

Attitudes to Aviation Sources in England (ANASE)



What might we conclude

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Scope



- **ANASE –**
 - Very brief background and Peer Review issues
 - What might cautiously be drawn from ANASE.

ANASE



ANASE

Attitudes to Noise from Aviation Sources in England

Final Report for Department for Transport

In Association With John Bates Services, Ian Flindell and RPS

October 2007

Background



- Last major survey regarding attitudes to Aircraft Noise was 1982
- Published in 1985 –
Aircraft Noise Index Study
(ANIS)
- Statistically Significant correlation between community annoyance and Leq

Background



- At T5 Inquiry in 1997 the continuing validity of ANIS was challenged (it was 15 years old at the time).
- The Inspector accepted these points in his report
- A new study was announced in May 2001

Study Objectives



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1.2.1 The stated objectives for this research were as follows:

- re-assess attitudes to aircraft noise in England;
- re-assess their correlation with the Leq noise index; and
- examine (hypothetical) willingness to pay in respect of nuisance from such noise, in relation to other elements, on the basis of stated preference (SP) survey evidence.

1.2.2 Specific issues to be considered in study design included:

- potential to test for differences by locality, socio-economic groups etc;
- distinguishing annoyance from noise at different times of day and night;
- examination of the effect of 'confounding factors' such as airport-related employment or self-selection in housing location;
- the interface between subjective annoyance ratings and valuations derived from stated preference; and
- whether/how attitudes might be affected if cash transfers or, for example, insulating grants were actually made available.

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Stated Preference



Area: H1H/H1J/H1K/H1L/H1M/H1P

SHOWCARD A

Jumbo



148

Stated Preference



Card: White 4B

H1H - Heathrow / Wave 1 (Revised) /

Time Period: 7am to 11am

Thinking about the period **7am to 11am** which of these three situations would be best for you and your household?

BOX A
.....the following planes fly overhead:

12 Jumbo


67 Under-wing


0 Tail-jet


79 Total aircraft
£200 grant every year

BOX B
.....the following planes fly overhead:

9 Jumbo


67 Under-wing


28 Tail-jet


104 Total aircraft
No grant

BOX C
.....the following planes fly overhead:

9 Jumbo


63 Under-wing


12 Tail-jet


84 Total aircraft
£150 grant every year

183

And which would be worst for you and your household?

Main Sites



- **People visited**
- **Technicians bring in loudspeakers, so that the sounds of aircraft can be played**
- **Then questions asked about attitude to aircraft noise**

Social Survey



- Questions are usually designed to ‘creep up’ on the respondent.
- Covering some general matters before going into the specifics
- What is the following about?

Social Survey



1. How long have you been living in this area?
2. And how long have you been living in this particular house/flat?
3. What is the main thing you like about living here?
4. And what about the things you don't like about living here?

Social Survey



If more than one thing mentioned in (4)

5. What is the main thing you don't like about living here?

6. Taking everything together, how satisfied are you with this area as a place to live?

Very / Fairly / Rather dis- / Very dis - / No feelings either way / Don't know

Social Survey



7. Forgetting for a moment about the area, how satisfied are you on the whole with this particular house / flat?

8. I'm going to read some statements people have made about other things. Please say whether you agree or disagree with each one?

Social Survey



V. Much agree / agree / disagree / very much disagree / other answers

- *Travel costs from here worry me*
- *It's a bit ugly round here*
- *There's plenty of green space close to here*
- *It's easy to get to work from here on public transport*
- *It's not too bad getting to the shops from here*
- *I don't like some of the people living round here*
- *My friends or relatives live near here.*

Social Survey



9. What sort of noises do you hear around here when you are indoors at home?

For each noise heard

10. Does the noise bother or annoy you at all now?

11. Of the noises that bother you now, which noise is the most bothersome?

Social Survey



12. When you hear the most bothersome noise do you feel
very annoyed / moderately / a little / not annoyed at all
13. Does the traffic noise that you can hear when you are inside your house / flat bother, annoy or disturb you?

Social Survey



14 And before you had double glazing.....

**Noise Annoyance
in Homes
with Secondary Glazing**

ANASE Annoyance Questions



INTRODUCTION AND SET-UP

⚡ READ OUT IF NECESSARY [IE IF NOT FOLLOWING DIRECTLY ON FROM RECRUITMENT QUESTIONNAIRE]

Thank you for agreeing to take part in this interview. My name is _____ and I am working on behalf of MVA, an independent research company.

Firstly, I need to set up some equipment which will take about five minutes.

⚡ SET UP EQUIPMENT STRICTLY FOLLOWING THE INSTRUCTIONS PROVIDED

SECTION A: PERCEPTIONS OF LOCAL NEIGHBOURHOOD NOISE

Q6 [SHOWCARD 1] Thinking about the last 12 months or so, when you are at home, how much does noise from **[LIST SOURCES BELOW]** bother, disturb or annoy you: Not at all, Slightly, Moderately, Very, Extremely?

Type of Noise	Level of Annoyance [TICK APPROPRIATE BOX]				
	Not at all	Slightly	Moderately	Very	Extremely
a) Road Traffic					
b) Trains					
c) Alarms/ Sirens					
d) Aircraft					
e) Animals					
f) Neighbours/ children					
g) Pubs/Night Clubs					
h) Factories/ Industry					
i) Other (please specify)					

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Annoyance Questions



Q7 [SHOWCARD 2] Next I'd like to ask you how much aircraft noise bothers you when you are at home, on a scale of zero to ten. If you are not at all annoyed choose zero, if you are extremely annoyed choose ten, if you are somewhere in between, choose a number between zero and ten. So, thinking about the last 12 months or so, what number from zero to ten best shows how much you are bothered, disturbed, or annoyed by aircraft noise?

