## Assessment of the Economic Value of Cultural Heritage Tourism in the City of Perth, Western Australia

*by* 

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## **Executive Summary**

This study measured the direct annual overnight visitor expenditure attributable to cultural heritage in the City of Perth local government area. Appendix 1 provides the project terms of reference.

A visitor expenditure survey was used to estimate the average expenditure per visitor per day in the City of Perth. The annual expenditure of all visitors was then calculated by multiplying this figure by the average number of annual overnight visitors (domestic and international) and then multiplying by the average length of stay.

In order to determine the proportion of the total visitor expenditure directly attributable to cultural heritage, an attribution factor was generated using a number of variables derived from the visitor survey. The attribution factor was multiplied by the total annual visitor expenditure to create a best estimate of the economic value of heritage tourism. The main findings are summarised in the table below.

## Summary of Direct Visitor Expenditure Attributable to Cultural Heritage in the City of Perth

Item	value
Average expenditure per person per day	\$116.02
Mean Annual Overnight Visitors	1,249,337
Average length of visit (days)	6.44
Total Annual Direct Visitor Expenditure	\$939.5 mil
Cultural heritage attribution factor (%)	37.28%
Attribution of visitor expenditure (upper bound)	\$350.2 mil
Substitution value (lower bound)	\$22.7 mil

The amount of direct expenditure attributable to the cultural heritage attractions in the City of Perth provides an upper bound estimate of value based on the importance visitors place on cultural heritage during their visit, the cultural heritage places visited and activities they undertake while in the city.

Annual direct visitor expenditure attributable to cultural heritage in = \$350.2 million the City of Perth

The state substitution value provides a lower bound estimate of value based on the direct visitor expenditure that is retained or generated in Western Australia by City of Perth cultural heritage. In other words, the amount of direct visitor expenditure that would not occur if City of Perth cultural heritage did not exist.

Substitution value for annual direct visitor expenditure associated with = \$22.7 million City of Perth cultural heritage

Appendix 4 provides a local government area substitution value for the City of Perth.

#### Acknowledgements

The study was commissioned by the City of Perth, Perth Heritage Appeal and Heritage Council of Western Australia. Oversight of the consultants was jointly undertaken by the Heritage Council, City of Perth and Perth Heritage Appeal. See <a href="http://www.cityofperth.wa.gov.au/">http://www.cityofperth.wa.gov.au/</a>

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#### 1 Introduction

This study measured the economic contribution of cultural heritage to Western Australia based on attribution of direct tourism expenditure in the City of Perth local government area. In the context of this report, cultural heritage includes both tangible aspects, such as buildings, memorials and landscapes; and intangible aspects, such as cultural practices, oral traditions and knowledge conserved for a greater good. Cultural heritage tourism may be defined as tourist activity in locations where historic assets are present and act as the main foci for tourists. The draft Heritage Tourism Strategy for Western Australia has adopted a broad definition along these lines: ...tourism activity that is, or can be, aligned to physical or tangible heritage. Poria et al (2004) argued that the mere presence of tourists in heritage places does not necessarily equate to heritage tourism. They prefer a more personal definition based on the relationship between the individual tourist, the heritage presented and how the tourist relates this to their own heritage. With this in mind, the analysis in this report factors in visitor perceptions of the importance of heritage to their visit when measuring value. See Appendix 1 for the project terms of reference.

There are a number of valuation techniques that can be used to estimate the contribution of tourism activity to the economy of a region. These may include direct, indirect and induced effects. This study concentrates on direct tourist expenditure. Direct expenditure provides a conservative reliable value from which further economic analysis may be applied. The direct tourism expenditure measurement carried out as part of this study is intended to provide a tool for future economic assessments of cultural heritage in order to manage and allocate resources to ensure the sustainability of heritage oriented tourism.

#### The Case Study Location: City of Perth

The City of Perth local government area is within the Greater Perth Metropolitan area, the capital of Western Australia (Figure 1). Located on the Swan Coastal plain in the southwest of the state, the region was colonised in 1829 by a British expedition with the establishment of the Swan River Colony. The area in which the city is located has a long history of indigenous occupation prior to European settlement. The Perth Metropolitan Area now runs approximately 125km north to south and 50km east to west with a population of just under 1.5 million people. The City of Perth local government area is located on the Swan River in the approximate centre of the greater metropolitan area. It encompasses the central business district and covers an area of approximately 9km<sup>2</sup> with a resident population of about 13,440. The City of Perth is adjacent to Kings Park, a significant natural and cultural attraction with extensive park and natural bush areas combined with a variety of monuments and cultural experiences. The City also contains various cultural heritage related assets. Appendix 3 provides a comprehensive list of City of Perth state heritage places. More information may be sourced from http://www.cityofperth.wa.gov.au, http://www.westernaustralia.com/, http://www.heritage.wa.gov.au/ and http://www.heritageperth.com.au/

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Baram & Rowan, 2004; Heritage Council of Western Australia, 2005; Howard, 2003; McKercher & Cros, 2002

