

NON-GOVERNMENT PRIMARY SCHOOL EDUCATION

- 1 This working paper describes how the Commission estimates what each State would need to spend to provide the average level of non-government primary education services to its residents. The development of the assessment method is discussed in Volume 4 of the 2004 Review Working Papers.

NON-GOVERNMENT PRIMARY SCHOOL EDUCATION SERVICES

- 2 These services are generally provided to children aged from 5 to about 11, but all States differ in the ages of children in primary education.
- 3 The Non-government primary school education category covers expenses on subsidies, grants and services provided to non-government systems or institutions that provide primary education services.
- 4 Australian and State governments do not provide these services themselves. They provide assistance to those who do. The Australian Government funding passes through the State budgets¹, but does not impact on them. Because of this, the Commission excludes the Australian Government payments from the category.
- 5 State governments spent \$1.083 billion (\$51.90 per capita) on non-government primary school education services in 2006-07. This was less than a quarter of the total cost of these services.

WHY EXPENSES ON NON-GOVERNMENT PRIMARY SCHOOL EDUCATION SERVICES DIFFER

- 6 The per capita amount spent by each State on non-government primary school education services varies considerably. The Commission seeks to understand why these figures vary. If the sole source of variation is different government policies, then the differences do not

¹ State governments do not determine either the level or distribution of Australian Government funding to providers of non-government primary education services.

impact on State GST shares. If the variation is due to circumstances beyond a States' control, the differences will be reflected in State GST shares. Table 1 shows Non-government primary school education expenses per capita for each State and the average overall.

Table 1 Non-government primary school education, expenses per capita, 2008 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
2002-03	27.64	24.43	65.74	46.65	23.00	46.05	20.69	66.14	36.32
2003-04	37.83	19.27	70.95	56.83	33.96	42.45	39.09	61.54	41.56
2004-05	41.78	20.64	75.98	77.80	44.16	29.68	50.42	81.31	47.20
2005-06	43.81	21.32	86.95	62.63	43.62	76.06	49.46	101.40	50.03
2006-07	45.01	23.01	91.61	65.89	43.50	64.49	49.13	103.93	51.90

Source Derived from Government Finance Statistics (GFS) data collated by the ABS using CGC coding rules (and adjustments).

Box 1: The Commission's concept of average

The Australian average expense per capita is calculated as the total expenses incurred by all States divided by total State population. This is a population weighted average. Population weighting gives equal weight to each Australian's experience. Since more Australians experience the New South Wales level of service, it carries more weight in the calculation of the average. 33 per cent of Australians reside in New South Wales and 1 per cent reside in the Northern Territory. Population weighting gives the experience of New South Wales (\$45.01 per capita in 2006-07) 33 times the weight of the experience of the Northern Territory (\$103.93 per capita). This approach means the average expense per capita is generally much closer to the New South Wales expense per capita than the Northern Territory expense per capita.

The concept of using this average also applies to the assessment of factors. If the Commission were trying to estimate the cost of providing services to Indigenous people living in remote areas, it would give most weight to the Northern Territory's experience (38 per cent of remote Indigenous people live in the Territory) and least to Tasmania (less than 0.2 per cent), Victoria and the ACT (0 per cent).

- 7 Differences in State expenses per capita are likely to reflect differences in:
 - the cost of resources provided to each student;
 - the number of resources provided to each student; and
 - the number of non-government primary students in State populations.

- 8 Table 2 shows a measure of the cost of resources (State expenses per teacher), a measure of the number of resources provided (teachers per student) and the number of non-government primary students per capita. It shows, for example, that Queensland provides a well above average level of funding to non-government primary education, despite experiencing a below average number of non-government students per capita.

- 9 However, numbers of non-government primary students are influenced by State policies². So, it would be inappropriate for the Commission to accept actual numbers of students as the driver of what States would need to spend to provide the average level of service.

Table 2 Possible determinants of state expense per capita, 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
(a) General indicators									
Expenses (\$m)	308.6	118.9	378.9	137.2	68.6	31.7	16.5	22.1	1 082.5
Teaching staff (FTE)	11 026	8 967	6 670	3 499	3 062	644	304	676	34 847
Students (FT)	185 840	140 968	105 926	59 105	50 043	10 914	11 775	5 288	569 859
Population ('000)	6 789	5 091	4 049	2 039	1 560	488	332	209	20 557
(b) Ratios									
Expense per capita (\$)	45.45	23.36	93.58	67.30	43.95	64.91	49.79	105.96	52.66
Expense per teacher (\$)	27 988	13 262	56 804	39 209	22 396	49 237	54 410	32 717	31 065
Teachers per '000 student	59	64	63	59	61	59	26	128	61
Students per '000 persons	27	28	26	29	32	22	35	25	28
(c) Comparison of State ratio to average ratio									
	%	%	%	%	%	%	%	%	%
Expense per capita	-13.7	-55.6	77.7	27.8	-16.5	23.3	-5.5	101.2	0.0
Expense per teacher	-9.9	-57.3	82.9	26.2	-27.9	58.5	75.1	5.3	0.0
Teachers per student	-3.0	4.0	3.0	-3.2	0.1	-3.5	-57.8	109.1	0.0
Students per capita	-1.3	-0.1	-5.6	4.6	15.7	-19.4	27.9	-8.6	0.0

Note: Year 7 students in QLD, WA, SA and NT are part of primary schools. NSW, VIC, TAS and ACT year 7 students are part of secondary schools and are not included in this table. See Figure 1 for more detail.

Source: Productivity Commission, *Report on Government Services 2008*, Chapter 4 Schools Education.

ABS GFS data and population data.

- 10 Table 3 provides information on some of the characteristics of each State's non-government primary education sector.
- 11 Table 4 shows States' shares of primary school age population (population aged 5 to 11) and non-government primary schools, enrolments and staff.

² Not only do State governments provide the regulatory framework for non-government providers, but their policies on the commencement age of students and the placement of Year 7 within the primary or secondary sector can influence the number of non-government primary students.

Table 3 Non-government primary school education, general indicators, 2006

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	No.	No.	No.	No.	No.	No.	No.	No.	No.
Population aged 5 to 11	618 609	453 757	393 847	193 679	134 979	44 882	28 768	23 929	1 892 450
Schools (a)	508	431	239	153	112	29	27	17	1 516
Full Time Enrolments									
All students	185 840	140 968	105 926	59 105	50 043	10 914	11 775	5 288	569 859
Indigenous	2 757	431	2 493	2 289	564	350	1 268	123	10 275
Staff (FTE)									
Teaching staff	11 026	8 967	6 670	3 499	3 062	644	304	676	34 847
Non-teaching staff	3 306	2 622	3 152	1 990	1 005	274	181	170	12 701
Average size									
School size	366	327	443	386	447	376	436	311	376
Class size	16.9	15.7	15.9	16.9	16.3	16.9	38.7	7.8	16.4

(a) Primary schools only, does not include primary/secondary combined schools or special schools.
 Note: Year 7 students in QLD, WA, SA and NT are part of primary schools. NSW, VIC, TAS and ACT year 7 students are part of secondary schools and are not included in this table. See Figure 1 for more detail.
 Source: Productivity Commission, *Report on Government Services 2008*, Chapter 4 Schools Education.

Table 4 Non-government primary school education, shares of indicators, 2006

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	%	%	%	%	%	%	%	%
Population aged 5 to 11	32.7	24.0	20.8	10.2	7.1	2.4	1.5	1.3
Schools	33.5	28.4	15.8	10.1	7.4	1.9	1.8	1.1
Full Time Enrolments								
All students	32.6	24.7	18.6	10.4	8.8	1.9	2.1	0.9
Indigenous	26.8	4.2	24.3	22.3	5.5	3.4	12.3	1.2
Staff (FTE)								
Teaching staff	31.6	25.7	19.1	10.0	8.8	1.8	0.9	1.9
Non-teaching staff	31.6	25.7	19.1	10.0	8.8	1.8	0.9	1.9

Note: Year 7 students in QLD, WA, SA and NT are part of primary schools. NSW, VIC, TAS and ACT year 7 students are part of secondary schools and are not included in this table. See Figure 1 for more detail.

12 State per capita funding of non-government school services is affected by:

- the structure of school education;
- the number of non-government primary school enrolments; and
- the per student cost of non-government primary schools.

13 A State may fund non-government primary education services at more or less than the average level. The Commission seeks measures of need that are not influenced by State policies.

Structure of school education

14 The structure of school education varies across States. States divide school education into compulsory and non-compulsory components based on age, not grade. School education is compulsory in all States for children between 6 and 14 years of age. Figure 1 shows the structure of school education across Australia.

