

# Tranquillity Mapping: Developing a Robust Methodology for Planning Support

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Centre for Environmental and Spatial Analysis (CESA)  
Participatory Evaluation and Appraisal in Newcastle upon Tyne (PEANuT)

bluespace environments

In collaboration with Bluespace environments, Durham

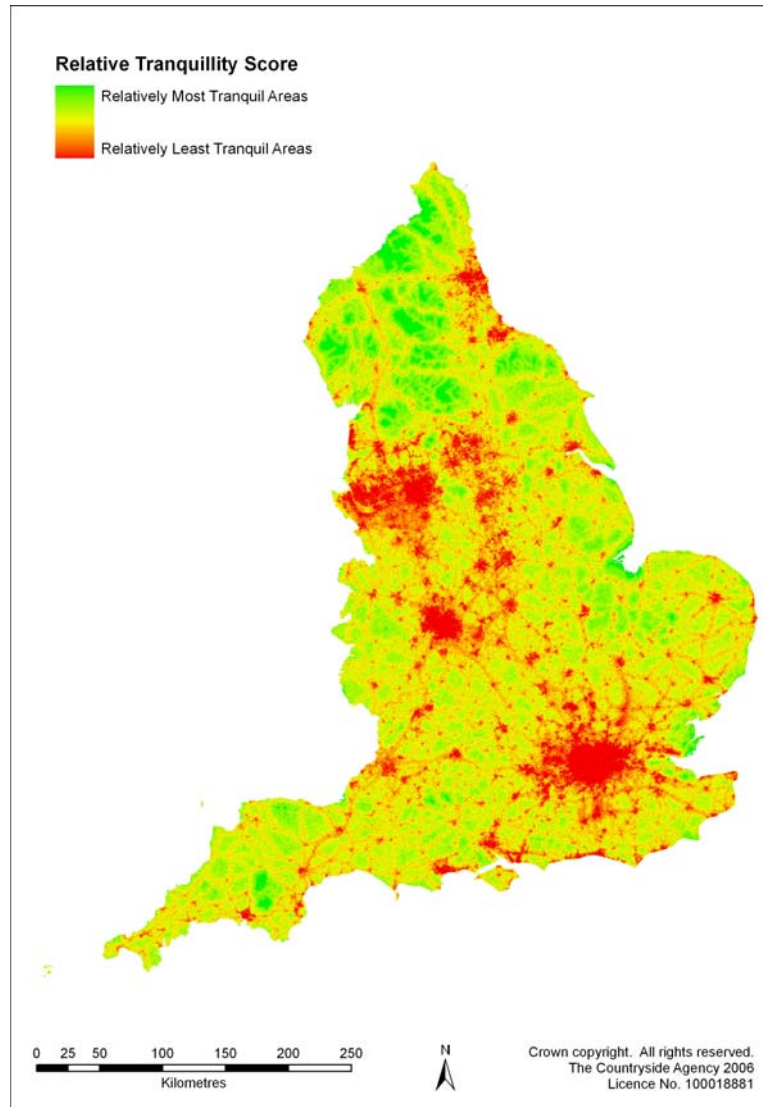


Landscape Research Group (LRG).



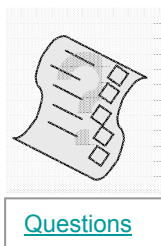


# National Map of Relative Tranquillity





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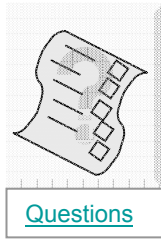


Stage 2

Stage 3

NE Study 6 Months

# The Questions



## **What is 'tranquillity'?**

What makes an area 'tranquil'?

What does 'tranquillity' mean to you?

If an area were described as being 'tranquil', what features would it have?

Where are 'tranquil' areas you know of?

## **What factors cause 'tranquillity'?**

What makes an area more 'tranquil'?

What makes an area less 'tranquil'?

## **What impacts do 'tranquil' areas have?**

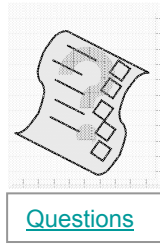
When you are in what you consider to be a 'tranquil' area, how do you feel?

