

Guest houses in the Lake District reported an adverse affect on their customers.

“Guests have said to me [about the noise]. I’ve slept in there [guest bedrooms] and you can still hear the noise [with the windows shut]. [...] It makes people less inclined to come back as guests.”

(A590, Interviewee E)

“In the house the noise doesn’t affect us unless we want the windows open. I like a window open at night, and in summer you want windows open, and you can hear the road. Visitors have remarked how noisy the road is in the morning, when they have had their bedroom windows open. The noise is much worse at busy times of day and at busy times of the year. I feel it might stop some people coming back. I think it does impact on some that come for peace and quiet. They may get a bit of a shock, particularly if they want a lie-in, but if they have the windows open it can wake them up.”

(A590, Interviewee C)

A visitor attraction in Snowdonia National Park was contacted during investigation of possible case studies. A member of staff described the impact on visitors and her working environment:

“Working here in the summer with the door open the sound of traffic is quite intrusive. And in the garden itself, [...] there is this constant noise of traffic [...] and sometimes it rises to quite a high level. If I was visiting here I would be quite saddened to think that I was going out into this beautiful garden – and it is a beautiful garden – and you have this noise of traffic. There have been comments from visitors, and in fact with the big heavy lorries and with motorbikes I’ve had to stop talking to people whilst the traffic has gone by, because they can’t bear.”

(additional material: exploratory interview, visitor attraction near A5)

11. Individual sensitivity to noise varies with behaviour and attitude

The same traffic noise source affects different people to different degrees. So for example:

“I’m trying to be calm about it, because I’ve realised there’s very little I can do, and you know life’s too short really [...] Last summer I was cross about it all the time, and so I was waking up and just being cross, which [...] doesn’t help you get back to sleep and I don’t think helps anything [...] [But my husband] He’ll be like, ‘yeah, yeah, it’s fine, I can’t bear it’.”

(A34, Interviewee D)

This seems to be a function both of a person’s psychological reaction to the noise and of their chosen activities – e.g. whether they walk in the countryside as a leisure activity or like to sit out in their gardens. So, the following person, who likes walking and who also expressed how he feels ‘annoyed’ when he encounters

'pollution' by traffic noise, finds his experience of the local environment to be badly affected:

"You could go up there and it was quite quiet, but because the amount of traffic has increased so much it's noisier; I just don't do it any more, which is sad, 'cos it's a lovely fell. When I lay in bed and look out the bedroom window at it, all I can see is fellside and trees, it couldn't be better, it's fabulous, but it's spoilt, and there's no question about it".

(A590, Interviewee B)

The idea that the countryside should be a place where quietness can be experienced is linked to frustration at intrusion by traffic noise.

"So it is a rural environment and it is like living in a city, it's ludicrous really."

(Dumfries and Galloway minor roads, Interviewee D)

Many respondents adopt a somewhat fatalist attitude: 'you have to grit your teeth', 'just have to put up with it'. It is not clear whether this is linked with other reported attitudes such as 'we need the road', 'I use the road myself'. Some people said they had become inured to the traffic noise over the years, although some reported re-sensitisation and embarrassment upon receiving visitors who found the noise intrusive or when they themselves visited quieter places.

"You get used to it. Then I notice it when visitors come. They say 'Oh, motorway's noisy isn't it.' It's a bit embarrassing then."

(M65, Interviewee H)

"You particularly notice if you go somewhere else it is nothing like the constant background noise. And when you sit out then you realise how awful it is here."

(M40, Interviewee B)

Survey of Lake District residents

In addition to case study interviews, an opportunity arose to gain a broader perspective through a postal survey of Cumbria residents who are members of Friends of the Lake District.

The Friends of the Lake District is a voluntary body dedicated to maintaining and improving the special attributes of the Lakeland landscape. It is therefore likely that their membership has heightened awareness of issues such as noise pollution in the countryside. For this reason, the quantitative results of the survey cannot be assumed to be representative of the general population. However, the survey was particularly designed to invite detailed qualitative responses about traffic noise, drawing upon this group's intimate knowledge of the Lake District. The resulting information provides a picture of where and how traffic noise is causing disturbance throughout one of Britain's best-known scenic areas. Although the mail-shot included all members with Cumbria addresses, the Lake District National Park was the prime focus of responses.

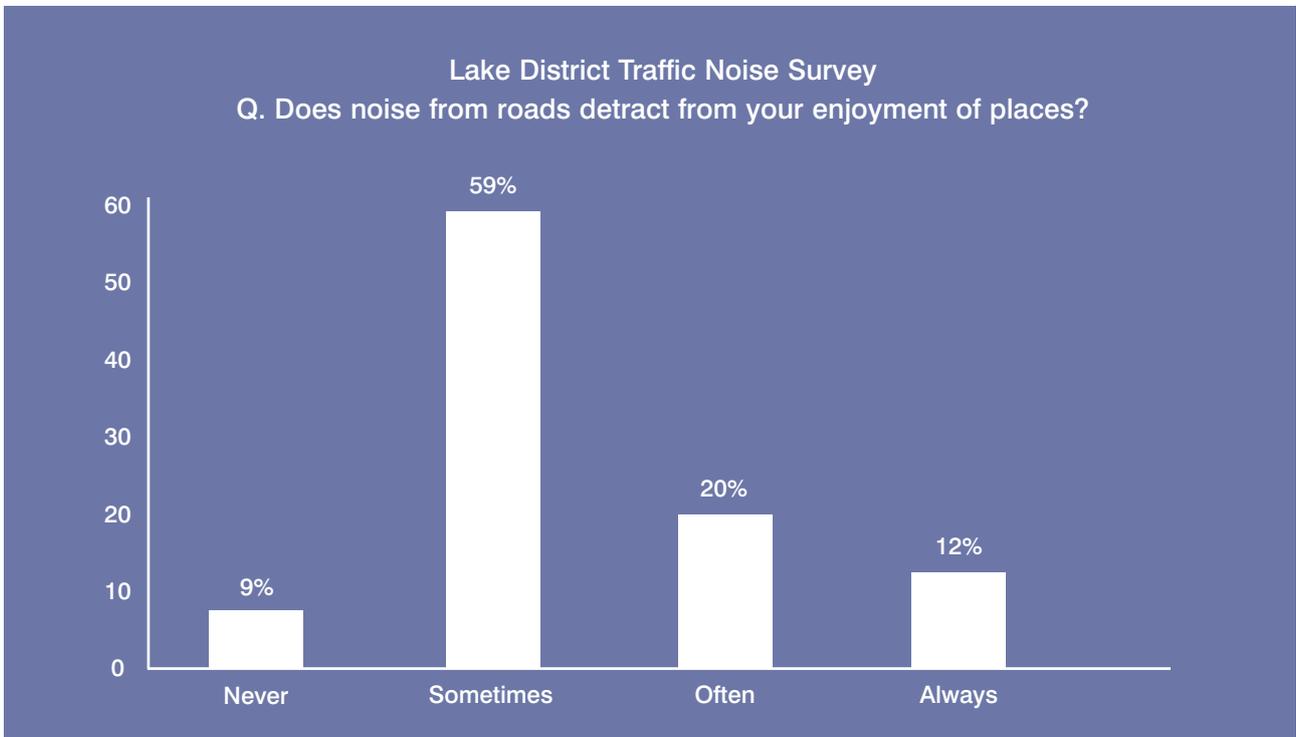
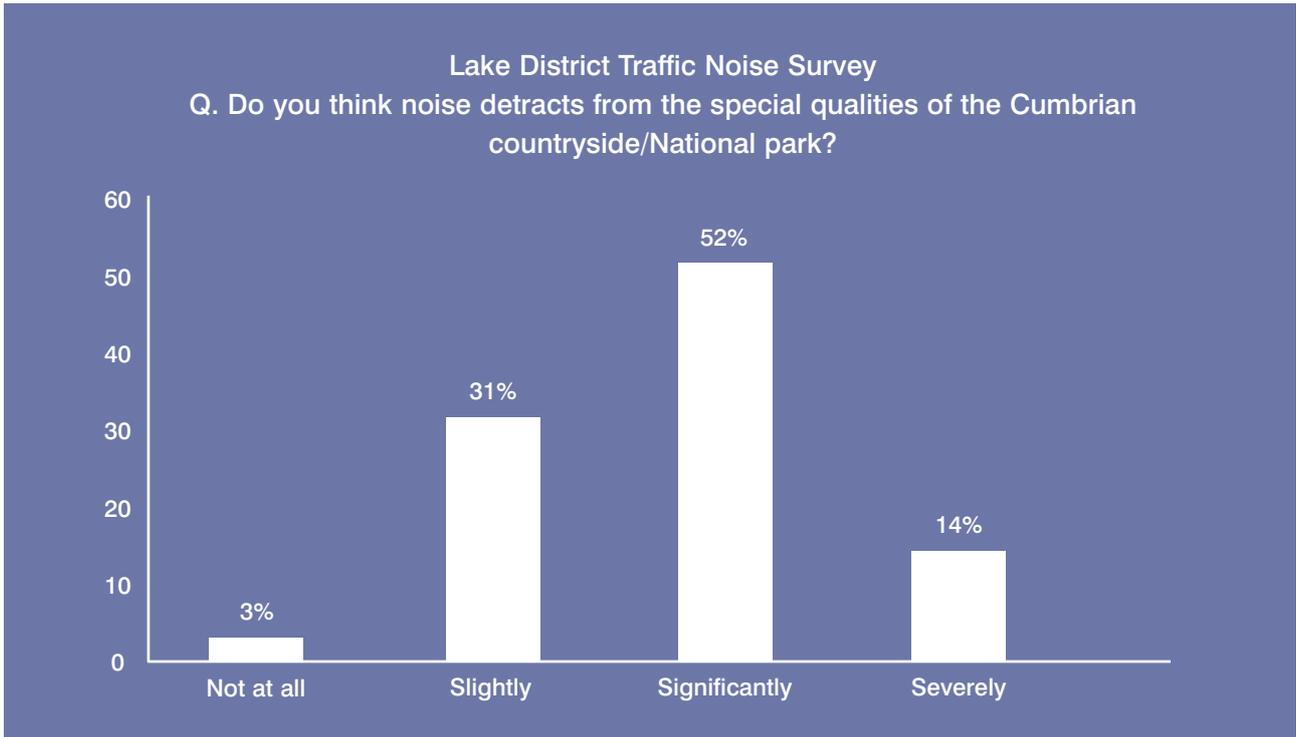
The following discussion of the survey particularly draws out those of its findings that provide complementary insights to the case study material already described. The survey results are presented in full [as an appendix](#).

The extent of traffic noise in the countryside

The survey produced a long list of places in Cumbria and the Lake District that respondents feel are 'adversely affected by traffic noise'. The large number of affected places is particularly striking in view of the Lake District's status as a highly valued National Park.

The impression that traffic noise is an issue in many locations and a frequent source of disturbance is reinforced by the split of responses to multiple-choice questions about the overall impact of noise on the area (shown in the graphs below).

- A majority of respondents (66%) feel that traffic noise detracts 'significantly' or 'severely' from the special qualities of the Cumbria and National Park countryside.
- A very large majority (91%) find that traffic noise detracts from their enjoyment of places in the Lake District and Cumbria 'sometimes', 'often' or 'always'.



Reactions to traffic noise: disappointment and reluctance to return

Survey responses reflect some of the views expressed in case study interviews, conveying a sense of loss and frustration at how traffic noise reduces or destroys enjoyment of beautiful countryside.

"We live in Sedgwick and bear traffic noise from the well used approach roads into the national park - A 590 and 591 - this also spoils enjoyment of all walks in this area - Kent valley , Sizergh Fell and Whitbarrow, etc."

"Marvellous Grasmere horseshoe Helm Crag/Calf Crag/Steel Fell walk ruined by the roar of traffic on Steel Fell, Deadman's Pike, from A591 Dunmail raise - spoils the day."

"Last year I walked up to Gummers How and Orrest Head and could bear traffic noise at both locations. This traffic noise ruined my walks."

"I avoid Ullock Pike Carlside approach to Skiddaw, wonderful route ruined by the A66."

"I love Blencathra massif, but noise from the A66 means I hardly ever go there."

"[tends not to go to] Windermere lakeshore - I rarely enjoy visits to Birdhouse meadow and Brathay/Rothay confluence (kingfishers) due to roar of traffic."

Amongst places that respondents reported avoiding due to road noise, the most mentioned was Blencathra, despite its spectacular scenery.

Issues arising

Most of the following concerns relate to issues that have already been reported from the case study interviews.

Distance at which noise disturbance occurs

Many of the places listed as 'adversely' affected by noise, even to the extent of being avoided by respondents, are at some distance from roads. Some respondents comment on how far road noise travels:

"I live on the A592 at Hartsop, noise from motorbikes and noisy exhausts on cars makes it necessary to walk 2-3 miles into valleys to escape it and to avoid the tops altogether as the noise reaches the tops."

"It is noticeable that the noise from fast roads carries many miles (e.g. routinely and significantly about 3 miles from the A590 up the Lyth valley, and at least 10km in the case of the M6 heard from Whitbarrow and the Lyth valley on still days/nights) and blights vast areas, while the noise from even fairly busy slower roads is lost only a relatively short distance from the road, depending on topography."

Fast traffic

The survey drew many comments on higher traffic speeds as a large contributor to increased noise levels. Respondents associate this with road widening and with lack of speed limit enforcement:

“Speed has increased significantly. This applies to the A591 at Dunmail Raise [a dual carriageway section] in particular, where speeds of over 80mph occur very often. When drivers are going at fast speeds, noise is increased.”

“Upgrading of roads to two carriageways - more traffic, tyre noise especially in fast traffic, high speeds.”

A respondent from near Staveley describes worsened noise from the A591 due to the bypass, an experience similar to that reported by one of the A590 case study interviewees with regard to the new bypass at Ayside:

“At home outside Staveley I’m afraid the bypass has replaced traffic jams with a constant traffic roar.”

Large vehicles

Increase in the number and size of large and heavy vehicles of various types is felt to be a significant source of increased noise. This is not just a feature of major roads - several comments express the view that more commercial vehicles are using the smaller roads with a consequent impact on noise levels.

Traffic noise on small roads and lanes

Although the bulk of the places listed as adversely affected by noise are within earshot of main roads, some B-roads and minor roads are also identified as sources of noise disturbance. Various respondents are of the view that smaller roads are receiving generally higher levels of traffic, bringing noise to hitherto quiet places. Some make a link to the noise from heavy traffic, for example, *“home deliveries up to 10 tonners going up valleys”*.

Fatalism about traffic noise

As in some case study interviews, the feeling was expressed that traffic noise is unpleasant but it is a fact of life: *‘we put up with it’*.

Variability of individual reaction to traffic noise

A small minority of respondents say that they experience no disturbance from traffic noise. Some of these interpret the survey questions about traffic noise as questions about whether the respondent is *‘entitled’* to use a vehicle.

Motorbikes, 'hot-rod' cars

Survey responses highlight the degree to which motorbikes are a source of noise. Although motorbike noise arose as an issue during case study interviews, in survey responses they emerge as by far the most mentioned particular source of traffic noise. Road-based motorbikes gain most negative attention, but off-road motorbikes and off-road 4x4 vehicles are mentioned as noise problems. Cars that are *'making as much noise as possible'* are also singled out for the degree of disturbance that they cause.

Emergency vehicle sirens

One respondent considers that noise from emergency vehicle sirens has increased. Although this noise is made for a deliberate purpose and is designed to be penetrating, an opinion is expressed that they seem to be used even on clear roads. The issue of sirens also arose in the case study interview for the M65, where sirens are, arguably, inaudible to other vehicles travelling at speed. The question raised is whether some use of emergency sirens may not be functional and could be avoided.

'Invisible' acute noise disturbance in rural settings

Amongst other findings, this study reports some instances of acute road noise disturbance in what, after all, are rural areas. Although mapping of tranquillity had shown that road noise disturbance in the countryside is now widespread, it did not lead the study team to expect descriptions of noise nuisance that are reminiscent of 1970's urban residents' campaigns for 'relief roads'. In fact, most of the roads in this study are wholly or partly 'relief roads' – bypasses - that have themselves become sources of problematic traffic noise, due to the high traffic speeds and traffic volumes that the roads permit. Their routing through hitherto quiet locations is also a reason that users of the nearby countryside experience significant disruption from the resultant noise.

It seems that these small communities constitute a problem that is to some degree officially 'invisible'. The population concerned is small and may be quite dispersed, therefore carrying little political weight. This situation is, as described earlier, worsened by assessment procedures for noise severity near trunk roads that automatically introduce a mathematical bias against small or dispersed settlements so that they are accorded a low priority for noise mitigation measures. The upshot of this combination of factors is that the annual budget for noise mitigation measures is comparatively small, and residents in small settlements who are suffering high traffic noise levels from trunk roads and motorways seem to be receiving a message that they stand little chance for the foreseeable future of receiving the mitigation treatments that they feel would assist them. If the significance of the noise problem in some of these communities were recognised as a priority for action, some of the measures identified by residents could in fact achieve immediate reductions of noise for almost zero expenditure, using measures such as speed limit reductions or restrictions on night-time lorries.

For roads under local authority control, residents described a situation where their requests for assistance apparently were disregarded in the context of rules designed to give priority to keeping traffic flowing at the highest possible speeds, even on the most minor of roads, within settlements. There appears to be an imbalance between the valuation of traffic convenience and the valuation of noise disruption, even when it is at distressing levels. Given the higher traffic levels already being experienced on rural roads and forecasts for further growth, this policy emphasis is increasingly problematic.

In recent years, some rural locations have found that they have become a route for large volumes of through traffic, including HGVs, due to satellite navigation systems. The Dumfries and Galloway villagers identified the problem – rat running – rather than this particular cause, but it could be playing a role. Nonetheless, their description of their situation offers insights that are relevant to minor roads elsewhere that have become cut-throughs for heavy traffic routed by sat nav. The East Ilsley case study did record the specific perception that sat nav was sometimes responsible for large vehicles diverting through the village itself.

Weaknesses in the wider assessment of road noise in rural areas

Whilst valuation of the experience of noise appears weak inside or near the buildings that are themselves the focus of official noise measurements and modelling, the valuation in countryside beyond the 300m cut-off applied to quantitative noise assessments is weaker still. There is a sharp mismatch between the noise disturbance experienced at some distance from roads by users of the open countryside and its omission from appraisals of roads. Even technical experts using the mathematical criteria to assess roads sometimes see that its results do not match what they themselves perceive, but must exclude. For example, a surveyor assessing the A591 in the Lake District recorded a 'personal observation' that:

"The road was almost always busy and noisy in all sections, unpleasant to walk or cycle along, dangerous to stop on except in lay-bys, and frequently smelly and dirty as well. And yet just the other side of the wall was some of the most beautiful countryside in England."

Despite this personal comment by the surveyor, his noise assessment of the road in question using the official methodology (Design Manual for Roads and Bridges) concluded that the noise level at a 'countryside location' 300 metres from the road was below the level at which it would impact on a community's quality of life.^{xi} This finding is in disagreement with both the specific list of places named in response to the Lake District survey and with the general level of noise disruption from the A591 described in those responses.

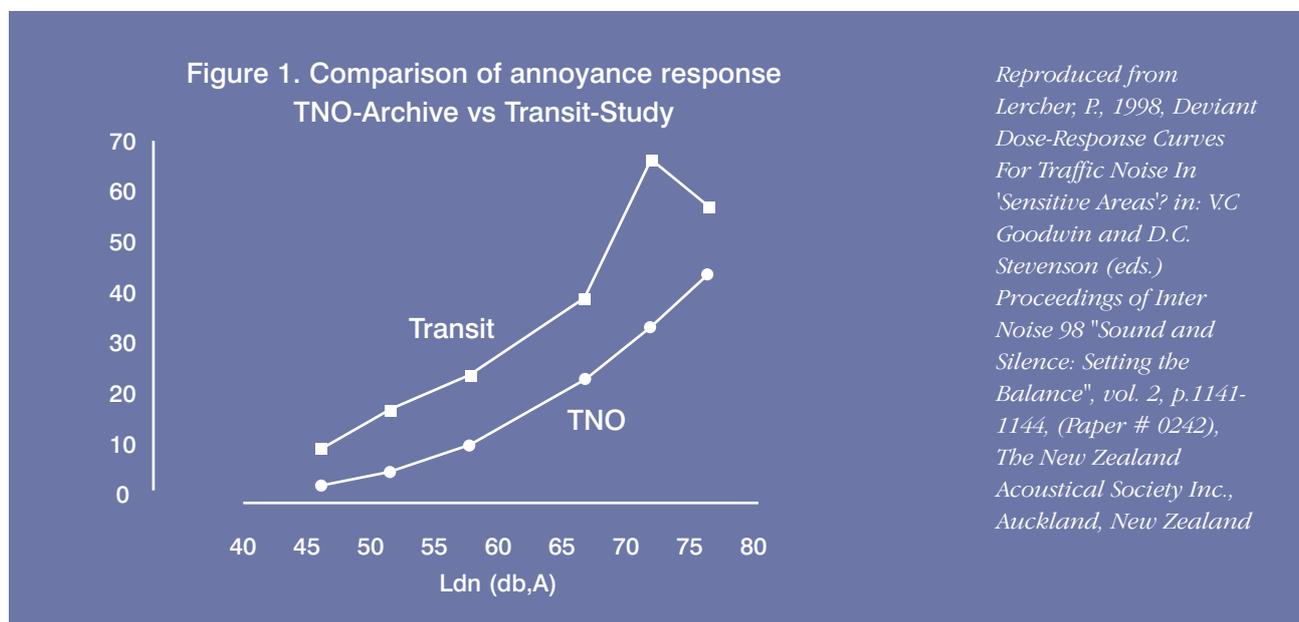
The latest development in noise assessment is the noise mapping required by the European Noise Directive for the most major roads. This represents an advance over previous methodologies in so far as it uses a weighted 24 hour noise measurement that includes night-time, which the case study interviews show to be an important period. It is also an improvement in that it does not stop at 300m and extends out to relatively lower noise levels (55db L_{den} compared, for example, with a cut-off of 68db $L_{A10,18hr}$ applied to the Noise Severity Index).³ Arguably, however, the biggest advance is that the Directive implicitly recognises that the present situation is, at least in some areas, unacceptably noisy, hence its requirements for noise mapping and noise action plans to make problem areas better. This would appear to be a departure from the present approach, at least in the UK, where discussion has generally focussed on how much extra noise is tolerable as a result of particular developments and activities. Although noise mapping and action plans under the Directive do not yet apply to most rural areas, a similar recognition is needed to address the evidence raised in this and other studies that traffic noise intrusion is already at unacceptable levels across wide areas of countryside and that action is needed to reduce it.

For more detail of noise measurement techniques, see Appendix: How noise nuisance is assessed.

³ These are differently weighted scales of noise measurement so the numbers do not directly read across, but the difference between these two cut-offs is nevertheless considerable. L_{den} represents the continuous sound level 'equivalent' to all the variable sound energy averaged out over time, weighted across day-evening-night. $L_{A10,18hr}$ is the noise that is exceeded 10% of the time, averaged for each hour between 6am and midnight. Webtag 3.3.2 para 1.3.2 indicates that an 'equivalent' scale translates to a number about 2.5 dB higher on an 'exceeded-10%-of-the-time' scale over the same time interval, but because the 'equivalent' scale includes a night-time weighting, it is more sensitive, so the difference between the scales should be less.

For the roads studied in this research, comparison with the noise maps produced under the Directive shows that their coverage is incomplete in important respects. For the Lake District, the most obvious feature of the noise maps is that the majority of the roads that attracted adverse comment in the survey are not mapped at all, because they fall short of the 6 million vehicle per year threshold. Some, but not all, of the interviewees' houses near the A590 are shown as noisy, but the marked zone of disturbance does not come near various locations identified as noisy by users of the countryside, and some of the A590 is not mapped at all. Unmapped roads include the A66, which attracted the largest number of adverse comments in the survey, particularly for the noise it causes in the vicinity of Blencathra. For the M65, most of the interviewees do fall within the zone that the map marks as affected by noise, but two are just beyond it. One of these is an interviewee who commented that, "I don't believe for one minute that anyone would have told me I was going to bear the motorway as I do". According to the noise maps, that is still the official assessment.

It seems relevant that some European research in quiet rural areas (discussed further in the Appendix, How Noise Nuisance is Assessed) shows considerable deviation from the standard 'dose-response' curves of the degree of nuisance created by particular levels of traffic noise.^{xii} All noise disturbance assessments based on quantitative measurements and models rely on these standard curves, which derive from studies of relatively urban areas. The graph below (Figure 1) shows that for most of the range of traffic noise levels, the residents of the rural area studied (curve labelled 'Transit') experienced a level of annoyance approximately double that predicted from the standard relationship (curve labelled TNO). The authors note that the human physiology of hearing is such that the sensory reaction to noise is 'always relative to the sensory background level', so higher reaction to greater audibility of traffic noise where background noise is less is not merely a psychological effect. What this means is that in quiet environments, the noise disturbance experienced as a result of a particular level of traffic noise tends to be much higher than predicted from the standard curves derived from areas with higher background noise.



Failure to appreciate traffic noise impacts out of doors and in open countryside

In part, the failure of noise annoyance assessment procedures in country areas appears to derive from a limited understanding of how use of the countryside (or even outside spaces such as gardens) is affected by road noise – as with the Inspector of Inquiry cited in the Introduction, who considered that it had no affect at all on people's actual behaviour. The experiences recorded by this research show that such a view is misguided. A proportion of people consciously avoid visiting country areas subject to traffic noise and others visit less and find their visits less pleasurable. At home in the countryside, disruption to use of outdoor areas such as garden can be experienced even at considerable distances from the road in question.

The consequence of this restricted view of noise disturbance in rural areas is that relatively little importance is placed on protecting open countryside from traffic noise – whether from new roads, enlarged roads, or just from increase in traffic on unaltered existing roads.

There is now some recognition in the Department for Transport's 'New Approach to Appraisal' (a.k.a. 'Webtag') that quantitative measures alone do not capture potential impacts of road projects on 'landscape', including 'tranquillity'. But, as already described in the Context section, noise is, in practice, submerged from view within the qualitative process to appraise landscape. A further concern is whether the qualitative landscape appraisal is accorded much weight. The evaluation of the impacts of the Newbury Bypass^{xiii} noted that 'the official processes of landscape assessment [assessments by the Landscape Advisory Committee] objected to the bypass as strongly as was possible' but the route under question was nevertheless adopted.

This is not to say that the solution lies in ever-more modelling and measurement. The fundamental problem derives from a considerable under-appreciation of the value of quietness in rural areas. The research in this report indicates that traffic noise is having a marked detrimental effect on the experience of the UK countryside amongst those who live, work, or take recreation there. The findings indicate that the effects are greater than are generally appreciated. On present trends they will continue to worsen unless a far higher valuation is placed upon quiet countryside, and translated into policies to manage traffic volumes and traffic speeds, including stricter limits on rural road building.

Conclusions and Recommendations

Conclusions

Even in lightly populated rural areas disturbance from traffic noise has become problematic, in places severe

Parts of the countryside are subject to levels of traffic noise that are a significant source of unpleasantness for people living, working or taking leisure there. These experiences are reported across a variety of country areas, from 'deep rural' through to peri-urban.

Traffic noise causes disturbance at distance from roads

Although noise levels and acute disturbance are greatest close to roads, in the rural areas studied disturbance was reported from a much wider corridor (1 - 2 miles or more either side of the road) to a degree such that some respondents chose to visit the area less or not at all. This corridor is much wider than that considered in the standard appraisal of potential road schemes. Although these areas have low population densities, the extent of these corridors means that much larger numbers of people are affected than feature in official appraisals. For popular scenic areas the affected numbers of people visiting the area for leisure may be considerable.

Noise-affected scenic locations are deliberately avoided by some people, visited less by others, and are felt to be a degraded experience for a proportion of those that do visit

Many reports were received of people avoiding otherwise pleasant countryside areas because traffic noise detracts so much from the experience, even for locations amongst Britain's most scenic places. Of those who choose to visit nevertheless, some find the experience to be noticeably degraded by noise. The most common reactions to encountering traffic noise in otherwise pleasant countryside were expressions of frustration and loss.

Current approaches to assessment of road noise nuisance are inadequate for country areas

Official noise assessment methodologies for new or existing roads and new noise mapping exercises inadequately reflect the level of road noise disturbance in rural areas, particularly in the open countryside. The emphasis on quantitative estimates and noise impacts within buildings fails to capture how noise is actually experienced in rural areas where the population is dispersed and road noise may create problematic disturbance outdoors or far from the road itself. As a result much noise nuisance caused by traffic in rural areas is 'invisible' to official processes.

Some villages that are heavily affected by traffic noise are nevertheless judged ineligible for amelioration measures

Some rural settlements experience very high traffic noise levels, even to the degree of causing sleep disturbance, but are judged ineligible for amelioration measures because their rural characteristics don't score highly on assessment formulae that seem designed for more urban situations.

Rural traffic noise problems are not restricted to major roads

Major roads do cause most disturbance. However, one of the case studies found extreme noise disturbance from minor roads where heavy goods vehicle traffic had increased considerably in recent years. Noise due to increased usage of small roads by larger vehicles was also reported elsewhere. In general it appears that noise is an increasing issue due to higher overall traffic levels on some B-roads and minor roads in country areas.

Increased traffic volume has led to more noise nuisance in country areas

For many locations in this study, respondents described a situation where noise disturbance due to traffic, although not a desirable experience to begin with, had increased to much more problematic levels as traffic volumes had increased over the years. In some instances this related directly to enlargement of the road in question. A common experience was that traffic noise that used to be only a problem at peak hours, or seasonally, or just during daylight hours, had become disturbing for much longer periods.

Increased traffic speed has increased rural noise disturbance

The association of high speed with high levels of noise disturbance was widely reported. Temporary speed restrictions due to road works or accidents created notably quieter periods and many people suggested that lower speed limits, with enforcement, would reduce traffic noise pollution. The construction of new higher-speed sections of road was blamed for significant noise increases.

Noise disturbance has risen as a result of an increase in particularly noisy types of traffic: HGVs and other large vehicles, motorcycles, 'hot-rod' cars, off-road vehicles

Certain types of traffic create particularly high levels of noise disturbance. The regulation of these (or lack of it) was a source of comment.

Recommendations

1. Recognise the impacts of road noise on rural areas

Traffic noise impacts in rural areas require and merit a higher valuation. This is not simply a question of modifications to noise assessment procedures, although that would help. The solution lies in recognising the worth to society of *lack of noise* and how intrusion of noise fundamentally changes the experience of countryside amongst those living or seeking recreation there.

Rather than the current discussion about how far from roads noise should be measured, it is necessary to start a debate about how to reduce the distance from rural roads that noise is audible. Present noise policy, largely limited to case-by-case consideration of the acceptable limits to extra noise from proposed roads and developments in rural areas, is merely overseeing cumulative worsening of noise intrusion throughout the countryside. Noise policy should be more ambitious: it should aim to 'clean up' the countryside polluted by road noise, just as its rivers and estuaries have been successfully cleaned in recent decades.

2. Set targets for traffic noise reduction throughout the countryside

Recognition is required that noise from roads in the countryside is already at unacceptable levels. These noise levels reduce the value of the countryside as a shared resource for the whole of society. Actions are needed to reverse the present trajectory towards ever fewer tranquil areas. Decision-makers should set in place policies to reduce rural traffic noise. The scope of such policies should extend to restriction of new projects that would bring increased traffic noise to country areas. They should include tighter planning rules for traffic-generating developments in quiet rural areas, including assessment of the particular noise problems that can be produced by heavy goods traffic on country roads, and a stricter presumption against road enlargement schemes or new roads that would give rise to increased noise through higher traffic speeds and volumes.

3. Reduce traffic speeds in country areas

The quickest way to achieve a large reduction in road noise in the countryside is to cut speed limits. It is inappropriate that B-roads and even country lanes are, by default, subject to the national speed limit. In highly valued scenic areas there is a strong case on noise grounds alone to universally reduce speed limits to 40 mph on all main roads. This would make a large contribution to restoring the special qualities of National Parks and other areas that are suffering degradation by road noise.

4. Restrictions on noisy vehicles

The rapid growth of heavy goods vehicles and other commercial vehicles on rural roads demands consideration of where these vehicles are or are not appropriate. Access-only rules, speed limits and weight restrictions would help prevent noise disturbance on roads where some of these vehicles have a legitimate presence.

Enforceable controls are required for particularly noisy motorbikes and cars. Operators of emergency vehicles should be asked to advise on the extent to which sirens are necessary on rural motorways and main roads.

5. Recognise the deficiencies of road appraisal for rural areas

Appraisal guidance for road schemes should make it clear that noise disturbance generally extends beyond 300m in country areas and should be explicitly included in the assessment process.

6. Re-assess the approach to noise mitigation measures

The Highways Agency should amend the Noise Severity Index so that it has a fairer application to small communities, at the very least removing the shoulder zones from the calculation in situations where these shoulders would not require screening to address the noise problem. The exceptionally high noise level threshold used in the assessment should also be reconsidered, including consideration of the evidence that in rural environments with quieter background noise, the physiology of hearing is such that nuisance from noise intrusion occurs at much lower sound levels.

The overall budget for physical noise mitigation measures should be increased to reflect the potential improvement these offer affected rural communities. However, mitigation measures considered for trunk roads and motorways should not, as at present, be restricted to constructional solutions (which carry high cost and limit the number of mitigation operations that are judged 'affordable') but should consider minimal cost measures such as reducing speed limits to 50 mph from the current 70mph on dual carriageway bypasses close to settlements. Such measures would have insignificant impacts on overall journey times and a major impact on noise levels.

Local authorities should rebalance their assessment of noise problems on roads under their control to lower the threshold for application of reduced speed limits and weight restrictions where noise is an issue.

7. Invest in 'smart' tourism

As some interviewees in this research candidly indicated, they themselves are responsible for traffic noise, including those who found traffic noise highly disturbing when they were out of their vehicles and away from roads. Visiting and taking recreation in scenic country areas is liable to become a self-destructive activity if it is reliant on private vehicles. National Parks and other areas that attract high numbers of visitors and their cars require public transport access options (scheduled and demand-responsive) of sufficient quality to permit restrictions on private car movements, with the aim of concentrating a large proportion of car destinations at places that can act as public transport hubs near the boundary of the area in question.

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A) Case Study 1: M40 Chilterns area

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C) Case Study 3: M65 Blackburn greenbelt

D) Case Study 4: A34 North Wessex Downs area

E) Case Study 5: A590 within Lake District National Park

F) Survey of Friends of the Lake District membership

G) How noise nuisance is assessed

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- ⁱⁱ see, for example, <http://noisemapping.defra.gov.uk/wps/portal/noise>, <http://www.scottishnoisemapping.org/public/view-map.aspx>, accessed 10.06.2008
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Case Study 1: M40 Chilterns area

Background

This case study focuses on the effects of noise on residents living close to a 20 mile stretch of the M40 as it crosses Buckinghamshire and Oxfordshire. Here, between Junctions 3 and 7, the motorway passes a series of villages and cuts through the heart of the Chilterns Area of Outstanding Natural Beauty. In 2005 the road had an Annual Average Daily Traffic flow of 90,000 (TRL, 2006) between Junctions 4 and 5. Because the motorway was originally built as a bypass, it has been argued that its route takes it unusually close to residential communities. Many people living between Loudwater and Tetsworth have complained about their exposure to noise, and the problems were discussed in a House of Commons Adjournment debate, held on October 16th 2007, in which MPs for Wycombe, Aylesbury, Beaconsfield and Henley argued for noise mitigation measures.

From the debate and literature produced by the M40 Chilterns Environmental Group, it is possible to give a brief history of the road:

- In the late 1960s, the first section of the road was constructed as a bypass and built close to High Wycombe and the string of villages whose traffic it was designed to relieve: Bolter End, Wheeler End and Lane End. It was then a dual two-lane road running from Handy Cross at Junction 4 to Stokenchurch. This road was subsequently designated as the M40.
- The early 1970s saw completion of further sections of the bypass as dual three-lane motorway - from Stokenchurch to Wheatley and from Junction 4 to Beaconsfield and on to Denham.
- During the 1980s the M40 was extended to Birmingham, with the new route opened in 1991.
- In the late 80s it was decided that the section of road from Junctions 4 to 5 should be widened from two lanes to three lanes, to accommodate additional traffic expected following the opening of the extension to Birmingham. Since the widening was within the existing highway limits, no public inquiry was required. At Cadmore End a landowner provided a strip of land next to the motorway to allow for construction of an earth barrier or bund, using soil excavated from widening the road. Apart from this the only noise protection for the new stretch of road was tree planting and some additional wooden fencing. Upon opening, daily traffic levels rose over a short period from 30,000 per day to 55,000 per day. While quieter asphalt has been installed on other parts of the motorway (on either side of Junction 3 and Junction 6 according to the M40 Chilterns Environmental Group), the stretch through the Chilterns AONB continued to use a conventional noisier asphalt. Some residents made compensation claims and there were a number of payments in the mid-90s, based on the noise difference between traffic flows before and after widening.



M40 passing Stokenchurch.
Photo credit: M40 Chilterns
Environmental Group.

- In the mid-90s a further road-widening scheme was introduced at the London end of the M40 to create a dual four-lane motorway between the M25 junction and Junction 3, at Loudwater. Here a grooved concrete design for skid resistance had proved especially noisy and the road-widening scheme included landscaping, noise protection barriers and resurfacing of the widened road with quieter asphalt. The contrast between this more environmental treatment and the treatment from Junctions 4 to 5 has become a source of grievance.
- Since 1997 management of the M40 between junctions 1-15 has been undertaken by UK Highways M40 Ltd, under a 30-year contract, which is part of the Government's private finance initiative.
- In 2004 the M40 Chilterns Environmental Group (CEG) was formed, chaired by Ken Edwards (see interview 10), with the purpose of "seeing what can be done about the M40," particularly through High Wycombe to Tetsworth. The group says it has support from seven parish councils from villages along a 20 mile stretch of the M40. It calculates that it represents 25,000 people who live within 500 metres of the motorway: 10,000 from Junctions 3 – 4 (Loudwater, Flackwell Heath and Daws Hill; 10,000 from Junctions 4 – 5 (Cressex, Booker, Lane End, Wheeler End, Bolter End, Cadmore End and Stokenchurch, and 5000 from Junctions 6 – 7 (Lewknor, Postcombe, Tetsworth and Milton Common). The motorway severs 15-20 footpaths and bridleways in the Chilterns AONB. CEG says these paths have lost their tranquillity because of motorway noise.
- In 2005 the Department for Transport published the M40/A40 route management strategy in which noise pollution was identified as an issue that needed to be addressed.
- In 2006, as a first step towards this, the Highways Agency published An Assessment of Noise Hotspots Alongside the M40 (TRL, 2006), which used modelling to identify 23 noise hotspots, including 13 between Junctions 3 and 8. The report assessed the potential eligibility of these areas for funding under the Highways Agency's Noise Mitigation Programme – a ring-fenced sum of £5m annually, set aside for local noise reduction measures at the highest priority sites across England. The criteria used meant funding could only be considered for locations opened before 1988 where the current daytime noise level was calculated to be greater than $L_{10,18\text{hour}} 68 \text{ dB(A)}^1$. The majority of the noise spots identified were not eligible for mitigation because they had been opened or altered after 1988 and the report said these locations would therefore be surfaced with a low noise material when maintenance was required. On this basis, the number of noise hotspots to be considered was reduced to five locations (Lane End, Bolter End, Cadmore End, Ibstone and Stokenchurch). All five sites were in areas that currently have Hot Rolled Asphalt surfaces and the report concluded that re-surfacing these sections with a low-noise road surface could typically reduce noise levels

¹ The noise in decibels (weighted using the 'A' scale) that is exceeded 10% of the time, averaged across each one of the 18 hours between 6am and midnight.

by 2.5 – 5.0 dB(A). On this basis it recommended that the sites did not meet the criteria to be eligible for funding noise mitigation through fencing, and that “resurfacing alone, under the existing surfacing maintenance programme would be appropriate treatment for these five sites.” Despite this conclusion the consultants calculated the Noise Severity Index (NSI) for all those locations on the original list where there were dwellings subject to 68dB(A) or over. The highest NSI was at Stokenchurch (10.2) followed by Lane End (3.1) and Bolter End (3.0). The Noise Severity Index indicates the number of properties in each kilometre that are likely to be annoyed by noise levels. The report comments that: “A location that has a long frontage but some dwellings exposed to very high noise levels could have a relatively low NSI using this method.”

The CEG argues that if the section of the M40 that began life as the Wycombe Bypass were being built today it would not be routed so close to villages, and would be given more effective noise mitigation measures.

They also say the decision to build some sections of the motorway above the level of adjacent villages has added to the intensity of the noise for nearby communities. The motorway is elevated about 20ft between Tetsworth, Lucknor and Milton Common, but the problem is at its most extreme at the Loudwater Viaduct where the M40 takes traffic over a valley at high level (CEG estimates that it is 60-70ft up). In the Adjournment debate Dominic Grieve, MP for Beaconsfield, said he had received many letters from constituents living some distance from the motorway complaining about the noise.

A central complaint about the Noise Severity Index is that the formula used is strongly weighted against the needs of rural communities. Ken Edwards, chair of the CEG, comments that there are ladies living in the vicinity of the motorway who are subject to 85dB(A) and under commercial regulations, should be “wearing ear defenders to put the washing out”. Yet because their homes are in a village that is only 0.5km long the settlement’s NSI is not high enough to be considered a priority. Ken concludes that the NSI calculation works in a way that is “hopelessly unfair to rural communities”.

Another criticism is that the Highways Agency modelling of noise takes no account of wind direction or night time noise, which is an important factor in disturbance. Ken argues that because of weather conditions, the noise level can be 10dB higher than the figure produced through HA noise maps.

In the Adjournment debate, David Lidington MP questioned the operation of the NSI in the light of the Government’s commitment to ‘rural proofing’ – a process of ensuring that domestic policies take account of rural circumstances and needs. In reply, transport minister, Jim Fitzpatrick commented that “areas where many people are affected are obviously given priority.”

