

Impact of Population growth on Development

Smart Cities versus making Existing Cities smarter!

By Dr Dirk A Prinsloo

The first reports covering the results of Census 2022 were released in October 2023. Most of the feedback and reports at that stage referred to broad population numbers and demographic information. The release of the census data on suburban level is still outstanding and only expected later this year .

Concerns were raised regarding the accuracy of the census information. However, based on verifications and follow-up sample surveys the level on a macro and municipal level can be regarded as fairly accurate and usable. Opportunities still exist to sort out differences in terms of Census 2022 data, before the final release. This will hopefully clarify many of the uncertainties.

South Africa is a country that moves from election to election. After the 2019 national elections, the 2021 municipal elections were followed by the ANC election in



2023, and the upcoming elections in May 2024.

One of the outstanding characteristics of all previous elections, as well as the current election, is the many promises made by different parties.

Thirty years after the first democratic election on 27 April 1994, questions are being raised regarding the progress and development of the country.

Urban decay and a lack of maintenance are typical of many of our large metropolitan areas, larger cities, and towns. One of the key aspects of further urban development is the maintenance and upgrade of existing infrastructure as well as the installation of new infrastructure and technology.



THE BELIEF THAT EVERYTHING IS NEGATIVE IS ALSO NOT TRUE

Property development and the contribution by the private sector is a very good example of successful developments over the past 30 years (see Table 1). All this growth is well-defined in most of the large metropolitan areas. Johannesburg has more than 10 million square meters of office space, which is more than the ±8 million m² of the combined Sub-Saharan office market. South Africa also had the fifth most shopping centre floorspace in the world in 2013/14. Currently there are more than 2 400 centres in South Africa

of which more than 1 000 are larger than 10 000m². Private hospital beds have increased from almost 10 000 in 1995 to the current 42 000+ beds. The same applies to the number of private schools.

All this represent at least 2,5 to 3 million direct job opportunities and a further 2 million indirect jobs. The finance, real estate and business services contribute **most** to the economy (24%), followed by trade (13%). This is primarily driven by the private sector.

During the State of the Nation Address in 2019 (7 February 2019) President Ramaphosa announced the development of a smart city at Lanseria. He referred to the fact that new cities will be established in several places countrywide. His dream was to build up to 30 new smart cities countrywide driven by smart technologies and modern planning initiatives.

According to the SONA of 2021 the President stated that the Lanseria Smart City is now a reality in the making. In a reaction to the president's announcement, Mr Tijs van den Brink (iT Web, 12 Feb 2021) believes South Africa should be **making cities smart rather than building new smart cities**. To make South African cities smarter the following is required: latest technology, information and research, out-of-the-box-thinking, commitment and buy-in of all stakeholders as well as to learn from and partner with the private sector. To make our cities smarter is a sustainable and impactful way to improve quality of life within our urban areas.

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Table 1: Increase in property related developments by the private sector over the last 30 years

30 Years	1993	2024
Number of shopping centres (> 10 000 m ²)	137	1004
Shopping Centre floor area m ² (>10 000m ²)	2 790 000	24 928 746
Offices floor area m ²	8 149 770	19 108 437
Number of Private Hospitals	108	524
Private Hospitals Beds	9 426	42 000
Number of Private Schools	1 397	2 282
Electricity generated by private sector		4 500 MW

The first census in Democratic South Africa was held in 1996. At that stage, the total population was 40.5 million people. The current population in South Africa is estimated at close to 64 million people (the Census 2022 reflected a population of 62 million people). This represents an annual increase of 1.5% in the total number of people since 1996. However, the period between the 2011 and 2022 census reflected a **higher growth** rate at 1.8%. The projected population for 2030 is ±70.5 million people. The total number of households will increase to more than 20.5 million. This will put further pressure on land development, as well as existing and new infrastructure.