Figure 1 Structure of primary and secondary schooling, 2006

<i>Level</i>	<i>NSW, Vic, Tas, ACT</i>	<i>Qld, WA, SA, NT^a</i>
Year 12	SECONDARY	SECONDARY
Year 11		
Year 10		
Year 9		
Year 8		
Year 7		
Year 6		
Year 5		
Year 4		
Year 3		
Year 2		
Year 1		
Pre-year 1	Kindergarten (NSW, ACT) Preparatory (Vic, Tas)	Preparatory (Qld) ^b Pre-primary (WA) Reception (SA) ^c Transition (NT) ^d

- (a) In some places in the NT, secondary schooling begins at Year 7.
 - (b) In QLD a preparatory year of schooling for pre-Year 1 (which will replace the part-time preschool program) is being progressively phased in prior to 2007 when a half cohort of students will commence to align with the change to the compulsory school starting age in 2008.
 - (c) SA has an intake for each term.
 - (d) The NT has an intake for terms 1 to 3 of its 4 terms.
- Source Productivity Commission, *Report on Government Services 2008*, Part B Education, Chapter 4 Schools Education, page 4.6.

15 A State’s decision on the age at which children can commence primary school education, the compulsory ages and whether Year 7 is placed within primary or secondary schools are examples of policy decisions which affect the cost of providing non-government primary education funding. The Commission’s calculations are based on the average structure of schooling.

16 At the beginning of August 2006, there were 1 516 non-government primary schools in Australia. The Northern Territory had the highest proportion of very small primary schools, those with 20 or fewer students (20.5 per cent).³

³ Productivity Commission, *Report on Government Services 2008*, Chapter 4 Schools Education.

- 17 Settlement patterns and the age distribution of the population are examples of circumstances which affect the distribution of schools by size and level and which are beyond the control of States.

Number of enrolments

- 18 At the beginning of August 2006, there were 569 859 full time non-government primary school enrolments in Australia.⁴
- 19 The proportion of children aged 5 to 11 in the total population and the proportion of those attending non-government primary schools vary between the States. They are examples of circumstances that affect the number of enrolments in non-government primary schools and which are beyond the control of States. These differences are shown in Table 5.

Table 5 Proportion of population aged 5 to 11 and proportion of primary students attending non-government schools, 2006

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	%	%	%	%	%	%	%	%	%
Population	9.1	8.9	9.7	9.5	8.6	9.2	8.7	11.5	9.2
Non-govt. Students	30.0	31.1	26.9	28.3	31.9	23.9	38.0	21.0	29.4

Source: Productivity Commission, *Report on Government Services 2008*, Chapter 4 Schools Education.

The per student cost of non-government schools

- 20 In the 2004 Review, the Commission found most States set the level of funding provided to non-government schools by reference to the total per student cost for government schools (ranging between 20.0 per cent and 26.5 per cent of that figure). This link between government school costs and the total funds made available to non-government schools means:
- the unit cost disabilities affecting non-government unit costs are related to the influences which impact on the relative levels of government school costs rather than those which impact on actual non-government school costs; and
 - from a State’s perspective, the per student cost of non-government schools is a proportion of the per student cost of government schools.
- 21 The percentage differs across States and is an example of a policy decision which affects the cost of providing non-government primary education services.

⁴ Productivity Commission, *Report on Government Services 2008*, Chapter 4 Schools Education.

ASSESSING STATES' COSTS OF PROVIDING NON-GOVERNMENT PRIMARY EDUCATION SERVICES

The equalisation task

- 22 The Commission aims to identify why some States spend more on non-government primary school education services. It uses this information to estimate what it would cost each State to provide funding to non-government primary education services based on the average policy and practice of all States. This estimate is called a State's *assessed expense*.
- 23 The process the Commission follows is twofold. First, it starts with the average expense that captures the average policies, efficiency and circumstances of all States. Second, it attempts to quantify how a State varies from the average in some underlying characteristic (for example, the proportion of its student population attending non-government schools) and what effect such a variation could have on its total expenses. Bringing them together shows how much a State could be expected to vary from the average, solely because of its innate characteristics. The resulting estimate is its assessed expense.
- 24 This section discusses how the Commission identifies these characteristics, the following sections discuss how it measures them.
- 25 The Commission identifies the major disabilities that cause States to have different expenses per capita and estimates their financial impact on either:
- assessed service use; or
 - assessed unit costs.

Assessed service use

- 26 For non-government primary education services, the disabilities which affect assessed service use are:
- the proportion of people of primary school age; and
 - the proportion of primary students attending non-government schools.

Assessed unit costs

- 27 Most States determine the level of funding to provide to non-government schools by:
- setting the per student payment as a percentage (ranging from 20.0 per cent to 26.5 per cent) of the total per student cost for government schools; and
 - multiplying that per student payment by the number of non-government enrolments.
- 28 The implication is that assessed unit costs for non-government school costs are related to the per student costs of government schools. The Commission reflects this situation by assessing a non-government schools costs factor and basing it on the average per student cost of government primary schools.

OVERVIEW OF THE METHOD FOR DETERMINING ASSESSED EXPENSES

- 29 The box below provides a brief step by step overview of the framework the Commission uses to determine each States' assessed expenses for non-government primary education.

Box 2: Assessment framework

Step 1: Derive the average expense per capita

This is done by dividing the total expenses incurred by all States by total State population. This figure captures the average financial impact of the policies, practices and particular State circumstances that impact on the cost of delivering the service across the nation.

Step 2: Identify different types of expenses

The Commission examines the service to determine whether parts of the total expense are affected by different disabilities. If the differences are material, the expense is divided into component parts to ensure that the various disabilities are accurately matched with the expenses they affect. The different expense types identified are referred to as components. To identify components, the Commission analyses information and data on the nature of the service (that is, what States do and how they do it), States' policies concerning the service and submissions. The proportion of total expense attributable to a particular component is referred to as the component weight. The Commission uses GFS data, State public accounts, annual reports and other data to estimate these proportions.

Step 3: Identify the disabilities for each component

The Commission identifies the disabilities that affect each component and the extent to which they are beyond the control of States. To identify disabilities, the Commission analyses information and data on the nature of the service (that is, what States do and how they do it), States' policies concerning the service, submissions and other publications.

Step 4: Measure the size of each influence

The Commission estimates the relative financial impact of each influence on each State's cost of providing the service, but only to the extent it is beyond the control of States. The relative impact is measured by relating the State's experience to the average experience. The relative impacts are presented as factors. A factor measures the percentage increase (or decrease) that the influence has on a State's cost of providing the service. There is at least one factor assessment for each component. In most cases there is more than one.

Step 5: Derive component factors

The factors calculated for each cost component are combined together to derive a component factor. If the Commission considers that one factor compounds with another, it multiplies them. If the Commission considers that two factors are independent of one another, it adds them.

Step 6: Derive category factors

The component factors are weighted to reflect the importance of the component in the category. This is done by multiplying each component factor by its component weight. The category factor is calculated by adding the weighted component factors together. The category factor represents the Commission's estimate of the combined financial impact of all the disabilities on a State's cost of providing the service.

Step 7: Derive assessed expense per capita

Each State's assessed expense per capita is calculated by applying its category factor to the average expense per capita. A State's assessed expense per capita is the Commission's estimate of how much it would cost the State (per capita) to provide the average level of service.

The difference between a State's assessed expense per capita and the average expense per capita is a measure of the financial impact of circumstances beyond its control. The difference between its assessed expense per capita and its actual expense per capita is a measure of the financial impact of circumstances within its control.

DERIVING COMPONENTS AND COMPONENT WEIGHTS

- 30 The Commission examines the service to decide whether parts of the total expense are affected by different disabilities. If the differences are material, the expense is divided into component parts to ensure that the various disabilities are accurately matched with the expenses they affect. The different expense types identified are referred to as *components*. The proportion of total expense attributable to a particular component is referred to as the *component weight*.
- 31 The Commission identified two components for non-government primary school education and calculated the proportion of expenses that each cost component contributed to total non-government primary education costs. The components and component weights are presented in Table 6.

Table 6 Components and component weights, 2006-07

	\$m	%
Fixed Costs	10.420	0.96
Schools	1 072.107	99.04
Total	1 082.527	100.00

- 32 The component weight for fixed costs was calculated directly. For 2006-07, fixed costs were calculated at \$10.4 million.⁵ The corresponding component weight is calculated by dividing this amount by total category expenses. The schools component weight was calculated as the residual amount.
- 33 The Commission identifies the disabilities affecting each component. They are, in the Commission’s assessment, the reasons why States spend more (or less) than the average expense per capita to provide the average level of service. The Commission presents these disabilities as factors, which are explained in further detail in Box 3.
- 34 Table 7 lists each component and associated factors for non-government primary education services.

