

Lessons from a pandemic: Future of urban design

As some of the world's biggest cities take on the challenge of being the epicentres of the Covid-19 pandemic, there is much debate about the future of cities and their 'design'.



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Should we change the way we live to minimise the impact of similar pandemics in the future, and how do we deal with social distancing in cities that are designed for high density occupation supported by mass transport? Conversely, high density living keeps infrastructure costs lower, and high-rise buildings are easier to contain and control in the event of a disease outbreak than that of an overpopulated suburb with multiple formal and informal entry and exit points.

Dominic Collett, an urban development engineer at Royal HaskoningDHV, says there are a few trends that have emerged from the pandemic in South Africa and abroad that could inform how we approach urban design in the near future, and beyond.

Neighbourhood connectivity

With either non-existent or limited public transport in the early stages of lockdown, people turned to supporting locals for essential goods and services. No longer able to get to regional shopping centres or other supply nodes, individuals started engaging with neighbours and businesses within walking or cycling distance.

“The urban design take-out from this trend is that people are safer in a community where everything’s within walking or cycling distance, as limited travel is linked to limited infection. It’s also made people realise that, depending on their work, they can be far more productive working at home and not spending time travelling to an office,” says Collett.

This could lead to the revival of urban villages, led by examples like Soweto, Parkview, Parkhurst and Norwood in Johannesburg – and even the upmarket Melrose Arch is an example of this.

Micro-living

South Africans are also relooking at their relationship with space, realising that sprawled homes on big pieces of land away from urban centres - and a lot of work and money - can be isolating.

“Perhaps it’s time to take inspiration from cities like New York and London, where much smaller spaces in central locations are highly sought after, but residents have easy access to multiple food and grocery options within walking distance of their homes, as well as to safe, spacious parks that provide an outdoor respite from smaller homes, which are well looked after by authorities.”

Collett says a greenfields project in KwaZulu-Natal – a development that’s 5km by 5km in size is case in point.

“Instead of starting with streets or houses, we started by designing a series of bicycle lanes and pedestrian paths. This community, which will have shops, workplaces, homes, a school and recreation facilities, will make it possible for people to avoid travelling to cities unnecessarily – because they’ll have everything they need within easy reach.”

Moving on to mobility

Mobility is likely to see some changes too, particularly as people become more wary of being in crowded spaces. Just as in the KwaZulu-Natal project, bicycles are becoming increasingly popular among people who have previously depended on public transport – so much so that [bicycle businesses in New York are booming](#) as commuters turn to cycling rather than taking the train.

“South Africa has already seen what may have been a [premature push](#) towards cycling, which has previously been seen as a sport for the wealthy, but perhaps now that more people want to move away from crowded modes of transport, the time is right to focus on making bicycles more affordable, and bicycle lanes more ubiquitous,” says Collett.

Making spaces more agile

The transformation of [conference centres](#) and [factories](#) into field hospitals has emphasised that converting large spaces for alternate uses isn’t difficult – if you know every detail about your assets.

“This is where [digital twinning](#) becomes its own asset to building owners, who can assess every nook and cranny of their property to identify potential alternate uses. Having full knowledge of your assets and their locations makes other things possible too. For example, analysing sewage can [track and trace Covid-19 outbreaks](#) (and other diseases), delivering valuable information about how a virus or illness is spreading,” says Collett.