competitiveness factors

5

If Cape Town is to realize its undoubted economic potential, it will be necessary for the public and private sectors to focus their attention on the longer term sources of economic growth and job creation, or competitiveness factors.

These competitiveness factors include the:

- maintenance and expansion of the physical and social infrastructure;
- development of appropriate human resources skills and education levels;
- promotion of information and communication technologies; and
- development of small businesses.

Cape Town's businesses are all facing growing global competition. Competitiveness at the business enterprise level is now primarily determined by city and regional competitiveness factors, such as:

- levels of infrastructure provision and maintenance;
- cost-efficiency of local services and inputs (e.g. water and electricity);
- quality of local inputs, especially labour force skills levels;
- crime and security;
- supportive entrepreneurial organisations and environments; and
- competitive networks and clusters of suppliers and buyers (often small businesses).

Economic growth alone is only one necessary condition for addressing poverty in the City of Cape Town. It is important that every effort be made to spread the benefits of growth by, for example, encouraging the development of small businesses (eg. by providing affirmative business enterprise support) and skills development programmes.

PHYSICAL AND SOCIAL INFRASTRUCTURE

Both the public and private sectors can make a positive contribution towards stimulating and reinforcing sustained economic growth through investments in infrastructure (e.g. the road network, telecommunications infrastructure, health and educational facilities).

Infrastructure programmes may create wide-ranging benefits for both communities and key sectors and industries in the economy by lowering production costs and boosting returns in the private sector. Likewise, recipients of education may transfer their skills free of charge to third parties, healthier citizens will be more productive and limit the spread of disease, new users of electricity will boost the demand for electrical appliances, and so on.

The prioritisation of public expenditure can help the public sector to do two things - achieve a more equitable distribution of income, and create the conditions for sustainable growth in the long run.

Table 15: South Africa and Western Cape: Percentage of Households with Access to Selected Services: 1996.

Services	Western Cape	South Africa
Water	96.8%	79.8%
Sanitation	90.5%	82.5%
Telephones	55.2%	28.6%
Electricity	84.9%	57.3%

Source: Stats SA (1996)

Table 16: City of Cape Town: Telecommunications Infrastructure: 2000.

Number and Percentage of Telephones in Houses			Number and Percentage of Business Lines		
Pre-paid	114,671	23.3%	Ordinary lines	228,396	82.8%
Basic Rate ISDN	556	0.1%	Basic Rate ISDN	10,832	3.9%
Conventional	377,022	76.6%	Primary Rate ISDN	366,000	13.3%
Total	**492,249**	**100%**	**Total**	**275,828**	**100%**

Source: Telkom (2001).

Table 17: City of Cape Town: Household Use of Telephones and Cellular Telephones: 1997.

Population Group	% Households with Telephone in House	% Households Owning at least 1 Cellular Phone
African/Black	23.9%	4.4%
Asian/Indian	79.4%	17.7%
Coloured	65.9%	5.4%
White	90.4%	24.0%

Source: Stats SA (OHS 1997).

Cape Town□s Telecommunications Infrastructure:

- Cape Town's telecommunications infrastructure is well-developed, with Integrated Services Digital Network (ISDN) rapidly becoming critical to companies embracing e-Commerce (especially Business-to-Business commerce) and using services such as speech, video telephony, video conference, facsimile, and data and image transfers.
- The costs of using telecommunications infrastructure still remains a constraint for small businesses and could be addressed as part of the ongoing Telkom privatisation process.
- The widespread use of cellular phones, as well as community information centres, may also assist in bridging the digital divide, and broaden access to the benefits of the new economy.

Physical and Social Infrastructure and Economic Growth: International Evidence from Developing Countries

- Physical infrastructure yields higher returns than most other investments.
- Primary and secondary education yields higher returns than certain types of tertiary education.
- Vocational training yields higher returns than general secondary education.
- Primary health care yields high returns over the long run.

