



Curtin
University of Technology

CURTIN UNIVERSITY OF TECHNOLOGY

2009 Performance indicators

PERFORMANCE INDICATORS

CERTIFICATION OF PERFORMANCE INDICATORS 112

**CURTIN'S INSTITUTIONAL
PERFORMANCE INDICATORS** 113

Section A:
Higher Education Performance 114

Section B:
Vocational Education and Training Performance 129

CONTENTS

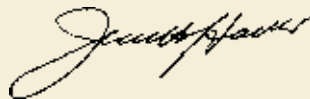
Performance Indicators (continued)

Certification of Performance Indicators

We hereby certify that the performance indicators are based on proper records, are relevant and appropriate for assisting users to access Curtin University of Technology's performance, and fairly represent the performance of Curtin University of Technology for the financial year ended 31 December 2009.



James Ian Gill
Chancellor



Jeanette Hackett
Vice-Chancellor

Dated this 17th day of March 2010

Curtin’s Institutional Performance Indicators

INTRODUCTION

Curtin is committed to innovation and excellence in teaching and research for the benefit of our students and the wider community. The institutional effectiveness and efficiency Performance Indicators (PIs) used by Curtin are designed to demonstrate progress towards meeting Teaching and Learning and Research and Development objectives and targets as espoused in the University’s Strategic and Enabling Plans.

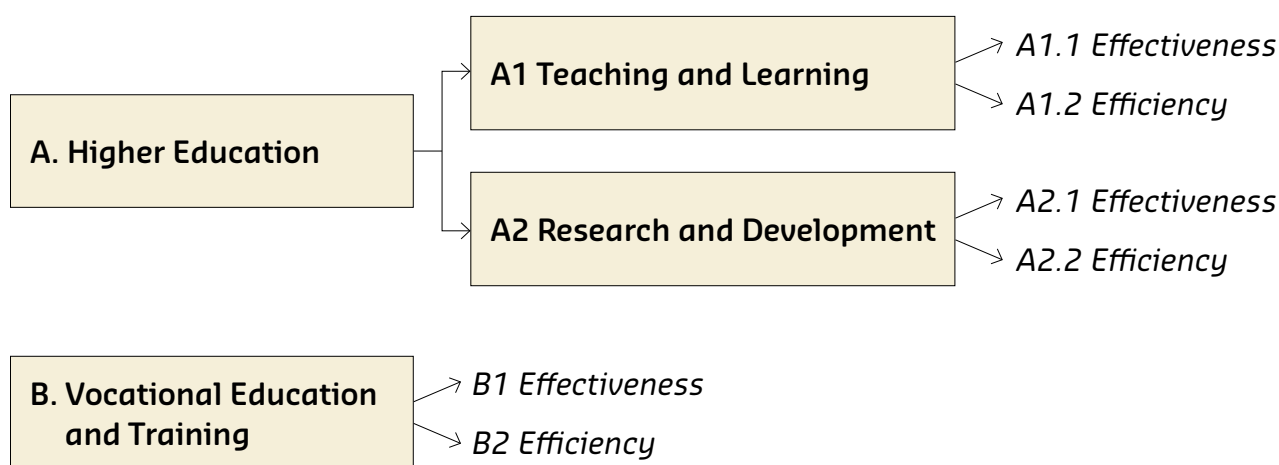
The performance indicators used are divided into two categories – effectiveness and efficiency – and are used in the following context:

- **Effectiveness** measures the extent to which outcomes have been achieved
- **Efficiency** measures the resources used to attain a certain level of output.

Section A indicators focus on Curtin’s higher education operations, while those in Section B relate to Curtin’s Kalgoorlie-based vocational education and training programs (VET).

The following diagram summarises the approach.

Trend data for the last three to four years are provided so that overall direction and rate of progress can be seen. These trend data also illuminate broad changes in cases where short-term variability may hide longer term trends.



Performance Indicators (continued)

Section A: Higher Education Performance

A1 Higher Education Teaching and Learning Performance Indicators

	Ref	Name	Objective
A1.1 Effectiveness	a	Employment and Study Destinations of New First Degree Graduates	Quality graduates
	b	Perceived Course Quality – Australian Graduate Survey	Quality course
	c	Perceived Teaching Quality – Curtin eVALUate Unit Survey	Quality teaching
	d	Quality of the University Experience – Curtin Annual Student Satisfaction Survey	Quality overall experience
	e	Subject Load Pass Rate	Student progress and achievement
A1.2 Efficiency	f	Teaching and Learning Expenditure per EFTSL and as a percentage of Curtin Total Expenditure	Efficient teaching and learning expenditure
	g	Teaching and Learning Expenditure per Successful EFTSL	Efficient teaching and learning expenditure
	h	Graduate Productivity Rate – Course Completions per 10 FTE Academic Staff	Student progress and achievement
	i	Commencing (First Year) Bachelor Degree Retention	Student progress and achievement

A2 Higher Education Research and Development Performance Indicators

A2.1 Effectiveness	j	Growth in Research EFTSL	Research capacity
	k	Institutional Grants (\$) Ranking	Research funding
	l	Total Research Income (\$) Ranking	Research funding
	m	Cooperative Research Centre (\$) Ranking	Research funding
	n	Research Publication (weighted HERDC points) Ranking	Research publications
A2.2 Efficiency	o	Research Funding per Research Staff (using Research Performance Index database)	Research funding efficiency
	p	Weighted Research Publication per Research Staff (using Research Performance Index database)	Research publications efficiency

A1 Teaching and Learning Performance Indicators

Strategic Objective: To provide excellent teaching that facilitates learning.

A1.1 TEACHING AND LEARNING EFFECTIVENESS

Ref	Name	Objective
a	Employment and Study Destinations of New First Degree Graduates	Quality graduates
b	Perceived Course Quality – Australian Graduate Survey	Quality course
c	Perceived Teaching Quality – Curtin eVALUate Unit Survey	Quality teaching
d	Quality of the University Experience – Curtin Annual Student Satisfaction Survey	Quality overall experience
e	Subject Load Pass Rate	Student progress and achievement

Performance Indicators (continued)

Quality graduates, measured by:

(a) Employment and Study Destinations of New First Degree Graduates

Benchmark gauge: Australian Universities' Average

This indicator measures Curtin's effectiveness in both assisting students to reach their full potential and in producing graduates who are of productive value to employers and the community.