## **What does a 'tranquil' area look like?**

## **Do places become more/less 'tranquil' over time?**

(day/night, weeks, months, seasons, years...)

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# Participatory Appraisal

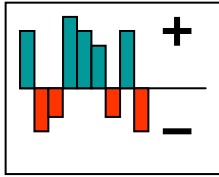
**PA is a form of community research. In this study it was about countryside users.**

**There is an emphasis on tools & techniques that allow participants to contribute in their own ways.**



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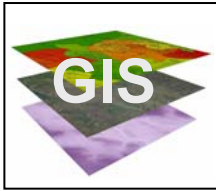


## Weighting

Positive factors	Weight
Openness of the landscape	24%
Perceived naturalness of the landscape	30%
Rivers in the landscape	21%
Areas of low noise	20%
Visibility of the sea	6%
Total of positive factors	100%
<b>Positive Scores as a percentage of the overall scores</b>	<b>44%</b>

Negative factors	Weight
Presence of other people	60%
Visibility of roads	12%
General signs of overt human impact	10%
Visibility of urban development	8%
Road, train and urban area noise	7%
Night time light pollution	3%
Aircraft noise	1.5%
Military training noise	<1%
Total of negative factors	100%
<b>Negative Scores as a percentage of the overall scores</b>	<b>56%</b>



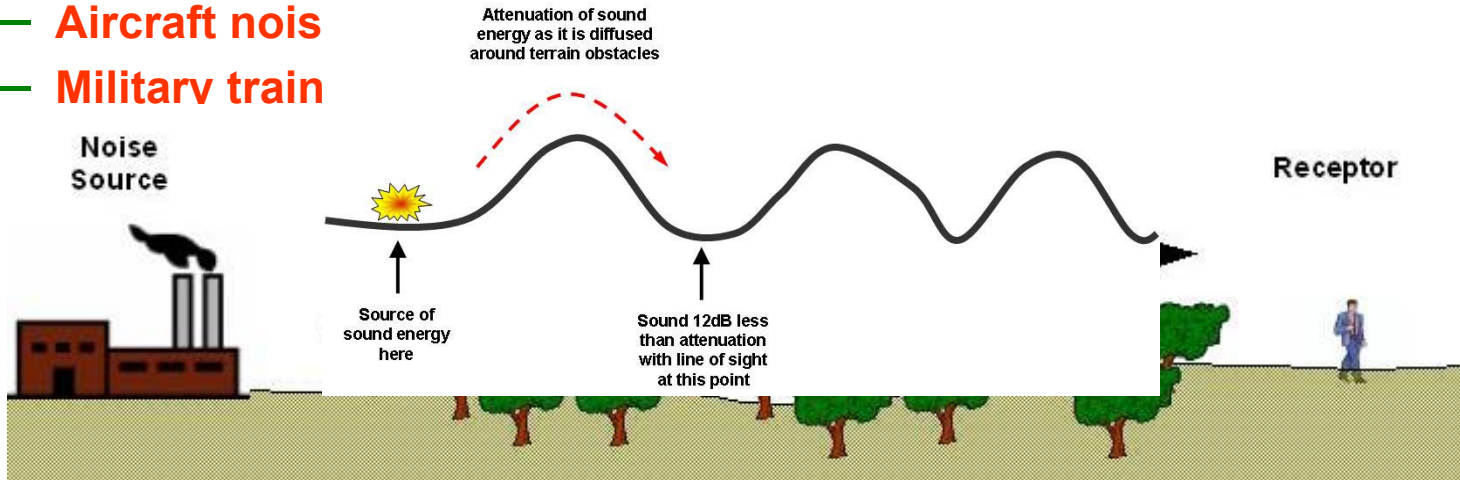
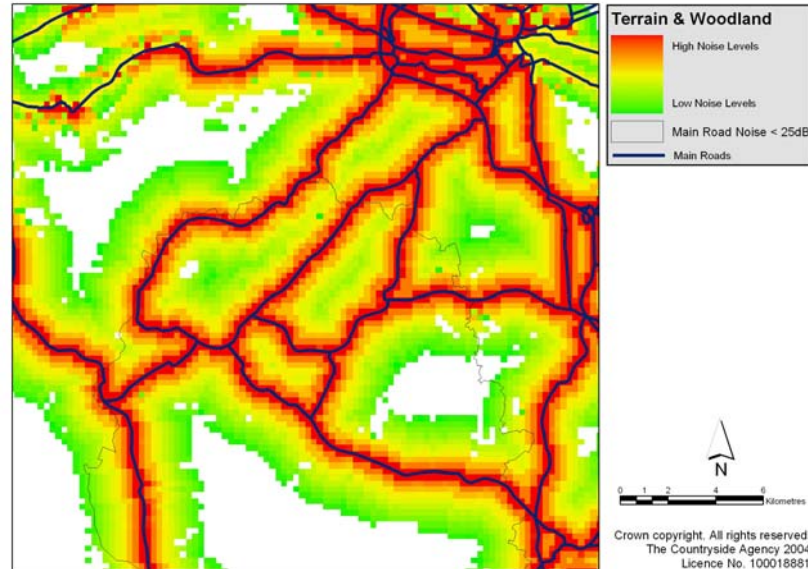