[TICK ONE BOX ONLY]

0	1	2	3	4	5	6	7	8	9	10



IF Q6 d) = 'Not at all' THEN GO TO Q8b. OTHERWISE ASK Q8a.

Annoyance Questions



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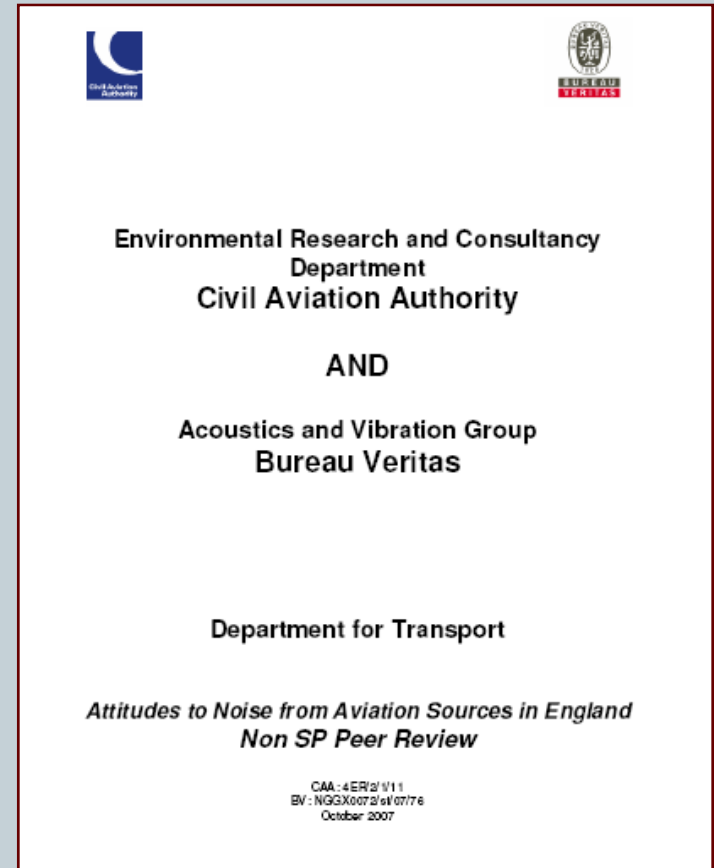


IF Q6 d) = 'Not at all' THEN GO TO Q8b. OTHERWISE ASK Q8a.

Bias



- Felt that this approach might have led to bias.
- Opportunity to exaggerate views on aircraft noise (consciously or unconsciously)
- Some evidence that this might be true from the results of the pilot study (restricted sites)



Peer Review conclusions



7.13 *Given the issues described above, the reviewers would counsel against using the detailed results and conclusions from ANASE in the development of Government policy.*

What went wrong?



- The study seemed to be managed by the DfT Economists
- The Study commenced in 2001
- A Peer review group had been established for SP
- They influenced the SP methodology
- The annoyance (non SP) review group was set up in May 2006 – when the study had been completed.
- Annoyance element not given enough consideration

What might we conclude



- Daytime contours routinely produced down to LAeq 57 dB(A)
- What might ANASE tell us about the degree of annoyance associated with LAeq 57 dB(A)?

