

State of the Consulting Engineering Industry January – June 2001

(Published September 2001)



GENERAL ECONOMIC OVERVIEW

The South African economy is faced with probably one of the largest challenges in history. To sustain economic stability amidst a) the growing probability of a global recession and b) the threat of a declaration of war from the United States. The United States government is well aware of the worldwide implications should it act against terrorism, and has subsequently prepared an “economic stimulus package” to act as impetus for economic growth. Interest rates were cut and allowances are also introduced in capital gains tax to encourage fixed capital formation. This step taken by the United States put some fears to rest, but has by no means restored dwindling confidence. There is no question that the South African economy will be affected by the latest global developments. Fuel prices are expected to jump by as much as 14c/litre in October, whilst the rand has reached another record low. The price of crude oil has been volatile on the fear that US retaliation against targets in Afghanistan could disrupt supplies.

Gross fixed capital formation as a percentage of total GDP improved over the last three quarters after bottoming out at 16,2% of GDP in the third quarter of 2000. Capital formation currently represents 16,6% of gross domestic product. Investment in fixed capital formations increased during the last three consecutive quarters by an average of 5%. The sharp reaction by the United States to reduce taxes on capital gains tax in an effort to stimulate gross fixed capital formation increases the reservation on SA’s government to impose capital gains tax, whilst the economy is struggling to gain full momentum and boost much needed job creation.

Economic prospects

- Economic growth for 2000 was 3,1%, after being scaled down from the initial forecast of 3,3% to 2,5%. The improved performance is partially due to a revision brought about by the South African Reserve bank in the publication of national quarterly figures. Forecast for this year (2001) was again scaled down from 2,9% to between 2,0% and 2,4%, although highly sensitive to prevailing global market conditions.
- Business confidence was stable at 9,2% higher than last year (measured in August 2001) which shows that the adverse social-political developments in Southern Africa, and even domestically, may well have fed negative sentiments towards Africa, but have not succeeded in causing damage to the inherent stability of the South African economy thus far.
- Lower inflation levels continue with headline inflation dropping to 4,6% year-on-year in August 2001. CPI(X) for the same period softened to an increase of 6,61% coming very close to the upper range of the South African Reserve Banks’ target.
- This prompted what economists referred to as a “responsible easing” of monetary policy. The repo rate was reduced by 50 points, reducing the prime-lending rate to 13%.

CONDITIONS IN THE CIVIL ENGINEERING CONTRACTING INDUSTRY

There are distinct differences between the perceptions of different size companies. The larger more established contractors (with a total number of employees exceeding 100) have shown an upliftment in confidence levels, whilst the smaller contractors are becoming increasingly pessimistic. Based on responses received from SAFCEC's surveys and other quantitative indicators, conditions appeared to have bottomed out in the last quarter of 1999. Latest trends in indicators show a moderation of expectations during the first quarter of 2001, but remain however, improved on depleted levels experienced last year. Provincial governments have as yet, not spent the additional funding allocated for infrastructure developments. For more detail on the spending patterns of provincial governments please contact the SAFCEC Economics Department.

The question however remains that although prospects are more buoyant, will this year finally bear fruit for the civil engineering industry?

The main indicators performed as follows:

1. **Confidence levels** softened in the first quarter of this year compared with last year, but are still higher compared with one year ago. Based on a weighted average, over 18% of respondents reported that there is "fairly good" to "good" outlook for expected conditions in the industry.
2. **Tender activity** increased by 8% for the first five months of 2001 compared with the same period in 2000. Although there is still a reported increase in activity levels, it has eased off during March to May.
3. On a year-on-year comparison, the total **value of contracts awarded** rose 23%, in real terms. This stronger than expected growth was largely due to an increase of more than 140% in May this year compared with the same month last year.
4. Although somewhat lower than at the end of last year, an increasing number of respondents are satisfied with the state of their **order books** compared with last year. However, the majority of members are still depressed regarding work captured on their order books.
5. It is estimated that **turnover** rose 7% (inflationary adjusted), based on the responses received regarding employment trends in 2000 compared with 1999. For the 12 months to March 2001, turnover rose 7% compared with the same period in 2000 and 1,8% for the period November 2000 to March 2001.
6. Although **employment** has increased by 3,8% in the first quarter of this year, creating an additional 3000 jobs in the industry, mainly by the larger contractors, it is possible that the trend will stabilise in the next two quarters as majority of the respondents expect to maintain current staff levels, with few expecting to decrease their staff.
7. **Liquidations** of construction companies (including building and civil industries) continue at a horrendous rate. During the first three months, there were 182% more liquidations than 12 months ago, translating to over 120 companies.
8. Entering the construction industry has become increasingly unattractive, since new **registrations** dropped by 33%. The impact (that is new registrations less liquidations) is a negative change of 152 for the first quarter. Thus more contractors are (willingly) leaving the industry, than those entering the market.

Confounding trends emerge....

Statistics

The aim of this section is to give an overview of the recent past and current statistics in the industry. The report presents the results of a survey done amongst SAACE members during the first six months of 2001.