Table 1 shows results from the Australian Graduate Survey (AGS), which combines the Graduate Destination Survey (GDS) and Course Experience Questionnaire (CEQ). It summarises the major activities of new first degree (that is, bachelor, bachelor honours, and diploma) Curtin graduates each year of the series, and compares these with the

national average sourced from Graduate Careers Australia (GCA). Surveys in each year deal with the graduates of the previous year. Therefore the latest available national data, which is from the 2008 AGS survey, applies to the views of students who graduated in 2007. In addition to this national data, Curtin also has access to the views of its own 2008 graduates from the results of the latest survey conducted in 2009. These results are included in the accompanying table.

The 84 per cent outcome in 2009 remains above Curtin's target.

It is acknowledged that labour market conditions influence this indicator and therefore a comparison to previous year's benchmarks may not be meaningful due to the economic crisis. Furthermore, the marginal decline may also be attributed in part to the weaker labour market in Western Australia as a result of the economic crisis.

**Table 1. Employment and Study Destinations of New Bachelor Degree Graduates¹ 2006-2009
Australian Citizens and Permanent Residents Only**

Activity	2006 survey		2007 survey		2008 survey		2009 survey	
	Curtin	All ²	Curtin	All ²	Curtin	All ²	Curtin	All ²
Full-Time Work	66%	55%	67%	56%	69%	56%	61%	n/a
Full-Time Study	13%	20%	12%	20%	11%	20%	11%	n/a
Not Working, Seeking Full-Time Work	4%	4%	3%	3%	4%	3%	6%	n/a
Part-Time Work, Seeking Full-Time Work	7%	8%	6%	7%	5%	6%	8%	n/a
Part-Time Work, Not Seeking Full-Time Work	7%	8%	6%	8%	8%	8%	9%	n/a
Not Working, Seeking Part-Time Work	0%	0%	1%	1%	0%	1%	1%	n/a
Unavailable for Work/Study	3%	5%	5%	5%	4%	5%	6%	n/a
Total	100%	100%	100%	100%	100%	100%	100%	n/a
Percentage Graduates in Mode of Choice ³	87%	84%	88%	86%	90%	86%	84%	n/a
Curtin Target (minimum)	82%		82%		82%		82%	
Benchmark (Aust Unis' Avg. in prior year)	82%		84%		86%		86%	
Total Number of Respondents	2,010	66,702	2,165	65,110	2,047	64,648	2,012	n/a
Response Rate	62%	n/a	69%	n/a	66%	n/a	61%	n/a

1. Data are taken from the Australian Graduate Surveys conducted by Curtin and other universities of all their graduates.

2. All refers to All Australian universities. While Curtin has access to its 2009 survey results, national data for 2009 are not available until 2010.

3. Definition: The percentage of new first degree graduates working in the mode of their choice as a percentage of the total number of graduates seeking work.

Mode of Choice = (the number of graduates in full-time work + number in part-time work, not seeking full-time work) / (total number of respondents minus those in full-time study and those unavailable for study or work).

Notes:

a. Rounding errors may occur.

b. Graduates are surveyed in the year following their completion/graduation. For example, the 2009 survey applies to students who completed their course in 2008.

c. GDS/AGS data are frequencies and not means, thus standard deviations are not reported.

d. Survey data for 2009: Confidence Level = 99%; Confidence Interval = 1.81.

e. National data from the 2009 survey are not yet available.

Quality course, measured by:**(b) Perceived Course Quality – Australian Graduate Survey***Benchmark gauge: Australian Universities' Average*

The Australian Graduate Survey (AGS) conducted by Curtin and other institutions provides graduate outcome measures of teaching and learning within the Course Experience section. New graduates are asked to rate their perceptions using five aspects of their recently completed course: good teaching; clear goals and appropriate standards; generic skills; overall satisfaction; and (new in 2007) graduate qualities. This new scale assesses a number of general skills that are not specific to the area of study. It also addresses how the course contributed to the graduate's enthusiasm for further learning and how they value other diverse perspectives and ideas. Graduate perceptions of the extent to which they have developed generic skills, together with their overall satisfaction, are fundamental to monitoring the quality of teaching and learning.

Surveys in each year deal with the graduates of the previous year. AGS survey data for all universities were analysed by the Australian Council for Educational Research on behalf of the GCA. Graduates assign scores across a range from -100 to +100 against each criterion. A score of -100 corresponds to *complete disagreement*, while at the other end of the scale +100 indicates *complete agreement*. Results are shown in Table 2. In addition to this national data, Curtin also had access to its own results of the latest survey, conducted in 2009 for students who graduated in 2008, which are included in the accompanying table.

On average, 86 per cent of Curtin's 2008 graduates (surveyed in 2009) were broadly satisfied with their course experience. Satisfaction results remain consistent with previous years for this indicator.

Curtin continues to implement development and change initiatives directed towards continuous improvement in the quality of teaching and learning to achieve better outcomes.

Table 2. Perceived Course Quality – Australian Graduate Survey (AGS) of all New Bachelor Degree Graduates 2006–2009 Average Graduate Score: -100 (complete disagreement) to +100 (complete agreement)

AGS Scale	2006 survey		2007 survey		2008 survey		2009 survey	
	Curtin	All ²	Curtin	All ²	Curtin	All ²	Curtin	All ²
Good Teaching	+20 (39.1)	+20	+19 (40.3)	+22	+19 (42.0)	+23	+21 (43.1)	n/a
Clear Goals and Standards	+19 (37.4)	+18	+17 (39.5)	+18	+17 (39.4)	+18	+17 (38.6)	n/a
Graduate Qualities	n/c	+42	+35 (40.6)	+41	+34 (42.1)	+40	+34 (43.3)	n/a
Generic Skills	+36 (35.7)	+37	+35 (39.9)	+38	+34 (41.5)	+37	+33 (42.9)	n/a
Overall Satisfaction	+37 (47.6)	+40	+34 (49.2)	+40	+34 (50.9)	+39	+34 (51.6)	n/a
Percent Broad Agreement ³ Overall Satisfaction	89%	90%	88%	90%	86%	88%	86%	n/a
Curtin Target (minimum)	90%		90%		90%		90%	
Benchmark (Aust Unis' Avg. in prior year)	90%		90%		90%		88%	
<i>Number of Respondents¹</i>	2,393	72,980	2,328	78,206	2,153	72,193	2,899	n/a
<i>Response Rate</i>	50%	n/a	49%	n/a	46%	n/a	57%	n/a

1. A student undertaking a double major has had the option of completing two Aust. Graduate Surveys. Of the 2,899 Curtin respondents to the 2009 survey, 791 provided additional information about a major.

