

CULTURE AND RECREATION — ASSESSMENT RESULTS

- 1 This working paper describes the expenses assessment for Culture and Recreation and provides information on its impact on GST revenue distribution for the 2007 Update. The development of the assessment method is discussed in Volume 6 of the 2004 Review Working Papers.

DESCRIPTION OF THE CATEGORY

- 2 The category comprised expenses on administration, support, provision and operation of cultural and recreational services. More specifically, the category included expenses on:
- direct provision of, and subsidies to, libraries open to the public;
 - art galleries;
 - museums;
 - facilities and services for the creative and performing arts such as theatres, concerts, stage productions and orchestras;
 - other cultural facilities and services such as exhibition halls and monuments;
 - other recreational facilities and services such as football and cricket grounds; and
 - national, regional or local representation in sporting events, and for equipment, coaching, training and other items needed for teams or players.
- 3 No specific purpose payments are associated with the Culture and Recreation category.
- 4 Table 1 shows the average expenses and user charges for the last six financial years. In 2005-06, average expenses of \$112.71 per capita represented 1.87 per cent of total average expenses. In 2005-06, user charges accounted for 15.43 per cent of category average expenses.

Table 1 Culture and Recreation, average expenses and user charges, 2000-01 to 2005-06

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Average expenses (\$pc)	105.79	93.08	98.97	102.30	102.42	112.71
% of total State average expenses	2.16	1.81	1.85	1.88	1.80	1.87
Average user charges (\$pc)	14.72	16.25	16.89	17.74	17.66	17.40
% of category average expenses	13.92	17.46	17.06	17.34	17.24	15.43

ASSESSMENT METHOD

Description of the assessment

- 5 The Culture and Recreation assessment for the 2007 Update was undertaken using four components: fixed costs, services, national capital and isolation.
- 6 The 2007 Update expenses assessment method is the same as the 2006 Update.
- the expenses for fixed costs and isolation were assessed using general methods; and
 - the expenses related to services were assessed using economic environment (assessed by judgment) and general methods for dispersion, input costs and cross-border factors;
- 7 The expenses related to national capital were based on an assessment of \$4.9 million updated for CPI movements. The assessment recognised the additional costs incurred by the ACT in managing and maintaining above-average urban open space and land classified as Designated Land Areas under the National Capital Plan.
- 8 Assessment Structure
- 9 Table 2 summarises the assessment structure for the 2007 Update.

Table 2 Culture and Recreation, assessment structure for the 2007 Update, 2005-04

Component	Component weight	Factors	Basis of calculation
	%		
Fixed costs	3.80	Administrative scale Input costs	General method. General method, with weights of 80% for wages, 2% for accommodation and 0.5% for electricity.
Services	95.61	Economic environment Cross-border Dispersion Input costs	Assessed by judgement. Assessed for New South Wales and the ACT by general method. General method. General method, with weights of 70% for wages, 2% for accommodation and 0.5% for electricity.
National capital	0.23	National capital	Based on an assessed allowance of \$4.870 million per annum, adjusted by CPI.
Isolation	0.37	Isolation	General method.

Calculating the category factor

10 Table 3 summarises the components, component weights and factors assessed for this category for the last year of the 2007 Update. It shows the calculation of the category factor for 2005-06.

Table 3 Culture and recreation, derivation of category factor, 2007 Update, 2005-06