In total 150 questionnaires were returned in the latest survey, compared with 121 received during the previous survey (period July - December 2000). To ensure continuity only responses received for the past two consecutive surveys are included in the analysis. This unfortunately does reduce the sample to less than 80.

Table 1

Year	Employment	Salaries / Wages (R mill, current prices)	Fee Income, R mill			Cost Deflator
			Current prices	Constant 2000 prices	Year-on-Year real percentage change	
Jun-96	11,938	961	2,660	3,561		74.7
Jun-97	12,185	1,185	3,266	4,012	12.68%	81.4
Jan-98	12,618	1,332	3,854	4,502	12.21%	85.6
Jun-98	12,379	1,554	3,791	4,323	7.74%	87.7
Dec-98	11,512	1,321	3,343	3,598	-20.07%	92.9
Jun-99	11,035	1,185	3,366	3,558	-17.69%	94.6
Dec-99	10,382	1,244	3,061	3,212	-10.74%	95.3
Jun-00	10,634	1,164	3,200	3,259	-8.42%	98.2
Dec-00	11,006	1,280	3,456	3,395	5.70%	101.8
Jun-01	10,236	1,332	3,905	3,716	14,03%	105.1
Dec-01 (forecast)	10,799	1,568	3,921	3,600	6,03%	108.9

Table 2

Percentage change (year-on-year) (inflation adjusted)				
Year	Employment	Salaries and Wages	Fee income	Cost escalation
Jun-98	1,59 %	21.7%	7.74%	7.7%
Dec-98	-8,77 %	-8.6%	-20.07%	8.5%
Jun-99	-10,86 %	-29.3%	-17.69%	7.9%
Dec-99	-9,82 %	-8.2%	-10.74%	2.6%
Jun-00	-3,60 %	-5.4%	-8.42%	3.8%
Dec-00	6,01%	-3,6%	5,70%	6,8%
Jun-01	-3,75%	6,9%	14,03%	7,3%
Dec-01 (forecast)	-1,88%	14,5%	6,03%	7,0%



Fee income rose, yet again against member's expectations, by 14% during the first six months of 2001 to R3,716 million, compared with the first six months of 2000. Expectations for the last six months of this year (2001) are for another but softer fee income increase of 6% in real terms. The first six months of a calendar year are generally slower, compared with the last six months, as contracts are first initiated, budgets approved and implementation procedures put in place by various tiers of government. Therefore, if conditions did improve by 14% in real terms after decreasing by 8% during the same time last year, prospects for the last six months of this year is more positive.

The salary and wage bill increased by 6,9% in real terms to represent 34% of gross income, which is lower than the increase reported in gross fee income. Employment on the other hand decreased by 3,7%. This could be attributed to an increasing number of members using more cost effective, but more expensive contract workers. However, since an increasing number of respondents reported that their firms are intending to increase engineering staff, the salary and wage bill could increase at a faster rate than the overall fee income.

Employment levels dropped by nearly 800 people (or 3,7% year-on-year) to 10,236, after an increase of 6% in 2000. There are indications that members are expecting to increase employment levels by expanding the current levels of engineers and technical staff. The prevailing and future outlook of employment levels in the consulting engineering industry is somewhat perplexed. Whilst conditions are set to slowdown, the overall outlook is to increase staff levels. On the other hand whilst fee income increased by 14% in the latest survey, employment levels were further reduced. *Possible distortions in how members report employment trends could occur as a result of an increasing number of members utilizing contract workers as opposed to full time staff. The questionnaires need to be revised to accommodate accurate reporting.*

The (inflation-adjusted) changes in the important indicators are shown in the table below.

Table 3

Indicator	Period Last 12 months	Period Last 6 months
Employment	-3,75%	-7,00%
Salaries	6,9%	0,73%
Fee Income	14,03%	9,45%
Confidence	63,5%	8,23%
Capacity utilisation	-5,0% (77%)	-0,52%

SALIENT FEATURES OF THE MARKET

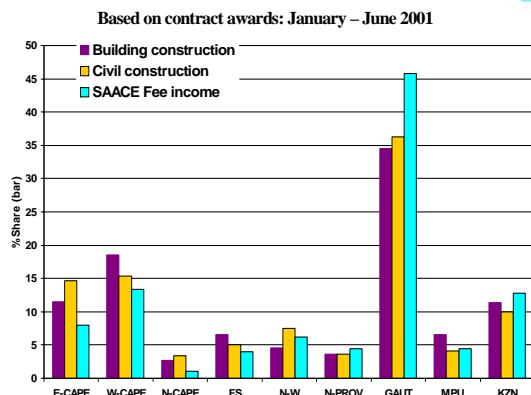
There are several important industry indicators and characteristics that provide insight into past, current and future trends.

Sub disciplines

The civil industry as the largest sub discipline lost some 8,6 percentage points to 36,7% of total gross income earned during January – June 2001. This loss was partially in favor of IT (up 2,2 points to 3,4%), Electric (up 1,9 points to 4,67%), Transport (up 1,44 points to 11,7%) and Development (up 2,6 points to 4,93%). Less work was also undertaken in the building services discipline (down 4 points to 2,7%). Fee income generated in the civil discipline is estimated at R1,363 million (constant 2000 prices) which is 52% higher than the R892 million earned during the same time last year. Please refer table 4 for percentage changes and market representation.

