

Johannesburg: Smart aspirations

Johannesburg is making moves towards smart-city development, including plans to roll out a digital platform that citizens can use to access municipal services.¹ That said, there is clearly much progress to be made as the city ranks 167th out of 174 cities worldwide according to an analysis of smart cities by Barcelona-based IESE Business School.²

Safety remains a pivotal issue: Johannesburg ranks 50th out of 60 cities for personal security according to a study by The Economist Intelligence Unit.³ In our latest study, sponsored by Nutanix, personal safety features high on the list of smart-city priorities for residents and business executives alike.⁴ However, there are still greater concerns. Residents and executives cite expanding employment opportunities and internet connectivity, respectively, as their most pressing priorities.



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¹ "Johannesburg steps up smart city plans", *BusinessTech*, July 18th 2018.

² *IESE Cities in Motion Index*, IESE Business School, 2019.

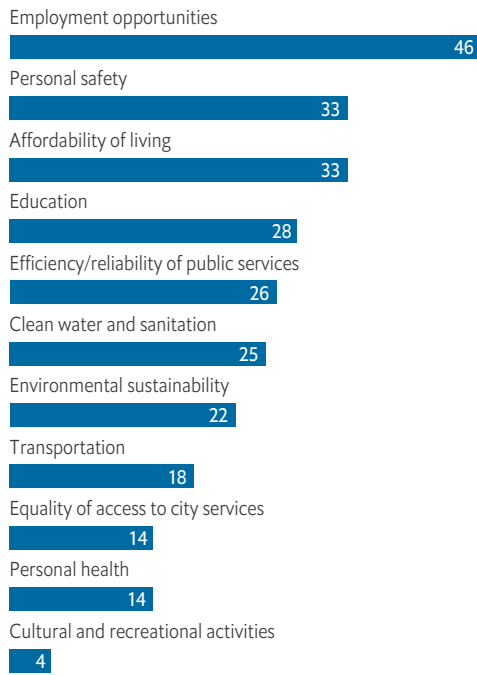
³ *Safe Cities Index*, The Economist Intelligence Unit, 2019.

⁴ In summer and autumn 2019, The Economist Intelligence Unit surveyed 346 citizens and 51 business executives in Johannesburg as part of a larger survey of 6,746 citizens and 969 executives in 19 cities around the world; the full research is available at <http://bit.ly/urbanintelligence>

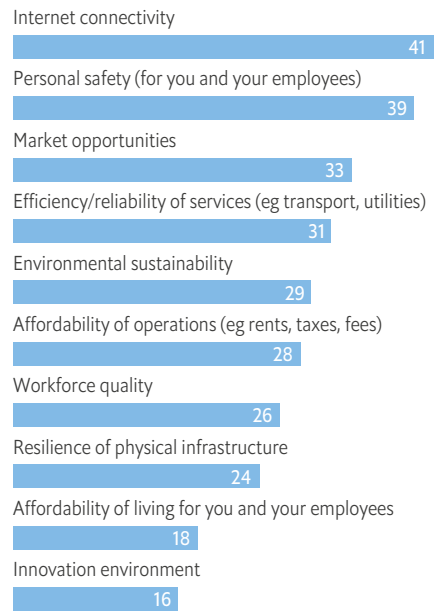
It's time for Jo'burg

Chief benefits sought by smart-city initiatives, Johannesburg citizens and businesses
(% of respondents)