Box 3: Commission factors

A factor is the Commission’s estimate of the relative financial impact a particular influence has on a State’s cost of providing a service. Factors are only calculated for the part of the influence that is beyond the control of States.

A factor value of 1 means the Commission considers the State could provide the average level of service by spending the average expense per capita. A factor value of more than 1 means the Commission considers the State will have to spend more than the average expense per capita to provide the average level of service. A factor value of less than 1 means the Commission considers the State can provide the average level of service by spending less than the average expense per capita.

⁵ The Administrative Scale section of Volume 4 of these working papers describes how the Commission determines the size of the administrative scale costs.

Table 7 Components and factors, 2008 Update

Component	Component weight	Factors	Influence measured by factor
Fixed costs	0.96%	Administrative scale	Recognises the unavoidable costs each State incurred to provide the policy and administrative infrastructure necessary to provide the minimum unavoidable service, regardless of the size of the task.
		Fixed costs input costs	Recognises the differences between States in the prices of head office labour, accommodation, and electricity used in providing services.
Schools	99.04%	Socio-demographic composition	Based on the actual number of students other than those in Year 7 or those aged 5 and under. Notional numbers of students are used for Year 7 and students aged 5 and under.
		Non government schools costs	Based on differences in the average per student cost of government primary schools.

35 An explanation of the reasoning behind each factor assessment in the Non-government Primary School Education category and the method of assessment are presented below.

DERIVING THE FIXED COST COMPONENT FACTOR

36 The Commission considers the amount of fixed costs required to be spent by each State is influenced by administrative scale and differences in the price of labour, accommodation and electricity.

Administrative scale factor

37 The administrative scale factor is assessed to recognise the unavoidable cost each State incurs to provide central administrative services to plan, regulate, and subsidise education services, regardless of the size of its population.

38 The disabilities for administrative scale factors are assessed by a common method. The method is discussed in Volume 7 of the 2004 Review working papers under the section for common factors.

39 For 2006-07, the level of unavoidable fixed cost assessed for this category is \$1.292 million for each State. Another \$0.087 million is assessed for the Northern Territory because its high proportion of indigenous students necessitates dual planning and administrative structures. For this category, the ACT is assessed to have the same disability as the six States.

40 Table 8 shows the amount assessed for each State and the per capita equivalent. It also shows the administrative scale factor that is calculated by dividing each States' per capita amount by the average per capita amount.

Table 8 Non-government primary school education, calculation of the administrative scale factor, 2006-07

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Fixed cost amount	\$m	1.292	1.292	1.292	1.292	1.292	1.292	1.292	1.292	10.334
Dual policy amount	\$m	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.087	0.087
Fixed costs	\$m	1.292	1.292	1.292	1.292	1.292	1.292	1.292	1.378	10.420
Population	m	6.856	5.168	4.136	2.082	1.577	0.492	0.337	0.213	20.859
Fixed costs per capita	\$pc	0.19	0.25	0.31	0.62	0.82	2.63	3.84	6.48	0.50
Factor		0.37715	0.50037	0.62523	1.24190	1.64000	5.25924	7.67972	12.96474	1.00000

41 The administrative scale factor is revised annually by adjusting the unavoidable fixed cost to reflect changes in the labour price index (80 per cent weight) and consumer price index (20 per cent weight).

Fixed costs input costs factor

42 The fixed costs input costs factor is assessed to recognise interstate differences, beyond the control of States, in the price of labour, accommodation and electricity used in providing administrative services.

43 The disabilities for the fixed costs input costs factors are assessed by a common method. The method is discussed in Volume 7 of the 2004 Review working papers under the section for common factors.

44 The fixed costs input costs factor depends on the proportion of fixed costs expenses deemed to relate to the price of labour, accommodation expenses and electricity expenses. For this component, these are 80% for the price of labour, 2% for accommodation and 0.5% for electricity. Table 9 shows:

- the price differentials for labour (wages), accommodation and electricity assessed by the Commission. For example, the average price of labour in New South Wales is, for reasons beyond its control, 3.0 per cent higher than average;
- the proportion of fixed costs expenses that relate to labour, accommodation and electricity expenses;
- a total price differential — obtained by weighting each price differential by the proportion of the fixed costs expenses it influences; and
- the 2006-07 fixed costs input costs factor — which is one plus the total price differential.

Table 9 Derivation of fixed costs input costs factor, 2006-07

	Prop'n	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	%	%	%	%	%	%	%	%	%
Wages	80.0	3.0	-0.5	-2.7	-1.4	-2.2	-4.1	2.5	2.5
Accommodation	2.0	5.0	-19.6	29.4	13.2	-34.2	-41.6	-1.1	-35.8
Electricity	0.5	-1.9	-1.9	-1.9	13.6	2.6	-40.3	-1.9	90.1
Balance of expenses	17.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total price ^(a)		2.5	-0.8	-1.6	-0.8	-2.4	-4.3	1.9	1.8
Factor		1.02528	0.99212	0.98387	0.99199	0.97579	0.95664	1.01939	1.01769

(a) May not add due to rounding.

Box 4: Weighting factors

The Commission weights a factor when it is to be applied to all of a component expense but it only affects part of that expense.

As an example, the fixed costs input costs factor is to be applied to all of the administrative scale expenses, but it only affects the price of labour (80 per cent), accommodation (2 per cent) and electricity (1/2 per cent) parts of these expenses. So, the Commission weights each subfactor according to the share of expenses it affects.

The formula is:

$$\text{Weighted factor} = \sum_i \text{Weight}_i * \text{subfactor}_i + (100\% - \sum_i \text{Weight}_i) * \text{EPC factor}$$

Where: i = the number of subfactors. For example, labour, accommodation and electricity

Weight_i = the share of expenses affected by the relevant subfactor

$(100\% - \sum_i \text{Weight}_i)$ = the share of expenses not affected by any of the subfactors.

For the fixed costs input costs factor, the formula is:

$$\begin{aligned} \text{Weighted factor} &= 80\% * \text{labour subfactor} + 2\% * \text{accommodation subfactor} \\ &+ 0.5\% * \text{electricity subfactor} + 17.5\% * \text{EPC factor} \end{aligned}$$

Weighting factors according to the proportion of expenses they affect is important. Weighting factors allows the Commission to combine them. After weighting, a percentage increase in one factor has the same impact on expenses as the same percentage increase in any other factor.

- 45 The fixed costs input cost factor is revised annually to allow for changes in the prices of labour, accommodation and electricity.

FIXED COSTS COMPONENT FACTOR

- 46 The fixed costs component factor is calculated using the formula:

$$\text{Fixed costs component factor} = [\text{administrative scale} * \text{fixed costs input costs}]$$

- 47 The Commission combines these factors multiplicatively because it recognises that States will vary around their administrative scale assessment due to differences in the assessed unit cost. For example, Table 9 showed price differences added 2.5 per cent to New South Wales' costs, so it would cost New South Wales 2.5 per cent more than its

administrative scale assessment (\$1.292 million) to finance the minimum structures required to provide State services.

48 Table 10 shows the derivation of the component factor. It shows that it is the same as a component factor obtained by multiplying the administrative scale and fixed costs input costs factors.

49 The component factor is calculated by:

- estimating the impact of differences in the unit cost of inputs between States on the fixed costs assessed in Table 8;
- adding this impact to States' fixed costs;
- dividing each State's total fixed costs by its population; and
- calculating the component factor by dividing each States' per capita figure by the average per capita figure.

Table 10 Non-government primary school education, calculation of fixed costs component factor, 2006-07

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
A. Fixed costs amount (from Table 8)										
Amount	\$m	1.292	1.292	1.292	1.292	1.292	1.292	1.292	1.378	10.420
B. Differences in price of inputs (from Table 9)										
Difference	%	2.5	-0.8	-1.6	-0.8	-2.4	-4.3	1.9	1.8	0.0
C. Impact of price differences (A * B)										
Amount	\$m	0.033	-0.010	-0.021	-0.010	-0.031	-0.056	0.025	0.024	0.000
D. Total fixed costs (A + C)										
Amount	\$m	1.324	1.282	1.271	1.281	1.260	1.236	1.317	1.403	10.420
Population	m	6.856	5.168	4.136	2.082	1.577	0.492	0.337	0.213	20.859
E. Total fixed costs per capita										
Expenses per capita	\$pc	0.19	0.25	0.31	0.62	0.80	2.51	3.91	6.59	0.50
F. Factor (E / E_{Aust})										
Factor		0.38669	0.49643	0.61514	1.23195	1.60029	5.03121	7.82864	13.19405	1.00000
G. Comparison with assessed component factor (administrative scale factor * fixed costs input costs factor)										
Assessed factor		0.38669	0.49643	0.61514	1.23195	1.60029	5.03121	7.82864	13.19405	1.00000
Difference		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Note: The component factor shown here is the component factor after it has been scaled to ensure total assessed expenses equals average expenses (see Box 7). The component factor shown in Table 21 is the component factor prior to scaling.