Provincial distribution

Provincial Market Share: Construction As at Jun'01



SAACE January – June 2001

possible explanation could be that KwaZulu/Natal members have increasingly serviced the northern part of the Eastern Cape.

In this report we include a new analysis that compares provincial market shares in terms of civil and building activity with reported consulting engineers' gross fee income earned. The hypothesis is that there should be some analogy between the exposure of consulting engineers and regional construction activity. Based on responses received, there appears to be a predictable over-exposure in Gauteng, since members are resident in Gauteng but operate in other provinces. In Kwazulu/Natal the fee income earned outperforms the provincial construction market share, whilst in the Eastern Cape the opposite occurred. One

Exposure to countries outside of South Africa continues to increase. **Activities in African countries** remained stable at around 10% whilst **international activities** rose from 1,2% in the last survey to 3% for the first six months of the year. An increasing number of members reported cross border activities. 21% of respondents reported activities in African countries and 7% of the respondents operate internationally. Combined estimated fee income generated outside of South Africa's borders increased from R392 million last year to R520 million this year (inflation adjusted).

Client distribution

Table 4: R mill, 2000 prices by type of client

Client	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Central	796	528	623	601	455	782
Provincial	520	551	457	329	498	528
Local	636	750	658	741	718	781
Parastatals	468	261	154	149	57	103
Private	1,180	1,468	1,320	1,438	1,667	1,552
Total	3,599	3,558	3,212	3,259	3,395	3,716

The private sector remains the single largest client, but has reduced its market share to 41% from 44% last year. More work emanated from the central and provincial government now contributing 21% of gross fee income earned opposed to 18% last year (central government) and 14% compared with 10% (provincial government). Parastatals on average contribute between 2 and 3% of gross fee income earned. Efficiencies within government departments remain a significant component to ensure a viable and sustainable engineering industry. Fortunately payments from these departments have improved mainly as a result of strenuous, but successful lobbying.

Table 5: Gross income earned by type of client, according to size of company

Category	Client				
	CEN	PROV	LOC	PARAS	PRIV
> 500	25.27%	12.17%	16.57%	3.08%	42.90%
Between 100 and 499	23.74%	24.36%	28.37%	1.07%	22.47%
Between 50 and 99	18.25%	10.44%	32.50%	0.25%	38.56%
Between 10 and 49	9.26%	10.73%	21.38%	4.46%	54.18%
Less than 10	17.44%	17.49%	15.19%	3.75%	46.12%
TOTAL	21.04%	14.20%	21.03%	2.76%	40.97%

THE IMPACT OF AFFIRMATIVE PROCUREMENT ON THE INDUSTRY

Affirmative procurement is an industry reality, which few businessmen would argue against the economic empowerment of the previously disadvantaged section of the population. However, there seems to be a growing disillusionment with the manner in which the issues are being approached by the authorities. It has not been fully appreciated that the path to successful empowerment is through appropriate education, training and management experience. Unless approached otherwise, the results would be disappointing or even downright disastrous.

In our latest survey we incorporated two new sections with regard to projects jointly undertaken with affirmable professional service providers and Public-Private partnerships (PPP) as well as the level of membership involvement and the distribution from income generated by means of these PPP's and affirmable business enterprises.

The number of respondents reporting on projects undertaken with **affirmable professional service providers** dropped from 72% last year to 66% in the first half of 2001. In the latest survey members reported a much lower rate of turnover outsourced to affirmable business enterprises (7% opposed to 15-20% reported in the previous survey)

Table 6:

Period	PPP%	Purpose of joint venture		
		Advising Public sector	Advising private sector	Equity partner
Dec-99	10.90%	45.23%	35.40%	19.37%
Jun-00	3.50%	49.98%	19.10%	30.92%
Dec-00	17.00%	30.00%	24.00%	46.00%
Jun-01	11.49%	31.60%	12.72%	55.68%

Slightly fewer members were involved in public private partnerships in the first half of 2001 compared with the last six months of 2000, when 17% of gross income was derived from PPP's. During the period January – June 2001, 11,4% of the industry gross fee income was derived from

PPP's. However, an increasing number of members are involved by means of an equity partner.

TEMPO OF ACTIVITY, COMPETITION, PROFITABILITY AND CAPACITY UTILISATION

Several questions in the survey were meant to highlight trends that would indicate whether the industry was growing or stagnating during the six months under review.

- Members are expecting the **tempo of activity** to decrease during the next six months and then stabilize thereafter during the first half of 2002.
- Although **competition for work** remains very keen to fierce, members reported a slight improvement.
- **Profit margins** improved slightly, underpinned by expectations of further increases. An increasing number of members were satisfied with prevailing margins. This does however, contradict members' expectations of an expected slowdown during the next 12 months.
- **Utilisation of capacity** remained stable at around 77%, with majority of respondents expecting no change in the next 6 months. A slightly higher number of respondents are however expecting a decrease, in line with the somewhat more pessimistic outlook for the next 6 – 12 months.



- Majority of the respondents has been working within **normal working hours**, or up to 5 hours overtime.