Following on from the debate, a letter from transport minister Tom Harris (31.12.2007), clarified that the NSI values are unique to the UK and have no EU equivalent. Whereas in the UK we use a measure of the noise level that could be expected between 0600 and 2400 hours, many EU countries use a measure of noise level based on a 12 hour daytime period, a four hour evening period and an

eight hour night time period, with evening and night time levels weighted to take account of the greater impact of noise at these times. The minister also explained that recent EU legislation will require all EU governments to develop noise maps for major conurbations, which will take account, not just of roads, but of all noise sources. In the UK this is being undertaken by DEFRA and called the National Ambient Noise Strategy.

The CEG is now hoping to pursue noise mitigation through other funding mechanisms such as planning gain, and as part of work planned on bridge repairs. Specifically, the group would like to see a new fund set up providing £1.5 million for noise mitigation measures for rural communities, with funding provided on a matched basis. CEG estimates that this would provide an additional 8-10 schemes a year nationally, quadrupling the number of problem locations addressed annually.

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Case study interviews

Summary

The 10 case study interviews are all with residents who have been in touch with the CEG about problems with noise from the motorway. While most lived within a few hundred yards of the M40, one is around 1.5 miles away from an elevated section of the motorway. In addition there were brief follow-up telephone calls with two estate agents, a school and the Chilterns Area of Outstanding Natural Beauty.

Key points emerging from the interviews:

1. Traffic noise is a particular problem in the summer when people would like to be spending time outdoors, but find the level of noise seriously detracts from their enjoyment and makes it difficult to open windows freely:

“It’s really upsetting in the summer when it’s a nice day. We like gardening [...] and you can’t have a conversation. You literally have to shout – I’m talking about being just a couple of metres apart. You have to shout at each other or else you can’t hear.” (Interviewee G)

“I love to be outside. I love my garden. There’s a certain tension you get when there’s constant noise [...] I’d have more seating outside if it was quiet. I tend to scuttle indoors, which isn’t me. It definitely makes me more tense.” (Interviewee B)

“if it’s noisy you tend to slip back into the conservatory” (Interviewee D)

“I wouldn’t use that bit. [...] it is quieter sitting at the front here so I just sit out at the front in the car park.” (Interviewee H)

Noise also affects the way in which people use different areas within their gardens: for example, whether they choose to spend time in a particular part of the garden or to do work there. Several interviewees had attempted - with mixed success - to screen outdoor noise by erecting structures, such as a high wooden fence, a walled garden and a strategically sited building extension. The head of a primary school situated immediately next to the motorway said that, in the summer, traffic noise prevents the school from using their grounds for teaching ways they would like to – for example, from holding outdoor assemblies.

Traffic noise is also particularly problematic at night in the summer, when some interviewees said they had to choose between sleeping in conditions that were too hot or too noisy.

“in the summer when it’s really hot, or when it’s really warm, we can’t have the windows open because the noise keeps us awake, [...] We can’t get to sleep. What happens is that the Heavy Goods Vehicles tend to prefer to drive at night, and if that’s their job I can understand it. But it means that this road is more busy with Heavy Goods Vehicles at night, as well as cars. And it is just so difficult to get to sleep.” (Interviewee G)

“It’s basically the problem is in the summer, when you want to have your bedroom windows open and that sort of thing, that you do get a steady and an increasing noise.” (Interview A)

One interviewee, who found it too claustrophobic to sleep with her windows shut, said the noise often kept her from sleeping and sometime woke her up.

2. Many interviewees described how the level of traffic noise affecting them varied hugely with wind direction (in relation to the location of the property) and weather conditions:

“When there’s a south westerly and there’s rain imminent, then the noise is absolutely horrendous.” (Interviewee C)

“What is difficult to comprehend is that under the worst conditions, which is usually when the road has been wet and the wind is in the west-south-west, the noise does feel as if it’s absolutely on top of you. It’s like great waves of thundering noise. And yet other times it can be completely still because the wind’s from the east and the surface is dry” (Interviewee A)

This variability meant that for some, the level of noise was their first thought in the day:

“It is very much a waking thought ‘how bad is the noise today?’” (Interviewee C)

“Some mornings [...] you can hear it through the window, you don’t even have to open the window, and, you know, [husband] will say, whoever makes the tea in the morning, will say, ‘gosh it’s a bad one today’. So it starts the day thinking ‘ah, here we go’.” (Interviewee I)

Some people talked about differences in the noise level that they noticed across the day. Two interviewees who suffered sleep disturbance from traffic noise described how, in the course of the night, they noticed that the noise dipped in the small hours before increasing again early in the morning.

3. Some interviewees said traffic noise had affected their leisure habits – and had deterred them from playing or watching sport on grounds that are close to the motorway:

“I found it an unpleasant experience playing cricket where you couldn’t hear people in the team giving instructions on the cricket field and you had to do it all visually [...] That is really intrusive, it’s a leisure activity where you’re trying to relax and you’ve got this constant roar.” (Interviewee C)

“Once the road started to go up to Birmingham the noise was so great that you couldn’t hear line calls, you couldn’t hear whether somebody the other side of the net was saying it was in or out, it was a real pain, there was no fun in playing tennis with the noise and these damn trucks rumbling by, so we gave up playing tennis and built a house instead.” (Interviewee A)

In a similar way, noise is a deterrent to visiting countryside close to the motorway. Some interviewees said they looked for walks away from the motorway, and there were also comments about the unattractiveness of a local nature reserve because it was close to the road.

4. The noise is viewed as a problem that has grown over time and is likely to become worse. There is a common perception that the level of noise from the motorway became markedly worse when the road was extended to Birmingham, and has also worsened further in recent years. Some interviewees talked about the increasing number of lorries using the road in the early morning and at night:

“When I was going into London I’ve always gone in very early when I was travelling and when there’d been snow I’d be quite often the first person along it, whereas now it’s 24 hours a day, 7 days a week. It never quietsens because of all the heavy lorries. My wife describes it as a continuous train going by.” (Interviewee D)

“We did notice after we’d moved in that on certain times of day it was a lot worse but it still wasn’t that bad. But over the four years the increase in the noise has been just unbelievable. Mainly heavy lorries.” (Interviewee G)

5. Several interviewees said that visitors were particularly likely to be struck by the noise level:

“We had an elderly couple from Scotland who’d come down here to stay with their son for a month or so before Christmas and they used one of our farm buildings for preparing Christmas wreathes, and they couldn’t believe it...They wanted to get back to Scotland as soon as they could.” (Interviewee F)

“It’s visitors who are startled and say ‘My God! How do you live with that?’ you know, if they catch you on a bad day with wind in the West.” (Interviewee A)

6. Conversely, some people talked about particularly noticing or appreciating the quiet when they went elsewhere:

“You particularly notice if you go somewhere else it is nothing like the constant background noise. And when you sit out then you realise how awful it is here.” (Interviewee B)

“I’ve got a friend of mine whose moved to Dorset, and I go down there quite often, on the Wiltshire-Dorset border and I think it’d be lovely to farm down here, the only noise you can hear is the buzzards and the bird life generally” (Interviewee C)

“It’s been to the extent that I’ve gone and stayed with friends at times to give myself some respite from it.” (Interviewee H)

7. While one interviewee was planning to move in the near future because of the noise, the more common sentiment was that, in practice, it was necessary to learn to live with the annoyance.

“In the end people learn to live with it. It is just intrusive – very intrusive really – in what is essentially a rural area.” (Interviewee A)

“The practical implications are not really that major are they? It’s just a constant intrusion and, you know, there are things in life that you have to put up with and farmers can’t just move. You know if you lived in a house you could up-sticks and move somewhere else, but I can’t take the land with me.” (Interviewee C)

“It’s just annoying at night. It’s not every night but – Saturday nights are quite quiet, they’re quite nice. Other than that, you get used to it.” (Interviewee E)

However one interviewee who suffered from fibromyalgia, said the noise exacerbated her condition and described considerable discomfort at having to cope with it:

“At its worst it will cause pain in my ears. And you kind of can’t relax and have a quiet time or read a book. It’s sort of difficult to concentrate, but the sleep deprivation is the worst.” (Interviewee H)

8. Several interviewees said they appreciated the amenity the motorway offered them:

“We love the M40 and we’re happy to be near it so we can use it to get out and about, but living near it is not good. And more importantly it’s got so much worse and I just can’t see it ever getting better and I just think it’s going to get worse.” (Interviewee G)

“It’s been very helpful for my business. But since it’s been opened up to Birmingham it’s been considerably busier and considerably noisier.” (Interviewee D)

9. Motorway noise was widely considered to have a strong effect on the price of property in the vicinity of the motorway: one interviewee had direct personal experience of the difficulties in selling her home:

“If they came on a noisy day it put them off. They liked the house. We’d go into the garden, open the door and wham!” (Interviewee B)

“We will be selling our house next year. [...] if we were to take someone round on an average day, they would not buy our house. I would say it’s affected it that much.” (Interviewee I)

“The point here is not how much the place is worth, but it makes the difference between a place that people want to buy and a place that people don’t want to buy, so that the actual, you know, way it affects the value is enormous.” (Interviewee F)

Two estate agents in the area were briefly interviewed for the study. While one said properties close to the motorway took longer to sell and estimated that they were likely to be worth up to 5% less, the other thought this was rarely a factor, though it might make a difference in the case of two otherwise similar and unexceptional properties.

10. Some interviewees were particularly concerned about the frequency of accidents on the M40²

“Monday morning, Friday nights and Sunday afternoons are terrible, with the number of crashes that are happening. There’s questions being asked in the paper because we seem to be getting a few a week. You don’t hear them, it just stops the traffic [...] It stops on the motorway and piles through the village.” (Interviewee D)

11. Two interviewees talked about modern sound barriers that they had seen on motorways in other countries, and would like to see here.

“The barrier is totally inadequate that they’ve got on it ‘cause it’s just a fence. There’s no sound absorbancy in it. If you travel - I’ve done a lot on the Dutch

² Accident data for the M40 between junctions 1A and 11 for 2004 – 2006 show an average accident rate of 7.8 per 100m vehicle kms, which is similar to the average accident rate for motorways nationally. This is from figures given in the adjournment debate by transport minister Jim Fitzpatrick.

motorways and such - and you see the fences there, they're big structures and they've got labyrinths in to absorb the sound and all sorts. Whereas these are just as cheap as possible fences as they could put up." (Interviewee D)

Other solutions mentioned to mitigate the noise were quiet road surfaces, speed restrictions, restrictions on lorries at certain times, extensive tree planting and concrete barriers in the central reserve of the Loudwater viaduct.

12. Interviewees had mixed views about their neighbours' reactions to the noise. While some said the noise was a frequent topic of conversation and mentioned neighbouring properties with particularly severe noise problems, others knew of neighbours who had grown used to the noise. While one primary school close to the motorway reported that they were affected by traffic noise, a playgroup that was similarly close said it was not a problem for them. Ken Edwards mentioned a recent door-to-door survey in Lane End, which had a 38% response rate and included questions about noise in the context of the parish plan. Asked whether they were disturbed by noise from the M40, some 39.5% of respondents said noise was an annoyance "continually" (26.4%) or "more frequently than not" (13.1%). Some 30.1% said they were occasionally disturbed and 20.7% said they were never disturbed.

Interview 1

Context

Interviewee A lives with his wife at Tetsworth in South Oxfordshire. The village is on the A40, which runs immediately parallel to the M40 on its north side, between junctions 6 and 7. The parish had 272 households in the 2001 census. The couple's house, located at one end of the village, is situated between the A40 and the M40. It is approximately 200 metres from the motorway, which is clearly visible from the garden. Now retired, A formerly worked for ICI.

Relationship with the road over time

The couple have lived in the house for 25 years, and their children grew up there. The M40 was there when they arrived, but was then just a "little motorway going to Oxford". Noise levels increased significantly once the motorway was extended up to Birmingham (completed in 1990). A has examined information from the Highways Agency, which he says shows that there is now about four times as much traffic as there was when they first came to the house and about 7/8 times as much heavy goods traffic, which particularly generates noise. In addition the HGV traffic is increasingly travelling through the night.

A sees noise as the main annoyance of the motorway, and has been actively engaged, over a long period, in trying to secure measures that will mitigate this, particularly noise barriers at 'hotspots' between junctions 3 and 8, and treatment of carriageways between junctions 3 and 5 with quiet asphalt.

The family used to have a tennis court at the bottom of the garden, which they also made available to other local people, but which they have now given up (and built on) because noise levels ruined their enjoyment of the game: "Once the road started to go up to Birmingham the noise was so great that you couldn't hear line calls, you couldn't hear whether somebody the other side of the net was saying it was in or out, it was a real pain, there was no fun in playing tennis with the noise and these damn trucks rumbling by, so we gave up playing tennis and built a house instead."

In the time that they have lived in the area, several local shops have disappeared as the village has become increasingly dominated by commuting – part of a wider social trend, but one in which the proximity to the motorway has been a contributory factor. A also used the M40 to commute himself when he was working.

Current effects of living near the motorway

Noise is an annoyance outside the house. The couple have a conservatory at the back (on the side of the motorway), which is double-glazed. When the vents are open "the noise comes roaring in". Fortunately, the main living room and the bedroom windows are on the non-motorway side of the house.

A takes a daily noise reading using a noise meter, and says that this indicates that the noise level at his woodshed exceeds the level predicted by the Highways Agency's model 85% of the time. A believes this is because the model does not take into account the wind direction or the motorway's elevation. The readings also indicate, he says, that wind direction is a more important determinant of actual noise than either weight of motorway traffic, time of day, or season. A change in wind conditions has a dramatic effect: "What is difficult to comprehend is that under the worst conditions, which is usually when the road has been wet and the wind is in the west-south-west, the noise does feel as if it's absolutely on top of you. It's like great waves of thundering noise." In contrast, he says, "Yet other times it can be completely still because the wind's from the east and the surface is dry [...] If you have a good north-east wind you can't hear the motorway, but it's so bloody cold you don't want to be outside anyway!"

The couple don't use the area of the garden to the west of the house, which is closest to the motorway, and whenever a window has to be replaced on this side they install double-glazing. To the rear of the house, behind their conservatory, they have built a walled garden to reduce the noise levels, though this can also be affected: "Depending on where the wind is the noise can bounce off the house. You can be fairly oblivious to it, but anyone who comes in says, 'my God that motorway's noisy.'"

A says that the general view locally is that people eventually become used to the noise: “There’s a bunch of ex-council houses called Chiltern View [...] close to the church, and they’re very close to the motorway, just a little bit of field between them and it, and some of the people there say ‘we’ve listened to it for so long that we really don’t mind.’ It’s basically the problem is in the summer, when you want to have your bedroom windows open and that sort of thing, that you do get a steady and an increasing noise [...] In the end people learn to live with it. It is just intrusive – very intrusive really – in what is essentially a rural area.”

He adds: “The issue for me is that there’s an ability to deal with it, it can be dealt with [...] We’re not going to move the motorway, it is where it is, it shouldn’t have been where it is, but it is. To my mind this stretch is a special case because it wasn’t designed as a motorway and so it wasn’t actually located properly taking into account what it was going to be used for. So they actually ought to take some measures to suppress the noise, or mitigate it and it is perfectly possible to do so – it costs money.”

Effects in the wider area

On the shoulders of the slope coming down from Stokenchurch to Lewknor there is a nature reserve, which is “obviously not one of those places where you go to get away from it all.”

A considers that the road noise affects property prices, especially since visitors are generally struck by it. He estimates that the noise can be heard from up to a mile away from the road and, on a clear evening, for about two miles as a distant rumble.

Interview 2

Context

Interviewee B, a research assistant, lives in Postcombe, South Oxfordshire, with her husband and 16-year-old daughter. Postcombe is hamlet located on the A40 to the east of Tetsworth. B’s house, between the A40 and the M40, is approximately 250 metres, or “a field away” from the motorway.

Relationship with the road over time

B has lived in the house for 22 years and in the village for 30. In her view the big change in the impact of the road followed the extension of the motorway to Birmingham: “Traffic has increased so much more,” she says, “It used to be a very quiet motorway.” B uses the motorway when travelling to London and High Wycombe, but not to travel to Oxford where she works. Her husband uses it on most days to commute to Slough.

Current effects of living near the motorway

The noise is the most annoying aspect of the road and particularly affects the way the family use the house and garden in the summer: “I love to be outside. I love my garden. There’s a certain tension you get when there’s constant noise [...] I’d have more seating outside if it was quiet. I tend to scuttle indoors which isn’t me. It definitely makes me more tense. You particularly notice if you go somewhere else it is nothing like the constant background noise. And when you sit out then you realise how awful it is here.”

Although they have put up a large fence at the back of the garden as a screen to the sound, B says it appears to come across the fence and bounce off the walls of the house. The family have recently put in a new door, but find noise comes through the vents. Although the whole house is double-glazed, B can still hear the traffic standing by the windows. The family never leave the windows open at the back of the house, and last year had a faulty window, which meant B’s daughter was kept awake.

The problem is very weather dependent. “If we’re lucky enough to get a northerly wind we don’t hear it much. In summer, when it is very settled the motorway is quieter.”

Effects in the wider area

For many years B tried to establish a playground in Postcombe, and one of the landowners offered a field, which was nearby but next to the motorway. Because of this, not enough parents wanted to take up the offer.

The motorway noise has also affected some local walks, particularly a walk round Aston Rowant Nature Reserve (in the Chilterns AONB), where the car park at the start of the walk is close to the motorway cutting: “It is not very nice at all to walk there now. If you go there you don’t do the motorway bit.”

B estimates that the motorway can still be heard from a mile away.

She has personal experience of the effect on the desirability of their property. They spent three years trying unsuccessfully to sell their house and were advised by estate agents that the motorway was the big factor in discouraging potential buyers. “If they came on a noisy day it put them off. They liked the house. We’d go into the garden, open the door and wham!”

Interview 3

Context

Interviewee C, aged 55, lives on the edge of Stokenchurch, where he farms mixed arable and beef on 380 acres. He built his house in 1980, and lives there with his wife and children, though his eldest recently left home. His family has farmed there for 300 years and his parents, now in their eighties, still live in the

main farmhouse very nearby. Stokenchurch is a sizable village on the A40 in Buckinghamshire (just under 2000 households in 2001 according to ONS). C's home is at one end of the village, close to Junction 5 of the M40, where the motorway runs through a cutting in the Chiltern escarpment. He estimates that motorway is about 200 yards from his house and 400 yards from his parents' house.

Relationship with the road over time

The family remember when this part of the motorway was built (the section from Stokenchurch to Wheatley, just outside Oxford was completed in the early 70s), and objected strongly at the time to the line of the route. This was particularly because C's mother was born in Lewknor, at a farm in a secluded valley, which C considers was "totally ruined" by the road, not so much because of the noise, but through its loss of isolation. Despite their objections to the route, the family realised once the road was built that it was the "only sensible option". The construction of the motorway caused them problems in terms of access, but these were ameliorated by buying some land from a neighbour to provide a right of way. The motorway then provided an improvement for 10 years – between the early '70s and the early '80s it was "a very quiet road." Since then however there has been a gradual escalation in the volume of traffic and noise, which is now "pretty much 24 hours a day".

C uses the road himself for leisure journeys, though not for farming, and sees the accessibility it provides him and his family as a 'definite advantage'. The other advantage of the road, in his view, is that it takes the traffic off the A40 through Stokenchurch itself. However, when the M40 is blocked – a frequent occurrence – the traffic that builds up on the A-road causes further problems for accessing the farm (see below).

C's wife previously lived in Stokenchurch in a house very close to the motorway, where she says, "you couldn't sit out in the garden." Both C's family and his wife's family received some compensation as a result of the motorway.

Current effects of living near the motorway

C finds the noise from the road "just permanently intrusive". His hearing is declining and the constant background noise accentuates this difficulty.

He says of the disturbance: "It is very much a waking thought 'how bad is the noise today?'" The level is highly weather-dependent: "When there's a south-westerly and there's rain imminent, then the noise is absolutely horrendous. Much worse here than it is at father's house [...] I'm convinced that the cutting creates a sort of amplification effect." He adds that while the problem at the house is one of background noise, he sometimes works in fields right next to the motorway, which "makes your whole body vibrate".

While the noise has been partially screened by tree planting at his parents' house, this is not an option at C's house: they don't own the relevant land where planting might help, and in any case, planting trees on the southern boundary of the fields would be bad farming practice.

In summer, noise prevents the family from holding a conversation in the garden, and consequently, they don't spend as much time there as they would like to. C says noise levels in the village have also had an effect: "I play a lot of cricket and the cricket ground is right next to the motorway and I found that really unpleasant and I gave up probably a bit prematurely [...] when I was 40. I played solidly for 20 odd years, and I found it an unpleasant experience playing cricket where you couldn't hear people in the team giving instructions on the cricket field and you had to do it all visually [.....] That is really intrusive, it's a leisure activity where you're trying to relax and you've got this constant roar."

His family's relationship with the land means that he sees no choice but to resign himself to the noise: "The practical implications are not really that major are they? It's just a constant intrusion and, you know, there are things in life that you have to put up with and farmers can't just move. You know if you lived in a house you could up-sticks and move somewhere else, but I can't take the land with me. So although I sometimes threaten to move... I've got a friend of mine whose moved to Dorset, and I go down there quite often, on the Wiltshire-Dorset border and I think it'd be lovely to farm down here, the only noise you can hear is the buzzards and the bird life generally [...] You can't up-sticks and move your farm and there's a lot of history here as well which you can't take with you either so I'm unlikely to do that."

C estimates that the motorway is closed about three times a week, usually because of an accident. When this happens diverted traffic blocks the A40. This is a particular problem during silage making, when all the silage enters the farm through the front gate: "When you've got six trailer loads an hour coming in and out of the farmyard, in rush hour periods it really slows us down, because you can't get on to the road with the tractor." The planned replacement of the bridge across the motorway at Junction 5 is also expected to cause considerable access difficulties for the business in the near future, especially since some of the land C farms is on the far side of the bridge. Access and noise are therefore the main problems from the motorway that now affect him.

Effects in the wider area

In addition to the problems of the cricket ground, described above, C mentioned the impact of the motorway on Beacon Hill, one of the old Armada Beacons and part of the Aston Rowant Nature Reserve. This spot, provides a "fantastic view" over Oxfordshire, but now overlooks the motorway cutting.

In general he adds that it is noticeable that the impact of the noise varies a great deal across the area.

Interview 4

Context

Interviewee D, a recently retired design engineer, lives with his wife in Stokenchurch in a house overlooking the cricket ground. They have been in the property for 30 years and brought up their family there. D estimates that the house is about 300-400 metres from the motorway.

Relationship with the road over time

When the couple first moved in, the road stopped at Wheatley. Although it was noisier then, because of the surface used, D says the noise would cease at night when traffic diminished: "When I was going into London I've always gone in very early when I was travelling and when there'd been snow I'd be quite often the first person along it, whereas now it's 24 hours a day, 7 days a week. It never quietens because of all the heavy lorries. My wife describes it as a continuous train going by. Now, when it's about to rain, especially if the wind's in that direction it's very, very loud. And in my neighbour's garden at times you just can't hear yourself think, you have to shout at each other." He adds: "It's been very helpful for my business. But since it's been opened up to Birmingham it's been considerably busier and considerably noisier."

Lorries are particularly dominant. In the period before he retired D found the motorway "solid with lorries" in the early mornings at 6.20am. Similarly, returning at night recently, after seeing a London show, he found HGVs were the main road users.

Having travelled around Europe and seen sound barriers on continental roads, D considers that the fence used along the M40 at Stokenchurch could be greatly improved: "The barrier is totally inadequate that they've got on it 'cause it's just a fence. There's no sound absorbancy in it. If you travel - I've done a lot on the Dutch motorways and such - and you see the fences there, they're big structures and they've got labyrinths in to absorb the sound and all sorts. Whereas these are just as cheap as possible fences as they could put up." Though the fence is the length of the village, it is interrupted for a footbridge at the end of D's road, where, he says, the noise floods through.

Current effects of living near the motorway

Noise is the aspect of the M40 that disturbs the couple most. It can keep them awake at night and prevents them from opening windows as they normally would, so that they have to decide "whether to be too hot or too noisy".

In the summer, the disturbance also makes them less inclined to use their garden – "if it's noisy you tend to slip back into the conservatory", and discourages them from spending time watching cricket on the cricket ground outside their house: "Sometimes it's all right but other days it can be wearing - the noise is

wearing.” They installed double-glazing about 20 years ago.

There is a high level of concern locally about the frequency of motorway collisions: “Monday morning, Friday nights and Sunday afternoons are terrible, with the number of crashes that are happening. There’s questions being asked in the paper because we seem to be getting a few a week. You don’t hear them, it just stops the traffic [...] It stops on the motorway and piles through the village. I cycle around and as soon as you put more traffic on the road it makes it dangerous ‘cause they’ve no consideration for cyclists.” At these times, D says, large lorries manoeuvring in the village are also a particular problem. One concern has been the lack of services between Dover and Wheatley, with speculation that drivers coming off continental ferries may be falling asleep by High Wycombe. (D adds that services are now being built at Beaconsfield.)

The couple are regular walkers, but avoid places along the motorway, and are now much less inclined to visit Beacon Hill, where they used to go more often when their children were small: “It’s a beautiful spot, but it’s overlooking the motorway.”

Pollution is also a major concern, with cars and window sills “always covered in dirt.”

In addition to state-of-the-art sound barriers, D would like to see a quieter road surface, speed restrictions of 60mph, more police patrols and restrictions on HGVs, to prevent them from overtaking at times when traffic is heaviest and to prohibit them from using the road completely at certain times of the week.

Effects in the wider area

On a recent walk, D noticed that the road was still audible at some distance from the road: “We walked down the valley and as we were walking up the hill to Bennett End [two miles from the road] we commented that you could still hear it quite loud at that stage”.

He is certain that proximity to the motorway affects property prices in the area, so that their own house would be worth perhaps 25 – 30% more in a village without the noise problems. .

Interview 5

Context

Interview E is a retired childminder who lives on her own in a house that is part of a small modern estate close to the motorway in Stokenchurch. She has lived in her present house since 1993 and in Stokenchurch since 1965. She estimates that her home is about 100 yards from the motorway – between her and the road there is a row of houses, a small green and some trees.

Relationship with the road over time

E says that when she bought the house she knew the motorway was there but there wasn't the volume of traffic that there is today. She thinks the road has changed a lot: "Over the years the traffic has just got terrible." The extension to Birmingham made conditions much worse. "At night you get cars racing down the motorway – not every night [...] I'm always waiting for an accident. It's probably just kids mucking about, but then, there is a speed limit. And there's lorries, they don't very often do it, but if they see their mate coming the other way they'll toot the hooter to them."

E doesn't own a car herself. She has not driven since 1982 and has never been a regular user of the motorway.

E would like the Highways Agency to erect effective barriers on the Stokenchurch section of the motorway, of the kind she saw on a trip to Japan. These were curved in a way that threw noise back, and worked extremely well. "Okay, they're costly, but they're only put up in areas where they're populated" she says. She believes this would "make a great difference." She would also like to see more speed controls on the road.

Current effects of living near the motorway

The main aspects of the M40 which affect E are noise and pollution. She has recently suffered from asthma and her doctor remarked that this was through living in Stokenchurch. E showed me the dirt on her window sills and opened the window in her conservatory to demonstrate the roar from traffic going past.

The sound of the motorway often keeps her from sleeping and can also wake her up. She says the noise dips at around 1.30am, but starts to get busy again at 3.30am. All her rooms are double-glazed with the exception of the conservatory. However, E likes to sleep with the windows open as she feels claustrophobic otherwise. When E's family come to stay they find the level of noise in the back bedrooms disturbing and prefer to sleep in the rooms on the other side of the house.

In general however, she says the noise does not change what she does: "You just carry on the best you can."

Effects in the wider area

Annoyance from road noise is a common topic of conversation in the area: "they're always moaning to one another about the noise on the motorway" E says.

Interview 6

Context

Interviewee F, aged 75, is a farmer at Cadmore End, Buckinghamshire, where he lives with his wife. The farm is 130 yards from the motorway, but is shielded from noise by the bunds that were built at the time of the motorway widening.

Relationship with road over time

F and his wife have lived at the farm since they married in 1955 and brought up their family there. When they first arrived there was no road there, but it was nevertheless a line on the county map as the proposed High Wycombe bypass. Three alternative routes were considered before the current road came into use in the second part of the 1960s. To begin with it was not very busy at all, since it had only two lanes and stopped at Stokenchurch. It became much noisier once it became the London to Birmingham road. F was very concerned about the noise potential, but says he was able to persuade the Ministry of Transport engineer to use spare soil to build bunds in the immediate area on either side of the motorway, that would reduce the noise. The local residents' association was also pressing for this. The bunds have been effective in reducing noise levels at the farm, and there are parts of Cadmore End in the village itself that are considerably further from the motorway but much noisier – for example at the church.

F adds: "The thing that's surprised us over the years is how much busier it's become. It is a very busy road indeed now." The couple also received some compensation (around £10 – 12,000) for the effects of the road on the value of the house – a claim made following the suggestion of the District Valuer. This was in the 1980s.

F says they use the road themselves for access to London and Oxford and enjoy its scenery.

Current effects of living near the motorway

F says noise is the biggest nuisance associated with the road. Another issue is that the motorway affects access to different parts of the farm. They regularly cross it in six places using two tunnels and four bridges.

Asked how the noise affects them, F describes how they have become acclimatised to it:

"Those of us that live here, we obviously try to - there's no point in getting cross about something you can't alter – do you see? The only thing we could do about it would be to sell up and leave and we don't intend to do that [...]"

"We have made a particular effort not to be annoyed by it. I mean I do know somebody else who's near a very busy road and he pretends that– if it were a stream of rushing water you'd be very happy with it. But we're fully aware of the

extent to which it affects people who haven't go used to it. Now, we had an elderly couple from Scotland who'd come down here to stay with their son for a month or so before Christmas and they used one of our farm buildings for preparing Christmas wreathes, and they couldn't believe it. They wanted to get back to Scotland as soon as they could. Whereas for us it's become the same as people who have a railway at the bottom of their garden. In the end the only thing that wakes them up is if a train doesn't come."

There are no rooms in their home where the only windows face the motorway, and they keep windows on the motorway side of the house shut at night.

Effects in the wider area

F considers that the motorway noise has strongly affected property prices in the area: "The point here is not how much the place is worth, but it makes the difference between a place that people want to buy and a place that people don't want to buy, so that the actual, you know, way it affects the value is enormous."

He knows of a footpath in Lane End that has become very noisy as a result of the motorway, though it is not one he used himself. He adds that the noise has affected Cadmore End School (where he used to be a governor). The school is between the motorway and a B-road.

Interview 7

Context

Interviewee G and his wife live in a cottage at Handleton Common, Lane End, an attractive Buckinghamshire village of about 4,000³ people. It is located between the B482 and the M40, near High Wycombe. G, aged 70, is a retired chartered surveyor. The back garden extends north towards the M40 and the rear of the house is about 200 yards from the motorway.

Relationship with the road over time

The couple have lived in the house since 2003 and G says they were not initially deterred by the prospect of the motorway noise: "When we first moved here we noted the traffic [...] and the woman that was selling the house said that a lot of people had been put off by the noise and we went in the garden and we said well, you know, it's a lovely house and it is double-glazed so - now you can tell it's not noisy, in fact you can't hear the road at the moment - and we walked round the garden and it wasn't that bad, I didn't think it would bother us at all. We did notice after we'd moved in that on certain times of day it was a lot worse but it still wasn't that bad. But over the four years the increase in the noise has been just unbelievable. Mainly heavy lorries."

³ Number in 2004 according to Lane End twinning association www.le-ta.co.uk

Consequently G has become involved with Ken Edwards in local campaigning. They have found that the local council and local MPs have been very supportive of measures to reduce the noise but the Highways Agency “always have reasons why they don’t feel that it’s necessary”. They have been told that when the maintenance company eventually come to repair the road surface they will use a quieter surfacing material. However, G argues that noise barriers are also required.

G has taken regular readings of the noise on the local common, the back garden, the upstairs bedroom and at a house the other side of the motorway which suffers badly. He found that while the readings on the common were similar to those of the Highways Agency’s modelling figures for the noise, the readings elsewhere were higher. For example, the back garden decibel readings were mainly in the 70s and sometimes as high as 73.7. The upstairs bedroom also registered in the 70s. G has also been struck that readings from locations higher up the hill in the village but further from the motorway can show higher decibel levels than readings from lower locations that are closer to the motorway.

G used the motorway for travelling in the course of work and appreciates it as an amenity: “We love the M40 and we’re happy to be near it so we can use it to get out and about, but living near it is not good. And more importantly it’s got so much worse and I just can’t see it ever getting better and I just think it’s going to get worse.”

Current effects of living near the motorway:

Noise is the biggest nuisance from the road, and is a particular problem in the summer when they want to get out into the garden:

“It’s really upsetting in the summer when it’s a nice day. We like gardening - or my wife particularly likes gardening, I just dig the holes for her and cut the grass - and you can’t have a conversation. You literally have to shout – I’m talking about being just a couple of metres apart. You have to shout at each other or else you can’t hear. And you tend to forget after a while and you say something and of course she says “What?” because she can’t hear and I remember, and I raise my voice and we just finish up shouting all afternoon. It’s worse when the wind is from the north and the west, and obviously, if it’s been raining because of the surface noise of the tyres on the road.”

Sleep disturbance is also a major problem: “in the summer when it’s really hot, or when it’s really warm, we can’t have the windows open because the noise keeps us awake, [...] We can’t get to sleep. What happens is that the Heavy Goods Vehicles tend to prefer to drive at night, and if that’s their job I can understand it. But it means that this road is more busy with Heavy Goods Vehicles at night, as well as cars. And it is just so difficult to get to sleep.”

G has six grandchildren and they hold barbecues in the garden for the children to get together, but find that it isn’t pleasant because of the noise.

Effects in the wider area

Noise has been a particular problem for another family, whose garden is about 3 metres from the edge of the road.

G also says property prices have been strongly affected. A neighbour living nearby had difficulty in selling her bungalow, which took about three months: "People would turn up and then drive away. And the people who did look round would say we're not sure about the noise."

Interview 8

Context

Interviewee H is a retired occupational psychologist. She lives in Lane End in a small house which is part of a modern estate set on a hillside above the main part of the village. The house is between four and five hundred yards from the M40. H, who is 58, had a road traffic accident in 1999 and has since suffered from fibromyalgia, a chronic condition which causes widespread pain and fatigue and can also be connected with disturbed sleep.

Relationship with the road over time

H has lived in the house for nearly five years. When she initially viewed it, it was afternoon and she did not realise how intrusive the noise would be at night or that it would cause problems inside as well as outside. She hears the traffic as a boom-base effect, like unpleasantly loud music. In the first year that she moved in, H installed triple-glazing in the bedroom because she found it "unbearably noisy". However, the window seals were warped and it is only in the last few months that she has had the windows themselves mended, which has led to some improvement. Nevertheless she says, noise affects every room in the house. She now believes she has done what she can to abate it and the vibrations from the road are still being transmitted through the house brickwork.

Current effects of living near the motorway

H describes the problems she sometimes suffers at night: "The noise comes up through the pillow. It's a vibrational noise and you can hear it, it's a bit like the base beat of music and also a sort of incessant deep hum.

"It's various points in the day. 10.30 at night it will sort of increase and then perhaps it's gone a little bit less by 4, and then it whacks in again about 6.

"You've got a steadier time during the day, again it depends on the wind direction.

It's probably most copable with say between something like 11.00am to 3.00, 3.30."



M40 passing Lane End
Photo credit: M40 Chilterns
Environmental Group.

The main repercussion is sleep deprivation, which exacerbates H's medical problems: "At its worst it will cause pain in my ears. And you kind of can't relax and have a quiet time or read a book. It's sort of difficult to concentrate, but the sleep deprivation is the worst." Since she has been living in the house, H says she has needed treatment for high blood pressure, and has been told by her doctor that this is no longer going down at night in the way that might be expected.

To counter the noise H has tried many different strategies, including sleeping with ear plugs or noise defenders, sleeping downstairs and playing music and the sound of waves. The noise has also pushed her out of the house on occasion: "It's been to the extent that I've gone and stayed with friends at times to give myself some respite from it."

In the last couple of months she has found the noise less invasive, and puts this down to the repair of her windows or a change in prevailing wind direction.

Because of the noise she tends to sit out less, and if she does sit out, will avoid her garden on the motorway side of the house: "I wouldn't use that bit [...] it is quieter sitting at the front here, so I just sit out at the front in the car park." She adds that living near the motorway means she cherishes the time when it is quiet, when she tends to concentrate more and relax: "It alters one's life, in terms of freedom to do what you want when you want." She says living with the noise affects her energy levels, motivation and concentration.

Effects in the wider area

H considers the noise is a problem within about half a mile of the motorway.

Her neighbours are not generally disturbed to the extent that she is and this may be because of the orientation of their houses. One neighbour, who has since moved, told her she thought it was bad, but tried to think of it as the sound of sea.

Interview 9

Context

Interviewee I, her husband and their two children live in a large house with a few acres of land, set in a relatively secluded area in Penn, Buckinghamshire, on a hillside that faces the M40. The house is approximately a mile and a half from the motorway. I no longer works but used to be in the fashion industry. Her husband is a fashion consultant.

Relationship with the road over time

I and her family moved to the house nearly 11 years ago. At the time they thought the house was perfect and there was no traffic noise there. In the last ten years they have renovated the property, with the intention of staying there

permanently. They first noticed the motorway noise three years ago and since then it has become considerably worse. As a result they are now planning to move.

I says: “This is a house we bought for the rest of our lives. [...] We’ve had to change our plans completely because I don’t want to stay here. You know, the whole idea for a retirement house in the country was to be in the country, not to have the constant drone of traffic. [...] it just defeats the object of being here really. It’s just changed our quality of life, [...] we don’t want to sell the house because it’s in a beautiful spot, it’s lovely.”

They frequently use the motorway, including for her husband’s work.

Current effects of living near the motorway

I finds the noise intrusive on a daily basis: “It’s just upsetting I think and, and it really stresses me, the fact that I bought a house for us and the dogs to walk out into the ground, into the garden and be at peace with nature really, with the birds and everything else. All I can hear now is the constant drone of the motorway. Some mornings [...] you can hear it through the window, you don’t even have to open the window, and, you know, [...] whoever makes the tea in the morning, will say, ‘gosh it’s a bad one today’. So it starts the day thinking ah, here we go.”

They can now hear the motorway at night and think this is the result of increasing numbers of lorries. Morning however is the time when the noise is at its worst, from about 6.30am.

I says that although she loves gardening the noise deters her from going into the garden in the summer, and they now go away for the summer because of it.

Effects in the wider area

People living in neighbouring properties are also troubled by the noise of the motorway. I is certain that it affects property prices: “We will be selling our house next year. [...] if we were to take someone round on an average day, they would not buy our house. I would say it’s affected it that much.”

Interview 10: Ken Edwards

Context

Ken Edwards is a retired telecoms engineer. He and his wife live in Lane End, Buckinghamshire, in a house on the edge of the village that is approximately 150 yards from the motorway. The couple have lived in the house since 1976 and brought up their family there.

Relationship with the road over time

At the time when they bought the house the road was the High Wycombe bypass. Ken first became involved in trying to quieten the traffic in 1989/90, but says it is since the end of the '90s that noise at night has become really pervasive.

Ken's current work on campaigning to reduce the noise originated in 2004. At that time he was ill for a period, during which his wife did a lot of the driving with the result that Ken was looking around him. In the course of the year they made many motorway journeys, often travelling at night. On one occasion they happened, unusually, to drive their own section of the motorway and Ken particularly noticed how near the village was to the road: "I was struck that I could see so many lights close to the motorway [...] and I started looking for other places that were like that, 'cause I'd always thought prior to that, well OK, it's just a cost of living in the South East, we get the advantages, we have to pay the penalty. And I was startled that on the M1, the M25, A1, M11, I couldn't see houses close to the motorway. And I realised that more modern roads didn't pass as close to houses and when they did there were either tall fences or there were big earth banks— that the design had actually changed since this one was built."

Most of the noise that affects the couple's own home comes from 400 - 500 yards away, across the village, rather than from the nearest stretch of the motorway, which is in a cutting where some of the sound is absorbed. Ken was struck that if the noise was hitting them from across the village then it must be having a greater effect on other homes along the way. A door-to-door survey showed that many people were suffering from it and Ken, who was by this stage retired and recovering from his illness, determined to do something about it: "I suppose I'd spent my years trying to deal with businesses that were impenetrable and thought, well, let's try it on the Highways Agency!"

He consequently set up the M40 Chilterns Environmental Group to see what could be done about the problem, particularly through High Wycombe to Tetworth.

Current effects of living near the motorway

Ken and his wife have taken several steps that reduce the noise at the front of the house, which faces the motorway. They have grown bamboo, installed a water feature and built an extension, which they deliberately sited to block the sound of the traffic. The main part of the garden is on the south side of the house, and faces away from the road. As a result Ken says, the noise is "an irritant to us, but I wouldn't have said that it's more than that."

They don't generally use the side of the garden on the motorway side of the house, but a relative who had recorded a wedding video there, found the noise so intrusive that he thought it was a fault with the recorder. A single bedroom at the front of the house is used for children staying over night, but Ken says an adult would not be able to sleep there. The house has double-glazing and they only open windows on the non-motorway side. They generally avoid recreational walks that are near to the motorway.

Effects in the wider area

Noise was one of a range of issues included in a recent questionnaire sent to every home in the village (with a 38% response rate). The survey found noise from the M40 was a disturbance “continually” or “more frequently than not” for 39.5% of respondents: (continually: 26.4%; more frequently than not: 13.1%; occasionally: 30.1%; never: 20.7%).

Ken says houses in the area appear to take longer to sell and some people stay for a very short time: they know of people who realised they had made a mistake within a month of buying. He knows of some very elderly residents who have talked about just abandoning their property because they have been unable to sell.

Brief follow up telephone interviews

Chilterns AONB

A number of the interviewees above mentioned the effects of motorway noise at Aston Rowant Nature Reserve. Steve Rodrick, Chief Officer of the Chilterns Conservation Board comments that ambient noise levels in the Chilterns must be very high, not only because of the motorway, which he estimated, can be heard up to about two miles away, but also because of other sources of noise in the area, including light aircraft, private helicopters, sports cars, motorbikes and train whistles on the Chiltern Line. The Conservation Board is especially concerned about the possible prospect of a third runway at Heathrow, which would lead to more flights over the Chilterns. He adds that light aircraft tend to use the M40 as a navigational aid.

