

# Cape Town: a city still divided by race and class

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This research analyses how the urban form and internal structure of the city of Cape Town, South Africa, has changed in recent decades.

Using satellite imagery and census data, it examines overall disparities in growth, internal socioeconomic dynamics and infrastructure within the city. An innovative, data-driven method is used to identify and compare distinct neighbourhood types that make up the city's physical, social and economic fabric.

## KEY FINDINGS

- Cape Town is one of the most unequal and segregated cities in the world.
- More than 25 years into democracy, the city has not changed its basic colonial and apartheid urban form.
- Economic gaps, infrastructure deficiencies and housing dynamics perpetuate historic injustices and create new urban challenges (informality, violent crime, land occupation).
- In-migration is shifting the racial mix, but race and social class remain the dominant factors that shape neighbourhood differences.
- Some neighbourhoods along the Voortrekker Road corridor are changing more quickly, reflecting their proximity to economic nodes and more affordable property.
- More concerted policies and determined implementation around education, health, affordable housing, policing and basic services are required to shift the trajectory towards a more integrated and inclusive city.

# About the study

This study<sup>1</sup> provides new evidence of the changing spatial structure and form of Cape Town – South Africa's oldest and second largest city, with a population of 4.6 million.

Located at the foot of Table Mountain, surrounded by the Atlantic Ocean, the city is known for its natural beauty, mild climate and leisure amenities. It is an attractive destination for migrants, especially from the rest of the country and the continent. The municipal area of Cape Town extends over 2,461 km<sup>2</sup>, 40% of which is protected from development. The city has a relatively diversified economic structure, with particular strengths in tourism, financial and business services. Yet it is one of the most unequal and racially segregated cities in the world, stemming from its colonial and apartheid history. Prior to democracy in 1994, the white minority government discriminated systematically against black African and coloured people, restricted their movement and forcefully relocated them from the inner city and leafy suburbs to underserviced 'townships' on the periphery – the Cape Flats. Rapid urbanisation in the 1970s and 1980s resulted in growing informality and overcrowding in these areas. Post-apartheid policies set out to transform Cape Town into an inclusive, compact and prosperous 'unicity'.

This research analyses satellite imagery and census data<sup>3</sup> to examine land-use change and internal socio-economic patterns, respectively, over time. An innovative, data-driven methodology (k-means clustering) is used to identify and compare distinct neighbourhood types.

## Research results

### The overall pattern: city-level changes

Our analysis of census data and satellite imagery indicates that Cape Town's urban footprint increased from 624.8 km<sup>2</sup> to 679.2 km<sup>2</sup> (up 8.7%) between 1998 and 2019.

There was a small loss of agricultural land of 5.3% and of land under natural vegetation of 3% through urban encroachment. Physical expansion was less than population growth, which increased by 56% from 2.6 million people in 1996 to an estimated 4 million people in 2016. The number of households grew even faster, as the average household size fell from 3.91 people in 1996 to 3.17 in 2016. The trend towards consolidation is mainly driven by poor black African and coloured residents crowding into already dense neighbourhoods on the urban periphery.

The annual population growth rate fell from 3.3% between 2000 and 2010 to 1.5% since 2010, indicating a slowing urbanisation process. At the same time, the racial composition of the city has changed considerably. Of the population groups used in the census, 'Black African' has become the largest group, increasing from 25.1% in 1996 to 43% in 2016; the 'Coloured' population has decreased in size, from 42.4% in 2011 to 40% in 2016; and the 'White' population has also decreased, down from 21.2% in 1996 to 16% in 2016.

The city's monocentric and fragmented form is gradually becoming more polycentric with the growth of outlying nodes, particularly Century City and Tyger Valley (Bellville). The concentration of economic activity in and around the central city encourages high levels of road-based travel between homes and workplaces, causing increasing congestion, pollution, long commuting times and high transport costs, especially for the poor.

The highly unequal and segregated structure of the city has persisted and has been reinforced by growing informal settlements, densifying historic townships and low-cost government housing projects in peripheral locations where population densities were already very high. Meanwhile, private-sector residential development has expanded outwards to continue the urban sprawl. There are some precincts with increasing numbers of apartment buildings in and around the core city, whereas the suburbs mostly comprise free-standing houses, some of which are located in secure estates and other gated communities.



Affluent neighbourhood, Cape Town, South Africa.  
Credit Ivan Turok, Human Sciences Research Council

## Internal structure: a ward-level analysis

Historic racial and socioeconomic segregation persists, despite some mixed areas emerging and black middle-class households entering former 'white neighbourhoods'.