2. All refers to All Australian universities.

3. Broad agreement includes responses of 3, 4 and 5 on a 5-point scale where 5 is strongly agree, so eliminating disagree and disagree strongly.

Notes:

a. Graduates are surveyed in the year following their completion/graduation. For example, the 2009 survey applies to students who completed their course in 2008.

b. Bracket figures are the standard deviation for each CEQ/AGS scale.

c. Survey data for 2009: Confidence level = 99%; Confidence interval = 1.57.

d. National data for 2009 are not yet available.

Performance Indicators (continued)

Quality teaching, measured by:

(c) Perceived Teaching Quality – Curtin eVALUate Unit Survey

Benchmark gauge: None

Curtin eVALUate Unit Survey (eVALUate) is automatically available for all students who are enrolled in Curtin's coursework units. The survey focuses on student achievement of unit learning outcomes. It asks students' level of agreement with three key indicators: what helped

their achievement of learning outcomes; their level of motivation and engagement; and their overall satisfaction with the unit.

Percentage Agreement of the item 'overall, I am satisfied with this unit' provides an indicator of student satisfaction with the quality of the teaching and learning experiences of the unit.

In 2009, agreement in overall unit satisfaction was 83% in both semesters. This exceeds Curtin's target. There is no benchmark as this is an internal Curtin survey.

Table 3. Perceived Teaching Quality – Curtin eVALUate Unit Survey 2006-2009
Total Agreement as a Percentage of Total Response

	2006		2007		2008		2009	
	Sem1	Sem2	Sem1	Sem2	Sem1	Sem2	Sem1 ²	Sem2 ²
Percent agreement ¹ in overall satisfaction	78%	80%	81%	81%	82%	84%	83%	83%
Curtin Target (minimum)	80%	80%	80%	80%	80%	80%	80%	80%
No. of students who could participate	25,611	25,927	28,945	27,767	28,472	30,133	35,342	33,201
Response Rate	33%	33%	41%	36%	44%	41%	45%	41%

Notes:

1. Agreement consists of 'strongly agree' and 'agree' in a 5-level of agreement, the others being 'strongly disagree', 'disagree', and 'unable to judge'.
2. The survey covers all locations and study periods included in the Semester 1 and Semester 2 events.

Quality overall experience, measured by:

(d) Quality of the University Experience – Curtin Annual Student Satisfaction Survey

Benchmark gauge: None

This indicator is measured by the Curtin Annual Student Satisfaction (CASS) survey which is conducted every year in August and September on all current students (both onshore and offshore) to assess students' satisfaction with their experience at Curtin, including

their course, campus life and the available services and facilities.

Positive responses to the statement 'overall, I am satisfied with my experience as a student at Curtin' provide a direct measure of student satisfaction not only to teaching quality but also to the support services and environment provided by Curtin.

The 2009 percentage agreement has improved to 85%, achieving Curtin's target. There is no benchmark as this is an internal Curtin survey.

Table 4. Quality of University Experience – Curtin Annual Student Satisfaction Survey 2007-2009
Total Agreement as a Percentage of Total Valid Responses

	2007 survey	2008 survey	2009 survey
Percent agreement ¹ in overall satisfaction	85%	83%	85%
Curtin Target (minimum)	80%	80%	80%
Number of respondents	8,299	7,545	8,172
Number in population ²	35,927	35,556	37,018
Response Rate	23%	21%	22%

Notes:

1. Agreement consists of 'strongly agree' and 'agree' in a 5-point scale, the others being 'strongly disagree', 'disagree' and 'neither'. Base: All Curtin students (all locations both onshore and offshore) who provided a valid response to the question 'Overall, I am satisfied with my experiences as a student at Curtin University'.
2. The population has been adjusted to exclude students who have withdrawn, graduated or taken leave of absence during the survey period.

Student achievement and progress, measured by:**(e) Subject Load Pass Rate**

Benchmark gauge: All WA and All Australian Universities Rates

The *Subject Load Pass Rate* indicator (also often referred to as 'Success Rate' or 'Progress Rate') measures quantity and timeliness of students attaining a pass result in their units of study. Sound curriculum design, good pedagogy, appropriate assessment practices and learning support should sustain subject load pass rates and, thus, course progression, minimising course completion times.

This indicator is the percentage in each academic year of assessed subject load (based on credit points studied) for which students were awarded a passing grade.

The data in Table 5 shows that Curtin's overall *Subject Load Pass Rate* in 2009 is 88 per cent, and is the same as 2008. This meets Curtin's minimum target and also the *All WA Universities* benchmark.

The *All WA* and *All Australian Universities* benchmarks are derived from success rates and success ratios of student equity groups reported in the Institution Assessment Framework Portfolio (2009) by DEEWR. Benchmark figures are on domestic student enrolments only.

Table 5. Subject Load Pass Rate (SLPR) by Branch of Learning 2007-2009
Student Load Passed as a Percentage of Student Load Assessed

Branch of Learning	2007	2008	2009
Science, Computing, Engineering, Architecture, Agriculture	85%	87%	87%
Benchmark	82%	82%	n/a
Administration, Business, Economics, Law	84%	85%	86%
Benchmark	82%	82%	n/a
Humanities, Arts and Education	88%	89%	89%
Benchmark	85%	84%	n/a
Health Sciences	95%	95%	95%
Benchmark	91%	90%	n/a
Curtin Overall SLPR	86%	88%	88%
Curtin Target (minimum)	88%	88%	88%
All WA Universities Benchmark (prior year)	89%	88%	88%
All Australian Universities Benchmark (prior year)	89%	88%	89%

Notes:

a. Rounding error may occur.

b. Data source: the Commonwealth annual student statistical collections. The Subject Load Pass Rates presented in the table exclude Higher Degree by Research student load.

c. Benchmark source: 2008 & 2009 DEEWR Student Outcome Indicators for Learning and Teaching Performance Fund (OLTF). The benchmark includes Commonwealth Supported bachelor degree students only. This benchmark is n/a in 2009 as the fund is discontinued.

The *All WA* and *All Australian Universities* benchmarks are derived from success rates and success ratios reported in the Institution Assessment Framework Portfolio (2009) by DEEWR. The benchmark figures are on domestic student enrolments only.