Steve considers it likely that noise affects the enjoyment of visitors to the Aston Rowant Nature Reserve and of walkers using the Ridgeway National Trail, which crosses the motorway. He would like to see noise mitigation through resurfacing with a low noise surface and through the use of speed restrictions.

Estate agents

Karl Avery a senior negotiator in the High Wycombe office of Andrew Milsom and partners says people do not usually mention road noise as a reason for not buying a property, though they will sometimes raise the issue of a road being busy. He adds that most buyers recce the area before hand and would not usually ask for a viewing if proximity to the M40 was an issue for them. In addition, he says, modern double-glazing can be very effective and they have sold some exceptional properties at premium prices within a few hundred yards of the motorway. Nevertheless, he thinks that, in a place like Stokenchurch, an ordinary two-bedroom terrace house would achieve a higher price if it was on the non-motorway side of the village.

Paul Lenton a partner at Christopher Pallet in High Wycombe says that in his experience a house close to the motorway would take longer to sell, and that if people were choosing between two similar houses that were different in terms of proximity to the motorway then nine times out of ten they would choose the one further away. He estimates that the difference in price would be perhaps 5%.

Cadmore End School

Cadmore End School, in Buckinghamshire is a small C of E voluntary aided school for children aged 4 – 11, which lies between the M40 and the B482. Head teacher, Peter Durrant, estimates that there is approximately 50 metres between the school buildings and the motorway, and just 15 metres between the fence at the edge of the school grounds and the fence erected to screen the M40. He says motorway noise affects the school's use of the outdoor area in that it prevents them from holding assemblies and meetings in the school grounds during the summer as they would like to. They tried this last summer but found it was not possible to compete with the sound of the traffic. The school building is built above the level of the sound proofing fence and this limits the benefit they receive from it. Trees, mainly on the school land, provide some noise protection when in leaf during the summer. While motorway noise is an issue for them, the head regards their more severe problem to be the danger from fast traffic on the B482, immediately in front of the school. The school has been campaigning to reduce the 50mph speed limit on this road and has documentation on the issue that goes back 18 years. The head adds that this traffic danger deters some parents from sending their children to the school, which is otherwise sought after.

Other schools

In the course of the interviewing unannounced calls were made on a primary school and a playgroup in Lewknor. In both cases staff said that noise from the motorway was not a concern for them.

Case Study 2: Dumfries and Galloway minor roads near A74(M) and A75

Background

This case study relates to minor roads in the vicinity of a stretch of the A74(M) motorway just north of the Scottish border, between Ecclefechan (Junction 19) and Gretna Green (Junction 22).

The five case study households are situated some distance from the motorway itself, on minor rural roads which feed into or cross the motorway. The interviewees are in two clusters, to the north-east of the motorway around the village of Eaglesfield, and to the south-west of the motorway around the village of Brydekirk, which lies between the A74(M) and the A75 Annan bypass.

This area of Scotland could be categorised as an 'accessible rural' location. The M74/A74(M) Glasgow to Carlisle motorway was built in stages from the mid 1980s to the mid 1990s¹. Stretches have recently undergone upgrading from two to three lanes. The port of Stranraer in the north generates a lot of cross-border freight traffic.

Three interviewees are located near the village of Brydekirk. Brydekirk has about 200 inhabitants and is a ribbon development with houses on both sides of a minor road, which forms a route between the A75 (about 3km to the southwest) and Junction 20 of the motorway (about 4km to the northeast). There is a 30mph speed limit for a stretch of approximately one mile through the village, with a narrow bridge at its northern end that acts to limit traffic speed. This road is part of a network of minor roads and B roads between the A75 and the A74(M), which elsewhere are largely designated 60mph (national speed limit). Some of the roads have long, straight stretches which invite some fast moving vehicles. Other than the Annan bypass to the south (the A75), these roads have remained largely unchanged apart from minor repairs. However, a major complaint is the poor road surface which can exacerbate the road noise.

One of these interviewees lives in the village of Brydekirk itself. The other two are situated either side of a small intersection of two minor roads about 1 km north-east of the centre of Brydekirk village. Between Brydekirk and this crossroads, about 0.5 km from the junction, a farm plot has been converted to an agricultural feed factory, owned by an international animal feed manufacturer, BOCM Pauls. This is a major source of traffic movements to and from the site, including large (40 tonne) lorries. The farm had been empty for a couple of years at the end of the 1990s. It was then purchased by Kingans with plans to let some of the land for a milk bank. This was refused permission on the grounds of the number of heavy goods vehicles involved in the development. They were granted a licence for light industry and were restricted to 8 x 17.5 tonne lorries. It was sold about 6 years ago to BOCM Pauls who still have that licence, but, because the licence restricts the number of vehicles they can own, not the traffic movements per se, 40 tonne lorries now service the plot².

¹ <http://www.iht.org/motorway/page1.htm>

² These facts have been collected from the interviewees and have not been verified from official Council documents.



The crossroads location can be seen below, showing the straight stretch of road and the bungalows very close to the road. The 40 tonne lorries which pass by this stretch are almost as tall as the houses themselves.

The other two interviewees live in Eaglesfield, a village to the north east of the motorway near Junction 20. One lives in a cul-de-sac adjacent to the B722 and the other lives on a minor residential road that branches off the B722 and travels east out of the village. Both these locations are the opposite end of the settlement to the motorway, which is over one mile away. The issues here are similar to Brydekirk: heavy goods vehicles generated mainly by local businesses using minor roads to cut cross country. Some of these businesses are deemed by the residents to be inappropriately located and the motorway traffic is a minor issue in comparison to the local traffic. The following photograph is a taken outside C's house and shows one of the lorries belonging to the local haulage business located further along this minor road at the eastern edge of the village.

Case study interviews

Summary

The 5 case study interviews were contacted initially through one person who had contacted his local Friends of the Earth about the issue of road noise. The other interviewees were found through a snowballing effect from this initial contact. Four were carried out face-to-face, and one by telephone. All the interviewees are retired and spent a lot of time in their homes. Four of them have been relatively active in trying to draw the attention of their local authority to noise disturbance.

Key points emerging from the interviews:

1. Traffic noise in this part of Scotland is primarily a result of increasing numbers of heavy goods vehicles travelling on minor rural roads deemed to be unsuitable for these types of vehicles. Whilst the motorway itself adds to the problems, particularly because of 'rat running' on minor roads between major roads and the motorway, it is not the sole cause of the problem. Traffic movements from local business are also a significant contributor to traffic noise. As people are living in very close proximity to the roads, often only metres away from their front wall, the noise can be extremely loud:

"From 8.30 usually in the morning and probably before, the transit of wagons up to the quarry is all day long really weekdays, and transit of wagons back, full ones. [...] The emptiest ones are the noisiest because they are great big empty chambers and the noise from that is phenomenal to be quite honest." (Interviewee D)

"It is so close to the road here and if we were further back, I think it would still be annoying, but of course these houses were never built for this type of traffic and of course it is only going to get worse [...] it wouldn't be so bad if it was just cars."

(Interviewee B)

“The tractors are getting bigger and bigger – they are enormous wheels and they are using the grass verges as part of the road now.” (Interviewee B)

“You get buses through here as well during the day and you also get tractors. Lots of tractors, it is terrible.” (Interviewee C)

The ‘rat running’ phenomena was specifically mentioned by most interviewees. This is seen to be due to traffic taking short cuts to and from the motorway, combined with changes in weight restrictions and signage which divert the problems onto local and even residential roads. It was also felt that once a route starts to be used by some vehicles for whatever reason, it then gets ‘opened up’ and becomes a ‘main route’:

“The local roads are now known as a rat run between the A74 and the A75. It has become a main route.” (Interviewee B)

“... we are getting huge international lorries coming through the place now, going well in excess of 30 mph.” (Interviewee E)

“They come into Annan, they go across to the A75, to go down to Stranraer. They have got as much right as anyone else to use the roads that are available [...]but I think it is a total madness these container wagons going through.” (Interviewee E)

There is a strong sense that things have been getting worse and that it will only continue to escalate given the inevitability of increased traffic growth:

“In that 6 years it has gone from intermittent during the day to constant three quarters of what I call daytime.” (Interviewee D)

“People in the centre part have been saying to me how noisy it is becoming, and these are people who have lived here all their lives, and their parents and grandparents before them, and they keep saying how busy and how noisy it is.” (Interviewee E)

“When I go down that motorway now it is just nose to tail HGVs from Carlisle up here. Basically because you have got the ferry ports and they are all heading for Stranraer, so we get more HGVs here [...] Something’s got to be done. But it ain’t going to go any better. Obviously its only going to get worse.” (Interviewee A)

Perversely, traffic levels through the village are better when the motorway is undergoing upgrading or maintenance. This is because traffic speed is slowed and enforced during roadworks and this results in fewer crashes that divert traffic through the village:

“We have had accidents at a bell of rate on the motorway and they were blocking off the motorway and that meant everything was being diverted down through here to pick up the Langholm or Edinburgh road. Since the motorway works have been going on we haven’t had it as bad because they start restricting the traffic and slowing it down.” (Interviewee C)

2. Much of the traffic disturbance is believed to result from one-off planning permissions that can generate traffic and give rise to disproportionate noise issues over a wider area. There are two specific examples of an agricultural feed factory on a former farm plot and a lorry park in the middle of a residential area.

“It [the feed factory] only employs 9 people, but it drags in a lot of heavy traffic from all around, and I mean heavy traffic – 40 tonners [...] It has just gone from bad to worse. The last two or three years have been really horrendous.”
(Interviewee B)

“Everything that goes there has to go up here and back through the village, because of the way the weight restrictions are. [...] The wagons travel all through the night. They warm up. That is a big issue. Starting their engines from cold and letting their engines warm up for half an hour or three quarters of an hour.”
(Interviewee C)

“What I can’t understand is why there is an industrial park adjacent to the motorway at the end of this village with plots to let e.g. for haulage companies, and they let them do this. It is crazy. There is no thought, no planning.”
(Interviewee D)

This leads to a strong sentiment that the planning system is ultimately to blame and that priority was given to businesses above residents:

“What they must stop doing is creating factories in the middle of the countryside like this. [...] I have never heard of a farm becoming a factory. How that ever got through, I don’t know [...] They put them [the factory] first and you [residents] second. They are paying big rates and they don’t want to upset them.”
(Interviewee B)

“The council appear to give the go ahead to things without giving it a thought about the infrastructure that is in place. 500 houses, golf courses, hotel and a full complex, and the roads down there are narrower than they are here.”
(Interviewee A)

One interviewee felt that the local authority’s biggest concern was not the safety or noise issue but simply how to make sure the infrastructure could accommodate traffic:

“I believe the traffic movements were considered. But the biggest concern at the time from the local authority was the concern whether the old bridge would carry the weight of the lorries.” (Interviewee E)

3. The size of the vehicles, the speed they are travelling and the uneven road surfaces all exacerbate the road noise.

“Was this built for 44 tonne lorries? It wasn’t even built for horse and cart.”
(Interviewee C)

“When they are empty, they hit this lump, and the noise is absolutely

horrendous. It hits a lump, it echoes around this big empty thing – it's like a big drum." (Interviewee A)

"They can put brand new surfaces down and within 6 months there are potholes developing. It started to go concave in places because of the weight of the lorries, you see. 40 tonnes is a lot of weight on an axel going through a rural village." (Interviewee D)

"The pot holes are unbelievable with the lorries churning it up." (Interviewee E)

As a result, weight and speed restrictions are seen as key solutions. However, the problems experienced by the interviewees were to some degree caused by weight restrictions on adjacent roads pushing the problems elsewhere – i.e. on to their roads. This all points to the need for a more strategic, area wide approach to planning restrictions and networks for heavy vehicles:

"The only solution I can see as far as this noise is concerned is to slow them down and if they are not slowing them down, to cut the size of the wagon down." (Interviewee A)

"They have been trying to get 20 mph signs since I have been here and they are still talking about it..." (Interviewee C)

"Although there is a 30mph speed limit through the village itself, the lorries come pounding down there [past the church]. It is unbelievable. The lorries that are using it are unbelievable in terms of speed and how many lorries are using it. [...] I honestly do believe they should be cut down to 20mph and that there should be calming zones." (Interviewee E)

Other than these solutions, the interviewees saw few other remedies, other than to strengthen the planning system.

"I have been trying to think of remedies to stop the noise [...] you know these things they put up on the sides of motorways [...]but it would spoil the whole area anyway and it would look a bit peculiar, it would look like a prison in the home." (Interviewee A)

4. The noise from road traffic directly impacts lifestyles of the interviewees and reduces the enjoyment of living in their homes:

"The big problem here is that it impacts on your lifestyle. It definitely does." (Interviewee D)

"Of course I wouldn't have come to live here if I'd have known we were to be faced with this problem." (Interviewee B)

Some interviewees felt the rhythm of their lives are somewhat dictated by the noise:

"Their first wagon leaves there at 5am. How do I know that? Because I hear it going past .. but that is only one of these 17.5 tonners – that is one of their own ones. About 6 o'clock you will start getting these feeders coming in and there's your 40 tonners going past." (Interviewee A)

“[...]you know when they are coming from the factory because there is that rumbling and you know when they are coming up through the village. [...] It’s a relief when it reaches evening when you get the odd one coming down then, and weekends it’s a blessing. I just sigh a huge sigh of relief.” (Interviewee B)

The noise affects activities that are undertaken in the home:

“I read a lot and this is a problem as your book almost moves as these things go past. [...] But my walls creak as these things are going past and you think to yourself well what sort of damage is it doing to the property?” (Interviewee B)

“In winter when you are watching the television the television goes off because it is a satellite dish and when one of these wagons goes past it just breaks all the screen and then you have to wait while it settles down. Because these 40 tonners are bigger than this cottage. They are higher and they knock all the signal out.” (Interviewee A)

“[A friend] is interesting as when he did his alterations he did it so he can live at the back.” (Interviewee D)

“[...]I must say the cottage my mother in law had, I felt very sorry for her, because she had to have the television so loud because the noise of the traffic going past her house. The lorries there were quite intolerable.” (Interviewee E)

More distant noise coming from the motorway was also reported as making certain activities unattractive:

“I can hear the motorway from where I live, rumbling away, especially in wet weather it is worse than dry. I am more set back and can hear it every day all day. People think , with 3 or 4 miles from the motorway we won’t get that background noise, but we do. So I go in the back if it is summer weather I go in the back garden or go indoors to be quite honest unless it is really warm.” (Interviewee D)

One interviewee talked about how she tries to go out as much as possible to avoid the noise:

“You hear it before you get up. Actually it is a relief to go out for the day or in the afternoon to get away from it [...] I try and go out as much as possible now but my eyesight is getting worse and I don’t know how much longer I can drive so that would be disastrous for me, really.” (Interviewee B)

In particular, use of the garden is affected:

“So it is a rural environment and it is like living in a city, its ludicrous really. My back garden is adjacent to fields and you can hear it. In fact, it is so noisy that if you are conversing you stop conversing until the vehicle has gone by and then you start again. So I don’t use my front garden, or only at weekends, and the front is where you are getting the sunshine and nice and pleasant but I don’t sit there.” (Interviewee D)

“We tell them [the Council] it is very stressful. It is very stressful. You know, you

can't sit in your garden without something coming bumping and banging past. You know, you can't enjoy your property really." (Interviewee A)

In general, the interviewees feel that they personally have few options and feel the solutions are to do with the road itself:

"You think 'how much longer can I put up with this?' But we've no options really, have we? You either put up and shut up or keep battling on. Apart from trying to go out as much as possible, nothing else would work." (Interviewee B)

Moreover, there is a feeling that it is unjust that they should have to alter their lives to accommodate the noise:

"If I were here before the traffic, I don't see any reason why I should alter my lifestyle to suit what the traffic is doing. We shouldn't have to alter our lifestyle at all. If councils want to let these things spring up in the middle of a field somewhere then it is up to the council to put it right in my opinion." (Interviewee A)

5. Noise from road traffic can be a source of embarrassment with friends or visitors:

"Your house vibrates, literally ... and in fact, I have stopped inviting people because they just don't like sitting here when these things go past [...] I used to have discussion groups in here. But I go to them, I don't bring them here now because this noise is just so bad. In fact, they don't want to come and listen to it. [...] If people are coming, you know elderly friends, and you get these things bouncing around, people literally cringe." (Interviewee B)

"We had some friends staying with us the last few days [...] and they said basically that they were kept awake from 2 o'clock onwards by vans going up and big lorries coming down." (Interviewee C)

6. The fact that the noise interrupts rural tranquillity can make the problem seem worse:

"I love rural environments, I just love 'em. I just like to get up and walk about and hear natural noises. Birds' wings through trees, you know ... I can put up with a moderate amount of man made noise ... I put music on, I love music ... but this background noise here ... it's like incessant banging ... it's not just a rumble, it's a boom, bang, boom like minor explosions, that's what I would describe it like, you would say they are minor explosions ... it gets me down." (Interviewee D)

"If you are in a rural location and you are in the garden and birds are singing and then suddenly you can hear one [a truck] coming down the road like a tornado turning up ... you can hear it tearing down until gets to a clear part on the crossroads and it intensifies- changes gear – you can hear it speeding up and they bump and bang all down there and it is very stressful." (Interviewee A)

7. Noise from road traffic has effects on health and wellbeing:

“[It leads to] weariness and stressfulness: you just feel, you wake up in the morning and you think ‘oh dear, it is going to be that noise all day again today’. Its not very good for one’s wellbeing, is it?” (Interviewee B)

“I am positive it has a health impact. Especially in middle age to old age it has a major impact. It’s an anxiety thing [...] It is not a natural way for human beings to live. It stresses people out in old age when their immune systems aren’t half as good as they were when they were younger and it increases various illnesses.” (Interviewee D)

8. There is a concern that schoolchildren in the primary school in the middle of Eaglesfield village may be affected:

“If you are in school and you hear bang bang bang bang while you have got your head down on a textbook ... it’s crazy. [...] I don’t think the 20mph limit would help the noise problem because the 20 limit would only apply when the kids were coming in and going out of school. But at least it is a safety solution. They are that big and heavy – a 40 tonne vehicle takes three times the distance to stop at 30 mph.” (Interviewee D)

9. Noise from road traffic is felt to have an effect on local wildlife:

“It is also affecting bird life. Their normal behaviour is altering. We are not getting birdsong in the morning. We used to have red squirrels here and we went to great lengths to get signs put up, but the traffic has increased and we never see a red squirrel now. We saw them mashed on the road for a bit, but now they have disappeared. So it is having a huge effect on wildlife as well.” (Interviewee B)

10. Noise from road traffic is closely associated with safety issues. Together they can have an effect on people’s enjoyment of areas for recreation and general outdoor activity:

“Quite a few people in this village walk their children to school, quite a number do, and for me it is very dangerous.” (Interviewee D)

“It’s actually dangerous to walk on these roads. There aren’t any footpaths. I have a dog and have to walk on the same side of the road as the on coming traffic and sometimes I have to be prepared to jump in a ditch. [...] [Cycling] is even more dangerous. I have tried this and given it up with these HGVs.” (Interviewee A)

“For a rural area like we have got, we don’t see many people walking. The horse riders have all but disappeared.” (Interviewee A)

11. People are attracted to moving to accessible rural areas and can underestimate how the accessibility itself might be the cause of significant noise disruption:

“A lot of the new homes here are retired people [...]and I think they have chosen this area because of the ease of access. I think they are quite surprised when they find out how much heavy traffic is flying through. They have great rosy ideas about the north and how quiet and peaceful it is, but I’m afraid that doesn’t always work out.” (Interviewee E)

12. The noise disruption is perceived to have an effect on the saleability of property:

“I think, well, perhaps I should sell it, but who is going to want to come and live in a house with all this heavy traffic going past – I wouldn’t. I don’t think any of us would find it easy to sell our properties now. I think we are stuck with them and this is a very worrying situation.” (Interviewee B)

“I’ve put my house up for sale because I have had enough of it. I am at the end of my tether with the place because the lifestyle is chronic. Noise is one factor, flooding is another. [I intend to] move to somewhere rural. Very rural. [...] it is a massive house; a lovely bungalow. [...] I think the issues will and do affect the sale. [...] I am not quite sure I will ever sell it.” (Interviewee D)

13. Local authorities and political representatives are perceived neither to care nor to understand the issues. Hence much of the frustration is directed at the local planning authority – both in terms of road planning and ‘bad’ land use planning permissions:

“They are really hard work to get a decision out of. An ex councillor put it in somewhat of a nutshell – he said that across the council there seems to be a reluctance to take decisions in case they are wrong [...] I don’t think it is so much money as I mean it would not cost them a fortune to put restrictions on this road.” (Interviewee A)

“The word corrupt comes to mind. I don’t mean financially corrupt, but as an organisation they are corrupt. These people know what they are doing and they still do it. These people are not stupid.” (Interviewee C)

There is also a sense that the accountability is lacking in the way that the officers control the councillors on technical issues such as these:

“We have been in touch with about 70 or 80 councillors in Dumfries and Galloway – they do not want to know. The officials don’t want them to become involved. They become the lackeys, the tools of the council officials – the very people they are there to monitor.” (Interviewee C)

“No one is prepared to do anything [...] the councillors should have control over the local council but it is the other way round – it is the officers that run things.” (Interviewee B)

Consequently, residents can feel frustrated with the way they are treated by local authority and political representatives:

“About 400 pages of traffic act. I mean they quote all this, and then it leaves you feeling – well – shall I spend 5 hours on the computer reading through all this bumph to try to find the right section that covers this piece...” (Interviewee A)

“Whoever you communicate with to get something done passes you on to someone who passes you on to someone else and eventually there is the Ombudsman and the Ombudsman doesn’t know anything and nobody is answerable. [...]” (Interviewee D)

One interviewee was told:

“The roads don’t meet the criteria for putting weight restrictions on the roads. Don’t meet the criteria in the local speed guidance. And the local council have said that you would just push the problem on to someone else.” (Interviewee B)

A couple of the interviews felt that it is imperative that the authorities come and carry out a proper evaluation of the noise that they are experiencing and of the fact that rat running is taking place:

“When they come and ask you about noise and so forth they say you have got to be able to hear it in the house, not in the garden and that’s their response, but I can hear it in the house and the garden.” (Interviewee B)

“We have put [the question] to the local authority ‘why isn’t there some kind of a census and monitoring of what is going on?’ Because there is no question about it, you can tell from the registrations and everything that there are people using this as a short cut.” (Interviewee E)

“Someone from the authority came and spent an hour and wrote back and said how impressed he was with how quiet it was in the village [...] People had been writing to him who had lived in the village for 35 years, but how could they compete with his visit of an hour? It is the sheer arrogance.” (Interviewee C)

These interviewees were prepared to battle on, although there was some sense of frustration with neighbours who were prepared to just grin and bear it:

“We are trying to battle through it ourselves [...] I cannot afford to go to solicitors. If I could, I would, but I can’t.” (Interviewee A)

“People do not do anything about it. They just take it on the chin... It makes me wonder what they would put up with before they would object.” (Interviewee D)

However, there was a recognition by at least one interviewee that some of the most vulnerable people may not be inclined to complain, even though they may need the most relief from the problem:

“More now than ever you have a lot more elderly people living on their own. These are generally people who are used to making do and are very apprehensive about saying anything. They are suffering, but they are suffering in silence.” (Interviewee C)

Interview 1

Context

Interviewee A lives with his wife and both are retired. Their house is situated at the crossroads of two minor roads between Brydekirk and Junction 20 of the A74(M). The front wall of the house is only about 4 metres from the road, with a narrow front garden, a short wall and about a foot of verge separating it from the road. The feed factory is about 500 metres down the road in the direction of Brydekirk. A works part time in a hotel two miles away and his wife works in a charity shop in town.

Relationship with the road over time

The couple moved here to retire 10 years ago. At that point, the motorway was already built. The immediate local road network has not changed in terms of layout or management. The roads have seen a small amount of upkeep and resurfacing.

A major source of increased traffic and road noise is the nearby feed factory. When they moved to the house, the farm that now accommodates the feed factory, was closed. The subsequent sale of the farm to Kingans but later to BOCM Pauls has been a major source of noise from heavy goods vehicles. The problems are largely confined to weekdays and during business hours. Nevertheless, the timing and frequency of movements and the size of the vehicles together add up to a serious issue for A and his wife: "Their first wagon leaves there at 5am. How do I know that? Because I hear it going past .. but that is only one of these 17.5 tonners – that is one of their own ones. About 6 o'clock you will start getting these feeders coming in and there's your 40 tonners going past."

There had been other direct noise issues from the factory, namely an incessant 'bleeping' from the machinery. After some battle with the council, this was assessed and then stopped.

In addition, A noted a variety of other reasons why heavy goods traffic had increased over the decade. In particular, the local roads, including a minor road through the village itself as well as one to the East, are used as a short-cut between the A75 and the Junction 20 of the A74(M) (essentially cutting off two sides of triangle). The short cut is used by both local traffic, for instance to and from a local quarry, as well as longer distance traffic. In addition to the feed factory's trucks and other heavy goods movements, A believes that private traffic has also increased. He observed that ten years ago there was not a supermarket in Annan, but there is now a small Somerfield which attracts traffic from Ecclefechan to the north, some of which will travel past his house. In general, A thinks: "It's all increased. When I go down that motorway now it is just nose to tail HGVs from Carlisle up here. Basically because you have got the ferry ports and they are all heading for Stranraer we get more HGVs here."

There are a number of factors which are believed to exacerbate the problems caused by the volume of traffic. The first is inappropriate speed. Much of this local

road network consists of long, straight stretches of road. There are currently no speed or weight restrictions on this part of the network. Consequently, A acknowledged the vehicles are not breaking the law at 60mph, but believed there should be a limit of 40mph for roads of this type and feels that there are other local roads such as the B722 which is wider and better surfaced and thus more appropriate for this traffic. In order for traffic to divert to more appropriate roads, he believes speed and weight restrictions and signage are key: "The only solution I can see as far as this noise is concerned is to slow them down and if they are not slowing them down, to cut the size of the wagon down." The noise generated by the vehicles travelling at speed is made worse by the poor condition of the road surfaces. "When they are empty, they hit this lump, and the noise is absolutely horrendous. It hits a lump, it echoes around this big empty thing – it's like a big drum."

A has actively been trying to bring these issues to the local council's attention, as well as to his MSP Elaine Murray and the local police. There was a clear sense of frustration and disappointment in his local representatives. A has had large excerpts from the 1984 Road Traffic Act sent to him (by email) as justification for why they cannot implement such restrictions. His reaction to this was "About 400 pages of Traffic Act. I mean they quote all this, and then it leaves you feeling – well – shall I spend 5 hours on the computer reading through all this bumph to try to find the right section that covers this piece and quite honestly I don't feel like doing that. [...] I want him to print it off. I am going to ask him to send me a copy of what he is quoting out of the traffic act so that I can see it [...] because I don't think it is there. You have to get these people over a barrel to do anything. If I found out he's telling me lies, then he really is in trouble." His experiences have left him feeling very sceptical about the potential for the local officials to be effective: "An ex-councillor put it in somewhat of a nutshell – he said that across the council there seems to be a reluctance to take decisions in case they are wrong and its spread and it has got rampant and nobody takes decisions. There are so many chiefs. It gets killed before it gets anywhere. I don't think it is so much money as I mean it would not cost them a fortune to put restrictions on this road."

A believes the councillors should come and assess the noise from the road. However, he also believes that if this happened, the lorries would in fact slow down and 'behave themselves' just by virtue of the fact that monitoring was taking place: "You see these things don't happen when people want them to happen. If we send for a councillor or the chief executive to come and listen to this traffic noise, word would go out and it [noise] wouldn't happen. You know these things they put across the road that record speed and weight of vehicles, they put them across for a week and we have never had a record of that and they never told us what happened with that. About 3 or 4 months ago, maybe five. And the wagons know what these things are and slow down." As for the negative reaction he has received from the police who believe they would not be able to enforce such restrictions, he says: "According to the police constable he is worried he can't police it. Well there are all sorts of roads that aren't policed; I mean you don't see a policeman on every 40 mph space of road, do you? They should put a 40 mph limit on there. I've asked for a 40 mph limit on there."

Despite his difficulties and that '[the council] are really hard work to get a decision out of', A seems determined to keep trying: "We are trying to battle through it ourselves. If I had more finances [...] we were thinking of like a human rights thing where we are allowed under the human rights to enjoy our property. But as far as me and my neighbour across the road are concerned, we are both pensioners, I cannot afford to go to solicitors. If I could, I would, but I can't. [...] I am going to win this case. But it takes time. I don't know how much time I have got left."

A also commented on his perceived unwillingness of most people to speak out and be proactive about such issues: "I've found [...] people are very reluctant to speak out. They seem to have this doff cap type of attitude. And that could be one of the problems with the council. They don't contact public bodies much. They don't argue. If a public body says no then as far as [people] are concerned, it means no."

There is an overwhelming feeling that the situation is only going to get worse: "I am sure we are not the only people in this county affected. Something's got to be done. But it ain't going to go any better. Obviously its only going to get worse." A cites specific developments which are likely to increase traffic levels (e.g. a sports complex and golf course at Hoddam Cross; a Tesco in Annan) and A feels that this could be avoided with more appropriate planning: "The council appear to give the go ahead to things without giving it a thought about the infrastructure that is in place. 500 houses golf courses, hotel and a full complex, and the roads down there are narrower than they are here. And what is going to happen during construction?"

Current effects of living near the road

For A and his wife, the noise of the passing traffic, particularly the HGVs has had serious negative effects on their ability to enjoy their property in their retirement. Although A acknowledges that the problems are not there at night and are less at weekends, he finds it important to emphasise that otherwise the noise is "continuous. It is not as if it is just one thing in a month." This causes severe stress and disturbance: "We tell them [the Council] it is very stressful. It is very stressful. You know, you can't sit in your garden without something coming bumping and banging past. You know, you can't enjoy your property really. I mean this is what we are getting at." The noise impact seems all the greater precisely because of the rural location: "If you are in a rural location and you are in the garden and birds are singing and then suddenly you can hear one coming down the road like a tornado turning up ... you can hear it tearing down until gets to a clear part on the crossroads and it intensifies- changes gear – you can hear it speeding up and they bump and bang all down there and it is very stressful." There is a specific mention of the impact on the wildlife itself: "I mean we have loads of birds around here and we encourage wildlife to the best we can and it is nice to sit there and then even the birds disappear."

This has led to some changes in the way in which the house might otherwise be used, particularly the garden. “In the garden, it makes you jump every time one of these things comes clattering past. We don’t use the garden as much because it is not comfortable to sit in. You can’t sit quietly and enjoy a good afternoon sitting in the sun when there are things clattering and banging about.” The noise is not such a big issue inside the house, but even here, there is some disturbance: “The living room is the one nearest to the road is the noisiest and it is not so bad in the back, although when they come through the crossroads you can hear it up in the bedroom.” The HGV traffic has a specific effect on watching television: “In winter when you are watching the television the television goes off because it is a satellite dish, and when one of these wagons goes past it just breaks all the screen and then you have to wait while it settles down. Because these 40 tonners are bigger than this cottage. They are higher and they knock all the signal out.”

A sees very few solutions, if any, that could be implemented around the home. The house is small and there are limited options to use the space differently: “We haven’t anywhere else to go really. We could change things around and put a bedroom in the living room and live up at this end but it would be a lot of messing about. I mean we shouldn’t have to do that. [...] The only alternative I can see without having to alter the house ... well it is all double glazed but we can still hear through double glazing. I mean you could put perhaps another section of double glazing in.” This causes him to think of solutions again to do with the road itself, rather than altering the home: “I have been trying to think of remedies to stop the noise. .. you know these things they put up on the sides of motorways at an angle you know the wooden bit to break the noise down if it is coming close to a house – I were thinking of them things, but you see you need planning permission and the other thing is it would spoil the whole area anyway and it would look at bit peculiar, it would look like a prison in the home.”

Given the limited options that A has to avoid the noise and the direct impact of the nearby development, he has a clear sense that he should not have to merely put up with the nuisance: “If I were here before the traffic, I don’t see any reason why I should alter my lifestyle to suit what the traffic is doing. We shouldn’t have to alter our lifestyle at all. If councils want to let these things spring up in the middle of a field somewhere then it is up to the council to put it right in my opinion.”

Effects in the wider area

In addition to the road noise, the safety of the increased HGV traffic on the narrow rural roads was clearly of some concern and had had an impact on the way in which A used the surrounding area for recreation. He also believed other users such as cyclists and horse riders were deterred from using the roads and footpaths in the area: “For a rural area like we have got, we don’t see many people walking. The horse riders have all but disappeared.” The main issue is safety as opposed to noise in this instance: “It’s actually dangerous to walk on these roads. There aren’t any footpaths. I have a dog and have to walk on the same side of the road as the on coming traffic and sometimes I have to be prepared to jump in a ditch. [...] I mean if a wagon goes out of control on that road, we are a sitting duck,

we've no protection. I mean motorways have crash barriers. We are only doing 10 miles per hour less [a reference to the speed limit relative to the motorway] for a 40 tonner. [Cycling] is even more dangerous. I have tried this and given it up with these HGVs."

A works in a hotel a couple of miles north of his home in Kirkpatrick Flemming. This is situated just off a slip road off the M74 and "There is a hubbub all the time. You can actually see the wagons from the hotel and it is below the motorway. I can hear this buzz and hum all the time. It's a 24 hour job." However, A does not believe this is as bad inside the hotel or that the hotel has had many complaints from guests.

It terms of the effects of the traffic and noise on property prices, A believes that "If we didn't say anything when we sold the house. If people knew we had a problem, then we would have a problem selling it". However, "I have no intention of selling it because I love it so much and it is so nice when it is quiet."

Interview 2

Context

Interviewee B lives opposite A on the same crossroads. She is retired and lives alone, having moved there 30 years with her husband, now deceased. The road passes only 3 metres from her front wall, with only a narrow patch of grass, short wall and increasingly eroded verge between it and the road.

Relationship with the road over time

Although B has witnessed a steady increase in the volume of traffic on the local road network over the past 30 years, including the construction of the A74(M), it is in the last 5 years when it has "become dreadful." As with interviewee A, the feed factory is identified as the main reason for this increase traffic and noise. When the plot was used for a fish farm, "They used to bus their employees in and you would get one or two lorries coming down. It now it only employs 9 people but drags in a lot of heavy traffic from all around, and I mean heavy traffic – 40 tonners." With this development, "It has just gone from bad to worse. The last two or three years have been really horrendous. There has been a big build up with this firm down here. [...] the people servicing this factory have discovered the route and of course once someone discovers the route it drags in more and more."

The most significant development in the past decade was the building of the A74(M). The local roads are "now known as a rat run between the A74 and the A75." This is apparently aided by signage on the Annan bypass, coming from Dumfries, which points to Eaglesfield and thus brings traffic past Mrs B's door to the A74(M). This means "It has become a main route."

Once again, it is the HGVs rather than cars which are responsible for the noise. B believes that "it wouldn't be so bad if it was just cars." Indeed, there is a level of

acceptance of the increase in car traffic, as B admits: “With the increase in housing and so forth there has got to be more cars and that has got to be accepted of course.” However, there is virtually no acceptance of the increase in volume and size of the heavy goods traffic on these roads. In particular, the vehicles are deemed to be inappropriate for the narrow rural roads. This does not just apply to HGVs but also general farm traffic: “The tractors are getting bigger and bigger – they are enormous wheels and they are using the grass verges as part of the road now.”

There is a strong feeling that the situation has deteriorated, and that will continue to worsen. Other ‘inappropriate’ developments will exacerbate the problems – for instance, B talked of an industrial development applied for at Ecclefechan. “It is so close to the road here and if we were further back, I think it would still be annoying, but of course these houses were never built for this type of traffic and of course it is only going to get worse.”

B has communicated extensively with the local council and her MSP. She has been told that “The roads don’t meet the criteria for putting weight restrictions on the roads. Don’t meet the criteria in the local speed guidance. And the local council have said that you would just push the problem on to someone else.” However, B believes that “There are some B roads which are parallel and slightly more suitable.” The uneven road surface was highlighted as compounding the noise problem. However, she does not feel the local council are taking the problem seriously and says they have only agreed to fill in a small section. “[...] But I don’t think it will have any effect at all to tell the truth... and the council are not really spending money on the roads at all. What is the point of doing all these temporary fill-in repairs when the lorries come down and dig it all out? All this expenditure loaded onto council tax payers and it is just going to go on and on and on.” It is clear that B and her neighbour have been trying to get the local authority to carry out an assessment of the noise. However, “When they come and ask you about noise and so forth they say you have got to be able to hear it in the house, not in the garden and that’s their response, but I can hear it in the house and the garden.”

Overall, she feels the noise issue is dismissed by the council, not only because they do not appreciate the extent of the problem but because they yield too much power to officers. Here are a number of statements in relation to Mrs B’s impressions of the local council and her MSP:

“No one is prepared to do anything.”

“The councillors should have control over the local council but it is the other way round – it is the officers that run things.”

“My MSP – apart from very simple issues - she can’t really do anything, so they have no powers anyway. So I remind her to get literature and then she will just go away and leave it with me now.”

“Why can’t they get it debated in Parliament? What are they there for? You don’t like to get worked up like that, but you feel as if you have got to.”

“They can’t seem to grasp the nettle where serious issues are concerned .. they are just floundering ... they don’t know what to do. The annoying thing is they don’t want to do anything.”

It was clear that B believed the motives for this lack of attention to the issue was due to the priorities of business being placed above residents: “They put them [the factory] first and you [residents] second. They are paying big rates and it’s the finance and they don’t want to upset them. [...] The government are afraid of the power of the haulage companies. But I mean, how much rope do you give them?” This leads to a strong sentiment that the planning system is ultimately to blame: “What they must stop doing is creating factories in the middle of the countryside like this. [...] I have never heard of a farm becoming a factory. How that ever got through, I don’t know, I think someone was pulling some strings.”

As a mark of how far the situation has deteriorated over the years, B explains that she would not have moved in to that house had she known what an issue the noise was going to become: “Of course I wouldn’t have come to live here if I’d have known we were to be faced with this problem.”

Current effects of living near the road

The traffic generated from the feed factory is such that during the week there is a predictable pattern of disturbance: “They are coming up at 5 o’clock in the morning and this place [the factory] starts down here at 6 in the morning and it wakes me up and in fact when they leave the factory you hear the rumble because they have to turn as it comes to the road and there is a terrific loud rumble. [...] So you know when they are coming from the factory because there is that rumbling and you know when they are coming up through the village.”

All this means that B essentially spends as much time away from her house as she can manage. “You hear it before you get up. Actually it is a relief to go out for the day or in the afternoon to get away from it.” It is clearly of some concern that she will not always be able to employ this tactic for dealing with the noise: “I try and go out as much as possible now but my eyesight is getting worse and I don’t know how much longer I can drive so that would be disastrous for me, really.”

The noise also means that she now avoids having people come to visit her in preference to going out. Indeed, she mentioned the effect on having visitors on at least three occasions during the interview: “Your house vibrates, literally ... and in fact, I have stopped inviting people because they just don’t like sitting here when these things go past [...] In the afternoon if I am not going out naturally I like to sit here (in the lounge) and have friends in here. I used to have discussion groups in here. But I go to them, I don’t bring them here now because this noise is just so bad. In fact, they don’t want to come and listen to it. [...] If people are coming, you know, elderly friends and you get these things bouncing around, people literally cringe.”

There is clear deterioration in her enjoyment of her property, inside and out. Inside, the heavy lorries are felt as well as heard: “I read a lot and this is a problem as your book almost moves as these things go past. [...] But my walls creak as

these things are going past and you think to yourself well what sort of damage is it doing to the property?"

Outside, it would appear that B does not enjoy her garden like she once did: "I just keep it tidy [the garden] and I don't even sit in it any more. I have a small conservatory and I don't sit in that either. And when you are in the garden, I think, I am paying out money for my garden and I can't even enjoy sitting in it these days."

These behavioural responses show how trying to cope with the noise disturbance imposes a pattern of life related to the times of the main flows of HGVs: "It's a relief when it reaches evening when you get the odd one coming down then and weekends it's a blessing. I just sigh a huge sigh of relief."

B worries about the impact it might be having on her health: "My health is not so great. And noise is effectively sound waves and I read the other day that it has been proven by some scientists that it can effect internal organs." The reasons why B might be worried about the impact on her health when she describes the situation as leading to "weariness and stressfulness: You just feel, you wake up in the morning and you think 'oh dear, it is going to be that noise all day again today'. Its not very good for one's wellbeing, is it? And you think to yourself there are all these people sitting up there in Parliament; there are all these people in the EEU, and between them all we can't get anyone to do anything... the politicians won't move without pressure groups."

Once again, the feeling of helplessness is apparent. B feels there are no practical solutions to the noise disturbance, other than going out as much as possible: "I have got double glazing in and goodness knows what it would be like without the double glazing. The traffic is so heavy that I can't even see triple glazing dealing with it and I am not going to fork out for triple glazing because it is too expensive. I am so close to the road here that frankly I think the houses just need knocking down." B seems resigned to the idea that the situation is simply inevitable: "You think 'how much longer can I put up with this?' But we've no options really, have we? You either put up and shut up or keep battling on. Apart from trying to go out as much as possible, nothing else would work."

Even selling the property and moving elsewhere is not felt to be a realistic option: "I think, well, perhaps I should sell it, but you think well 'who is going to want to come and live in a house with all this heavy traffic going past?' – I wouldn't. I don't think any of us would find it easy to sell our properties now. I think we are stuck with them and this is a very worrying situation."

Effects in the wider area

The increased traffic on the local roads also leads to some serious concerns about safety which themselves have caused some behavioural adjustment. B used to be more active by going for walks from her house: "I did enjoy walking, but the roads are so dangerous now and you have to get on ... well even the grass verges are so badly eroded. I have lost about 10 inches out the front in the last three months ...so the roads are not safe to walk on. If a big thing goes past you

get that sort of rush which almost blows you off your feet. You try and step on the grass verge and there is a deep rut there.” This safety concern has been exacerbated by incidents she has witnessed very close to home. Her front garden wall was hit last year by a car which she observes: “If it had been a lorry, not a car, my house would have been demolished”; her grass verges are disappearing and she has witnessed many drivers going straight through the crossroads which she can see from her front rooms. She believes that “there are serious accidents waiting to happen and I have seen several near accidents.”