While race has been replaced by social class as the main driver of segregation, class remains tightly linked to race in post-apartheid South Africa. Poor black residents can't afford to leave under-serviced, dangerous settlements. The rapid growth of informal housing (backyard and free-standing shacks) in townships reflects the lack of affordable housing options and stringent evictions of land occupations in more affluent areas. Free government housing makes up half of all new homes built every year, but their peripheral location perpetuates segregation.

Population densities are highest and rising fastest in the low-income areas of the Cape Flats. All 10 wards with the highest densities (between 17,458 and 31,414 people per km<sup>2</sup>) are here. They comprise informal settlements or a mixture of informal settlements and formal townships. One ward grew by 250% between 2001 and 2011, from 12,079 people per km<sup>2</sup> to 29,648. Meanwhile, the density of the inner city/Atlantic seaboard and southern suburbs increased by only 4.8% and 3.2% respectively over the same period. This inverse densification worsens the severe spatial mismatch between where most people live (the Cape Flats) and where most formal jobs are located (the central city). It also exacerbates unemployment because of the high costs (in money and time) of seeking and sustaining employment. Unemployment rates are relatively low in the core city (14.5%), the Northern suburbs (17.7%) and the Southern suburbs (6.2%), but are high at approximately 40% in poorer neighbourhoods. The 10 wards with highest unemployment (over 50%) are all on the Cape Flats. Multiple deprivation – with regards to income, education, employment and living conditions – is also much higher here than elsewhere, and there was no improvement between 2001 and 2011.

The changing racial composition over time means that some racial mixing is happening everywhere. Some parts of the Northern suburbs, Southern suburbs and Helderberg district have seen little change in racial composition (less than 10%), but in most other areas the black African population has grown by between 20% and 25%. These ward-level averages often mask the concentration of most new entrants in pockets of informal settlements with extreme densities, or a few rapidly densifying new townships. Some historically mixed areas in and around the central city have experienced gentrification and displacement of the poor in recent years.

A few areas along the Voortrekker Road corridor and N1 highway have seen more substantial racial transformation. The black African population of Goodwood grew by 43.6% between 1996 and 2011. And Parow, Bellville, Montague and Brackenfell have seen the black African population increase by 20-30% over this period. These areas are conveniently located between the city centre and an emerging economic node in Bellville, and are more easily accessed with lower property prices and more apartment blocks. The city has chosen this corridor for investments in transport and other infrastructure.

## Education and health

Post-apartheid policies expanded the education and health facilities in poorer neighbourhoods.

Consequently, the distribution of primary schools and public health facilities across the city is better aligned to the population distribution than it used to be. On average, there are 3,710 pupils per primary school in the inner city/Atlantic seaboard compared to 6,569 pupils in the Cape Flats. However, the distribution of secondary schools is less balanced. The average secondary school in the Cape Flats serves 14,322 pupils, more than three times the 4,751 pupils in the inner city/Atlantic seaboard. Rapidly growing informal settlements, such as Lwandle in Helderberg, Masiphumelele in the Peninsula, and Phillipi in the Cape Flats, experience critical shortages of education and health facilities – shockingly, the average population served by primary schools in these areas is more than 24,000.

Despite progress in extending education and health facilities, major disparities in quality persist. People living in affluent areas have access to public and private facilities with superior infrastructure, more resources and better qualified staff. There are big differences between the size of schools, pupil-teacher ratios and payment of fees. Average pupil-teacher ratios in the Cape Flats (25.3) are much larger than in the Northern (19.6) and Southern suburbs (13.9). Education is also undermined by violent crime and serious social problems in poor communities, leading to low performance and high drop-out rates. This reinforces the historic divisions across the city.

Highly educated groups with well-paid jobs cluster in the affluent areas, particularly in the Southern suburbs (where 84.2% had completed secondary or higher education in 2011), the Northern suburbs and around the University of the Western Cape. Another emerging cluster is in Strand and Somerset West in Helderberg, an attractive retirement zone for affluent white people with several new private schools. Only 35% of residents on the Cape Flats had completed secondary or higher education in 2011. The biggest educational improvements between 2001 and 2011 were in the already highly educated areas of the inner city/Atlantic seaboard and the Southern suburbs, with little improvement in the Cape Flats. Education levels actually declined in several of these neighbourhoods between 2001 and 2011 because of in-migration by poorly educated people who settled in informal settlements and backyard shacks.

