

# PROS AND CONS OF HIGH-DENSITY URBAN ENVIRONMENTS

The benefits of higher density environments are worth pursuing as they give us more choice, argues a student of architecture.

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**W**ith a growing interest in sustainable urban design and a respect for the outstanding landscape of Aotearoa, New Zealanders are starting to demand a better neighbourhood design than the post-World War 2 unsustainable suburban subdivisions that mirror our Australian and North American counterparts.

It is clear that by increasing density – the number of people per unit area – many economic, environmental and social benefits can be realised. However, if density is considered alone, we risk exacerbating the very problems we are trying to alleviate. We must be realistic about the benefits and aware of the potential pitfalls. Any increase in density must be carefully considered along with quality design, mixed land use, increased accessibility and greater connectivity.

## Reducing private car use

Some of the main benefits of higher density are those realised from reducing private car travel. On a city-wide scale, areas with higher densities, well-mixed land uses, and accessible and connected transport options demonstrate less reliance on private cars. These higher density areas show greater numbers of people walking, using public transport, cycling and spending less time commuting.

With greater travel options available and fewer people travelling by car, global warming emissions are reduced, less ground is paved over, and more destinations become accessible to non-drivers. People's health improves from fewer harmful emissions plus all that walking. More people walking

also means more possibilities for social interaction, added economic vibrancy and vitality, fewer opportunities for crime through passive surveillance and less money spent on petrol. Environments then become people rather than car oriented.

Increasing the number of people in an area provides the support many businesses

need to survive, as well as demand for other amenities such as swimming pools, libraries, schools, hospitals, parks, public transit, and the neighbourhood pub. Often these areas of high amenity attract people from what is being termed the 'new economy' or the 'creative class' which many cities rely on as a key economic driver. Higher density and →

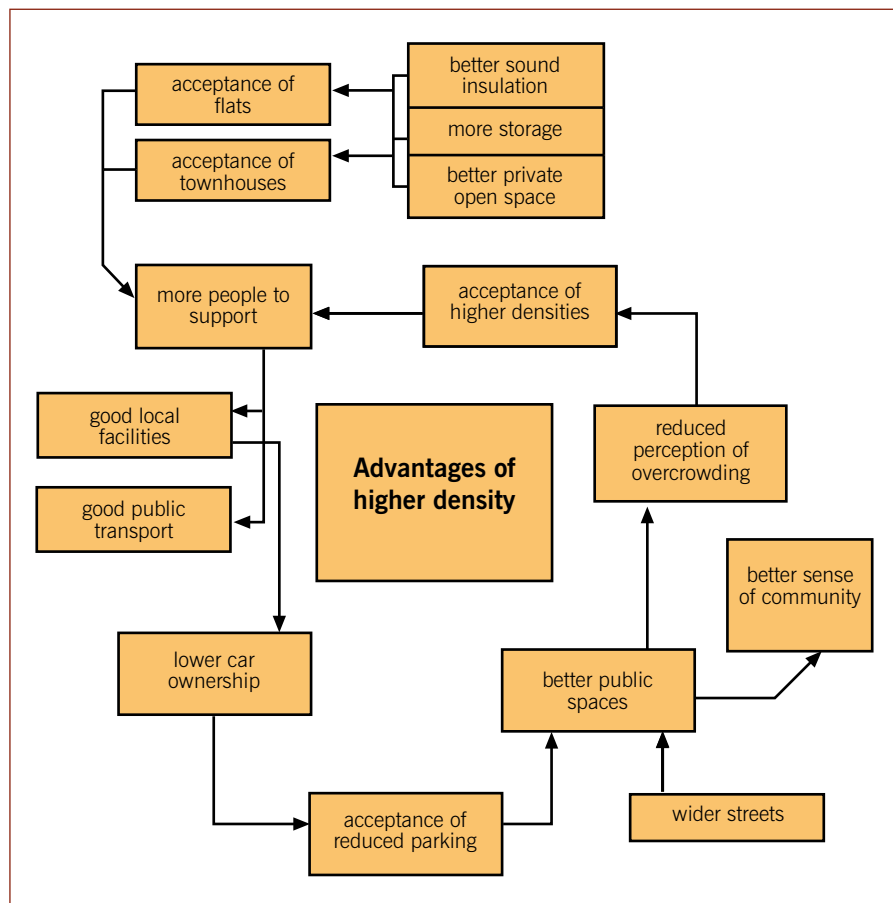


Figure 1: The virtuous circle (Samuels, 2005).

mixed land use also provides for the ageing population to shift from family dwellings to smaller ones in the same neighbourhoods where they raised their families. With more people able to happily fit into a smaller area, the pressures contributing to sprawl are reduced and the countryside may be preserved.

Accepting higher densities does not spell the extinction of the single family dwelling. Rather it provides a choice to be able to live in such a dwelling in a neighbourhood that also has apartments, townhouses, a bakery, a pub, a school within walking distance, a café, reliable travel options and, all things considered, a greater ease of living.