Given the safety issues, B finds it difficult to comprehend the effort to designate the adjacent road as a cycle route: “Bear in mind that the council has been putting up cycling routes. So they have spent all this money on cycle routes which must have cost a fortune on these signs and no one dare cycle now. You can hardly walk your dog along the road, you know and the horse riders have practically disappeared.”

Related to B’s increasing lack of enjoyment of her garden and local area is her observation of the impact of the traffic noise on local wildlife: “But it is also affecting bird life. Their normal behaviour is altering. We are not getting birdsong in the morning (only here to some extent). We used to have red squirrels here and we went to great lengths to get signs put up, but the traffic has increased and we never see a red squirrel now. We saw them mashed on the road for a bit, but now they have disappeared. So it is having a huge effect on wildlife as well.”

Interview 3

Context

Interviewee C is retired and lives at home with his wife in Eaglesfield. They live in a detached bungalow on an unclassified, 30mph residential street that branches off the B722 at the north-eastern end of the village and runs east out of the settlement (photo in introduction). About 300 metres along the minor road from C’s property, travelling east out of the village and nearly at its edge, a haulage company is situated among a line of residential properties which has grown up incrementally since before C moved to the area. This business is a major source of heavy goods vehicles travelling along this residential street. C’s bungalow sits about four metres back from the footpath. The road is fairly narrow and has cars parked along much of its length. Mr C is active on the local Community Council.

Relationship with the road over time

C has lived in Eaglesfield for 8 years. In that time, he claims, “there’s been a lot of funny things going on” with respect to planning permissions (or lack of proper planning and enforcement) and some reclassifications of roads and bridges on the local road network. Interviewee C explains that, perversely, a weight restriction on a bridge at his end of the village which might otherwise deter though traffic, exacerbates the problem: “No heavy goods are supposed to come through here

but that is a lorry park and they have a licence for 18 units and 25 trailers for a three or 4 multi-operator consortium. Everything that goes there has to go up here and back through the village because of the way the weight restrictions are.” Once again, the main issue is about the inappropriateness of such a development in its present location, particularly given the size of the vehicles in relation to the size of the road: “Was this built for 44 tonne lorries? It wasn’t even built for horse and cart.”

The lorries from this development “travel all through the night”. The problems created by this development are not confined to the traffic movements themselves but also derive from activities in the yard upon departure and arrival: “They warm up. That is a big issue. Starting their engines from cold and letting their engines warm up for half an hour or three quarters of an hour.”

In addition to these vehicles, there is other traffic which C believes is inappropriate to this residential road. He says: “You get buses through here as well during the day and you also get tractors. Lots of tractors, it is terrible.” There are also comments about the behaviours of drivers: “I have photographs of lorries overtaking parked vehicles on the bends. [...] Last summer I was stood out there and these lorry drivers were coming through and I started to take a note that it was 8 lorries – every one of them were on the phone and it was the 9th lorry who wasn’t on the phone.”

HGV traffic movements have generally increased on the local roads through the village due to the closure of a bridge in the vicinity and the resulting diversions. “There is another bridge which they closed without any warning at all and said they were going to do work on; but they have never [re-] opened it but have now put a weight restriction on it, and everything now comes through the village permanently.” There was a sense that the closure of this bridge was an unjust and unnecessary policy given that it had been used for many years without a weight restriction, and that, if anything, this should only require a temporary repair and closure, not a permanent situation. It appears that there are many local forestry, farming and quarry movements so that the centre of the village receives many more traffic movements than C does in his road: “People live right adjacent to it, I don’t know how they put up with it. It is bad enough living here. Virtually everything that has passed us has already passed those people down there and there is a lot of stuff that we don’t get. You will get double the amount of traffic through the village to here.”

There are some relatively minor improvements that were felt might at least alleviate the situation to some extent. These include tackling the substandard road surface and implementing lower (20mph) and stricter speed limits on the residential roads: “A couple of years ago the surface was so bad, full of potholes, and they would come along and patch it up and 6 weeks later the same holes were dug out again. It got so bad that they came along and put a new surface down, but it wasn’t down for 3 months and they were digging it up again. [...] They have been trying to get 20mph signs since I have been here and they are still talking about it...”

On the whole, the traffic problems were not felt to have been exacerbated by the A74(M). Instead, it was felt that enough local traffic is generated by agricultural, forestry and quarrying industries in addition to the local haulage firm that these, together with the 'management' of the local road network that were to blame for any disturbance. Perversely, traffic levels through the village are better when the motorway is undergoing upgrading or maintenance. This is because traffic speed is slowed and enforced during roadworks and this results in fewer crashes that divert traffic through the village. "When an accident occurs, this can mean extreme traffic movements through the village: the thing is we have had accidents at a hell of a rate on the motorway and they were blocking off the motorway and that meant everything was being diverted down through here to pick up the Langholm or Edinburgh road. Since the motorway works have been going on we haven't had it as bad because they start restricting the traffic and slowing it down so far away from where the work is that it takes in a lot of the places where we used to get these accidents."

Much of the frustration is directed at the local planning authority – both in terms of road planning and 'bad' land use planning permissions. C gives a detailed account of his interpretation of the situation with the local lorry park: "When we arrived here, this lorry park was here – its an operating centre – like a hire business. Now they have VOCER licences but they have never submitted a planning permission and they have had updates to their licences and the planning authorities have totally ignored it. Within the planning scheme of things it is invisible and doesn't exist. The local plan, although it is supposed to be based on a survey, they have never carried out as a survey, they have never reported this as a lorry park." The main frustration is with the fact that the authority have had opportunities to 'do something about it': "Although the planning authorities get all these things through from VOCER, they have never said 'oh look, we have made a mistake' and do something. And they have had 5 or 6 extensions all within the time frame when they could have done something about it, but never have. [...] You would think the council would have said 'you should move your business' and taken the opportunity to say 'you know we haven't looked after this properly from the planning point of view'."

C has a very low opinion of the local authorities going so far as to call them 'inept' and 'corrupt' and 'one of the worst': "The word corrupt comes to mind. I don't mean financially corrupt. But as an organisation they are corrupt. These people know what they are doing and they still do it. These people are not stupid." C and his neighbours have been trying to tackle the council on the issues of general traffic and traffic generated by the lorry park. A lack of success meant they also contacted the planning Ombudsman, but were left feeling this was of no use: "You have a situation where the Ombudsman is a complete farce. Don't waste your time. They will ignore something that you tell them, you give them all the information and all the backup and they say 'no, no the council is doing what it should' even when you know that is so wrong. You have the situation at the end of the day there is no comeback at local or national government."

One of the most frustrating aspects is the lack of an official assessment of the disturbance. "Someone from the authority came and spent an hour and wrote back and said how impressed he was with how quiet it was in the village [...]"

People had been writing to him who had lived in the village for 35 years, but how could they compete with his visit of an hour? It is the sheer arrogance." There is also a sense that the accountability is lacking in the way that the 'officers' control the councillors on technical issues such as these: "If we didn't have inept planning departments and councillors. We have been in touch with about 70 or 80 councillors in Dumfries and Galloway – they do not want to know. The officials don't want them to become involved. They become the lackeys, the tools of the council officials – the very people they are there to monitor. It is unbelievable."

The low densities and dispersed population were felt to offer a particular challenge for Scotland's current planning system to be able to protect residents from issues such as noise. This is because the 'normal' procedure of notifying immediate neighbours of any development (such as a lorry park) is ineffective when there are so few people living directly next to any such planned development. Developments such as this affect a much wider population than those living next door to it: "You have in this part of Scotland these people who can build and open up and extend their property, but no one sees the planning application because it doesn't go up where people can see. Other parts of the country you have to put signs up near the property. But here unless you have property that shares a common boundary or unless you live exactly opposite, you are not a neighbour. But when you have something like that it affects everybody and only maybe one person would be involved to keep it legal." C does qualify this statement by saying that in the case of the lorry park even the idea of notifying neighbours was irrelevant as no permission was applied for anyway.

Current effects of living near the road

In this case, the issue of noise caused by the heavy goods vehicles cannot be said to have caused C and his wife to have significantly altered aspects of their lifestyle. It would appear that their house, set back from the road and with the main garden on the opposite side, was relatively shielded from the worst effects. Nevertheless, C's position on the Community Council reflects his desire to see the disturbance reduced for those most affected by the noise issues, such as those directly opposite the lorry park, or those further into the village closer to the B road, or families with children who are particularly vulnerable to the safety issues associated with the traffic. He says: "It doesn't affect us so much as it does a hell of a lot of other people."

This does not mean that this household is immune from the traffic noise: "In the garden and in the house you can hear them coming down the road at night and early in the morning ...the main thing is that our main bedroom is at the back. Our kitchen and snug is at the back. Our conservatory is at the back. So we are sheltered from that point of view. But even at the back you can hear them go through sometimes where you can hear a thud which sounds like the suspension of the lorry or the road just sort of giving, because you have got lots of little pipes going across [the road] and we also suffer from lots of drainage problems."

Because of the layout of the house, it seemed as though a main concern was the impact on visitors rather than themselves: “We had some friends staying with us the last few days and we are at the back of the house and you do not hear it half as much as you do at the front. They said basically that they were kept awake from 2 o’clock onwards by vans going up and big lorries coming down, And when I had an illness I slept in the front bedroom and they kept me awake.”

Effects in the wider area

C provided many examples of the types of people in the village he thought were particularly affected and vulnerable to the traffic noise. Elderly people were one category: “More now than ever you have a lot more elderly people living on their own. These are generally people who are used to making do and are very apprehensive about saying anything. They are suffering but they are suffering in silence”; and children are another: “It must be awful for people with kids.” More generally, he believes that people are reluctant to speak out: “They are in an invidious position sometimes – they have lived here and they wouldn’t get publicly ridiculed, but they would probably feel uneasy about drawing attention to that yard because of what they think people would think.”

A particular concern was the effect on the local property market: “There are people further on down the road who can’t sell their house and never will until they get rid of that place. Other people have had property a bit further on for sale and it’s been for sale for about 4 years and what the people will tell you is that whilst the lorry park is over there, they will never ever sell the house. It is just noisy.”

Interview 4

Context

Interviewee D is retired and lives with his wife in Eaglesfield in a small cul-de-sac adjacent to the B722, which from this point turns north out of the village towards Waterbeck Quarry three miles away. There is another house between this one and the B road and his back garden is adjacent to open fields.

Relationship with the road over time

D has lived in the village for 6 years, but claims that the noise from heavy goods vehicles on the B722 travelling towards and away from the village has significantly increased in the past 18 months: “In that 6 years it has gone from intermittent during the day to constant three quarters of what I call daytime.” He identifies the causes of this increase as coming mainly from local businesses “as it is a quick route from forestry areas, quarries [...] and a number of construction projects going on in the surrounding area.” This results in a steady stream of lorry traffic during the week: “From 8.30 usually in the morning and probably before, the transit of wagons up to the quarry and that is all day long really weekdays, and

transit of wagons back, full ones. They make noise, not as much, but still a lot of background noise. The emptiest ones are the noisiest because they are great big empty chambers and the noise from that is phenomenal to be quite honest. I live in a cul-de-sac off that road. For the people that live adjacent to that road itself, it must be appalling."

The issue of traffic to serve local construction projects includes the upgrading of the A74(M) to three lanes. In general he believes there are more vehicles coming through this village because of the adjacent motorway and this includes the effect of crashes on the motorway, "because, when they occur you do notice the traffic being diverted through."

Inappropriate vehicle weights and uneven and weak road surfaces were identified as part of the problem exacerbating noise: "It's not a metalled road. They can put brand new surfaces down and within 6 months there are potholes developing. It started to go concave in places because of the weight of the lorries, you see. 40 tonnes is a lot of weight on an axle going through a rural village."

Once again, there is a strong feeling that inappropriate planning decisions have been at least partly to blame for certain problems: "What I can't understand why there is an industrial park adjacent to the motorway at the end of this village with plots to let, e.g. for haulage companies, and they let them do this. It is crazy. There is no thought, no planning." In relation to the section of road and bridge that has been closed meaning that more lorries travel directly through the village (also referred to in interview with C) he comments: "I just can't understand why it is allowed when there is a way around it. There are facilities to use the road they used to use, if you upgrade the bridge and strengthen it, they can use the road they have used for the last 100 years."

D has been attempting to get these issues addressed by the local council. However, his failure to secure any kind of solutions to the problems such as rerouting and re-surfacing of the roads, leads him to feel very sceptical about their effectiveness: "Whoever you communicate with to get something done passes you on to someone who passes you on to someone else and eventually there is the Ombudsman and the Ombudsman doesn't know anything and nobody is answerable. [...] It galls me how the ordinary man or woman in the street are treated with contempt and are not considered at all. There is no logic in it for me."

In addition, D is frustrated with the idea that many of his neighbours just seem to put up with the situation: "People don't say anything. There is a lot of inertia in the village about raising things. People do not do anything about it. They just take it on the chin... It makes me wonder what they would put up with before they would object. It is really, really strange."

Current effects of living near the road

D feels that the noise from the heavy goods vehicles travelling on poorly serviced roads makes aspects of living in his house 'intolerable'. D is clearly a lover of the countryside and this is a main reason for choosing this as a location to live. The fact that this noise interrupting his enjoyment of rural sounds and the

tranquillity he expected is the main theme for D: “I love rural environments, I just love ‘em. I just like to get up and walk about and hear natural noises. Birds’ wings through trees you know ... I can put up with a moderate amount of man made noise ... I put music on, I love music ... but this background noise here ... it’s like incessant banging ... it’s not just a rumble, it’s a boom, bang, boom like minor explosions, that’s what I would describe it like, you would say they are minor explosions ... it gets me down, its starting to wear me down and don’t want to be worn down, too old to be worn down ...”

It is clear D does not believe the main traffic disturbance is caused by the motorway, but by local traffic movements to and from the quarry and agricultural and forestry uses. He says, “There is no rat running going on here [from the motorway], there is enough lorries going on here without it. However, I can hear the motorway from where I live, rumbling away, especially in wet weather it is worse than dry. I am more set back and can hear it every day all day. People think , with 3 or 4 miles from the motorway we won’t get that background noise, but we do. So I go in the back if it is summer weather I go in the back garden or go indoors to be quite honest unless it is really warm.” [unclear whether this is a reference to audibility of more distant sections of motorway, which at its nearest point is somewhat over one mile away].

D also mentioned the fact that the recent roadworks on the motorway had actually improved the situation in the village because it meant less serious crashes and diversions: “But once it reopens it will reoccur because it will be a faster road. And lorries are responsible for more fatalities on motorways than any other vehicle...”

This disturbance affects the way in which D uses his property. Indeed, he says: “The big problem here is that it impacts on your lifestyle. It definitely does.” It especially affects way he uses his garden. “In our garden it is intolerable. We sit in the garden to try and subdue it, but it doesn’t. So it is a rural environment and it is like living in a city, it’s ludicrous really. My back garden is adjacent to fields and you can hear it. In fact, it is so noisy that if you are conversing you stop conversing until the vehicle has gone by and then you start again. So I don’t use my front garden, or only at weekends, and the front is where you are getting the sunshine and nice and pleasant, but I don’t sit there. And I moved here thinking it is a quiet road. It’s mad.”

Although he finds the noise bad, he believes it is worse in the centre of the village: “The ones that [live] adjacent [to the road] – the ones that come down the B722 and go right though the village .. and it is really dangerous ... and it shakes. I mean I have been in one property and the whole structure of the door internally, the front door is all cracked and come away. To be quite honest, if you use your lounge in one of those houses I don’t know how you speak to one another without interrupting.” Interestingly, he cites a friend who has made a quite dramatic sounding alteration to his house in order to be able to live more comfortably with the noise: “[A friend] is interesting as when he did his alterations he did it so he can live at the back.”

D is convinced this is having a health impact on himself and others: “I am positive it has a health impact. Especially in middle age to old age it has a major impact. It’s an anxiety thing. It’s not natural, no matter what excuses they make, it is not a natural way for human beings to live. It stresses people out in old age when their immune systems aren’t half as good as they were when they were younger and it increases various illnesses.”

D seems to believe that Eaglesfield may not be untypical of rural areas when he says, “The situation is insane. Not just in this village, it is like it all over the place.” He has nevertheless put his home up for sale. “I’ve put my house up for sale because I have had enough of it. I am at the end of my tether with the place because the lifestyle is chronic. Noise is one factor, flooding is another.” He intends to move “to somewhere rural. Very rural.”

However, he is pessimistic at his chances of selling his house, even though “It is a massive house, a lovely bungalow. I put it up twice. I put it on last year for about 6 months, approximately, well 4 months, and took it off and put it on a week ago at a much lower price. I think the issues will and do affect the sale. A couple of viewers say ‘oh you are not too near the road’ – that’s the B road – and then they will say, ‘Oh, what’s that?’ It is a heavy goods vehicle, banging away, an empty one with these big chambers that they tip stuff in. I am not quite sure I will ever sell it. It is a massive house. A lovely bungalow.”

Effects in the wider area

D believes that the noise problems may be even worse in the centre of the village than where he lives. He particularly mentions the potential effect on the primary school in the middle of the village: “If you are in school and you hear bang bang bang bang while you have got your head down on a textbook ... it’s crazy.” He pointed out that some limited-hours types of speed limit restriction that might be considered as a solution to traffic problems near the school would make no difference to noise levels once the children are in school: “I don’t think the 20mph limit would help the noise problem, because the 20 limit would only apply when the kids were coming in and going out of school. But at least it is a safety solution. They are that big and heavy – a 40 tonne vehicle takes three times the distance to stop at 30 mph.”

Whilst the noise issue seemed to be D’s main preoccupation, safety was also mentioned, with particular emphasis on the impacts on children: “Quite a few people in this village walk their children to school – quite a number do, and for me it is very dangerous. I raised this issue when the road was closed and they started coming through in volume. It is so dangerous because you have a narrow footpath and it is a narrow road and vehicles parked both sides and you have 40 tonne wagons and the child only has to make a tiny error and it is a major error. It is a catastrophe. It is dreadful.”

Interview 5 (Telephone interview)

Context

E is a retired property surveyor who lives with his wife in Brydekirk village. He moved there 9 years ago to retire and built his own house (bungalow) on a side street leading down to the river from the village's principal street, which is a 'three minute walk away'. He lives in the last house of about 20 along this side street and so is the most 'sheltered' from the main road.

Relationship with the road over time

Over the 9 years in which E has lived in Brydekirk he feels there has been quite a big change in traffic levels and the composition of the traffic. He puts some of the blame on the feed factory plant (BOCM Pauls) located about half a kilometre outside the village. Before the 'factory' development about 6 years ago, the farm used to supply supermarkets with foodstuffs and this apparently generated far fewer traffic movements: "It's quite obvious that a big wagon used to come here during the night and pick all the stuff and away and you never heard them, but now because it's factory and feedstuff there is a lot more traffic using the one main road in here."

When granting planning permission, E feels that the local authority's biggest concern was not the safety or noise issue but simply how to make sure the infrastructure could accommodate traffic: "I believe the traffic movements were considered. But the biggest concern at the time from the local authority was the concern whether the old bridge would carry the weight of the lorries, and the local authorities seemed to think it would ... yet the bridge has been hit quite a few times and I am just beginning to wonder if it will hold like they say it will do."

It is not just the traffic from this one factory that is a problem. Local issues include "farmers driving far too fast with their tractors and trailers through the area." In addition, E is of the firm belief that the road through the village is being used as a rat run: "What I do think is happening, and I have no foundation in what I say, is a lot of people are coming up the motorway, the M74, and they are coming right up to exit 20 and they are cutting off exit 20 and they are cutting off a triangle to save time and then they don't have to go on the Annan bypass to get to the A75. And we are getting huge international lorries coming through the place now, going well in excess of 30 mph."

Again, the scale of the problem in terms of the size of the lorries is described here: "They come into Annan, they go across to the A75, to go down to Stranraer. They have got as much right as anyone else to use the roads that are available, but some of the wagons that are being used are not just a normal wagon but with containers on the back and in my opinion, I've got no background to say it is right or wrong, but I think it is a total madness these container wagons going through."

E believes the rat running is an issue which should be recognised and addressed by the local authority: "We have put [the question] to the local authority,

'why isn't there some kind of a census and monitoring of what is going on?' because there is no question about it, because you can tell from the registrations and everything that there are people using this as a short cut."

In addition to the general traffic volumes and the noise disturbance, safety issues are mentioned frequently. He believes less than 50% of the traffic sticks to the speed limit: "We had another accident the other night – we have got a few problems here to say the least. Although there is a 30mph speed limit through the village itself, the lorries coming pounding down there [past the church]. It is unbelievable. The lorries that are using it are unbelievable in terms of speed and how many lorries are using it."

E believes traffic calming would be more effective than speed limits on their own. "But I honestly do believe they should be cut down to 20mph and that there should be calming zones because we have a lot of youngsters here, boy racers and all the rest of it – backwards and forwards and some of these kids are driving far far too fast. And the police are pushed right to the limits of what their resources are, so there is a limit to what they can do...and I actually think you should shove a few cameras up for a few months and they should have a big effect."

The state of the repair of the roads is believed to be another factor which impacts on both noise and on safety: "The state of the road is absolutely deplorable. You have got these huge potholes and everything [...] The road surface is a disgrace, unclassified road, old fashioned C road, and there are T junctions and the pot holes are unbelievable with the lorries churning it up and it is a major route that and if you pick your times wrong and a ferry has been in, it can be really quite hazardous." Once again, the road surface is highlighted as exacerbating the traffic noise from heavy goods vehicles: "Where my mother in law lives, there are great big indentations in the road and that has been filled up and the indentation must have been about at least 9 inches deep in the middle and about 8 feet wide. They are great big lorries and you can hear them thundering down on that."

There is a sense that the local authority are aware of the problem, but do not appear to be doing anything about it. "I think it is at the stage now when something really needs to be done about it. For instance, people in the village have actually asked if they can have speed limiters put on the road but they don't seem to be too happy about that in the local authority. When our local MP has his surgeries in the village hall, a lot of people - a high percentage - are pressing him on traffic: why do we have to put up with all this noise?"

Current effects of living near the road

The effects of traffic noise on E are, by his own admission, not particularly strong in his own house compared to those who live closer to the man road. However, he explains that the levels vary, particularly with the seasons, and stresses that the noise is worse because it penetrates otherwise rural tranquillity: "We live on one side of the river and the road comes down parallel to the river and comes over the bridge and we can hear traffic, especially just now when there is

no leaves on the trees, when there are leaves on the trees and there is shrubbery growing that obviously deadens the decibels. But we can hear because it is such a quiet rural area and you can hear when these young kids are belting up and down the road.”

E emphasised that he thought the problem was much worse for those in the centre of the village: “We get some noise purely because of the road coming down into the village. It is not intolerable but people in the centre part have been saying to me how noisy it is becoming and these are people who have lived here all their lives and their parents and grandparents before them and they keep saying how busy and how noisy it is. There is no question about it, it is quite noisy in some of those houses.” In particular, he spoke about the effects on his mother in law who lived, until recently, in another house along the same lane, closer to the main road: “We bought one of the cottages just opposite for my mother in law – it’s a lovely lovely cottage but the lorries come pounding down through there and the lights rattle on the walls. [...] It doesn’t stop me from doing anything personally. But I must say the cottage my mother in law had, I felt very sorry for her, because she had to have the television so loud because the noise of the traffic going past her house. The lorries there were quite intolerable.”

Effects in the wider area

E believed that the very reason people are attracted to this area of Scotland – its accessibility – is the very thing which ends up causing disappointment to people once they arrive and realise how noisy it can actually be in such a rural area. He illustrates how accessible this part of Scotland is: “When I ask people why they come to live here, for instance my neighbour is from Kent ... and he was retiring ... he wanted to be back in Scotland in a rural area and he actually pinpointed this village as equidistant between Edinburgh, Glasgow and Newcastle airports... So a lot of the people I think round here have done that and a lot of the new homes here are retired people and retired professionals and highly paid professionals and I think they have chosen this area because of the ease of access. I think they are quite surprised when they find out how much heavy traffic is flying through. They have great rosy ideas about the north and how quiet and peaceful it is, but I’m afraid that doesn’t always work out.”

Appendix C

Case Study 3: M65 Blackburn greenbelt

Background

This case study considers the effect of traffic noise on residents living near the M65 to the Southwest of Blackburn, particularly a four-mile section between Junction 3 and Junction 4.

In this area, the M65 is passing mainly through land designated in development planning terms as green belt or countryside area, and additionally designated as West Pennine Moors for the purposes of landscape and nature conservation policies.

The landscape here consists of hilly farmland, with deciduous woodland in the steep narrow stream valleys. The outskirts of Blackburn lie in the Calder Valley to the North and Northeast and higher hills to the South mark the western fringes of Pennine moorland.

The section of the M65 within this case study area was part of the last portion of the motorway to be built. The road was routed past the south side of Blackburn to form a connection to the M6 from an isolated earlier section of motorway from Blackburn to Colne further East up the Calder Valley. It opened to traffic in December 1997. Two facts about the history of the project are significant:

- The road attracted strong environmental concern, with a direct activists' treetop encampment in the woodlands of the Stanworth Valley, in the immediate vicinity of the present study area. There was also direct action outside the area of this case study, at Cuerden Valley Park near the western extremity of the road near Bamber Bridge.
- Partly because of the environmental sensitivity, the project made claims at the time to be particularly well landscaped: "*This was one of the most comprehensive landscape schemes made in the north west region for a new motorway*", according to the Department for Transport¹.

In 1998, its first full year of operation, the M65 carried 39,000 vehicles per day. By 2007 it had increased by 55%, to 60,500 vehicles per day², already approaching 20% more than the top end of the traffic forecast for 2010 that was presented to the Public Inquiry for the road³.

¹ Department of Transport statement cited in *Inspector's Report on the Public Inquiries into the M65 Motorway (Bamber Bridge to Whitebirk Section) Blackburn Southern Bypass, 13th February – 23rd March 1990*, Inspector: Major General DB Wood, file no. CNW/465/2D/26/05, p.18, para 65c.

² Figures for 24 hour average annual daily 2-way traffic, from Highways Agency Trads2 database of traffic monitoring sites, measured between junctions 4&5 (no monitoring site data is available for the section of motorway between Junctions 3&4, within the case study area).

³ Department of Transport predictions to Inquiry for 2010 were 41,000-51,000 average annual daily traffic, *Ibid*, p.17, paras 60, 57

Case study interviews

Summary

The eight interviewees for this case study all live within earshot of the M65, at distances ranging between 300m and one mile. Most were living in their present location prior to the construction of the M65 motorway. All the interviewees live in or on the boundary of land designated as green belt or 'countryside area', in locations that include isolated farmhouses, the outer edge of the suburbs of Blackburn, and the village of Tockholes. Tockholes parish has 454 inhabitants in 189 households (2001 Census data, which includes the separate village of Ryal Fold one mile further South).

Potential interviewees were identified with the kind assistance of the Blackburn group of the Campaign to Protect Rural England (CPRE), chaired by Tony Duckworth (see interview 5). One person was interviewed by phone after the visit to the case study location.

The following key points arise from the interviews:

1. Some of the interviewees' experience of their homes and gardens suffered a marked deterioration as a result of construction of the road:

"In summer it's awful. I don't know if you can get used to a continual drone, but when you've always had peace ... and that's the joy of living somewhere like this. It was so quiet when we moved here, it was wonderful – that was what we wanted, just to live in the countryside." (Interviewee G)

"In the summer when the weather's hot, if you leave the bedroom window open you get woken up at half past six because it's very noisy in those weather conditions. The traffic starts to get heavy at that time." (Interviewee B)

Others that had not lived there prior to the motorway also described negative impacts on how they used their houses and gardens:

"It can spoil being outside. It can definitely spoil the fact that we live in the country. If I want to read in the morning, I think, I really didn't want to be listening to traffic. I'm hoping to hear nothing, or birds. I like to meditate as well and sometimes I think it would be nice to go outside, but then I don't because it defeats the object if you can hear the noise of traffic, so I stay inside." (Mrs A)

2. Several respondents talked about locations that they no longer feel are worth visiting, or places that they now go less frequently as a result of the traffic noise:

"There's an enormous amount of noise in the vicinity of the canal. It's not a place where you can happily engage in conversation, it's an oppressive noise around you for a fair band either side of that bridge. There was a time when we used to take the bicycles to the far side and we'd have a birthday picnic there for my daughter at Withnell Fold. It's water, it's dead still and you could hear the plop



M65 north of Tockholes, Lancashire, showing footpath diversion alongside motorway to cross at minor road bridge from which the picture is taken.

of the fish – well you’ve got no chance of that now. It should be tranquillity at its best. But all that’s gone.” (TD)

“I used to go walking in the Stanworth woods a lot, with the dog. It’s a lovely walk, especially when the bluebells are out, but we don’t very often do it because it is really bad, noisy. I wouldn’t take people down there now. We always tend to go towards the moors and round Roddlesworth.” (Mrs D)

“You can walk under the motorway at the [Stanworth Valley] bridge and walk on the other side. I do that occasionally, but since the motorway is there – and I used to walk in this area even before I lived here - I now choose generally to go the other way. It’s visual as well as noise. It’s pleasanter walking away.” (Interviewee B)

This issue is exacerbated by footpath diversions that cause walkers to deviate alongside the motorway prior to crossing it, so that they experience the noise for longer than they would at a direct crossing.

3. Several respondents who had lived in the same location before the motorway was built had been surprised to find that the noise was so noticeable, or that it carried so far:

“People in this row [of cottages] were grumbling about it, saying they didn’t realise how bad it was going to be.” (Interviewee C)

“Once it was opened there was an immediate change. Initially I thought that the noise wouldn’t have much effect on us, but then I did find that the constant buzz of vehicles was there.” (Mr D)

“When this route was chosen you wouldn’t have considered that there would be any impact on us. It would have influenced my enthusiasm for the motorway to know that I was actually going to be affected to the extent that I am. I think it’s disingenuous of planners to put corridors of noise around things – I don’t believe for one minute that anyone would have told me I was going to bear the motorway as I do.” (TD)

4. The increase in noise over time was a recurrent theme:

“When it first opened it wasn’t very busy. It was a number of years before all of a sudden we thought ‘there’s never a minute when we can’t see or hear traffic now.’ Nights used to be quieter, it used to be quiet on Sundays. Now it is just a continual noise, no matter what time of day or night, or weekend, Sundays seem to be just as busy.” (Interviewee G)

“I think it [the noise] has increased because the amount of traffic has increased. I’ve noticed when I’m working in the garden that there is more constant noise than there was because the amount of traffic has increased”. (Mr D)

One person who moved in shortly after the motorway was built, wouldn’t have bought the house that she now lives in if she had realised how bad the noise would become:

“It’s a pity. We didn’t have that problem when we first moved here. If that noise was there when we came round to buy the house, I’m convinced we wouldn’t have bought it.” (Mrs F)

The noise she is hearing at her house is coming from over a mile away.

5. A range of exacerbating and alleviating factors were identified by respondents. Foremost amongst these was wind. Those to the northern side of the M65 experience a more continuous noise, carried on the prevailing winds. For those on the southern side the noise is less often blown in their direction, but, because it can correspond to periods of high pressure driving northerly airstreams, they noticed that the noise does tend to be during periods of good weather when they wanted to be outside:

“So it happens that the days that it’s worst tend to be the days when you want to sit out or to have the windows open.” (Interviewee B)

“The problem is that the wind comes over the motorway to us most of the time. The odd time the wind is going the other way we don’t hear it. The kids notice. They’ll say ‘motorway’s not noisy today is it’ and I’ll say ‘no, wind’s in t’other direction’”. (Interviewee H)

Wet weather was identified as a factor making the noise worse. Leaves on trees were identified as bringing improvement to the noise. Noise from peak period traffic could be particularly bad. Sirens of emergency vehicles were identified as a noticeably disrupting noise. Two people felt that the bridge over the Stanworth Valley was responsible for noise that they heard a mile or more away. One person felt that more tree planting and a quieter road surface would help dampen the noise.

6. Two interviewees commented on how visitors react to the noise. One, who felt fairly inured to the noise in general, commented on how the reaction of visitors reawakes his awareness of the noise:

“You get used to it. Then I notice it when visitors come. They say ‘Oh, motorway’s noisy isn’t it.’ It’s a bit embarrassing then. We have an outdoor patio and barbecue. I hear it all the time when we’re out there with friends. That’s when you notice it. Friends comment.” (Interviewee H)

7. Most interviewees made some comment that they found the road useful, although they varied as to whether its usefulness to them personally, or to the region, outweighed its impact:

“I don’t want to appear a hypocrit about this motorway, in so much as I make good use of it– it makes my life more convenient. Although on balance I’d still rather it hadn’t been built.” (Interviewee C)

“I could see the economic benefits of it. There has certainly been a resurgence of business in the area since it has been built. From a personal point of view I

didn't want it because I knew that it would bring noise into an area where we didn't have any." (Mr D)

"We used to get working lads in [to the cafe]. When that [the road] opened, they'd say 'I'm sorry we haven't seen you for a bit, but we don't come this way now, we go on the motorway'. So it took a lot of business from us in town. That had an effect on us. Do we really need it? Has it generated an enormous amount of business? I don't think it has. In fact, in the towns, if you look at them, they're dying, right along [the Calder Valley]." (Interviewee G)

Respondents in Tockholes could identify a benefit in relief of rat-running, whereas those on Gib Lane had seen their road become a rat-run by people going to the motorway junction. The level of congestion on the motorway, particularly queuing to get off at junctions, was raised by several people.

8. A number of respondents raised visual intrusion as an issue. Both traffic movement and headlights were identified as disturbances, in addition to the road itself. How visual impacts rated relative to noise impacts varied from person to person and place to place, and in some instances where interviewees were describing how the road had altered their feelings about visiting favourite places, it was apparent that they could not, understandably, entirely disaggregate their feelings about the sight of the road from its noise.

"What is tranquillity? It's not just a noise thing, it's the visual impact as well." (Interviewee G)

Interview 1:

Context

Mr and Mrs A live with their two children on a country lane $\frac{1}{2}$ mile south of Feniscowles, a village now absorbed into the suburbs of Blackburn. Their house lies just inside the green belt boundary. It is about $\frac{1}{3}$ mile north of the M65. Although their house is slightly above the motorway, they cannot see the motorway from their house because the land rises slightly before falling away to the road, and there is a belt of trees in between. Both Mr and Mrs A are out at work for all or part of the day. The house is single glazed with a double glazed newer extension.

Relationship with the road over time

The family have lived in this house for three years. Mrs A grew up in the area and remembers it from before the motorway was built.

Both of them see positive aspects to the presence of the motorway.

Mrs A: "It [the M65] is very convenient for my husband's work."

Mr A: "The logistics benefit for me is immense. We are quarter of a mile from a motorway. That makes my life easier." He sees the road as an overall benefit despite the noise.

Mrs A remembers the physical impacts of the construction of the motorway:

"I remember it causing a lot of problems, especially at Yew tree farm because he had lovely woods that the motorway went through. And I remember there were people up trees, living in trees, in Stanworth Wood. You can walk there from here, and it is a shame to think of it."

Current effects of living near the motorway

Mrs A: "The biggest issue for us is noise, here. The downside for us is that, we're a single-glazed house, because of the old mullioned windows, so we do hear the motorway when the wind is blowing in the wrong direction. And it is loud, and sometimes in the morning it can out-do the birds. I find it quite frustrating because we do have a lot of birds round here and I'd much rather be woken up by the sound of the birds than by the sound of the motorway. During the day you tend to blank it out, but the morning is the time [I notice]".

"It can spoil being outside. It can definitely spoil the fact that we live in the country. If I want to read in the morning, I think, I really didn't want to be listening to traffic, I'm hoping to hear nothing, or birds. I like to meditate as well and sometimes I think it would be nice to go outside, but then I don't because it defeats the object if you can hear the noise of traffic, so I stay inside."

"It very much does depend on the wind".

"I think the noise is worse, even since we've been living here."

Mr A: "The reality is that some mornings, you go out, and that [the M65] is the significant noise that you hear. It depends totally on the wind direction, other mornings you can go out and it doesn't exist. If the wind's in the wrong direction, we hear it."

"When we get visitors here, they tend to identify the noise, whereas we've probably become a little bit immune to it. A visitor to our house, if the wind is from the motorway, will say, 'is that the motorway you can hear from here?'"

"In the ten years it's been open, the volume of traffic and congestion has increased dramatically. The junctions are backing up at Whitebirk both sides, at Padiham, at Darwen. Originally it was quite quiet, now it's constant, even at what you'd class as off-peak."

"[Since we've lived here] it's more regular, there's no gaps in it, it's all day from early morning right through to late night."

"If it's a rainy day, that tends to amplify the noise".

Effects in the wider area

Mrs A: "My husband would walk from here and not mind the noise, whereas, I would go in the car to Roddlesworth Woods where you can't hear the motorway. I'm looking for solitude"

Mr A: "I'm looking for not using the car. I like the fact that I can walk from here, without getting the dog in the car, so I do a big loop from here. I've become immune to it now I think, visually and aurally."

Interview 2:

Context

Interviewee B and his wife live in an old farmhouse close to the village of Tockholes. The house is situated on a farm track in open countryside. It lies about 1km south of the M65 which is at a lower level and is visible from inside and outside the house. The road is in view as far as the bridge over the Stanworth valley which is about 1 mile away. B works elsewhere for about 2 days each week and is based at home for the remainder of the time. The house is within green belt.

Relationship with the road over time

The family have lived in this house for about 12 years, but have a longer association with the area. They moved in shortly before construction started on the nearest section of road. The house is double glazed throughout and has been for all the time they have lived there.

B remembers that 12 years ago, it was very very quiet. There is now a 'marked difference' on the days when it is noisy.

Current effects of living near the motorway

"The most significant thing is the variability of it [the noise]. There are times when we are not aware of it at all. The atmospheric and the wind direction clearly affect it. There are some days when it is very very noisy indeed. They tend to be when there is high pressure, when the weather is fine, particularly if we've got a northerly drift to the wind. So for example, in the summer when the weather's hot, if you leave the bedroom window open you get woken up at half past six because it's very noisy in those weather conditions. The traffic starts to get heavy at that time. So we [get up and] shut the window."

"So it happens that the days that it's worst tend to be the days when you want to sit out or to have the windows open."

"If we sit immediately behind the house, you can't hear it. You walk past the corner and it hits you, when it is noisy, almost like a physical blow, because you don't expect it. If we sit out in the summer we always sit just behind the house so

that we don't hear it. There are better places to sit from the point of view of what you are looking at, but we tend to sit behind the house so that we don't hear the noise. ”

“After about 7.30pm it quietens down and it isn't a problem”.

B remarked that the methane burner at the landfill site across the valley also creates significant noise from time to time, and can sound quite similar to the motorway.

Effects in the wider area

“I walk fairly extensively over the area. You can walk under the motorway at the [Stanworth Valley] bridge and walk on the other side. I do that occasionally, but since the motorway is there – and I used to walk in this area even before I lived here - I now choose generally to go the other way. I tend to walk on the moors this way. It's visual as well as noise. It's pleasanter walking away.”

“If I walk around the higher part of Tockholes – there's one circuit that is very easy – if you do that, you can hear the motorway the whole way. You pick it up from the other side, from the Whitebirk side as well [where the motorway is visible 1-2 miles away across the Darwen valley]. It's quite intrusive up there.”

“But if you walk down into Roddlesworth Woods, you can't hear it at all, because you go down in the dip.”

Interview 3:

Context

Interviewee C lives on the western side of the village of Tockholes, where the hill slopes down towards the M65 just under 1 mile away. An extended stretch of the road and traffic on it, as far as the other side of the Stanworth Valley, is clearly visible from the house in winter, but is screened by leaves on trees in between during summer months. The whole house is double glazed. The house is within the Blackburn - Darwen greenbelt. C is now retired. He is the author of a book of country walks (published 2003) with historical notes, based on Tockholes.

Relationship with the road over time

C has lived in Tockholes since 1974 and in the present house since 1979. He has photographs showing the official opening of the M65 in December 1997.

“I'm very concerned about the countryside in general – I was brought up in the Lake District. I was very concerned about the damage to the countryside – not just the noise but visually and because of wildlife. I didn't quite have the courage to join them, but I applauded the tree people [direct activists]. I was very concerned about the destruction of the woodland. I must say I've been pleasantly surprised.

It hasn't done as much damage visually and to wildlife as I had expected. And they have done quite extensive plantings of trees." Nevertheless, C expresses concern that the Lancashire Wildlife Trust, of which he is a member, has been unable to open Stanworth Woods as a nature reserve, because monies promised for its upkeep as part of the road scheme apparently have not materialised.

"I also don't want to appear a hypocrit about this motorway, in so much as I make good use of it– it makes my life more convenient. Although on balance I'd still rather it hadn't been built."

C also feels that the road has been good for the economy of the region, especially Blackburn. But he also comments that such economic expansion brings environmental problems such as more traffic: "It is fairly obvious that a lot more traffic and lorries has been generated by the motorway than would have struggled through when the roads were the way they used to be. Delivery lorries to supermarkets seem to be incessant – Asda and Tesco and Morrisons - you can read the signs on the sides of the lorries." C describes the traffic as "a visual disturbance to the landscape".

"Everyone noticed it [the noise] for the first weeks, including me, when it first opened, compared to the way it was before. Certainly people in this row [of cottages] were grumbling about it, saying they didn't realise how bad it was going to be. But that's all died down now, everybody accepts it – you get used to it."

Current effects of living near the motorway

For C, noise is not presently the worst problem of the motorway. "Because of my hearing problems, I would no longer put noise as the worst aspect. The disturbance of the visual tranquillity is now worse. It's visually intrusive, not just from my garden but walking around the countryside."

"The trees are a good barrier to the sound in the summer but in the winter they don't have any effect at all. On clear frosty days it's a lot louder. It's not very often that we get the wind from that direction (North/ Northwest), but when we do, it's a lot louder. It's a steady background drone. I'd rather it wasn't there, but you forget about it very quickly. I do spend a lot of time in the garden, but if it was getting on my nerves, I'd just take my hearing aids out!"

Effects in the wider area

C's book of walks does include three walks that go very close to the motorway. "People just have to grit their teeth," he says, "it's worth it to get to the other side".