Performance Indicators (continued)

A1.2 TEACHING AND LEARNING EFFICIENCY

Ref	Name	Objective
f	Teaching and Learning Expenditure per EFTSL and as a percentage of Curtin Total Expenditure	Efficient teaching and learning expenditure
g	Teaching and Learning Expenditure per Successful EFTSL	Efficient teaching and learning expenditure
h	Graduate Productivity Rate – Course Completions per 10 FTE Academic Staff	Student progress and achievement
i	Commencing (First Year) Bachelor Degree Retention	Student progress and achievement

Efficient teaching and learning expenditure, measured by:**(f) Teaching and Learning Expenditure per EFTSL**

Benchmark gauge: None

(g) Teaching and Learning Expenditure per Successful EFTSL

Benchmark gauge: None

Teaching and Learning expenditure relates to the teaching of coursework (that is, non-research) programs. The two indicators reported in Table 6A show: (i) the average cost of teaching each Equivalent Full-Time Student Load (EFTSL) where load is sourced from the Commonwealth annual statistical collections; and (ii) the average cost of teaching

each successful EFTSL. Both of these provide an insight into the efficiency with which monies directed towards the Teaching and Learning objective have been spent. Table 6B shows the comparison in 2009 dollars (that is, after applying CPI adjustments to previous years' data).

It is important to note that average expenditure per EFTSL is largely dependent on the mix of disciplines taught by an institution. Curtin's high representation of laboratory-based courses raises service delivery costs when compared to institutions where non-laboratory based courses feature more prominently. Also, Curtin incurs higher than average costs in supporting the delivery of regional higher education programs through its presence in Kalgoorlie, Northam, Esperance, Margaret River, Albany, Geraldton, Karratha and Port Hedland.

Table 6A. Teaching and Learning Expenditure¹ at Historical Cost 2006-2009

Expenditure and EFTSL details	2006	2007	2008	2009
A. (1) Teaching and Learning Expenditure (\$'000)	\$348,880	\$388,619	\$479,836	\$493,500
(2) Total Curtin Expenditure (\$'000)	\$418,003	\$471,871	\$579,635	\$609,138
(3) Teaching and Learning Expenditure percentage	83.5%	82.4%	82.8%	81.0%
B. Total Taught EFTSL	23,814	24,317	24,570	26,198
C. Successful EFTSL	20,575	21,017	21,523	23,034
Indicator (f) Teaching and Learning Expenditure (\$) per EFTSL	\$14,650	\$15,981	\$19,529	\$18,837
Curtin Target	\$14,500	\$14,500	\$14,500	\$14,500
Indicator (g) Teaching and Learning Expenditure (\$) per Successful EFTSL	\$16,957	\$18,491	\$22,294	\$21,425
Curtin Target	\$16,500	\$16,500	\$16,500	\$16,500

1. Teaching and Learning Expenditure reported above excludes that for the Kalgoorlie VET sector. All University Expenditure is now reported on: (i) Teaching and Learning or Research and Development, in line with the University's objectives; and, (ii) consistent with the University's Financial Statements.

Note: Benchmarks are not available.

Table 6B. Teaching and Learning Expenditure at Constant Dollar Value 2006-2009

Expenditure and EFTSL details	2006	2007	2008	2009
A. (1) Teaching and Learning Expenditure (\$'000)	\$370,597	\$404,716	\$489,913	\$493,500
(2) Total Curtin Expenditure (\$'000)	\$444,023	\$491,416	\$591,807	\$609,138
(3) Teaching and Learning Expenditure percentage	83.5%	82.4%	82.8%	81.0%
B. Total Taught EFTSL	23,814	24,317	24,570	26,198
C. Successful EFTSL	20,575	21,017	21,523	23,034
Indicator (f) Teaching and Learning Expenditure (\$) per EFTSL	\$15,562	\$16,643	\$19,939	\$18,837
Indicator (g) Teaching and Learning Expenditure (\$) per Successful EFTSL	\$18,012	\$19,256	\$22,762	\$21,425
Higher Education Indexation Factor ¹	1.236362	1.261089	1.286311	1.313323

1. Higher Education Indexation Factor in the table are extracted from the Commonwealth Special Gazette No S104 (14 May 2008) and used to convert historical cost figures to December 2009 price levels.

Student progress and achievement, measured by:

(h) Graduate Productivity Rate – Course Completions per 10 FTE Academic Staff

Benchmark gauge: ATN average

The indicator *Graduate Productivity Rates* provides an insight into the efficiency with which monies directed towards the Teaching and Learning objective have been spent.

These rates show changes over time in the output of graduates for every 10 full-time equivalent staff. Table 7A provides the rates for undergraduate and postgraduate coursework students, where the numerator is based on

graduate numbers and the denominator on 'teaching' and 'teaching and research' staff only.

Curtin's 2009 postgraduate coursework graduates per 10 FTE academic staff has improved to 27.3 and exceeds both Curtin's target and the Australian Technology Network (ATN)¹ benchmark.

The undergraduate productivity rate has also improved to 63.7 graduates per 10 FTE academic staff and exceeds Curtin's targets. It is considerably above the ATN benchmark.

¹ The ATN universities consist of the five major former Institutes of Technology across Australia: Queensland University of Technology; University of Technology, Sydney; RMIT University; the University of South Australia and Curtin University of Technology.

Table 7A. Graduate Productivity Rates¹ 2006-2009: Graduations per 10 FTE Academic Staff²

	2006	2007	2008	2009
Undergraduate	62.0	62.8	60.4	63.7
Curtin Target (minimum)	57.0	57.0	57.0	57.0
Benchmark (ATN in prior year)	50.4	50.8	50.6	49.5
Postgraduate Coursework	24.9	24.5	26.5	27.3
Curtin Target (minimum)	20.0	20.0	20.0	20.0
Benchmark (ATN in prior year)	24.8	27.0	26.2	25.9

1. For each year shown (X) graduates (the numerator) are taken as those with awards approved in the period 1 January to 31 December in year X-1. Thus for 2009 there would have been 91.0 graduates for every 10 FTE teaching in the period 1 January 2008 to 31 December 2008.

2. The denominator consists of staff from all funding sources categorised as 'teaching' or 'teaching and research'. An average of the staff in the previous three years is taken.

Notes:

a. Curtin Source: Student Record System S1.

b. Benchmark Source: DEEWR Selected Higher Education Student (2005-2007) and Staff (2003-2007) Data Collection.

