

# World view

## Suburbs are a climate disaster, but there is a fix



By Dana Cuff

**With a radical approach to planning, suburbs can be made affordable, liveable and climate friendly – even in the United States.**

**C**urrently, the sprawling outer areas of US cities are environmentally unsustainable and a wasteful use of land. Unaffordable for most people, these suburbs are, in many places, the physical embodiment of social stratification and an unequal distribution of wealth and opportunity.

In the United States, we perfected this modern atrocity and exported it. As a result, cities around the world have large carbon footprints, long commute times, high infrastructure costs and problems with traffic congestion. Many residents have high rates of social isolation and health problems related to a lack of exercise. Suburban sprawl contributes to a housing crisis that sees a lack of affordable homes for workers in many desirable cities. Because a finite supply of precious land is being gobbled up by residential developments of one house per plot, the opportunity is lost to build cities with the qualities that most people want: walkable, mixed use, diverse and affordable.

But even US suburbs are not beyond redemption. Over the past two decades, my colleagues and I at cityLAB, my urban-design research centre at the University of California, Los Angeles (UCLA), have been finding and implementing solutions to the suburban sprawl of southern California, as I describe in my 2023 book, *Architectures of Spatial Justice*.

In the United States, the greatest obstruction to building residential areas that people (and the planet) need today is zoning: rules that dictate what can be built where. Three-quarters of residential areas in US cities are designated as 'single family', meaning that just one house can be built on each plot. These restrictions prevent the construction of any other buildings, such as blocks of flats, shops, schools, health facilities and workplaces. Only 12% of residential zones allow the building of denser multi-family housing, and just 1.2% is labelled mixed use. Such rules actively prevent the creation of neighbourhoods and cities in which people can walk or cycle to essential services in less than 15 minutes, as proponents of '15-minute cities' suggest.

Parking requirements are another huge hurdle. US residential zones often require two parking spaces for every residential unit. In multi-family housing, those add considerably to the cost and extent of already-expensive constructions, and contribute to a situation in which there are as many as eight parking spaces for every car in the country (M. Chester *et al. Environ. Res. Lett.* 5, 034001; 2010).

Many people's responses to such rigid and often absurd planning rules are to take things into their own hands. As

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discussed in cityLAB's 2010 book *Backyard Homes*, around two-thirds of houses in some southern Californian neighbourhoods had an extra rental unit that was essentially illegal. But they fulfilled people's needs: a university student returning home, an older relative needing company, empty-nesters wanting a smaller unit, homeowners with unaffordable mortgages who needed the extra income or new parents with a live-in nanny.

As a result of this research, I wrote a law, with fellow cityLAB member Jane Blumenfeld and colleagues at the University of California, Berkeley, that legalized rental units on nearly all single-family properties without requiring extra parking spaces wherever public transport was available. California passed the Accessory Dwelling Unit law in 2017, effectively doubling the density allowed in many suburbs.

Many communities are finding that such extra dwellings are a kind of 'stealth density' that is hardly noticed, despite some residents' objections, especially in wealthier neighbourhoods. Subsequent rule tweaks in California have supported higher densities, removed minimum parking requirements altogether and expanded ownership and rental opportunities. Other US cities are similarly changing zoning rules and parking requirements, and mixed-use projects continue to grow nationwide as a proportion of new developments.

My research indicates that well-designed state laws on land use can boost public benefits while allowing local jurisdictions to adjust projects to local needs. For example, cities with relatively large houses or small plots could customize laws to allow secondary units to be carved out of existing homes.

What is less clear is whether dense suburbs are, by themselves, equitable and affordable. Where housing demand is great enough, even small extra units can have sky-high prices. But there are other options. I authored legislation that became state law this year that allows housing for teachers and other staff members to be built on underused school land. Cities can also set up loan funds to boost the construction of rental houses for particular groups, such as military veterans or essential workers, or to create affordable units, as San Diego, California, has done. cityLAB designed a demonstration project called BruinHub, a home on campus for UCLA students who are housing-insecure or commute over long distances.

It will take many creative solutions to redeem suburbs. Can corner plots provide public amenities such as seating, shaded bus stops or mini libraries? Can alleys include solar power, water-permeable surfaces and shared parking? These are the sorts of question that must be asked at all levels of planning in the United States, as already happens worldwide. With the answers, communities can transform urban sprawl into healthier, more inclusive neighbourhoods.