C also comments on how some footpaths have been diverted so that they run alongside the M65 to join other paths or roads in order to cross underneath or above the motorway, thereby lessening the number of crossings required: "That footpath [pointing at map] - we used to be able to walk straight across the fields

- but the footpath now hits the motorway and runs alongside it [for some $\frac{1}{8}$ mile before crossing the M65 at Stockclough Lane]". Quite apart from noise issues, the section in question becomes so overgrown in summer that he describes it as "virtually impossible to get through".

Interview 4:

Context

Mr and Mrs D live on the northern side of Tockholes. Their house, which is fully double glazed, is about $\frac{1}{2}$ mile south of the motorway within the greenbelt. The road is not visible from their house or their garden. The old vicarage and trees in the churchyard come in-between. Mr D has, in the past, chaired the parish council. Mrs D has researched and written about the local history of Tockholes. They used to have a dog that they would go walking with and Mrs D is a member of a local walking club. They are now retired.

Relationship with the road over time

The couple have lived in their present house for 33 years, and prior to that lived on the other side of Blackburn.

Mr D describes himself as having been "ambivalent" about the road. "I could see the economic benefits of it. There has certainly been a resurgence of business in the area since it has been built. From a personal point of view I didn't want it because I knew that it would bring noise into an area where we didn't have any. I wasn't too bothered about the visual side. One of the benefits that we got was that the village used to be a rat run [to avoid congestion at junctions on the main roads]. It has benefits as well as disbenefits."

"Once it was opened there was an immediate change. Initially I thought that the noise wouldn't have much effect on us, but then I did find that the constant buzz of vehicles was there."

Over the time since the road was built he says, "I think it [the noise] has increased because the amount of traffic has increased. I've noticed when I'm working in the garden that there is more constant noise than there was because the amount of traffic has increased".

Current effects of living near the motorway

The noise is not an issue inside the house.

Immediately outside at the back they are baffled from traffic noise by the house but further up the garden is exposed.

Mr D: "If I'm on the top garden I can hear it. We tend not to sit on the top lawn. If I had the choice I'd sit down here because that noise would put me off – the

constant swish swish swish swish of the cars going to and fro. The level of noise does depend on the time of day, [for example] when it's heavy [traffic] in the morning. We also get the emergency service sirens which is slightly annoying, but obviously they are carrying out their duties.

Mrs D: "It does depend which way the wind is blowing. During the summer there is a constant buzz if the breeze is coming from that direction, which we never had before."

Effects in the wider area

Mrs D: "I used to go walking in the Stanworth woods a lot, with the dog. If you go down there now it just gets louder and louder until eventually you're walking along the edge of the motorway to get round the farm and back again. Oh it's horrendous. Once you get down at the bottom it's very noisy. We don't do that very often. We usually head away from the motorway." [These comments refer to the section of diverted footpath also mentioned by Interviewee C].

Mrs D says of her walking group, "I have taken them down there to show them around Stanworth Woods, but the noise, it's overwhelming once you are down there. It's a lovely walk, especially when the bluebells are out but we don't very often do it because it is really bad, noisy. People do remark about it, it's getting louder and louder as you're approaching it. It's virtually impossible to speak whilst you're walking past there. I wouldn't take people down there now. We always tend to go towards the moors and round Roddlesworth [i.e. opposite direction to the motorway]."

She also comments that where the footpath was changed near the motorway the stiles are 'like ladders' and would not be possible for people in an older age group.

Mrs D: "Up to Darwen tower [on Darwen Hill, 2 miles from nearest portion of M65], you can see it from there and you can hear it if it's calm."

Mr D: "You can hear it there if the wind is in the right direction, unless it's so windy that you just hear the wind, but I wouldn't say it's intrusive."

Interview 5: Tony Duckworth

Context

Tony Duckworth lives on the southwest edge of Blackburn, one mile north of the M65, which at its nearest point is over the crest of a hill and sunk into a cutting. His house, which is double glazed, lies 30-40m outside the Blackburn-Darwen greenbelt. Tony's background is in civil engineering, including designing and building road projects, but he now runs a business unrelated to engineering. He is generally away from home at work during weekdays. He is chair of the local group of the Campaign to Protect Rural England (CPRE).

Relationship with the road over time

Tony grew up in this house and knows it from long before the motorway was constructed.

He says of the motorway, "It is a very convenient link, but it has now become a very busy link. The way people live and work these days, there is a huge amount of commuting between the different towns in East Lancashire. People from Blackburn work in Preston, people in Preston work in Burnley, etc, etc. As a consequence there is a long queue at the Preston end in the morning."

From a business point of view Tony was happy to see the motorway completed.

Different parts of Tony's business are in Chorley and Accrington, accessible via the motorway to the West and East respectively. In practice, however, Tony tends not to use the motorway between work sites: "The motorway has provided a little greater speed between the sites, but to be honest I generally prefer to use the main roads not the motorway. The one bit of motorway that I do habitually use, which is not what motorways are supposed to be for, is to get on at Darwen [Junction 4] and to get off at the top of the hill at Guide [Junction 5] because it avoids going through the bottleneck in Lower Darwen. It acts as a bypass for a lot of people."

"Knowing that the motorway is over the crest of the hill and in a cutting, you'd have thought that you are well protected from it. When this route was chosen you wouldn't have considered that there would be any impact on us. It would have influenced my enthusiasm for the motorway to know that I was actually going to be affected to the extent that I am. I think it's disingenuous of planners to put corridors of noise around things – which would put me well outside any noise [impacts] – I don't believe for one minute that anyone would have told me I was going to hear the motorway as I do."

Tony says that noise from the motorway increased over time. "It was a very quiet motorway to start with. I believe there's a huge amount of traffic been attracted to it. There was very modest traffic over the first 2-3 years."

Current effects of living near the motorway

Tony points out that their road has become a rat run for people to reach the nearest motorway junction. "There's a lot of traffic that is attracted up this road to cut out a set of traffic lights on the A666 on the way to the motorway at Darwen."

He says, however, "I'm somewhat resigned to the traffic that has been attracted, the noise is the issue that particularly niggles me."

"I hear it. I enjoy my garden. But if I'm busy weeding, for a lot of any day there is the background hum and noise of the motorway. It varies with the wind but it is very noticeable. I don't think the noise is coming over the hill, I think it comes up the valley, so I hear it from the Preston side.

"For a lot of the summer we leave upstairs windows open, so if you are upstairs

you can hear the noise of the motorway. Mostly it's a steady noise so it isn't a problem for sleeping. You can also hear the motorway down the chimney, so you can hear it in the lounge as a background noise if the wind is from that direction."

Tony ponders whether noise has been channelled by the landfill site which has constructed a considerable hill to the Southwest on the other side of the motorway.

Effects in the wider area

"The motorway skirts through what was the countryside surrounding Blackburn, slap bang through the gaps."

"We used to take our bicycles down the canal towards Preston. You hear the motorway for that portion through Stanworth Woods - although it's fairly well [visually] screened by the trees there's a lot of noise there - and then further along the motorway goes over the canal and there's an enormous amount of noise in the vicinity of the canal. It's not a place where you can happily engage in conversation, it's an oppressive noise around you for a fair band either side of that bridge. There was a time when we used to take the bicycles to the far side and we'd have a birthday picnic there for my daughter at Withnell Fold [one mile distant from the motorway]. It's water, it's dead still and you could hear the plop of the fish. Well you've got no chance of that now. It should be tranquillity at its best. But all that's gone."

"From the top of the hill here or by The Rock pub in Tockholes there is a wonderful vista across to Morecambe Bay, the Ribble estuary. Sunsets are beautiful, but there you are on the edge of a flipping motorway, with noise intrusion".

Interview 6:

Context

Mr and Mrs F live on the southwestern edge of Blackburn (in the same area as Tony Duckworth). Their house and garden overlook open country. The greenbelt starts at the end of their garden. Their house is about one mile from the motorway, which lies to the South. They cannot see the road from their house or garden due to higher ground and woodland. The house is double glazed.

Relationship with the road over time

The couple have lived in this house for 9 years, prior to which they lived in Darwen. They moved to the house shortly after the motorway had opened.

Noise is one of several issues to do with the motorway. They comment that they have had a lot of increased traffic because their road gets used as a rat-run bypass to Ewood for traffic accessing the motorway at Junction 4. On the other

hand they find that their own local car trips to Darwen now take much longer (20 minutes instead of 10 minutes) due to congestion caused by traffic going to the motorway at Junction 4, which is also on their route to Darwen. They also comment how Junction 5 at Guide is so busy in the morning that people exit one junction early at Junction 4 to go up the hill on the old road which is “still chock-a-block”.

Mrs F also remarks how much dust they get in summer months: “I do notice the dust. We get an awful lot of dust in summer months, a lot more dust”.

The couple think there are also good things about the motorway – “It does get you from A to B pretty quickly”. They also find a benefit in trips that they make to Chorley, for which, rather than take the motorway route they prefer to take the cross-country (non-motorway) route, which is now less busy because other traffic takes the motorway.

Mr F remarks that “When the motorway first opened it was nowhere near as busy as it is now.” Mrs F says, “We used to sit out and think how quiet it was round here”.

At a later date, she recalls their neighbour saying, “I didn’t realise how noisy the motorway was going to be.” Mrs F asked whether anyone had objected and was told that they had understood it wouldn’t affect them. She was amazed how the noise travelled and did ring the council, who said it was too late to alter anything.

Current effects of living near the motorway

Mr and Mrs F think that in general the sound they hear is not from the nearest bit of road, but comes round the hill from near the bridge over Stanworth Valley, $\frac{1}{4}$ miles away to the Southwest. When it’s wet they think that they hear the whole length of the road that is near them, particularly in the morning around 8:30.

“You hear the rumble of the cars in the morning, it’s really noisy in the morning, then it quietens down. If I open that door first thing in the morning, it hits you right away.

“You wouldn’t sit out and listen to that rumble in the morning. And you’d come in at tea time because it gets noisier. Sometimes I get up early in the morning, I’m not a great sleeper, and I’d make myself a cup of coffee and I’d probably sit out there, but I wouldn’t sit out with that noise - it drones on you - I’d sit in here.”

“In the summer months you don’t seem to notice it so much. The leaves are on the trees. If it’s damp and the ground’s wet you seem to notice it more. It’s double in the morning and it’s double if it’s wet – then it’s really noisy.”

They are surprised how loud the noise is at the distance they are from the road, and wonder if the bridge over the Stanworth Valley makes it worse: “It seems to come from the bridge – I don’t know, because we’re far enough away really.”

“It’s a pity. We didn’t have that problem when we first moved here. If that noise was there when we came round to buy the house, I’m convinced we wouldn’t have bought it.” They think that the noise as it is now would put some potential

housebuyers off and will affect the price of property, particularly if it continues to get worse.

Effects in the wider area

Mrs F says, “I do a lot of walking [with the dog] – there’s a footpath near Bogheight by the motorway and I wouldn’t go there now, it does sound really noisy, it’s quite deafening.”

Interview 7:

Context

Interviewee G and her husband live in an isolated old farmhouse in open countryside to the Southwest of Blackburn. The land round about is designated in planning terms as ‘countryside area’. It is about 450m from the M65 at its nearest point, but the section of road that is in view is further away to the Southwest, stretching down to the bridge over Stanworth valley one mile away, which is visible from the house and garden. The house has been double glazed throughout since they moved in. They are now retired.

Relationship with the road over time

The couple have lived in their present house for 22 years, and lived in the general Blackburn area for many years before that.

G comments on the environmental impacts of the road construction:

“Initially it was a shock to see a beautiful valley being decimated. It went through John Coar’s wood [a neighbouring farmer] which was terrible, and Stanworth Wood. I think over the years it is blending in. I would have liked to see more trees because the nature of the countryside around here is tree-lined valleys so that would look nicer and muffle the noise a bit.”

She also remarks on the impacts on the business of a snack bar that she and her husband used to run in the centre of town:

“We used to get working lads in. When that [pointing at the road] opened, the number of lads that didn’t come through town and come to us...if we saw them occasionally they’d say ‘I’m sorry we haven’t seen you for a bit, but we don’t come this way now, we go on the motorway’. So it took a lot of business from us in town. That had an effect on us. And I think that would have had an impact on a lot of businesses in the town. And then they build things on the outskirts near motorways, oh it’s stupid. Do we really need it? Has it generated an enormous amount of business? I don’t think it has. In fact, in the towns, if you look at them, they’re dying, right along [the Calder Valley].”

Regarding the noise, G says:

“It’s made quite an impact on us really, it was very very peaceful before. When it first opened it wasn’t very busy. It was a number of years before all of a sudden we thought ‘there’s never a minute when we can’t see or hear traffic now.’ Nights used to be quieter, it used to be quiet on Sundays. Now it is just a continual noise, no matter what time of day or night, or weekend, Sundays seem to be just as busy. And we notice it grinding to a standstill a lot more than we used to.”

“Christmas I think is the quietest, because the road is so quiet on Christmas Day that you just remember what it used to be like.”

Current effects of living near the motorway

“When you’re outside it’s the noise – it’s a continual drone - but when we’re inside we get the visual impact of it and the lights. It’s just headlights [the road is not lit on the section of the motorway within view]. When we moved here it used to be dark.”

With windows open in fine weather the noise is audible inside the house, even in the back rooms facing away from the road: “In summer it’s awful. I don’t know if you can get used to a continual drone, but when you’ve always had peace ... and that’s the joy of living somewhere like this. It was so quiet when we moved here, it was wonderful – that was what we wanted, just to live in the countryside.” At night time, even with windows open, the couple find that their sleep is not generally disturbed by traffic noise, unless there is exceptional noise, like police sirens, which will awaken them.

G says that the noise is normally carried to them from the Southwest on the prevailing wind, but because the motorway curves slightly as it passes their house, wind from the East also brings noise to them from another section, which tends to be the case during good weather in the summer.

Outside the house: “You’re aware of the droning noise and sirens. It does intrude on your space somehow, although I think you subconsciously block the sound out. It’s nice to just be peaceful and still sometimes. Depending on the wind, it decides where we sit. We’d sit on the other side of the house [to be out of the wind as well as out of the noise]. If we don’t get the noise from one side we get it from the other, depending on the wind. When the wind comes from the North we don’t hear it as much, although it doesn’t obliterate it completely.”

“I think it makes you tense, noise, continual noise.”

G thinks the road surface could be quieter. She also comments on how Stanworth Bridge is the apparent source of noise: “I think it sounds louder because it seems to echo as it goes over the bridge [at Stanworth Valley], it seems to resonate more.”

As well as noise, G also commented on the light pollution caused by the traffic: “What is tranquillity? It’s not just a noise thing it’s the visual impact as well.”

Effects in the wider area

The couple have dogs that they walk. “You notice it [the noise] for quite a long way from here. When you get out of it and it’s so peaceful, that’s when you notice what you’ve been listening to – you notice the silence – and you think ‘oh how wonderful, this is what it used to be like’.”

G doesn’t think that noise affects property prices. She comments, “It’s bizarre that being near to a motorway junction is seen as a selling point”.

Interview 8: (telephone interview)

Context

Interviewee H lives with his wife and two children. Their house is in the midst of open country about 300m north of the M65, slightly above the motorway, which is visible from the house. The house is double glazed throughout. He is out at work during the daytime.

Relationship with the road over time

The family have lived in the house for 11 years, moving in shortly before the motorway was built.

H recalls, “When they built it they said to us, don’t worry, it’ll hardly get used, and now they’re talking about a third lane”.

Current effects of living near the motorway

“It depends which way the wind is blowing. If the wind is blowing the wrong way it’s absolutely horrendous.”

“You get used to it. Then I notice it when visitors come. They say ‘Oh, motorway’s noisy isn’t it.’ It’s a bit embarrassing then.”

“We have an outdoor patio and barbecue. I hear it all the time when we’re out there with friends. That’s when you notice it. Friends comment.”

“We’ve built a conservatory and we sit out there a lot, so we do hear it a lot more now. There’s a constant road noise all the time, even though it’s double glazed.”

“The worst noise is the empty trailers of Castle Cement trucks. When they go over the bridge over Stockclough Lane they bounce and ring like a big empty tube.”

“The problem is that the wind comes over the motorway to us most of the time. The odd time the wind is going the other way we don’t hear it. The kids notice. They’ll say ‘motorway’s not noisy today is it’ and I’ll say ‘no, wind’s in t’other direction’”.

Effects in the wider area

“If I take the dog for a walk across the fields close to the motorway I can hardly hear myself think.”

Appendix D

Case Study 4: The A34 at East Ilsley, North Wessex Downs area

Background

East Ilsley is a small village in Berkshire immediately next to the A34, within the North Wessex Downs Area of Outstanding Natural Beauty. At one time the trunk road ran through the village itself and residents welcomed a bypass when it was built in the 1960s, bringing relief from through-traffic. Since then, however, noise from the A34 has risen with the volume and speed of vehicles using this strategic route. The road connects with the M3 in the south and the M40 to the north, linking the south coast and the Midlands. The MP for Newbury has described the junction between the A34 and the M4, a few miles away, as “the crossroads of the South of England.”

East Ilsley Parish Plan, produced in 2003 following considerable consultation with residents, recorded that A34 traffic noise had become “a major blight on the village.” Other recognised problems were the increase in traffic using the village to access the trunk road and traffic danger from its slip roads.

Reducing traffic noise was listed among nine priorities for the village cited in the plan. Other issues included the re-introduction of a village shop, the need for increased traffic calming and more flexible local transport. A youth questionnaire (with a 70% response rate) identified the proximity of the A34 as a concern and irritant for younger residents, who cited both the noise from the road and danger from traffic entering East Ilsley among the things they least liked about the village.

The consultation found many residents were relative newcomers seeking to enjoy rural living: the most common length of time lived in East Ilsley was one to five years and the most common reason for coming to the village was “love of village life”. Asked what was most important to them about East Ilsley, the most common reply was “the environment.”

A major road scheme about 5 miles south of East Ilsley has had some implications for the level of traffic passing close to the village. In 2004, following on from the 1998 opening of the Newbury Bypass, a scheme at the Chieveley junction between the A34 and the M4 provided nearly 3km of new dual carriageway and an underpass below the motorway, with the objective of improving the traffic flow and safety. A “One Year After Study” carried out on the scheme¹ showed that as well as reducing journey times for through-traffic, the scheme had led to some traffic growth. In the vicinity of East Ilsley, traffic on the A34 reached 58,100 vehicles per day in 2005. The report concluded that this represented a rise of 4% since 2002, solely as a result of the junction improvements (i.e. 4% growth over and above background traffic growth during this period, assumed to be 3%). Larger increases were recorded closer to the junction: 8% immediately north of the M4 and 14% immediately south of it. The scheme itself included a noise barrier, landscape modelling and a low-noise road surface, and the report found that, despite the increases in traffic, noise levels at properties near the junction were either the

¹ Department for Transport (March 2006) *A34/M4 Chieveley Improvement One Year After Study*.

same or marginally lower. However, the study did not include any before or after noise monitoring at East Ilsley², where the A34 has not benefited from the same kind of noise abatement measures. A further evaluation of the scheme is due to be prepared in 2009.

A separate noise assessment by the Highways Agency, published in 2006, identified East Ilsley as one of 44 'noise hotspots' in the Agency's 'Area 3'. This means that on the basis of noise modelling, East Ilsley meets the criteria for noise mitigation funding from the Government's annual ring-fenced budget of £5m. However, due to the village's low population density (480 in 2003), the East Ilsley A34 bypass receives a relatively low placing in the Noise Severity Index, and is only ranked 30th of the 44 qualifying sites in Area 3³.

Case study interviews

Summary

The eight case study interviews are all with residents of East Ilsley. Five live on the A34 side of the village – about 250 metres or less from the road. One is in the centre of the village, just over 300m away, whilst the other two are on the further side of the village, one over 400m and the other nearly 1km from the road. The interviewees were initially recruited through the parish council. A resident who has concerns about traffic noise contacted other residents willing to be interviewed about the issue.

Key points emerging from the interviews:

1. There is general agreement that the road has become progressively noisier with an ongoing rise in traffic. Interviewees perceive an increase in the volume of vehicles using the road, a lengthening in the duration of heavy traffic across 24 hours, a growth in numbers of heavy lorries and an increase in the speed of vehicles.

"We never heard it before, now we hear it all the time, and it's permanent, it's 24 hours a day, because that now is a main trunk road from the north to the south. People don't go round London anymore, they go round the A34. So it's now one of the busiest roads and one of the noisiest." (Interviewee A)

"I think there's more stuff on the road. I think it's going faster and it's going faster for longer; [...] You can wake up at about 4.30, 5 o' clock and suddenly you will hear it start to go. There'll be the odd thing before that and then it will start – the rumble will start at 5 o'clock." (Interviewee D)

"It does seem that there's a massive amount of trucks on the road, more, a great deal more than there used to be and that they're heavier than they used to be, as well, so maybe that's impacted the amount of noise, because they're having to work the engines harder to get them up the hill. I think the hill's an issue noise-wise because we've got a steep hill coming into the village and a steep hill leaving

² The Highways Agency has confirmed that this is the case and that noise monitoring was only carried out at sites around Chieveley village.

³ Letter from the Highways Agency to local resident, June 2006.

the village...” (Interviewee H)

Some interviewees cite the road schemes affecting the A34 - the Newbury Bypass and the Chieveley underpass - as accelerating traffic growth, and one interviewee has written to the Highways Agency about this in the past. In contrast, another interviewee comments that the Chieveley scheme has not led to “a step change in traffic”. A number of interviewees say traffic is flowing more smoothly following the introduction of the M4 underpass.

Interviewees say wind direction, weather, tree foliage and screening from other buildings are all factors influencing noise levels from the road.

2. Several interviewees describe ways in which the road noise limits their use of garden space in summer, making activities such as barbecues less appealing and detracting from tranquillity.

“You choose your days to sit out in the garden sometimes, [...] if it’s too noisy you do find yourself coming in, almost sub-consciously thinking about it.” (Interviewee B)

“You can’t go and sit and chill out in the garden with this sort of roar going on in the background.” (Interviewee D)

One resident, whose house was on the slip road into the village, has made changes to his garden to escape the noise, for example, moving a sitting area at the side of the house to the back and designing an extension in such a way as to shelter the garden from noise. Another is considering methods of blocking both the sound and sight of traffic:

“So now we’re trying to work out ways. I’ve got to get a much louder water feature for example. I’m trying to work out how to screen the front off [...] I’m going to try and visually block it and get a loud water feature [...] apparently if you can’t see it you don’t hear it as much.” (Interviewee D)

3. Some interviewees say noise from the road disturbs their sleep:

“I get woken up by a truck that’s struggling to get up the hill, or quite often, you know, little rows, that you hear, horns blasting at each other at 4 o’clock in the morning” (Interviewee H)

“Last summer I was cross about it all the time, and so I was waking up and just being cross, which [...] doesn’t help you get back to sleep and I don’t think helps anything.” (Interviewee D)

Most of the interviewees have double or triple-glazing and find this helps in screening out noise. A common problem however is that on summer nights, noise from traffic deters them from opening windows on the side of the house nearest the road. Because of the night time disturbance, one interviewee says they have “firmly relegated” a bedroom at the front of the house to a spare room, which means that his son has to sleep in a much smaller bedroom than he otherwise would. Another interviewee thinks traffic noise is the cause of her 11-year-old son’s

early morning wakefulness.

4. People vary considerably in the extent to which they feel themselves to have become acclimatised to the noise. One interviewee says she has never got used to it, despite having owned her property for a decade. Several others say they have in some way grown accustomed to it or at least accepted it.

“Over time you just accept, it’s that noise in the background. It’s not pleasant but unfortunately it’s there.” (Interviewee B)

Interviewees who describe themselves as being accustomed to the noise are not necessarily unaffected by it – for example one interviewee who says the noise is *“something we tend to have got used to”* also reports that it wakes him at night. One resident has had a conscious struggle to come to terms with the noise and not let it upset her:

“It’s actually like wobbling a tooth, like I’ll, I’ll wake up and I’ll think about it and, and then I’ll think, ok, right I won’t think about it again. Do you know what I mean? It’s kind of, it’s like something that’s there that’s niggling, that’s always there, but I, I try very hard to... You know we love living here, we love this village, we love our house, you know the kids were born and grew up here, and the noise just is - I think wherever you live there’s something that’s not good and that’s the not good thing about here.” (Interviewee D)

Others also expand on the idea that living with background traffic noise is part of a compromise to be reached involving a trade off against other factors, such as the accessibility of the village by road and the affordability of the property. Most interviewees and their families use the A34 frequently and some are conscious of a contradiction in having been attracted to the village because of convenient access and then finding the road noise a problem. However, there is also some uncertainty about whether the compromises made have been worthwhile, particularly given the rise in traffic.

“I remember we came back and looked at [the house] again and it seemed noisier; but again we sort of weighed it up and we just thought that the pluses outweighed the minuses. And I suppose really, ever since we moved in it has been a sort of constant bug-bear really.[...] I do wonder whether it was the right decision. I mean I suppose it meant, buying here, we got a bigger house. But I sometimes think, well would it, would I have rather lose the road and lose space?” (Interviewee C)

“I think we would have thought differently if the noise, if we came to look at the house today with the noise being as loud as it is now we may well have thought differently.” (Interviewee H)

Some interviewees who have become accustomed to the noise themselves say their visitors notice it:

“With people round, you find yourself apologising for it and explaining, ‘well it depends on which way the wind’s blowing’ - making excuses for that distant noise.” (Interviewee B)

“People that visit the house always comment [...] how noisy it is, especially in the garden.” (Interviewee H)

Unsurprisingly, the two interviewees living furthest from the road are the least affected by traffic noise, which they say is still audible, but does not bother them. However, both observe that the problem must be much worse for others living closer to the A34, and one interviewee says she would not wish to move further into the village because of the traffic noise:

“Whilst it’s great for getting from A to B quickly, there’s a price to pay for that.” (Interviewee F)

5. A low-noise road surface, a noise barrier and speed restrictions are seen as potential solutions to the noise problem, but there is a strong sense of pessimism about the chances of securing any abatement measures in the near future:

“for a small village like East Ilsley, unfortunately, whose population isn’t that big, to complain means nothing to the Government.” (Interviewee A)

“You are dealing with a very, very high authority who will re-surface the road or do this whenever they want to do it, not when you want to.” (Interviewee G)

Some residents express regret or frustration that the road was originally routed so close to the village:

“When you look now you think well why on earth didn’t they just put it quarter of a mile away [...] If you actually look, it hugs the village, it actually curves round the village, and you think, why did they need to do that?” (Interviewee C)

“It’s just a shame when they did the A34 it wasn’t in that bit between, [...] if it was a distance further, I suppose at the time it was a blessing ‘cause it wasn’t coming through the village any more.” (Interviewee B)

6. In addition to annoyance about traffic noise there is also strong concern about traffic danger as a result of vehicles from the A34 rat-running through the village.

“Where we live is an accident black-spot and we sometimes get a lot of very heavy lorries in a village that is totally unsuitable for them... we’ve actually had them even wedged on corners.” (Interviewee G)

“The problem that we have with the A34 is that if there is an accident we become a bit of a rat run, people find this as the quick route through and, well, it is quite serious. It has a huge, quite a major impact crossing roads, just the safety impact because a lot of people don’t know and you have people coming up the high street the wrong way because their sat navs tell them to do that, and so we have large, very large vehicles trying to come through the village” (Interviewee B)

One interviewee says she almost feels at times as if the village is itself a junction on the A34, while another says drivers commonly speed past her house on the slip road because they are *“still in A-road mode.”*

7. Noise and traffic danger are strong deterrents to the use of certain footpaths running close to the A34:

“I can remember saying to my husband once, ‘Why don’t we cut down there? It’s going to be much quicker.’ And he said, ‘It’s a horrible path, it’s really dangerous.’ So I’ve never gone down there, but he said, you know, ‘I wouldn’t take the kids down that one.’” (Interviewee C)

“There are a number of footpaths that go very, very close to the A34. [...] There is one that goes parallel from Fiddlers Lane up to Stanmore Road and that’s just deafening unless you walk it Christmas Day.” (Interviewee G)

8. Noise can affect opportunities for recreation in the village. Several interviewees think proximity to the A34 is a problem for the village’s Millennium Green:

“It’s a pleasant area and it’s got benches, but because of the noise it’s not pleasant to sit there with the traffic just trundling past, ‘cause you’ve got the A34, you’ve got the corner of another field, and it’s right there. So it’s not the best location for a nice green area to be in, so we’ve never used it. We may walk the dog around it but that’s as afar as it goes.” (Interviewee B)

“I can’t imagine many people picking it as a place to go and picnic and yet I know the village spent a lot of money on picnic tables. And then they decided to plant trees, because nobody was using it, it would make it more pleasant [...] and I just thought you’re throwing good money after bad [...] and I’m sure it would be used more if it was in a more amenable place, but it really is very close to the road.” (Interviewee C)

“We do go up there occasionally but we don’t stay long, [...] because of the noise really. [...] I tend to probably go into Newbury with my daughter to go and do things rather than stay locally.” (Interviewee E)

Traffic noise is also mentioned in relation to the village fete, which one interviewee estimates is held 30 – 40 yards from the A34:

“Even on [...] a sunny June afternoon it can be difficult to hear yourself speaking there.” (Interviewee H)

9. Some comments from interviewees suggest that traffic noise can alter the feel of a rural community in quite subtle but pervasive ways:

“It affects my whole perception of where we live I suppose. I mean only a few miles away, West Ilsley, it feels a lot more rural than we are just because we’re by this kind of busy road. Even though we’re surrounded by just as much open countryside. It has a very different feel because of [...] the road sort of thundering past.” (Interviewee C)

One interviewee, who lives within 100 metres of the road, finds the traffic noise makes it difficult to have a casual conversation outdoors with her neighbours and she sometimes has to shout to be heard. Road noise is also described as *“a common whinging point”* in the wider community: *“like the weather.”* An

interviewee who teaches at the local school in the village says it is necessary to compete with the sound of traffic when supervising outdoor PE. People who are at home during the day are conscious that they are more affected by the road than other family members who are routinely away from the village. Some interviewees say they use the radio or music to screen out the sound of traffic. There is wide agreement that road noise can be heard in most parts of the village. However, the local countryside offers some respite from this:

“We’re quite fortunate that we’ve got The Ridgeway, it’s actually behind us so that, you know, within five minutes of leaving the house you can be in what feels like right in the middle of the countryside and you can’t bear the road from there.” (Interviewee H)

Nevertheless, another interviewee says she is sometimes aware of traffic noise when on The Ridgeway and also mentions visual intrusion:

“parts of it are quite high so that it [noise] does blow over and it’s quite open, and it’s a shame, the view, when you see the village and then you just get that lorry going past and you think, oh!” (Interviewee B)

10. Several interviewees are certain that traffic noise has affected the value of their property:

“I think if it was somewhere a bit quieter it would be worth a lot more money today.” (Interviewee H)

In some cases residents have had clear evidence for this. For example, one interviewee says she was told by an estate agent that her own home would be worth £30,000 more if it was away from the traffic in nearby West Ilsley, while another says that, when house-hunting, she and her husband looked at slightly smaller houses in West Ilsley, and found that they cost about £75,000 more. She was also told by a professional valuer that if their new home were not so close to the A34 it would be worth an additional £100,000. One of the interviewees living further from the road however, considers property prices are unaffected.

Interview 1

Context

Interviewee A, aged 62, is a company director who lives with his wife and 17-year-old son in a house in the centre of East Ilsley, a little over 300 metres from the A34.

Relationship with the road over time

The family have lived in their house for 15 years and did not find the traffic noise noticeable until about 10 years ago. “We never heard it before,” says A, “now we hear it all the time, and it’s permanent, it’s 24 hours a day. Because that now is a

main trunk road from the north to the south. People don't go round London anymore, they go round the A34. So it's now one of the busiest roads and one of the noisiest." The house has secondary double glazing upstairs and triple glazing in a downstairs extension that faces towards the trunk road.

A considers that the A34 in East Ilsley has become a lot busier since about 2000, and that the volume of traffic also rose greatly with the opening of the Newbury Bypass and the underpass below the M4 junction.

He wrote to the Highways Agency about the problem in June 2006, saying that there had been a dramatic increase in noise levels following the opening of the underpass. In response the HA said that, while the road at East Ilsley met the criteria to qualify for noise mitigation, the low population density of the area gave it a low placing in the Noise Severity Index. The HA did promise that when resurfacing was required for maintenance purposes lower noise surfacing materials would be used as a matter of course, but were unable to say when this would be. A has been frustrated by this response, commenting that "for a small village like East Ilsley, unfortunately, whose population isn't that big, to complain means nothing to the Government."

The accessibility offered by the A34 was one of the reasons that the family initially moved to the village and A values its convenience and uses the road to get to his office on the other side of Newbury. Nevertheless, he argues that the growing traffic has been detrimental to the area over time, and considers that the impact on property prices (see below) could form the basis of a legal case against the Government: "We didn't ask for the A34 bypass to be open, we didn't ask to get the busiest traffic route in Europe now – almost, when we've had a nice little village that's changed beyond- you know, because of the noise, and because we've been here that long we've seen the changes."

In addition to resurfacing and/or noise reduction barriers, A would like to see a 50mph speed restriction.

Current effects of living near the A34.

Because of the road noise the couple have difficulty in opening windows on hot summer evenings and are currently thinking of putting air conditioning in. If they do leave their windows open then the noise sometimes wakes them up. The road is busy between 4 am and midnight.

The problem is exacerbated by a Westerly wind, which A says is the prevailing wind direction. The family's front garden faces towards the road and they have planted trees that help to screen the noise. Nevertheless, traffic sound makes it difficult for them to relax there and make full use of a swimming pool they have installed, enjoy barbecues or just sit quietly. A describes the effect as: "on a good day a drone, on a bad day a noise". He estimates that noise can be a problem up to a mile away from the road. In terms of recreation, the noise does not prevent them from walking around the village, but they no longer use a footpath that runs parallel to the A34: "It's not comfortable 'cause the cars are going so fast that you're worried that they're going to come off and into the walking area."

Effects in the wider area

A mentioned the village's Millennium park which he said was quite close to the A34, and which he thought was not well used. He also believed noise levels were an issue for house buyers: "It used to be a village where everybody wanted to come and live 'cos of the access and I think people still will buy a house here, but I think if they're anywhere near the A34 noise level, whatever you say, people get put off by the road noise level." He estimates that when he tried to sell his property a couple of years ago about 40% of potential buyers mentioned the road, though not all of them appeared deterred by it.

Interview 2

Context

Interviewee B, aged 40 is a recently qualified primary school teacher, who formerly worked as a teaching assistant at the primary school in East Ilsley. She lives in the village, at the top of a hill, around 100m from the A34, in a house that she shares with her husband and two children. The road is visible from upstairs and friends will sometimes call her to find out if there are problems with traffic.

Relationship with the road over time

B has lived in her current home for nearly 14 years, and has become accustomed to the noise: "Over time you just accept it's that noise in the background. It's not pleasant but unfortunately it's there." It is only when visitors come that she realises quite how bad it is: "With people round, you find yourself apologising for it and explaining, 'well it depends on which way the wind's blowing' - making excuses for that distant noise."

The school where B has worked for five years is very nearby and "a couple of fields" from the road, making it necessary for teachers to compete with the sound of traffic when supervising outdoor PE: "You get used to having to raise your voice," she says.

B is also concerned about danger from heavy vehicles coming off the trunk road: "The problem that we have with the A34 is that if there is an accident we become a bit of a rat run, people find this as the quick route through and, well, it is quite serious. It has a huge, quite a major impact crossing roads, just the safety impact because a lot of people don't know and you have people coming up the high street the wrong way because their sat navs tell them to do that, and so we have large, very large vehicles trying to come through the village"

B thinks it would have been better if the trunk road had been routed further away from the village when it was first built. "It's just a shame when they did the A34 it wasn't in that bit between, [...] if it was a distance further. I suppose at the time it was a blessing 'cause it wasn't coming through the village any more."

B's husband uses the road on a daily basis to commute to Newbury and B also uses the road for trips to Newbury, shopping etc.

Current effects of living near the A34

Because of the "constant din in the background" B's children sleep with their windows shut during the summer. She also finds that the noise affects the way she spends time outdoors: "You choose your days to sit out in the garden sometimes, [...] if it's too noisy you do find yourself coming in, almost sub consciously thinking about it." She will sometimes put on the radio to block out the noise of the road.

The proximity of traffic also affects the family's use of the nearby Millennium Green: "It's a pleasant area and it's got benches, but because of the noise it's not pleasant to sit there with the traffic just trundling past, 'cause you've got the A34, you've got the corner of another field, and it's right there. So it's not the best location for a nice green area to be in, so we've never used it. We may walk the dog around it but that's as far as it goes."

Road noise affects the way in which the family use different rooms in the house – they would not generally sit in the dining room with the windows open in the summer because it is closer to the road, but they sit instead at the back of the house which is quieter.

Effects in the wider area

Some parts of the Ridgeway are affected by road noise, and the sight of lorries going by is detrimental to the view: "Parts of it are quite high so that it [the noise] does blow over and it's quite open, and it's a shame, the view, when you see the village and then you get that lorry just going past and you think, oh!"

Interview 3

Context

Interviewee C is a 47-year-old primary school teacher, whose home is less than 200m from the A34. She lives with her husband and two children. The road is visible from their top floor, but is screened from the garden by a hedge.

Relationship with the road over time

Road noise has been a significant issue for C from the point when they first looked at the house, 10 years ago, and identified this as a major negative factor. "I remember we came back and looked at it again and it seemed noisier, but again we sort of weighed it up and we just thought that the pluses outweighed the minuses. And I suppose really, ever since we moved in it has been a sort of constant bug-bear really."

Whilst neighbours told her that people get used to the noise, C says this has not been her experience; she has always been aware of it and has never been able to screen it out. She says: "I do wonder whether it was the right decision. I mean I suppose it meant, buying here, we got a bigger house. But I sometimes think, well would it, would I have rather lose the road and lose space?" She adds that a quieter road surface would make a big difference. The family have recently installed secondary glazing in their upstairs windows to screen out the sound of traffic at night, which was disturbing them. "I mean lots of times I'd wake up at night and think, gosh that road's noisy tonight. It seems to go most of the night as well, I mean obviously the volume of traffic drops, but I was never conscious of waking up at any time and thinking there was nothing on the road, you know. It's always something on it." She considers that traffic increased with the building of the underpass at the junction with the M4.

In addition to being troubled by the noise C says this stretch of the A34 is "very dangerous" and known for accidents. Because the slip roads were built when the road was much quieter it has become increasingly difficult for vehicles to pull on to it safely. Lorries will suddenly slow down, she says, and car drivers don't notice until it is too late. C argues there is a strong case for reducing the speed limit. When there is a problem on the A34 traffic tends to divert through the village, so that "It almost feels sometimes like we're a junction on it."

C is aware of the history of the road, which at one time ran through East Ilsley. When the bypass was built, she says, the village was so relieved to get rid of the traffic that there was no concern about where the road was re-routed to. "When you look now you think well why on earth didn't they just put it quarter of a mile away [...] If you actually look, it hugs the village, it actually curves round the village, and you think, why did they need to do that?"

The family regularly use the road themselves to get to Newbury and C's husband commutes on the A34.

Current effects of living near the A34

C says that traffic noise can be heard at the furthest point of the village and its impact is a pervasive one: "It affects my whole perception of where we live I suppose. I mean only a few miles away, West Ilsley, it feels a lot more rural than we are just because we're by this kind of busy road. Even though we're surrounded by just as much open countryside. It has a very different feel because of [...] the road sort of thundering past."

If walking for leisure C tends to walk away from the road as much as possible. She no longer uses a footpath that runs alongside the A34 because it has become unpleasant to walk on, particularly with the increasing numbers of lorries overtaking each other. She also mentioned a path which provides a short cut between West Ilsley and East Ilsley, which she deliberately avoids: "I can remember saying to my husband once, 'Why don't we cut down there? It's going to be much quicker.' And he said, 'It's a horrible path, it's really dangerous.' So I've never gone down there, but he said, you know, 'I wouldn't take the kids down that one.'"

Effects in the wider area

C thinks the proximity of traffic must affect the amenity value of East Ilsley's Millennium Green: "I can't imagine many people picking it as a place to go and picnic and yet I know the village spent a lot of money on picnic tables. And then they decided to plant trees, because nobody was using it, it would make it more pleasant [...] and I just thought you're throwing good money after bad [...] and I'm sure it would be used more if it was in a more amenable place, but it really is very close to the road."

In addition, C thinks that the A34 contributes to the perception of East Ilsley as a commuter village and a place where people come and go, lessening the area's community spirit.

C says many local people appear undisturbed by traffic noise, but are becoming increasingly aware of its effect on property prices. She was told by an estate agent that her own home would be worth £30,000 more if it was in West Ilsley and away from the traffic.

Interview 4

Context

Interviewee D is a 43-year-old mother of two, married to a management consultant. Their home is located on the road that runs into East Ilsley off the A34. The A34 is around 250m from the house and clearly visible in winter months when trees are bare.

Relationship with the road over time

D and her husband have lived there for 16 years. She initially saw the property from the road when house-hunting, and was attracted by its accessibility for commuting. Although the house survey mentioned that the road might be an issue, this didn't concern them at the time, and it is only in the last couple of years that she has become bothered by it. She considers the traffic is considerably worse since the Newbury Bypass opened: "I think there's more stuff on the road. I think it's going faster and it's going faster for longer, [...] You can wake up at about 4.30, 5 o'clock and suddenly you will hear it start to go. There'll be the odd thing before that and then it will start – the rumble will start at 5 o'clock."

Besides being disturbed by the noise, D dislikes the appearance of the road, especially in winter when the view is unobstructed. She is also concerned about drivers speeding past her house "because they're still in A-road mode" and wishes there was a physical barrier to make them slow down. Cats have been killed outside the house. D's daughter is very aware of the traffic danger.

D finds the A34 a useful road. She travels on it to get to Newbury and to take her children to school, and her husband uses it to commute.

Current effects of living near the A34

D says the sound of the traffic affects her in several ways. “It has to be really stuffy before I can leave my windows open because it is noisy. It means I have music on in the background all the time where I might not choose to.”

On a noisy day it will stop her sitting outside: “You can’t go and sit and chill out in the garden with this sort of roar going on in the background.” She is currently considering new methods for blocking the sound: “So now we’re trying to work out ways. I’ve got to get a much louder water feature for example, I’m trying to work out how to screen the front off. I mean basically from my research I’ve discovered there’s nothing I can do to block the noise at all on a personal level, but I have read that if I visually block it then it might be better so I’m going to try and visually block it and get a loud water feature [...] Apparently if you can’t see it you don’t hear it as much.” She is also considering growing plants on a high trellis for this purpose.