## GIS Example Mapping NOISE

The Public closely associated  
of low noise with **positive**  
tranquillity.

There were specific types of r  
that were **negative**:

- **Road, train and urban**
- **Aircraft noise**
- **Military train**

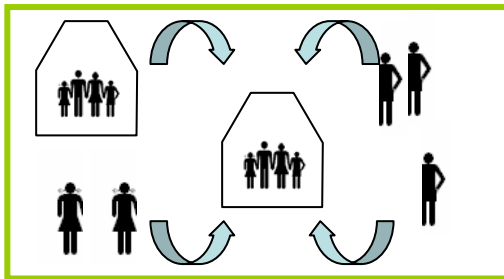




Stage 1

Stage 3

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Chilterns 2  
Mths



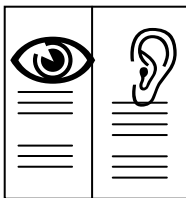
Themes Verified

Stage 1	Stage 2	Stage 3
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National Study 1 year

	
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[Questions](#)



Questions

## The Public Consultation

**Q.1. What is 'tranquillity'? What enhances 'it'? What adds to 'it'**

Seeing...



- |                            |                          |                                    |
|----------------------------|--------------------------|------------------------------------|
| 1 A natural landscape      | 2 Wide open spaces       | 3 A wild landscape                 |
| 4 Remote landscapes        | 5 Trees in the landscape | 6 Deciduous trees in the landscape |
| 7 Natural looking woodland | 8 Streams                | 9 Rivers                           |
| 10 Lakes                   | 11 The Sea               | 12 The stars at night              |

Hearing...



- |                  |                    |                    |
|------------------|--------------------|--------------------|
| 13 Birdsong      | 14 Wildlife        | 15 Natural sounds  |
| 16 Silence       | 17 Peace and Quiet | 18 No human sounds |
| 19 Running water | 20 Lapping water   | 21 The sea         |

**Q.2. What is not 'tranquillity'? What detracts from 'it'? What lessens 'it'?**

Seeing...



- |                              |                                  |  |
|------------------------------|----------------------------------|--|
| 22 Lots of people            | 23 Anyone at all                 | 24 Overhead light pollution (night time)   |
| 25 Low flying aircraft       | 26 High altitude aircraft        | 27 Coniferous woodland                     |
| 28 Power lines               | 29 Wind turbines                 | 30 Urban development                       |
| 31 Any signs of human impact | 32 Railways                      | 33 Roads                                   |
| 34 Towns and Cities          | 35 Villages and Scattered Houses | 36 Military training (other than aircraft) |

Hearing...