<sup>&</sup>lt;sup>2</sup> Garrod & Fyall, 2000

<sup>&</sup>lt;sup>3</sup> Heritage Council of WA, 2005

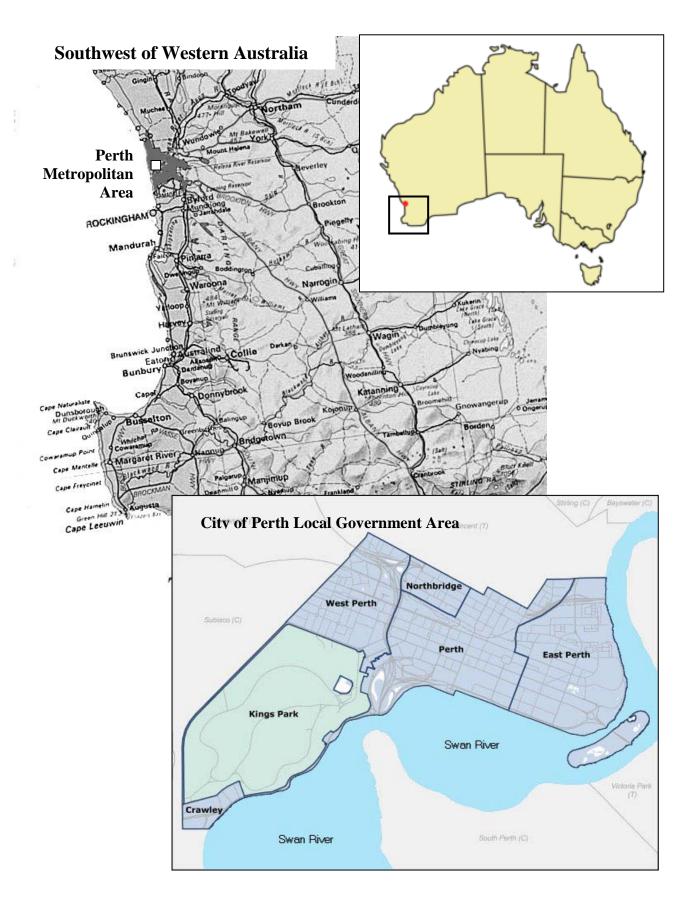


Figure 1: Study area location and detail

### 2 Method

This study used a multiple choice self completed visitor survey to determine average visitor expenditure, attribution factors and demographics (see Appendix 2 for questionnaire example). Data was collected from the City of Perth local government area between May 2007 and February 2008 using a self complete questionnaire format. Questionnaires were initially distributed for later return using a reply paid envelopes. However, a low response rate prompted the use of an alternative approach where visitors were given a questionnaire for immediate completion and return to researchers on site. This resulted in an improved response rate.

#### 2.1 Measuring Economic Contribution of Tourism

There are a variety of methods that can be used to assess the economic value or contribution of tourism. Each of these methods has their advantages and disadvantages and each suit different contexts depending on the amount of data available, the scale of the area to be studied and the available project budget. The various economic valuation methods are not comparable as they include different variables and factors and thus represent different economic concepts. The direct expenditure method establishes a conservative but reliable value from which further economic analysis may be extrapolated.

Many projects measuring economic impact include the indirect and induced effects of tourism activity. This approach is reliant on the use of extensive data about economic multipliers. Although data is available at a national level, using this data for smaller scale local government areas would produce inaccurate results. It is also difficult in a capital city location to isolate the factors related to tourists and day visitor activity from other influences. The use of multipliers in measuring secondary impacts has also been questioned on the basis that:

- Multipliers assume that extra output can be produced without constraints on the supply of labour, capital, land, good or service. The factors of production are assumed to be limitless in supply and therefore can be sourced without any price increase.
- Multipliers assume that households consume good(s) and service(s) in exact proportion to their initial budget shares. No allowance is made for purchasers' marginal preferences. For example the household budget share of some goods might increase or fall as household income increases.
- An increase in demand for a product implies an equal increase in production. In reality however, if domestic demand increases it might be more efficient for industries to divert some exports to local consumption or import to some extent rather than increasing local production by the full amount;
- Multipliers are often misused when evaluating industry assistance proposals because they
  refer to changes in the economy caused by a change in final demand for a product, while
  requests for government assistance are usually framed in terms of increasing the
  production of an industry.

Although multipliers can be a useful way of summarising and quantifying inter-linkages within the economy, they are more often abused than used correctly. Multipliers can be considered as a method of inflating the output of an industry to more impressive levels.<sup>4</sup>

This study used the direct expenditure method that produces a conservative but reliable value based on primary data. Visitor direct expenditure also provides a foundation for further extrapolation using economic multipliers if desired. It is important to note that the various forms of economic valuation are not comparable as they include different variables and factors and so represent

<sup>&</sup>lt;sup>4</sup> Lindberg et al, 2001

different economic concepts.

#### 2.2 Visitor Expenditure Survey

In order to measure visitor expenditure in the City of Perth, a visitor sample was obtained by distributing self completion questionnaires directly to visitors at various locations in the city area. People visiting the city for holiday or leisure were targeted. City workers and commuters were not included in the sample. Hotels in the Perth Central City area were approached with a request to assist with distribution of the survey forms to guests but were reluctant to participate. An initial mail back survey distributed to visitors approaching the Visitor Information Kiosk in Forrest Place provided a low response rate. Consequently, researchers were employed to approach City of Perth visitors at key locations and request completion of the questionnaire on site. Locations were selected in consultation with the steering committee based on the likelihood of tourists being present and included the following:

- The Bell Tower
- Kings Park War Memorial and adjacent areas
- Perth Mint
- Perth Arts Precinct and adjacent areas
- Constitution Centre and adjacent areas

A total of 115 viable questionnaires were returned completed.

#### 2.3 Calculating direct tourist expenditure

The visitor expenditure was measured by asking respondents to indicate:

- The approximate amount of money (in Australian dollars) they spent during their visit with reference to the categories of 'travel', 'accommodation', 'food and drinks', 'activities', 'equipment' and 'other'
- Whether these expenditure figures were per day or for the total trip;
- How many people were covered by these expenditure figures; and
- Their length of stay in the City of Perth (in days).

The nature of asking visitors to record their own expenditure gives rise to a limitation in the accuracy of the data. Common difficulties arise in visitors misinterpreting expenditure questions and in their inability to estimate holiday expenditure. However, requesting visitors write an itemised list of expenditure improves the accuracy of estimates.<sup>5</sup>

#### 2.3.1 Calculation of average daily expenditure per person

Each of the 115 survey respondents provided an itemised list of expenditure for their stay in the City of Perth. They also indicated how many people the expenditure figures covered and how long they were staying in the City of Perth area. From this, a mean daily expenditure per person figure could be calculated for each response then an average expenditure value for the total sample.

An expenditure figure per person per night for accommodation was initially calculated for each respondent using the following equation:

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<sup>&</sup>lt;sup>5</sup> Pearce, 1981

Expenditure per person per day was calculated for each respondent based on the remaining items of expenditure using the following equation:

An average daily visitor expenditure per person figure was calculated from the sum of individual respondent total expenditure values divided by the sample size as follows:

For the purposes of reporting, itemised expenditure per person per day was calculated for each respondent using the following equation:

An itemised average daily expenditure per person value could then be calculated from the sum of individual respondent values divided by the sample size. The sum of the average expenditure on each item does not equal the average total expenditure as not all respondents indicated spending on all items.