D’s son, who is 11 and sleeps at the front of the house, normally wakes up at 5 am, and D thinks this is because of the road noise, but does not want to suggest this to him as there is no easy solution.

D sleeps at the back of the house. They have replaced their windows with more effective double-glazing which has helped in reducing the noise. Nevertheless she finds the traffic disturbs her in summer when she keeps her windows open.

D described her struggle to come to terms with traffic noise: “It’s actually like wobbling a tooth, like I’ll, I’ll wake up and I’ll think about it and, and then I’ll think, ok, right I won’t think about it again. Do you know what I mean? It’s kind of, it’s like something that’s there that’s niggling, that’s always there, but I, I try very hard to... You know we love living here, we love this village, we love our house, you know the kids were born and grew up here, and the noise just is - I think wherever you live there’s something that’s not good and that’s the not good thing about here.”

Consequently, D says, she is making a conscious effort not to be annoyed. “I’m trying to be calm about it, because I’ve realised there’s very little I can do, and you know life’s too short really [...] Last summer I was cross about it all the time, and so I was waking up and just being cross, which [...] doesn’t help you get back to sleep and I don’t think helps anything.” She adds that her husband is less affected and generally tries to calm her down: “He’ll be like, yeah, yeah, it’s fine, I can’t hear it.”

Effects in the wider area

D says the road noise is a “common whinging point” in the wider community: “like the weather.” However she doesn’t think it prevents people from talking across the fence. In her experience the traffic can be heard from the other side of the village pond, which is nearly 400m from the road.

Interview 5

Context

Interviewee E, a 41-year-old chartered surveyor, lives with her husband and small daughter in a house that is less than 100m from the A34.

Relationship with the road over time

E's husband commutes by road and E is about to resume work in London and will be using the A34 to commute to Didcot station. She currently tends to stick to back roads for day-to-day journeys. Since they bought the house, three and a half years ago, she says traffic on the road has become busier and the number of lorries has increased. She has also found the noise more intrusive since spending more time at home looking after her daughter.

Current effects of living near the A34

E says that the noise affects the way they use the garden. They tend not to have many barbecues there during the summer and those they do have will be in the evening rather than lunchtime, because there is then less traffic. Noise makes them unlikely to sit out in the garden for more than an hour or so. "We would go and try and find somewhere quieter [...] or would drive somewhere else into the countryside." Having a small child, she would like to be able to make more use of the garden. She occasionally takes her daughter to the Millennium Green playground in East Ilsley but finds it very noisy "We do go up there occasionally but we don't stay long, [...] because of the noise really. [...] I tend to probably go into Newbury with my daughter to go and do things rather than stay locally."

The house has double-glazing and the noise of traffic does not disturb E and her husband at night, but can wake them in the summer if the windows are open.

They have noticed that the level of noise is affected by weather and wind direction; the volume of lorries on the road and rush hour traffic. When trees are in full bloom on the meadow then they seem to screen out sound.

Effects in the wider area

E says the traffic noise can make it difficult to have a casual conversation with her neighbours outdoors, and she has sometimes found herself having to shout to be heard.

E has good evidence that the road affects property prices. At the time when they bought their East Ilsley house, she and her husband looked at slightly smaller houses in West Ilsley, and found that they cost about £75,000 more. They were also told by a professional valuer that if their new home had not been so close to the A34 it would be worth £100,000 more.

Interview 6

Context

Interviewee F, aged 40, is a freelance florist who lives with her husband and three children, just under a kilometre from the A34 on the outer edge of East Ilsley.

Relationship with the road over time

F has lived in her home for 10 years. She uses the A34 for going to Newbury and Oxford, for a wide variety of trips including for work. In her experience it has become busier and noisier, but is running more smoothly since the underpass was built at the junction with the M4.

Current effects of living near the A34

F says she is not really bothered by the road and finds it is great for access. She says she can hear the road but it is not a problem and it doesn't stop her sitting in the garden. She also does not think it affects her use of the countryside. However, she adds that she probably wouldn't want to live in the village itself because of it and the road noise would make her think twice about buying a property there: "Whilst it's great for getting from A to B quickly, there's a price to pay for that."

Effects in the wider area

F does not think the road has an impact on local schools or facilities, for example, affecting the park. She does however think that it affects property prices.

Interview 7

Context

Interviewee G, aged 59, is a self-employed business consultant working from home who lives over 400 metres from the A34 in East Ilsley, in a house on the far side of the village from the road, which he shares with his wife and mother-in-law.

Relationship with the road over time

G has lived in his home for 16 years and says that the quantity of traffic and the noise from it has increased substantially during this period, but adds, "With noise, you get yourself immune to it." He finds traffic is audible from 3-4 miles away.

For G, the major source of annoyance connected with the road is not road noise but the danger and congestion from traffic cutting through the village: "Where we live is an accident black-spot and we sometimes get a lot of very heavy lorries in a village that is totally unsuitable for them... we've actually had them even wedged on corners."

G has installed double-glazing in his home to screen out disturbance from the local road, and this has also shut out the noise completely from the A34.

He uses the trunk road himself on a daily basis and does not consider there has been a step-change in traffic following the Chieveley road scheme. Before the scheme, he says, A34 traffic regularly came to a standstill with queues of cars backed up from the junction that stretched past the village and caused major problems in terms of accessibility.

Current effects of living near the A34

G says his wife uses their garden slightly less because of traffic noise. There are also local paths that he only uses if he has to because they are too noisy: “There are a number of footpaths that go very, very close to the A34. [...] There is one that goes parallel from Fiddlers Lane up to Stanmore Road and that’s just deafening unless you walk it Christmas Day.” He adds that because the road creates a natural barrier with limited crossing places, residents are generally more inclined to travel in the opposite direction to the east of the village. Overall G says he is used to the noise.

Effects in the wider area

G says traffic noise is one of the main topics of conversation among people locally.

He has noticed that those who have more recently moved to the area seem more susceptible to it and thinks they get “allured by the attraction of living in a village rather than in the town” and consequently “see something with rose coloured spectacles” when first looking at a property. But he says, “The A34 was there and is a major trunk road and you just have to accept that.” He points out that accessibility for commuting also attracts people to the area. He does not think that traffic noise has affected property prices.

Although relatively unaffected in his own home, he adds that there are parts of the village where he would find the noise very annoying if he lived there, and that it must be unbearable in properties immediately alongside the A34.

G is pessimistic about the chances of persuading the Government to install noise abatement measures: “You are dealing with a very, very high authority who will re-surface the road or do this whenever they want to do it, not when you want to.”

Interview 8

Context

Interviewee H is a full-time father, aged 39, and a former truck driver, who lives with his wife and eight-year-old son on a slip road from the A34 into the village,

approximately 250 metres from the trunk road. The elevation of the road means that it is almost level with his bedroom window.

Relationship with the road over time

H has lived in his current home for eight years. When he and his wife first moved to the house a good network of roads was one of the features that attracted them to the property. Given this, he says, it seems “a bit silly” to complain about it. At the same time, he points out that the noise has grown worse over time: “It does seem that there’s a massive amount of trucks on the road, more, a great deal more than there used to be and that they’re heavier than they used to be, as well, so maybe that’s impacted the amount of noise because they’re having to work the engines harder to get them up the hill. I think the hill’s an issue noise-wise because we’ve got a steep hill coming into the village and a steep hill leaving the village...” H considers that it is “difficult anywhere in the Thames Valley to find a house that is actually devoid of road noise,” but adds, “If we came to look at the house today with the noise being as loud as it is now, we may well have thought differently.”

Over time however, he says he has become acclimatised to the noise: “It’s something we tend to have got used to. People that visit the house always comment [...] how noisy it is, especially in the garden.”

He is in favour of tackling the problem with noise mitigation measures including re-surfacing and a noise barrier, because, he says: “things are only going to get worse. The road is only going to get busier [...] Just by the very nature of the amount of foreign trucks for example that are using this part of the road.” He also considers that the poor condition of the road surface is contributing to the noise levels.

H uses the road himself every other day and his wife uses it on a daily basis to commute.

Current effects of living near the A34

Because of the noise the family don’t open windows at the front of the house. Although H and his wife sleep in a front bedroom, they open a window to the rear and leave a connecting door open for ventilation. A second bedroom is “firmly relegated” to a spare bedroom because of noise, and consequently H’s young son sleeps in a much smaller room at the back of the house.

It is common for H to be disturbed at night by traffic: “I get woken up by a truck that’s struggling to get up the hill, or quite often, you know, little rows, that you hear, horns blasting at each other at 4.0 clock in the morning, [...] although they’re obviously not meant to use them at those times.” He and his wife are currently considering replacing the existing double-glazing with triple-glazing.

The disturbance means the family use their garden “a lot less” and have landscaped it in an effort to reduce the noise. They have moved a sitting area at the side of the house to the back and, when they built an extension, designed it to

shelter the garden from noise. H says traffic noise is audible through most of the village, though some houses have the advantage of being blocked by other houses. However, road noise does not affect the family's use of the countryside: "We're quite fortunate that we've got The Ridgeway, it's actually behind us so that, you know, within five minutes of leaving the house you can be in what feels like right in the middle of the countryside and you can't hear the road from there."

Effects in the wider area

H thinks that the noise may affect the way in which people interact with each other, with people tending not to spend time sitting out in front of their houses, despite the fact that quite a few of these have nice front gardens. The village fete is held in a meadow that is "almost directly next to the A34", about 30-40 yards from the road. H says people comment on the traffic noise: "Even on, [...] a sunny June afternoon it can be difficult to hear yourself speaking there."

The village primary school is also noisy, but H conjectures that the school is more likely to be affected by the problem of traffic coming through the village from the nearby slip road.

H considers that noise from the road "certainly" affects property prices and says their own house was cheaper when they bought it than other equivalent properties: "I think if it was somewhere a bit quieter it would be worth a lot more money today."

Appendix E

Case Study 5: A590 within Lake District National Park

Background

This case study deals with the effects of noise on people living close to the A590, the trunk road linking Barrow-in-Furness and other towns on the southwest Cumbrian coastal plain to the M6.

The A590 runs mostly along the line where the coastal lowlands meet the Lakeland hills, cutting through the southernmost fells in places. For some 15 miles in its middle section, the A590 runs within the Lake District National Park. Most interviewees live in the area close to Haverthwaite and Backbarrow, where the A590 traverses a line of outlying hills via the valley of the river Leven, which flows out from Lake Windermere a few miles further Northeast. However, their experiences of the noise take in much of the corridor of the A590 to the East and West within the National Park.

In 2007 the road carried 17,200 vehicles per day¹. Traffic increased 22% over the 10 year period 1995 to 2005². In 2007, 14% of traffic on the A590 at Haverthwaite comprised heavy goods vehicles.

Over the decades, different sections of the A590 have experienced widening, straightening, dualling and junction alterations. Two schemes are of particular relevance to the area under consideration:

- A longstanding section, somewhat under 2 miles long, built through the Backbarrow – Haverthwaite area in the mid 1960s comprising both single and dual carriageway sections. This cut between different parts of the settlement of Backbarrow and between Backbarrow and Haverthwaite. It opened to traffic in 1964.
- A new section of about two miles of dual carriageway some four miles further East, which opened to traffic in April 2008. This bypasses the villages of Low Newton, High Newton and Ayside, and extends an earlier scheme that runs past the village of Lindale.

Case study interviews

Summary

Nearly all of the 10 case study interviews are with people living within the Lake District National Park. Most live within earshot of the A590, although the interviews illustrate a range of experiences of noise from the A590, including some people for whom it is entirely an issue associated with outdoor activities undertaken away from home. The main focus of interviews is the Backbarrow-Haverthwaite area, but the observations recorded span the whole length of the A590 within the National

¹ Measured at a traffic monitoring site just West of Haverthwaite station, data from Highways Agency Trads2 database, 24hr average daily traffic both directions.

² Measured at a traffic monitoring site further East near Low Newton, data from Highways Agency Trads2 database, 24hr average daily traffic both directions.

Park. Taken together, the closely associated settlements of Haverthwaite, Backbarrow and Brow Edge have a population of about 700 people in some 300 households³.

An initial list of potential interviewees was identified with the assistance of Friends of the Lake District. Further interviewees were identified from a survey on noise circulated to members of Friends of the Lake District resident in Cumbria, to which some respondents raised issues related to the A590. The results of this survey are presented in a separate Appendix. One interview was undertaken with a representative of Friends of the Lake District and a consultant working with them on road and traffic issues (see interview 10 with Judith Moore and Jo Cleary). Somewhat shorter phone interviews were undertaken with those people who were unavailable on the dates of the case study visit. For interviewee I, close to the new bypass past Ayside, one interview (Interview 9) was conducted two months before the new bypass opened, with a shorter follow-up phone interview (Interview 9a) two months after the bypass opened.

A number of key points can be summarised from the interviews:

1. Despite living in rural locations, some interviewees are experiencing a significant deterioration in their experience of their home and garden:

“We have a patio at the front of the house – it’s a panoramic view from the front – but even on a nice day if we want to be quiet we go round the back where the house shelters it from the noise.” (Interviewee C)

“We don’t open the window at night because at 6.30 it becomes really intrusive and can wake you up.” (Interviewee D)

“The noise never goes away. Sleeping with the windows closed you hear it all the time even though the house is double glazed. If I have to have the windows open it tends to take longer to go off to sleep because you lie there listening to the noise, which goes on until the early hours. I put the duvet over my head to go off. If the windows are open you need the TV or radio louder in order to hear – I have to adjust the volume. It bothers you anytime when you’re at home. We often say ‘oh, it’s busy down there today’”. (Interviewee E)

2. Traffic noise from the A590 impinges on interviewees’ use of the countryside along a broad corridor up to 5 miles wide:

“Milnethorpe bridge to Sandside is an absolutely marvellous walk, but you can see and hear the road. You can still hear the A590, 2 ? miles away.” (Interviewee G)

Interviewees described how traffic noise degrades the experience that they are seeking to find:

“Even if you can’t see a road you can be up in the hills in some quite isolated locations and hear traffic. I get out there for peace and quiet and solitude. I went up to Finsthwaite, mixed woodlands, for the first time around Christmas. You

³ From 2001 census count for the whole of Haverthwaite parish.



A590 from hills above Brow Edge, visible section (arrowed) between Haverthwaite (left) and Backbarrow (right) very audible at this distance – about one mile.

couldn't see the road and it was a beautiful day, but you could hear the traffic all the time in the background, even at what I'd consider a quiet time of year.” (JM)

Several interviewees deliberately choose not to visit or to restrict visits to certain places where they know that they would hear significant traffic noise, even if they are scenic places that they are fond of:

“Noise does influence where I go. If I were taking you for a walk here, I deliberately wouldn't go straight up the fellside here because it would have been noisy, and I wouldn't have been giving you a country experience. We've got a lovely footpath here that goes up the top of the fell, it's a nice steep path but if you go up between four and six o'clock when the road is particularly busy, you just bear the noise of the road, it's really frustrating.” (Interviewee B)

“There are places that I go less often even though the butterflies and the flowers and the dragonflies are superb, particularly the nature reserves at Latterbarrow, Meathop Moss, Foulshaw Moss. If I go out I want to hear natural sounds. The traffic noise is an intrusion that you can't get away from. It spoils it, it's not what I want.” (Interviewee H)

3. Interviewees consistently identified a set of exacerbating & alleviating factors associated with weather conditions, topography, trees, traffic levels, types of traffic and traffic speed.

“The leaves on the trees help in the summer but it's offset by having the windows open and the busy summer traffic. The noise seems to rise up from the road. The wind sometimes has a slight effect to lessen the noise. And it seems louder when it's wet. Lorries are noisy, some cars have noisy exhausts and motorbikes come screaming along.” (Interviewee E)

Interviewees commented how noise carried up to locations raised above the road and how wind direction could make a significant difference. Traffic noise was perceived to be worsened during wet conditions. Variation of the noise with seasonal changes in traffic and with daily peak commuter flows received many comments. Certain types of vehicles, such as HGVs or motorbikes were identified as particular noise generators. Some identified very fast driving as a source of significant additional noise:

“The speed that the traffic goes along that road is colossal. I think that a lot of this noise is due to speed.” (Interviewee F)

4. Traffic noise is generally viewed as having worsened over time:

“It has got worse in the last 20 years. Noise was an issue – you were aware of it – but it wasn't a big issue. I feel it's become a big issue”. (Interviewee B)

“We have more noise than we used to. The amount of traffic has increased tremendously over the last 10-15 years. Particularly the last 4-5 years seem a lot worse. You can wait ten minutes to get out and turn right.” (Interviewee D)

5. Community severance between the different parts of Backbarrow and between Haverthwaite and Backbarrow was raised as a major issue by several interviewees, linked to the issues of pedestrian safety and very high speed traffic. One interviewee (A) termed the situation, “a village divided”:

“It was one community before the road, the road split it – houses and a community meeting room were knocked down to build it”. (Interviewee B)

“Elderly people from Haverthwaite are faced with trying to cross dual carriageway to reach the doctor’s surgery”. (Interviewee A)

“There are times now when it’s nearly impossible to cross that road. If this was a town or city there’d be traffic lights.” (Interviewee F)

“Especially with being a split village, speed limits should be lower – people go like the clappers”. (Interviewee E)

Because crossing the dual carriageway is so dangerous, a school bus makes a daily run to collect children from Haverthwaite to take them to the school in Backbarrow, even though it is within easy walking distance.

6. Visual intrusion was an issue raised several times:

“It’s noisy and it’s visually intrusive and it does divide everything it runs through”. (Interviewee B)

“As for this latest thing at High and Low Newton [i.e. the bypass under construction], I think it’s devastation.” (Interviewee G)

7. Negative effects of the noise on visitors were described by some interviewees, to the extent that they were felt to have potentially negative commercial implications:

“Guests have said to me [about the noise]. I’ve slept in there [guest bedrooms] and you can still hear the noise [with the windows shut]. It makes people less inclined to come back as guests”. (Interviewee E)

“Visitors have arrived and said ‘isn’t that road noisy!’. Visitors have remarked how noisy the road is in the morning, when they have had their bedroom windows open. I feel it might stop some people coming back. I think it does impact on some that come for peace and quiet. They may get a bit of a shock, particularly if they want a lie-in, but if they have the windows open it can wake them up.” (Interviewee C)

9. One person commented that she would not have bought the house if she had realised how noisy it really was:

“When we bought the house it must have been on a good day, otherwise we wouldn’t have bought it.” (Interviewee C)



A590 dual carriageway section separating Backbarrow and Haverthwaite

10. Several interviewees said they appreciated the need for the road. But mixed views were expressed on what benefits road ‘improvements’ have brought or will bring:

“The road is a plus in terms of commuting out to the M6.” (Interviewee B)

“We do need that road”. (Interviewee F)

“For all the things that are said, I don’t think it’s brought any jobs to Barrow, I don’t think it’s really cut down the time of travel from Barrow to the M6 substantially enough to make any new employer come to the area. There are other factors I’m quite sure.” (Interviewee G)

11. One interviewee explained that the purpose of a visit to a particular place would tend to influence his willingness to suffer the noise:

“I research local history, so if I’ve gone there to research an old building, I’ll put up with it, but if I’m going purely for pleasure, I wouldn’t do it, I’ll go away from the road somewhere.” (Interviewee B)

12. Interviewees identified a range of potential amelioration measures. Several believed that quieter tarmac would assist (these interviewees reported that sections to either side of Haverthwaite and Backbarrow presently have quieter surfaces but not the portion nearest to Backbarrow). One interviewee suggested that noise-screening fences would help. The family interviewed near the road under construction past Ayside were particularly concerned that the proposed landscaping, walling, fencing and planting are inadequate.

Several people suggested the need for measures to achieve noise reduction by reducing the speed, which was also perceived to be required to help relieve safety and community severance issues. They proposed both lower speed limits and road re-design to make drivers inclined to drive slower, or to make it physically impossible to drive so fast. Re-directing longer distance and freight traffic to rail and/or to a bridge across Morecambe Bay to Barrow were raised by some interviewees.

Two interviewees said that the fundamental solution was to reduce the total amount of traffic. They felt that road schemes to increase the speed of traffic, like the scheme under construction past Low and High Newton and Ayside, were set to make matters worse rather than better, and advocated measures to offer better travel options as alternatives to the private car.

Interview 1:

Context

Interviewee A lives with his wife at Bouth in Cumbria, two miles inside the southern boundary to the Lake District National Park. The couple's house is on the northern edge of Bouth, a small village of some 20 houses 1 ½ miles northwest of Haverthwaite, approximately one mile north of the A590. The road is not visible from the house. A has served as county councillor and chairs Colton parish council. Now retired, he formerly worked as development manager at Glaxo's plant in Ulverston. He is a recognised authority on local history, has personally documented the area in photographs over a period of decades, and leads guided historical walks around the local area.

Relationship with the road over time

A has lived locally all his life and has known the A590 both before and after the construction of the new section through Backbarrow. When the new section opened in autumn 1964 he was living above the road at High Brow, part of the settlement of Brow Edge, just south of Backbarrow, about 1/3 mile from the closest part of the A590. He moved from there to Bouth in 1969.

A recalls that, congestion, in general, was not a problem on the old road, but that some heavy goods shipments encountered lengthy delays at Backbarrow – for example, one of A's photographs shows a lorry carrying a ship propeller to Barrow that had halted to jack up its load to the vertical in order to get through a constriction past the ultramarine dye works. So the road was "the most welcome thing" to begin with, "until we started getting casualties". A number of older people were killed by fast traffic as they attempted to cross the new road, including one of Ron's close friends. "As time progressed, traffic increased, and that's when we realised the effect it was having on us. It was only a couple of years after when we started to notice the accidents and we also started to notice the noise." A points out that prior to the road coming between them, Backbarrow and Brow Edge were "one community", but summarises the situation today as "a village divided", citing the example that "elderly people from Haverthwaite are faced with trying to cross dual carriageway to reach the doctor's surgery". A was instrumental in obtaining some modifications to the central reservation crash barrier which have made the situation slightly safer.

A's biggest concern about the road is the "lack of thought for the effect it has on the surrounding countryside and the people who live there...quality of life is affected dramatically". He regards the two biggest impacts as pedestrian safety and noise, and regards these as of equal importance. In his eyes, the dual carriageway presently being constructed past High and Low Newton (5 miles to the east) has the sense of "deja vue...they don't know what's coming".

A describes the effects of the noise when he lived in Brow Edge: "When we left it wasn't anywhere near as bad as it is now, but it was bad enough – when you were laying in bed or trying to get your son to sleep, there was horns blowing and

a buzz all the time. I love reading, but it affects your concentration. The worst effect is that it affects your sleep. Because I was working shifts, in summer time I had to open the window otherwise it'd be too hot and all you could hear was zoom zoom zoom zoom all the time. I couldn't sleep for the bloody noise. It was an irritant then, now you could have health problems.”

Current effects of living near the road

A describes the contrast after moving further from the road to Bouth as 'unbelievable'. The road sometimes is still audible both inside and outside the house, but it does not cause them bother. They hear noise from a section of road over a mile away when the wind is in the southwest carrying the sound up the valley. “It's surprising, we hear it. We're now a mile and a half from the A590, but we're on an elevated position, so with motorcycles and heavy traffic in rush hour in the morning, you can hear them when you're in the bedroom, and every time a police car goes up that road you hear the sirens, even in the garden [which is behind the house]. You're aware of it”.

Effects in the wider area

Whilst leading his historical tours around Backbarrow, the level of noise can be such that A has to ask people to gather close around in order for him to make himself heard, “otherwise within ten minutes I can't speak with having to shout so loud for the noise”. He tries to schedule tours to avoid the morning peak and late afternoon peak when the noise is worse, “if you're there from half past three, four o'clock until six o'clock, that's bad then”. He is currently in the process of being interviewed for a series of historical films, but “it's going to take a long time” because they are finding that repeated re-takes are required due to traffic noise disturbance. “There's always noise in the background. In the school playground there is constant noise. The footpath down from Trundle Brow is affected by noise.” A feels that the noise is generally audible up to 1 ? miles distant from the road, and “at less than a mile it's an irritant”. He notices that the noise level is much higher in wet weather and in the absence of leaves on the trees in the winter, but seems better when it is foggy.

He points out that speed limits are not adhered to, and that higher speeds generate increased noise levels. He feels that baffling fences, quieter road surface and speed reduction – enforced!- are the sort of measures that would improve matters. He feels the design of the present road tends to encourage high speed driving whereas it ought to be (re)designed so that drivers feel that they should slow down.

Interview 2:

Context

Interviewee B lives in the northern part of the village of Backbarrow. His house is close to the west bank of the river Leven. The A590 passes 200m to the east at a slightly higher level on the opposite side of the valley. B works as a head teacher.

Relationship with the road over time

B moved to this house 22 years ago, some twenty years after the construction of the present portion of the A590 through Backbarrow. His school is in Heysham, which entails a daily commute to the east along the A590. He says, “the road is a plus in terms of commuting out to the M6, but it’s noisy and it’s visually intrusive and it does divide everything it runs through”.

In 1992 B undertook a survey as part of a parish mission. The survey highlighted the feelings of long-standing residents that the community had been divided by the road. As well as the physical division, the road seemed to have introduced a ‘mental block’ – people no longer thought of the previously contiguous settlements [particularly the two parts of Backbarrow, i.e. Backbarrow and Brow Edge, but also Backbarrow and Haverthwaite] as a single community. “It was one community before the road, the road split it – houses and a community meeting room were knocked down to build it”.

Since he has lived there, “the road has definitely got busier”. Regarding the noise of the road, B says “it has got worse in the last 20 years. Noise was an issue – you were aware of it – but it wasn’t a big issue. I feel it’s become a big issue”.

Current effects of living near the road

B says he notices the noise when he is walking around the area or walking down to the shop. At home the noise of the river tends to screen out the road noise, although “when the river is very low you do hear the road, but we’re fortunate at this location, for 60-70% of the year we hear the river as opposed to the road”. But the drier period can also correspond with the busiest season of traffic due to visitors, “and then it is noticeable”.

Effects in the wider area

“What I find upsetting is that if you go walking – you go up Brow Edge – you’re very aware of the road noise, it goes right up to the valley top”. “I feel annoyed – pollution annoys me”.

“Noise does influence where I go. If I go somewhere and the walk is close to a noisy road, near here or somewhere else, I don’t want to do it as a leisurely walk. I research local history, so if I’ve gone there to research an old building I’ll put up



A590 passing between Backbarrow (left) and Brow Edge (right), Cumbria

with it, but if I'm going purely for pleasure, I wouldn't do it, I'll go away from the road somewhere. If I'm going out from here, I go northwest, not the other way. If I were taking you for a walk here, I deliberately wouldn't go straight up the fellside here because it would have been noisy, and I wouldn't have been giving you a country experience. We've got a lovely footpath here that goes up the top of the fell [directly to the west of the house], it's a nice steep path but if you go up between four and six o'clock when the road is particularly busy, you just hear the noise of the road, it's really frustrating. And that has got worse in the last 20 years. You could go up there and it was quite quiet, but because the amount of traffic has increased so much it's noisier, I just don't do it any more, which is sad, 'cos it's a lovely fell. When I lay in bed and look out the bedroom window at it, all I can see is fellside and trees, it couldn't be better, it's fabulous, but it's spoilt, and there's no question about it".

Regarding the distances from the road that are affected, B comments: "You can hear it in Bouth – a mile from the road. You can hear it across the Mosses, it's a good mile and a half before you lose the road noise. You go up the to the top of Bigland [3/4 mile to 1 mile due south of the A590], and up the top there is absolutely fantastic, you've got superb views right across the valley and all of the central lakeland fells, fabulous views up there, but you can hear the road."

B emphasises that the "busy times, 6am-10am, 3pm-7pm" are when noise is particularly noticeable.

In his view the noise does not affect property prices, although "they might be affected if very close to the road".

B feels that wide tyres exacerbate noise problems. He considers that the present regional transport arrangements, that rely on major trunk roads and A roads through the National Park, particularly the A66 and A590, are "wrong". He would like to see a bridge across Morecambe bay to service Barrow.

In addition to his remarks on the A590, B also comments how the A66, across the northern part of the Lake District, spoils his enjoyment of that area: "There's some fabulous mountains up there - Skiddaw, Blencathra. But you go up to the top of Blencathra and you can hear the A66. You've got to go right back into the forest of Skiddaw, miles back, before you lose the noise. I like that area as a walking area but I feel really cheated off. Beautiful country, I'm looking at fantastic country, but you can hear a flipping main road, it's just not acceptable".

Interview 3: (telephone interview)

Context

Interviewee C lives with her husband in the village of Low Brow (part of the settlement of Brow Edge) two miles within the southern boundary of the Lake District National Park. The front of their house faces the valley of the river Leven and the A590, which at its closest is less than 1/4 mile from the house. The road is visible from both the house and the garden, although the visible sections are not the closest piece of road, a bend which is hidden from view by trees, but the

straights to the North and West which are about 7 mile away. Their house is a guest house.

Relationship with the road over time

C has lived in the Lake District for 11 years, all of that time in this house. The house is double glazed throughout and has been since they have lived there. Looking back now she comments, "When we bought the house it must have been on a good day, otherwise we wouldn't have bought it. We weren't really aware of the noise. It was early in the year when there isn't as much traffic and we were talking to people."

Current effects of living near the road

"Some days it's really bad. Visitors have arrived and said 'isn't that road noisy!'. Sometimes when we sit outside we're really aware of it. A lot depends on the direction of the wind. We have a patio at the front of the house – it's a panoramic view from the front – but even on a nice day if we want to be quiet we go round the back where the house shelters it from the noise. We just accept it now, and we can see open fields from the back, but it would be nice not to have the noise at the front. We let guests use the back as well."

"In the house the noise doesn't affect us unless we want the windows open. I like a window open at night, and in summer you want windows open, and you can hear the road. Visitors have remarked how noisy the road is in the morning, when they have had their bedroom windows open. The noise is much worse at busy times of day and at busy times of the year. I feel it might stop some people coming back. I think it does impact on some that come for peace and quiet. They may get a bit of a shock, particularly if they want a lie-in, but if they have the windows open it can wake them up."

Effects in the wider area

"You do notice the noise on the bridle path down to Low Wood – we walk the dog there." Otherwise, the road noise is not an issue for C when she is out and about.

C feels that quieter tarmac would make a difference. She understands that the straight section to the North is already surfaced with quieter material and a section a mile to the west of Haverthwaite also, but not the straight that is visible and audible to the west of her house. She also comments on how fast people drive on that dual carriageway section.

Interview 4: (telephone interview)

Context

Interviewee D lives on Brow Edge Road in the part of Backbarrow that is to the East of the A590. D estimates that their house is less than 200m from the A590 which is below them to the West on the same side of the valley. The front of their house faces across Brow Edge Road towards the A590, although their living room is to the rear. The A590 is visible from their garden where they see down in a northwesterly direction to the junction of Brow Edge Road with the A590. D is now retired.

Relationship with the road over time

D and his wife moved to this house 10 years ago. For the decade prior to that they had spent part of each year in a holiday property close by. Their house has been double glazed all the time they have lived there.

D thinks that “We have more noise than we used to. The amount of traffic has increased tremendously over the last 10-15 years. Particularly the last 4-5 years seem a lot worse. You can wait ten minutes to get out and turn right [from Brow Edge Road]”

Current effects of living near the road

“[With the windows shut] we don’t hear the noise in the house because we have double glazing, but if you have the windows open when it’s nice weather during summer it can be quite intrusive. You end up with a permanent background hum. You put up with it. We don’t open the window at night because at 6.30 it becomes really intrusive and can wake you up.”

“Outside the house you can hear it all the time. It’s seldom unbearable, but if the wind is from that direction during the busy times 4-6pm, 7-9am, then it is very intrusive. You hear it in the garden, but there are quiet places by [behind] the house or up in the trees.”

“We can get more noise here than people down the road, because we live in a valley and it bounces off. It very much depends on the noise direction. Wind from the Southwest brings the noise from the dual carriageway section near Haverthwaite station.”

Effects in the wider area

D commented that there is quieter tarmac on the section running north from the A590 bridge over the river but not the dual carriageway section to the West.

He remarks of the A590: "There is too much traffic on it. One obstruction and it backs up for miles. It's a blight. The traffic needs either moving on to rail or a bridge across Morecambe Bay".

Interview 5: (telephone interview)

Context

Interviewee E lives in the Brow Edge part of Backbarrow on the western side of Brow Edge Road. The rear of her house and garden face towards the A590 which is some 100m distant and downhill. During winter they can see the road and the traffic on it from both the house and the garden. Deciduous trees obscure the road during summer. E runs the house as a guest house.

Relationship with the road over time

E has lived in this house for 22 years, offering B&B to guests for the last 15 years. The house is double glazed throughout and has been throughout the time that they have lived there. She comments that traffic noise has become worse over that time. "It's got busier and busier, particularly over the last ten years. The noise was there before, but you're hearing it and noticing it more. I'm sure it wasn't as bothersome as now."

Current effects of living near the road

"The noise never goes away. There's a constant drum of traffic all the time. Even now in my office with all the windows closed I can hear. Sleeping with the windows closed you hear it all the time even though the house is double glazed. If I have to have the windows open it tends to take longer to go off to sleep because you lie there listening to the noise which goes on until the early hours. I put the duvet over my head to go off. If the windows are open you need the TV or radio louder in order to hear – I have to adjust the volume. It bothers you anytime when you're at home. We often say 'oh, it's busy down there today'".

"The leaves on the trees help in the summer but it's offset by having the windows open and the busy summer traffic. The noise seems to rise up from the road. The wind sometimes has a slight effect to lessen the noise. And it seems louder when it's wet. Lorries are noisy, some cars have noisy exhausts and motorbikes come screaming along."

The garden is on the same side of the house as the A590. E comments: "you cannot sit out without sometimes being deafened – you have to raise your voice to make yourself heard. There's nowhere private to sit on the other side of the house so we just put up with it".

“Guests have said to me [about the noise]. I’ve slept in there [guest bedrooms] and you can still hear the noise [with the windows shut].” E believes “it makes people less inclined to come back as guests”.

Effects in the wider area

E says she doesn’t go out walking because of the time commitment to running the guest house.

She is not certain whether the noise affects property prices, but one of her neighbours had an assessment from a holiday lettings company and the assessor pointed out the degree of noise from the A590.

E comments that it “doesn’t make sense” for the quieter tarmac surface not to continue from the straight to the north past the main portion of Backbarrow and Brow Edge. She believes quieter surface might have some effect. She would like to see lower speed limits: “Especially with being a split village, speed limits should be lower – people go like the clappers”. She favours the idea of a bridge across Morecambe Bay to carry traffic to Barrow.

Interview 6:

Context

Interviewee F and his wife live at Oak Moss cottages, which lie between the eastern and western portions of Haverthwaite, about ½ mile south of the A590. They are now retired.

Relationship with the road over time

F has lived in the parish of Haverthwaite nearly all his life, and so has experienced the A590 both before its route through Backbarrow and Haverthwaite was altered and over the subsequent decades. The couple moved to their present house in 1993, prior to which they lived in the Low Brow part of Brow Edge, near to Trundle Brow. For F, safety and physical division are as much or more of an issue than road noise. Despite the problems it brings, he says, “we do need that road”.

“At Brow Edge, if we wanted to work out in the garden there was a good hedge that dampened the noise so the noise didn’t bother us all that much. There again, there wasn’t the same amount of traffic then. But lorries have got bigger and they’ve put bigger engines now so you get more noise.”

F says of the increase in traffic over time, “there are times now when it’s nearly impossible to cross that road. If this was a town or city there’d be traffic lights.” His wife, who has difficulty walking now, comments that “you have to have your wits about you”.

Current effects of living near the road

“It’s not so bad here. We don’t hear it in the house so much, but if you go and sit in the garden you are aware of it, although the noise is not objectionable, [but] I’m partly hard of hearing now, so a lot of the background noise is sort of smoothed out a bit.”

Effects in the wider area

“The speed that the traffic goes along that road is colossal. I think that a lot of this noise is due to speed. I used to work at Newby Bridge [on the A590 2 miles NE of Haverthwaite] and before they put up the roundabout there, the speed was colossal on that road, including motorbikes going about 70-80 mph. They installed the roundabout about 5 years ago and the speed and the noise dropped overnight.”

“So I think more roundabouts would cut down the speed, would cut down the noise and it would make the roads a lot safer. If they put a roundabout at the two junctions – Haverthwaite station and Haverthwaite crossroads - they would reduce the speed of the traffic going through the two villages and that would dampen the noise down. When people are going at 70-80mph, which they do go down that road, they’re revving up and it all contributes to the noise.”

F also thinks the noise would be reduced by modern road surfaces designed to cut down the noise. He would like a bridge across Morecambe Bay to divert some of the traffic.

Interview 7:

Context

Interviewee G lives on the outskirts of the town of Ulverston, a small town with a population of 11,524 in 5016 households⁴ situated 4 miles southwest of the Lake District National Park on the A590 route to Barrow. He is now retired and voluntarily leads a local walking group with the National Trust.

Relationship with the road over time

G moved Cumbria in the late 1960s and lived near Barrow until moving to his present home in Ulverston in 1998.

He used to commute to the East along the A590, leaving early and travelling back late. He recalls, “the A590 used to be a lovely road. You’d see deer coming down in the morning to drink in the Leven, you could see herons on the estuary. Then they started doing ‘improvements’ – ha ha - bits have been widened and straightened, and the herons disappeared and the deer must go somewhere else.”

⁴ 2001 census data for Ulverston parish.

The deer are still in the woods, you can see them, but I think all the herons went up the creek. And a lot of the trees got cut down – we used to have a tremendous display of blackthorn early in spring”.

“For all the things that are said, I don’t think it’s brought any jobs to Barrow, I don’t think it’s really cut down the time of travel from Barrow to the M6 substantially enough to make any new employer come to the area. There are other factors I’m quite sure”

“As for this latest thing at High and Low Newton [i.e. the bypass under construction], I think it’s devastation.”

Current effects of living near the road

G’s house and garden are not within earshot of the road.

Effects in the wider area

“I notice the noise principally in the Backbarrow area, where you can walk up to Brow Edge and into the woods. There’s delightful views, lovely countryside, but you’ve got this background of noise all the time.”

“Noise may determine where we’d stop, there might be a particularly good view over the valley [Leven Valley/ Backbarrow] but we’ll only stop and look at it and then go somewhere else for lunch rather than sit there and listen to the noise all the time”.

“The only time I have noticed a diminuation of the noise above Backbarrow is when we’re walking above fog that is filling the river valley, but whether that is [an atmospheric effect] or because people are going slowly or that there are fewer people driving I don’t know”.

“There’s an old road near the Old Derby Arms that we have used as a meeting place, with the Foulshaw Mosses, Cumbria Wildlife Trust, on the other side of the road. We certainly wouldn’t start there now to go to Foulshaw Mosses because you have to go alongside the A590 for a way before crossing over.”

“At Latterbarrow Nature Reserve, Cumbria Wildlife Trust, there is a discouragement from stopping there, there’s this terrible din, and you think, what’s the rest of the reserve going to be like, shall I bother, and it’s only if you are persistent or if you’ve got local knowledge and you know that you can go further in. You have to walk up this incline [pointing at map] and you can drop down onto these paths, we often go up there, it’s quiet.”

“Milnethorpe bridge to Sandside is an absolutely marvellous walk, but you can see and hear the road, you can still hear the A590, 2 ? miles away. And you also get noise from the B5282 from trucks going to the quarry.”

“It does make me decide where I’m going to walk because I know where I can go where it’s quiet.”

“Occasionally people in the group do raise the issue of noise. Although many people are inured to noise. But there was almost a revolution on one walk. One lady was leading a walk, people were saying ‘what on earth did you bring us along here for’ and ‘don’t go on any of her walks again...if she takes us down paths like that’ – it was a path that went right alongside a road, perhaps the M6, over Burton way, for quite some distance. She was born in the area and she said, ‘well it never used to be like this, we used to come along here with Mum and it was perfectly alright’”.

“Here in Ulverston alongside the road, if you are a pedestrian, it can be very very noisy, particularly near the police station and the cinema where the noise rebounds off the buildings”

Interview 8: (telephone interview)

Context

Interviewee H lives with her partner in the Lyth Valley near the hamlet of Howe, 2 ½ miles north of the A590, ½ mile within the southeastern boundary to the Lake District National Park. Their house and garden are alongside the A5074. They run their own business from home, specialising in ecological surveys and assessments.

Relationship with the road over time

H has lived in the Lake District for 25 years and at this present house for the last 9 years. The house has been double glazed all the time that they have lived there.

Current effects of living near the road

H comments: “The A590 is a more distant noise – the A5074 is louder but more intermittent. “The A5074 makes the garden not a nice place to be and the distant noise of the A590 adds to that”. She hears noise from the A590 inside the house on some days, particularly in summer with the windows open or at night because they sleep in a bedroom on the south side of the house.

Effects in the wider area

H likes to walk in the local area but lists a series of places that she tends not to go because of traffic noise from the A590. The fell of Whitbarrow is directly accessible to the west of their house, but “I normally wouldn’t go to the south end because you can always hear the noise on a calm day and it spoils the experience. If I’m going up on Whitbarrow and it’s a northerly wind, I might deliberately take the opportunity to go down to the south end [because the wind will blow the traffic noise in the opposite direction]”.

“There are places that I go less often even though the butterflies and the flowers and the dragonflies are superb, particularly the nature reserves at, Latterbarrow, Meathop Moss, Foulshaw Moss...also Roudsea Nature Reserve, although that is rather less affected because it is further from the road and it is in woods.”

“I was surprised at the noise when I was in the woods that rise above Newby Bridge. I remember thinking ‘oh that’s spoiled it here’. It’s not even dual carriageway there, just sheer volume of traffic”.

“If I go out I want to hear natural sounds. The traffic noise is an intrusion that you can’t get away from. It spoils it, it’s not what I want. It is very difficult to get away from traffic noise. People talk about tranquillity and I think ‘where do you get tranquillity?’. There is little true tranquillity left, at least in the southeast of the county where I live”.

H feels the fundamental solution is “less traffic and realistic public transport”. In addition she feels “Speed limits should be dropped, e.g. 10mph less everywhere, because the faster the traffic the more the noise and the further it carries. We shouldn’t have any more schemes like High and Low Newton that are designed to increase traffic speed”.