Factors	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Fixed costs (component weight = 3.8 %)								
Administrative scale	0.37633	0.50595	0.63736	1.25990	1.65290	5.24912	7.81806	12.47610
Input costs	1.02885	0.99514	0.97511	0.98495	0.97832	0.96027	1.02142	1.02379
Component factor	0.38718	0.50349	0.62150	1.24094	1.61707	5.04058	7.98555	12.77287
A Wgtd comp factor	0.01476	0.01919	0.02369	0.04730	0.06163	0.19212	0.30436	0.48682
Services (component weight = 95.61 %)								
Economic environment	0.9918	0.99183	0.99183	1.02159	1.02159	1.05134	1.05134	1.05134
Cross border	0.9957	1.00000	1.00000	1.00000	1.00000	1.00000	1.08919	1.00000
Dispersion	0.99962	0.99703	1.00323	1.00191	0.99823	0.99875	0.99168	1.03331
Input costs	1.02569	0.99552	0.97811	0.98674	0.98041	0.96430	1.01885	1.02114
Component factor	1.01258	0.98444	0.97333	1.00999	0.99976	1.01250	1.15717	1.10859
B Wgtd comp factor	0.96811	0.94121	0.93059	0.96564	0.95586	0.96804	1.10636	1.05991
National capital (component weight = 0.23 %)								
National capital	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	62.54449	0.00000
Component factor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	62.54449	0.00000
C Wgtd comp factor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.14282	0.00000
Isolation (component weight = 0.37 %)								
Isolation	0.04030	0.07374	0.11575	1.86107	1.08664	2.90754	1.21355	58.91048
Component factor	0.04030	0.07374	0.11575	1.86107	1.08664	2.90754	1.21355	58.91048
D Wgtd comp factor	0.00015	0.00027	0.00043	0.00687	0.00401	0.01073	0.00448	0.21741
Category factor	0.98302	0.96068	0.95470	1.01981	1.02150	1.17088	1.55801	1.76415

Note: For each component, the component factor is calculated using the formula in the following paragraph. The weighted component factor is the component factor multiplied by the component weight. This is then population weighted to ensure that the sum of assessed expenses equals average expenses.

Note: Category factor is the sum of the weighted component factors. It equals A + B + C + D.

11 The category factor was calculated as follows

Category factor	=	fixed costs + services + national capital + isolation
Fixed costs	=	0.0378 * [administrative scale * fixed costs input costs]
Services	=	0.9561 * [economic environment * cross-border * (input costs + dispersion – 1)]
National capital	=	0.0023 * [national capital]
Isolation	=	0.0037 * [isolation]

12 In each case, the contribution to the category factor was calculated as the component weight (the percentages in the table) multiplied by the component factor (the bracketed terms in the formulas). Each component’s contribution to the category factor was scaled to ensure the sum of assessed expenses equalled average expenses.

RESULTS FOR 2005-06

13 Table 4 shows, the actual, average and assessed expenses per capita and the assessed cost of providing services ratios for 2005-06. The assessed cost of providing services ratios are equivalent to the category factor shown in Table 3.

Table 4 Culture and Recreation, assessment results, 2005-06

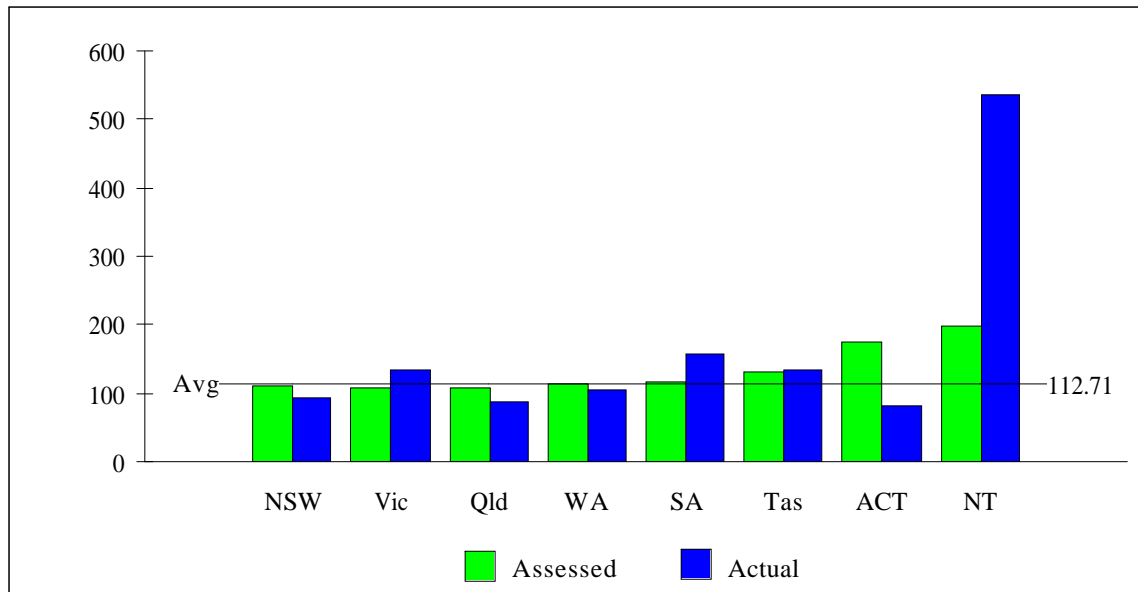
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Actual expenses	92.40	132.60	87.09	104.57	158.05	133.64	81.67	535.20	112.71
Assessed expenses	110.80	108.28	107.61	114.94	115.13	131.97	175.60	198.84	112.71
	%	%	%	%	%	%	%	%	%
Assessed cost of providing services ratio (a)	98.30	96.07	95.47	101.98	102.15	117.09	155.80	176.41	100.00