Performance Indicators (continued)

Table 7B. Research Degree Completions Productivity Rate 2006-2009
Research Higher Degree Completions per 10 FTE Academic Staff¹

	2006	2007	2008	2009
Master	0.65	0.77	0.49	0.54
Doctorate	1.99	2.82	2.13	2.18
All Research	2.64	3.59	2.62	2.73
Curtin Target (minimum)	3.00	3.00	3.00	3.00
Benchmark (ATN in prior year)	2.52	2.40	2.58	2.82

1. Staff data comprise a three-year average of teaching and research academic staff of Lecturer B level and above in academic organisational units only and from all funding sources. Hourly paid academic staff is excluded. These staff data are derived from the Commonwealth annual statistical collections. An average of the staff in the current and previous two years is taken.

Notes:

a. Curtin Source: Graduate Studies.

b. Benchmark Source: DEEWR Selected Higher Education Student (2005-2007) and Staff (2003-2007) Data Collection.

Table 7B shows Research Degree Completions Productivity Rates, with the data disaggregated to the Master and Doctorate levels. The denominator is restricted to staff eligible to supervise research students. Research degree completions rates have improved against 2008 outcomes but remain marginally below Curtin's target, and marginally lower than the ATN benchmark.

Student progress and achievement, measured by:**(i) Commencing (First Year) Bachelor Degree Retention**

Benchmark gauge: ATN and All Australian Universities Retention Rates

Resources devoted to teaching students during a year are not efficiently expended if students do not return to their studies in the following year. High efficiency is achieved when high numbers of students return (are retained) into the following year. This measure focuses on the most vulnerable group (first year students) in Curtin's largest course offering – Bachelor courses – which comprise over 70% of all students.

The 2008 commencing bachelor degree students who returned in 2009 is 87% which greatly exceeds the university minimum target. It is also ahead of the ATN Universities and All Australian Universities benchmarks.

Table 8. Commencing (First Year) Bachelor Degree Retention 2006-2009
Percentage of First Year Students Returning the Subsequent Year

	2005-06	2006-07	2007-08	2008-09
First Year Bachelor Degree Retention Rate	84%	86%	83%	87%
Curtin Target (minimum)	75%	75%	75%	75%
ATN Universities Benchmark (prior year's rate)	84%	85%	85%	84%
All Australian Universities Benchmark (prior year's rate)	83%	83%	83%	83%

Notes:

a. Curtin Source: Student Record System S1.

b. Benchmark Source: The ATN Universities and All Australian Universities retention rates are derived from attrition rates that are published by DEEWR in the 2009 Institution Assessment Framework Portfolio. Retention rate = (1 - Attrition rate). These 'Undergraduate First Year' attrition rates for a particular year (x) is the proportion of students commencing a bachelor course in the year (x) who neither complete nor return in the next year (x+1).

A2 Research and Development Performance

Strategic Objective: To focus on areas of high-impact, high-quality research.

A2.1 RESEARCH AND DEVELOPMENT EFFECTIVENESS

Ref	Name	Objective
j	Growth in Research EFTSL	Research capacity
k	Institutional Grants (\$) Ranking	Research funding
l	Total Research Income(\$) Ranking	Research funding
m	Cooperative Research Centre (\$) Ranking	Research funding
n	Research Publication (weighted HERDC points) Ranking	Research publications

Research capacity, measured by:

(j) Growth in Research EFTSL

Benchmark gauge: WA Universities and National growth rates

One of Curtin's educational strategies to raise its research profile is to increase research higher degree enrolments and EFTSL.

Table 9 shows research higher degree EFTSL growth of 10.2% between 2008 and 2009 which is significantly higher than the *All WA Universities* and *All Australian Universities* benchmarks.

In Australia, Curtin ranks 11th in total research enrolled EFTSL in 2008. This places Curtin in the top 10% of the list of 111 Australian higher education institutions for this measure (DEEWR, 2008).

Table 9. Growth in Research EFTSL 2005-2009: Year on Year Percentage Change

	2005	2006	2007	2008	2009
Doctorate EFTSL	831	849	843	905	981
Master EFTSL	126	154	149	137	167
Total Research EFTSL	957	1003	992	1,042	1,148
Research Growth (% change)		+4.8%	-1.2%	+5.1%	+10.2%
All WA Universities Benchmark (prior year growth)			+3.8%	+1.2%	+3.5%
All Australian Universities Benchmark (prior year growth)			+1.1%	+1.3%	+1.6%
National Ranking (prior year) (of 111 Australian Institutions)			11	12	11

Notes:

a. All EFTSL data are for the year at 31 March.

b. Benchmarks source: DEEWR Selected Higher Education Student Statistics for Western Australian and Australian universities.

c. Rounding errors may occur.

Research funding, measured by:

(k) Institutional Grant Scheme (\$) Ranking

Benchmark gauge: National

The Institutional Grant Scheme (IGS) is distributed across universities by a performance-based formula comprising research income (weighted 60 per cent); publications (10 per cent); and using the two most recent years' data on higher degree research student places measured in EFTSL (30 per cent). Table 10 provides the IGS allocations by university and is ranked according to each institution's share of the

total IGS for 2009. Curtin has maintained its rank of 11th nationally, and is the highest ranked of the ATN universities.

ATN universities are identified in the table in italics, Western Australian universities are identified in bold type and universities with medical schools and supporting departments are identified with the letter 'M'. This latter group has the advantage of enhanced access to National Competitive Research Grants (for example, medical research funding through the National Health and Medical Research Council), and includes the University of Western Australia – the only Western Australian university that is ranked higher than Curtin. Curtin's IGS allocation should be assessed in this context.