#### 2.3.2 Total Annual direct visitor expenditure

The total annual visitor expenditure was calculated using expenditure data from the City of Perth visitor survey where analysis provided the average expenditure per visitor per day and the average length of stay. The total annual number of overnight visitors to the City of Perth was obtained from the Tourism WA fact sheet for the City of Perth local government area. A four year rolling average was used. The total annual expenditure was calculated as follows:

<sup>\*</sup> length of stay in nights = length of stay in days - 1

#### 2.3.3 Total annual attributable visitor expenditure

An estimation is required as to the amount of visitor expenditure that can be attributed to the heritage present in the City of Perth. The attribution factor provides a value that is based on the importance of cultural heritage to the visit as well as the proportion of visitors attending cultural heritage places and events. The attribution factor was calculated from percentage of responses rather than percentage of survey participants. Survey participants often selected more than one option in response to the attribution questions. For example, a given survey participant may provide a main reason for visiting Perth that simultaneously includes a heritage related and nonheritage related factors, as with the activities undertaken in the city. Consequently, the heritage related response represents a fraction of that survey participant's total reason for visiting rather than a whole response in itself. This effectively represents a pro-rata approach to counting the proportion of heritage related responses. Using the percentage of responses (or percentage of total number of all options selected), functions as a means of weighting the data to better represent the status of heritage as part of the City of Perth tourism experience. Once the attribution factor has been measured, the attributable expenditure is calculated as follows:

Total annual attributable visitor expenditure = total annual direct visitor expenditure x attribution factor (%)

#### 2.3.4 State Substitution factor

The state substitution factor provides a lower bound estimate of direct visitor expenditure value. It represents the amount of direct expenditure generated or retained within Western Australia by cultural heritage tourism in the City of Perth The substitution factor is generated using a scenario question. With multiple choice options. The question asks respondents to indicate their behavioural intention in the event that cultural heritage places and experiences did not exist. Survey responses indicating spending would not have occurred in the state (chose to stay at home or visit another state or country), represent expenditure generated or retained in the state explicitly by City of Perth cultural heritage. The substitution value is calculated as follows:

Substitution value =  $\frac{Annual\ attributable}{visitor\ expenditure} x \quad substitution\ factor\ (\%)$ 

#### 2.4 Data Treatment

Treatment of data sources for the purposes of estimation required some decisions about 'outliers' (that is 'extreme' values of some variables in the primary data set) and the accuracy of secondary data. The approach employed in the study was to use conservative estimates and measures available for the key variables of visitation, length of stay and average daily expenditure. It was important to recognise how sensitive the estimates were to changes in any of these key variables to ensure that the study provided robust and reliable estimates of the economic value of heritage tourism. The following section outlines the approach used to estimate key variables and includes a discussion of the treatment of the data in order to provide the best estimates for visitation, length of stay and average daily expenditure.

#### 2.4.1 Estimation of visitation

One of the key variables used in estimation of economic value of tourism is visitation, as measured in number of visitors to the location (domestic and international). The main source for domestic and international overnight visitor data is the Bureau of Tourism Research, National Visitor Survey (NVS) and International Visitor Survey (IVS). The data were obtained through Tourism WA. In order to reduce the standard error and improve the estimates, a four year rolling average was used as the basis for estimation of visitation. This had the effect of increasing the sample size and reducing

the standard error to the order of 20 percent or less. This was considered acceptable for the purposes of extrapolation and estimation.

#### 2.4.2 Average length of stay

Average length of stay can be influenced by visitors who choose to stay much longer than the average. This may then skew the total expenditure figures in subsequent calculations. Length of stay values provided by survey participants more than two standard deviations from the sample mean were identified as outliers. Two standard deviations is considered to be inclusive of 95 percent of data in a normally distributed sample.

## 2.4.3 Average daily expenditure

Total expenditure per person was calculated for each survey response and a sample average calculated. As with length of stay, values that were greater than two standard deviations from the sample mean daily expenditure per person were excluded from the analysis to avoid skewing results.

## 3 Findings

It is important to note that owing to the sampling approach, responses may be biased toward tourists who tend to visit locations where cultural heritage is present. This approach was deemed necessary to boost the response rate within a short period given the limited time frame for the project. It resulted in 82 completed questionnaires (additional to the 33 mail back forms received), providing a total of 115 viable completed questionnaires.

#### 3.1 Survey respondent characteristics

Over half of the respondents indicated Perth was their main destination while most were staying for seven days or less (71.1%). The average length of stay (6.4 days) was in approximate accord with the figure published by Tourism WA for the Perth LGA (6.18). Over half of the sample indicated they were staying in the City of Perth local government area. International visitors comprised the largest group in the sample (48.7%) followed by interstate and WA residents. In terms of age, 71% of respondents were 45 years or older while close to half were travelling with a partner. Of the specific accommodation categories provided, '3-4 star hotel' was the most frequent response. The 'Other' category for accommodation included friends and family residences, bed and breakfasts and billets.

In terms of place of origin, while the sample proportion of intrastate, interstate and international visitor respondents does not synchronise with figures published by Tourism WA, they are proportionally approximate corresponding visitor nights proportions for each group in the City of Perth reported by Tourism WA (2007a) as follows:

- WA nights = 18%,
- Interstate nights = 22%,
- International nights = 60%

Table 1: Summary of City of Perth survey respondent characteristics

Category	Frequency	%	Category	Frequency	%
Place of origin			Age Group		
WA	22	19.1%	18-24	14	12.3%
Interstate	37	32.2%	25-34	9	7.9%
International	56	48.7%	35-44	10	8.8%
			45-54	17	14.9%
			55-64	42	36.8%
			65+	22	19.3%
			No response	1	
Total responses	115	100%	Total responses	114	100%
Length of stay			Nature of visitor gro	oup	
1-3 days	39	35.1%	Alone	27	23.7%
4-7 days	40	36.0%	Partner	53	46.5%
8-14 days	14	12.6%	Club or tour group	27	23.7%
15+ days	18	16.2%	Other	7	6.1%
No response	4		No response	1	
Total responses 111 100%		Total responses	114	100.0%	
Mean length of Stay 6.44 days					
Transportation			Accommodation type	ne	
Private vehicle	35	36.8%	5 star hotel	5	4.7%
Scheduled bus / train	28	29.5%	Unit / apartment	18	16.8%
Hire vehicle	12	12.6%	3-4 star hotel	34	31.8%
Package tour	10	10.5%	Backpackers	18	16.8%
Other	10	10.5%	Other	40	37.4%
No response	20				
Total responses	95	100.0%	Total responses	115	
City of Perth main tra	avel destinati	on?	Accommodation in	City of Perth a	area?
Yes	52	61.1%	Yes	63	59.4%
No	33	38.8%	No	43	40.6%
No response	30		No response	9	
Total responses	85	100%	Total responses	106	100