PROSPECTS FOR THE INDUSTRY

The **confidence index** is an indication of members' general discernment regarding current and future prospects with respect market developments. This is a "weighted" answer (each company weighted according to employment size), and calculates the net percentage of members satisfied with the conditions.¹ To ensure that possible distortions emanating from ad hoc replies do not occur, only those members that have submitted returns during the last two consecutive surveys are considered.

Confidence levels of the consulting engineering fraternity have steadily dropped from the beginning of last year. Although more members are feeling less pessimistic regarding future and current trends, their expectations are not entirely being met. Nonetheless members were not overly optimistic regarding the future outlook of the industry in the last survey, it appears that the industry performed better than expected. This translates to an improved confidence index of 72% (up from 66%) compared with the same time last year. Expectations for the next 12 months (to June 2002) are steady.

We started reporting on **business confidence indices**, published by SACOB as a leading indicator for possible movements in the SAACE index. The SACOB index, representing general business perceptions of business, revealed the first turning point at the middle of last year (1999). The SAACE index followed a similar trend six months later. Recent developments in the SACOB index (August 2001), showed a continued strengthening business confidence with a year-on-year increase of 9%. The recent turmoil in the United States will probably dampen business confidence during September but should show some recovery in October in light of the cut in global and domestic interest rates. Business confidence rose at a much sharper rate than those expressed by the consulting engineering fraternity, which ultimately means that positive business sentiment only has a limited impact on sentiment in the civil engineering, and affiliated industries.

PHASES OF THE PRODUCT CYCLE

We asked respondents to indicate whether they are experiencing better, the same or deteriorating conditions in terms of the "phases of the product cycle", i.e.

1. enquiries
2. pre-feasibility / proposals
3. preliminary planning
4. detailed planning and design
5. tender adjudication and appointment, and
6. construction of project (s).

An increasing number of members' reported an increase in pre-feasibility studies over the past six months. Preliminary planning, although still showing a negative net change, also improved. Detailed planning and adjudication of projects are positive, but has slowed down after a peak in the last six months of 2000. The "construction of projects" showed for the first time over a period of 7 surveys a positive net change.

Overall the work flowing in (enquiries, pre-feasibility studies and preliminary planning) dropped from the last survey, but still motioned an improvement, while work flowing out (including detailed planning, adjudication and construction), showed a marginal positive net change.

¹ The net percentage reflects only those members that expect conditions to be satisfactory, quite busy or very busy.

COST ESCALATION TRENDS

No specific escalation index is available for the consulting engineering industry. The industry forms part of the “financial, insurance, real estate and business services” sector. Up to now we have used the civil engineering index as a guide to consulting engineering price changes. First the CPI was used as a sole index, but lately the civil engineering industry returned to the composite index comprising of four elements namely fuel, materials, plant and labour. A comparison of the three possible indicators of price changes is included for further discussions. If none of the possible indices suffice, perhaps the questionnaire could be revised to include a “cost indicator” specifically formulated for the consulting engineering industry.

Table 7

Year	CPI (%)	Civil engineering index (Composite)	Business Services (SARB)
1997	8,7		6,7
1998	6,9	5,8	4,4
1999	5,8	8,0	7,3
2000	5,3	6,3	6,0
2001	6,5	9,2	5,0
2002	5,5	8,5	
2003	5,0	8,3	

The South African Reserve Bank came very close to reaching the upper level of its 3% – 6% inflation target when the CPI(X) increased by a year on year 6,6% in August 2001. Latest figures for the civil engineering composite index suggests an increase of 8,4%.

EDUCATION AND TRAINING

Table 8

Survey	Bursaries % of salary bill	Salary / Wage bill (current prices)	Bursaries R mill current prices	Training % of Salary bill	Training R mill current prices
1/98	0.86%	1332	11	2.45%	32.63
6/98	1.04%	1554	16	2.22%	34.50
1/99	1.03%	1321	14	2.70%	35.67
6/99	1.9%	1185	23	0.77%	9.12
12/99	0.75%	1244	9	1.54%	19.16
6/00	1.1%	1164	13	2.90%	33.76
12/00	0.6%	1280	8	2.17%	27.78
6/01	0,8%	1332	11	2.04%	27.16

Bursaries granted by members (expressed as a percentage of the total salary/wage bill) increased slightly from 0,6% to 0,8% of the total salaries and wages paid. We estimated that the bursary amount increased from R8 million to R11 (expressed in nominal terms). Training represented 2,04% percent of the total salary bill, slightly down from 2.17% in the last six months (2000). Thus an estimated R27 million was spent on training during the first six months of 2001. The average

bursary amount, based on the latest survey (January – June 2001) was between R10,000 and R12,000. More than half of the recipients of the bursaries granted over the survey period came from a previously disadvantaged background. Extrapolated to represent the entire industry approximately 500 of the total 924 bursaries granted over the survey period have been granted to previously disadvantaged individuals.