## Neighbourhood analysis

Moving from the ward to the neighbourhood level, we used k-means clustering of Census 2011 data (disaggregated to Small Area Layers) to identify distinct neighbourhood typologies.

The dataset includes 301 variables covering demographic, socioeconomic, public services, housing and other physical characteristics for more than 3.7 million individuals living in 5,800 neighbourhoods. The computerised clustering only elevates variables that are objectively most significant in distinguishing between different places. Race, class and dwelling type emerged as the hallmarks of neighbourhood differences (see Figure 1).

At the lower end of the income/wealth spectrum, the model identified informal settlements as a neighbourhood type, which comprise people living in shacks. These are further distinguished between households with and without access to electricity. There is persistent segregation between black African and coloured communities, except for one cluster comprising both groups. Some low-/medium-income clusters have a mixture of formal and informal housing (especially backyard shacks), while others are dominated by free-standing houses or townhouses. A distinguishing factor is whether formal settlements have many or few backyard shacks. The rented apartments/flats cluster represents medium-income neighbourhoods with higher-density buildings, while a cluster of affluent neighbourhoods was identified that comprise predominantly white residents in larger houses. Houses in this affluent cluster are much larger than elsewhere with more than six rooms (excluding bathrooms and kitchen), but only 2.5 residents.



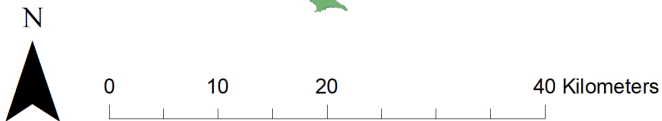
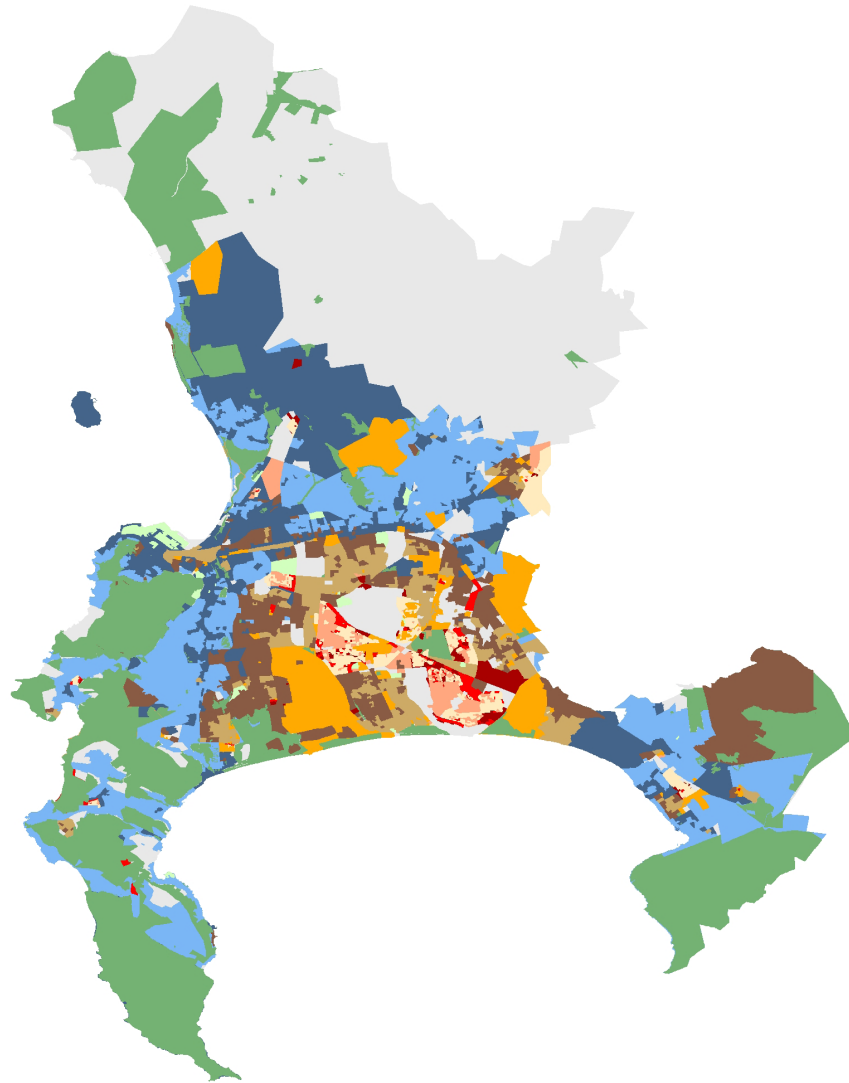
The contrast between neighbourhood clusters is stark, with most communities being dominated by a particular racial group. This indicates the continued salience of race. People living in informal settlements are almost exclusively black African (>95%), whereas those living in large houses are mostly white (78%). The model identified notable language and wealth differences among coloured communities, especially between poorer, Afrikaans-speaking neighbourhoods and 'middle-class', English-speaking areas. Among low-to-medium-income neighbourhoods, there are distinct black African, coloured and mixed communities. The exceptions are households in the rented apartments/flats cluster, which comprises 'middle-class' residents from different backgrounds.