Source: World Bank (2001)

SKILLS DEVELOPMENT

The central importance of labour force skills development:

- The higher the proportion of literate adults, the higher economic growth or the average economic output per person.
- Investments in education and training are amongst the most productive in terms of maximising economic growth, job-creation, and poverty reduction.
- Improving skills levels is central to reducing poverty levels, as high skills levels are positively linked with high income levels.

Table 18: City of Cape Town: Average Annual Income of Individual Wage Earners in Formal Sectors by Level of Education: 1997.

Level of Education	Average Annual Income (R)
No Schooling	20,570
Grade 3-6	26,653
Grade 7-8	20,925
Grade 9-10	28,278
Grade 11-12	38,553
Study - currently studying for a diploma/degree	33,800
Diploma	56,046
Degree	69,589
Average for all levels of education	37,966

Source: Bureau of Market Research (1998).

Global skills trends and "playing catch-up" in South Africa:

- Globally, economic activity is increasingly knowledge intensive, this is shifting labour demand towards medium and highly skilled workers, with unskilled jobs rapidly declining as a share of total employment.
- In South Africa, highly skilled jobs increased by 20% between 1970 and 1998, while unskilled jobs fell by a similar 20%, but by a far greater number of jobs.

- In today's industrialised countries, the market system appears to perform reasonably well in matching the ever-changing demand for, and supply of, skills. Since market adjustments do take time, however, emerging economies that want to "catch up" with industrialised countries have to find ways of accelerating the process of skills formation by prioritising investments in human resources skills development.

Long-term Skills Profile Changes in South Africa: 1970 - 1980.

¥ Highly skilled workers:	from 8% to 17% of total work force
¥ Medium skilled workers:	from 30% to 40% of total work force
¥ Semi-Skilled/ Unskilled workers:	from 62% to 43% of total work force

Source: Department of Labour (February 2001)

Table 19: Linking Skills Categories to Occupations.

Skills Category	Occupation
Highly Skilled	¥ Professionals ¥ Associate Professionals ¥ Technicians ¥ Legislators ¥ Senior Officials ¥ Managers
Skilled	¥ Clerks ¥ Service and Sales ¥ Skilled Agriculture and Fishing ¥ Craft and Related Trades ¥ Plants and Machine Operators and Assemblers
Semi-Skilled/Unskilled	¥ Sales and Service Labourers ¥ Agriculture, Fishing and related Labourers ¥ Mining, Construction, Manufacturing and Transport Labourers ¥ Other Labourers

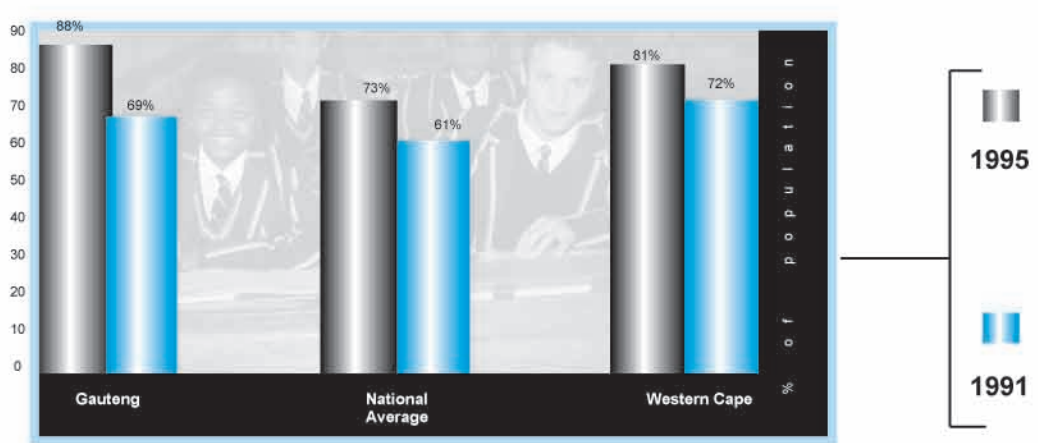
Source: Bhorat (2000)
Note: The skills classification based on occupational categories is a broad one and mainly provides an indication of the *relative* skills profile by sector.