Citizens



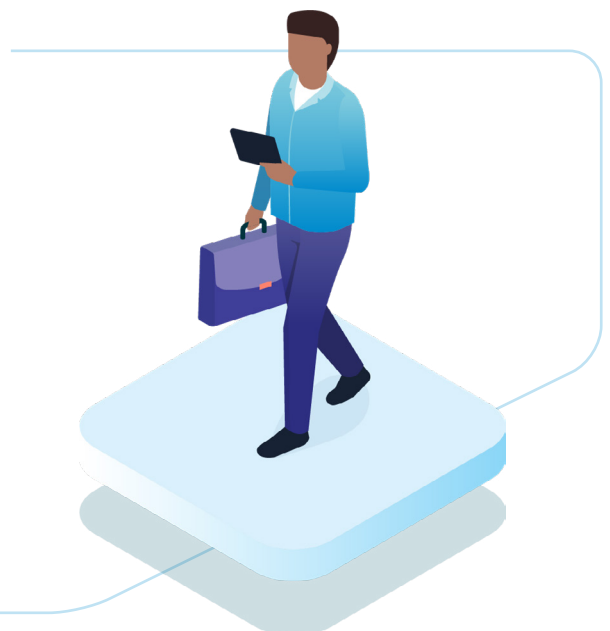
Businesses



Source: The Economist Intelligence Unit

Citizen priorities: Focus on jobs

Johannesburg residents believe smart-city development should prioritise the **expansion of employment opportunities** by a wide margin.





46%

Jobs are the primary concern of nearly half of the surveyed citizens (46%)—the largest share observed in any of the cities.

2 in 5

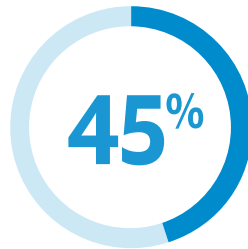
Approximately two in five (42%) residents say that, when developing smart-city initiatives, the municipal government needs to focus primarily on creating business opportunities for local firms.

37%

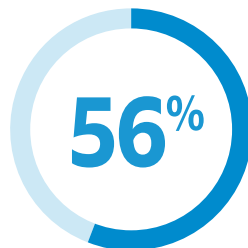
When asked about creating job opportunities, a similar share (37%) believe smart-city programmes should set their sights on attracting large technology companies to the city.



Making the city **more affordable** and **ensuring personal safety** are also high-ranking aims of smart-city development, each cited by one in three Johannesburg residents.



Nearly half (45%) of citizens point to smart energy and water tariffing that enables variable pricing as the main priority for improving the city's overall affordability, followed by expanding free internet access in public spaces (38%).



When it comes to improving personal health and safety, citizens of Johannesburg are nearly twice as likely as the global average (29%) to say enhancing the crime-fighting capabilities of police through smart technology should be a top priority, cited by 56% of respondents.

Business priorities: Connectivity and safety

Business executives in Johannesburg place the heaviest emphasis on **internet connectivity** and **personal safety** as top priorities for smart-city initiatives.



41%

Two in five (41%) look to smart programmes to deliver better internet connectivity to their organisations, compared with a global average of 28%.

43%

Just over two in five (43%)—among the largest share of all cities—point to deploying ultra-high-speed broadband networks as the best way to enhance the city's innovation environment, second only to supporting the growth of tech start-ups.

39%

Executives in Johannesburg are the most likely of any city to cite personal safety as a key concern, noted by 39% of respondents.

43%

Among the different ways smart-city development can expand the talent pool, 43% point to reducing crime, far more than any other method and the highest share recorded of all cities surveyed.



Increasing market opportunities is another area where executives in Johannesburg hope smart programmes will make a significant impact.

1 in 3

One in three executives (33%) view it as a key priority for smart-city development, compared with a global average of 24%.

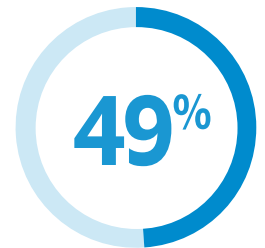
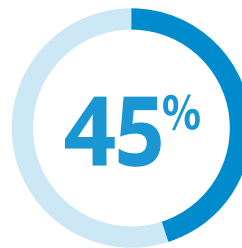
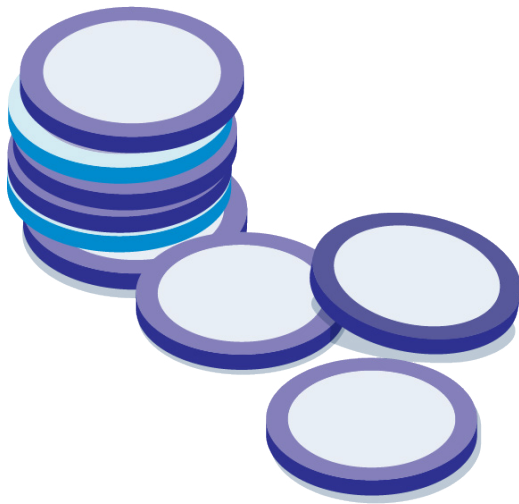


2 in 5

About two in five say invitations to tender for public contracts to deliver smart-city solutions (43%) and partnerships with large technology companies (41%) will expand market opportunities for their business.