POPULATION GROWTH

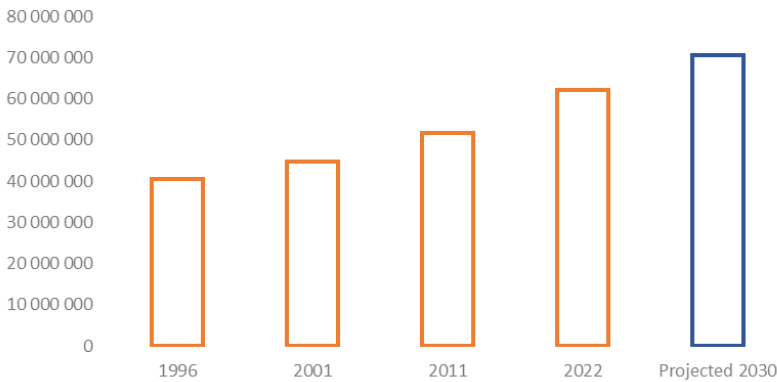
Map 1 indicates the high growth as well as those municipalities showing a decline in population numbers during the last 10 – 12 years. As expected, the major metropolitan areas have shown the highest increase in population. The Gauteng areas including City of Tshwane and Ekurhuleni showed the highest increase in population. This is followed by City of Cape Town and eThekwin. More important, however, is to focus on the second-tier growth areas where more than 100 000 people were added during the same period. This includes areas like City of Mbombela, Polokwane, Tubatse (Burgersfort), Bushbuckridge and Thulamela (Thohoyandou).

Other high growth areas include George, Buffalo City, Pietermaritzburg, and Newcastle. The role played by the **provincial capitals** in population growth must also be acknowledged. As South Africa is nearing the **70% urbanisation** mark, even more pressure will be placed on urban planning and development.

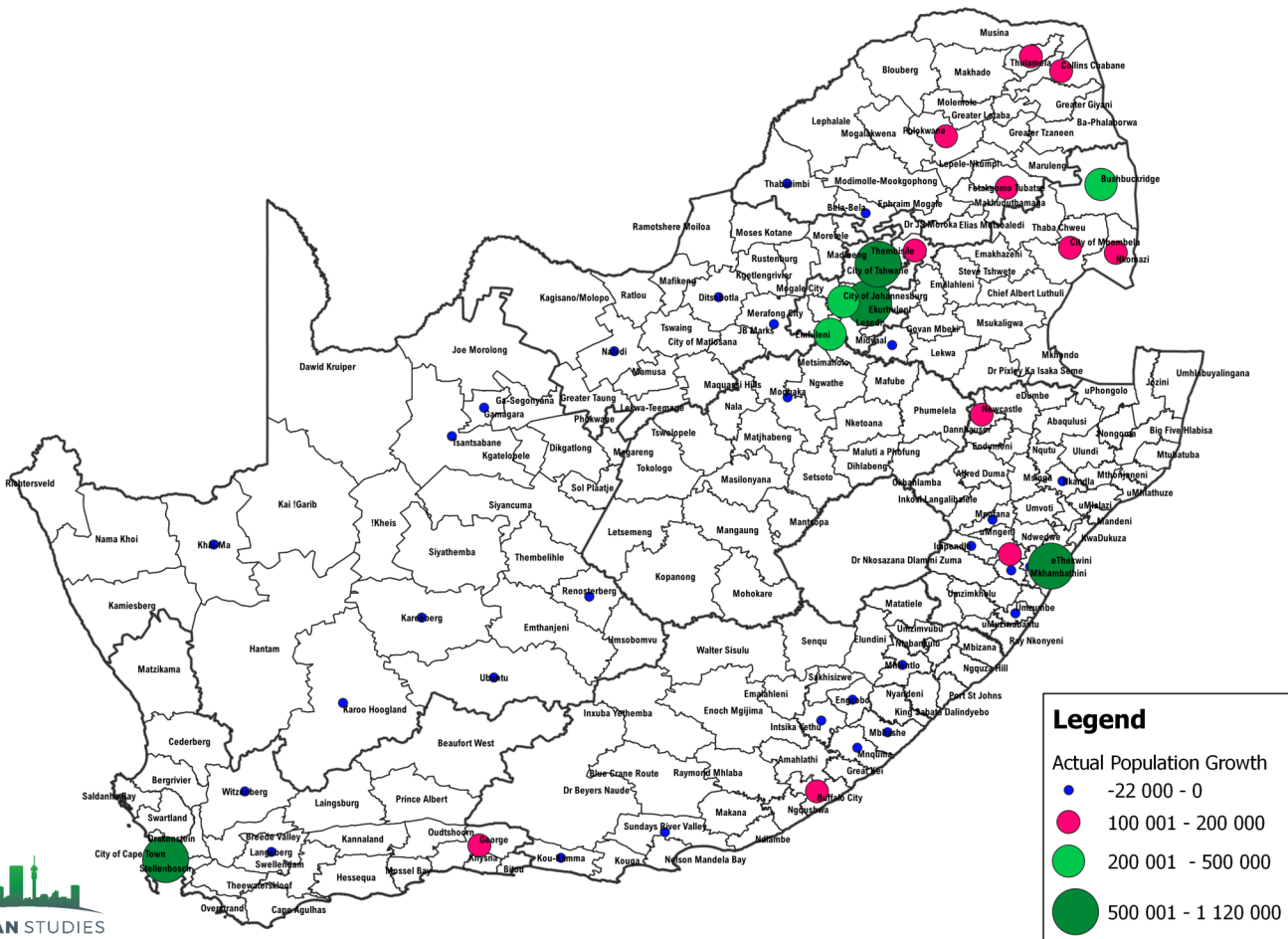
Cities showing slower growth than expected include Nelson Mandela Bay (Gqeberha), Mahikeng, and Rustenburg.