## 3.2 Attribution factor

The attribution factors are variables that indicate how significant cultural heritage is in the context of the survey respondents' visit to the City of Perth. These include the main reason for visiting the City of Perth, types of activities undertaken and the importance of various aspects of the City of Perth experience. Percentage of responses rather than percentage of survey participants was used to calculate the attribution factor. Using the percentage of responses (or percentage of total number of all options selected) functions as a means of weighting the data to better represent the status of heritage as part of the City of Perth experience.

In terms of the key attribution factors drawn from the survey, 12.9% of responses indicated that cultural heritage was a main reason for visiting the City of Perth, 52.3% of responses rated cultural heritage as important to the visit and 46.6% of responses indicated a visit to one or more heritage

places or experiences while in the city. Tables 2 - 6 provide details of the response to the attribution questions.

Respondents indicated their main reason for visiting the City of Perth by ticking one of several options in a multiple choice question. The options included and 'Other' category for which alternative reasons may be written. Tables 2 and 3 detail the responses.

Table 2: Main reason for Perth City visit

	Responses		
Reason	Frequency	Percent	
Natural attractions	42	22.58%	
Other	41	22.04%	
History / heritage	24	12.90%	
River / beaches	22	11.83%	
National / State parks	21	11.29%	
Shopping for pleasure	16	8.60%	
Pubs / nightclubs / restaurants	12	6.45%	
Convention / business / meeting	8	4.30%	
Total Responses	186	100%	

The most frequent response for main reason for visitation was natural attractions. These may include Kings Park and the Swan River. History and heritage received 12.9% of responses. A significant number of respondents opted to indicate a reason for visit other than those categories provided. Table 3 details the various responses included in the other category.

Table 3: Other main reasons provided for visiting the City of Perth

"Other" reasons provided for visit	Frequency	Percent
Visiting friends and/or relatives	7	18.42%
Holiday	4	10.53%
Stopping off point on holiday	4	10.53%
City in general	3	7.89%
Wedding	3	7.89%
A job	2	5.26%
Study	2	5.26%
Exchange visit with friendship force	2	5.26%
Hash - international	2	5.26%
Backpacking	1	2.63%
For the pleasure of seeing a big and quiet city	1	2.63%
Galleries	1	2.63%
Hang out at King's Park	1	2.63%
In Australia for 2 months, wanted to see Perth	1	2.63%
Organised golf trip	1	2.63%
Specialist appointment	1	2.63%
Theatre	1	2.63%
We've never been before	1	2.63%

Respondents were requested to rate the importance of six aspects of their City of Perth visit. Table 4 demonstrates that parks and natural areas received the highest positive response. More than half of the respondents (52.3%) indicated heritage places were important to their visit. In order to boost the sample size in a short time frame, places where tourists were considered to congregate were targeted in sampling. This included a significant number of heritage related sites. Thus, it is

possible that the sampling technique may have resulted in a bias toward heritage places in the response.

Table 4: Respondents' importance rating of various aspects of the Perth City experience (n=99)

	Not		
Aspect	important	neutral	Important
Parks/natural areas	6.4%	12.8%	80.7%
Heritage places	15.8%	31.7%	52.3%
Visiting Family/friends	49.4%	6.0%	44.4%
Hotels/bars/restaurants	32.6%	24.4%	42.8%
Shopping for pleasure	42.4%	34.3%	23.2%
Entertainment venues	49.4%	31.1%	19.3%

Respondents were requested to tick one or more activities they participated in from a list provided in the questionnaire. As more than one response could be selected, the total responses were greater than the number of survey participants (115). Table 5 provides the frequencies of response for each item with a percentage of the total number of items selected by participants.

**Table 5: Activities during stay in Perth (n=115)** 

Activity	Responses	%
Parks / gardens	94	18.1%
Bell Tower	64	12.3%
Restaurants / pubs / nightclubs / bars	54	10.4%
Monuments / memorials	50	9.6%
Historic walks / Guided tours	47	9.0%
Historic buildings / churches	45	8.6%
Shopping for pleasure	44	8.4%
Galleries / museums	42	8.1%
Perth Mint	36	6.9%
Other	24	4.6%
Movie / entertainment	18	3.4%
Total Responses	518	100

Parks and gardens received the most frequent response followed by the Swan Bells (Bell Tower) and restaurants/pubs/ nightclubs/bars. The activity items were amalgamated into heritage places and non-heritage places (within the terms of reference of this project). Just under half of the total number of responses indicated a visit to one or more heritage places or experiences during their visit to the City of Perth. Table 6 details the percentage of responses indicating a visit to one or more heritage places.

Table 6: Visited heritage place or experience during city visit

Response	Frequency	%		
Other non-heritage place or activity	110	53.4%		
Visited heritage place or experience	96	46.6%		
Total Response	206	100		

#### 3.3 Direct average tourist expenditure in the City of Perth

Respondents were asked to detail their expenditure in order to generate an estimate of the direct tourist expenditure in the City of Perth. The average total daily expenditure per person in Perth City was \$116.02. The results are summarised in Table 7.

Table 7: Average visitor expenditure per person per day

Item	N	Minimum	Maximum	Mean
Travel	40	\$0.13	\$62.50	\$12.70
Accommodation	40	\$6.52	\$107.14	\$50.21
Food and Drinks	51	\$0.83	\$56.25	\$20.93
Activities	33	\$0.77	\$33.33	\$8.75
Equipment	12	\$0.00	\$10.00	\$3.79
Other Items		\$0.00	\$25.00	\$8.12
Average total expenditure per person per day	59	\$1.00	\$293.33	\$116.02

The mean total expenditure is based on the sum of the total expenditure for each respondent divided by the number of responses. It differs slightly from the sum of the means of each item as not all respondents spent money on all items in the list. The daily spend per person figure accords with data published by Tourism WA (2007b) for domestic tourists to the Perth Metropolitan Area with a daily expenditure per person of \$118.16. The daily spend per person figure calculated from the survey data is slightly higher than the national average figure available for international tourists (\$82.1 per person per day) sourced from the International Visitor Survey. The IVS data may not be specific to activities in Perth.