Performance Indicators (continued)

Table 10. Institutional Grant Scheme Funds and Percentage Shares 2007-2009
Ranking According to %IGS Share in 2009

Rank	University	(\$'000) 2009	(% share) 2009	(% share) 2008	(% share) 2007
1	University of Melbourne (M)	36,364	11.6	12.0	11.8
2	University of Sydney (M)	36,276	11.5	10.9	10.1
3	University of Queensland (M)	28,987	9.2	9.5	9.6
4	Monash University (M)	25,511	8.1	7.7	7.4
5	University of New South Wales (M)	24,830	7.9	7.5	7.5
6	University of Western Australia (M)	17,324	5.5	5.5	5.6
7	Australian National University	16,973	5.4	5.7	6.0
8	University of Adelaide (M)	15,744	5.0	5.3	5.5
9	University of Tasmania (M)	8,643	2.7	2.7	2.6
10	University of Newcastle (M)	7,675	2.4	2.4	2.5
11	CURTIN UNIVERSITY	6,941	2.2	2.1	2.1
12	<i>Queensland University of Technology</i>	6,776	2.2	2.0	1.9
13	Griffith University	5,976	1.9	1.9	2.0
14	Macquarie University	5,832	1.9	1.9	1.9
15	Flinders University of SA (M)	5,796	1.8	1.9	2.0
16	<i>University of South Australia</i>	5,708	1.8	1.7	1.7
17	University of Wollongong	5,697	1.8	1.9	1.9
18	La Trobe University	5,492	1.7	1.7	1.8
19	<i>Royal Melbourne Institute of Technology</i>	5,243	1.7	1.7	1.8
20	<i>University of Technology, Sydney</i>	5,167	1.6	1.7	1.6
21	Murdoch University	4,946	1.6	1.7	1.7
22	Deakin University	4,145	1.3	1.4	1.5
23	James Cook University	3,877	1.2	1.3	1.3
24	University of New England	3,167	1.0	1.1	1.1
25	University of Western Sydney	3,031	1.0	1.0	1.1
26	Swinburne University of Technology	2,572	0.8	0.8	0.8
27	Charles Darwin University	2,263	0.7	0.7	0.7
28	Charles Sturt University	1,952	0.6	0.6	0.6
29	Victoria University	1,907	0.6	0.6	0.7
30	Edith Cowan University	1,865	0.6	0.6	0.6
31	University of Canberra	1,557	0.5	0.5	0.6
32	Southern Cross University	1,544	0.5	0.5	0.5
33	Central Queensland University	1,299	0.4	0.4	0.4
34	University of Southern Queensland	1,025	0.3	0.3	0.3
35	University of Ballarat	813	0.3	0.3	0.3
36	Australian Catholic University	654	0.2	0.2	0.2
37	University of the Sunshine Coast	309	0.1	0.1	0.1
38	Melbourne College of Divinity	209	0.1	0.1	0.1
39	Bond University	204	0.1	0.1	0.0
40	University of Notre Dame, Australia	130	0.0	0.0	0.0
41	Batchelor Inst Indigenous Tertiary Ed	120	0.0	0.0	0.0
	Total	315,545	100.0	100.0	100.0

Research funding measured by:**(l) Total Research Income (\$) Ranking***Benchmark gauge: ATN, National*

Curtin's research income continues to grow, with continued high performance in relation to the ATN average, and maintaining a national ranking of 11th. Overall research income has grown 35% over the 2006-2008 period, with an annual growth between 2007 and 2008 of 11%.

Table 11. All Research Funding: Comparison Between Curtin and the Average of All ATN Universities and National Ranking 2006-2008

	2006			2007			2008		
	Curtin \$'000	ATN ¹ \$'000	Nat Rank	Curtin \$'000	ATN ¹ \$'000	Nat Rank	Curtin \$'000	ATN ¹ \$'000	Nat Rank
Australian Competitive Research Grants ²	11,877	11,402	17	12,968	12,145	16	13,284	12,772	18
Other Public Sector Research Funding ²	13,795	11,474	10	24,074	14,313	9	31,404	17,277	9
Industry & Other Funding for Research ²	14,929	10,184	11	13,328	11,899	13	13,750	12,602	14
Cooperative Research Centres Funds ^{2,3}	7,109	3,694	6	7,691	4,171	5	6,100	4,297	5
Total	47,710	36,754	11	58,061	42,528	11	64,538	46,948	11

1. ATN refers to the average of all ATN universities.

2. Source: the Commonwealth's Higher Education Research Data Collection.

3. Note: All financial data are for calendar year periods, except for CRC data which is reported on a financial year.

Research funding measured by:**(m) Cooperative Research Centre (\$) Ranking***Benchmark gauge: National*

Established through the Commonwealth Government's Cooperative Research Centre Programme, CRCs link the public and private sectors across Australia and bring together a wide range of expertise and facilities, with a focus on new and innovative research, leading to competitive technological applications. Funding from CRC differs from other funding sources in that it is calculated on a financial year. It is reported here for the year that

it is reported under the Higher Education Research Data Collection (HERDC).

Table 12 expands upon the Cooperative Research Centre funding data provided in the previous table and is an indicator of the amount of applied collaborative research at Curtin, reflecting, in particular, the University's commitment to collaboration with external organisations in research and development, technology transfer and innovation.

ATN universities are identified in the table in italics, and Western Australian universities are identified in bold type.

Performance Indicators (continued)

Table 12. CRC Funding for the HERDC Reporting Year

Rank	University	(\$'000) 2008	% Share 2008	% Share 2007	% Share 2006
1	University of Queensland	16,271	13.1	11.7	14.7
2	University of Melbourne	14,200	11.5	10.3	9.4
3	Monash University	10,715	8.6	7.7	5.9
4	University of Tasmania	6,897	5.6	5.3	4.4
5	CURTIN UNIVERSITY	6,100	4.9	6.1	5.4
6	University of Adelaide	6,027	4.9	4.8	5.2
7	University of Sydney	6,017	4.9	6.4	6.0
8	<i>University of South Australia</i>	5,987	4.8	2.6	1.8
9	University of New South Wales	5,713	4.6	4.5	3.7
10	<i>Queensland University of Technology</i>	5,385	4.3	4.7	3.5
11	Murdoch University	5,291	4.3	4.4	4.0
12	University of New England	3,434	2.8	2.3	2.3
13	University of Canberra	3,325	2.7	2.8	1.0
14	Southern Cross University	3,246	2.6	2.5	3.1
15	<i>Royal Melbourne Institute of Technology</i>	3,100	2.5	2.4	2.6
16	Swinburne University of Technology	2,864	2.3	1.8	1.4
17	University of Western Australia	2,813	2.3	5.1	5.7
18	University of Newcastle	2,178	1.8	1.4	1.2
19	La Trobe University	2,030	1.6	1.1	0.7
20	Griffith University	1,653	1.3	1.4	2.8
21	Charles Sturt University	1,517	1.2	0.8	1.1
22	Central Queensland University	1,349	1.1	0.3	0.9
23	Charles Darwin University	1,258	1.0	1.3	1.0
24	Australian National University	1,164	0.9	1.5	2.0
25	James Cook University	1,013	0.8	2.2	4.5
26	<i>University of Technology, Sydney</i>	915	0.7	0.8	0.8
27	Flinders University of SA	798	0.6	0.4	0.5
28	Deakin University	796	0.6	0.6	0.3
29	Macquarie University	716	0.6	1.1	0.7
30	Victoria University	451	0.4	0.5	1.0
31	University of Western Sydney	440	0.4	0.7	0.5
32	University of Wollongong	159	0.1	0.8	1.5
33	Edith Cowan University	75	0.1	0.1	0.1
34	University of Southern Queensland	52	0.0	0.1	0.2
35	Australian Catholic University	0	0.0	0.0	0.0
36	Australian Maritime College	0	0.0	0.0	0.1
37	Batchelor Inst Indigenous Tertiary Ed	0	0.0	0.0	0.0
38	Bond University	0	0.0	0.0	0.0
39	Melbourne College of Divinity	0	0.0	0.0	0.0
40	University of Ballarat	0	0.0	0.0	0.0
41	University of Notre Dame, Australia	0	0.0	0.0	0.0
42	University of the Sunshine Coast	0	0.0	0.0	0.0