There are mainly two types of areas where decline in population numbers occur namely low-density municipalities in the Karoo/Northern Cape and municipalities close to large metropolitan areas where urbanisation takes place. Local economic conditions also play a major role in the decline of some mining cities.

Graph 1: South Africa Population Numbers 1996-2022 (Projected to 2030)



Map 1: Actual Population Growth: Census 2011 to 2022

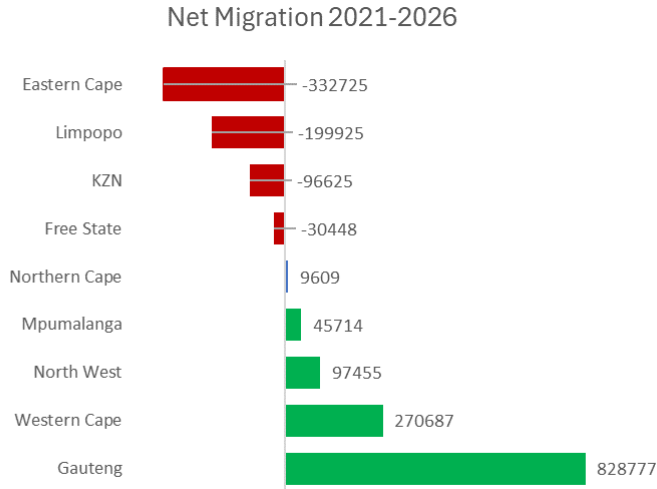


MIGRATION

One of the dynamic features of the South Africa population is the **migration** between provinces. See Graph 2 and Province Maps. Many reasons exist for the migration between provinces of which job opportunities and quality of life are the most important driving factors.

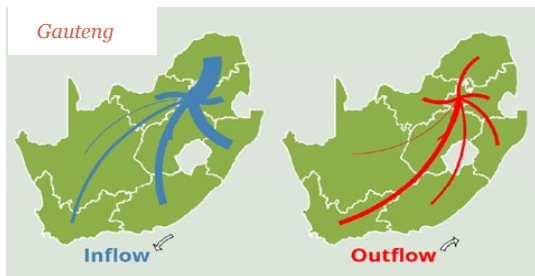
There are strong net inflows to Gauteng Province and the Western Cape. Migration from the Eastern Cape to the Western Cape is also a strong trend. This will not only impact on infrastructure but will have major impact on political parties in future. There are also substantial outflows from Gauteng to all surrounding provinces, as well as the Western Cape.

Graph 2: Net Migration

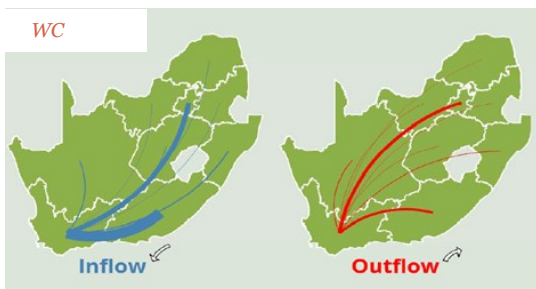
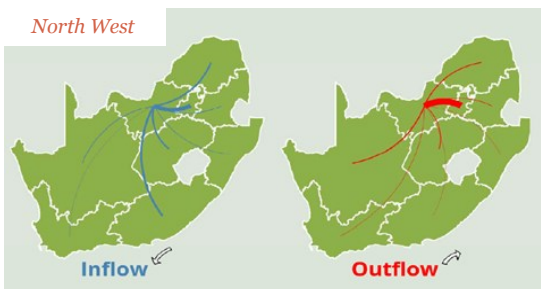
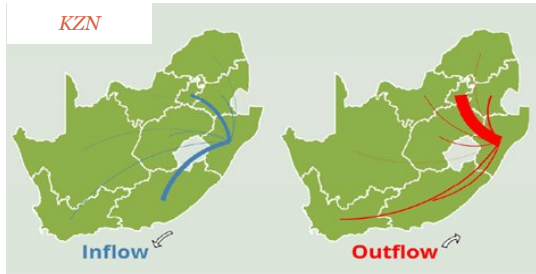