Western Cape and Cape Town Literacy Rates:

- The Western Cape has one of the highest literacy rates and levels of education of all provinces in South Africa (see figure 9):
  - ¥ South Africa: Average literacy rate of 73% in 1995.
  - ¥ Western Cape: Average literacy rate has increased by almost 10% from 72% in 1991 to 81% in 1995.
  - ¥ Gauteng: Average literacy rate of 88% in 1995.
- Cape Town's *adult illiterate* population grew significantly between 1996 and 1999 from 310,967 to 362,804 persons (or 17% of the 15-64 age group), or by 17,279 persons per year (partly due to early school leavers and new migrants).

(City of Cape Town, 2001 and Stats SA, 1996 and OHS 1991-1999).

Figure 9: South Africa, Western Cape and Gauteng: Literacy Rates as % of the Population: 1991 - 1995.



Source: Stats SA (1991 and 1995).

Adult illiteracy is defined as not attaining **a level of education** higher than Grade 6 (previously Standard 4).

Stats SA (1996)

Table 20: South Africa, City of Cape Town, Durban and Johannesburg: School Levels of the Labour Force: 1996.

Area	Level	African /Black	Asian /Indian	Coloured	White	Unspecified	Total
South Africa	% no school education	17.0	7.2	3.9	0.9	9.4	13.7
	% post secondary	2.9	3.0	4.4	7.4	10.3	3.6
Cape Town	% no school education	6.8	3.1	2.4	0.7	2.4	3.5
	% post secondary	3.4	5.2	15.9	29.8	13.1	10.6
Durban	% no school education	10.7	2.1	4.2	1.0	6.2	7.7
	% post secondary	3.7	8.0	9.2	25.4	9.1	7.9
Johannesburg	% no school education	8.1	2.1	2.4	1.3	5.0	6.2
	% post secondary	4.1	6.0	14.2	25.5	10.0	8.8

Source: Stats SA (1996).

- Levels of education among all population groups, except the Coloured population, were higher in Cape Town than in Durban and Johannesburg, and significantly higher than in the country as a whole.

- There are significant labour force skills profile differences for the main economic sectors, with a fairly significant shift towards medium and highly skilled labour taking place.

Table 21: South Africa: Skills Levels in Selected Economic Sectors: 1998.

Sector	Highly Skilled %	Skilled %	Semi-Skilled /Unskilled %
Food and Beverages	7.3	38.1	54.6
Clothing, Textile, Footwear and Leather	4.5	14.7	80.8
Chemical Industries	18.0	34.3	47.7
Manufacturing, Engineering and other	12.6	27.4	60.0
Energy	24.6	34.3	41.1
Construction	5.5	21.8	72.8
Wholesale and Retail Sector	14.5	60.7	24.8
Transport	8.8	59.5	31.7
Banking, Financial and Accounting	20.7	77.5	1.8
Community Services	33.4	45.5	21.1
Tourism and Hospitality	9.2	76.1	14.7
Information Systems, Electricity and Telecommunications	12.5	65.4	22.1

Source: Bhorat (2000).

- The demand for highly skilled labour in Cape Town will increase by an annual average of 2.3%, while the demand for unskilled workers will decline by an annual average of 3.1%.
- The demand for highly skilled and skilled workers in Cape Town is projected to grow by about 200,000 (–20,000 per year) between 2000 and 2010 while the demand for unskilled workers will grow by about 42,000 (or 4,200 per year). This will reinforce poverty unless the unskilled labour force profile can be dramatically enhanced relative to other skills categories.
- The Tourism, Construction, Wholesale and Retail, and the Information and Communication Technology sectors will experience the highest rates of employment growth in the Cape Town economy between 2000 and 2010.
- In the expected high growth industries of Tourism, Trade, and Information and Communications Technologies, the demand for medium skilled labour is expected to increase relative to that for highly skilled and unskilled labour.