To estimate the total direct expenditure of tourists to the City of Perth, a four year rolling average number of annual overnight international and domestic visitors was calculated using Tourism WA (2007a) data (1,249,337). Given the mean length of stay is 6.44 days and the mean daily expenditure per person is \$116.02, the total direct tourist expenditure in the City of Perth may be calculated as follows:

[Total annual overnight visitors] x [mean length of stay] x [average daily expenditure per person]

$$1,249,337 \times 6.44 \times \$116.02 = \$939,537,342.44$$

Based on the results of this survey, the estimated total direct expenditure of overnight visitors to the City of Perth is \$939.5 million.

# 3.4 Attribution of visitor expenditure to cultural heritage (upper bound estimate)

In order to estimate the upper bound estimate of total annual expenditure associated with cultural heritage tourism, an attribution factor is applied. The attribution factor is based on the proportion of visitors for whom cultural heritage forms a significant and important part of their City of Perth experience. The attribution factor represents an upper bound expenditure estimate. It is obtained by averaging the response to three attribution variables. In this respect, the key attribution values from the survey data are as follows

- 12.9% of responses indicated cultural heritage was a main reason for visiting
- 52.3% of respondents rated cultural heritage as important to their visit
- 46.6% of responses indicated visitation to a cultural heritage place or experience during the visit

This provides a mean attribution factor of 37.28 percent (0.3728). The upper bound of annual direct tourist expenditure attributable to cultural heritage tourism is calculated by applying the attribution factor as follows:

- 12 -

:

[annual direct tourist expenditure] x [attribution factor]

#### $$939,537,242.44 \times 37.28\% = $350,248,399.01$

Thus, the upper bound estimate of annual direct tourist expenditure in the City of Perth attributable to cultural heritage is \$350.2 million.

In order to boost the survey response rate, locations where tourists tended to congregated were targeted for distribution of questionnaires. Consequently, a significant number of questionnaires were distributed at tourism sites in the study area where cultural heritage assets or products were present. This should be taken into consideration when interpreting the values provided.

# 3.5 State substitution value of cultural heritage in the City of Perth (lower bound estimate)

The state substitution value represents the amount of attributable direct expenditure that is generated or retained within Western Australia by cultural heritage attractions in the City of Perth. This is a lower bound estimate of direct expenditure that otherwise would not have occurred in the absence of cultural heritage attractions. The substitution value is estimated based on the response to a scenario question about what tourists would choose to do if the City of Perth cultural heritage did not exist. From this, a substitution factor is calculated from the sum of key variables. Responses were as follows (Table 8):

Table 8: Substitution factor scenario question: 'If heritage attractions did not exist'

Option	Responses	%	
Stay at home	5	4.6%	
Go to another state	1	0.9%	► Key state substitution variables
Go to another country	1	0.9%	
Travel elsewhere in WA	7	6.5%	
Travel to Perth City anyway	94	87.0%	
No response	7		
Total responses	108	100.0%	

The state substitution factor is calculated by summing the key variables as indicated (4.6% + 0.9% + 0.9% = 6.48%). To obtain the lower bound estimate of cultural heritage direct expenditure value, the substitution factor is applied to the attributable direct expenditure value as follows:

[attributable direct expenditure] x [substitution factor]

$$$350,248,399.01x 6.48\% = $22,701,285.12$$

The estimated amount of annual direct tourist expenditure generated or retained in Western Australia as a result of the existence of cultural heritage tourism in the City of Perth is \$22.7 million. This represents a lower bound estimate of cultural heritage tourism value for the City of Perth. A local government area substitution value may be calculated for the City of Perth using the same technique. This value may be less reliable given expenditure data provided by tourist and visitors may have occurred outside the defined study area. This may have been a function of survey respondents viewing the City of Perth as including the entire Perth Metropolitan Area despite inclusion of a map and a brief explanation provided by those distributing the survey. See Appendix 4.

## 4 Conclusion

Based on the results of a visitor survey in the City of Perth local government area, the upper bound value of annual direct tourist expenditure attributable to cultural heritage tourism is estimated to be \$350.2 million. The amount of annual direct tourist expenditure generated or retained in Western Australia by cultural heritage tourism in the City of Perth is estimated to be \$22.7 million. This represents a lower bound value for cultural heritage tourism in the City of Perth postcode area.

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## **Appendix 1: Terms of Reference**

## AN ANALYSIS OF HERITAGE TOURISM IN THE CITY OF PERTH

#### **Background:**

Representatives from the City of Perth, the City of Perth Heritage Fund and the Heritage Council of Western Australia have previously discussed projects that can increase awareness of, generate enhanced interest in, and provide direction for investment in the City of Perth's heritage assets.

Two reports commissioned by the Heritage Council were germane to these discussions, in terms of quantifying visitor perceptions of Perth's cultural heritage and identifying broad areas of specific interest. These reports were:

- *Key Heritage Tourism Thematic Assessment* identified key heritage themes with tourism potential, noted global benchmarks, and provided a geographical template.
- *Economic Value of Heritage Tourism* evaluated direct economic value of heritage tourism in Albany, Fremantle and New Norcia, confirming heritage as an important motivator for visitors and generator of significant revenues.

A subsequent meeting was held with, in addition to those cited above, representatives from Tourism Western Australia and the Curtin Sustainable Tourism Centre. The latter were the authors of the Economic Value report.

After due discussion on the adaptability of the Curtin methodology to the City of Perth's specific interests, potential costs and timelines, Curtin considered the project was feasible and requested a brief in order to consider it further and respond accordingly.

#### **Objectives:**

The primary objectives of this study are to:

- Measure the direct value of expenditure by visitors staying within the Perth 6000 postcode where heritage or historic interests or activities are a factor;
- As visitors are unlikely to recognise postcode boundaries, the interests and activities factors should encompass a wider metropolitan definition (perhaps defined by public transport termini or reasonable taxi distances);
- Heritage interests and activities should be posited to 3 or 4 dominant heritage tourism themes, chosen on the basis of relevance to the metropolitan region. Selection will in part be determined through a City of Perth assessment of 50 key buildings/places.