DERIVING THE SCHOOLS COMPONENT FACTOR

50 The Commission considers the level of funding each State provides to non-government primary schools to be influenced by the number of people attending those schools and differences in:

- assessed use. Use of services can be influenced by State policies on the commencement age and placement of Year 7; and
- assessed unit costs. This is based on the per student cost of government primary schools.

Socio-demographic composition factor

51 A socio-demographic composition (SDC) factor is assessed to take account of State differences in the use of services. The use of services is measured by adjusting actual enrolments to remove the influence of State policies.

Box 5: Socio-demographic composition factor

Step 1: Adjust ABS actual enrolments to make them comparable for funding purposes

The number of enrolments for each State is obtained from the ABS. The enrolments are adjusted to obtain comparable numbers of non-government primary school enrolments that each State must fund.

Step 2: Remove the influence of State policies on the commencement age of schooling

State policies on the age at which children can commence schooling affect actual enrolments aged 5 and under. Replace actual enrolments aged 5 and under with notional enrolments aged 5 and under to remove the influence of State policies.

Step 3: Add in diplomatic children aged 5 and under

The ACT provides primary education services to children aged 5 and under from diplomatic families. Children aged 5 and under from diplomatic families are not included in the standardisation step above because overseas diplomats are not included in the Census data used to calculate notional enrolments in Step 2. This ensures the cost associated with the provision of services to these children remains with the ACT.

Step 4: Remove the influence of State policies on the structure of schooling

State policies on the placement of Year 7 in the primary or secondary sector affect the actual enrolments of Year 7 students in primary education. Replace actual Year 7 enrolments with notional Year 7 enrolments to reflect the average policy on the placement of Year 7.

Adjusting ABS enrolment data

52 The ABS's definition of primary school enrolments differs from the Commission's definition. The adjustments made to ABS actual enrolment data are:

- The CGC used Department of Education, Science and Training data for Pre-year 1 students with this data applied as an adjustment. However, from 2007 onwards, the adjustment no longer applies.
- The ABS classifies Northern Territory students in the former 'mission schools' as non-government students. The Commission classifies them as government students because they are fully funded by the Northern Territory government.

Use of services

53 The compulsory years of schooling are assumed to be 6 to 14. Since all States apply a common policy of compulsory schooling for children in this age range, actual enrolments can be used as the measure of use.

54 This is not the case with the non-compulsory years of schooling. Actual enrolments in these years are influenced by State policies. The Commission adjusts the actual enrolments to reflect average policy. The State policies operating in this area are:

- differences in the commencement age of students; and
- the structure of schooling.

55 A separate adjustment is made for children aged 5 and under from diplomatic families. This adjustment ensures that their use of services is attributed to the ACT.

56 ***The commencement age of students.*** Actual enrolments aged 5 and under are influenced by State policies on the age at which students can commence schooling. The Commission applies the average policy by imposing the average participation rate for children aged 5 and under on each State. It does this by:

- calculating the average participation rate for 5 and under. This is total enrolments aged 5 and under divided by total population aged 5;
- estimating each State's notional enrolments aged 5 and under by applying the average participation rate to its population aged 5; and
- apportioning each State's notional enrolments aged 5 and under between its government and non-government sectors using its actual proportion of children aged 5 and under attending government schools.

57 This calculation for 2006-07 is shown in the Table 11. The adjustment:

- increases the enrolments in States which experience below average participation rates. Their actual enrolments are replaced with a higher notional enrolment; and
- reduces the enrolments in States which experience above average participation rates. Their actual enrolments are replaced with a lower notional enrolment.

Table 11 Calculation of adjustment for commencement age of students, 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Actual enrolments 5 and under									
A. Government	51 253	28 550	35 925	19 180	12 846	2 360	2 013	2 563	154 687
Non-government	20 194	12 901	16 269	7 095	5 569	732	1 165	527	64 450
B. Total	71 447	41 451	52 193	26 275	18 415	3 092	3 178	3 089	219 137
C. Proportion of enrolments aged 5 and under government sector (A/B)									
Difference	71.7%	68.9%	68.8%	73.0%	69.8%	76.3%	63.3%	83.0%	70.6%
D. Population aged 5									
Population	86 047	63 267	54 842	26 535	18 417	6 065	3 966	3 498	262 637
E. Average participation rate (B_{Aust}/D_{Aust})									83.4%
F. Notional enrolments (D*E)									
Total	71 795	52 788	45 759	22 140	15 367	5 060	3 309	2 919	219 137
G. Apportion notional enrolments between sectors (F*C)									
Government	51 503	36 359	31 496	16 162	10 720	3 862	2 096	2 421	154 618
Non-government	20 293	16 430	14 263	5 978	4 647	1 198	1 213	497	64 519
Total	71 795	52 788	45 759	22 140	15 367	5 060	3 309	2 919	219 137
H. Difference between notional and actual enrolments (G-A)									
Government	250	7 809	- 4 429	- 3 018	- 2 126	1 503	83	- 141	- 69
Non-government	99	3 529	- 2 006	- 1 116	- 922	466	48	- 29	69
Total	349	11 338	- 6 435	- 4 134	- 3 048	1 969	132	- 170	0

58 **Diplomatic children in non-compulsory years of schooling.** Children aged 5 and under from diplomatic families use primary schools in the ACT. Adjusting for this ensures their use of primary education services is attributed to the ACT.

59 For the ACT, the actual number of diplomatic children aged 5 and under is added to its notional enrolment figures for both government and non-government⁶ schools. The 2006-07 adjustment for non-government primary schools is 15 children.

60 **The structure of schooling.** Actual enrolments in primary schools are affected by whether States place Year 7 in their primary sector or their secondary sector. The Commission applies the average policy by assuming each State has the average proportion of Year 7 students in its primary schools. It does this by:

- calculating the average proportion of Year 7 students in primary schools;

⁶ Children aged 5 and under from diplomatic families use primary schools in the ACT. To ensure their use of these services is attributed to the ACT, they are not included in the enrolment or population data used to standardise enrolments for children aged 5 and under. They are added to the ACT's assessed enrolment figures.

- estimating each State's notional Year 7 students in primary schools by applying the average proportion to its actual number of Year 7 students; and
- apportioning each State's Year 7 enrolments between the government and non-government sectors using each State's actual proportion of Year 6 students attending government schools.⁷

61 This calculation for 2006-07 is shown in Table 12. The adjustment:

- increases the primary school enrolments for States which place Year 7 in secondary schools, because it replaces their nil actual enrolments with a notional enrolment; and
- reduces the primary school enrolments for States which place Year 7 in primary schools, because it replaces their actual enrolments with a lower notional enrolment.

⁷ The Year 6 proportions are used in preference to the Year 7 proportions. The Commission accepts that a major decision point for parents in the choice between government and non-government education occurs when the child is about to commence secondary school. The Commission accepts the actual proportion of Year 7 enrolments in non-government schools is affected by the placement of Year 7 within the school structure.

Table 12 Calculation of adjustment for school structure, 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Actual enrolments Year 7									
(i) Primary									
A. Government	0	0	41 229	20 048	12 976	0	0	2 285	76 537
B. Non-government	0	0	16 180	8 539	6 591	0	0	685	31 993
(ii) Secondary									
Government	54 711	39 254	0	0	0	4 646	2 510	0	101 121
Non-government	33 175	27 224	0	0	0	2 193	2 378	0	64 969
C. Total	87 886	66 478	57 408	28 586	19 567	6 839	4 888	2 969	274 619
D. Average proportion of enrolments in primary schools $(A_{Aust}+B_{Aust})/C_{Aust}$									39.5%
E. Notional Year 7 enrolments in primary schools (C*D)									
Number	34 732	26 272	22 688	11 297	7 733	2 703	1 932	1 173	108 530
Actual Year 6 enrolments									
F. Government	61 019	44 600	40 943	20 015	13 123	5 026	2 742	2 556	190 022
Non-Government	26 928	21 273	15 587	8 109	6 413	1 773	1 870	575	82 527
G. Total	87 947	65 873	56 529	28 124	19 536	6 799	4 612	3 130	272 549
H. Proportion of of Year 6 enrolments in government sector (F/G)									
Proportion	69.4%	67.7%	72.4%	71.2%	67.2%	73.9%	59.5%	81.6%	69.7%
I. Apportion notional year 7 enrolments between sectors (E*H)									
Government	24 098	17 788	16 432	8 040	5 194	1 998	1 148	958	75 656
Non-Government	10 635	8 484	6 256	3 257	2 538	705	783	215	32 874
Total	34 732	26 272	22 688	11 297	7 733	2 703	1 932	1 173	108 530
J Difference between notional and actual enrolments (I-A)									
Government	24 098	17 788	- 24 796	- 12 008	- 7 782	1 998	1 148	- 1 327	- 881
Non-Government	10 635	8 484	- 9 924	- 5 281	- 4 052	705	783	- 469	881
Total	34 732	26 272	- 34 720	- 17 289	- 11 834	2 703	1 932	- 1 796	0

62 Table 13 summarises the changes made to actual enrolments for each policy influence for 2006-07. The notional enrolment figures in this table are actual enrolments adjusted to remove the effects of:

- differences in definition, placing enrolments on a comparable basis; and
- differences in State policies.