Research publications measured by:**(n) Research Publications (weighted HERDC points) Ranking***Benchmark gauge: National*

Research publications are considered an important measure of research performance throughout the higher education sector. The publication of a piece of research demonstrates that referees, expert in the appropriate field, have judged the work worthy of acceptance and dissemination to the research community.

Publications are also forming a major component of judging quality of research the Commonwealth Government initiatives such as the Excellence in Research for Australia (ERA).

Table 13 gives Curtin's relative performance in respect of the publications indicator over the period 2006-2008 against averages for the ATN universities and ranked against all Australian universities. Additional initiatives and incentives were put in place in 2006, and there has been a steady increase in total HERDC points awarded for publications, both overall and relative to the sector, given Curtin's continued progression up the national ranking tables.

Table 13. All Research Funding: Comparison Between Curtin and the Average of All ATN Universities and National Ranking 2006-2008

	2006			2007			2008		
	Curtin wt pts	ATN ¹ wt pts	Nat Rank	Curtin wt pts	ATN ¹ wt pts	Nat Rank	Curtin wt pts	ATN ¹ wt pts	Nat Rank
Books ²	68.1	61.5	19	96.0	78.0	13	78.8	82.7	23
Book Chapters ²	73.9	96.7	23	124.4	107.2	16	102.2	129.9	21
Journal Articles ²	498.1	541.6	18	567.5	572.9	18	749.3	646.5	12
Conference Articles ²	440.8	477.7	10	457.8	460.1	8	494.8	456.1	6
Total	1,081	1,178	17	1,246	1,218	13	1,425	1,315	11

1. ATN refers to the average of all ATN universities.

2. Source: the Commonwealth's Higher Education Research Data Collection.

Performance Indicators (continued)

A2.2 RESEARCH AND DEVELOPMENT EFFICIENCY

Ref	Name	Output/Objective
o	Research Funding per Research Staff (using Research Performance Index database)	Research funding efficiency
p	Weighted Research Publications per Research Staff (using Research Performance Index database)	Research publications efficiency

The Research Performance Index (RPI) is an internal initiative that collects information on research performance, on an annual basis, at the level of an individual staff member. These newly developed measures are to gauge research efficiency in the key research input (income) and output (publications).

Research funding efficiency measured by:**(o) Research Funding per Research Staff
(using RPI database)**

Benchmark gauge: None

Table 14. Research Funding Efficiency – 2009: Research Funding per Research Staff Member

Research Funding per staff ¹	\$50,107
Curtin Target	\$55,000

1. Based on 2008 performance data collected in 2009.

Research publications efficiency measured by:**(p) Weighted Research Publications per Research Staff
(using RPI database)**

Benchmark gauge: None

**Table 15. Research Publication Efficiency – 2009
Weighted Research Publication per Research Staff Member**

Weighted HERDC points per staff ¹	1.11
Curtin Target	1.26

1. Based on 2008 performance data collected in 2009.

Section B: Vocational Education and Training Performance

Strategic Objective: to supply quality teaching and skills formation services to both meet customer needs and provide education and training for employment in the region.

Vocational Education and Training Performance Indicators

	Ref	Name	Objective
B1 Effectiveness	q	Percentage of Graduates Satisfied with their Course	Quality teaching
	r	Employment Rate of Graduates	Quality graduates
	s	Graduates in Further Study	Quality graduates
B2 Efficiency	t	Expenditure per Student Curriculum Hour	Efficient teaching and learning expenditure

B1 VOCATIONAL EDUCATION AND TRAINING EFFECTIVENESS

Quality teaching, measured by:

(q) Percentage of Graduates Satisfied with their Course

Benchmark gauge: National average

Table 16, covering the years 2006-2009, signals the extent to which Curtin met individual student's needs in terms of

skills formation outcomes through provision of training services, and as assessed as part of a nationally conducted Graduate Survey.

The 2009 survey shows graduate satisfaction at Curtin has dropped markedly and has fallen below both the State and national averages.

The national surveying body only carries out 'detailed' small area sampling biennially. Thus in 2006 and 2008 the survey returns are deemed insufficient for reporting purposes.

Table 16. VET Graduate Satisfaction 2006-2009

	2006	2007 ¹	2008	2009 ¹
Curtin	n/a	90% (91%)	n/a	84% (85%)
<i>Number of Respondents</i>		1,673		1,111
State	n/a	88% (87%)	n/a	89% (89%)
<i>Number of Respondents</i>		36,544		43,307
National	n/a	89% (89%)	n/a	89% (89%)
<i>Number of Respondents</i>		391,597		388,365

Survey Data for 2009:

Curtin: Response rate = 98%; sample size = 313 and standard deviation = 0.9

State: Response rate = 98%; sample size = 7,211 and standard deviation = 0.8

National: Response rate = 97%; sample size = 44,951 and standard deviation = 0.8

Notes:

- The national surveying body only conducts 'detailed' small area sampling biennially. Consequently, the relevant 2006 and 2008 survey returns for Curtin are deemed insufficient for reporting purposes.
- ¹ Bracketed percentages represent estimates prepared by the National Centre for Vocational Education and Research (NCVER), provided to the Western Australian Department of Training and Employment (WADOT), and are intended as a better measure of the full year's outcomes given the data were collected in June. Unbracketed percentages are generated from actual rather than estimated responses.
- Rounding errors may occur.
- Number of respondents, response rate in percentage, sample size and standard deviation for Curtin, State and national data in 2007 and 2009 are sourced from NCVER report. Confidence level and interval are not reported.