- |                                     |  |  |
|-------------------------------------|--|--|
| 37 Lots of people                   | 38 Low flying aircraft                                 | 39 High altitude aircraft                                |
| 40 Trains and railways              | 41 Constant noise from cars, lorries and/or motorbikes | 42 Occasional noise from cars, lorries and/or motorbikes |
| 43 Military training (not aircraft) | 44 Non-natural sounds                                  |  |

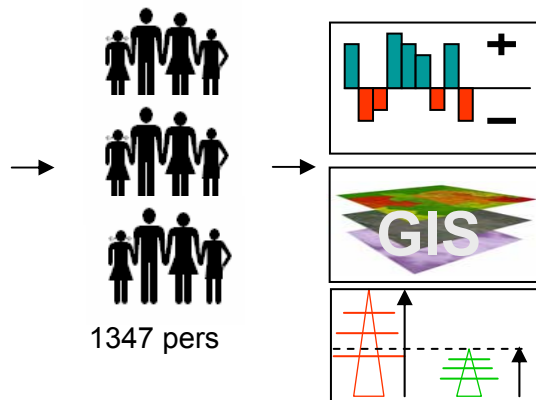
Stage 1

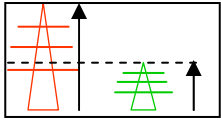
Stage 2

Stage 3



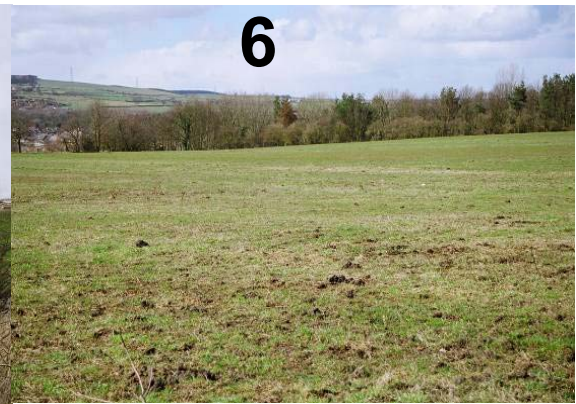
[Questions](#)