Interview 9 (before opening of new dual carriageway bypass):

Context

Mr and Mrs I live in the village of Ayside, two miles within the Lake District National Park. The three villages of Ayside, High Newton, and Low Newton are each separated by about 1 mile, and all three are about to be bypassed by a new dual carriageway section of the A590, in the final stages of construction and due to open spring 2008. Mr and Mrs I’s house is about 150m from the new road and about 200m from the old road. They used to work for the local authority and have now retired. They say that they received assurances that they wouldn’t be adversely affected by the new road and that there would be a screening earth bund, planting and walling, but they are concerned at the limited extent of the planned screening and consequently its effectiveness.

Relationship with the road over time

The couple have lived in this house for 24 years with their two children. They recall that before construction works started on the new road, the location felt quiet, although the road did generate appreciable noise, which they were mainly aware of outside the house in the front garden and inside the house on summer nights when they had bedroom windows open – particularly the noise of trucks labouring up the incline. They feel that, over the years they have lived in the location the amount of heavy goods traffic seems to have grown.

Three years ago, they installed double glazing, in part because they anticipated that traffic noise levels were going to increase.

Current effects of living near the road

The present situation is that Mr and Mrs I see and hear traffic running on the old road, the flow of which is disrupted by ongoing construction works on the new road and limited to 40mph.

“They’ve taken a lot of buildings down – there was a very large house there, a barn, there were lots of trees there. They’ve taken away all the screening. The noise from the old A590 is worse now than it was two years ago. And we get noise in the back now which we never used to get, we used to get no noise at the back at all.” They also comment that it is much more visually intrusive than they had expected it to be.

“You can tell the difference inside the house, because even with the double glazing you can hear it all”.

They add the proviso that, at present, it’s rather hard to distinguish how much noise is generated by works machinery and traffic accessing the new road and how much is the normal road traffic still running on the old road.

Effects in the wider area

Mr I comments on the traffic noise experienced in Witherslack village. “I was amazed at the noise that was permeating down into Witherslack from the A590 dual carriageway. We walked the dog on Christmas day, when traffic was I guess at its very lowest, and I didn’t notice it, then we went on Boxing Day and I said ‘what’s that noise’ - it was just incredible, and there was woods between us and the road.”

Mrs I expresses the view that the new road is a “total waste of money” and think that the predicted timesavings to motorists of less than one minute are inadequate justification. In their view, issues with the accident record of the road could have been far better dealt with through introduction of a lower speed limit near the settlements. Mr and Mrs I point to the introduction of a speed limit of 40mph (previously 60mph) through High Newton a few years ago, which reduced accidents. According to Mrs I, a survey showed that a large majority of local residents were opposed the road, but a comparatively vocal minority backed it.

Interview 9a (two months after opening of new dual carriageway bypass):

Noise from the new bypass

“In some areas people feel the earth bunds have blocked out the noise. But unfortunately we in Ayside don’t have much in the way of earth bunds. So it is much noisier than it was where we are. Noise is quite an issue here. They did put quiet tarmac on it, but the quiet tarmac doesn’t take away the noise of the traffic.”

Mrs I points in particular to the section of the road towards the Southeast, which is where she says an earth bund was initially ‘promised’ and where an old wall was

knocked down and replaced with a post-and-rail fence that does not block the sound at all. She thinks there should be both a wall and earth bund at this location. They now hear traffic noise at this side of the house – their main garden, vegetable garden and field where they keep chickens and two horses:

“We’re now getting road noise at the back. Round the back of the house we never had noise at all with the old road. When we’re up on the field the noise is substantial. Our neighbour says they’re hearing noise they never heard before.”

The front of the house also receives more traffic noise now:

“We’re more aware of the noise than we were in the front garden. It is noticeably more [than before they constructed the new road].” Mrs I comments that although she supposes the level of the traffic is comparable to what it used to be, “it feels like more traffic”, and wonders if this is associated with the change from two to four lanes.

Mrs I notes that others are affected more badly: “We are aware that other people are worse off. Five or six properties are significantly worse off in terms of noise.” She says that they are fortunate to have better screening by trees than some other people.

Other remarks about the new bypass

“It’s a 70mph speed limit now but unfortunately people don’t stick to it. It has made it dangerously fast.”

Where Mr and Mrs I used to be able to walk directly up onto the nearest fell the route is now blocked by the new road. They used to be able to cross the old road at the north end of their lane to access the fell. At this point, the footpath (bridle path) is diverted for about ½ mile alongside the dual carriageway to join another track and cross at an underpass. To get up onto the fell it is then necessary to back-track along the old road for ½ mile. Although the diverted route is designated as a bridle path Mrs I has so far hesitated to ride along it because the post-and-rail fence gives no noise separation or visual separation from the high speed traffic close by, so she is concerned that horses will be disturbed and will bolt.

Interview 10: Judith Moore and Jo Cleary

Context

Judith Moore works for Friends of the Lake District, an independent organisation with about 7000 members dedicated to protecting and enhancing the special landscapes of the Lake District and Cumbria. Judith’s brief includes work on issues arising from transport, roads and traffic. Jo Cleary works on a call-off consultancy basis to assist Friends of the Lake District with its work on rural roads. Judith lives in Burneside, a village two miles northwest of Kendal (i.e. not near A590). Jo Cleary lives in the village of Haverthwaite about ½ mile from the A590. Both Judith and Jo have personal experience of noise issues arising from the A590

as well as a broader overview arising from their work. The interview started with questions to gather their personal experiences of the road then discussed the issues from their professional standpoint.

Personal experiences of the A590:

Relationship with the road over time

Both Judith and Jo have lived in the Lake District since 2005.

Current effects of living near the road

Jo's house is screened from the A590 by higher ground and trees between the house and the road and prevailing winds tend to carry the sound of road noise in the opposite direction. Nevertheless Jo says she does very occasionally hear the road in her garden when the wind is blowing from the A590.

Effects in the wider area

Judith: "Even if you can't see a road you can be up in the hills in some quite isolated locations and hear traffic. I get out there for peace and quiet and solitude. I went up to Finsthwaite, mixed woodlands, for the first time around Christmas. You couldn't see the road and it was a beautiful day, but you could hear the traffic all the time in the background, even at what I'd consider a quiet time of year."

"It does depend what you're doing – if I'm cycling, with a helmet on and wind in my ears I'm not so conscious of noise as when I'm walking."

Judith worries that noise from the High and Low Newton bypass will affect a wide area.

Jo: "You can't turn off the noise. I go out and walk sometimes because I want some thinking time. I do seek out places where there is no noise. I tend to keep away from a broad corridor either side of the A590 because of the noise and visual impact. From our house I'd go due north or due south because if you go east or west you follow the line of the road. That noise is in the background all the time. Whitbarrow – I do go up there, but if the wind is blowing from the wrong direction you do get a lot of noise. It's a shame it's affected by noise but it's a special place so I go there. Haverthwaite Heights, it's a very nice walk, there's lots of forest tracks, but especially in winter when the leaves are off the trees, and the prevailing wind is southwesterly it does drive the noise up there. It's not terrible, but it's there all the time."

"We chose to move to this part of the world because it's a beautiful landscape, we are looking for tranquillity, not audible or visual interruptions."



New dual carriageway section of A590 past Ayside, Cumbria, prior to opening

Overview reflecting Judith and Jo's work on these issues:

Judith: "Roads bring a whole range of issues, noise being just one, with loss of tranquillity as the consequence. There's all the congestion, all the car parking issues, all the visual intrusion, lighting. Friends of the Lake District rate tranquillity really highly, we believe that peace and tranquillity are very important to people. That is why people come here - that is why Jo and I live here. When there are visitor surveys done, that is one of the driving forces that bring people to the Lake District National Park. Cumbria Tourism's surveys show that something like 95% of people come for natural beauty, but peace and quiet rate really highly⁵. Peace and quiet are really important to people - the visitor economy which is driving Cumbria is potentially in danger if we continue to have all these road improvements because it's going to spoil the very thing that people come to enjoy."

"There's more traffic on more minor roads than even ten years ago, and correspondingly more noise. Cumbria Tourism's visitor surveys show that car touring is up 25% between 2002 and 2006.⁶"

Jo: "I think that the crucial thing is that there is no real acceptance that the volume of traffic and the way it behaves and how it is allowed to behave is the key problem. There's no amount of baffling and landscaping that is really going to deal with the tranquillity problem. We need to tackle the nub of the issue, which is how people get about in the Lake District. The root of the problem is unfettered access by car and there doesn't seem to be any concerted effort attempt to address that. Noise can't be compartmentalised, it's part of a much larger problem".

"[By driver behaviour I mean] People can and do drive as fast as they can get away with, generally, so there is lots of acceleration and deceleration, and you get groups of motorcyclists that like the windy twisty roads and who come out for a blast, and part of their thrill is accelerating and decelerating on the bends. There's quite a lot of long draggy hills, passes, so you get engines labouring up those and people accelerating to pass caravans, coaches, or people pottering to enjoy the view. If you drive at what we'd call the 'design speed' of the road you just feel constantly hounded. And people expect to drive everywhere irrespective of parking provision. People just park anywhere. In the Peak District the road up one of the valleys⁷ has been closed on Sundays for years, and I think Saturdays. There is a shuttle bus and a car park at the bottom of the valley, and people accept it because it is a lovely tranquil valley to cycle along and walk along and on the surrounding hills when the road is closed. I think we need to try some of those things here."

⁵ Cumbria Visitor Survey 2006 Report shows 95% ticked physical scenery as a main motivation for visiting; 92% ticked 'emotional characteristics of the area (peaceful, clean, beautiful, etc)'.
⁶ Cumbria Visitor Survey 2006 Report found that the activity defined as 'touring around/sightseeing by car' attracted a 25% higher response than the 2002 survey.

⁷ Upper Derwent Valley: 'On Sundays throughout the year, and Saturdays and Bank Holidays from Easter until the end of October, the road beyond Fairholmes is closed to motor vehicles to provide a more relaxing environment for walkers and cyclists. A frequent minibus service operates between Fairholmes and King's Tree at these times, and blue badge holders may continue to drive up the valley respecting other road users.' Texts from <http://www.peakdistrict.org/index/visiting/accessibility/access4all/access4all-sites/derwentvalley.htm>, accessed 5/7/2008

Survey of Cumbria members of Friends of the Lake District

Background

During preparations for the A590 Case Study interviews, Friends of the Lake District kindly offered the opportunity to insert a survey about traffic noise with the magazine mailed to their members. The Friends of the Lake District are a voluntary body dedicated to maintaining and improving the special attributes of the Lakeland landscape. As such, the members represent a subset of the population that is likely to be more concerned about environmental issues, including noise. Nevertheless, it was felt that the survey presented a valuable opportunity for a wider exploration of experiences of noise in the Lake District to complement the more detailed discussions with interviewees near the A590. The survey was mailed to all members with Cumbria addresses, an area larger than the Lake District. The National Park was, however, the main focus of responses.

The main purpose of the survey was to find out where noise is felt to be a problem, how it is experienced in the countryside, and how it influences respondents' behaviour. To that end, the survey reserved most space for freehand remarks. Although this approach meant it was more onerous to complete the survey, it produced a large volume of descriptive information from those who took the time to respond. 109 responses were received (7% response rate)¹. Two multiple-choice questions were also included in order to gauge views about the overall impact of noise on the area: a) the degree to which traffic noise is felt to be an issue considering the area as a whole; b) how often traffic noise impinges on people's enjoyment of the area. The survey questions are listed in full at the end of this section of the report.

A summary of the results and the main issues arising is provided in the following section, along with a small number of illustrative comments from the surveys.

Respondents' comments are reproduced in full in a further set of tables.

The results in summary

How traffic noise is felt to affect the Cumbria/ Lake District area a whole:

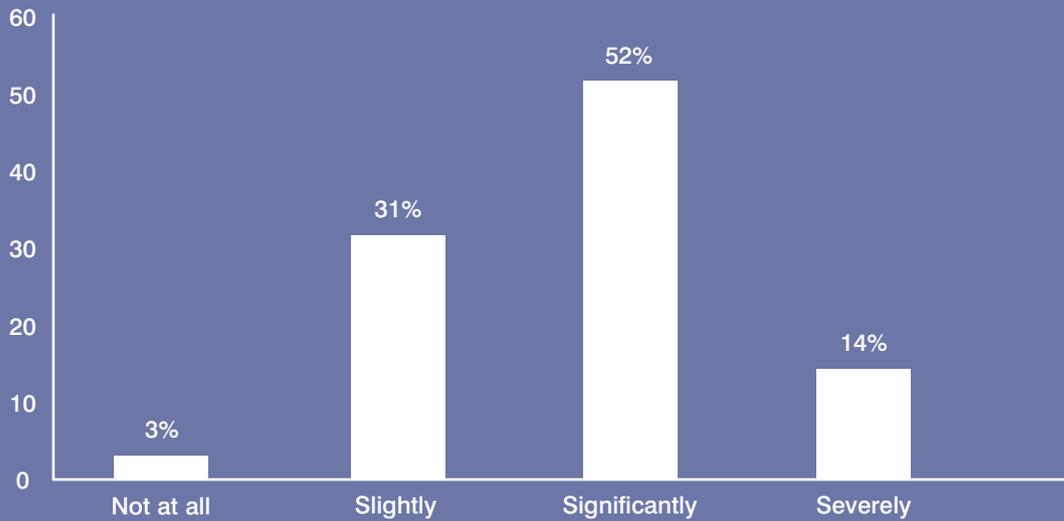
A majority of respondents (66%) feel that traffic noise detracts 'significantly' or 'severely' from the special qualities of the Cumbria and National Park countryside.

A very large majority (91%) find that traffic noise detracts from their enjoyment of places in the Lake District and Cumbria 'sometimes', 'often' or 'always'.

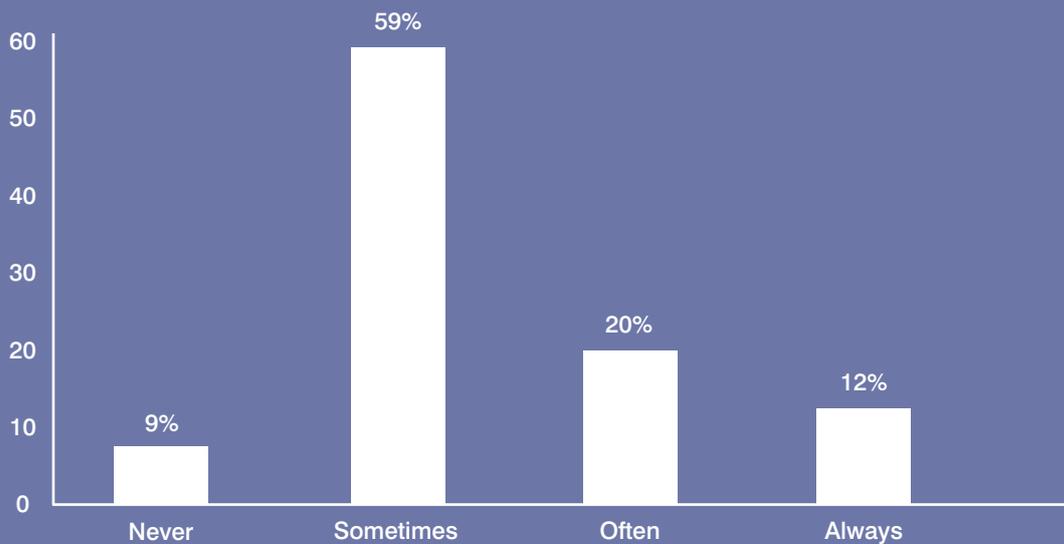
Given that this is a National Park and a scenic area of such renown, it is notable that only a small proportion (9%) find that they are never disturbed by the noise of

¹ Due to computer programming problems, 10 surveys completed via Friends of the Lake District web site conveyed only the descriptive information without the quantitative multiple choice responses, so the multiple choice analysis is based on 99 responses.

Lake District Traffic Noise Survey
Q. Do you think noise detracts from the special qualities of the Cumbrian countryside/National park?



Lake District Traffic Noise Survey
Q. Does noise from roads detract from your enjoyment of places?



traffic and that an even smaller proportion (3%) think that traffic noise does not detract from the area's special qualities.

The effect of traffic noise on specific places in Cumbria/ The Lake District:

Several broad features of the survey results are apparent:

- A large number of places are listed as 'adversely affected' by road noise.
- A significant proportion of these are felt to be so unpleasantly noisy that some respondents 'tend not to go' to them.
- A lot of the places amongst those adversely affected or avoided are well-known for their scenic qualities, some would rate as nationally famous destinations for their scenery.
- Through the Lake District National Park itself, the trunk road corridors of the A66, A591 and A590 are major sources of noise disturbance.
- Of various other A-roads causing noise disturbance, the A592 appears to cause most annoyance within the Lake District National Park.
- Noise from the M6 motorway affects the eastern side of the Lake District National Park as well as other Cumbria countryside round about.
- Not only major roads cause noise disturbance in the Lake District - some B-roads and busy minor roads cause noise disturbance, although to a lesser degree.

How respondents describe the impact of traffic noise on the countryside:

Some respondents' comments convey a sense of loss and frustration at how traffic noise reduces or destroys their enjoyment of beautiful countryside.

"We live in Sedgwick and hear traffic noise from the well used approach roads into the national park - A 590 & 591 - this also spoils enjoyment of all walks in this area - Kent valley , Sizergb Fell and Whitbarrow, etc."

"Marvellous Grasmere horseshoe Helm Crag/Calf Crag/Steel Fell walk ruined by the roar of traffic on Steel Fell, Deadman's Pike, from A591 Dunmail raise - spoils the day."

"Last year I walked up to Gummers How and Orrest Head and could hear traffic noise at both locations. This traffic noise ruined my walks."

"I avoid Ullock Pike Carlside approach to Skiddaw, wonderful route ruined by the A66."

"I love Blencathra massif, but noise from the A66 means I hardly ever go there."

"[tends not to go to] Windermere lakeshore - I rarely enjoy visits to

Birdhouse meadow and Brathbay/Rothbay confluence (kingfishers) due to roar of traffic."

The range of traffic noise pollution:

Many of the reported locations subject to noise disturbance are countryside areas, e.g. fells, at some distance from roads. Blencathra is the single most mentioned noise-affected location (and most avoided). Several comments remark that traffic noise affects the summit and summit ridge, which is over a mile from the A66.

Some respondents make specific mention of the distances that road noise carries:

"I live on the A592 at Hartsop, noise from motorbikes and noisy exhausts on cars makes it necessary to walk 2-3 miles into valleys to escape it and to avoid the tops altogether as the noise reaches the tops."

"It is noticeable that the noise from fast roads carries many miles (eg. routinely and significantly about 3 miles from the A590 up the Lyth valley, and at least 10km in the case of the M6 heard from Whitbarrow and the Lyth valley on still days/nights) and blights vast areas, while the noise from even fairly busy slower roads is lost only a relatively short distance from the road, depending on topography."

Particular sources of traffic noise and changes in traffic noise over time:

A large majority of respondents, but not all, feel that traffic noise has progressively worsened. Several comment that there is traffic noise for longer periods of the day and for a greater proportion of the year. It is, however, clear that the summer tourist season is the period of most noise, with summer weekends being peaks of traffic noise disturbance.

Respondents also perceive an increase in particularly noisy types of traffic and motor vehicle noise in previously quiet locations.

Motorbikes receive by far the most complaints, including complaints about off-road motorbikes. Off-road 4x4 vehicles are also identified as a noise source.

Cars with noisy exhausts ('hot-rod' cars) are the second most-mentioned cause of offence.

Increase in the number and size of large and heavy vehicles of various types is felt to be a significant source of increased noise. This is not just a feature of major roads - several comments express the view that more commercial vehicles are using the smaller roads with a consequent impact on noise levels. One respondent remarks on *"bome deliveries up to 10 tonners going up valleys."*

Various respondents are of the view that smaller roads are receiving generally

higher levels of traffic, bringing noise to hitherto quiet places.

In addition to increased traffic volume, higher traffic speeds are seen as a large contributor to increased noise levels. Respondents associate this with road widening and with lack of speed limit enforcement:

“Speed has increased significantly. This applies to the A591 at Dunmail Raise [a dual carriageway section] in particular, where speeds of over 80mph occur very often. When drivers are going at fast speeds, noise is increased.”

“Upgrading of roads to two carriageways - more traffic, tyre noise especially in fast traffic, high speeds.”

One respondent judges that there is an increased incidence of noise from emergency vehicle sirens, and notes that these appear to be used regardless of whether or not there is any other traffic on the road.

Other exacerbating factors:

Respondents note the variation of traffic noise disturbance with weather conditions, including wind. One instance of tree felling (near Thirlmere) appears to have removed significant noise screening.

One response records early morning noise disturbance from vehicles going to ‘large charity walks’.

There is comment that traffic noise rises from the road and is heard on surrounding hillides.

Defensive responses to the survey:

A small number of respondents take the view that the issue of traffic noise should not be the subject of discussion and appear to regard raising the subject as an indirect attack on the vehicle use to which they are ‘entitled’. One of these thinks that noise is a problem for over-sensitive visitors rather than residents.

“I do not think there is really anywhere which is really affected significantly by traffic noise. You are always going to get a minority of people moaning and whingeing - mostly those who do not work or live here. Just enjoy the area and ignore any traffic noise there may be. People who live and work here have got to have transport of their own”

Another response implies that visitors might be encouraged to use other types of transport but that car use is fine for local people.

In light of the stated presumption in the quote above, it is relevant to note that of survey respondents, only 2% described themselves as visitors, the remainder describing themselves as residents or workers in the Lake District, or both.

Perceived solutions:

Many respondents offer up thoughts of how to decrease traffic noise. Some consider that quieter road surfacing would assist, but many comments focus on more fundamental approaches such as reducing traffic levels, reducing speed limits, stopping building more roads and providing more public transport. For example, one respondent suggests a halt to 'building of roads designed to increase traffic speed'. Others suggests a 30mph or 40mph speed limit throughout the National Park:

“National Park speed limit should be 40mph instead of 60/70mph national limit. Urban limit of 20mph instead of 30mph. National Parks should be a different place.”

Although not part of the survey, two respondents comment on how much noise has been reduced as a result of a low speed limit for boats on Lake Windermere.

Several comments consider whether it is necessary or justifiable for the present volumes of through-traffic, particularly heavy vehicles, to pass through the Lake District National Park.

One respondent felt that the smallest roads should be shut to traffic except for people farming and living there.

The survey questions

Q1 Are you a resident/ worker/ visitor in Cumbria / the Lake District National Park?

Q2 Do you think traffic noise detracts from the special qualities of the Cumbrian countryside / Lake District National Park?

not at all slightly significantly severely

Q3 Does noise from roads detract from your enjoyment of places?

never sometimes often always

Q4 Can you list any places you have been to in Cumbria / the Lake District which you feel are adversely affected by traffic noise? (these could include fell tops, villages, campsites, etc – but please be as specific as possible with location information)

Q5 Are there places in Cumbria's countryside that you tend to avoid because of sound from roads? Please give details below.

Q6 Do you think that noise from traffic has changed over time? If yes, what has changed and how?

Q7 Do you have other comments about traffic noise from roads in Cumbria's countryside / the Lake District?

Survey responses in full

Q1: Status of respondents

resident 90 worker 1 resident & worker 6 visitor 2

total hard-copy responses 99

additional electronic responses (only comments legible, tick-box responses corrupted) 10

total responses 109

Q2: Do you think traffic noise detracts from the special qualities of the Cumbrian countryside/ National Park?

	Not at all	slightly	significantly	severely	total
Percentage	3%	31%	52%	14%	
Number	3	31	51	14	99

Q3: Does noise from roads detract from your enjoyment of places?

	never	sometimes	often	always	total
Percentage	9%	59%	20%	12%	
Number	9	58	20	12	99

Q4: Places that respondents listed as 'adversely affected by traffic noise'

Some respondents chose to list road names, others places, some both. Responses are grouped according to which was the respondents' primary categorisation.

A comment from any one respondent about a particular location is listed either by road or by place (i.e. only listed once and counted as one 'mention').

Different locations and roads mentioned by a single respondent are each counted as 'mentions' and listed accordingly (i.e. no. of mentions > no. respondents)

Question marks indicate: a) where respondent did not specify road causing the noise and an ambiguity remains after checking maps; b) uncertainty with names due to legibility issues

Where more than one respondent named the same road or place and offered further details, different respondents' remarks are separated by semi-colons

Road or Place name	No. of multiple mentions	Further details
Primary mention by road number		
A66	22	specified as: villages nearby, 'anywhere near', 'anywhere near A66 Corridor Penrith-Cockermouth', Braithwaite-Threlkeld, villages of Portinscale, High Portinscale, ?New Road; Bassenthwaite Lake; Crosthwaite church & churchyard, New Road, Portinscale, village hall Braithwaite, any adjacent fells; 'The new road bridge on the A66 makes a good point to photograph Brougham Castle and the old bridge. As an engineer for the Cumberland County Council I could stand on the old bridge and be almost unaware of any traffic. Now the traffic over the new bridge on the A66 is getting on for continuous. It must make life on the local farm very disturbed.'; Thornthwaite village; A66 Penrith to Cockermouth - constant drone of traffic noise on all the fells from Keswick down the left and right of Derwentwater and Bassenthwaite; we live at Fieldhead, Troutbeck and can hear significant noise from the A66 - the hill going up west to the ?white house at Scales; especially Blencathra, Latrigg, north Keswick, Portinscale, Braithwaite, Thornthwaite, Barf, Bassenthwaite lake shore, Beck Wythop; heard on summit of Blencathra in absence of wind; Braithwaite, Braithwaite How, Barrow, Barf, Threlkeld; fells near Braithwaite; particularly Blencathra and near Threlkeld; Braithwaite village; Braithwaite campsite, Threlkeld; 'anywhere on the A66 corridor'; Braithwaite area on nearby fells; The A66 through the Keswick district produces a steady background noise over a wide area; any fell that borders the A66;

Road or Place name	No. of multiple mentions	Further details
A685		specified as: north Howgills, south Orton Fells, upper Lune valley;
A689		specified as: Hallbankgate to Alston speeding motorbikes;
A590	8	specified as: river Leven between Newby Bridge and Haverthwaite; Witherslack, Ayside, Lindale; 'Lindale bypass noise'; Whitbarrow Scar south end, Haverthwaite heights, Hampsfield Fell from the new bypass to High/Low Newton; my back garden in Levens in summer especially;
A591	14	specified as: fellside walks; (8 times) as Loughrigg Terrace, Coffin route opposite Rydal/Ambleside; Rydal & Grasmere; Fairfield Horseshoe, Helvellyn, Thirlmere; 'alongside the A591 to a couple of fields away'; traffic noise can drift as far as School Knott where we live; footpaths Crook Road to A591 near Plumgarths and crossing to Hollins lane; intrusive on western slopes Dollywagon Pike; 'walking along A591 near Brockhole it is often impossible to hold a conversation because of traffic noise'; Grasmere to Thirlspot; mid-level circuits around Grasmere/Rydal; We live in Sedgwick and hear traffic noise from the well used approach roads into the national park - A 590 & 591 - this also spoils enjoyment of all walks in this area - Kent valley , Sizergh Fell and Whitbarrow etc; It is difficult to find a quiet spot to reflect on my local beloved fell Loughrigg;
A592	2	specified as: Pooley Bridge to Glenridding, winding road favourite with motorcyclists. Noise heard from Barton Fell, Arthurs Pike; intrusive on western slopes and top Yoke and Sallows, eastern slopes Red Screes, western slopes Candale Moor; "I live on A592 at Hartsop, noise from motorbikes and noisy exhausts on cars makes it necessary to walk 2-3 miles into valleys to escape it and to avoid the tops altogether as the noise reaches the tops";
B5285		specified as: I live at Far Sawrey, my main problem with traffic noise is motorcyclists from the ferry to Hawkshead
M6	6	specified as: East-facing Howgills moorland; 'I can hear it three miles away at my home in Newby, Penrith'; 'all areas adjacent, sometimes as far as two miles away, places like Scotby, Penrith, Tebay have constant noise, western slopes of Howgills particularly affected; Lancaster canal north of Tewitfield

Road or Place name	No. of multiple mentions	Further details
<p>Primary mention by place name</p> <p>Aira Force (A592, ? also A5091)</p>		
Ambleside (A591 & A593)	10	specified as: 'Anywhere in Ambleside when the HGVs are rolling through - my house shakes'; area between Ambleside and Coniston; 'traffic noise in Ambleside streets can be quite deafening';
Applethwaite village (A591 & A66)		
Backbarrow (A591)	2	specified as: Backbarrow area footpaths - in Massicks Wood and ?Rarrock Wood, Low Wood to Brow Edge footpath,
Bassenthwaite Lake (A66, also A591)	4	specified as: East and West shores;
Blencathra & (A66)	26	specified as: near Threlkeld; Skiddaw-environs Blencathra ridges; above Scales; main road noise until over half way up; and adjacent hills; flanks of Blencathra and Skiddaw; the climb up to the summit of Blencathra via Halls Fell; summit ridge, Halls Fell ridge especially ruined by A66; southern slopes, very bad; southern side, Hall's Fell, etc; sound from A66 spoils the climb from Scales; climbing Blencathra via Scales Fell, the noise from the A66 accompanies me all the way to the summit; top & southern approaches; eastern side; Blencathra and adjacent fells; lower South side of Blencathra, e.g. at the Blencathra centre;
Borrowdale valley	3	specified as: Borrowdale road near Grange; (B5289) Falcon Crag; Grange;
Borrowdale (the other one near the M6)		
Bowness (A592, A5074)	7	specified as: Bowness/Lakeside road viewing point; Lake Road;
Brampton by-pass (A69)		
Bretherdale & Birkbeck Fells (M6, also A6)		specified as: the ascent from Greenholme

Road or Place name	No. of multiple mentions	Further details
Buttermere Fells (B5289)		
Calthwaite (M6)		
Carlisle		specified as: and all its approach roads;
Castlerigg Stone Circle (A66)		
Coniston (A593, also ? B5285)	3	specified as: and area around;
Dunmail corridor (A591)		specified as: Helm Crag, etc
Dunmail raise (A591)		
Elterwater (B5343, ?A593)		
Farleton Knotts and Fell (M6) Craggs (M6)	3	specified as: Farleton Knott/ Hutton Roof
Finsthwaite area, Great Knott Wood (A590)		
Foulshaw Moss nature reserve (A590)		
Glenridding (A592)		
Grasmere (A591)	6	
Grayrigg Pike (M6)		
Great Mell Fell (A66, ?A509)		
Grizedale Pike (?A66)		
Grizedale Forest, Satterthwaite (minor road)		
Gummers How (A592)		

Road or Place name	No. of multiple mentions	Further details
Harrop tarn shores		specified as: Harrop Tarn area and western (A591)
Hartside (A686)	3	specified as: Hartside to Langwathby; Hartside/Alston rights of way (A686); Hartside Pass
Helm Crag (A591)	4	specified as: Helm Crag to Sbeel Fell; Loughrigg Terrace and Helm Crag Grasmere; 'marvellous Grasmere horseshoe Helm Crag/Calf Crag/Steel Fell walk ruined by the roar of traffic on Steel Fell, Deadman's Pike, from A591 Dunmail raise - spoils the day; Dunmail raise traffic affects the peace and quiet of Helm Crag near Grasmere;
Helvellyn slopes (A591, also ?A592)	2	specified as: A591 side; 'eastern approaches';
Hempsfell (A590)		
High Rigg (A591)		specified as: ascent from A591 from GR315195
Hills above Stavely (A591)		
Hoad Hill, Ulverston (A590)		
Honister (B5289)		
Howgills (M6)	4	specified as: Carlingill Bridge; west Howgills (twice);
Hutton Roof area (?M6, A65)		
Ings (A591)		specified as: footpaths near Ings and Staveley
Jeffreys Mount (M6)		
Kendal (A591, A6)	3	specified as: 'noise from the bypass'; A6 coming in from bypass;
Kendal Fell golf course and Cunswick Scar		
Kent Valley (?A6, ?A591)		
Keswick (A66, A591)	5	

Road or Place name	No. of multiple mentions	Further details
Kirkby Lonsdale (A65)		specified as: to be avoided, particularly at weekends, due to the aggregation of motor bikes;
Kirkoswald (B6413)		
Kirkstone pass (A592)		specified as: bottom of Kirkstone Pass;
Lancaster canal (M6/A591)		
Langdale valley (B5343)	3	specified as: high season; 'hell on bank holidays';
Latrigg fell (A66)	6	specified as: 'top of Latrigg'; seriously affected by A66; southern facing slopes;
Latterbarrow Wildlife Trust Nature Reserve (A590)	3	specified as: south east end;
Ling Fell (A66)		
Little Langdale (minor road)		specified as: 'hell on bank holidays - rewing traffic, horns, screaming brakes, etc';
Lune Valley and Gorge (M6)	4	specified as: between Low Gill and Tebay
Lyth Valley (A590, A5074)		specified as: also noise from M6 on still nights when local traffic is less frequent;
Meathop Moss nature reserve (A590)		
Melmerby (A686)		
Millbeck village (A591 & A66)		
Milnethorpe Bridge (A590)		specified as: foreshore footpath to Sandside;

Road or Place name	No. of multiple mentions	Further details
Newby Bridge wooded fells ;(A590, also ?A592)	2	specified as: wooded fells above Newby Bridge - you need to walk a mile to escape the echo of traffic
Old canal south of Kendal (?A591, ?A65, ?M6)		
Orrest Head walks (A591)		specified as:"last year I walked up to Gummings How and Orrest Head and could hear traffic noise at both locations. This traffic noise ruined my walks";
Orton (M6)		
Patterdale (A592)	3	specified as: Thirlspot Farm campsite
Penrith		
Pooley Bridge (A592, also ?B5320)	2	
Ravenstonedale (A685)		specified as: ?Severals area
Red Screes (A592)		specified as: on top of Red Screes [noise from] Kirkstone pass;
Renwick (?A686)		
River Kent near Staveley (A591)		
Rosthwaite village (B5289)		
Rothay Bridge (A593)		
Roudsea Moss nature reserve (A590)	2	
Rusland Valley (?minor road, ?A590)	2	specified as: near Grizedale visitor centre lower Rusland valley;
Rydal Water (A591)	6	specified as: under Loughrigg; lakeshore, coffin route, north Loughrigg incessant roar from A591; especially path from Rydal Mount to Grasmere;

Road or Place name	No. of multiple mentions	Further details
Sale Fell (A66)		
Scout Scar (A590)	2	
Shap area (M6)		
Sizergh/Natland area (A591)	2	specified as: Sizergh Fell
Sizergh Castle gardens (A591)		
Skelwith Bridge (A593)		specified as: traffic to/from Coniston
Skiddaw (A591 & A66)	3	specified as: occasionally; I avoid Ullock Pike Carlside approach to Skiddaw, wonderful route ruined by the A66, Barf is quite unpleasant;
Staveley (A591)	3	specified as: 'At home outside Staveley. I'm afraid the bypass has replaced traffic jams with a constant traffic roar'; 'noise from the bypass'; 'we notice that sound tends to travel upwards towards the fell tops - our present house in Staveley is below the level of the A591 and is less affected by noise than those on the hill which are further from the road';
Staveley-in-Cartmel (A590)		
Steel Fell (A591)		
Tebay (M6, A685)	3	specified as: Tebay village is adversely affected; Tebay area
The Helm (nr Oxenholme A65 or M6 dep. on wind)	3	
Thirlmere (A591)	5	specified as: including the slopes above; 'new and horrendous noise pollution following felling of trees on the lake side of the road that used to absorb noise';
Troutbeck (A592)	2	
Troutbeck Bridge (A591)		
Ullswater Lake (A592)	6	specified as: the whole length;

Road or Place name	No. of multiple mentions	Further details
Walna Scar above Coniston (?green road)		specified as: one example of motor bikes on fell passes
Waterhead (A591)		
Whinlatter pass (B5292)		
Whinfell area (A6)		
Whitbarrow (A590)	5	specified as: south end (three times); 'on quiet days you can hear traffic noise';
Windermere (A591, A592)	8	specified as: and the countryside around; young residents' cars revving and roaring along a residential road in Windermere; 'bad as Park Lane in London'; Rayrigg road viewing point;

Off-road traffic and vehicle-specific comments (mentions arising in response to other questions have been counted here)

motorbikes	28	specified as: A592; on green roads; off-road; A686 Penrith-Alston; 'Tracker motorbikes heard and seen at Smardale Fell GR735065, Beacon tarn/fell/Woodland fell GR265895, Blackcombe fell GR135855, Swindale Common, these are quite clearly being ridden illegally over national park lands'; motorbikes on A592 can be heard from Garburn pass; Motorcycle noise is particularly intrusive as it carries so far eg. A5074 on sunny weekends in summer; motorbikes whose riders favour hilly and bendy routes such as Penrith-Alston road and Pooley Bridge-Glenridding; on weekends; Hartside Pass; motorbikes driving too quickly through Portinscale;
jeeps/ 4x4 vehicles	2	specified as: off-road; green roads being used by 4x4 vehicles and motor bikes, in particular U5001 from High Tilberthwaite to Fell Foot bridge in Little Langdale;
milk & oil tankers		specified as: these 'get bigger'
big tractors	3	specified as: through Bampton Grange and along road to Penrith
animal carriers		
cars with noisy exhausts	9	
police car and ambulance sirens		specified as: 'even on clear roads';

Road or Place name	No. of multiple mentions	Further details
coaches		
Generalised comments		
throughout the National Park on valley paths		
South Lakes area generally everywhere in the Lake District		specified as: I live in Kendal but go east to Yorkshire Dales where there are fewer cars

Q5: Places where respondents 'tend not to go because of sound from roads'

Some respondents chose to list road names, others places, some both. Responses are grouped according to which was the respondents' primary categorisation.

A comment from any one respondent about a particular location is listed either by road or by place (i.e. only listed once and counted as one 'mention').

Different locations and roads mentioned by a single respondent are each counted as 'mentions' and listed accordingly (i.e. no. of mentions > no. respondents)

Question marks indicate: a) where respondent did not specify road causing the noise and an ambiguity remains after checking maps; b) uncertainty with names due to legibility issues

Where more than one respondent named the same road or place and offered further details, different respondents' remarks are separated by semi-colons

Place name	No. of multiple mentions	Further details
Primary mention by road number		
A6		we definitely avoid footpaths that go near the A6
A66	8	fells adjacent and nearby valley paths, particularly in tourist season; anywhere near the Penrith-Keswick-Cockermouth road; any walk overlooking the A66; we chose not to buy our home within earshot of the A66;
A590	4	anywhere blighted by the 'noise envelope' of the A590; anywhere near; footpaths near or crossing;
A591	9	places close to the A591; fells adjacent and nearby valley paths, particularly in tourist season; anywhere near; we chose not to live above Grasmere because of noise from A591; footpaths near or crossing; it is not possible to hold a conversation while walking along the footpath/cycleway adjacent to the A591 between Staveley and Windermere; any fellside walks along A591;
A592		tops in vicinity of A592;
M6	3	we definitely avoid footpaths that go near the M6; anywhere near (2 times); anywhere within earshot;
Primary mention by place name		
Alston (A686)		in summer or sunny days because of motorbike noise;
Ambleside (A591 & A593)	3	

Place name	No. of multiple mentions	Further details
Backbarrow (A590)		Backbarrow area';
Barf (A66)		
Bassenthwaite Lake (A66, also ?A591)	4	I don't visit it at all due to the A66;
Bede Wythop (A66)		
Blencathra (A66)	9	southern routes (3 times); puts me off; I love Blencathra massif, but noise from the A66 means I hardly ever go there;
Bowness (A592, A5074)	2	
Braithwaite (A66)		
Brampton (A69)		we do not use the footpaths around the Brampton bypass because of the constant noise from the traffic;
Brundholme Woods (A66)		
Buttermere Fells (B5289)		
Burton-in-Kendal (M6)		walks around, because of M6 noise.
Carlside (A66, ?A591)		
Coffin route (A591)		opposite Rydal/Ambleside
Coniston lake (?A593, ?B5285, ?A5084)		shore on western side;
Crooklands (M6, ?A65)		Crooklands area';
Dunmail shoulder (A591)		
Farleton Knott (M6)	2	
Grasmere (A591)	5	mid-level circuits;

Place name	No. of multiple mentions	Further details
Grizedale Pike (?A66)		
Hartside (A686)		
Haverthwaite (A590)		
Helm Crag near Grasmere (A591)		If you climb the quiet (Easedale) side of the hill you get a shock at the top from the road traffic noise';
Helne near Kendal (A65)		
Holme (M6)		
Howgills (M6)		western Howgills;
Hutton Roof area (M6, A65)		
Ings (A591)		some of the footpaths in the Ings and Staveley area - they are blighted by the A591;
Keswick (A66, A591)	5	
Kirkstone (A592)	3	area around The Struggle, Kirkstone (Snarker Pike, Grove, ?Wausfell), in peak summer periods - incessant roar of motorcycles doing the passes; Kirkstone top off-road footpath down to Coniston Beck and Bridgend - very scenic walk for bus users in summer but unfortunately very busy;
Langdale (B5343)		in summer;
Latrigg (A66)	4	south side;
Latterbarrow nature reserve (A590)	2	
Levens Park (A6)	2	
Loughrigg Terrace (A591)		
Lune Gorge (M6)		
Lune Valley (M6)		upper Lune valley;

Place name	No. of multiple mentions	Further details
Orrest Head (A591)		I stay away from Orrest Head now;
Patterdale (A592)		
Penney Rock Woods (?)		
Penrith		
Pooley Bridge (A592, also ?B5320)		
Portinscale (A66)		
River Kent (A591)		south of Kendal;
Rusland Valley (minor roads)		lanes leading to Grizedale visitor centre
Rydal Water (A591)	9	rarely enjoy visiting in summer; mid-level circuits
Shap Fells (M6)		
Skiddaw (A591 & A66)		
Stainmore (A66)		
Thirlmere (A591)	2	
Thornthwaite (A66)		
Threlkeld (A66)		
Troutbeck (A592)		
Ullock Pike (A66)		wonderful route to Skiddaw ruined by A66;
Ullswater (A592)	4	the fells above east and south side on Sundays; west shore;
Whinfell (M6)	2	eastern ridge
Whitbarrow (A590)	3	south end, unless there is a northerly airflow; south end;
White Moss (A591)		
Windermere	4	Windermere lakeshore - I rarely enjoy visits

Place name	No. of multiple mentions	Further details
(A591, A592)		to Birdhouse meadow and Brathay/Rothay confluence (kingfishers) due to roar of traffic;
Wray (?A591)		rarely enjoy visits to the waterside in summer;
Generalised comments		During the majority of the year my walks are planned with avoidance of traffic noise as priority; I live in Kendal and avoid the Lake District - instead I go to the Yorkshire Dales; I would try to avoid walking near many of the higher pass routes on busy days; [avoids] town centres; we always tend to visit places away from big roads;
Off-road vehicle/motorbike vehicles and trail bikes;		[tends to avoid] Old Man of Coniston/ Tilberthwaite due to noise from off road noise I try to avoid the hills close to major areas e.g. Coniston, Windermere, etc.

