



Cities are growing. As more people move to cities to find employment, many of the world's largest cities will continue to expand, becoming megacities (over 10m people). By 2011, half the global population was living in urban areas; by 2050, [it is forecast that the proportion will grow to 66%](#). [The number of megacities is also growing](#) - from 10 in 1990, to 28 in 2014, and 41 by 2030 - with the biggest growth in the developing world.

If properly planned, providing public transportation, as well as housing, electricity, water and sanitation for a densely settled urban population is typically cheaper and less environmentally damaging than providing a similar level of services to a dispersed rural population. However, cities are huge consumers of resources and their environmental footprint can be substantial.

Going up

Skyscrapers already dominate the skylines of big cities but there's still room for them to extend their reach. As the cities stop growing outwards they are starting to grow upwards – in some cases up to 1000 meters in height like the Kingdom Tower currently under construction in Jeddah, Saudi Arabia. It will take over the title of the world's tallest building from the Burj Khalifa in Dubai when it is completed in 2018. Meanwhile, the World One tower in Mumbai will be the planet's highest residential building at 117 floors when it is finished this year. And Tokyo has plans for the [Sky Mile Tower](#), to be completed by 2045.

In the UK, the trend is still upward, even if not quite so ambitious. [A recent survey](#) by New London Architecture, found that there were 455 new tall buildings (over 20 stories) in the pipeline. "If you can't build out, build up!" The pressures to build at the heart of cities, often on brownfield land, is not just a demand of urban planners. Demographic and economic aspects are driving the change too: more students, immigrants, singles and childless couples; more city-centre jobs in service and the knowledge economy, as well as increased costs of commuting. The challenge is to accommodate this growth in ways which enhance the urban areas. However, [as the concept of 'good density'](#) becomes more established and better understood, cities will see pay more attention to considerations of scale than merely that of height.

Getting it right

At a spatial level, density is all about the concentration of things in an area. Most local authorities, as well as the ONS, collect information about things they can readily count, such as the density of houses and people. With these two figures, along with other kinds of information, such as brownfield availability and where certain services are located, cities make decisions about how land is used, how it is described and what future uses might be needed.

Described in this way, density shapes how cities look, feel and are experienced. However, it is debatable whether these types of density alone are enough to make decisions. What about the density of rubbish bins? Cars? Cycle lanes?

[Getting cities right in terms of density is difficult](#). For example, those advocating a more compact city model suggest that higher overall densities in cities can: support better and cheaper public transport, promote greater energy efficiency in buildings, create more opportunities for mixed-tenure housing, engender more social equality and provide greater control over who people contact. At the same time, high-density cities also lead to: more pedestrian casualties, urban heat