

BRISBANE COMMUNITY NOISE SURVEY 1998

F.D. Henry¹, W.L. Huson²

¹Brisbane City Council, Australia, ²Huson & Associates Pty Ltd, Australia

Introduction Brisbane is at the centre of the fastest growing urban region in Australia. It has a current population of 890 000 and a projected population of 990 000 people by the year 2011. The Council's vision is for a prosperous subtropical city, enjoyed by residents, admired by visitors and respected nationally and internationally for its achievements.

The rapid development and urban consolidation of Brisbane means more people are becoming exposed in their living spaces to high noise generating sources such as transportation, industry and entertainment venues.

In addition Brisbane's traditional subtropical house design also results in reduced sound insulation between the inside and outside of a typical dwelling.

To manage the impacts of increasing exposure to community noise, Brisbane City Council commenced the development of a Brisbane Noise Management Strategy¹ to protect and enhance the livability of the city by managing the impacts of community noise upon the wellbeing of residents.

As part of the development of the Brisbane Noise Management Strategy, Huson & Associates were commissioned by Brisbane City Council to complete a Community Noise Survey within the Brisbane City Council area. The objectives of the survey were to:

- Determine the perceived sources of noise in the Brisbane community;
- Assess community attitudes to noise;
- Determine the actual impacts of noise on the community; and
- Evaluate any trends in perceived noise impacts with respect to a previous 1986-1988 Brisbane Noise Survey².

Methodology The Community Noise Survey was conducted in August 1998 and comprised a random sample of residents in Brisbane over the age of 18 years, based on telephone entries in an electronic database. The number of people interviewed was 450 and the average interview length was almost 25 minutes.

A questionnaire was developed containing 32 questions, many with sub-questions. All responses to each question were recorded or coded to enable later dissemination by computer analysis.

The questions aimed at determining:

- Which general environmental problems are of most concern;
- Which single environmental problem was of most concern from those categories;
- How the respondent rates their neighbourhood;
- The degree of annoyance caused by different noise sources;
- Preferred noise reduction measures;
- Willingness to pay for noise control in the home;
- Noise sensitivity of respondents; and
- Demographic data.

To visually assess the randomness of the sample the address of each person interviewed was geocoded using MapInfo onto a map of the Brisbane City area.

Results The survey indicated that noise significantly bothers or annoys 48% of Brisbane's adult population.

The largest single noise source category of concern is transportation. Road and air traffic were the dominant sources, totalling 77.8% of the population claiming to be seriously affected by noise.

The greatest effect on lifestyle is sleep disturbance, although perhaps the most important result of concern is that 9% of those seriously annoyed become aggressive.

66% of people reporting to be seriously affected by noise did not complain. The major reason for not complaining was that they considered there was nothing that could or would be done about the noise.

70% of the respondents said that they would be willing to pay more in rent or cost of the home to reduce noise in the home.

Discussion The results of the survey indicate that the impact of community noise is a significant issue in Brisbane and is at the top of residents' pollution concerns in their local neighbourhood.

Several factors might account for increasing noise impacts in Brisbane, including:

- Increasing urban density;
- Increasing use of devices and appliances capable of generating loud noise;
- Increasing road, railway and air traffic levels;
- Increasing residential development in inner city areas that are dominated by commercial activity operating 24 hours a day, seven days a week ; and
- Increasing public expectations of livability and quality of life.

Keywords: Community Noise Survey, Annoyance

References

1. Brisbane City Council (2002) *Draft Brisbane Noise Management Strategy*, Brisbane City Council
2. Duhs.T, Renew.W, Eddington.N, (1989) *Brisbane Noise Survey 1986-1988*, Ted Duhs, Warren Renew, and Noela Eddington.