(a) The assessed cost of providing services ratio is the ratio of assessed to average expenses per capita.

14 Table 9 at the end of this working paper shows the actual, average and assessed expenses for each State for all years of the 2007 Update.

15 Figure 1 illustrates the actual, average and assessed expenses per capita for Culture and Recreation for 2004-05.

Figure 1 Culture and Recreation, expenses per capita — assessed, actual and average, 2005-06



CONTRIBUTION TO GST REVENUE DISTRIBUTION

16 Table 5 shows the category’s contribution to the distribution of GST revenue and health care grants (hereafter GST revenue) for the 2007 Update. It also shows the contribution of each factor and component.

Table 5 Culture and Recreation, contribution of assessment to GST revenue distribution, 2007 Update

Factor	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total redist'd
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Fixed costs									
Administrative scale	-20.2	-11.9	-6.7	2.7	4.7	9.7	10.4	11.3	38.7
Input costs	1.1	-0.1	-0.6	-0.2	-0.2	-0.1	0.0	0.0	1.1
Component factor	-19.8	-11.8	-7.0	2.5	4.4	9.3	10.8	11.6	38.6
Services									
Economic environment	-6.3	-4.7	-3.7	5.0	3.8	2.8	1.9	1.2	14.7
Cross-border	-3.3	0.0	0.0	0.0	0.0	0.0	3.2	0.0	3.3
Dispersion	-0.3	-1.7	1.5	0.4	-0.3	-0.1	-0.3	0.8	2.7
Input costs	22.6	-1.6	-12.4	-3.6	-4.3	-2.0	0.7	0.5	23.9
Component factor	12.6	-7.9	-14.6	1.7	-0.9	0.6	5.8	2.6	23.4
National capital									
National capital	-2.0	-1.5	-1.2	-0.6	-0.4	-0.1	5.8	-0.1	5.8
Component factor	-2.0	-1.5	-1.2	-0.6	-0.4	-0.1	5.8	-0.1	5.8
Isolation									
Isolation	-3.0	-2.2	-1.6	0.8	0.1	0.4	0.0	5.4	6.8
Component factor	-3.0	-2.2	-1.6	0.8	0.1	0.4	0.0	5.4	6.8
Redistribution from EPC resulting from the 2007 Update assessment									
	-12.1	-23.3	-24.3	4.5	3.1	10.2	22.4	19.6	59.8

Note: The redistribution due to the component factors includes the effect of interactions between factors. Therefore the component factor figure may not equal the sum of its factors' redistribution.