Main ANASE Results

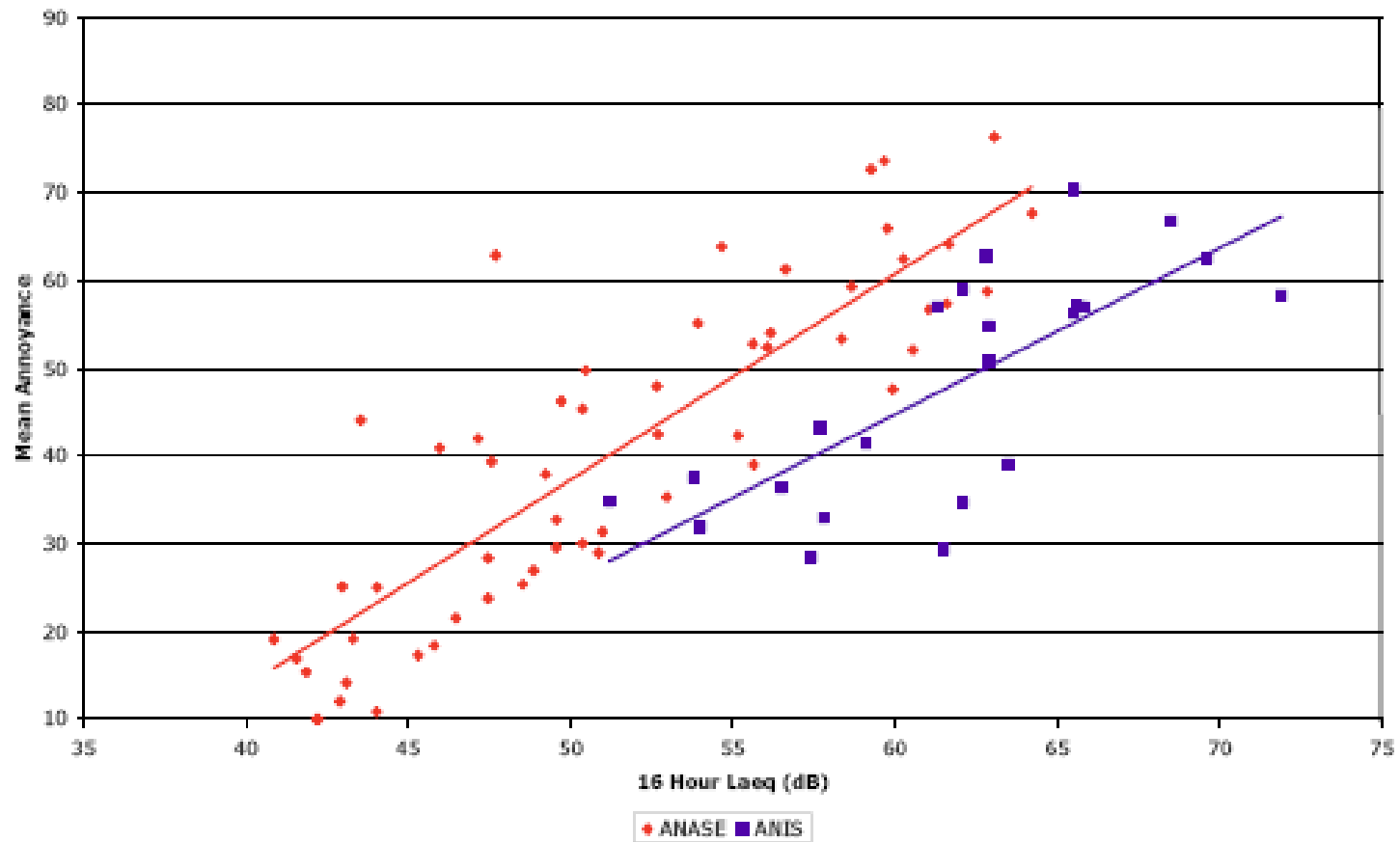


Figure 9.2 Models of Mean Annoyance against LAeq for ANASE and ANIS

Main ANASE Results

