

Productivity Commission Inquiry: Policy framework & incentives for the Conservation of Australia's Historic Built Heritage Places

- Submission -

1. Introduction

This submission provides empirical evidence from recent research in Sydney on measuring the community benefits of preserving suburban built heritage. The research investigated if non-market economic valuation techniques were suitable for measuring such community benefits. The Ku-ring-gai Local Government Area of Sydney was used as a case study. The focus was on privately owned residential heritage with local significance.

Two economic valuation techniques, *hedonic analysis*, and *contingent valuation*, were used in this research. For each of these techniques, the findings are organised as follows in this submission:

- *Empirical estimates for Ku-ring-gai (KRG)*: Benefit estimates and community preferences for the management of their local heritage are summarised for the KRG local government area.
- *Insights on methodology and application*: These insights relate to how well the two economic valuation techniques performed and their strengths and limitations in the context of suburban heritage. While based on the KRG market and community, they are generic in nature and have implications for use of these techniques at a wider scale.
- *Data issues*: Some data quality constraints emerged during the research that impacted on how estimation was conducted. Addressing these constraints can facilitate cost-benefit analysis of local heritage policy.

This submission presupposes familiarity with non-market valuation techniques.

2. Hedonic Analysis

The study used a sample of 64 heritage-listed and 76 unlisted houses sold in 1999-2000 to estimate average net benefits to owners of owning heritage-listed properties. The relationship between heritage/cultural value of listed properties and their market price was also tested.

2.1 Empirical Estimates for KRG

On average, listed houses were found to have a 12% premium over unlisted houses after controlling for variations in property and location attributes. A statistically significant positive relationship was also found to exist between heritage/cultural values and sale prices. Details of this study and statistical calculations are provided in a research paper "Does the housing Market value Heritage? Some Empirical Evidence", available on the Macquarie University website <http://www.econ.mq.edu.au/research/rdp2004.htm>

2.2 Insights on methodology and application

A prerequisite for the application of hedonics is the existence of equilibrium in the market under study. Introduction of heritage-listing or major changes to development controls can disturb this equilibrium; so the use of hedonics may not be possible in local government areas (LGAs) where such changes have just been introduced. (KRG performed favourably in this respect – the properties included in the study had been listed for many years and no major changes to development controls were introduced in 1999-2000, the period for which sales data were used.)

Another precondition for successful use of this technique is adequate sample sizes. Preliminary review of sales data showed Hornsby Shire and KRG council areas (known to have some of the highest numbers of heritage-listed houses in NSW) had sales of 30 to 35 heritage-listed houses per year. So sales data for multiple years or multiple LGAs have to be combined for hedonic analysis; and stability of buyer preferences – over time or across LGAs - must be considered before amalgamating data.

Hedonic analysis allows computation of implicit prices of housing attributes. Since 'heritage' is the attribute of interest here an objective measure must be selected for input into hedonic analysis. Four different measures were considered. Heritage values are related to *architectural qualities*; so architectural style classifications of houses (eg. 'Victorian Filigree', Federation Queen Anne', 'Californian Bungalow') could be used provided there is adequate sample in each style category used. The *property age* or period of construction also captures the heritage character. Thirdly, *classification of houses or conservation areas by the National Trust* can be used as an indication of heritage character. Nonetheless qualitative research with property agents and buyers showed that there was low awareness of such classification in the market limiting its use in hedonics. Finally, the *statutory listing status* of houses or conservation areas (in LEPs) provides a definitive indication of the heritage character. When the listing status is used, the price difference between listed and unlisted houses will represent the combined influence of the heritage value of a property, and its listing status; the direction and strength of their separate influences cannot be partitioned out.