Table 13 Non-government primary school education, actual and notional enrolments, 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
A. Actual enrolments									
Students aged 5 and under	20 194	12 901	16 269	7 095	5 569	732	1 165	527	64 450
Diplomatic students 5 and under	0	0	0	0	0	0	15	0	15
Compulsory years of schooling	166 115	128 588	85 967	44 094	38 230	10 287	10 685	3 463	487 427
Year 7	0	0	16 180	8 539	6 591	0	0	685	31 993
Total	186 309	141 489	118 415	59 727	50 389	11 019	11 865	4 674	583 885
B. Notional enrolments									
Students aged 5 and under	20 293	16 430	14 263	5 978	4 647	1 198	1 213	497	64 519
Diplomatic students 5 and under	0	0	0	0	0	0	15	0	15
Compulsory years of schooling	166 115	128 588	85 967	44 094	38 230	10 287	10 685	3 463	487 427
Year 7	10 635	8 484	6 256	3 257	2 538	705	783	215	32 874
Total	197 042	153 502	106 486	53 329	45 415	12 189	12 696	4 176	584 834
C. Differences (B - A)									
Students aged 5 and under	99	3 529	-2 006	-1 116	- 922	466	48	- 29	69
Diplomatic students 5 and under	0	0	0	0	0	0	0	0	0
Compulsory years of schooling	0	0	0	0	0	0	0	0	0
Year 7	10 635	8 484	-9 924	-5 281	-4 052	705	783	- 469	881
Total	10 733	12 013	-11 930	-6 397	-4 974	1 171	831	- 498	950

63 Table 14 and Table 15 show actual and notional government primary enrolments for the 2008 Update.

Table 14 Non-government primary school education, actual enrolments, 2008 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
2001-02	178 783	139 364	97 107	54 859	45 759	10 404	11 186	4 352	541 813
2002-03	180 730	139 425	99 811	54 488	47 054	10 323	11 367	4 282	547 479
2003-04	182 600	139 154	104 393	55 340	48 196	10 398	11 510	4 401	555 990
2004-05	184 506	139 491	109 658	56 567	49 186	10 573	11 651	4 515	566 145
2005-06	185 591	140 335	114 739	58 192	49 876	10 785	11 735	4 589	575 840
2006-07	186 309	141 489	118 415	59 727	50 389	11 019	11 865	4 674	583 885

Table 15 Non-government primary school education, notional enrolments, 2008 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
2001-02	188 793	150 366	88 244	47 923	41 312	11 463	11 996	4 106	544 204
2002-03	190 381	150 156	90 439	48 589	42 452	11 341	12 114	4 050	549 522
2003-04	192 457	150 122	94 228	49 453	43 486	11 499	12 333	4 053	557 631
2004-05	194 845	150 641	98 829	50 536	44 322	11 658	12 459	4 070	567 359
2005-06	195 976	151 809	103 591	52 015	44 831	11 896	12 522	4 138	576 777
2006-07	197 042	153 502	106 486	53 329	45 415	12 189	12 696	4 176	584 834

64 The socio-demographic composition factor is calculated by:

- dividing the notional number of non-government primary school enrolments by the mean resident population; and
- dividing each State's per capita figure by the average per capita figure.

65 Table 16 shows the derivation of the socio-demographic composition factor for 2006-07.

Table 16 Derivation of socio-demographic composition factor, 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aus
A. Notional enrolments									
Enrolments	197 042	153 502	106 486	53 329	45 415	12 189	12 696	4 176	584 834
B. Population									
Population	6.856	5.168	4.136	2.082	1.577	0.492	0.337	0.213	20.859
Notional enrolments per capita (A / B)									
Ratio	0.02874	0.02971	0.02575	0.02561	0.02880	0.02479	0.03771	0.01962	0.02804
Factor (C / C_{Aust})									
Factor	1.02507	1.05947	0.91835	0.91355	1.02735	0.88427	1.34490	0.69988	1.00000

66 The socio-demographic composition factors are revised annually to allow for changes in enrolments and State populations. Table 17 shows the assessed factors for the 2007 Update.

Table 17 Non-government primary school education, socio-demographic composition factor, 2008 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
2002-03	1.02999	1.10403	0.86404	0.90219	1.00108	0.85931	1.34516	0.73085	1.00000
2003-04	1.03262	1.08768	0.87596	0.90223	1.01643	0.85899	1.35754	0.72431	1.00000
2004-05	1.03408	1.07237	0.89256	0.90287	1.02396	0.85921	1.35502	0.71196	1.00000
2005-06	1.02886	1.06281	0.91190	0.90940	1.02394	0.86797	1.34330	0.70665	1.00000
2006-07	1.02507	1.05947	0.91835	0.91355	1.02735	0.88427	1.34490	0.69988	1.00000

Non-government school cost factor

- 67 The non-government schools costs factor recognises differences in the per unit student payment applicable to non-government students. It is based on the assessed per student cost for government primary schools.
- 68 With the availability of 2006 Census data, these data have now been included in the calculation of this factor for the years 2004-05 through 2006-07, while 2001 Census data have continued to be used in calculating the factor for the earlier assessment years.

Box 6: Non-government schools costs factor

Step 1: Calculate the assessed cost per student for non-government primary school education

The cost per student is calculated by dividing a State’s assessed expenses for government primary school education by its total government primary school notional enrolments. The non-government school costs factor is calculated as the State’s per capita figure divided by the average per capita figure.

- 69 The non-government schools costs factor calculation is shown in Table 18.

Table 18 Non-government primary school education, calculation of the non-government school costs factor, 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aus
A. Assessed expenses for government primary schools									
Expense (\$m)	3 590	2 535	2 149	1 082	736	286	155	235	10 769
B. Government Primary Education notional enrolments									
Enrolments	457 340	337 734	276 847	134 944	96 693	37 862	20 204	19 371	1 380 994
C. Expenses per enrolment (A / B)									
Ratio	7 850	7 507	7 764	8 015	7 614	7 556	7 672	12 138	7 798
D. Factor (C / C_{Aust})									
Unscaled factor	1.00670	0.96265	0.99563	1.02784	0.97642	0.96905	0.98384	1.55664	1.00000
Scaled factor	1.00895	0.96481	0.99786	1.03014	0.9786	0.9712	0.986	1.5601	1.00000

(a) Factors are scaled so that the sum of assessed expenses equals average expenses.

Box 7: Scaling factors

Some factor assessments cause total assessed expenses to move away from average expenses. To prevent gaps opening up in the assessments, the Commission scales these factors to ensure total assessed expenses equals average expenses. It also scales component factors.

The scaling procedure is to:

- (i) apply the factor to mean resident population;
- (ii) calculate the total weighted population by aggregating across States;
- (iii) divide total mean resident population by the total weighted population; and
- (iv) scale each State’s factor using this ratio.

70 The non-government school costs factors are revised annually to allow for changes in the assessed per student cost for government primary schools, non-government enrolments and population. Table 19 shows the assessed scaled factors for the 2008 Update.

Table 19 Non-government schools costs factor, 2008 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
2002-03	1.01504	0.96824	0.98684	1.02287	0.97506	0.97858	0.99010	1.56231	1.00000
2003-04	1.01323	0.96856	0.98879	1.02281	0.97803	0.97892	0.99012	1.56132	1.00000
2004-05	1.01393	0.96945	0.98765	1.02056	0.97884	0.97343	0.98764	1.57270	1.00000
2005-06	1.01251	0.96773	0.98956	1.02376	0.98106	0.97475	0.98818	1.57020	1.00000
2006-07	1.00895	0.96481	0.99786	1.03014	0.97860	0.97122	0.98604	1.56013	1.00000

Schools component factor

71 The schools component factor represents the combined impact of assessed service use and assessed unit costs on schools expenses. The socio-demographic composition factor captures the assessed service use and the non-government schools costs factor captures differences in the assessed unit costs of non-government primary students.