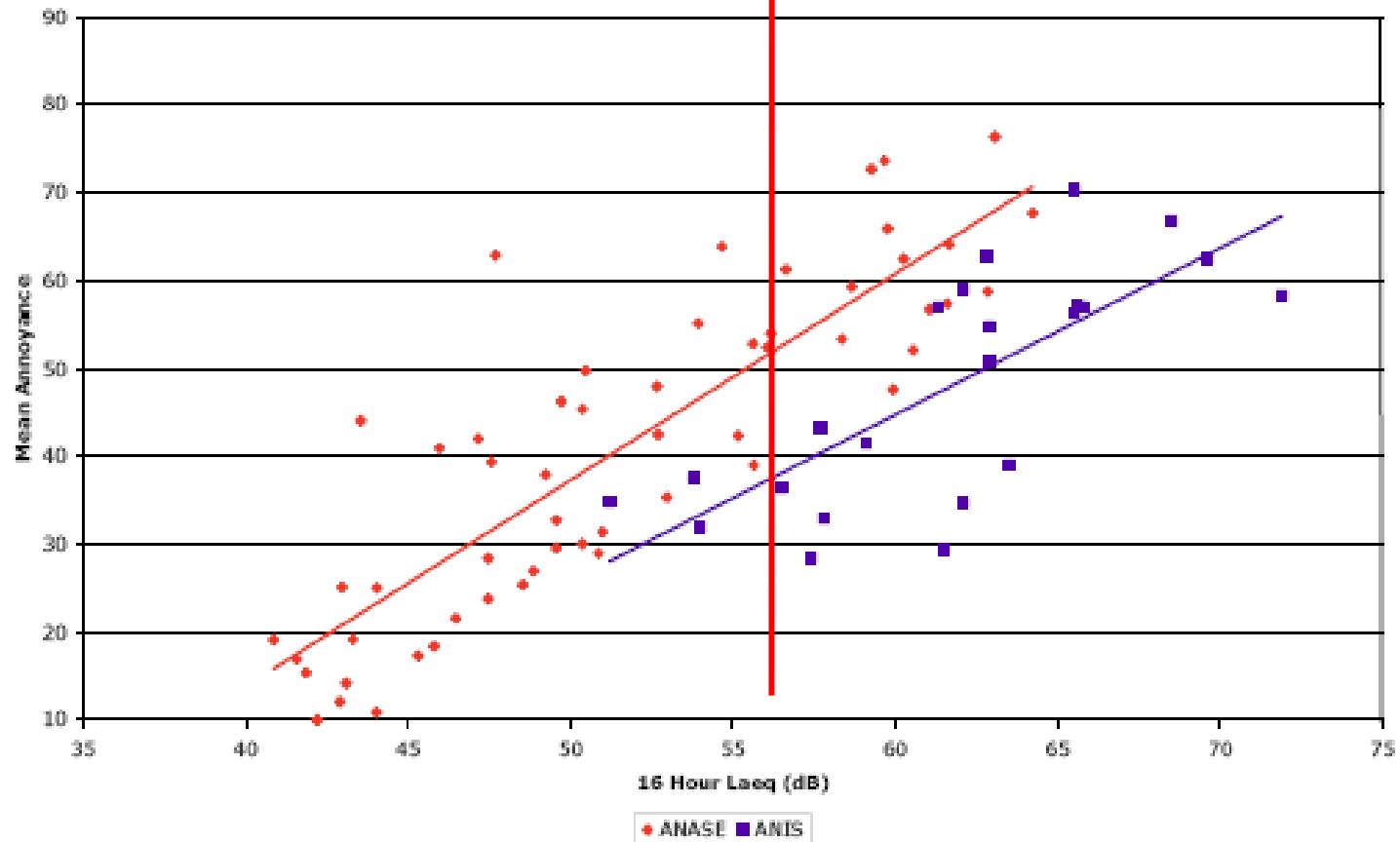


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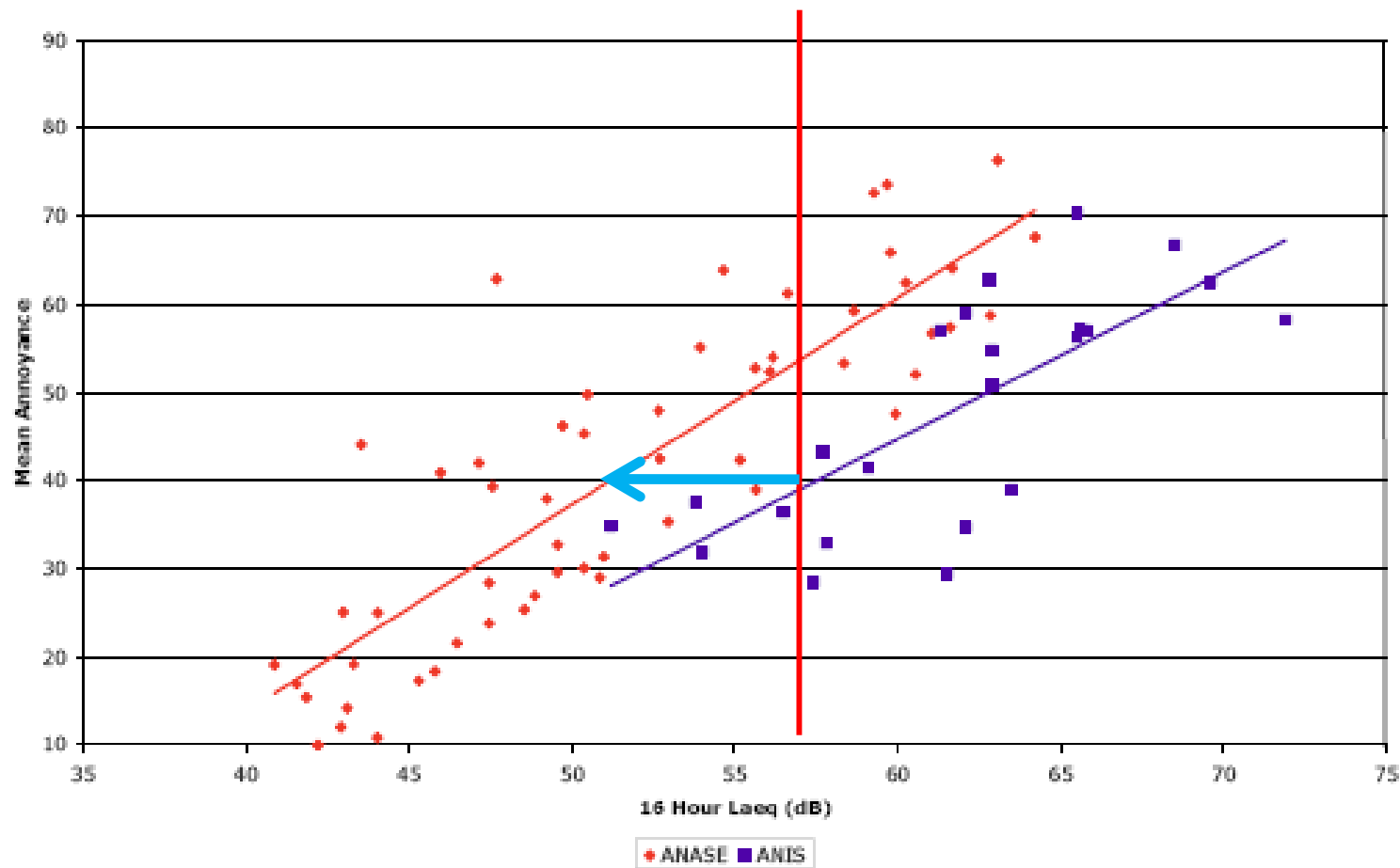