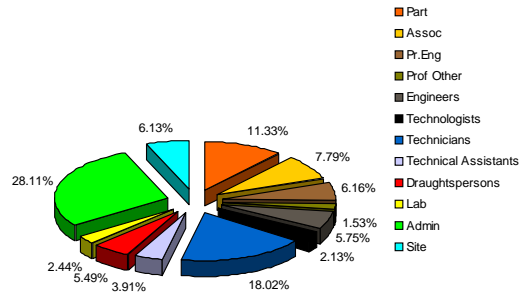
HUMAN RESOURCES

An increasing number of members are intending to increase current employment levels of engineers and technical staff, with only a few intending to increase support staff. Finding appropriate staff particularly from a PDI background remains challenging.

EMPLOYMENT PROFILE ANALYSIS



Employment Breakdown Workforce Analysis January – June 2001



The graph on the left shows the breakdown of employment by category for the period January – June 2001

Refer to the attached table for full details on gender and race classification by type of job category.

Disabled = 0,2%

SAACE July - December 2000

FEE-INCOME OUTSTANDING

Table 9

Income distribution	Fee income outstanding for more than 90 days as % of total <u>potential</u> fee income (Outstanding + reported fee income)		Total outstanding for longer than 90 days by type of client	Fee income outstanding longer than 90 days R mill, 2000 prices
	Jan – Jun 2001 %	July – Dec 2000 %		
Central government	6.1	9.9	18.5	47
Provincial government	6.1	11.6	11.5	29
Local government	6.8	10.5	21.8	55
Parastatals	6.2	6.4	3.0	8
Private Sector	7.4	13.5	45.2	114
Total	6.8	11.7	100%	253

Non-payments, or delayed payments, really become a problem when such delays exceed 90 days. Calculations based on responses in the latest survey, suggest that 6,8% of the total potential fee income (that is fee income received plus all amounts still outstanding) is outstanding for more than 90 days. Based on a fee income of R3 716 million in 2000 prices, in excess of R250 million has been outstanding for over three months. The analysis was extended to highlight potential problems within the different size of companies. For example smaller companies employing less than 10 people would find it a great deal harder to sustain sufficient cash flows in an environment where payments are outstanding for such long periods. The analysis highlighted the local government and the private sector as “culprits” of not paying the smaller companies where between 12% and 13% of payments are outstanding for more than 90 days. A concerted effort should be made to rectify this problem since close to 40% of SAACE members employ less than 10 people.

Comparing clients’ performance in terms of payments, it would appear that payments across all sectors have improved compared with the last survey (July – December 2000), but compared with the same time last year (January – June) the local authorities and parastatals worsened, the central and provincial governments remained reasonably unchanged, whilst the private sector notably improved.

STATISTICAL TABLES





Table 10: EMPLOYMENT BREAKDOWN AS AT DECEMBER 2000, BY JOB CATEGORY, RACE AND GENDER

EMPLOYMENT BREAKDOWN: JULY - DECEMBER 2000																
	Black			Coloured			Asian			White			Total			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	% of Total
Partners / Directors	63	2	65	9	0	9	23	0	23	1042	16	1058	1137	19	1156	10.50%
Associates	21	5	26	9	0	9	2	12	14	537	26	563	570	42	612	5.56%
Pr. Eng / Pr. Tech. Eng	37	0	37	9	2	12	0	0	0	465	7	472	512	9	521	4.73%
Prof Architects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Professional Quantity surveyors	0	0	0	0	0	0	0	0	0	14	0	14	14	0	14	0.13%
Professional other	14	2	16	5	2	7	19	0	19	540	88	628	577	93	670	6.09%
Engineers	49	9	58	9	0	9	21	0	21	444	63	507	523	72	595	5.41%
Other graduates	5	2	7	0	0	0	0	0	0	51	19	70	56	21	77	0.70%
Technologists	23	0	23	9	2	12	9	0	9	293	9	302	335	12	347	3.15%
Technicians	307	53	361	100	12	112	33	5	37	993	172	1165	1433	242	1675	15.22%
Technical Assistants	149	37	186	23	9	33	23	2	26	181	93	274	377	142	519	4.71%
Draughtspersons	30	28	58	65	21	86	26	2	28	263	247	509	384	298	681	6.19%
Laboratory / Survey Assistants	454	179	633	53	2	56	0	0	0	12	2	14	519	184	702	6.38%
Administration / Support staff	474	512	986	107	195	302	12	70	81	135	1321	1456	728	2098	2826	25.68%
Site staff	147	33	179	21	5	26	5	2	7	274	51	326	447	91	537	4.88%
Total	1772	863	2635	421	251	672	172	93	265	5245	2114	7359	7610	3321	10932	99.32%
% of Total	16.1%	7.8%	23.9%	3.8%	2.3%	6.1%	1.6%	0.8%	2.4%	47.7%	19.2%	66.9%	69.1%	30.2%	99.3%	
Disabled	7	0	7	5	0	5	0	0	0	44	19	63	56	19	74	
% of total disabled	0.06%	0.00%	0.06%	0.04%	0.00%	0.04%	0.00%	0.00%	0.00%	0.40%	0.17%	0.57%	0.51%	0.17%	0.68%	