METROS AND CITIES

The 20 metros and cities with more than 500 000 inhabitants (Table 2) already have a well-established infrastructure and a strong localised economic base. The key challenges are to stimulate further economic growth, to maintain and upgrade the quality of infrastructure, and to develop new infrastructure. No city can develop with a decline in services and infrastructure. This becomes critical for the South African cities going forward, creating more job opportunities and a better quality of life for all people. The cities/municipal areas indicated in Table 2 clearly show opportunities for further urban growth. The biggest threats for further job and growth opportunities are associated with the decay in infrastructure, service delivery, high crime and the loss of investors. Unfortunately, the ratings of most of these municipal areas are low.



In- and Out-flow of People between 9 provinces



Source:
StatSA Census

Table 2: Metros and Cities with a Population larger than 500 000 Inhabitants

Municipality	Prov.	Population	Growth Rate	% Of Total Pop
City of Johannesburg	GP	4 803 262	0,8%	7,5%
City of Cape Town	WC	4 772 846	2,4%	7,4%
eThekweni	KZN	4 239 901	1,9%	6,6%
Ekurhuleni	GP	4 066 691	2,4%	6,3%
City of Tshwane	GP	4 040 315	3,1%	6,3%
Nelson Mandela Bay	EC	1 190 496	0,3%	1,9%
Buffalo City	EC	975 255	2,1%	1,5%
Emfuleni	GP	945 650	2,6%	1,5%
Polokwane	LIM	843 459	1,4%	1,3%
City of Mbombela	MP	818 925	2,1%	1,3%
The Msunduzi/Pmb	KZN	817 725	2,7%	1,3%
Mangaung	FS	811 431	0,4%	1,3%
Bushbuckridge	MP	750 821	3,2%	1,2%
Nkomazi/ Malelane	MP	591 928	4,0%	0,9%
Fetakgomo Tubatse	LIM	575 960	2,9%	0,9%
Thulamela/Thohoyandou	LIM	575 929	2,4%	0,9%
Rustenburg	NW	562 315	0,2%	0,9%
Madibeng	NW	522 566	0,9%	0,8%
Newcastle	KZN	507 710	3,3%	0,8%
Makhado	LIM	502 452	1,9%	0,8%

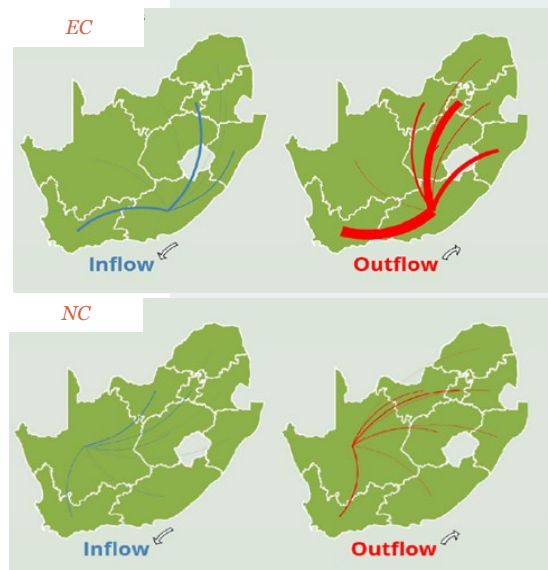
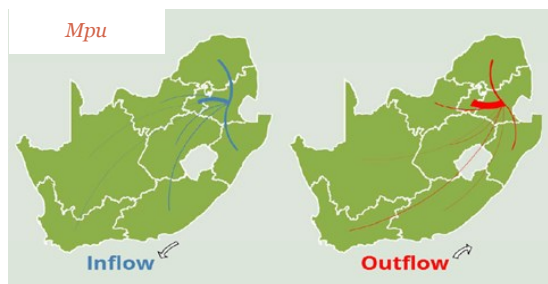
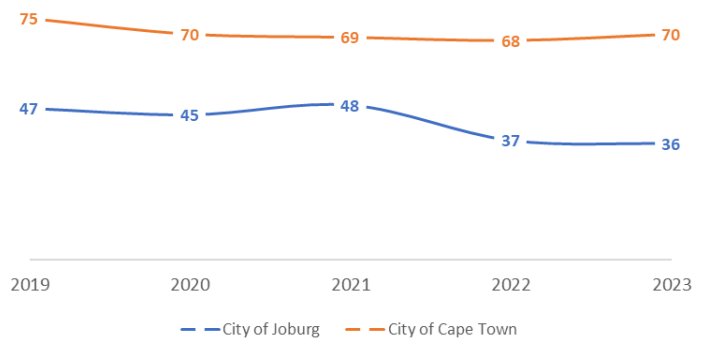
One of the biggest concerns is the negative perception of Johannesburg as the business and financial hub of South Africa (±14% of national GDP in 2018).