However, these must be considered only as potential benefits as we are still some way off understanding how to build efficiently to meet the increased demands of

higher density living and how to make it an attractive alternative to single family detached dwellings. The potential benefits must be considered realistically against the pitfalls of getting it wrong. Figures 1 and 2 show how both benefits and pitfalls can be realised by increasing densities.

### Potential pitfalls

Numerous poor examples of terraced houses and council tower blocks highlight many of the potential pitfalls of higher density living. Even if the design does provide plenty of privacy, storage and sound insulation and the neighbourhood provides for walking, public spaces and mixed uses, concerns remain to be addressed.

The economic argument that denser living arrangements will reduce affordability by restricting land supply is one of these

concerns. To reduce this risk, planning mechanisms must be in place to allow for floor space to be created at an equal rate to the restricted land supply. The additional floor space is meant to go up (two or more storeys) and be found in smaller yards and setbacks.

Another potential pitfall is higher construction costs. There are fewer leniencies for wasted space and clumsy designs when there is less room to play with. That said, building at higher densities requires better sound insulation, professional organisation of space, lifts and underground parking. However, these additional costs must be weighed against savings in both land required and the services and infrastructure necessary when building at lower densities. These external additional costs associated with low-density development and growing environmental concerns also weigh in on the cost-benefit analysis, along with the inconclusive evidence on which building form is cheapest when all externalities are considered.

Higher densities mean more people and mixed uses mean different types of people. This raises a possible concern regarding crime levels. However, studies show that increases in both activity and people, within certain limits, create passive surveillance that decreases crime and increases safety.

More intensive land use may also squeeze out green spaces and trees. Less greenery is not a requirement in accepting higher densities but often is an unforeseen side-effect. Avoiding uniform densities across large areas, planning for quality usable green spaces and an effective tree planting programme is needed to avoid this pitfall.

Cultural acceptance and attractive buildings are the two main barriers to higher densities being successful in New Zealand. Whether attractive building types create cultural acceptance or the other way round is hard to say. If we can find a higher density formula that works for New Zealanders, a more sustainable and potentially more rewarding and healthy lifestyle can be achieved.

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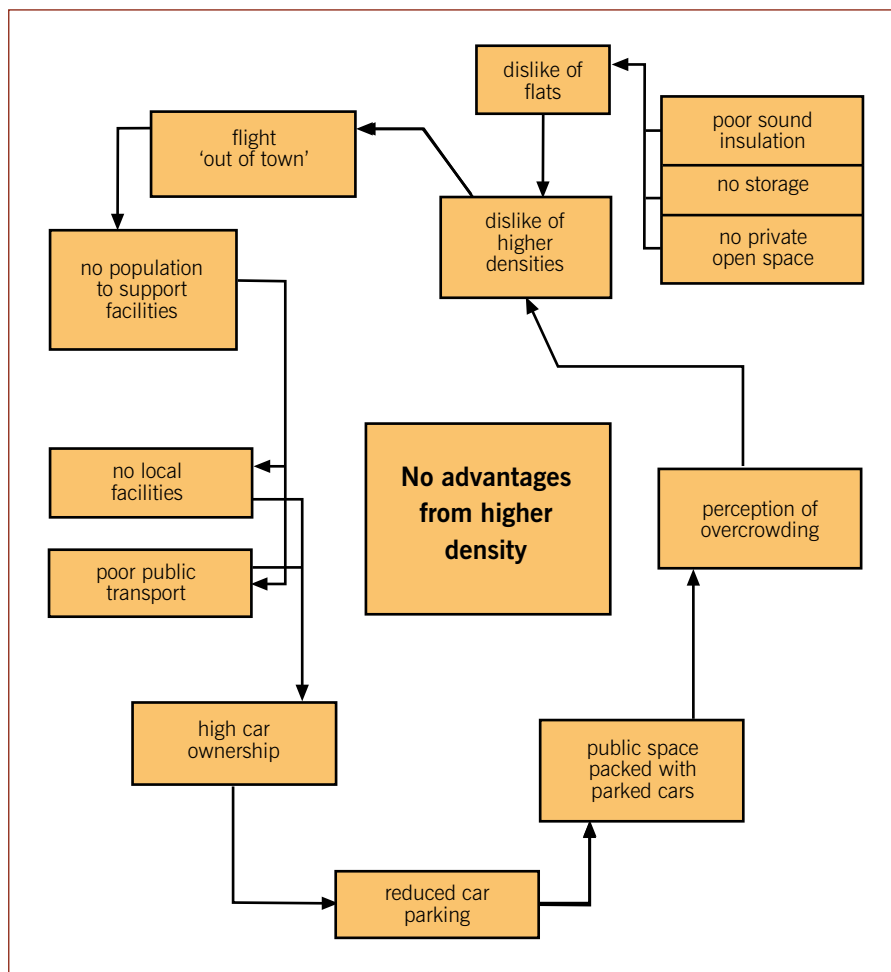


Figure 2: The vicious circle (Samuels, 2005).