72 Table 20 shows the derivation of the schools component factor for 2006-07. It also compares the schools component factor with one calculated using the formula:

$$\text{Schools component factor} = [\text{socio-demographic composition} * \text{non-government schools costs factor}]$$

73 The calculation shows that the socio-demographic composition and non-government schools costs factors should be combined by multiplication.

Table 20 Calculation of schools component factor, 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
A. Assessed service use (notional enrolments from Table 15)									
Enrolments	197 042	153 502	106 486	53 329	45 415	12 189	12 696	4 176	584 834
B. Differences in prices of the per student payment									
Price difference	0.7	-3.7	-0.4	2.8	-2.4	-3.1	-1.6	55.7	0.0
C. Impact of differences in prices (A * B)									
Enrolments	1 320	- 5 733	- 466	1 485	- 1 071	- 377	- 205	2 324	- 2 723
D. Notional enrolments (A + C)									
Enrolments	198 362	147 769	106 020	54 814	44 344	11 812	12 491	6 500	582 111
E. Population									
Population (m)	6.856	5.168	4.136	2.082	1.577	0.492	0.337	0.213	20.859
F. Enrolments per capita (D / E)									
Enrolments per capita	0.02893	0.02860	0.02564	0.02633	0.02813	0.02403	0.03710	0.03055	0.02791
G. Factor (F / F _{Aust})									
Factor ^(a)	1.03677	1.02467	0.91861	0.94337	1.00782	0.86091	1.32935	1.09456	1.00000

(a) This is the component factor after it has been scaled to ensure total assessed expenses equals average expenses (see Box 7). The component factor shown in Table 21 is the component factor prior to scaling.

CALCULATING CATEGORY FACTORS

74 Category factors measure the combined impact on a State of those circumstances that are beyond its control and that impact on its cost of providing non-government primary education funding. Category factors are calculated by:

- weighting the component factors to reflect the importance of the component in the category. This is done by multiplying each component factor by its component weight; and
- adding the weighted component factors together.

75 Table 21 shows the calculation of the category factors for the last year (2006-07) of the 2008 Update.

Table 21 Non-government primary school education, derivation of category factor, 2008 Update, 2006-07

Factors	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Fixed costs (component weight = 0.96 %)								
Administrative scale	0.37715	0.50037	0.62523	1.24190	1.64000	5.25924	7.67972	12.96474
Input costs	1.02528	0.99212	0.98387	0.99199	0.97579	0.95664	1.01939	1.01769
Component factor	0.38669	0.49643	0.61514	1.23195	1.60029	5.03121	7.82864	13.19405
A Wgted comp factor	0.00374	0.00480	0.00595	0.01191	0.01547	0.04865	0.07570	0.12758
Schools (component weight = 99.04 %)								
Socio-demographic composition	1.02507	1.05947	0.91835	0.91355	1.02735	0.88427	1.34490	0.69988
Non-government schools cost	1.00895	0.96481	0.99786	1.03014	0.97860	0.97122	0.98604	1.56013
Component factor	1.03425	1.02218	0.91638	0.94108	1.00537	0.85882	1.32612	1.09190
B Wgted comp factor	1.02679	1.01481	0.90976	0.93429	0.99811	0.85263	1.31656	1.08402
Category factor	1.03053	1.01961	0.91571	0.94620	1.01359	0.90128	1.39225	1.21160

- (a) 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 the assessed expenses equals average expenses.
- (b) Category factor is the sum of the weighted component factors. It equals A + B.

76 The category factor was calculated as follows:

$$\text{Category factor} = \text{fixed costs} + \text{schools}$$

where:

$$\text{Fixed costs} = 0.0096 [\text{administrative scale} * \text{fixed costs input costs}]$$

$$\text{Schools} = 0.9904 [\text{socio-demographic composition} * \text{non-government schools costs}]$$

77 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 2006-07

78 Assessed expenses per capita are calculated by multiplying each States' category factor by the average expense per capita. Table 22 shows, for 2006-07, the actual, average and assessed expenses per capita and the assessed cost of providing services ratios. The assessed cost of providing services ratios are equivalent to the category factors shown in Table 21.

Table 22 Non-government primary school education, assessment results, 2006-07

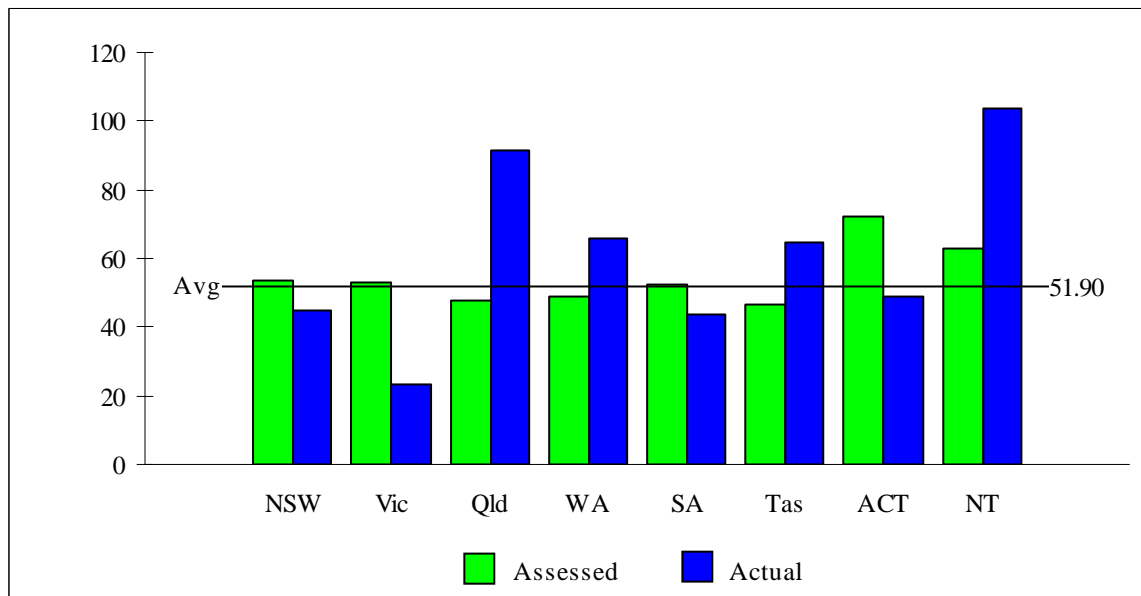
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Actual expenses	45.01	23.01	91.61	65.89	43.50	64.49	49.13	103.93	51.90
Assessed expenses	53.48	52.92	47.52	49.11	52.60	46.77	72.26	62.88	51.90
	%	%	%	%	%	%	%	%	%
Assessed cost of providing services ratio (a)	103.05	101.96	91.57	94.62	101.36	90.13	139.23	121.16	100.00

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

79 Table 30 at the end of this section shows the actual, average and assessed expenses for each State for all years of the 2008 Update.

80 Figure 2 illustrates the actual, average and assessed expenses for Non-government Primary School Education for 2006-07.

Figure 2 Non-government primary school education, expenses per capita — assessed, actual and average, 2006-07



Note: Actual expenditure for NSW, VIC, ACT and NT includes spending on year 7 students. Actual expenditure on year 7 students for QLD, WA, SA and NT is captured in non-government secondary. This reflects the structure of primary and secondary schooling in the States (see figure 1).

CONTRIBUTION TO GST REVENUE DISTRIBUTION.

81 The assessed difference from average in millions dollars provides an indication of the impact of this assessment on GST shares. This can be calculated by:

- subtracting the average expense per capita from each State’s assessed expenses per capita; and
- multiplying by each State’s population.

82 Table 23 shows this calculation for 2006-07.

Table 23 Assessed difference from average, 2006-07

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Assessed expenses per person	\$pc	53.48	52.92	47.52	49.11	52.60	46.77	72.26	62.88	51.90
Assessed difference from average per person	\$pc	1.58	1.02	-4.37	-2.79	0.71	-5.12	20.36	10.98	0.00
Population	m	6.856	5.168	4.136	2.082	1.577	0.492	0.337	0.213	20.859
Assessed difference from average	\$m	10.9	5.3	-18.1	-5.8	1.1	-2.5	6.9	2.3	0.0

83 Table 24 shows the assessed difference from average in millions of dollars. The average over these amounts over the five year assessment period provides an indication of impact of the assessment on the GST shares. The actual impact depends on the growth in the size of the pool between the assessment years and the application year.