HOW DO CITY OF JOBURG RANK?

The latest Governance Performance Index (GPI) - South Africa 2024 (p.3), indicates that Johannesburg is the only metro where the rating has decreased since the previous study. Johannesburg is now ranked no 5 out of 8 and has been sliding backwards over the last five years, scoring a mere 36 points, 11 points **lower than in 2019**, indicating decreasing financial sustainability. (Moneyweb, 17 April 2024, Rating Afrika's Municipal Financial Sustainability Index). The **least favourable** GPI category is Planning, Monitoring and Evaluation*. Every effort should be made to turn the negative perceptions of Johannesburg around and attract more

investments and stimulate more development. Make Johannesburg **smarter!** Political will is required. The graph clearly indicates the difference in the total ratings between Cape Town and Johannesburg since 2019. The growth of Johannesburg will continue but what is required is a dramatic turnaround on the perception and the performance of the city.

RESULTS FOR METROS 2019-2023
(SOURCE: RATING AFRICA)



URBAN STUDIES

Urban Studies specialises in property and urban market research.

Since the inception of the company in 1990, more than 4 500 research projects have been completed. This also includes primary research in more than 350 shopping centres. Research has been conducted throughout South Africa, rest of Africa, Europe and the Middle East.

REFERENCES:

Stats SA, Census 2022

Mr Tijs van den Brink (IT Web, 12 Feb 2021)

(Moneyweb, 17 April 2024, Rating Afrika's Municipal Financial Sustainability Index).

SAPOA

SACSC

Urban Studies Database

Various websites

WAY FORWARD

The priority to make smarter cities is to **upgrade infrastructure** and to **attract more investment**. This can only happen once the dominance of the existing large urban areas has been re-instated and urban decay is turned around.

Job opportunities are of critical importance in these areas and can only be achieved through further investment and a much higher GDP growth. To better understand and stimulate the main local economic drivers e.g. the provincial capitals and their strong regional and provincial support can become examples of these smarter cities.

Another key driver must be to make it **easier for the private sector** to get more involved in new construction and to create more job opportunities. Table 1 is a clear indication of how important these partnerships are in making our cities smarter. Encourage more Public/Private Partnerships.

One of the main economic drivers can be **property development** which will be driven by higher economic growth, increased confidence levels and more support in the whole development process. This includes aspects like approving town planning applications much quicker. To get approval can take anything up to 3-8 years. Set targets for one year or less.

Let us believe that after the elections there will be a much stronger **political will and drive** to prevent further urban decay and to focus on making our existing cities smarter. Once this is done Smart Cities can follow but enough people and money is needed to make it work. Waterfall City in Johannesburg is a very good example of a Smart City within an existing urban environment where people and good infrastructure are already present. This is perhaps the better alternative to follow in order to develop smart cities.

CONTACT US

TEL: 082 857 9074

EMAIL: info@urbanstudies.co.za

dirknico@urbanstudies.co.za

ADDRESS: 103 5th Street, Linden, Johannesburg, 2195

REGISTRATION NO. 2017/077434/07

VAT NO. 4160107555