2.3 Data Quality Issues

Land and house attributes are an essential input to hedonic analysis. While data on sale price and land area are readily available (from councils), it is difficult to get information on year of construction, built-up area, number of rooms, or street frontage. Commercial databases do not have all relevant data either. If councils' sales registers were to record key house attributes at time of sale it will facilitate use of hedonics not only for heritage purposes but to estimate impacts of other amenities and environmental goods provided by the government. As an example, hedonic studies in the U.S. routinely use information on housing characteristics included in county appraisal databases.

3. Contingent valuation

A community survey using the contingent valuation survey technique was conducted with a random sample of 270 residents in KRG in August-September 2004.

The objective of the survey was to determine the value residents place on local heritage conservation programs. With heritage-listed houses enjoying a premium there was no apparent case for ratepayers funding conservation activities for listed houses. In-depth discussions with people and organizations involved in heritage

conservation showed that the greatest need for public funds was in the areas of heritage identification, historical research and development of clear development guidelines for residents. Accordingly the survey proposed a 2-year heritage program for KRG that would guarantee the completion of these.

The survey used a dichotomous choice format to elicit willingness-to-pay (WTP). Photographic material and concept cards were used in the survey to assist respondents to make an informed decision. Random probability sampling was done: 19 census collector districts (CCD) were randomly chosen in KRG and 12 to 15 households per CCD were interviewed.

3.1 Empirical Estimates for KRG

At this stage the analysis of this data is still underway; detailed findings will be available by Jan-Feb 2006. Some preliminary estimation results are given below.

- **Government involvement in conservation.** Respondents were asked if they prefer the proposed 2-year heritage program to be administered by (a) an Independent Committee under the Council, funded by a compulsory heritage surcharge on their rates, or (b) by a Voluntary Community Trust funded by voluntary contributions. In response
 - 53% said they favoured the Independent Committee under Council,
 - 31% preferred a Voluntary Community Trust,
 - 7% preferred neither arrangement and,
 - the remaining 9% said they had equal preferences for both.
- **Average willingness-to-pay:** this is estimated at \$ 95 per household, per year for 2 years, using non-parametric estimation. This contrasts with \$4 per year per household currently spent by the KRG Council on heritage (based on figures provided by the Council).
- **Validation of willingness-to-pay estimates:** Parametric modelling of data shows that WTP conforms to theoretical and intuitive expectations.
 - WTP was positively related to the age of a respondent's house - the older the house the more the owner was WTP as heritage surcharge.
 - Areas in KRG with higher socio-economics had a higher WTP.
 - The WTP data are also consistent with the attitudinal data recorded in the survey - residents expressing a higher degree of concern and care for heritage displayed a higher WTP.

3.2 Insights on methodology and application

Contingent valuation appears to be well suited to evaluating local policy scenarios. Heritage policy programs are seen to lead to measurable outcomes from a community's perspective; they lend themselves to objective description and presentation for direct valuation in a survey setting.

The community seems to have a good understanding of local public expenditure and its impacts and is able to provide well-considered evaluations. This was evident in the interest they showed when participating in the survey as well as from the results of the willingness-to-pay data modelling.

Before eliciting their willingness-to-pay for heritage programs, residents have to be given information on how the extra taxes or charges will be spent by the government. In the current study the proposed heritage program was designed to exclude financial assistance to heritage homeowners because the market compensated such owners; identification and research of heritage, and development of appropriate heritage development controls, were the main thrusts of the program. If on the other hand heritage houses were disadvantaged in the property market, the proposed valuation scenario would need to include financial assistance and subsidies. A credible and plausible scenario is critical for the successful use of contingent valuation.

3.3 Data quality issues

Estimating community benefits of preservation requires providing residents with accurate description and information on the existing status of their local heritage. Information on heritage houses that were altered/demolished is needed so they can evaluate the need for conservation policies. There is currently no systematic record of this information and the extent of loss is unknown. (In case of KRG this information was reconstructed using historical evidence available with interest groups and the Ku-ring-gai Historical Society). There appears to be a case for maintaining an inventory of demolished or irreversibly altered local heritage properties.