Table 24 Assessed difference from average, 2008 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust ^(a)
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
2002-03	9.5	11.4	-20.3	-5.0	-0.8	-1.8	4.9	2.2	28.0
2003-04	11.4	10.2	-21.6	-5.9	0.2	-2.2	5.7	2.3	29.7
2004-05	14.0	8.6	-22.3	-6.9	0.7	-2.8	6.3	2.4	32.0
2005-06	12.8	6.5	-20.0	-6.5	1.0	-2.7	6.5	2.4	29.2
2006-07	10.9	5.3	-18.1	-5.8	1.1	-2.5	6.9	2.3	26.4
Average	11.7	8.4	-20.5	-6.0	0.4	-2.4	6.1	2.3	29.1

(a) Total redistribution. It is the sum of the positive (or the negative) items in the row.

84 The impact of Non-government primary school education on the distribution of GST revenue and health care grants (hereafter GST revenue) is equal to the average from the table above scaled by the growth in the pool. This impact can be sub-divided to show the effect of each factor.

85 Table 25 shows the category's contribution to the distribution of GST revenue. It also shows the contribution of each factor and component.

Table 25 Non-government primary school education, contribution to GST revenue distribution, 2008 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	-2.4	-1.4	-0.8	0.3	0.5	1.1	1.2	1.4	4.6
Input costs	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1
Component factor	-2.3	-1.4	-0.9	0.3	0.5	1.1	1.3	1.5	4.6
Schools									
Socio-demographic composition	10.9	20.6	-22.7	-10.0	1.6	-3.4	6.1	-3.1	39.2
Non-government schools costs	4.5	-8.6	-2.1	2.6	-1.7	-0.6	-0.2	6.2	13.3
Component factor	16.3	11.9	-24.1	-7.5	0.0	-3.9	5.9	1.3	35.4
Redistribution from EPC resulting from the 2008 Update assessment									
	14.0	10.5	-25.0	-7.2	0.5	-2.8	7.1	2.8	34.9

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

- 86 The table indicates that the disabilities which had the biggest impact on the assessment were:
- socio-demographic composition factor — which recognised differences in the assessed proportion of a State’s population that attended non-government primary schools;
 - non-government schools costs factor — which recognises differences in the assessed per student payment for non-government students; and
 - administrative scale factor — which recognises differences in the costs of the minimum administrative structure used to provide services .
- 87 The assessment reflects the following on a State by State basis.
- 88 *New South Wales* — The positive GST redistribution was due to its above average proportion of assessed non-government primary school students in New South Wales’s population, and its above average assessed per student payment. This was partially offset by its lower per capita costs reflecting economies of scale.
- 89 *Victoria* — Victoria’s positive GST redistribution was due to its above average proportion of assessed non-government primary school students in its population. Additional influences which also reduced its GST redistribution were its below average assessed per student payment and its lower per capita costs because of economies of scale.
- 90 *Queensland* — Queensland’s negative GST redistribution was caused by its below average proportion of assessed non-government primary school students in its population, a below

average assessed per student payment and its lower per capita costs reflecting economies of scale.

- 91 **Western Australia** — The State’s negative GST redistribution was due to its below average proportion of assessed non-government primary school students. Its above average assessed per student payment and its higher per capita costs because of diseconomies of scale reduced the amount of the negative redistribution.
- 92 **South Australia** — South Australia had a positive GST redistribution due to its above average proportion of assessed non-government students and its higher per capita costs due to diseconomies of scale. These were partially offset by a below average assessed per student payment.
- 93 **Tasmania** — Tasmania’s negative GST redistribution was due to a below average proportion of assessed non-government primary school students and a below average assessed per student payment. These negative influences were partially offset by its higher per capita costs due to diseconomies of scale.
- 94 **ACT** – The ACT had a positive GST redistribution. This was due to its above average proportion of assessed non-government primary school students and its higher per capita costs because of diseconomies of scale.
- 95 **Northern Territory** — Its positive GST redistribution was due to an above average assessed per student payment, as well as higher per capita costs reflecting diseconomies of scale. A negative influence was its below average proportion of assessed non-government primary students.

CHANGES IN GST REVENUE DISTRIBUTION: 2008 UPDATE COMPARED WITH 2007 UPDATE

Effect of assessment on distribution of the GST revenue

- 96 Table 26 shows the redistribution of GST revenue resulting from the assessments in the 2007 Update and the 2008 Update. It also shows the sources of these changes.
- 97 Changes in the distribution of GST revenue between the 2007 Update and the 2008 Update were brought about because the Commission:
- used revised average expenses data and other revised data in updating factor calculations for the years 2001-02 to 2005-06; and
 - replaced 2001-02 average expenses and factors with those of 2006-07 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 the services.

Table 26 Non-government primary school education, effect of the assessment on GST revenue distribution, 2007 Update to 2008 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 2007 Update assessment (a)	12.1	13.4	-25.7	-7.1	-0.3	-2.5	6.9	3.0	35.4
Effect of revising category averages and factors for 2001-02 to 2005-06									
Category average	1.1	1.0	-2.3	-0.7	0.1	-0.2	0.7	0.3	3.2
Category factors	1.6	-0.1	-0.7	-0.1	-0.2	-0.1	-0.3	-0.2	1.6
Interactions	0.2	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.2
Total	3.0	1.0	-3.1	-0.8	-0.2	-0.4	0.4	0.1	4.5
Effect of replacing 2001-02 category averages and factors with those for 2006-07									
Category average	-0.4	-0.6	0.8	0.2	0.1	0.1	-0.2	-0.1	1.2
Category factors	-0.8	-3.8	3.3	0.5	1.0	0.0	0.0	-0.2	4.9
Interactions	0.1	0.4	-0.4	-0.1	-0.1	0.0	0.0	0.0	0.5
Total	-1.1	-3.9	3.8	0.7	1.0	0.1	-0.2	-0.3	5.5
Redistribution from EPC resulting from the 2008 Update assessment (a)	14.0	10.5	-25.0	-7.2	0.5	-2.8	7.1	2.8	34.9
Total effect of revisions and updating (b)	1.9	-2.9	0.7	-0.1	0.8	-0.3	0.2	-0.2	3.6

- (a) Using the same pool and populations that were used to calculate the 2007 Update redistribution.
- (b) This figure shows the change in the amount redistributed among the States between the 2006 Update and the 2007 Update. It does not necessarily equal the difference in the total redistribution from EPC between the two inquiries.

- 98 Compared with an equal per capita assessment, the 2008 Update redistributed \$34.9 million away from Queensland, Western Australia and Tasmania to the other States. New South Wales, Victoria and Queensland experienced the biggest redistributions.
- 99 Table 27 shows the changes in GST revenue attributable to changes in each factor arising from both revising data for 2001-02 to 2005-06 and replacing 2001-02 data with 2006-07 data.

Table 27 Non-government primary school education, effect of the assessment on GST revenue distribution by factor, 2007 Update to 2008 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	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.2
Input costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Schools									
Socio-demographic composition	1.7	-2.2	0.4	-0.4	0.8	-0.1	0.3	-0.6	3.3
Non-government schools costs	0.0	-0.5	0.0	0.3	0.0	-0.1	0.0	0.3	0.7

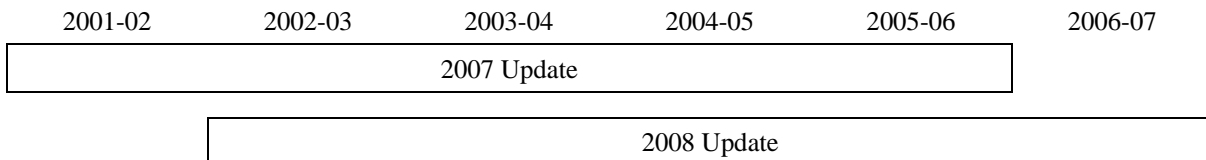
What has changed?

100 The main changes the Commission examines are:

- revisions to the financial and assessment data that were used in the 2007 Update; and
- advancing the assessment period one year — a new year enters the assessment period and the oldest year drops out.

101 Figure 3 shows the assessment periods for the two updates.

Figure 3 Advancing the assessment period, 2008 Update



102 The effect of revisions is calculated by replacing 2007 Update data with 2008 Update data for the years 2001-02 to 2005-06. The effect of advancing the assessment period one year is calculated by comparing the data of the new year entering the assessment period (2006-07) with the financial and assessment data of the year dropping out (2001-02). In both cases, the Commission considers the impact of replacing financial data (actual expenses) separately from the effect of replacing assessment data (category factors).

Changes due to revising average expenses and factors for years 2001-02 to 2005-06

103 **Revising average expenses.** An upward revision signifies average expenses in the 2007 Update understated how much States spent on this service. An upward revision leads to an increase in the category’s redistribution, which will increase the GST distributions of States with above average assessed cost of providing services ratios.