Differences from an equal per capita assessment

17 The table indicates that the disabilities which had the biggest impact on the assessment were:

- administrative scale — which recognised the unavoidable costs each State incurred to have the minimum policy and administrative infrastructure necessary to provide the service;
- input costs — which recognised the interstate differences in the cost of inputs used to provide services (labour, office accommodation and electricity); and
- economic environment — which recognised interstate differences in the breadth and depth of corporate support for the arts and the extent to which State government support is required;

18 The category factors reflected the following on a State by State basis.

- *New South Wales* — the negative GST revenue redistribution for New South Wales was primarily due its economies of scale, higher corporate support for the arts and the

provision of services to its residents by the ACT. This negative effect was partially offset by disabilities stemming from its higher labour costs.

- *Victoria* — Victoria's negative GST revenue redistribution was primarily due to its economies of scale and higher corporate support for the arts.
- *Queensland* — Queensland had the largest negative GST revenue redistribution. Its lower labour costs, economies of scale and higher corporate support for the arts contributed to this outcome.
- *Western Australia* — the positive GST revenue redistribution for Western Australia was due to lower corporate support for the arts and diseconomies of scale. These distribution-positive influences were partially offset by lower labour costs.
- *South Australia* — South Australia's positive GST revenue redistribution was due to diseconomies of scale and lower corporate support for the arts, but these positive influences were partially offset by lower labour costs.
- *Tasmania* — the positive GST revenue redistribution for Tasmania was due to its diseconomies of scale and lower corporate support for the arts. These positive influences were partially offset by lower labour costs.
- *ACT* — the ACT had the highest positive GST revenue redistribution. This was due to its diseconomies of scale, the provision of services to residents from New South Wales and the additional costs incurred because of its role as the national capital.
- *Northern Territory* — the positive GST revenue redistribution for the Northern Territory was mainly due to its diseconomies of scale and high costs due to isolation.

CHANGES SINCE THE 2006 UPDATE

Effect of assessment on distribution of GST revenue

19 Table 6 shows the redistribution of GST revenue resulting from the assessments in the 2006 Update and the 2007 Update. It also shows the sources of change.

20 Changes in the distribution of GST revenue between the 2006 Update and the 2007 Update were brought about because the Commission:

- used revised average expenses data and other revised data in updating factor calculations for the years 2000-01 to 2004-05; and
- replaced 2000-01 average expenses and factors with those of 2005-06 to move forward the five year period on which GST revenue distribution was based. Moving the five-year period forward in this way ensures the assessments reflect recent trends in State priorities on the services provided and recent trends in State demographic and economic circumstances which affect the relative costs of those services.

Table 6 Culture and recreation, effect of assessment on GST revenue distribution, 2006 Update to 2007 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total redist'd
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Redistribution from EPC resulting from the 2006 Update assessment (a)	-11.1	-23.7	-26.5	4.5	2.3	10.6	23.3	20.6	61.3
Effect of revising category averages and factors for 2000-01 to 2004-05									
Category average	-0.4	-0.9	-1.0	0.2	0.1	0.4	0.9	0.8	2.4
Category factors	-0.7	0.7	1.3	-0.1	0.5	-0.4	-0.7	-0.7	2.5
Interactions	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Total	-1.1	-0.2	0.3	0.1	0.6	0.0	0.2	0.0	1.3
Effect of replacing 2000-01 category averages and factors with those for 2005-06									
Category average	0.6	1.1	1.3	-0.2	-0.1	-0.5	-1.1	-1.0	3.0
Category factors	-0.6	-0.7	0.7	0.1	0.4	0.1	0.1	0.0	1.3
Interactions	0.1	0.2	-0.1	0.0	-0.1	0.0	0.0	0.0	0.3
Total	0.1	0.5	1.8	-0.1	0.2	-0.5	-1.1	-1.0	2.7
Redistribution from EPC resulting from the 2007 Update assessment (a)	-12.1	-23.3	-24.3	4.5	3.1	10.2	22.4	19.6	59.8
Total effect of revisions and updating (b)	-1.0	0.4	2.1	-0.1	0.8	-0.4	-0.9	-0.9	3.3

(a) Using the same pool and populations that were used to calculate the 2006 Update redistribution.