#### Methodology:

In addressing the study the consultant will:

- Apply the methodology first developed for the 2003 study Assessment of the Economic Value of Recreation and Tourism in Western Australia's National Parks, Marine Parks and Forests, and subsequently adapted for the Economic Value of Heritage Tourism;
- Refine the methodology for the specific measurements sought by the City of Perth;

- Access available statistical and economic information sources as appropriate, including visitor information, and advise where gaps may exist and what measures are available to address these gaps;
- Contingent on Objectives and Methodology requirements, construct a questionnaire that is sufficiently compact to elicit higher response rates.

#### **Outcome:**

The study proponents require data on the percentage of visitors to Perth with specific or general interests and/or who pursue activities in heritage, to better define development and promotional projects relating to Perth's heritage tourism assets.

#### **Management:**

A Steering Committee comprising representatives from the City of Perth, the City of Perth Heritage Fund, the Heritage Council of Western Australia and Tourism Western Australian will oversee the consultancy and ensure that the objectives are met.

## **Appendix 2: Survey Questionnaire** PERTH CITY VISITOR SURVEY 2007

I am a researcher from Curtin University undertaking a study to establish the significance of tourism in the Perth City centre and would appreciate your participation. The information we gather is important to the future planning and management of this city.

When completing the questionnaire, please only think about your current visit to the Perth central city area as indicated on the map. Thank you for sparing the time to complete the survey.

This survey should be completed by a person over the age of 18.

City of Perth Study Area Map Cambridge (T) Northbridge **West Perth** Perth East Perth Kings Park Swan River Crawley

1. Is City of Perth your main destination for this trip (circle one)? Yeş No

2. V	Valuation of Cultural Heritage Tourism in the City of What is your MAIN REASON for visiting Perth City on this trip (tick o	U
	Visit history / heritage buildings	$\Box_1$
	Go to the river / beach	$\square_2$
	Visit national / state parks	$\square_3$
	Visit natural attractions e.g. Kings Park / public gardens	$\Box_4$
	Go shopping for pleasure	$\square_5$
	Attend convention / business / meeting	$\Box_6$
	Visit pubs / nightclubs / restaurants	$\Box_7$
	Other (specify)	$\square_8$
•	Which of the following Perth City activities have you done or plan to during this visit? (You may tick more than one box)	do
	Visit the Perth Mint	$\Box_1$
	Go Shopping for pleasure	$\square_2$
	Visit Galleries/Museums (eg WA Museum, Art Gallery of WA)	$\square_3$
	Visit Historic buildings / churches	$\Box_4$
	Visit bell tower (Swan Bells)	$\square_5$
	Historic Walk Trails / guided tours (eg Perth tram)	$\Box_6$
	Visit Monuments/ Memorials (eg Kings Park War Memorial)	$\Box_7$
	See a movie or other entertainment (eg live theatre, music)	$\square_8$
	Visit restaurants / pubs / nightclubs / bars	$\square_9$
	Visit parks/gardens (eg Kings Park)	$\Box_{10}$
	Other (specify)	$\square_{11}$
•	If the heritage attractions of Perth City did not exist, would you have to (tick one box):	
	Stay at home $\Box_1$ Travel to another Australian	
	Travel to Perth City anyway $\Box_2$ Travel to another co	untry

5.	How much have you spent / intend spending				during t	his	<b>8.</b> . How did you travel to	•	Area?	sm in the City	of Perth
	visit? Please indicate/estimate figures for the	ne total		ı \$Aus. Perth C	ontrol		Private vehicle	$\Box_1$ Package	tour $\square_4$		
	Expenditure item (\$AUS)		111	City ar			Scheduled bus/train	$\square_2$			
	Travel (bus fares, car hire, fuel, etc.)			City ui	Cu		<ul><li>Hire vehicle</li><li>9. Who are you visiting vehicle</li></ul>	$\Box_3$ Other (spec	eify) $\square_5$ .		•••••
	Accommodation						•	Alone $\square_1$	With	family or frier	nds $\square_4$
	Food and drinks:						With pa	1		lub or tour gro	
	(local hotels/restaurants, local stores/supermarkets) Activities						Other (spe				•
	(entry fees, guided tours etc) Equipment purchased for your trip						10 How many days will y	ou spend visiting th	ne Perth City	Centre?	
	(film, camera etc) Other (clothing, merchandise, souvenirs etc.)						<b>11.</b> What is your normal p		ountry or Aus		
<b>5.</b>	How many people do these spend figures inc	erson(s)		<b>12.</b> During this visit, where <b>Accommodation type</b>		or how long? No. of nights					
<b>'.</b>	How important are the following to you when	n visitin <b>Not</b>	g Perth	City?		Very	5 star hotel		$\Box_1$	Yes	No
		impo	rtant		imp	ortant	Unit/Apartment		$\square_2$	Yes	No
_	Visiting Family/friends	$\Box_1$	$\square_2$	$\square_3$	$\Box_4$	$\Box_5$	3-4 star hotel		$\square_3$	Yes	No
_	Heritage places (e.g. museums, monuments, historic buildings)	$\Box_1$	$\square_2$	$\square_3$	$\Box_4$	$\square_5$	Backpackers		$\Box_4$	Yes	No
-	Entertainment venues (movies, theatre arts etc)	$\Box_1$	$\square_2$	$\square_3$	$\Box_4$	$\square_5$	Other (specify)	•••••	$\square_5$	Yes	No
	Shopping for pleasure	$\Box_1$	$\square_2$	$\square_3$	$\Box_4$	$\square_5$	12 DI ' 1'		1 \		
-	Hotels/bars/restaurants	$\Box_1$	$\Box_2$	$\square_3$	$\Box_4$	$\Box_5$	13 Please indicate your ag		box)	55 CA 🗆	
-			— 2				$18-24$ $\square_1$	35-44 $\square_3$		55-64 □ <sub>5</sub>	
	Parks/natural areas	$\Box_1$	$\Box_2$	$\square_3$	$\Box_4$	$\Box_5$	$25-34$ $\square_2$	45-54 $\square_4$	65 ar	nd over $\square_6$	
	Other (specify)	$\Box_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$	THANK YOU. Please retu pre-paid envelope and pos		(if supplied)	insert it into	the