- 104 For this category, upward revisions were made to average expenses for 2001-02 to 2005-06. This increased the category’s redistribution of GST revenue for that period (\$3.2 million) and increased the GST revenue shares of the States assessed to have above average costs of providing services ratios (New South Wales, Victoria, SA, ACT and NT). The revisions were the result of reclassifications by States (mostly for NSW) of education spending up to 2004-05, and the use of ABS GFS data replacing State UPF data, which had understated State spending on this service in 2005-06.
- 105 **Revising category factors.** An upward revision in the assessed costs of providing services ratio reflects an increase in the category factor for a State (and vice versa) and will lead to a higher GST distribution for that State.
- 106 Revisions were made to States’ cost of providing services ratio as a result of replacing DEST provided enrolment data for 2005 with ABS enrolment data, as well as revising input costs data. Revising State enrolment data had a minor impact on the ratios. Revising input costs data in the Government primary education category had a flow on effect to this category through the non-government school costs factor. Input costs revisions reduced Victoria’s assessed costs of providing government primary services, a component of the non-government school costs factor, with smaller impacts for the other States.

Changes in State circumstance —replacing 2001-02 with 2006-07 data

- 107 Table 28 shows the actual expenses and implied costs of service provision for 2001-02, the year that drops out of the assessment period, and 2006-07, the year that comes in, for the 2008 Update assessment.

Table 28 Non-government primary school education, actual expenses and assessed cost of providing services, 2001-02 and 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Avg
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Actual expenses									
2001-02	29.46	60.89	58.31	45.01	12.53	45.78	20.66	44.05	43.27
2006-07	45.01	23.01	91.61	65.89	43.50	64.49	49.13	103.93	51.90
	%	%	%	%	%	%	%	%	%
Change between 2001-02 and 2006-07	52.78	-62.20	57.11	46.40	247.23	40.88	137.75	135.93	19.94
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Assessed expenses									
2001-02	44.93	46.58	36.74	39.99	41.48	38.85	60.61	56.07	43.27
2006-07	53.48	52.92	47.52	49.11	52.60	46.77	72.26	62.88	51.90
	%	%	%	%	%	%	%	%	%
Assessed cost of providing services ratio									
2001-02	103.83	107.65	84.92	92.41	95.86	89.79	140.08	129.59	100.00
2006-07	103.05	101.96	91.57	94.62	101.36	90.13	139.23	121.16	100.00

Note: Changes may occur over time in how actual expenses are classified, so trends for individual States should be treated with caution.

- 108 **Replacing average expenses.** An increase in average expenses between 2001-02 and 2006-07 which is less than the increase in the pool signifies States are using a smaller share of the pool to finance this service. This will lead to a decrease in the size of the category's GST redistribution, which will decrease the GST distribution to States with an above average cost of providing service ratio.
- 109 Since 2001-02, State spending on this function has increased (28.1 per cent), but it has not kept pace with the growth in the GST pool (43.9 per cent). So, replacing the 2001-02 average expenses with 2006-07 average expenses has led to a reduction in the size of the category's GST redistribution (\$1.2 million). It has reduced the GST distribution to States assessed to have above average cost of providing services ratios (New South Wales, Victoria, the ACT and the Northern Territory). It has increased the GST distribution to the other States.
- 110 **Replacing category factors.** An increase in the assessed cost of providing services ratio between 2001-02 and 2006-07 reflects an increase in the category factor for a State (and vice versa) and will lead to a higher GST distribution to that State. Queensland, Western Australia, South Australia and Tasmania's ratio increased (Table 28). So, replacing the 2001-02 factors with 2006-07 factors increased the GST distribution to Queensland, Western Australia and South Australia (\$4.9 million). The shares of NSW, Victoria and the Northern Territory were reduced, while the distribution to Tasmania and the ACT was unchanged.
- 111 The observed changes were largely driven by changes to socio-demographic composition factors. The socio-demographic composition change was due to the removal of 2000 enrolment data and the inclusion of 2006 data⁸. The new enrolment data showed that between 2001-02 and 2006-07, the number of people attending non-government primary schools increased in all States. The proportion of these people attending non-government primary schools increased in most States except for Victoria. However, some of these increases were smaller relative to the rises observed in the 2007 Update.
- 112 Table 29 shows the proportion of each States population attending non-government primary schools in 2001-02 and 2006-07. Table 30 on the last page shows assessed and actual expenses for each State for the last 5 years including 2006-07.

⁸ The Commission receives annual enrolment data which it converts to financial year data.

Table 29 Non-government primary school education, actual proportion of non-government primary school enrolments, 2001-02 and 2006-07

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Average
	%	%	%	%	%	%	%	%	%
Proportion of the population attending non-government primary schools.									
2001-02	2.7	2.9	2.6	2.9	3.0	2.2	3.5	2.2	2.8
2006-07	2.7	2.7	2.9	2.9	3.2	2.2	3.5	2.2	2.8
Change	0.4	-5.0	8.3	0.1	5.9	1.7	1.1	0.2	0.9

This chapter was prepared by the Expense — Education section of the Commonwealth Grants Commission. If you have any questions about its content please contact Nick Reddan on (02) 6229 8869 or Nick.Reddan@cgc.gov.au.



Date: 29/02/08

Table 30 Assessment of expenses, Non-government primary schools education

	2002-03		2003-04		2004-05		2005-06		2006-07	
	Amount	Per Capita	Amount	Per Capita	Amount	Per Capita	Amount	Per Capita	Amount	Per Capita
	\$m	\$	\$m	\$	\$m	\$	\$m	\$	\$m	\$
Standard Expenditure		36.32		41.56		47.20		50.03		51.90
New South Wales										
Assessed difference	9.524	1.43	11.421	1.71	13.959	2.07	12.760	1.88	10.862	1.58
Expenses - Assessed	251.192	37.76	289.574	43.27	331.768	49.28	352.423	51.91	366.664	53.48
Actual	183.905	27.64	253.152	37.83	281.262	41.78	297.449	43.81	308.591	45.01
Victoria										
Assessed difference	11.402	2.33	10.196	2.06	8.595	1.71	6.507	1.28	5.258	1.02
Expenses - Assessed	189.227	38.65	216.179	43.62	245.531	48.92	261.216	51.31	273.442	52.92
Actual	119.580	24.43	95.483	19.27	103.610	20.64	108.538	21.32	118.922	23.01
Queensland										
Assessed difference	-20.300	-5.39	-21.635	-5.60	-22.284	-5.63	-19.953	-4.93	-18.091	-4.37
Expenses - Assessed	116.553	30.94	138.905	35.96	164.473	41.57	182.618	45.10	196.540	47.52
Actual	247.683	65.74	274.046	70.95	300.627	75.98	352.042	86.95	378.880	91.61
Western Australia										
Assessed difference	-5.019	-2.59	-5.868	-2.98	-6.943	-3.47	-6.533	-3.20	-5.813	-2.79
Expenses - Assessed	65.397	33.74	75.934	38.58	87.464	43.73	95.462	46.83	102.240	49.11
Actual	90.431	46.65	111.850	56.83	155.589	77.80	127.671	62.63	137.191	65.89
South Australia										
Assessed difference	-0.810	-0.53	0.168	0.11	0.746	0.48	0.977	0.63	1.112	0.71
Expenses - Assessed	54.634	35.79	64.018	41.67	73.753	47.69	79.050	50.66	82.936	52.60
Actual	35.109	23.00	52.165	33.96	68.299	44.16	68.062	43.62	68.577	43.50
Tasmania										
Assessed difference	-1.832	-3.86	-2.226	-4.63	-2.751	-5.67	-2.723	-5.57	-2.519	-5.12
Expenses - Assessed	15.424	32.47	17.752	36.93	20.134	41.53	21.716	44.46	22.996	46.77
Actual	21.874	46.05	20.404	42.45	14.391	29.68	37.153	76.06	31.709	64.49
Australian Capital Territory										
Assessed difference	4.879	15.05	5.678	17.41	6.302	19.18	6.547	19.71	6.854	20.36
Expenses - Assessed	16.654	51.38	19.236	58.97	21.810	66.39	23.170	69.74	24.328	72.26
Actual	6.707	20.69	12.752	39.09	16.565	50.42	16.434	49.46	16.541	49.13
Northern Territory										
Assessed difference	2.156	10.81	2.266	11.28	2.376	11.63	2.417	11.58	2.337	10.98
Expenses - Assessed	9.400	47.13	10.616	52.84	12.018	58.83	12.859	61.61	13.381	62.88
Actual	13.190	66.14	12.363	61.54	16.609	81.31	21.165	101.40	22.117	103.93

Note: Refer to Attachment A of the 2008 Update, *Relative Fiscal Capacity of States* for how these figures are compiled.