Table 22: City of Cape Town: Projected Changes in Skills Demand: 2000 - 2010.

Sector	Contribution to total change 2000 - 2010 (%)		
	Highly Skilled (Total projected number = 69,000)	**Skilled** (Total projected number = 134,000)	**Semi-Skilled /Unskilled** (Total projected number = 42,000)
Food and Beverages	1.9	4.9	-0.5
Clothing, Textile, Footwear, Leather	5.2	2.7	33.0
Chemical Industries	2.0	1.0	0.1
Manufacturing, Engineering and other	3.9	0.5	-0.5
Energy	0.2	0.2	-0.9
Construction	6.1	5.0	44.7
Wholesale and Retail Sector	27.6	45.4	20.7
Transport	5.8	7.4	10.3
Banking, Financial and Accounting	21.0	-0.3	-0.6
Community Services	19.4	11.2	-11.4
Tourism and Hospitality	5.4	18.1	3.4
Information Systems, Electricity and Telecommunications	1.5	3.9	1.7
Total	**100.0**	**100.0**	**100.0**

Source: City of Cape Town (April 2001).

INFORMATION AND COMMUNICATIONS TECHNOLOGY

- Information and Communications Technology (ICT) is an important source of productivity growth, and is one of the main reasons for the sustained period of economic growth that the USA economy has recently experienced.
- Use of ICT enables firms to become globally competitive and cut their costs of production, marketing and distribution, as well as to penetrate new global markets swiftly and cost-effectively.

What is an Economic Cluster ?

- An economic cluster involves a main industry with its associated immediate backward (suppliers of services and intermediate inputs) and forward production linkages (distribution and sales channels).
- "Supply chain" is another (and recently more popular) term used and can be defined as "an economic network of strongly interdependent companies, knowledge producing agents and demanding customers, linked to one another in a value adding production chain".

Source: City of Cape Town (April 2001)
Note: Statistical profiles of 14 Cape Town Clusters can be found in City of Cape Town (April 2001)

Cape Town's ICT Cluster in 2000:

- Contributes more than 2,5% towards Cape Town's total turnover.
- Employs more than 15,000 permanent workers.
- Comprises more than 866 companies (the majority being wholesale equipment suppliers and software consultancies).
- Manufacturing industries contributed only 11% towards total ICT turnover and about 13% to total ICT employment.
- Imports a substantial proportion of ICT products and components, with the largest percentage (88%) originating in the USA (Department of Arts, Culture, Science and Technology, 1999).

Source: City of Cape Town (April 2001)
Note: These statistics under-estimate the economic importance of the City of Cape Town ICT clusters as many businesses have in-house IT Departments which are not captured here.

- Although the average size of firms in the ICT cluster is relatively small (17 permanent employees and R9 million annual turnover), important exceptions are firms producing television and radio transmitters and apparatus for line telephony (average 155 employees), as well as firms involved in data base activities (average 20 employees) and wholesale trade (average 18 employees).
- A major constraint facing the ICT cluster in South Africa is insufficient investment in Research and Development (R&D) and related activities. R&D expenditure in South Africa constitutes about 0,8% of GDP, compared to average spending in Organisation for Economic Cooperation and Development countries varying between 2,5% and 3% of GDP (Department of Arts, Culture, Science and Technology, 1999). A further constraint is the limited supply of suitably skilled workers.

Table 23: City of Cape Town: Composition of ICT Cluster: 2000.