Table 11: PERCENTAGE BY RACE AND GENDER: JULY – DECEMBER 2000

EMPLOYMENT BREAKDOWN: JULY - DECEMBER 2000															
	Black			Coloured			Asian			White			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Partners / Directors	5.4%	0.2%	5.6%	0.8%	0.0%	0.8%	2.0%	0.0%	2.0%	90.1%	1.4%	91.5%	98.4%	1.6%	100.0%
Associates	3.4%	0.8%	4.2%	1.5%	0.0%	1.5%	0.4%	1.9%	2.3%	87.8%	4.2%	92.0%	93.2%	6.8%	100.0%
Pr. Eng / Pr. Tech. Eng	7.1%	0.0%	7.1%	1.8%	0.4%	2.2%	0.0%	0.0%	0.0%	89.3%	1.3%	90.6%	98.2%	1.8%	100.0%
Prof Architects	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Professional Quantity surveyors	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%
Professional other	2.1%	0.3%	2.4%	0.7%	0.3%	1.0%	2.8%	0.0%	2.8%	80.6%	13.2%	93.8%	86.1%	13.9%	100.0%
Engineers	8.2%	1.6%	9.8%	1.6%	0.0%	1.6%	3.5%	0.0%	3.5%	74.6%	10.5%	85.2%	87.9%	12.1%	100.0%
Other graduates	6.1%	3.0%	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	66.7%	24.2%	90.9%	72.7%	27.3%	100.0%
Technologists	6.7%	0.0%	6.7%	2.7%	0.7%	3.4%	2.7%	0.0%	2.7%	84.6%	2.7%	87.2%	96.6%	3.4%	100.0%
Technicians	18.3%	3.2%	21.5%	6.0%	0.7%	6.7%	1.9%	0.3%	2.2%	59.3%	10.3%	69.6%	85.6%	14.4%	100.0%
Technical Assistants	28.7%	7.2%	35.9%	4.5%	1.8%	6.3%	4.5%	0.4%	4.9%	35.0%	17.9%	52.9%	72.6%	27.4%	100.0%
Draughtspersons	4.4%	4.1%	8.5%	9.6%	3.1%	12.6%	3.8%	0.3%	4.1%	38.6%	36.2%	74.7%	56.3%	43.7%	100.0%
Laboratory / Survey Assistants	64.6%	25.5%	90.1%	7.6%	0.3%	7.9%	0.0%	0.0%	0.0%	1.7%	0.3%	2.0%	73.8%	26.2%	100.0%
Administration / Support staff	16.8%	18.1%	34.9%	3.8%	6.9%	10.7%	0.4%	2.5%	2.9%	4.8%	46.7%	51.5%	25.8%	74.2%	100.0%
Site staff	27.3%	6.1%	33.3%	3.9%	0.9%	4.8%	0.9%	0.4%	1.3%	51.1%	9.5%	60.6%	83.1%	16.9%	100.0%
Total	16.2%	7.9%	24.1%	3.9%	2.3%	6.1%	1.6%	0.9%	2.4%	48.0%	19.3%	67.3%	69.6%	30.4%	100.0%
% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Disabled	6	1	7	1	0	1	0	0	0	20	11	31	27	12	39
% of total disabled	15.38%	2.56%	17.95%	2.56%	0.00%	2.56%	0.00%	0.00%	0.00%	51.28%	28.21%	79.49%	69.23%	30.77%	100.00%



Table 12: PERCENTAGE BY RACE AND GENDER: JANUARY – JUNE 2000

EMPLOYMENT BREAKDOWN: January - June 2000															
	Black			Coloured			Asian			White			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Partners / Directors	3.8%	0.3%	4.0%	0.8%	0.0%	0.8%	1.3%	0.0%	1.3%	92.4%	1.3%	93.8%	98.4%	1.6%	100.0%
Associates	3.0%	0.7%	3.7%	1.7%	0.2%	2.0%	1.5%	0.0%	1.5%	88.7%	4.1%	92.8%	95.0%	5.0%	100.0%
Pr. Eng / Pr. Tech. Eng	1.4%	0.2%	1.7%	1.9%	0.2%	2.1%	1.9%	0.5%	2.4%	90.0%	3.8%	93.8%	95.2%	4.8%	100.0%
Prof Architects	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Professional Quantity su	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	80.0%	20.0%	100.0%	80.0%	20.0%	100.0%
Professional other	8.3%	1.7%	9.9%	0.8%	0.8%	1.7%	1.7%	0.0%	1.7%	53.7%	33.1%	86.8%	64.5%	35.5%	100.0%
Engineers	5.9%	2.1%	8.0%	1.6%	0.3%	1.9%	4.3%	0.5%	4.8%	74.4%	10.9%	85.3%	86.1%	13.9%	100.0%
Other graduates	6.5%	1.1%	7.5%	0.0%	0.0%	0.0%	5.4%	0.0%	5.4%	49.5%	37.6%	87.1%	61.3%	38.7%	100.0%
Technologists	12.7%	2.1%	14.9%	2.9%	0.8%	3.7%	2.4%	0.3%	2.7%	65.8%	13.0%	78.8%	83.8%	16.2%	100.0%
Technicians	22.9%	1.8%	24.8%	7.7%	0.7%	8.5%	5.7%	0.1%	5.8%	55.8%	5.2%	61.0%	92.1%	7.9%	100.0%
Technical Assistants	36.6%	6.2%	42.8%	6.6%	2.1%	8.6%	2.1%	0.8%	2.9%	32.1%	13.6%	45.7%	77.4%	22.6%	100.0%
Draughtspersons	3.7%	1.8%	5.5%	7.6%	4.7%	12.4%	6.8%	0.8%	7.6%	35.0%	39.5%	74.5%	53.2%	46.8%	100.0%
Laboratory / Survey Ass	66.7%	22.0%	88.6%	7.4%	0.0%	7.4%	0.3%	0.0%	0.3%	3.2%	0.5%	3.7%	77.5%	22.5%	100.0%
Administration / Support	13.9%	19.8%	33.7%	1.8%	6.1%	7.9%	0.8%	2.4%	3.2%	4.1%	51.2%	55.3%	20.6%	79.4%	100.0%
Site staff	26.5%	4.4%	30.8%	10.2%	1.5%	11.6%	1.7%	0.3%	2.0%	49.7%	5.8%	55.5%	88.1%	11.9%	100.0%
Total	15.5%	8.1%	23.6%	3.7%	2.4%	6.1%	2.3%	0.9%	3.2%	45.5%	21.6%	67.2%	67.1%	32.9%	100.0%
% of Total	15.4%	8.1%	23.5%	3.7%	2.4%	6.0%	2.3%	0.9%	3.2%	45.6%	21.6%	67.2%	67.1%	32.9%	100.0%



