

# Community Values for Historic Heritage Preservation in Australia - a Choice Modelling Application

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# Background

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- Study undertaken for the Heritage Chairs and Officials of Australia and New Zealand.
- Formed part of the client's submission to a Productivity Commission inquiry.
- Objective of the inquiry was to examine the system of heritage preservation in Australia
  - Inefficiencies
  - Net benefits to community
  - Better policy approaches and mechanisms
- The Inquiry Report was published in July 2006.

# Scope of inquiry

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- What's included in historic heritage?
  - Buildings and structures.
  - Physically constructed places demonstrating ways of life, customs etc. that are no longer practised (e.g. gardens, stock routes).
  - Physically created landscapes with evidence related to particular activities (e.g. old mine sites, sawpits).
  - Other places of historical significance (e.g. Captain Cook's landing place).
  - Approximately 200,000 places on statutory lists.

# Policy issues

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- Inefficiency of public investment in government-owned heritage places.
  - Inadequate information about condition of places on register
  - Responsibility for management split between agencies
  - Poor accountability for conservation outcomes
- Also inefficiencies in the management of privately-owned heritage places
  - Cost consequences of heritage controls (public and private) not assessed.
- Inadequate assessment of net community benefit from conservation alternatives
  - Poorly targeted investment (subjective and fragmented).

# The need for community value estimates

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- Value estimates – part of the solution.
- Better targeting of investment based on highest marginal net benefit.
- Optimise the portfolio of heritage places.
- Understanding how people trade-off one outcome against another.

# Research challenges

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- Historic heritage is a multi-attribute good
- Quality and quantity dimensions
- Combination of public and private goods
- A wide frame (as opposed to being site-specific)
  - Difficulty of communicating what's in the frame
- Both use and non-use values
- Intergenerational values
- Poor knowledge about the current stock of heritage places
  - Quantity
  - Condition
  - Rate of new listings

# Why the CM technique was selected

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- Capable of estimating:
  - non-use values
  - 'part worths' for individual attributes
  - welfare changes of alternative scenarios
- Demonstrated usefulness in other applications (transport, environment, health).
- Robust underpinning theory.

# Choice scenarios

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- “No change to current management” alternative
  - Continue with the same level of funding and same types of management programs.
  - 20-year outcomes specified.
  - No payment required from respondent.
  - Included in every choice set.
- “Levy alternatives” – unlabelled
  - Involves a change in heritage management.
  - 20-year outcomes specified.
  - Requires respondent to pay a levy (\$20, \$50, \$200).
  - Two levy alternatives per choice set.

# Attributes of the choice alternatives

## ATTRIBUTES

Attribute	Description
Number of heritage places protected	The number of places that will be protected from loss, additional to those currently protected.
Condition and integrity	The percentage of places that are structurally sound and preserved in a way that is faithful to original features
Age mix	The proportion of places that come from different historical periods.
Public accessibility	Whether or not the public is able to visit a place and get a hands-on experience at the site.
Development control	The level of controls on development in and around heritage places
Levy payment	The cost to the respondent, specified in terms of a levy.

# Attribute levels (20 year outcomes)

Additional places protected	2000, <b>5000</b> , 8000, 10000
% in good condition	<b>15%</b> , 20%, 40%, 80%
Age mix	All >100 years old Almost all >100 years old (5% more recent) <b>Many &gt;100 years old (15% more recent)</b> Half >100 years old
% publicly accessible	<b>5%</b> , 15%, 20%, 25%
Level of development control	No modifications permitted Minor modifications permitted Substantial modifications permitted, but no demolition <b>Demolition permitted subject to assessment</b>

No management change scenario italicised

# Descriptive statistics

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- 8 choice sets x 2024 respondents =
  - 16,192 choice observations.
- 77% of choices involved the selection of a levy alternative.
- Only 5% of respondents selected the 'no change' alternative consistently across all choice sets:
  - Protest zeros (43%)
  - Low values for heritage protection (50%)
  - Confused about choice task (7%)

## MULTINOMIAL LOGIT MODEL ESTIMATES

Attribute	Coeff and significance	Individual characteristic	Coeff and significance
Places protected	0.0000 ***	Gender	-0.3788 ***
Condition of places	0.0097 ***	Pro heritage	0.5694 ***
Age mix of places	-0.0015 **	Heritage house	0.5750 ***
Accessibility of places	0.0258 ***	Age	N/S
Development control levels		Education	-0.0234 **
- No modifications	-0.1531	Income	0.0001 **
- Minimal modifications	0.2102 ***	Citizen	N/S
- Substantial modifications	0.1130 ***	Metro resident	N/S
Levy	-0.0072 ***		
ASC (change options)	0.1764 *		

1% level of significance (\*\*\*); 5% level of significance (\*\*)

## ATTRIBUTE IMPLICIT PRICES

Attribute	Annual \$ per person	Units
Places protected	5.53	per 1000 additional heritage places protected
Condition of places	1.35	per 1% increase in the proportion of places in good condition
Age mix of places	-0.20	per 1% increase in the proportion of places that are over 100 years of age
Accessibility of places	3.60	per 1% increase in the proportion of places that are publicly accessible.
Development control		
- Change to level 1	39.50	Change from demolition permitted to substantial modifications permitted but no demolition.
- Change to level 2	53.07	Change from demolition permitted to minor modifications permitted only.
- Change to level 3	2.38	Change from demolition permitted to no modifications permitted.

# Values for alternative outcomes - example

Attribute	Current level	2020 Level	Implicit price (\$)	Units	Aggregate value (\$/person per year)
Places protected	200,000	208,000	5.53	per 1000	44.27
Condition	20% in good condition	30%	1.35	per 1% increase	13.52
Age Mix	80% >100 years	65%	0.20	per 1% reduction	3.04
Accessible	10%	15%	3.60	per 1% increase	17.98
Development Control	Substantial modification permitted	Only minor modifications permitted	13.57		13.57
<b>Total</b>					<b>92.38</b>

# Conclusion

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- Improved heritage protection is valued
  - Respondents willing to pay \$92 per annum for a relatively modest package of improvements over a 20 year period
  - Equates to an aggregate national value of \$1.4 billion per annum
  - Program implementation costs need to be netted off this figure
- Further analysis of the data could provide more insights