BUSINESS CLASSIFICATION (SIC CATEGORY) (CORE ICT INDUSTRIES)	Total Employment	Average Employment	% Turnover	Average Annual Turnover (Rand)
Software Reproduction	14	3.5	0.1	937,227
Pre-Recorded CD (Except Software), Tape and Record Reproduction	17	8.5	0.2	7,199,466
Manufacture of Office, Accounting, and Computer Machinery	101	16.8	1.6	19,690,227
Manufacture of Electronic Valves and other Electrical Components	155	19.3	0.4	3,741,683
Manufacture of Television and Radio Transmitters and Apparatus for Line Telephony	1,400	155.5	6.8	56,875,248
Manufacture of Television and Radio Receivers,Sound or Video Recording	109	6.8	1.0	4,781,031
Manufacture of Instruments and Appliances for Measuring, Checking and Testing	290	29.0	0.6	4,270,111
Manufacture of Industrial Process Control Equipment	4	1.3	0.0	677,278
Wholesale Trade in Machinery, Equipment, and Supplies	3,946	17.9	42.0	14,213,026
Telecommunications	556	13.6	3.7	6,709.851
Renting of Office Machinery and Equipment including Computers	22	5.5	0.1	1,286,624
Hardware Consultancy	933	11.8	10.5	9,989,685
Software Consultancy and Supply	5,811	15.6	31.0	6,242,467
Data Processing	26	6.4	0.1	1,699,106
Data Base Activities	123	20.4	1.1	14,093,727
Maintenance and Repair of Office, Accounting, and Computing Machinery	349	11.3	1.0	2,421035
Other Computer Activities	1,083	22.1	3.1	4,666,232
TOTAL FOR INDUSTRY:	**15,056**		**100.0**	**159,494,024**
AVERAGE FOR INDUSTRY:		**17.4**		**8,653,736**

Source: City of Cape Town (April 2001)
Note: SIC Category: Standard Industrial Classification Category.

- Maximising the future positive economic impact and growth of Cape Town's ICT cluster will require the further development of e-Government services, promoting initiatives to bridge the digital divide (including literacy programs), improved Information and Telecommunications infrastructure and cost-efficiency, and private sector prioritisation of IT investments.

SMALL BUSINESS DEVELOPMENT

Job creation in micro, small and medium businesses is increasing. It is becoming very important for Cape Town to foster a business environment which minimises constraints to small business growth and which actively supports entrepreneurship. Large businesses, which are working closely with small businesses to a much greater extent, can play a major role in stimulating small business growth through, for example, long term outsourcing contracts.

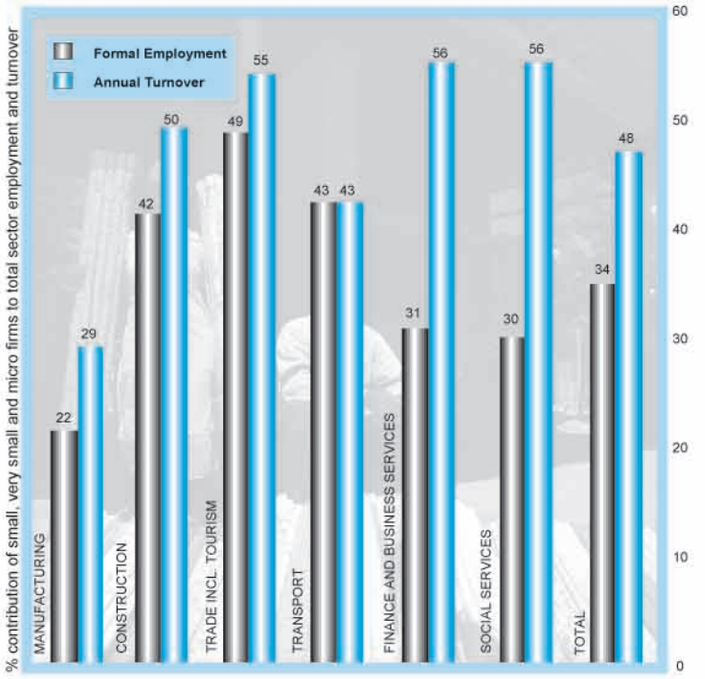
Cape Town Firms: Size Structure: 2000

- 3% of all firms are large (100+ or 200+ employees depending on the sector).
- 4% of firms are medium-sized (50+ or 100+ employees depending on the sector).
- 22% of firms are small (10-50 or 20-50 employees depending on the sector).
- 71% are very small (5-10 or 5-20 employees) and micro (less than 5).