Table 13.1: EMPLOYMENT BREAKDOWN AS AT JUNE 2001, BY JOB CATEGORY, RACE AND GENDER

	Black			Coloured			Asian			White			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Partners / Directors	76	5	81	10	0	10	25	17	42	1,013	15	1,028	1,123	37	1,160
Associates	39	2	42	20	0	20	7	20	27	665	44	709	731	66	797
Pr. Eng / Pr. Tech. Eng	25	0	25	5	0	5	5	0	5	586	10	596	621	10	630
Prof Architects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Professional Quantity surveyors	0	0	0	0	0	0	0	0	0	20	2	22	20	2	22
Professional other	15	0	15	0	5	5	2	0	2	91	44	135	108	49	157
Engineers	47	17	64	7	0	7	15	5	20	446	52	498	515	74	589
Other graduates	5	2	7	0	0	0	0	0	0	54	20	74	59	22	81
Technologists	17	0	17	7	0	7	17	0	17	174	2	177	216	2	218
Technicians	385	83	469	108	12	120	66	7	74	1,006	177	1,182	1,565	280	1,845
Technical Assistants	162	34	196	17	7	25	7	2	10	137	32	169	324	76	400
Draughtspersons	32	17	49	29	10	39	42	5	47	189	238	427	292	270	562
Laboratory / Survey Assistants	186	2	189	32	2	34	0	0	0	25	2	27	243	7	250
Administration / Support staff	390	621	1,011	91	204	294	12	69	81	130	1,361	1,491	623	2,254	2,877
Site staff	226	32	258	20	0	20	5	0	5	341	5	346	591	37	628
Total	1,604	817	2,421	346	240	586	204	125	329	4,876	2,004	6,880	7,030	3,186	10,216
% Of Total	15.70%	8.00%	23.70%	3.39%	2.35%	5.74%	1.99%	1.22%	3.22%	47.73%	19.62%	67.35%	68.81%	31.19%	100.00%
Disabled	5	0	5	0	0	0	0	0	0	12	2	15	17	2	20



Table 13.2: PERCENTAGE BREAKDOWN OF EMPLOYMENT BY RACE AND GENDER, JANUARY – JUNE 2001

	Black			Coloured			Asian			White			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Partners / Directors	6.6%	0.4%	7.0%	0.8%	0.0%	0.8%	2.1%	1.5%	3.6%	87.3%	1.3%	88.6%	96.8%	3.2%	100.0%
Associates	4.9%	0.3%	5.2%	2.5%	0.0%	2.5%	0.9%	2.5%	3.4%	83.4%	5.5%	88.9%	91.7%	8.3%	100.0%
Pr. Eng / Pr. Tech. Eng	3.9%	0.0%	3.9%	0.8%	0.0%	0.8%	0.8%	0.0%	0.8%	93.0%	1.6%	94.6%	98.4%	1.6%	100.0%
Prof Architects	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Professional Quantity surveyors	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	88.9%	11.1%	100.0%	88.9%	11.1%	100.0%
Professional other	9.4%	0.0%	9.4%	0.0%	3.1%	3.1%	1.6%	0.0%	1.6%	57.8%	28.1%	85.9%	68.8%	31.3%	100.0%
Engineers	7.9%	2.9%	10.8%	1.3%	0.0%	1.3%	2.5%	0.8%	3.3%	75.8%	8.8%	84.6%	87.5%	12.5%	100.0%
Other graduates	6.1%	3.0%	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	66.7%	24.2%	90.9%	72.7%	27.3%	100.0%
Technologists	7.9%	0.0%	7.9%	3.4%	0.0%	3.4%	7.9%	0.0%	7.9%	79.8%	1.1%	80.9%	98.9%	1.1%	100.0%
Technicians	20.9%	4.5%	25.4%	5.9%	0.7%	6.5%	3.6%	0.4%	4.0%	54.5%	9.6%	64.1%	84.8%	15.2%	100.0%
Technical Assistants	40.5%	8.6%	49.1%	4.3%	1.8%	6.1%	1.8%	0.6%	2.5%	34.4%	8.0%	42.3%	81.0%	19.0%	100.0%
Draughtspersons	5.7%	3.1%	8.7%	5.2%	1.7%	7.0%	7.4%	0.9%	8.3%	33.6%	42.4%	76.0%	52.0%	48.0%	100.0%
Laboratory / Survey Assistants	74.5%	1.0%	75.5%	12.7%	1.0%	13.7%	0.0%	0.0%	0.0%	9.8%	1.0%	10.8%	97.1%	2.9%	100.0%
Administration / Support staff	13.6%	21.6%	35.1%	3.2%	7.1%	10.2%	0.4%	2.4%	2.8%	4.5%	47.3%	51.8%	21.7%	78.3%	100.0%
Site staff	35.9%	5.1%	41.0%	3.1%	0.0%	3.1%	0.8%	0.0%	0.8%	54.3%	0.8%	55.1%	94.1%	5.9%	100.0%
Total	15.7%	8.0%	23.7%	3.4%	2.4%	5.7%	2.0%	1.2%	3.2%	47.7%	19.6%	67.3%	68.8%	31.2%	100.0%
Disabled	25.0%	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	62.5%	12.5%	75.0%	87.5%	12.5%	100.0%