## **Appendix 3: List of State heritage places in the City of Perth**

Number	Name	Address		Tourism Experience
1330	W D & H O Wills	464-468	Murray St	?
	Warehouse (fmr)			
1627	Baird's Building (fmr)	491-493	Wellington St	Retail
1784	Mitchells Building	136-142	William St	Retail, Cafes
1943	St John's Lutheran	16	Aberdeen St	Ecclesiastical
	Church			
1947	Supreme Court Buildings		Barrack St	Gardens, Court
	and Gardens, Old Court			
	House, Stirling Gardens			
1950	The Weld Club	3	Barrack St Cnr	Club
			The Esplanade	
1953	Perth Town Hall	Cnr	Hay & Barrack Sts	Interp Display
1954	Bon Marche Arcade	74-84	Barrack St	Retail
1954	Railway Hotel (remains	130-132	Barrack St	Retail
1737	of facade & balcony)	130-132	Darrack St	INCIAII
1962	Art Gallery & Museum		Beaufort St	Visual Art & interp
1902	Buildings		Deautort St	displays
1963	Perth Court of Petty	Cnr	Beaufort & Roe	7
1703	Sessions	CIII	Sts Sts	•
1965	Old Court House & Gaol	Cnr	Beaufort &	?
1505	ord Court House & Guor		Francis Sts	•
1969	Protestant Hall (fmr),	160-162	Beaufort St	Retail
-, -,	Perth			
1973	Central Government	50	Barrack St	Curtin Uni
	Offices			
1975	Atlas Building	8-Oct	The Esplanade	Offices?
1976	St Brigid's Convent (fmr)		John St	Offices?
1979	Perth General Post Office	3	Forrest Place	Offices? Retail, Photo
				Op
1980	Swan Barracks		Francis St	Offices?
1985	St George's Hall Facade	508	Hay St (25 Irwin	Façade, Photo Op
			St)	
1988	Cremorne Arcade	572-578	Hay St	Retail
1989	Criterion Hotel	560	Hay St	Food & Beverage
1990	McNess Royal Arcade	613-619	Hay St	Retail
1991	Connor Quinlan Building	612-616	Hay St	
1993	Theatre Royal &	637-645	Hay St	Performing Arts
	Metropole Hotel (fmr)			
1998	London Court	647-653	Hay St	Retail
2000	Devon House	729	Hay St	Retail?
2002	Gledden Building	723	Hay St	Retail?
2003	Wesley Church	75	William St Cnr	Ecclesiastical
			Hay St	
2005	Melbourne Hotel (fmr)	942	Hay St	Food & Beverage
2006	His Majesty's Theatre	825-839	Hay St Cnr King	Performing Arts
			St	

Number	Name	A	Address	Tourism Experience
2007	Harper's Buildings	810-820	Hay St	Retail, Cafes
2023	18 & 20 Howard Street	18 & 20	Howard St	Retail, Offices
2024	21 Howard Street	21	Howard St	Offices
2025	Art Gallery	47	James St	Visual Arts
	Administration Building			
2026	Hackett Hall	40	James St	Offices?
2027	Chung Wah Association Hall	128	James St	Offices, Café
2028	PICA & Arts House	51	James St, 2 Roe St	Performing Arts
2030	St Brigid's Group, Perth		John, Fitzgerald & Aberdeen Streets	?
2043	The Terraces	63	Mount St	Residential
2048	Royal Perth Hospital Administration Bldg		Murray St	Hospital
2049	Royal Perth Hospital (Kirkman House)	10	Murray St	Hospital
2051	Fire Brigade No 1 Station	25	Murray St cnr Irwin St	Museum
2052	Young Australia League and House	45 & 55	Murray St	Dance Studio, Offices, Photo Op
2053	Chief Secretary/Public Health Department (fmr)	57	Murray St	?
2056	Perth Government Stores (fmr)	70-74	Murray St	Offices?
2064	Commonwealth Bank Building	242	Murray St Cnr Forrest Place	Retail
2065	Piccadilly Theatre and Arcade	700-704	Hay St	Retail, Cinema
2081	1 Museum Street	1	Museum St, 25 Aberdeen St	Residential? Offices?
2084	Salvation Army Headquarters & Congress Hall (fmr)	48-54	Pier St & 69 Murray St	Retail? Offices?
2089	Lieut. General Sir J.J. Talbot Hobbs Memorial		Riverside Dr	Monument
2090	West Australian Rowing Club		Riverside Dr□	Rowing Club
2092	Lawson Flats		Sherwood Court	Residential?
2093	Bishop's House		Spring St	Ecclesiastical
2094	St George's House	235-239	St Georges Tce	Ecclesiastical
2095	Government House	13	St Georges Tce	Tour
2096	Government House Ballroom	13	St Georges Tce	Tour
2097	Council House, Perth	27-29	St Georges Tce	Photo
2099	St Andrew's Church	36	St Georges Tce	Ecclesiastical
2100	The Deanery	Cnr	St Georges Tce & Pier St	Ecclesiastical
2101	Burt Memorial Hall	38A	St Georges Tce	Retail