Performance Indicators (continued)

Quality graduates, measured by:

(r) Employment Rate of Graduates

Benchmark gauge: WA and National average

Table 17, showing the proportion of graduates in employment in the year following their graduation, indicates the extent to which the desired outcomes were successfully achieved in terms of an employable and adaptable graduate. Even though Curtin VET graduates' employment rate in 2009 had dropped and unemployment rate increased (due to the global economic crisis), they are still significantly higher than both the State and national averages.

Table 17. VET Graduate Employment 2006-2009

	2006		2007 ¹		2008		2009 ¹	
	No.	%	No.	%	No.	%	No.	%
Curtin								
Employed	n/a	n/a	376	91 (92)	n/a	n/a	264	85 (87)
Unemployed	n/a	n/a	13	3 (3)	n/a	n/a	23	7 (8)
Not in Labour Force	n/a	n/a	25	6 (5)	n/a	n/a	22	7 (6)
<i>Number of Respondents</i>			1,669				1,111	
State								
Employed	n/a	n/a	4,681	83 (83)	n/a	n/a	5,444	78 (78)
Unemployed	n/a	n/a	340	6 (6)	n/a	n/a	682	10 (10)
Not in Labour Force	n/a	n/a	641	11 (11)	n/a	n/a	882	13 (12)
<i>Number of Respondents</i>			34,974				43,307	
National								
Employed	n/a	n/a	31,094	81 (80)	n/a	n/a	34,310	78 (77)
Unemployed	n/a	n/a	3,183	8 (9)	n/a	n/a	4,616	11 (11)
Not in Labour Force	n/a	n/a	3,980	10 (10)	n/a	n/a	4,809	11 (11)
<i>Number of Respondents</i>			378,830				388,365	

Survey Data for 2009:

Curtin: Response rate = 99% and sample size = 313

State: Response rate = 97% and sample size = 7,211

National: Response rate = 98% and sample size = 44,951

Notes:

- The national surveying body only conducts 'detailed' small area sampling biennially. Consequently, the relevant 2006 and 2008 survey returns for Curtin are deemed insufficient for reporting purposes.
- ¹ Bracketed percentages represent estimates prepared by the National Centre for Vocational Education and Research (NCVER), provided to the Western Australian Department of Training and Employment (WADOT), and are intended as a better measure of the full year's outcomes given the data were collected in June. Unbracketed percentages are generated from actual rather than estimated responses.
- Rounding errors may occur.
- Numbers of respondents, response rate in percentage, and sample size for Curtin, state and national data in 2007 and 2009 are sourced from NCVER report. Confidence level and interval and standard deviation are not reported.

Quality graduates, measured by:

(s) Graduates in Further Study

Benchmark gauge: WA and National average

The proportion of graduates who enrol in further study provides another measure of effectiveness in achieving the desired outcome of meeting customers' needs. Table 18 provides these data for the period 2006-2009, with Curtin benchmarked against State and national data. Note that respondents may also be in work while engaging in further study.

A higher percentage of Curtin VET graduates enrolled for further study in 2009 compared with 2007. The gap between Curtin's outcome and the State and national benchmarks is being reduced.

Table 18. VET Graduates Enrolled in Further Study 2006-2009

	2006		2007 ¹		2008		2009 ¹	
	No.	%	No.	%	No.	%	No.	%
Curtin	n/a	n/a	102	25 (23)	n/a	n/a	82	27 (25)
<i>Number of Respondents</i>							1,669	1,111
Target – Exceed State and National Percentages								
State	n/a	n/a	1,881	33 (34)	n/a	n/a	2,397	34 (33)
<i>Number of Respondents</i>							34,974	43,307
National	n/a	n/a	12,147	32 (31)	n/a	n/a	14,514	33 (33)
<i>Number of Respondents</i>							378,830	388,365

Survey Data for 2009:

Curtin: Response rate = 99% and sample size = 313

State: Response rate = 97% and sample size = 7,211

National: Response rate = 97% and sample size = 44,951

Notes:

- The national surveying body only conducts 'detailed' small area sampling biennially. Consequently, the relevant 2006 and 2008 survey returns for Curtin are deemed insufficient for reporting purposes.
- ¹ Bracketed percentages represent estimates prepared by the National Centre for Vocational Education and Research (NCVER), provided to the Western Australian Department of Training and Employment (WADOT), and are intended as a better measure of the full year's outcomes given the data were collected in June. Unbracketed percentages are generated from actual rather than estimated responses.
- Rounding errors may occur.
- Numbers of respondents, response rate in percentage, and sample size for Curtin, State and national data in 2007 and 2009 are sourced from NCVER report. Confidence level and interval and standard deviation are not reported.

Performance Indicators (continued)

B2 Vocational Education and Training Efficiency

Efficient teaching and learning expenditure, measured by

(t) Expenditure per Student Curriculum Hour

Benchmark gauge: Not available

The indicator *Expenditure per Student Curriculum Hour* provides an insight into the efficiency with which monies directed towards the VET goal have been spent.

Table 19 records expenditure and Student Curriculum Hours (SCH) and ratios of Expenditure to SCH – the overall expenditure per SCH as well as teaching and non-teaching components.

Total SCH in 2008 and 2009 have fallen due to the current economic climate. Employers are not recruiting as many apprentices and, thus, student uptake at VET/TAFE across the board has declined.

Table 19. Expenditure per Student Curriculum Hour 2006-2009

	2006	2007	2008	2009
Total SCH ¹	667,924	656,868	573,195	549,145
Curtin Target in SCH	565,388	565,388	600,668	573,195
Total Teaching and Learning Expenditure	\$12,466,442	\$14,703,886	\$14,791,271	\$15,769,770
Teaching Expenditure per SCH	\$8.98	\$10.57	\$14.20	\$15.65
Non-Teaching Expenditure per SCH	\$9.68	\$11.81	\$11.60	\$13.07
Total Teaching Expenditure per SCH	\$18.66	\$22.38	\$25.80	\$28.72

1. Estimated SCH as actual SCH are only available in mid year.

Actual SCH in previous years: 2006 – 662,990 SCH; 2007 – 681,391 SCH; 2008 – 573,515 SCH.

Note: Rounding errors may occur.