Q6: Do you think that noise from traffic has changed over time? If yes, what has changed and how?

More cars (3 times)

More vehicles (twice)

Increased volume of traffic (5 times)

As traffic has increased so has noise (3 times).

Traffic noise has got worse with higher speeds and more traffic (twice).

More traffic on the road and commercial vehicles have become bigger and noisier.

Traffic noise has increased as traffic levels and speed have increased. There's more constant fast traffic on the fast roads and more constant traffic on the slower roads. Cars seem to be noisier - more aggressive driving in 'souped up' cars which seem to try to compete with motorcycles for noise. Motorcycle noise is particularly intrusive as it carries so far eg. A5074 on sunny weekends in summer.

More traffic = more noise; faster traffic = more noise; road improvements = faster traffic & more traffic = more noise

More traffic on the roads and vehicles tend to travel faster.

Noise has increased, mainly due to increase in number of heavy goods vehicles.

Greater volume of traffic and larger vehicles

Home - Dufton - we used (in 1966) to hear four vehicles / day. Now it's 20 or more, some extremely noisy.

Traffic speed has increased, especially on the A66 race track where hardly anyone keeps to the speed limit, and road surfaces are noisier. Harrop Tarn area and western shores - Thirlmere - new and horrendous noise pollution following felling of trees on the lake side of the road that used to absorb noise

Noise levels have increased as a result of a) increased speed b) increased traffic, due to improved roads and more vehicles.

Many more cars travelling very fast.

Increased traffic on country roads and through villages. Improvement of M6 and A66 [has] encouraged more traffic.

Diesel vehicles much more common and often noisier than petrol, & volume of traffic increased.

Individual cars are much quieter but there are more of them.

Worse because of more and heavier vehicles and also places away from A roads but close to them (e.g. Langdale) are spoiled by traffic.

Increase in illegal silencers on motorbikes and [higher] volume of traffic.

No significant change in last decade.

Engines have become quieter but there are more cars.

Fewer quiet periods in autumn and winter than 20 years ago.

Huge increase in overall volume of traffic compared with 60 or even 20 years ago (I am now 80, first visited Lakes 1944) and in use of narrow Lakeland roads and streets by heavy freight vehicles such as container transports.

Significant increase in volume of traffic, particularly motorbikes.

Police and ambulance use of sirens has increased substantially in last 4 years and more loud motorbikes.

Traffic noise has become louder, fewer quiet intervals, great predominance of tyre noises caused by high speed traffic. Straightening and widening of roads encourages traffic to move faster.

Increase in traffic as tourism has developed.

Having lived on Dunmail Raise for the last 6 years we have found that speed has increased significantly. This applies to the A591 at Dunmail Raise [dual carriageway] in particular, where speeds of over 80mph occur very often. When drivers are going at fast speeds, noise is increased.

Noise has got worse, more traffic on roads now. Once quiet lanes busier, thus noisier.

Only been resident a few years, however, volume of traffic has increased significantly (and thus noise).

Increased resonance and volume.

It [traffic noise] has increase over time but gradually so I think I've acclimatised gradually.

Compared with my 1950s childhood there is much more traffic, big new roads, and it goes faster so making more road noise (but engines have got quieter)

Many more trucks and larger capacity apparent.

It [noise from traffic] has increased but happily not so much in Cumbria as in other areas.

Increased level of people coming for a day out to places like Keswick and Ambleside, not necessarily to walk but often to shop, has dramatically increased the noise in these towns. Fortunately the out of the way places have not suffered so badly.

Since the A66 was built through the park.

More traffic on main roads

Volume of traffic and speed has increased tremendously.

Much more noise at all seasons and times of day

Particularly from increased tyre noise.

[Traffic noise] has increased.

In summer the A66 is continuous now. Big lorries are more common.

Upgrading of roads to two carriageways - more traffic, tyre noise especially in fast traffic, high speeds.

It [traffic noise] has increased because the volume of traffic has increased from the 1990s onwards.

More noise in Langdale, especially weekends & holidays.

Not really [changed]. Cars tend to be quieter and the banning of heavy through traffic on the A591 is a great blessing.

Deterioration of road surfaces and more heavy traffic.

Increased traffic and faster roads leading to general increase in tyre noise and engine noise from HGVs.

Increased significantly

Not noticed much change over 11 years.

Particularly with the increase in delivery vans along narrow lanes, presumably due to more home shopping.

Not much in the past 10-20 years on existing A roads, but bypasses seem to generate extra noise associated with speed e.g. Keswick bypass.

Bypass construction, but on balance the bypasses have more positives than the sound negative.

As traffic has increased so has its noise. There are many unfortunate results of the increase in road traffic and noise is one of the least of them.

The noise level has increased significantly, especially on the A591. The volume of traffic seems to have increased.

Motorcycling has increased greatly. Commercial vehicles are getting bigger and delivering along smaller roads. They also tend to ignore speed limits through villages which is noisier.

Over past 12 years noise has increased markedly by more traffic.

No [change over time]. Modern cars are quieter and traffic speeds are now reduced throughout the park by compulsory speed limits.

More incessant, longer period of time - 9am to 6pm or later, becoming all year round, used to be seasonal/peak times. More 'turbo' cars/motorcycles.

Main route traffic is starting earlier in the morning - HGVs on A66 from 5am!

More constant, no lulls.

We are not aware of any change in the last 25 years.

Vehicles increasing rapidly.

The volume has increased, especially the tyre noise.

It has become much louder. Walking across the fields from Ullock Farm to Portinscale it is very noticeable now - 30 years ago I don't recall it being so.

Not significantly [changed] in last 20 years.

Traffic noise has increased over time.

There is a slight increase in volume of traffic noise, I feel, particularly in the southern half of the Lakes

Q7: Do you have other comments about traffic noise from roads in Cumbria's countryside / the Lake District?

Perceived exacerbating factors

A few vehicles can make a disproportionate amount of noise. Motorbikes seem to be better the noisier they are. Silencers would make a big difference. A few cars (usually sports cars) also suffer from the same 'its better to be noisy' syndrome.

Greater number of motorbikes driving at speed. In my opinion, they are much worse than cars.

Motorcycles are the worst and in the summer there seems to be more of them.

Very early morning delivery vehicles and late night taxis [in] Keswick town centre.

Motorists speed over the speed limit.

Lack of enforcement of speed limits; lack of enforcement by police of breaches of law relating to motorcycle and motorcar exhaust noise emissions; increasing numbers of very large lorries.

Noisy motor bikers and young idiots who drive their cars with the objective of making as much noise as possible.

Organised large rallies, especially of motorcycles are particularly obtrusive. Also vehicles connected to large charity walks, especially early morning.

The only (occasional) problem is when 'bikers' descend in large numbers.

More holiday coaches.

Promotion of Cumbria by motorbike organisations and magazines.

Driving at or above the speed limit.

Noisy motorcycles at weekends are a particular nuisance.

Bigger trucks, louder engines, especially motorbikes. People drive too fast and engines just roar.

Some road surfaces seem to produce more noise than others. Noise is always quieter when vehicles have to travel more slowly e.g. roadworks.

The increase of motorbikes and the noisy exhausts of speed cars has the major impact.

Atmospheric conditions notably temperature inversions in certain locations at certain times of day.

The noise level in general has increased due to increase in the speed of traffic

[Dunmail Raise] is used by cars and motorcycles as a race track

More lorries and delivery vehicles. Increase in antisocial behaviour. Inadequate and expensive public transport. Poor road surfaces including poor maintainance. Noisy car radios. Increase in visitor attractions e.g. Grizedale.

Lorries rumbling, motorbikes screaming. Traffic calming creates massive noise - Queen's Rd, Kendal.

Increased traffic and so-called 'improved' roads, A66 & M6 being the main problem areas.

No effort to mitigate by quieter road surfaces or planting.

Fast noisy motorbikes on otherwise quiet scenic roads.

Too much commercial traffic.

Motorbikes, large vehicles, large tractors pulling large trailers.

Short bypass areas have been constructed causing more problems than solving. The Low and High Newton bypass under construction is a total waste of money causing more problems for residents - noise, danger from speed, etc. Severe reservations that the earth bunds and planting along the new bypass will significantly reduce the impact of the traffic noise.

The most intrusive noise is caused by motor cycles and high powered sports cars.

Excess noise comes from ill-maintained vehicles and those modified in both engine and exhaust to enhance performance and improve macho image.

More motorbikes = more road noise.

Traffic noise seems worse since tree felling at Thirlmere westside Helvellyn. Ancient open-topped buses particularly noisy.

Using horns. Rally style driving increases noise from cars considerably and is selfish. Home deliveries up to 10 tonners going up valleys.

The main incursion is from noisy cars or in particular motorbikes on roads but in particular on tracks which should be reserved for non motorised use.

There has been a big increase in the number of large delivery vehicles on Lake Road [Bowness], often in the early morning.

Undoubtedly it has increased in volume threefold in the 20 years we have lived in Newton Reigny. It grows only worse.

Extent of the problem

It is very difficult to get away from traffic noise - there is little true tranquillity left in Cumbria, at least in the south-east of the county where I live.

There are many quiet areas to go in the Lakes to avoid traffic noise i.e. parts of the Eden Valley & Pennines & west coast areas.

It is increasingly difficult to get away from traffic noise caused by cars.

A high price to pay for tourism and collapse of farming is the destruction of the concept of the National Parks - a place of peace and tranquility?!

Am very much aware of increased noise in this once very unspoilt area.

Distance noise carries from roads

It is noticeable that the noise from fast roads carries many miles (eg. routinely and significantly about 3 miles from the A590 up the Lyth valley, and at least 10km in the case of the M6 heard from Whitbarrow and the Lyth valley on still days/nights) and blights vast areas while the noise from even fairly busy slower roads is lost only a relatively short distance from the road, depending on topography.

Perceived potential solutions and improvements

If all speed limits were reduced by 10mph there would be less traffic noise, fewer and less horrific accidents, and a great saving on fuel use and carbon emissions. There is currently no real encouragement from 'the authorities' or government to reduce vehicle use or traffic speed. Even the increasing cost of fuel does not appear to be having much effect, and the public transport system seems to be under threat of cuts rather than subsidy and remains woefully inadequate as a realistic alternative to the private car. Reduced traffic speed, and no more building of roads designed to increase traffic speed (such as the folly of the excessive length of dualling of the A590 at Low/High Newton) will reduce traffic noise, but ultimately it is the significant reduction of private and freight traffic which is needed.

Could Friends of the Lake District lobby for road surfaces to be improved with low noise surfaces?

Surely we should make bus travel more attractive. I lead walks including bus sections, but recently someone complained to me that one-way bus tickets to Aira Force for 2 people was over 2 x £4, so next time he was taking the car. How about bus passes (for younger persons) for a nominal sum, like £5 per weekend/10 per week for the whole family, i.e. per car load arriving in the LDNP, given out at every accommodation and t.i.c.? And free shuttle minibuses in school hols for destinations like Glenridding, Haweswater, Dodd Wood etc.....

Better public transport including rail links. Our village, Ireby?, has two buses a week and 50% of these are threatened. This will lead to more traffic and more noise and congestion.

Poor quality road surfacing; wider section tyres on cars

Increase public transport and make it far cheaper.

Only solution is park-and-ride.

Can anything be done about motorway noise e.g. screening with dense trees along its length?

Reduce traffic. Quiet tarmac and sort the potholes and reduce clatter.

Lower the speed levels on certain roads - more cameras?!

A 30mph or 40mph speed limit in the National Park would obviously help a lot.

Use of very large vehicles for local deliveries ought to be discouraged. Quieter engines don't represent a solution - far better to reduce traffic volumes, set size restrictions for some routes, and ensure that trunk road improvements and replacements develop key through routes around the scenic/national park areas.

We must accept traffic that has business/recreation in the park but NOT traffic for elsewhere. The A66 is the worst thing ever to be done to the Lake District National Park.

No further road development needed as traffic will only grow to fill this as well.

All villages should have 20mph speed limit. [Freight] should be moved to railways as national policy.

We would be very upset by road schemes which would increase both speed as well as quantity of traffic.

Speed levels need to be reduced in the National Park not increased [comment in context of anticipated increase in speed limit on High/Low Newton bypass dual carriageway due to open spring 2008]

Noise would be reduced if more tourists went by e.g. Mountain Goat [buses]; if lorry freight went by rail.

Level of road noise could be improved by speed restrictions, quieter material for road surfaces and use of quieter tyres.

No more new roads in the National Park.

Reduced speed would help.

We need draconian and comprehensive traffic control.

The only way of reducing traffic noise is to reduce the volume of traffic using Lakeland roads - other benefits would be to reduce atmospheric pollution, accidents and road hazards - a public transport would be needed, mainly for visitors.

Park and ride? Linking to a good bus system in the villages. Lots of education needed for this.

It might be better to emphasise the tranquillity and uniqueness of the landscape. Perhaps the Lake District has been too successful at attracting visitors.

The speed limits on rural roads in particular are too high - reducing the speed might help reduce noise.

Soft quiet surfaces on fast roads wherever possible. Public roads should not be used for trialling/racing on bikes. Speedlimits should be conveyed more clearly and enforced. Deliveries in sensitive areas - e.g. quiet areas, small roads, residential areas - should be made by smaller vehicles, not by those bringing goods from other regions in bulk quantities, but via transfer to suitable quieter greener vehicles.

A lot of [traffic noise] is not necessary. Modern surfaces can be much quieter.

Suggest that 40 and 50 mph speed limits should be more widely applied.

Why is A591 being promoted as the 'best drive' in England? Is it possible to restrict gangs of motorcycles on the minor passes? - The Struggle should be restricted to local access only.

National Park speed limit should be 40mph instead of 60/70mph national limit. Urban limit of 20mph instead of 30mph. National Parks should be a different place.

Could park and ride be applicable in some areas?

Far more private car use is responsible. We need to reduce private car use. Also goods should travel by train where possible rather than by road. I think some people either become immune to traffic noise or else do not care about it. I think we need a balance and for a few decades, the political will has been more roads.

On reflection I do not see what can be done unless smallest roads in the National Park could be closed except to those who live there and farm and work there, with unmistakable permits

Traffic noise is not a problem/ The survey is misguided

I think this questionnaire is fundamentally misconceived. From my perspective, the most serious enjoyment-threatening noise in the National Park came from high-powered motor boats on Windermere, which was why the speed limit was fundamentally justified. I don't see motor vehicle noise as a widespread problem. I think we need to concentrate on traffic volumes and the impact of large delivery vehicles.

I do not think there is really anywhere which is really affected significantly by traffic noise. You are always going to get a minority of people moaning and whingeing - mostly those who do not work or live here. Just enjoy the area and ignore any traffic noise there may be. No, [traffic noise has not changed over time], people who live and work here have got to have transport of their own - there really is no public transport of any use or value and what there is is very expensive and inconvenient.

I would say this is a major problem we do NOT suffer from!

This survey is remarkably narrow in its focus and avoids the wider issues of an integrated transport system, the needs of rural dwellers for adequate personal transport and the opportunities for more imaginative transport systems for tourists all of which could impact on noise factors.

Everyone is entitled to enjoy the National Park in their own way. To the less mobile the use of a car enables them to enjoy the National Park.

Questionnaire is biased in assuming that the problem exists and so solicits answers rather than let the reader make up their own mind.

One person's noise is another's enjoyment or work. Tolerance across interests should be encouraged.

Putting up with it

We put up with noise as we still want to go.

We put up with it.

I tend to put up with the noise.

Windermere boats (no question on survey)

Our house is 250ft above and 1500ft from Windermere south basin. The imposition of the 10mph limit has been a great blessing.

You [sic] have certainly solved the noise of speed boats on Windermere, which has made a great difference.

Low-flying jets (no question on survey)

3 mentions of their impact.

Appendix G

How noise nuisance is assessed

What follows is a short summary of current procedures for assessing noise nuisance.

There is also a basic explanation of the various scales of noise measurement, which is necessary because several systems are in use, and they each involve calculations that have potential to make the level of the noise nuisance appear different according to the circumstances (see Box 1).

The Highways Agency's Design Manual for Roads and Bridges (DMRB)¹ sets out the method that is used to assess the likely noise and vibration impacts of a proposed road scheme. The Department for Transport also publishes guidance on the appraisal of noise impacts of proposed road schemes as part of the New Approach to Appraisal, in its Webtag guidance². These two pieces of guidance follow the same basic approach and are intended to work alongside one another.

For existing trunk roads, the Highways Agency applies a Noise Severity Index to determine which places require noise mitigation measures and which of them should be given priority within its mitigation budget.

Existing roads with traffic above six million vehicles per year have now become subject to the European Directive on Environmental Noise³, as a result of which noise maps for these routes have recently been published for Scotland and England. There is also a requirement for Noise Action Plans, although as yet it is unclear what threshold noise nuisance levels these will contain, if any, what actions may result, and how much attention they will give to the mapped roads in addition to urban areas.

Some relevant features of each of these procedures are outlined further below.

1. DMRB approach to evaluating noise impact

The DMRB approach to the evaluation of the noise impact of a proposed road scheme uses the concept of noise annoyance. It involves the following steps (summarised here in simplified form):

- Identify existing roads and possible new corridors where traffic increases of at least 25%, or decreases of at least 20%, are expected as a result of the road scheme.
- Estimate the number of properties within 100 metres, 200 metres and 300 metres of the existing road and the proposed new road.

¹ Design Manual for Roads and Bridges, Volume 11 Section 3 Part 7 Traffic Noise and Vibration August 1994

² Transport Analysis Guidance Unit 3.3.2 The Noise Sub-Objective November 2006, available at http://www.webtag.org.uk/webdocuments/3_Expert/3_Environment_Objective/3.3.2.htm

³ 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, Official Journal of the European Communities 18.7.2002, L189/12-25

- Identify any particularly sensitive locations within 300 metres of the existing road / proposed new road. These might include sports fields, canals or footpaths, or buildings such as schools, hospitals, accommodation for older or blind people, or heritage buildings.
- Calculate the noise level at a representative number of residential properties and sensitive locations, comparing the 'without scheme' situation and the 'with scheme' situation. Noise level is calculated using computer modelling software, which takes into account traffic flow and speed, the composition of traffic, distance from the road, and other factors. At locations which are already dominated by traffic noise, the measure used is $L_{A10,18hr}$ – that is, the volume of noise that is exceeded 10% of the time. At 'quiet' locations where there is presently little traffic noise, DMRB notes that it may be necessary to use a different measure to gauge the initial ambient noise levels, $L_{A90,18hr}$ – that is, the noise that is exceeded 90% of the time. Although DMRB recognises this measure as a better representation of fairly continuous low background noise levels, it is only used for the initial assessment – it is not used for post-construction assessment of quiet locations for continuous low levels of traffic noise such as can be created by a high speed road at distance.
- Calculate how many properties / sensitive locations would suffer increased noise, and by how much, and how many would experience a reduction in noise.
- Estimate what proportion of people is already annoyed by noise (using the relationship between steady state noise and percentage of people bothered, shown in the first graph in Box 2). Based on the expected change in noise levels, estimate what proportion of people would be bothered by noise once the road scheme was completed (using the second graph in Box 2).

2. Webtag approach to evaluating noise impact

Webtag guidance on the appraisal of noise impacts extends the approach outlined in DMRB, and monetises the impact of short-term changes in noise levels. It involves two main steps:

- As in DMRB, the difference in the estimated population annoyed by noise is calculated in 'with scheme' and 'without scheme' scenarios, for the scheme opening year and the fifteenth year after opening. Webtag includes a table summarising the percentage of people annoyed at each noise level (in 1 dB intervals), so that it is possible to simply read off what percentage of people will be annoyed by 'steady state' traffic noise at, say, 45dB, or 60dB. The percentages are broadly the same as those in the 'steady state' noise / annoyance relationship in DMRB, once allowance is made for the fact that the Webtag evaluation is based on the equivalent

continuous sound level ($L_{Aeq, 18 \text{ hr}}$), as opposed to the volume of noise exceeded 10% of the time ($L_{A10,18hr}$) used by DMRB. In practice, the calculation of the number of people annoyed in the 'with scheme' and 'without scheme' scenarios is automated by use of a spreadsheet.

- The effect of the short-term change in noise exposure is monetised. Based on the effect of noise on house prices, the present value of households' willingness to pay to avoid transport related noise is calculated. Again, Webtag includes a table summarising the value, in £ per household, of each decibel change in noise. In practice, the calculation is again automated by use of the spreadsheet. Webtag (para 1.3.9) specifies that 45dB $L_{Aeq,18 \text{ hr}}$ be used as the "cut-off" for both annoyance and valuation calculations, on the grounds that this is the level down to which "*research suggests a positive willingness to pay to avoid transport related noise*".

The spreadsheet used to calculate these two outputs requires the assessor to enter data on the number of people exposed to noise at different levels (in three decibel bands e.g. 45-48 dB(A); 48-51dB(A) etc) both *with* the road scheme and *without* the road scheme in the opening year for the scheme and in the fifteenth year after opening. As with the approach used in DMRB, only people living within 300 metres of the road scheme are considered.

Webtag noise guidance specifically excludes consideration of the impact of noise on tranquil areas⁴:

'In general, noise assessment from transport is limited to the consideration of effects on people in occupied buildings, so-called noise sensitive receivers (dwellings, schools, hospitals etc). The debate on noise impacts stimulated by developing EC noise policy has raised concern about other spaces, particularly those used for recreation, that currently enjoy a peaceful environment, referred to as 'quiet areas'. Some Member States have become concerned that attempts to improve the noise climate in areas of high exposure may lead to a spreading of noise across areas that are currently almost free from transportation noise. There is a perceived need to protect these quiet or tranquil areas.

However, 'tranquillity' is one of the features defining landscape, and changes in tranquillity will be taken into account in the assessment of impact under the landscape sub-objective. Thus, in order to avoid double counting, the noise impacts of plans and strategies in quiet or tranquil areas should not be assessed under the noise sub-objective.'

The practical effect of this guidance is discussed in section 5 below.

⁴ Transport Analysis Guidance *ibid.* paragraphs 1.7.1 and 1.7.2

3. The Noise Severity Index

This is the methodology⁵ applied by the Highways Agency to judge whether noise mitigation measures are required for the *existing* trunk roads and motorways under its management, and to set priorities for its limited noise mitigation budget. The approach uses the same method as for appraisal of new roads to quantitatively estimate the degree of disturbance at properties near the road. However, the cut-off noise level is set significantly higher, at 68 dB ($L_{A10,18hr}$). The resulting number of affected properties is then turned into a 'Noise Severity Index' by dividing by the width of the settlement's 'frontage' onto the road. However, the number used for 'frontage' is wider than the settlement itself on the grounds that shoulders on either side "*would need to be notionally screened*". The additional length added on each side is ten times the distance from the road to the 68 dB sound contour, which in practice means 0.75 - 1km either side of a settlement's actual frontage onto the road.

For certain types of rural settlement this measure has perverse consequences, described in section 5 below.

4. Noise mapping for the European Directive on Environmental Noise

Roads with traffic volumes above six million vehicles per year are required to be mapped. This level of traffic is carried by motorways and the most major trunk roads. Unlike DMRB and Webtag methodologies, the noise assessment uses a noise scale (L_{den}) that includes night-time noise and factors in an allowance for the fact that noise at night is disturbing at lower levels than those that would create nuisance during the day (further details in Box 1). The cut-off noise contour for the maps is 55 dB L_{den} . The mapping is entirely based on computer modelling of traffic flows rather than roadside noise measurements.

The Directive instructs that the resulting maps will be the basis for "Noise Action Plans". The definition of these is, however, vague and it is as yet unclear what they will contain and how much consideration will be given to roads through rural areas.

5. Problems with the current approach to assessing noise

As will be apparent from the foregoing description, the methodology used to appraise the noise impact of a road scheme is highly technical. However, there is a sense that what is being measured fails to capture the way that increased noise is actually experienced by people living in and using the countryside. This feeling is expressed even by individuals responsible for noise appraisal. For example, a surveyor employed by Capita Symonds to appraise the quality of rural roads in the Lake District as part of a project for Friends of the Lake District made a 'personal observation' of the A591 that:

⁵ Highways Agency 2003, *Area Management Memo No. 43 Prioritisation Of Category 2, 3 And 4 Noise Mitigation Sites*, issued 18 December 2003, 16pp

‘..the road was almost always busy and noisy in all sections, unpleasant to walk or cycle along, dangerous to stop on except in lay-bys, and frequently smelly and dirty as well. And yet just the other side of the wall was some of the most beautiful countryside in England.’

Despite this personal comment by the surveyor, Capita Symonds’ noise assessment of the road in question using DMRB methodology concluded that the noise level at a ‘countryside location’ 300 metres from the road was below the level at which it would impact on a community’s quality of life.⁶

From our review of the noise appraisal methodology, and the way it is used in practice, the following specific weaknesses or problems are evident:

a) The approach adopted by both DMRB and Webtag focusses almost entirely on appraising the noise impact on residential properties. The annoyance caused by increased noise levels in areas used for recreation (playing fields, canals, footpaths, open access land, open spaces, nature reserves etc) may be recorded as a qualitative factor in the Appraisal Summary Table, but in practice this seems rarely to happen. Thus, for road schemes which bypass a settlement, the AST focusses on the number of households which will benefit from a reduction in noise (potentially giving a moderate or large positive score), and there may be no mention of the noise effects along footpaths and in open spaces which will be affected by increased traffic noise as a result of the new route.

b) The 300 metre ‘cut off’ for noise appraisal means that noise appraisals routinely ignore the noise impact of road schemes on tranquil areas which are more distant from the road scheme, but still within earshot. Webtag guidance suggests that the effect of a road scheme on tranquil areas should be considered qualitatively as part of the ‘Landscape’ sub-objective in the Environmental Assessment. In light of this, it is notable that the definition of tranquillity in the landscape sub-objective para 1.2.10 does not explicitly mention noise. Although its use of a broader term ‘absence of intrusion’ might perhaps be useful to allow consideration of other forms of intrusion, it does seem perverse to omit any mention of noise. In fact, the word ‘noise’ does not appear in the whole of the Landscape sub-objective part of the guidance.

However, even if, despite this, noise were to receive serious consideration as an element contributing to tranquillity, there is a further obstacle that tranquillity is, itself, considered as just one part of a whole set of landscape factors, and the issue is effectively ‘submerged’. A ‘large negative’ impact on tranquillity (on the NATA seven point scale from large negative through to large positive) would not register in the Appraisal Summary Table unless the impact on visual aspects of landscape quality was also ‘large negative’ – yet it is quite possible for a fairly ordinary landscape to offer a tranquil environment for local people to enjoy.

From a brief review of a sample of Appraisal Summary Tables for actual road schemes, we suspect that in practice little, if any, attention is paid to this issue under the ‘Landscape’ section of the Environmental Assessment, and none under the ‘Noise’ section of the Environmental Assessment.

⁶ Rural Roads at Risk – Saving the Character of Country Roads, Capita Symonds for Friends of the Lake District, 2005

c) The calculation of future noise impact assumes high traffic growth – that is, a worst case scenario. However, review of a selection of recent Highways Agency evaluations of road schemes suggests that it is common for traffic growth following a road scheme to be substantially greater than even the high growth forecast, both in the immediate period after the road opens and in the long to medium term. Research for the Countryside Agency and the Campaign to Protect Rural England⁷ looked at the post-scheme evaluation of 13 road schemes and concluded that: ‘many of the schemes reviewed have demonstrated significant increases in traffic volumes (in the range of about 10-35%, within a period of one to two years after opening)’ – that is, traffic growth on these largely rural road corridors was substantially greater in the period immediately after the road opening than would have been predicted from ‘high’ national or regional traffic growth forecasts. The same tendency was apparent in the medium to longer term: for example, traffic growth on the north-south corridor including the Newbury bypass had already substantially exceeded 2010 ‘high’ traffic growth predictions by 2004, and this was typical of other schemes examined. The fact that scheme traffic forecasts seem routinely to underestimate the actual traffic flows once a road has opened suggests that forecasts of future noise impact are also likely to be underestimates.

d) The standard reference data-set used to calculate how many people will be annoyed by particular noise levels has significant limitations.

So, for example, the DMRB and Webtag calculations of the number of people bothered by noise, and the monetary value that should be placed on this, are made only with reference to daytime noise levels (6am – midnight). As the Webtag guidance points out⁸, night-time traffic levels are lower than day-time levels, but people are more sensitive to night-time noise. Any significant changes in night-time noise should be reported in the qualitative assessment column of the Appraisal Summary Table, but in practice there is a risk that night-time sleep disturbance is inadequately considered.

There is also a question whether the standard graphs of traffic noise against annoyance are applicable to quiet rural environments. For example, a study⁹ of roads through valleys in the Alps found that residents registered much higher levels of disturbance than the standard ‘dose-response’ curves, even though the study group rated similarly to previous study groups on a scale of general ‘sensitivity’ to noise (i.e. they are not particularly sensitive people). So, at traffic noise levels (L_{dn}) around 60 db (A) the study finds that approaching 30% of the population are ‘highly annoyed’, double the expected percentage of about 15%. Similarly, around 70 db, about 60% of the population find the noise highly annoying compared with an expected proportion about half that percentage. The authors view the discrepancy in the context that *“methods and results used to assess acceptability of road traffic noise have been developed and interpreted*

⁷ Beyond Transport Infrastructure: Lessons for the future from recent road projects, report for the Countryside Agency and CPRE by Transport & Environment, Transport for Quality of Life and John Elliott Consultancy, 2006

⁸ Transport Analysis Guidance *ibid.* paragraph 1.1.5

⁹ Lercher, P., 1998, *Deviant Dose-Response Curves For Traffic Noise In 'Sensitive Areas'?* in: V.C Goodwin and D.C. Stevenson (eds.) *Proceedings of Inter Noise 98 "Sound and Silence: Setting the Balance"*, vol. 2, p.1141-1144, (Paper # 0242), The New Zealand Acoustical Society Inc., Auckland, New Zealand

with urban areas in mind". The study authors discuss whether the results derive from an *attitudinal* difference generated by unconscious raised expectations of quiet environments, or whether the difference is because in quiet environments, the traffic noise is *physically* more audible at lower sound levels. They note that human physiology means that the sensory reaction to noise is '*always relative to the sensory background level*', so higher reaction to greater audibility is not just a psychological effect. They also postulate some reasons that valley topography might exacerbate the physical effects. Whether the root cause is physiological, psychological, or both, the effect experienced by the residents is *real*, and the difference from the standard methodology is very large.

The assessment processes for *existing* roads share some of the problems outlined above, but in addition have their own deficiencies, as outlined below.

The Noise Severity Index does not seem to give fair treatment to certain configurations of rural community. So, for example, a dispersed settlement that is spread out so that it has a long frontage to the road may contain very noisy properties but never achieve a high enough severity score to be a candidate for mitigation because the 'amount of noise nuisance' experienced at the properties is averaged out over the whole frontage. This effect is exacerbated because the definition of 'frontage' includes the shoulder length of 0.75 - 1km either side of a settlement's actual frontage onto the road. So even if a settlement is densely built and all its properties experience very high noise levels, if it is small, it can not achieve a high score for noise mitigation purposes. This appears to introduce a bias towards larger towns. It is also notable that the extended definition of 'frontage' is applied whether or not the physical circumstances to either side of the settlement are such that mitigation to the shoulders is actually required. So, even in the most clear-cut case where, for example, a road is crossing a valley by the settlement in question but is already screened within cuttings or even a tunnel to either side, the procedure dictates that the calculation must include shoulder zones on the presumption that these need mitigation treatment. A further problem with the noise severity index is that it does not consider noise nuisance at all below 68 dB, which is a comparatively high threshold that will exclude locations that experience significant noise disturbance.

The noise maps produced under the European Directive on Environmental Noise do improve on previous methodologies by extending beyond a 300m limit and by including a measure of night-time noise disturbance. Their most obvious limitation is that they are only applied to the most major roads, and exclude a large number of roads that have high traffic levels and high traffic speeds that are sources of noise disturbance across wide areas of countryside. Another issue is that their cut-off at the 55 dB noise contour means that they do not show the extent of the area of countryside where noise causes disturbance. As noted above, Webtag appraisal extends to the 45 dB noise contour on the grounds that this is the level that research shows that people will pay to get rid of it. The distance to which noise will significantly intrude on the experience of countryside tranquillity is liable to be greater than this.

Box 1

How noise is measured: a primer

Traffic noise is a combination of noise produced by vehicle engines (including transmission and exhaust) and noise due to friction between tyres and the road surface. The volume of noise from a road is affected by the amount of traffic, the traffic speed, the proportion of different types of vehicles (cars, HGVs and motorcycles), the gradient of the road and the road surface.

Noise is measured in decibels (dB). A noise at the threshold of human hearing is 0 dB. A noise at the threshold of pain is 120 dB. The scale is logarithmic, so that a doubling in the sound energy emitted (for example, doubling the volume of traffic) results in an increase of 3 dB.

The human ear is much more sensitive to sounds at some frequencies than others – that is, we cannot hear very high pitch sounds and very low pitch sounds. In order to measure the noisiness of road vehicles in a way that bears a reasonable relation to the way that they are actually heard, it is necessary to give more weight to frequencies which are most readily heard by the human ear. The weighting that is normally used is the 'A' weighting (there are other weightings, 'B' and 'C'). This weighted form of measurement is shown as dB(A) or L_A .

The noise from a stream of traffic varies from moment to moment. There are two different approaches to turning this variable sound into a measure that is representative of the overall sound that is experienced at any given location. One, traditionally used in Britain, is to calculate a representative level of sound that is exceeded for, say 10% of the time. The other, favoured in Europe, and now being applied in Britain under the EU Directive on Environmental Noise, is to work out the steady sound level that over the time period in question amounts to the same total amount of noise energy as the actual variable sound.

$L_{A10,18hr}$ is the noise in decibels (weighted using the 'A' scale) that is exceeded 10% of the time, averaged across each one of the 18 hours between 6am and midnight. There is a reasonably good correlation between this index and the amount of annoyance perceived by people exposed to a noise.

Another measure of this type, $L_{A90,18hr}$ is the noise that is exceeded 90% of the time. The Design Manual for Roads and Bridges notes that *"This index may give a more realistic indication of noise changes in rural areas at a considerable distance from a new road because in such circumstances the main noise effect is likely to be on background noise levels."* But it goes on to say that *"its usefulness as an indicator of noise impact is uncertain at the present time and more research is needed to assess how it correlates with people's reactions to noise and how it can be modelled."* The practical

upshot is that this measure, if it is used at all, is only used to describe ambient noise levels where traffic noise is not present.

$L_{Aeq,18hr}$ is the equivalent continuous sound level for 6am to midnight – that is, the level of steady sound that would deliver the same noise energy as the varying traffic noise during that 18 hour period.

Webtag guidance relates these two scales of measurement with the formula:

$$L_{Aeq, 18hr} = L_{A10, 18hr} - 2.5 \text{ dB(A)}$$

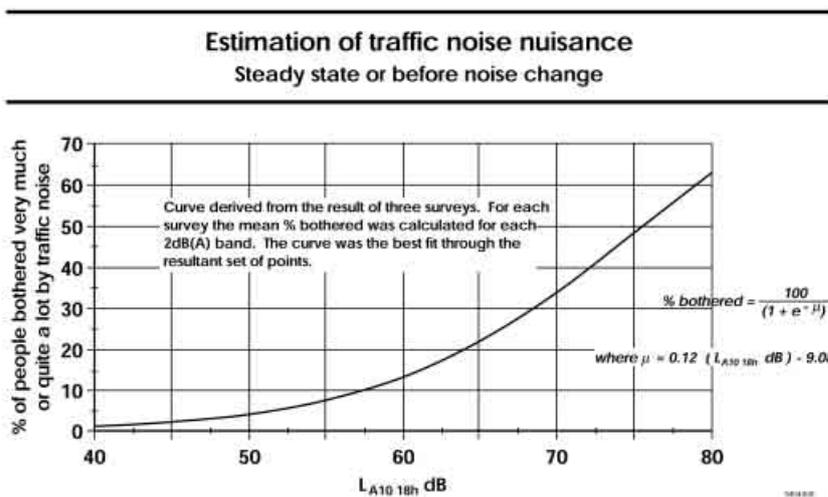
The mapping of major roads under the European Directive on Environmental Noise uses the equivalent sound level approach. The main maps use a scale L_{den} which combines equivalent noise levels for three periods – day, evening, night. But this definition also includes a weighting to account for the fact that although evening and night-time noise may be less, noise at these times tends to cause more disturbance. So 5 decibels are added to the evening level and 10 to the night level before the overall average is calculated. The Government (DEFRA) noise mapping web site notes that the net effect is that the resulting noise zones on the map are somewhat larger than on a map of just daytime noise – i.e. a reading on L_{den} scale is equivalent to a slightly lower reading on the L_{day} scale.

(Summarised from: The Design Manual for Roads and Bridges, Volume 11, Traffic Noise and Vibration; Transport Analysis Guidance Unit 3.3.2 The Noise Sub-Objective November 2006; DEFRA Noise Mapping England FAQs website <http://noisemapping.defra.gov.uk/wps/portal/noise>, FAQ section, accessed 26/06/2008)

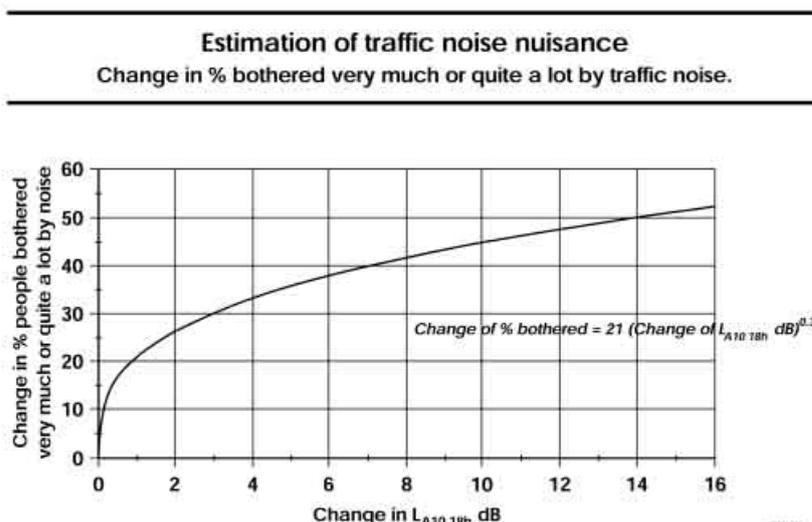
Box 2

The relationship between traffic noise and nuisance

The Design Manual for Roads and Bridges uses three surveys of people's perceptions of 'steady state' traffic noise to derive a graphical estimation of traffic noise nuisance. This shows how the proportion of people who are 'very much' or 'quite a lot' bothered (on a four-point worded scale) increases with the volume of traffic noise. At a noise level of around 60 dB(A) (using the $L_{A10,18hr}$ index) it is estimated that about 13% of people are bothered. At a noise level of around 70 dB(A), around 34% of people are bothered.



However, other studies have shown that the amount of nuisance experienced by people as a result of *changes* in traffic noise due to road schemes is much greater than would be expected from the 'steady state' surveys.



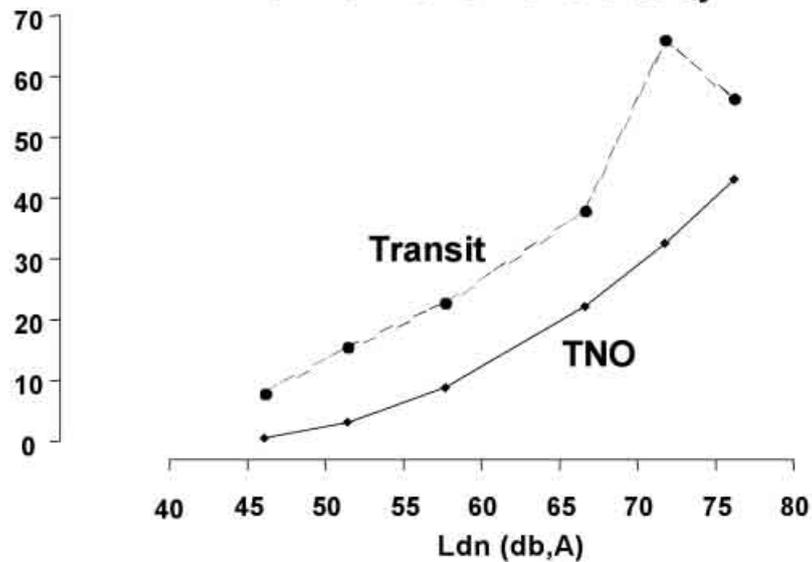
Box 3

Deviation from standard traffic noise nuisance 'dose-response' curves in quiet areas

Some research of quiet rural areas has shown that many more people in these environments are bothered by traffic noise than would be expected from the relationships in general use that are derived from areas with more background noise.

Upper (Transit) curve shows the higher levels of annoyance in a rural Alpine area compared with those predicted from standard curves (TNO) for the same level of traffic noise.

**Figure 1. Comparison of annoyance response
TNO-Archive vs Transit-Study**



Reproduced from Lercher, P, 1998, Deviant Dose-Response Curves For Traffic Noise In 'Sensitive Areas?' in: V.C Goodwin and D.C. Stevenson (eds.) Proceedings of Inter Noise 98 "Sound and Silence: Setting the Balance", vol. 2, p.1141-1144, (Paper # 0242), The New Zealand Acoustical Society Inc., Auckland, New Zealand

L_{dn} is a combined measure of day-time and night-time equivalent sound levels, which weights night-time noise with an additional 10 decibels.