Micro, Very Small and Small Formal Businesses in Cape Town: 2000

- Comprise more than 90% of the total number of firms.
- Contribute about 50% to economic output.
- Contribute about 40% to total formal employment.
- Contribute more to output than to employment.

Figure 10: City of Cape Town: Contribution to Annual Business Turnover and Formal Employment of Micro, Very Small and Small Firms: 2000.



Source: City of Cape Town (April 2001).

Sectoral Profile of Micro, Very Small, and Small Businesses in Cape Town: 2000

- Play a dominant role in terms of turnover in the Finance and Real Estate, Services, Trade and Catering and the Construction sectors.
- Play a relatively smaller role in the Manufacturing and Transport sectors.
- Contributions to total formal employment are generally below 40% of sector employment, with Trade and Catering, Transport and Construction each recording contributions in excess of 40%.

OUTSOURCING AND SUB-CONTRACTING

> ***Outsourcing*** **concerns a decision by a business to restructure its internal operation by outsourcing certain functions.**
> ***Sub-contracting*** **can be viewed as one of the alternative service delivery options taken in the whole process of outsourcing whereby a contractor sub-contracts certain operations**
> (Theron and Godfrey, 2000).

- Outsourcing and sub-contracting are gaining popularity among firms due to global competitive pressures and the need to minimise costs.

- Factors such as labour legislation also play a role in determining the costs of employing workers on a permanent basis vis-□-vis the costs of utilising independent sub-contractors.

- Outsourcing and sub-contracting may reduce labour costs and could lead to overall improved economic efficiency, growth, and job creation due to an improved allocation of resources. In the short term, however, it could lead to increased unemployment and more insecure working conditions. There are also difficulties in regulating smaller sub-contracted businesses that could undermine government's ability to collect taxes.

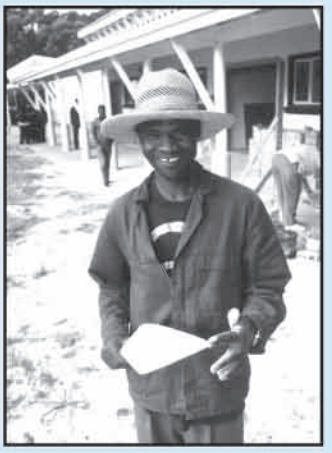
- Outsourcing and sub-contracting are still in an early phase in South Africa and are expected to increase in the foreseeable future. It is also likely that outsourcing and sub-contracting will extend beyond non-core functions, and include more strategic functions such as distribution, marketing, transport and administration (Theron and Godfrey (2000).

Outsourcing and Sub-contracting in Cape town: 2000

- At least 6,5% of all firms in Cape Town are involved in outsourcing and sub-contracting.

- The sectors with the highest proportion of companies practicing outsourcing or sub-contracting are: Construction (23,6%), Mining (13,6%), Manufacturing (12%) and Agriculture (10%).

- It is especially larger firms in the Services, Construction and Trade sectors that engage in outsourcing or sub-contracting, whereas smaller firms do so in the Finance and Real Estate, Transport and Manufacturing sectors.

- 77% of outsourcing and subcontracting firms do so with other firms located in Cape Town. It is mostly firms in the Construction, Mining, Services and Trade sectors that sub-contract to firms located outside of Cape Town.
  In contrast, Manufacturing and Finance firms mostly contract out to firms located in Cape Town.

Source: City of Cape Town (April 2001)
Note: In reality, the number and proportion of firms outsourcing and subcontracting is likely to be higher than reported here as an element of under-reporting may have occurred during the RSC Levy business survey.