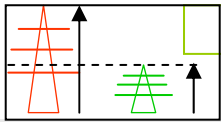


# EXAMPLE - Spatial Threshold Analysis

## Signs of Human Development – Pylons



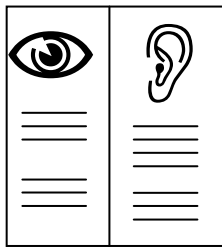




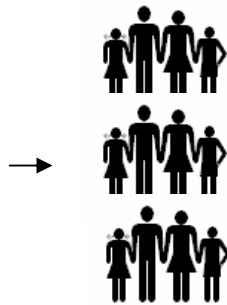
Stage 1

Stage 2

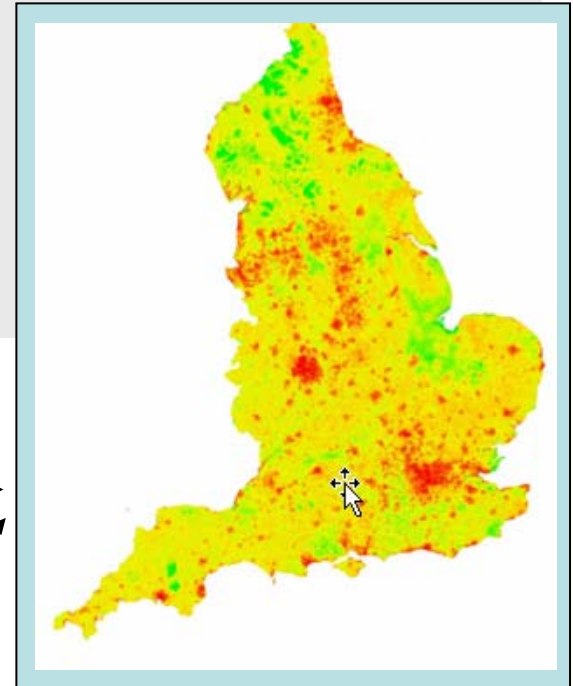
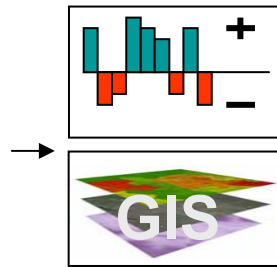
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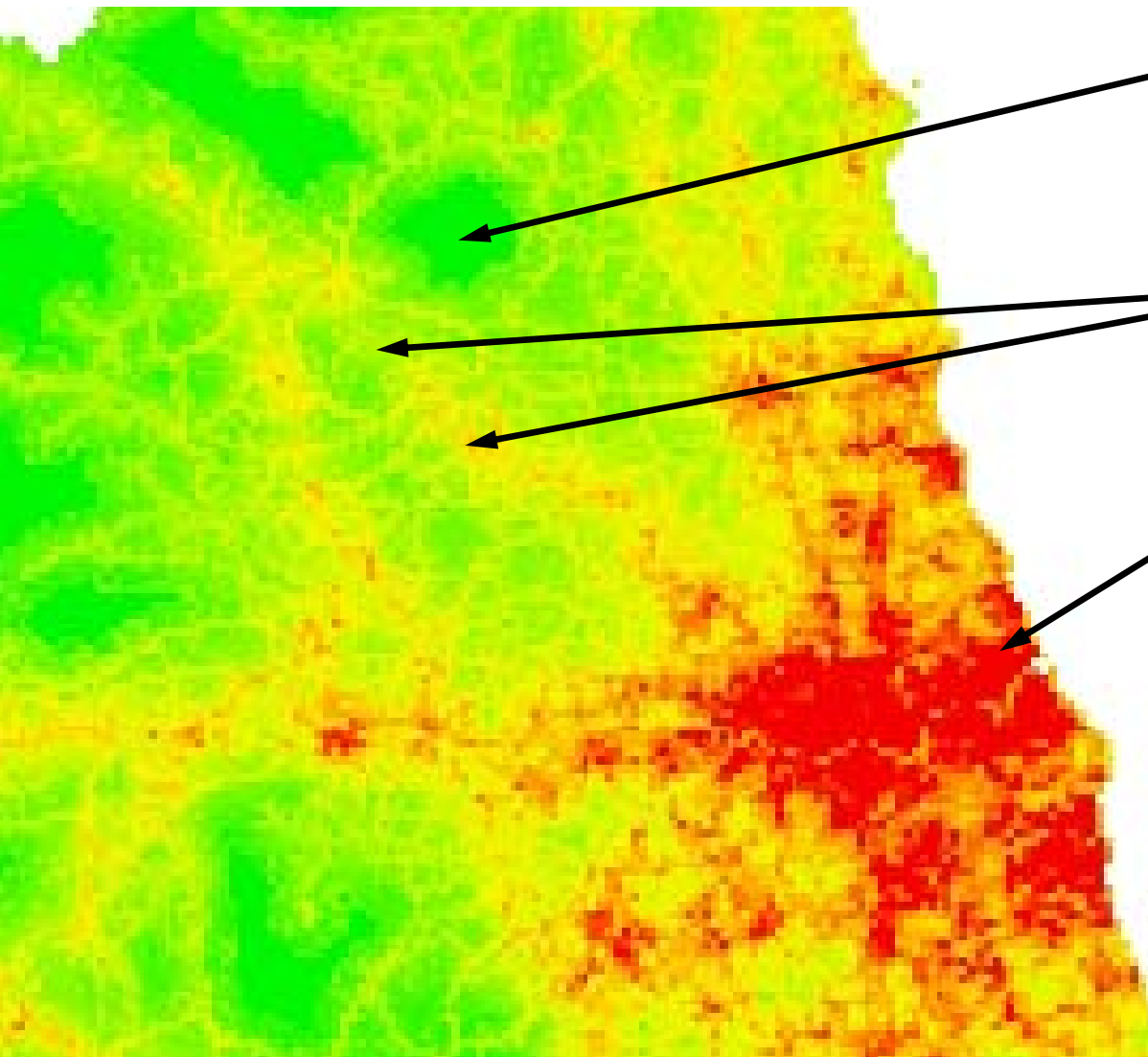


[Questions](#)



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**High tranquillity  
score**

**Same road but not  
the same score**

**Low Tranquillity –  
Newcastle upon Tyne  
North East England**



# To finish...

- Keep the public's views as a priority – remove expert led decisions where possible.
- Methodology is complex.
- Choice of sample areas: use of verification exercise is essential.
- Map is supported by important qualitative material – just because it isn't mapped
- The importance of Urban Tranquillity
- Strong influence of what you can see and hear and the threshold level of tolerance of an individual...
- Look at how tranquillity has changed in 10 years time