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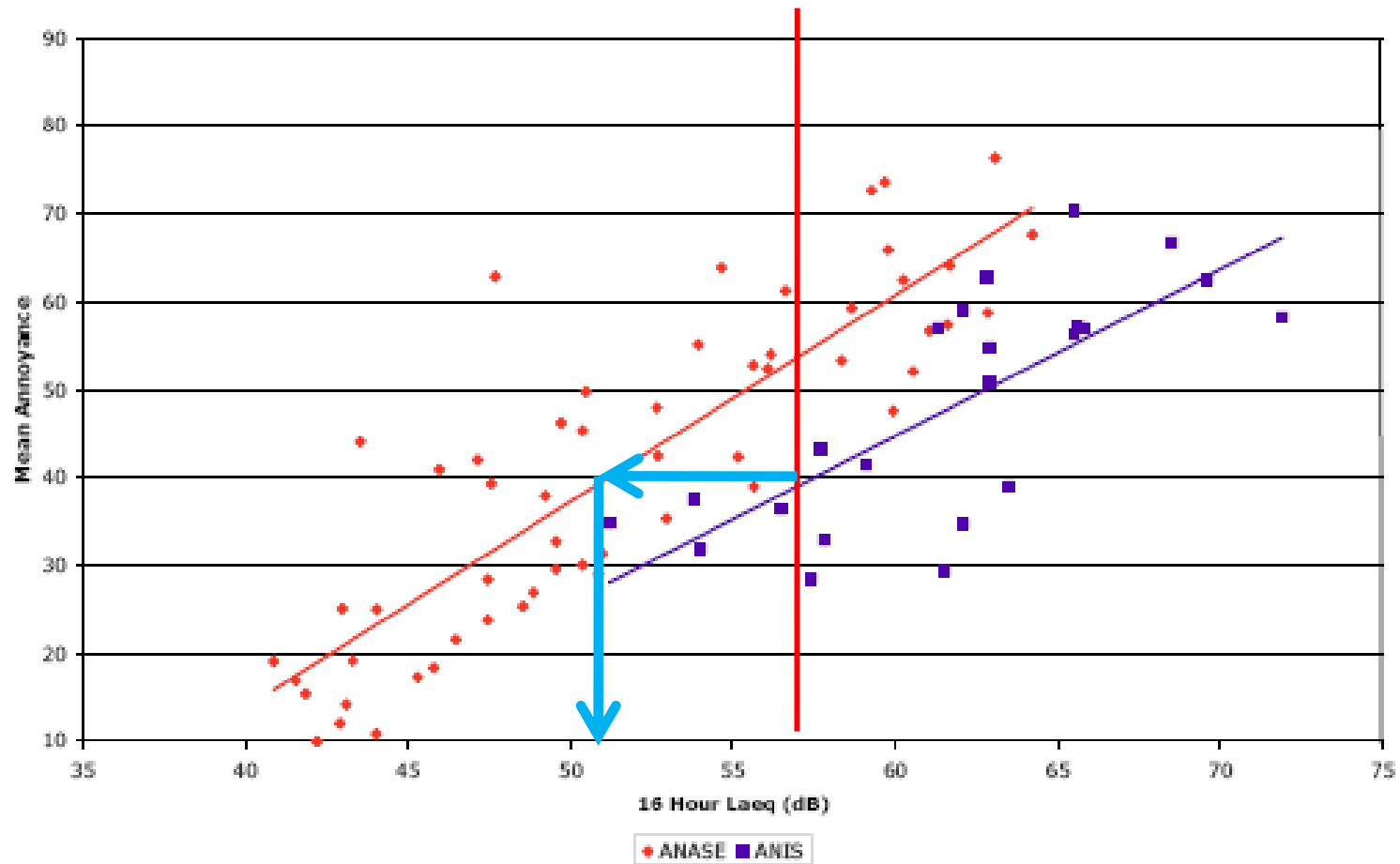