Number	Name		Address	Tourism Experience
2102	St George's Cathedral	cnr	St George's Tce &	Ecclesiastical
			CathedralAve	
2103	Alexander Forrest Statue	Cnr	St Georges Tce &	Monument
			Barrack St	
2105	Trinity Uniting Church	70-72	St Georges Tce	Ecclesiastical
	Group			
2110	Western Australian Club	101-103	St Georges Tce	Club
2112	Newspaper House Group	123-137	St. George's Tce	Offices? Retail
	& Perth Technical			
	College			
2114	Palace Hotel (fmr)	108	St Georges Tce &	Bank?
			Cnr William St	
2117	Old Perth Boys School	139	St Georges Tce	Café
2119	The Cloisters	202	St Georges Tce	Café
2120	Barracks Arch	Junct	St Georges Tce,	Monument
			Malcolm & Elder	
			Sts	
2121	Victoria Square Cottages	23-29	Victoria Sq	Residential
2124	St Mary's Roman	41	Victoria Sq	Ecclesiastical
	Catholic Cathedral			
2126	Archbishop's Palace		Victoria Sq	Ecclesiastical
2130	St Johns Pro-Cathedral	18	Victoria Av	Ecclesiastical
2131	Perth Dental Hospital	189	Wellington St Cnr	Hospital
	Main Block		Lord St	
2132	St John's Ambulance	298-300	Wellington St	Offices?
2122	Building	27.6	777 11° 4 C4	T
2133	Perth Railway Precinct	376	Wellington St	Transport
2140	Wellington Buildings	150-160	William St (509-	Retail
			515 Wellington St)	
2143	Wesfarmers Building	569	Wellington St	Retail? Offices?
2143	(fmr)	307	Wennigton St	Retail: Offices:
2146	Railways Institute	591-605	Wellington St	Offices?
2140	Building (fmr)	371 003	Wennigton St	Offices:
2148	Royal Hotel	531	Wellington St cnr	Retail, Accommodation
			William St	
2153	Horseshoe Bridge		William St	Road Bridge
2154	Brass Monkey	209	William St Cnr	Food & Beverage
			James St	
2155	Rechabite Hall	222-224	William St	Retail
2158	The New Church (fmr)	176	Adelaide Tce	Ecclesiastical
2159	Perth Girls' Orphanage	108	Adelaide Tce	Offices
	(fmr)			
2161	Carlton Hotel	248-260	Hay St	Food & Beverage
2164	East Perth Cemetery	2	Bronte St	Cemetery
2166	The Perth Mint	310	Hay St	Interprep Displays,
				Tours
2170	Gloucester Park	40	Nelson Cr	Trots
2173	Perth Girls School (fmr)	2	Wellington St Cnr	Offices?
			Plain St	

Cnr ?
CIII .
Rd Food & Beverage
d Memorial
Offices
Garden, Tour
Offices
Cnr   Hall?
d Offices
Residence
Residential/Offices?
Offices
Residential/Offices?
Retail
Food & Beverage?
Photo Op?
Photo Op?
Pier Curtin Uni
O.C.
Offices
Dasidanas
Residence
Glyde Offices
Tryde Offices
UWA
of OWA
ralia
ey Offices?
of offices.
iver Road/Bridge
Retail, Cafes
d Tennis Club
Offices, Café
Park, Offices
rrack
e
t

Number	Name	I	Address	Tourism Experience
3854	Two Attached Houses &	219-223	Newcastle St	Residential?
	Separate House			
4031	Barrack Square	S end of	Barrack St	Cafes, Retail, Bell
				Tower - Interp
4241	Harold Boas Gardens	bounded by	Wellington, Colin	Garden
			& Delhi Sts	
4317	Tower House,	115	Francis St Cnr	Residential?
4221	Northbridge	22	Parker St	D 11 11
4331	Ho33 Wellington St	33	Wellington St	Residential
4342	Residence, 52 Mount Street	52	Mount St	Residential
4506		74-82	Outram St	Offices
4559		1217	Hay Street	Residential
4571		5	St Georges Tce	Performing Arts
4572		3	Hay St	Garden
4587	P & O Building (fmr)	56-60	William St	Retail, Offices
4601	Aberdeen Hotel & St	76-88	Aberdeen St	Food & Beverage
1001	Johns Building	, 5 55		2 300 to Bo voingo
4633	No 6 Electricity Sub	Cnr	Brown & Glyde	Sub Station?
	Station (fmr)		Sts	
4641	Cathedral of St	18	Parker St Cnr	Ecclesiastical
	Constantine & St Helene		Francis St	
4652	Houses at 51-53	51-53	Goderich St	Residential
	Goderich Street			
6101	ANZ Bank (fmr)	938-940	Hay St Cnr	Café?
			Milligan St	
6102	Site of Buildings, Burt	3-Aug	Burt Way & 96-98	Residential
	Way		& 102-104	
0702	Dalamar Callana	7.4	Terrace Rd	Off.
8783	Delaney Gallery	74	Beaufort St	Offices  Residential
11509 11595	Aberdeen Street Precinct First Church of Christ,	154-186 264	Aberdeen St St Georges Tce	Residential Ecclesiastical
11393	Scientist, Perth	204	St deolges Ice	Ecclesiastical
14888	Globe Hotel	495-497	Wellington St	Food & Beverage
14892	Three Attached Houses	17-21	Palmerston St	Residence
15026	Shops & Offices	109	Fitzgerald St &	Retail, Offices
	r		377-387	,
			Newcastle St	
15226	Commercial Building &	309	Newcastle St	Retail?
	Attached Residence			
15761	Flats 72-74 Thomas	72-74	Thomas St	Residence, Photo Op
	Street			
15783	Tom Burke House	191-195	Newcastle St	Offices?
15850	Solidarity Park	Cnr	Parliament Pl &	Memorial
4 := 2 :	4 . 6 . 11		Harvest Tce	T. 1. 4.
16722	Art Gallery of Western		James St	Visual Arts
1.77.40	Australia Complex	00.160	0- 07 1 45 XV'11'	Datail Cafe
16743	William & Wellington	90-160	& 97-145 William	Retail, Cafes
	Street Precinct		St, & 493-537 Wellington St	
			wennigion St	

## Appendix 4: Calculation of City of Perth substitution value

Substitution factor scenario question: 'If heritage attractions did not exist'

Option	Responses	%	
Stay at home	5	4.6%	
Go to another state	1	0.9%	➤ Key City of Perth substitution variables
Go to another country	1	0.9%	Rey City of Fertil substitution variables
Travel elsewhere in WA	7	6.5%	
Travel to Perth City anyway	94	87.0%	
No response	7		
Total responses	108	100.0%	

The City of Perth substitution factor is calculated by summing the key variables as indicated (4.6% + 0.9% + 0.9% + 6.5% = 12.9%). To obtain the City of Perth substitution value, the substitution factor is applied to the attributable direct expenditure value as follows:

[attributable direct expenditure] x [substitution factor]

The estimated amount of annual direct tourist expenditure generated or retained within the City of Perth as a result of the existence of cultural heritage tourism is \$45.2 million. This represents an alternative lower bound estimate of cultural heritage tourism value for the City of Perth.