Table 14: SUB-MARKETS, R mill, 2000 PRICES

R mill, 2000 prices	Survey period			PERCENTAGE	
	Jun-00	Dec-00	Jun-01	Market share %	Y-o-Y Change %
Acoustics	0	0	0	0.00%	ERR
Agriculture	8	28	18	0.48%	118.91%
Architecture	5	0	15	0.41%	192.17%
Building Services	57	241	101	2.73%	77.86%
Chemical	1	0	0	0.01%	-42.99%
Civil Works	892	1,539	1,363	36.67%	52.76%
Development	124	79	183	4.93%	47.92%
Dispute Resolution	8	4	9	0.25%	18.77%
Electrical	160	93	174	4.67%	8.66%
Electronic	10	10	30	0.80%	194.23%
Environmental	53	30	71	1.92%	35.13%
Facilities / Maintenance Management	38	30	69	1.85%	81.84%
Geotechnical	76	49	70	1.89%	-7.91%
Industrial	150	15	62	1.66%	-58.86%
IT	280	41	126	3.40%	-54.87%
Land Surveying	2	0	0	0.00%	-100.00%
Marine	111	2	2	0.05%	-98.33%
Mechanical	127	53	68	1.82%	-46.93%
Mining	17	41	1	0.04%	-91.40%
Management Consulting	76	29	74	1.98%	-3.53%
Process Engineering	12	17	12	0.32%	-3.99%
Project Management	263	260	317	8.54%	20.51%
Quantity Surveying	8	1	2	0.06%	-72.64%
Structural	385	470	488	13.14%	26.96%
Town planning	23	13	25	0.67%	7.59%
Transport	372	349	435	11.71%	16.91%
Total	3,259	3,395	3,716	100.00	14.02%

Based on revised definitions

Table 15: PROVINCIAL TURNOVER, R mill, 2000 prices

Province	Survey period							
	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
E-CAPE	310	318	236	269	263	222	130	253
W-CAPE	679	453	561	543	507	456	254	416
N-CAPE	70	31	56	72	71	68	61	37
FS	256	198	245	106	154	98	101	130
N-W	111	99	115	85	61	109	403	197
N-PROV	169	208	177	131	119	143	204	141
GAUT	1,555	1,632	1,373	1,328	1,185	1,204	1,482	1,483
MPU	174	202	140	199	119	117	105	141
KWA-NAT	896	762	421	485	369	449	275	398
African	0	254	192	269	292	353	336	409
INT'L	282	169	84	70	71	39	41	111
TOTAL	4502	4324	3598	3558	3212	3259	3395	3716

Table 16: TURNOVER BY CLIENT, R mill, 2000 prices

Client	Survey period					
	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Central	796	528	623	602	455	782
Provincial	520	551	457	329	498	528
Local	636	750	658	741	718	781
Parastatals	468	261	154	149	57	103
Private	1,180	1,468	1,320	1,438	1,667	1,522
Total	3,599	3,558	3,212	3,260	3,395	3,716

Table 17: SAACE Confidence index

Survey Period	SAACE Confidence Index	% Change on previous survey	% Change on survey same time last year
Jun-95	63		
Jun-96	75	19.05%	
Jun-97	95	26.67%	
Dec-97	92	-3.16%	
Jun-98	85	-7.61%	-10.53%
Dec-98	68	-20.00%	-26.09%
Jun-99	32	-52.94%	-62.35%
Dec-99	39	20.31%	-43.38%
Jun-00	44	14.29%	37.50%
Dec-00	66	51.05%	72.62%
Jun-01	72	8.23%	63.48%
Dec-01	69	-2.99%	5.00%
Jun-02	69	-0.40%	-3.38%