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Appendix Figure A9.5

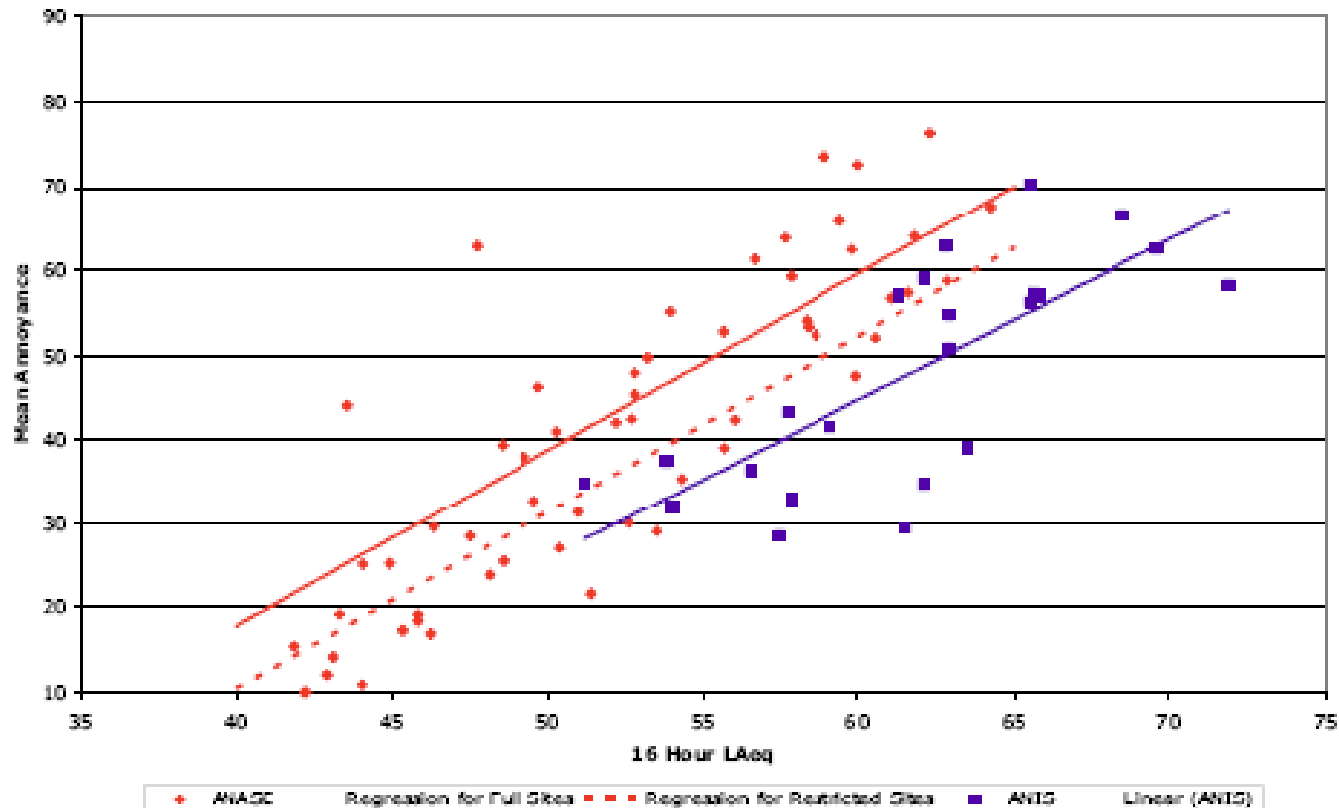


Figure A9.5 Mean Annoyance against LAeq for ANIS and ANASE, using CAA estimates of LAeq for the Heathrow sites, and a dummy variable for the Restricted Survey Sites