(b) This figure shows the change in the amount redistributed among the States between the 2005 Update and the 2006 Update. It does not necessarily equal the difference in the total redistribution from EPC between the two inquiries.

21 Compared with an equal per capita assessment, the 2007 Update redistributed \$59.8 million away from New South Wales, Victoria and Queensland to the other States. This amount was \$1.5 million less than in the 2006 Update.

22 Table 7 shows the changes in GST revenue distribution attributable to changes in each factor arising from both revising data for 2000-01 to 2004-05 and replacing 2000-01 data with 2005-06 data.

Table 7 Culture and Recreation, effect of assessment on GST revenue distribution by factor, 2006 Update to 2007 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total redist'd
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Fixed costs									
Administrative scale	1.2	0.6	0.0	-0.2	-0.2	-0.5	-0.5	-0.5	1.8
Input costs	-0.1	0.0	0.1	0.0	0.1	0.0	0.0	-0.1	0.2
Services									
Economic environment	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Cross-border	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dispersion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Input costs	-2.3	-0.4	1.7	0.2	1.0	0.0	0.0	-0.1	2.8
National capital									
National capital	0.1	0.1	0.1	0.0	0.0	0.0	-0.3	0.0	0.3
Isolation									
Isolation	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.2

23 The main reasons for the changes in GST revenue distribution were as follows.

Changes due to revising average expenses and factors for years 2000-2001 to 2004-05

24 **Revising average expenses.** Upward revisions were made to average expenses in the common years. This increased the importance of the category, decreasing the GST revenue share of those States with a below-average assessed cost of service provision ratios (New South Wales, Victoria and Queensland).

25 **Revising category factors.** The category factors changed as a result of revisions to fixed costs in the common years. Wages costs for New South Wales and the Northern Territory were revised downwards, reducing their assessed cost of service provision ratios and GST distributions.

Changes in State circumstances — replacing 2000-2001 data with 2005-06 data

26 **Replacing average expenses.** Between 2000-01 and 2005-06, per capita average expenses increased by 6.5 per cent. In the same period, the per capita GST pool increased 43.3 per cent. As a result, the category became less important to the calculation of the relativities, lowering redistribution of GST revenue. This increased the GST revenue shares of the States assessed to have cost advantages (New South Wales, Victoria and Queensland).

27 **Replacing category factors.** Table 8 shows the actual expenses and implied assessed cost of providing services for 2000-01, the year that drops out of the assessment period, and 2005-06 the year that comes into the assessment period. It shows that, for States other than New South Wales and Victoria, the 2005-06 costs of providing services were larger than the 2000-01

costs. Replacing the category factors increased their shares of GST revenue by \$1.3 million. The shares of New South Wales and Victoria fell when their factors were replaced.

Table 8 Culture and Recreation, actual expenses and assessed cost of providing services, 2000-01 and 2005-06

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Actual expenses									
2000-01	127.24	85.85	83.44	73.61	139.38	78.25	166.87	304.93	105.79
2005-06	92.40	132.60	87.09	104.57	158.05	133.64	81.67	535.20	112.71
	%	%	%	%	%	%	%	%	%
Change between 2000-01 and 2005-06	-27.38	54.45	4.38	42.06	13.39	70.78	-51.05	75.51	6.54
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Assessed expenses									
2000-01	104.20	102.04	100.32	107.58	107.06	123.34	163.95	186.61	105.79
2005-06	110.80	108.28	107.61	114.94	115.13	131.97	175.60	198.84	112.71
	%	%	%	%	%	%	%	%	%
Assessed cost of providing services ratio									
2000-01	98.50	96.46	94.83	101.69	101.21	116.59	154.98	176.40	100.00
2005-06	98.30	96.07	95.47	101.98	102.15	117.09	155.80	176.41	100.00

28 The observed changes were driven by changes to administrative scale and input cost factors, and changes in the category composition. Fixed cost expenses were increased by the CPI, which was slower than the growth in category average expenses. This reduced the importance of the fixed costs component within the category, which had a negative impact on Western Australia, South Australia, Tasmania, the ACT and the Northern Territory. The input costs factors changed because wages data were updated, incorporating the below-average growth in wages in New South Wales and the Northern Territory, lowering their assessed cost of service provision ratios.