Trade-offs: Business and citizen reservations

Executives in Johannesburg are averse to **higher costs in exchange for smart-city benefits**, but are willing to make compromises elsewhere.



Approximately half of Johannesburg business executives are willing to pay more in taxes (45%) and service fees (49%), lower than the global averages (52% and 60%, respectively).



Seven in ten (69%) are willing to share more of their organisation's data.



Still, sharing data has its limits—in line with the global average, 65% of executives in Johannesburg believe it would be risky to share too much of their business's data to develop smart-city programmes.

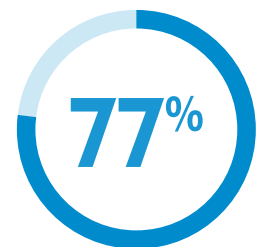
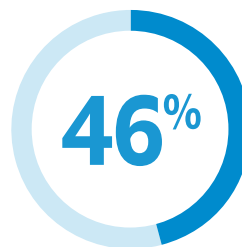
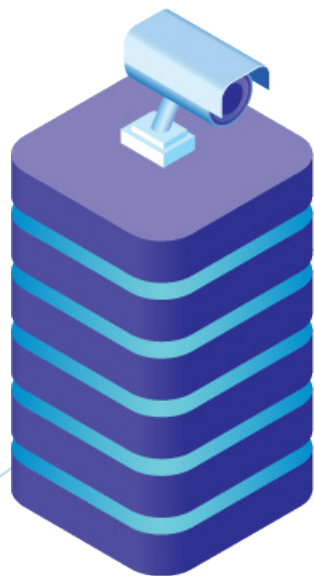
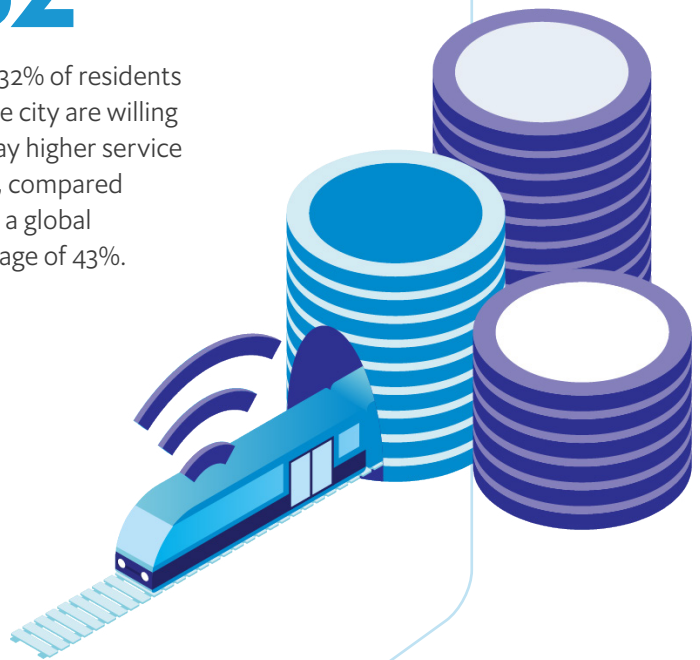
Citizens are also **reluctant to pay higher costs**, but are willing to make concessions for better security.

25%

Only one in four Johannesburg residents (25%)—among the smallest share of all cities surveyed—say they are willing to pay higher taxes for smart-city initiatives.

32%

Just 32% of residents in the city are willing to pay higher service fees, compared with a global average of 43%.



Although just under half (46%) are willing to share their personal data for smart-city benefits, 77% are comfortable with the use of their personal data to prevent and solve crime through technologies like facial recognition.