Appendix Figure A9.5

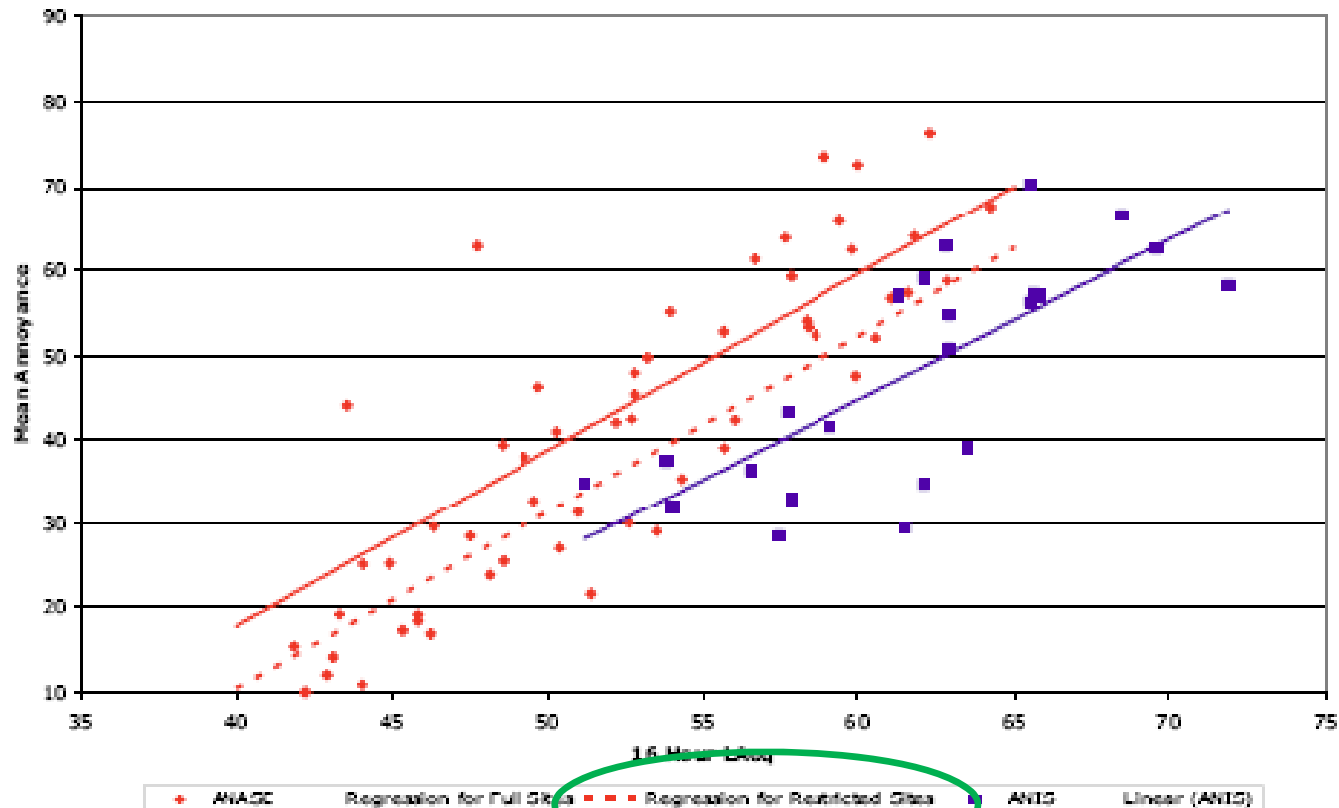


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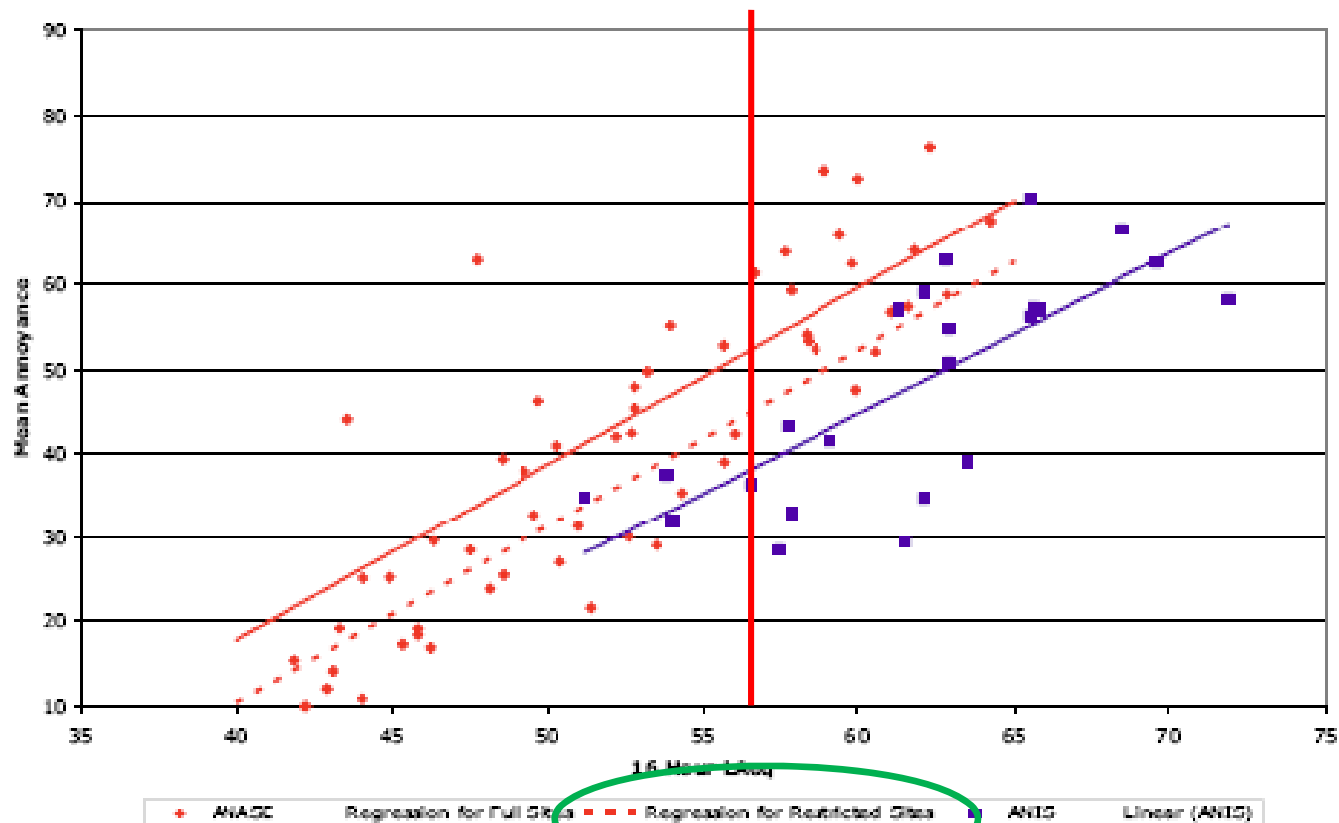


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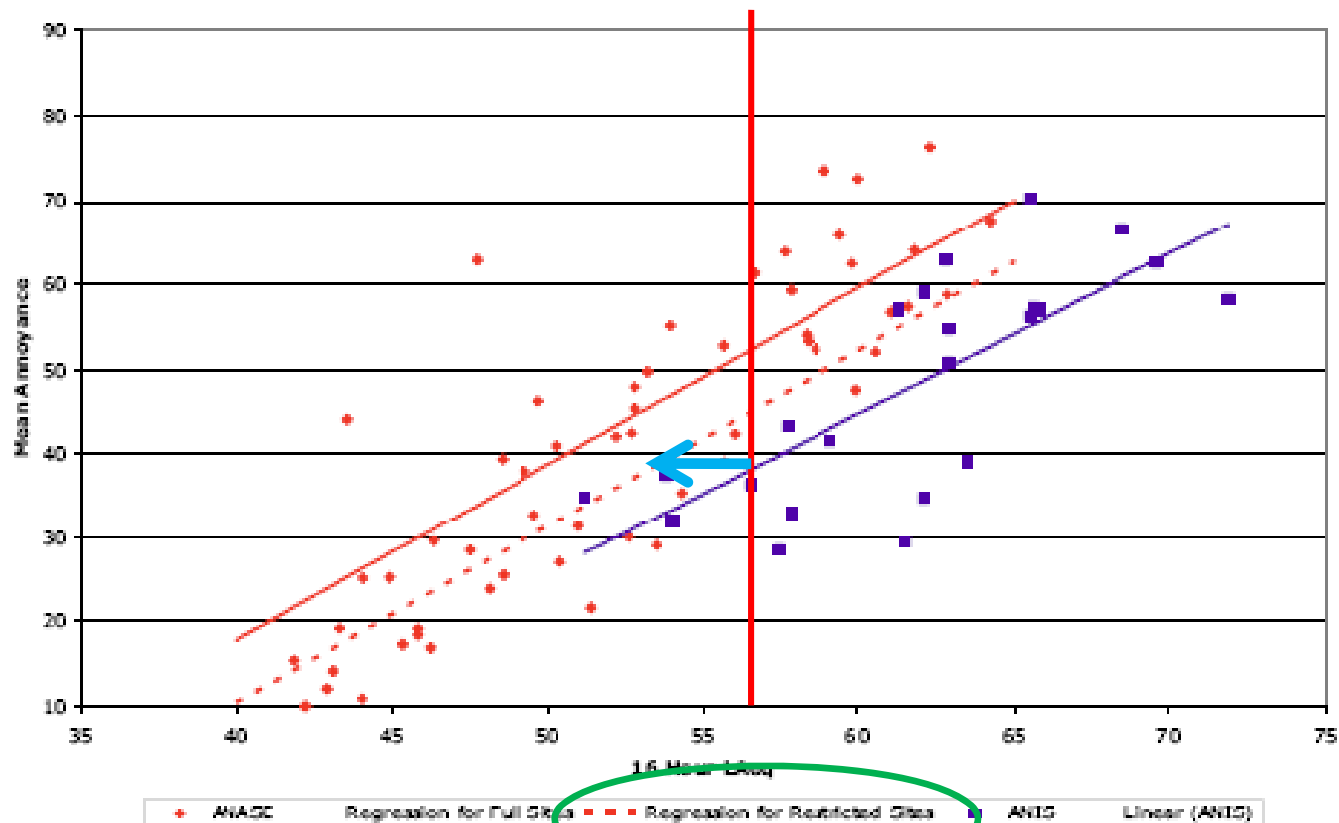