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Table 9 Assessment of expenses, Culture and Recreation

	2001-02		2002-03		2003-04		2004-05		2005-06	
	Amount	Per Capita	Amount	Per Capita	Amount	Per Capita	Amount	Per Capita	Amount	Per Capita
	\$m	\$	\$m	\$	\$m	\$	\$m	\$	\$m	\$
Average Expenses		93.08		98.97		102.30		102.42		112.71
New South Wales										
Assessed difference	- 8.576	- 1.30	- 8.874	- 1.33	- 10.379	- 1.55	- 12.359	- 1.83	- 13.015	- 1.91
Expenses - Assessed	606.505	91.78	650.232	97.64	675.283	100.75	678.504	100.59	753.498	110.80
Actual	472.820	71.55	534.153	80.21	540.730	80.67	512.429	75.97	628.378	92.40
Victoria										
Assessed difference	- 18.287	- 3.78	- 18.652	- 3.82	- 19.351	- 3.92	- 20.191	- 4.04	- 22.420	- 4.43
Expenses - Assessed	431.478	89.29	464.845	95.15	485.863	98.38	491.384	98.38	547.715	108.28
Actual	446.865	92.48	522.920	107.04	523.911	106.08	544.737	109.06	670.768	132.60
Queensland										
Assessed difference	- 19.271	- 5.25	- 19.946	- 5.31	- 20.274	- 5.27	- 19.499	- 4.96	- 20.500	- 5.11
Expenses - Assessed	322.238	87.83	351.966	93.66	373.139	97.02	383.206	97.47	432.083	107.61
Actual	311.916	85.01	315.912	84.07	338.910	88.12	300.825	76.51	349.707	87.09
Western Australia										
Assessed difference	3.132	1.64	3.341	1.73	3.559	1.81	3.572	1.79	4.535	2.23
Expenses - Assessed	181.259	94.71	194.996	100.70	204.523	104.11	207.861	104.22	233.489	114.94
Actual	172.805	90.30	185.748	95.92	194.985	99.25	229.330	114.98	212.415	104.57
South Australia										
Assessed difference	1.537	1.01	1.991	1.31	2.680	1.75	3.224	2.10	3.753	2.42
Expenses - Assessed	142.575	94.09	152.680	100.28	159.173	104.05	160.689	104.52	178.270	115.13
Actual	237.311	156.61	201.019	132.03	229.255	149.86	239.598	155.85	244.721	158.05
Tasmania										
Assessed difference	8.123	17.20	8.191	17.25	8.599	17.91	8.935	18.46	9.391	19.26
Expenses - Assessed	52.073	110.28	55.177	116.23	57.719	120.21	58.518	120.88	64.345	131.97
Actual	54.137	114.65	55.872	117.69	54.810	114.15	77.039	159.14	65.159	133.64
Australian Capital Territory										
Assessed difference	17.974	56.10	18.321	56.80	18.985	58.68	19.455	59.91	20.589	62.89
Expenses - Assessed	47.794	149.18	50.245	155.77	52.080	160.98	52.717	162.33	57.485	175.60
Actual	48.917	152.69	60.921	188.87	66.911	206.82	67.845	208.92	26.737	81.67
Northern Territory										
Assessed difference	15.368	77.56	15.628	78.83	16.181	81.35	16.862	83.69	17.668	86.13
Expenses - Assessed	33.810	170.64	35.250	177.80	36.530	183.64	37.501	186.11	40.789	198.84
Actual	72.960	368.23	78.847	397.71	94.799	476.57	98.579	489.23	109.788	535.20

Note: Note: ACT expenses may include municipal expenses. Attachment A, 2007 Update, *RFCS* for how State actual figures are compiled.