The racial dimension of neighbourhood clusters is closely connected to socioeconomic status. Unemployment varies widely, from only 4% in the affluent cluster to nearly 50% in the informal settlements. No less than 40% of residents in the affluent cluster and the rented apartment/flats cluster have higher education, and 70% completed secondary school. In contrast, roughly 80% of residents in informal settlements and some of the other clusters have not completed secondary school.

Figure 1: Cape Town's neighbourhood typologies

Legend

- Informal settlements without electricity
- Informal settlements with electricity
- Black Africans living in planned settlements
- Black Africans living in planned settlements with backyard shacks
- Coloureds & Black Africans, formal housing, backyard shacks
- Coloureds (Afrikaans) living in formal (semi-detached) housing
- Coloureds (English), medium income, living in formal (bonded) housing
- Apartments or flats, medium-high income, more mixed
- Affluent, predominantly White, living in larger houses
- Protected areas
- Institutional spaces
- Omitted areas (e.g. airfields, military reserves, wetlands, sparsely populated)



Source: StatsSA Census 2011. Small Area Layer Boundaries.  
Protected areas data obtained from City of Cape Town Open Data Portal.

# Way forward

Cape Town's polarised character is clear from our analysis.

The stark social divides that manifest in different neighbourhood types are deeply inscribed into the city's topography. This has profound effects on people's living standards and life chances. Historically affluent groups remain privileged insiders, while marginalised communities continue to be left behind, trapped in places with inferior infrastructure and fewer opportunities of all kinds.

Although there are some localised examples of change – such as in the distribution of primary schools across the city and investments in transport, affordable housing and other infrastructure in the Voortrekker Road corridor in particular – the vast majority of new arrivals are forced to settle in impoverished communities. This aggravates the daunting challenges these people and places face.

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The yawning chasm between neighbourhoods has been cruelly exposed during the Covid-19 crisis and is simply not sustainable. Bolder efforts are required to shift the trajectory in a more fundamental way, beginning with a far-reaching review of existing policies, practices and public spending patterns, alongside a robust public conversation to spur more creative and constructive thinking.

An invigorated city-wide economy is crucial to create the jobs, incomes and taxes needed by the growing population. Investments in public services and infrastructure need to do more to improve connectivity and tilt the playing field towards disadvantaged communities. Improvements in the quality of education, health, policing and basic services are vital for human development. A coordinated, area-based approach could enable sectoral interventions to reinforce each other and engage communities actively in the upgrading process. After Covid-19, getting back to normal offers little appeal. The crisis could have a catalytic effect in disturbing the status quo in Cape Town and inducing a reset.

Historically affluent groups remain privileged insiders, while marginalised communities continue to be left behind, trapped in places with inferior infrastructure and fewer opportunities of all kinds.

<sup>1</sup> This paper summarises key findings of a report on the city as part of an international comparative study coordinated by the Centre for Sustainable, Healthy and Learning Cities and Neighbourhoods (SHLC). The wider study examines urbanisation and sustainable development in 14 cities in Africa and Asia and this part explores patterns of neighbourhood distribution and changing socio-spatial structures in response to recent urban expansion and migration. Geographic information system (GIS) data and remote sensing image analysis have been used to explore land-use changes and urban sprawl at city level and official statistics such as the population census and other secondary data have been used to map internal structural changes.

<sup>2</sup> Statistics South Africa, which administers the national census, uses the following terms with regard to population groups: Black African, Coloured, White, Indian/Asian, Other/Unspecified. 'Coloured' refers to people of multiple heritages and is used without offence.

<sup>3</sup> [http://www.statssa.gov.za/?page\\_id=993&id=city-of-cape-town-municipality](http://www.statssa.gov.za/?page_id=993&id=city-of-cape-town-municipality)

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Cover photo: Shacks in informal settlement in Khayelitsha township, Cape Town, South Africa. Credit: Shutterstock - Nikolai Link

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