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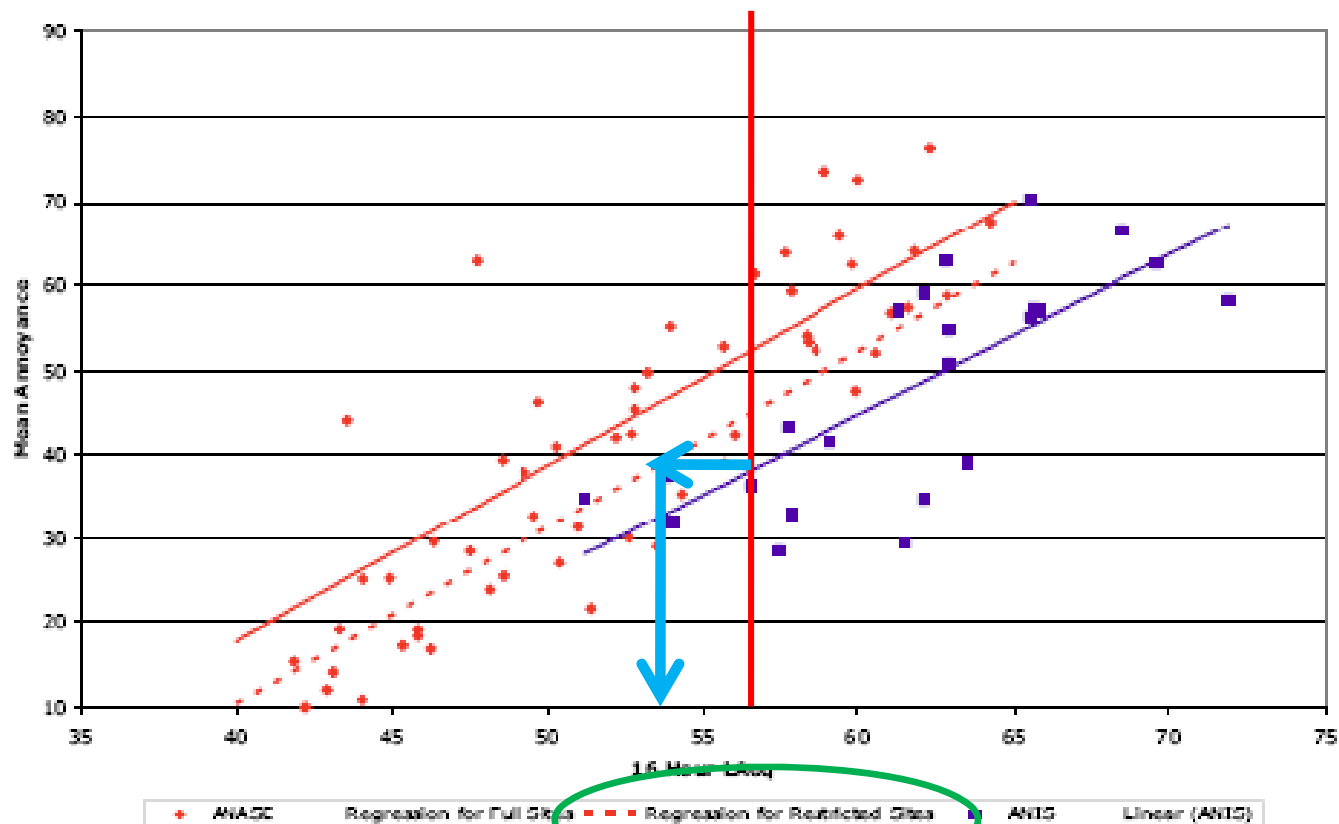


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Conclusion



- The headline ANASE results suggest that the response that used to occur at 57 dB(A) $L_{Aeq,16h}$ is now happening at 51 dB(A).
- **The potential bias makes that very unreliable**
- Based on the limited number of restricted sites the response that occurred at 57 dB(A), $L_{Aeq,16h}$ now occurs at 54 dB(A).

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Thank You